

IBM Sterling Gentran:Realtime for z/OS

Technical Reference Guide

Release 6.6



This edition applies to the 6.6 Version of IBM® Sterling Gentran:Realtime® for z/OS® and to all subsequent releases and modifications until otherwise indicated in new editions.

Before using this information and the product it supports, read the information in Notices on page N-1.

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Table of Contents

Chapter 1 Getting Started

| | |
|-----------------------|-----|
| Overview | 1-1 |
| How To Get Help | 1-1 |

Chapter 2 Interface Programs

| | |
|--------------------------------------|--------|
| Overview | 2-1 |
| Separator Gateway..... | |
| EDIR100 | 2-2 |
| Databank Extract Driver | |
| EDIR105 | 2-4 |
| Online Input Gateway..... | |
| EDIEOIG | 2-5 |
| Online Output Gateway | |
| EDIEOOG | 2-12 |
| Outbound Application Gateway | |
| EDIR101 | 2-20 |
| Outbound Communication Gateway | |
| EDIR102 | 2-25 |
| Inbound Communication Gateway | |
| EDIR103 | 2-29 |
| Inbound Application Gateway..... | |
| EDIR104 | 2-34 |
| Application Log Interface..... | |
| EDIR999 | 2-38 |
| Asynchronous Gateway..... | EDIRA- |
| SYN | 2-42 |
| Viewpoint Online Gateway | |
| EDIX980 | 2-44 |
| Associated Data Gateway..... | |
| EDIR106 | 2-45 |

Chapter 3 Translation Programs

| | |
|-------------------------------|-----|
| Overview | 3-1 |
| Inbound Editor..... | |
| EDIR001 | 3-2 |
| Outbound Editor | |
| EDIR002 | 3-6 |
| Inbound Reject/Splitter | |
| EDIR015 | 3-9 |
| Outbound Splitter | |

| | |
|---------------------------------------|------|
| EDIR016 | 3-12 |
| Ack \$\$ADD Program | |
| EDIR021 | 3-15 |
| Inbound Mapper | |
| EDIR041 | 3-19 |
| Outbound Mapper..... | |
| EDIR042 | 3-23 |
| Mapper Subroutines..... | |
| EDIR043, EDIR044, | |
| EDIR045, EDIR046, | |
| EDIR047, EDIR049, | |
| EDIR050, EDIR051, | |
| EDIR056 | 3-27 |
| Acknowledgment Process Reformat | |
| EDIR110 | 3-28 |
| Internal Standards Loader..... | |
| EDIR113 | 3-30 |
| Dynamic Codes Validation..... | |
| EDIR114 | 3-31 |
| Associated Data Read | |
| EDIR065 | 3-32 |
| Associated Data Write..... | |
| EDIR066 | 3-33 |

Chapter 4 System Processor Programs

| | |
|----------------------------------|---------|
| Overview | 4-1 |
| Online Scanner/Initiator | EDIEO- |
| SI | 4-2 |
| Internal Addressing Routine..... | EDIRAD- |
| DR | 4-4 |
| Online Message Handler | ED- |
| IROMH | 4-5 |
| Shell Program | |
| EDIR313 | 4-6 |
| Exception Program Exit | |
| EDIR852 | 4-7 |

Chapter 5 Databank Utility Programs and Reports

| | |
|---|------|
| Overview | 5-1 |
| EDI Databank Inquiry Report | |
| EDID550 | 5-2 |
| Application Databank Inquiry Report | |
| EDID551 | 5-26 |
| Network Reconciliation..... | |

| | |
|--|------|
| EDID850 | 5-37 |
| Network Reconciliation Maintenance | |
| EDID860 | 5-40 |
| Outbound Application Databank Maintenance | |
| EDID151 | 5-43 |
| Outbound Application Databank Interface Subroutine | |
| EDID152 | 5-50 |
| Outbound EDI Databank Maintenance | |
| EDID251 | 5-51 |
| Outbound EDI Databank Interface Subroutine | |
| EDID252 | 5-58 |
| Outbound EDI Databank Extract | |
| EDID255 | 5-59 |
| Inbound EDI Databank Maintenance | |
| EDID351 | 5-63 |
| Inbound EDI Databank Interface Subroutine | |
| EDID352 | 5-69 |
| Inbound Application Databank Maintenance | |
| EDID451 | 5-70 |
| Inbound Application Databank Interface Subroutine | |
| EDID452 | 5-76 |
| Inbound Application Databank Extract | |
| EDID455 | 5-77 |
| Acknowledgment Reconciliation/Monitor | |
| EDID515 | 5-83 |
| Acknowledgment Reconciliation/Monitor Reformatter | |
| EDID516 | 5-93 |
| Change Audit Maintenance | |
| EDID552 | 5-95 |
| Databank Status Update | |
| EDIR855 | 5-98 |
| Databank Reprocess Driver | |
| EDIR856 | 5-99 |

Chapter 6 Separator Utilities

| | |
|---|------|
| Overview | 6-1 |
| Separator Driver | |
| EDIR930 | 6-2 |
| X12 Interchange Priority Lookup | |
| EDIR931 | 6-6 |
| EDIFACT Interchange Priority Lookup | |
| EDIR932 | 6-8 |
| TRADACOMS Interchange Priority Lookup | |
| EDIR933 | 6-10 |
| Monitor I/O | |
| EDIR940 | 6-12 |

| | |
|----------------------|------|
| Router Program | |
| EDIR945 | 6-14 |

Chapter 7 Communication Utilities

| | |
|-----------------------------------|------|
| Overview | 7-1 |
| Connect Outbound Interface..... | |
| EDIR314 | 7-2 |
| Connect Monitor Wakeup | |
| EDIR315 | 7-6 |
| Connect Inbound Interface | |
| EDIR316 | 7-7 |
| Connect Batch Number Update | |
| EDIR317 | 7-11 |

Chapter 8 Queue File Utilities

| | |
|--|-------------------|
| Overview | 8-1 |
| Queue File Maintenance..... | |
| EDIEQMT | 8-2 |
| Queue Read | |
| EDIRQRD | 8-5 |
| Queue Write | |
| EDIRQWR | 8-10 |
| Central Multi-Queue Read Subroutine | EDIRC- |
| MR | 8-15 |
| Central Multi-Queue Write Subroutine | EDIRC- |
| MW | 8-16 |
| Remote Single-Queue Read Subroutine..... | |
| EDIERSR | 8-17 |
| Remote Single-Queue Write Subroutine..... | EDIER- |
| SW | 8-23 |
| Sample Queue Read | |
| EDIESQR | 8-28 |
| Sample Queue Write..... | |
| EDIESQW | 8-29 |
| Journal Subroutine..... | |
| EDIJNL | 8-30 |
| Logging Subroutine..... | |
| EDILOG | 8-31 |
| Online Batch Initiator..... | EDIEO- |
| BI | 8-32 |
| Online Queue Read | EDIEO- |
| QR | 8-33 |
| Online Queue Write..... | EDIEO- |
| QW | 8-34 |

Chapter 9 Support Utilities

| | |
|----------------|-----|
| Overview | 9-1 |
|----------------|-----|

| | |
|--|------|
| Online Report File Maintenance | |
| EDIR305B | 9-2 |
| Online Report File Lister..... | |
| EDIR306B | 9-5 |
| Realtime Activity Maintenance | |
| EDIRAMT | 9-7 |
| Batch Option and Path Copy Maintenance | EDI- |
| ROCP | 9-9 |
| OCF Change Audit Inquiry | |
| EDIR330 | 9-12 |
| OCF Change Audit Maintenance Program | |
| EDIR331 | 9-15 |
| Request Change Audit Inquiry | |
| EDIR890 | 9-19 |
| Request Change Audit Maintenance Program | |
| EDIR891 | 9-22 |

Chapter 10 Start-Up Utilities

| | |
|------------------------------------|------|
| Overview | 10-1 |
| Report Initiation..... | |
| EDIR312 | 10-2 |
| Request File Initiation | |
| EDIR900 | 10-3 |
| Activity Initiation | |
| EDIR901 | 10-4 |
| Automatic System Start-Up..... | |
| EDIRPLT | 10-5 |
| Remote System Stop/Start..... | EDI- |
| STOP | 10-6 |
| System Status Toggle Program | EDI- |
| ETOGL | 10-8 |
| Batch Wait Utility..... | EDI- |
| WAITD | 10-9 |

Chapter 11 Copy Utilities

| | |
|---------------------------------------|------|
| Overview | 11-1 |
| Online Application Data ID Copy | |
| EDIR060 | 11-2 |
| Online Translation Table Copy | |
| EDIR076 | 11-3 |
| Online Option and Path Copy..... | |
| EDIR077 | 11-4 |
| Online Transaction Mapping Copy | |
| EDIR080 | 11-5 |
| Online Partner Xref Copy..... | |

| | |
|---------------------------|------|
| EDIR086 | 11-6 |
| Online Partner Copy | |
| EDIR087 | 11-7 |

Chapter 12 User Exits

| | |
|---|------------------|
| Overview | 12-1 |
| Online Shell Path User Exit Interface | |
| EDIRXIT1 | 12-2 |
| Online Error User Exit..... | |
| EDIRXIT2 | 12-6 |
| Online Mapper User Exit Interfaces..... | |
| EDIXIT3, EDIXIT4, | |
| EDIXIT5, EDISGXT, | EDIR- |
| ING | 12-8 |
| Online Shell Path Capture Exit..... | EDIR- |
| CAP | 12-11 |

Chapter 13 Test Programs

| | |
|---|---------|
| Overview | 13-1 |
| Installation Checkout Procedures Output Test..... | EDIRT- |
| OUT | 13-2 |
| Sample Online Application | EDIR- |
| SOA | 13-3 |
| Online Test Program..... | EDIT- |
| PGM | 13-6 |
| Batch Test Load Program..... | EDIIPG- |
| MX | 13-8 |
| Results Program..... | |
| EDIRSLTS | 13-10 |
| Batch Results Program | |
| EDIRSLTX | 13-12 |

Chapter 14 File Descriptions

| | |
|--------------------------------------|--------|
| Overview | 14-1 |
| Breakdown of Files by Function | 14-4 |
| Performing File Maintenance | 14-9 |
| Associated Data File..... | EDIAS- |
| CDT | 14-11 |
| Error Message File | EDIER- |
| RC | 14-13 |
| Online Control File..... | EDIO- |
| CF | 14-15 |
| Online Log File..... | |
| EDIOLF | 14-17 |
| Queue Files..... | |

| | |
|--|---------|
| EDIQnnn | 14-19 |
| Report Request Queue File..... | |
| EDIQ092 | 14-22 |
| Status Update Input Queue File..... | |
| EDIQ096 | 14-24 |
| Acknowledgment Reconciliation Input Queue File | |
| EDIQ098 | 14-26 |
| Acknowledgment Reconciliation Output Queue File..... | |
| EDIQ099 | 14-29 |
| Checkpoint File | |
| EDICKP | 14-31 |
| Sterling Gentran:Realtime Activity File..... | |
| EDIRAPF | 14-33 |
| Change Audit Databank Archive File | |
| EDIRARCH | 14-35 |
| Inbound Application Databank Archive File | EDIRAR- |
| IA | 14-36 |
| Inbound EDI Databank Archive File..... | EDIRAR- |
| IE | 14-38 |
| Outbound Application Databank Archive File..... | |
| EDIRAROA | 14-40 |
| Outbound EDI Databank Archive File | |
| EDIRAROE | 14-42 |
| Sterling Gentran:Realtime Acknowledgment Reconciliation File | EDIRD- |
| AR | 14-44 |
| Request File | |
| EDIREQ | 14-46 |
| Exception Processing Detail Bypass File..... | |
| EDIRDBP | 14-49 |
| Exception Processing Header Bypass File | EDIRH- |
| BP | 14-51 |
| Inbound Application Databank Directory | EDIRI- |
| AA | 14-53 |
| Inbound Application Databank Change Audit File..... | EDIRIA- |
| CA | 14-55 |
| Inbound Application Databank Message Store | EDI- |
| RIAS | 14-57 |
| Inbound EDI Databank Directory | EDI- |
| RIEA | 14-59 |
| Inbound EDI Databank Change Audit File | EDI- |
| RIECA | 14-61 |
| Inbound EDI Databank Link File | EDIRI- |
| EL | 14-63 |
| Inbound EDI Databank Message Store File | EDI- |
| RIES | 14-65 |
| Monitor Header File | EDIRM- |
| NH | 14-68 |

Table of Contents

| | |
|--|---------|
| Monitor Store File | |
| EDIRMNS | 14-69 |
| Network Reconciliation File..... | EDIRN- |
| RC | 14-71 |
| Outbound Application Databank Directory..... | ED- |
| IROAA | 14-73 |
| Outbound Application Databank Change Audit File | EDIROA- |
| CA | 14-75 |
| Outbound Application Databank Link File | ED- |
| IROAL | 14-77 |
| Outbound Application Databank Message Store | ED- |
| IROAS | 14-79 |
| Outbound EDI Databank Directory..... | ED- |
| IROEA | 14-81 |
| Outbound EDI Databank Change Audit File..... | EDIRO- |
| ECA | 14-83 |
| Outbound EDI Databank Message Store..... | ED- |
| IROES | 14-85 |
| Batch Number Cross Reference File | |
| EDIRMXR | 14-88 |
| Report Control File..... | |
| EDIRRC | 14-90 |
| Report Detail File | |
| EDIRRD | 14-92 |
| Summary Statistics File..... | EDIR- |
| SUM | 14-94 |
| Sample Application Data Files..... | EDIAP- |
| PL, EDIAPPL1, | |
| EDIAPPL2 | 14-96 |
| Sample EDI Inbound Data Files..... | EDI- |
| DAT, EDIDAT1, | |
| EDIDAT2 | 14-97 |
| Test Data File | EDIIDA- |
| TA | 14-98 |
| Translation Results File..... | |
| EDIRSLTS | 14-100 |
| Online Control Change Audit File | EDIO- |
| CHA | 14-101 |
| Request Change Audit File..... | |
| EDIQCHA | 14-103 |
| Sterling Gentran:Realtime Acknowledgment Reconciliation File | EDIRD- |
| AR | 14-106 |
| Sterling Gentran:Realtime Acknowledgment Overdue File..... | EDIRAC- |
| KO | 14-108 |

Notices

| | |
|------------------|-----|
| Trademarks | N-3 |
|------------------|-----|

Glossary

Definition of TermsG-1
Reserved Word ConstantsG-12
Application Data TypesG-16
EDI Data TypesG-19

Index

Getting Started

Overview

Welcome to IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6.

Sterling Gentran:Realtime provides the flexibility, efficiency, and thoroughness you need to meet your most demanding requirements.

The *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 Technical Reference Guide* introduces the system programs, terminology, and functional requirements. Each chapter is arranged by function.

Chapters 2 – 13 provide detailed information on:

- Batch program processing
- Batch program interfaces
- Online programs
- Online program interfaces
- User Exits

Chapter 14 provides detailed information on:

- Sterling Gentran:Realtime file structure
- File maintenance procedures
- Sample files

See Chapter 1, “Getting Started” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for introductory information on system interaction.

How To Get Help

IBM® Sterling Customer Center provides a wealth of online resources that are available around the clock to enrich your business experience with IBM® Sterling Gentran®. By using Sterling Customer Center, you gain access to many self-support tools, including a Knowledge-Base, Documentation, Education, and Case Management. Access Sterling Customer Center at <http://customer.sterlingcommerce.com>.

Once logged in, select **Support Center** from the top navigation menu, and then locate Sterling Gentran product-specific support information from the left navigation menu.

Additionally, our Customer Support Reference Guide outlines our support hours, contact information, and key information that will enhance your support experience with us. For detailed information about Customer Support, please refer to the Customer Support Reference Guide accessible from the login page. (<http://customer.sterlingcommerce.com>)

Interface Programs

Overview

This chapter describes Sterling Gentran:Realtime interface programs.

This chapter contains the following topics:

| Topic | Page |
|--|---------------------|
| Separator Gateway.....EDIR100 | 2-2 |
| Databank Extract Driver | EDIR105 2-4 |
| Online Input Gateway.....EDIEOIG | 2-5 |
| Online Output Gateway | EDIEOOG..... 2-12 |
| Outbound Application Gateway | EDIR101 2-20 |
| Outbound Communication Gateway | EDIR102 2-25 |
| Inbound Communication Gateway | EDIR103 2-29 |
| Inbound Application Gateway..... | EDIR104 2-34 |
| Application Log Interface..... | EDIR999 2-38 |
| Asynchronous Gateway..... | EDIRASYN 2-42 |
| Viewpoint Online Gateway | EDIX980 2-44 |
| Associated Data Gateway..... | EDIR106 2-45 |

Separator Gateway

EDIR100

Purpose

The Separator Gateway program (EDIR100) is the application interface to the Separator subsystem. User programs that want to pass data to the Separator Driver (EDIR930) link to the Separator Gateway. In addition, the Separator Gateway is the application program on the Queue Options screen when the data in a queue file is to be passed to the Separator subsystem.

Operation

The user application writes its data to a TSQ (temporary storage queue). The application formats the linkage area (EDIEOGCA in the Utility.Source library) with the System image, TSQ name, process number (600), and beginning, ending, and batch indicators. It then passes control to the Separator Gateway. When processing is complete, the Gateway returns an error level, a status code, and an error message to the user program.

Another way to execute the Separator Gateway is by starting the EDIA transaction (program EDIRASYN) and specifying the Separator Gateway as the name in the Gateway field. This method will provide the ability to execute the Separator in a different CICS region and to run it in an asynchronous way.

Inputs

The linkage area is the only input.

Outputs

None.

Reports

None.

Control Card Options

Control is passed from a user program that uses the linkage area in the queue file gateways. The source for this layout is located in the member EDIEOGCA in the UTILITY.SOURCE library.

| Position | Length | Format | Field Name | Value |
|--|--------|--------|------------------|--|
| Control Values Passed to Gateway from Application | | | | |
| 01 – 03 | 3 | AN | System Image ID | System Image setup during installation |
| 04 – 06 | 3 | ZD | Separator Option | 600 for Separation processing |
| 07 – 14 | 8 | AN | Name of TS Queue | |

| Position | Length | Format | Field Name | Value |
|--|--------|--------|---------------------|-------|
| 15 – 15 | 1 | AN | Begin Document Ind. | Y |
| 16 – 16 | 1 | AN | End Document Ind. | Y |
| 17 – 17 | 1 | AN | Batch Process Ind. | N |
| Control Values Returned to Application from Gateway | | | | |
| 18 – 19 | 2 | AN | Error Level | |
| 20 – 21 | 2 | AN | Status Code | |
| 22 – 121 | 100 | AN | Error Message | |

Databank Extract Driver

EDIR105

Purpose

The Databank Extract Driver program (EDIR105) provides the start-up parameters for the Realtime Databank Extract programs (EDID255 and EDID455).

Operation

The program can be started through the Schedule Options facility of Sterling Gentran:Realtime. The Online Scanner/Initiator (EDIEOSI) starts the transaction EDIE and passes the parameters from the Schedule Options Maintenance Screen. The program retrieves these parameters and determines which extract process (Outbound EDI or Inbound Application) it is to perform. It then links to the appropriate gateway for the specific process. The primary option on the Schedule Options Screen (EDIM821) is the Path ID field, which must contain the Immediate Option number for the extract program being processed. This identifies the extract program to be processed and the parameters that the program will use.

In addition, the program can be started by entering the value EDIE ppp on a CICS screen (where ppp is the immediate option identifying the extract program being processed).

Inputs

The following table describes inputs for the Databank Extract Driver program.

| DDname | Description |
|--------|--------------|
| EDIREQ | Request File |

Outputs

The following table describes outputs for the Databank Extract Driver program.

| TSQname | Description |
|----------|----------------------|
| EDIKnnnn | Start-up parameters. |

Reports

None.

Online Input Gateway

EDIEOIG

Purpose

The Online Input Gateway (EDIEOIG or simply “OIG”) program is the interface between the queue read function and the user program (or Sterling Gentran:Realtime process) that will process the data on a queue file.

Operation

The Online Input Gateway program works with the Online Queue Read programs (EDIEOQR and EDIROQR) to read data from a queue file and pass it to the appropriate process.

Note: In the following discussion, the Online Input Gateway and Online Queue Read programs are referred to collectively as the Online Input Gateway (OIG).

Overview

The value in the Appl. Prog field on the Queue Options Maintenance screen (EDIM303) identifies the process that will receive the data from the OIG.

The Online Scanner Initiator program (EDIEOSI) determines if a queue file has data that meets the trigger level(s) specified on the Queue Options Maintenance screen. The EDIEOSI program will then start a queue read transaction. The Queue Read program reads the data from the queue file and places it in a TSQ. The system passes the TSQ name to the OIG program that reads the queue options parameters from the EDIOCF file, and then formats a communications area and passes this information to the application program identified on the Queue Options Maintenance screen.

Inbound applications and outbound communications may use the Online Input Gateway to receive application data and EDI data respectively from Sterling Gentran:Realtime. The gateway is used in the same manner regardless of the type of data. The gateway does not distinguish between application and EDI data.

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|--|
| 1. | An Online Input Gateway task is STARTed for each queue file having data. |
| 2. | The Online Input Gateway prepares a CICS TSQ containing record images (application or EDI data) that contain one or more documents or interchanges, respectively. The records are variable-length, with trailing spaces truncated. |
| 3. | The Gateway program links to the user-supplied interface program indicating that the TSQ is a complete unit of work (document group). |
| 4. | The interface program returns to the Gateway with a status code and error level. The status code indicates whether the interface program accepted all the records or rejected them in their entirety. |

When Records Exceed TSQ Limits

When large amounts of data (greater than 32,760 records) are present on the queue file, the program must create multiple TSQs to hold the records (CICS limits TSQs to 32,767 records, Sterling Gentran:Realtime therefore sets the limit at 32,760). This data may be processed by different methods, as determined by the TSQ Store Switch parameter on the Queue Options screen.

- When the switch value is set to A, M, or blank, the system passes the data to the application program one TSQ at a time, with 32,760 records in each TSQ. Indicators identify the beginning and end of the data. This results in multiple links to the application program.
- When the switch value is set to C, the system writes the data to multiple TSQs chained together (each TSQ has 32,760 records and a special record that identifies the next TSQ). This results in one link to the application program. This method must be used when Sterling Gentran:Realtime translation is being executed for the queue file data.

File Access

| File Description | DDname | File Access |
|---|---------|--------------------------|
| Sterling Gentran:Realtime Activity file | EDIRAPF | Read, write, and update. |

Control Structure

This section describes the control structure, which is the method by which the gateway calls the interface program and the interface program returns to the gateway.

The Online Input Gateway LINKs to the interface program, which then RETURNs with a status code and error level.

The Online Input Gateway may LINK to the interface program with a complete document group, or may issue a series of LINKS for a document group.

Examples

Example 1: The document group contains less than 32,760 records.

| Step | Description |
|------|--|
| 1. | The gateway creates a TSQ containing the records for the document group. |
| 2. | The gateway program initializes the parameter list to the interface program and then LINKs to the interface program. The document group indicators are set to indicate both the beginning and the end of the document group. |
| 3. | The interface program processes the document group and then deletes the TSQ. |
| 4. | Control is returned to the gateway. The gateway examines the status code to determine whether the document group was accepted by the interface program, and examines the error level to determine if any errors were encountered. The system writes any error message provided by the interface program to the Sterling Gentran:Realtime Online Log. |

Example 2: The document group contains more than 32,760 records, and TSQ chaining is not enabled.

| Step | Description |
|------|---|
| 1. | The gateway creates a TSQ containing the first part of the document group. |
| 2. | The gateway initializes the parameter list to the interface program and then LINKs to the interface program. The system sets the document group indicators to indicate the beginning, but not the end of the document group. |
| 3. | The interface program processes the document group and then deletes the TSQ. |
| 4. | Control is returned to the gateway. The gateway examines the status code to determine whether the document group was accepted by the interface program, and examines the error level to determine whether any errors were encountered. The system writes any error message provided by the interface program to the Sterling Gentran:Realtime Online Log. |
| 5. | The gateway creates a TSQ containing the next part of the document group, and LINKs to the interface program indicating that the document group neither begins nor ends on this call. The interface program processes the portion of the document group and deletes the TSQ. Upon return, the Gateway checks the status code and error level as before. |
| 6. | This process repeats until the last part of the document group. On this LINK, the gateway indicates that the document group ends. |

Example 3: The document group contains more than 32,760 records, and TSQ chaining is enabled.

| Step | Description |
|------|---|
| 1. | The gateway creates as many TSQs as needed to contain the records for the document group. Each TSQ will contain 32,760 records and chain to the next TSQ. |
| 2. | The gateway initializes the parameter list to the interface program and then LINKs to the interface program. The system passes the name of the first TSQ to the interface program and sets the document group indicators to indicate both the beginning and the end of the document group. |
| 3. | The interface program processes the document group and then deletes all of the TSQs. |
| 4. | Control is returned to the gateway. The gateway examines the status code to determine whether the document group was accepted by the interface program, and examines the error level to determine whether any errors were encountered. The system writes any error message provided by the interface program to the Sterling Gentran:Realtime Online Log. |

Parameters

The following tables describe the parameters for the Online Input Gateway (Copybook member – EDIEIGCA).

Values Passed to Application

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|---------------------|
| 0001 – 0003 | 3 | AN | System Image ID |
| 0004 – 0006 | 3 | ZD | Queue File Number |
| 0007 – 0014 | 8 | AN | Name of TS Queue |
| 0015 – 0015 | 1 | AN | Begin Document Ind. |
| 0016 – 0016 | 1 | AN | End Document Ind. |

Values Returned to Gateway

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|----------------|
| 0017 – 0018 | 2 | AN | Error Level |
| 0019 – 0020 | 2 | AN | Status Code |
| 0021 – 0120 | 100 | AN | Return Message |

Field Descriptions

Values Passed to Application

System Image (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Queue File Number

The 3-digit queue file number. The document group was obtained from this queue file.

Name of TS Queue

The 8-character name of the TSQ to be processed by the application interface.

Begin Document Ind.

A 1-character code indicating whether the TSQ contains the beginning of this document group. Valid values are **Y** and **N**.

End Document Ind.

A 1-character code indicating whether the TSQ contains the end of this document group. Valid values are **Y** and **N**.

Values Returned to Gateway

Error Level

A 2-character code that indicates the highest error level that occurred in the application interface program or any of its sub-functions. A value of 00 indicates no errors occurred. Any value other than 01 results in an error message and disables the queue file.

Messages entered in the Return Message area are displayed on the Online Log.

Note: Copybook member RTECODES displays an explanation of error level and status code values for Sterling Gentran:Realtime programs.

Status Code

A 2-character code that indicates success or failure of the requested function. Valid values are:

- | | | |
|-----------|---|---|
| 00 | = | Document group accepted by application interface. The document group is "Committed" by the Online Inbound Gateway if this is the end of this document group. |
| 04 | = | Document group could not be processed by the application. This implies that the program can not currently function properly. The Queue Read program attempts to process the document group on the next process cycle. The system does not disable the queue file. |

16 or greater = Document Group rejected by application interface. The Online Input Gateway terminates and no further documents are passed. The next time the Online Scanner/Initiator starts, the system issues a stall message against the queue file.

Note: If you receive an error level of 00 and a status code of 04, the Online Scanner Initiator issues a stall message, but continues to enable the queue file. The Stall Limit on the Queue Options Maintenance screen limits the number of stalls that can occur before the queue file is disabled. Entering 99 in the Stall Limit field allows unlimited number of stalls (i.e., the queue never becomes disabled, but many stall messages may be created).

Return Message

A 1- to 100-character text message of any error encountered by the application interface or its sub-functions. If the system returns a non-zero error level, the Online Input Gateway records this message on the Sterling Gentran:Realtime Online Log.

Note: The program EDIESOA provides an example of the interface to the gateway.

Interface Design Considerations

This section describes important issues to consider when designing interface programs to the Online Input Gateway. The considerations are organized by inbound application interfaces and outbound communication Interfaces.

Inbound Application Interfaces

- The Online Input Gateway calls (LINKS) inbound applications to receive application data from the online or batch translator.
- The TSQ contains application record images with trailing spaces truncated (i.e., the record length is variable). Each record is 1- to 5000-bytes in length.
- A document group contains one or more documents (one or more transaction sets) from Sterling Gentran:Realtime or Sterling Gentran:Basic.

- If a document group has more than 32,760 records, the system can employ either of two different methods to process the data. The method used depends on the switch value set in the TSQ Store field on the Queue Options Maintenance screen.
 - When the switch value is set to A, M, or blank, the system passes the data to the application program one TSQ at a time, with 32,760 records in each TSQ. Indicators identify the beginning and end of the data. This results in multiple links to the application program.
 - When the switch value is set to C, the system writes the data to multiple TSQs chained together (each TSQ has 32,760 records and a special record that identifies the next TSQ). This results in one link to the application program. This method must be used when Sterling Gentran:Realtime translation is being executed for the queue file data.

If the application finds that it can not process the data, it sets the status code and error level to 16. This disables the queue file. If the application determines that it can not process the data, but the error is only temporary (i.e., a communication is down), then setting the error level to 00 and the status code to 04 causes the queue file to remain enabled. The gateway then retries the data on the next scanning interval.

- Access to an individual queue file is serialized. In particularly busy systems, the application interface should operate asynchronously from the rest of the application so as not to cause the rest of the application to serialize processing.
- The application (when in control) may terminate or return a status code of 16 without affecting the queue file. Any document group data passed to the application interface remains on the queue file in its entirety, and CICS frees the queue file during task termination. The next time the Online Scanner/Initiator starts, the system issues a stall message against the queue file.

Outbound Communication Interfaces

The same considerations apply to outbound communication interfaces as to inbound applications, with the following differences:

- The TSQ contains record images of EDI data. The record images are fixed in length, at 80 bytes.
- A document group contains one or more interchanges from Sterling Gentran:Realtime and one interchange from Sterling Gentran:Basic.

Online Output Gateway

EDIEOOG

Purpose

The Online Output Gateway program allows a CICS application to directly pass data to a queue file. This allows you to send the data to a Sterling Gentran:Realtime or Sterling Gentran:Basic translation. The queue file can also pass data from one user CICS application to another or to a batch application

Operation

A user CICS application that needs to write data to a queue file must use the EDIEOOG program to perform this write. The data must be written to a TSQ. The user program then passes the TSQname, along with other parameters, to the EDIEOOG program. The gateway will then write the data to the queue file.

The user application can invoke the gateway two different ways

- Through a direct LINK to the the program. This LINK provides the application with a direct verification that the data has worked or hasn't worked.
- Via a START on the asynchronous transaction EDIA. Using the START, the user application does not need to wait until the writes are completed before continuing processing.

Outbound applications and inbound communications may use the Online Output Gateway to send application data and EDI data respectively to the translation system. The gateway is used in the same manner regardless of the type of data. The gateway does not distinguish between application and EDI data.

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|---|
| 1. | The interface program (application or communications) prepares a CICS TSQ containing record images (application or EDI data) that represent a desired unit of work called a "document group." |
| 2. | The interface program links to the Online Output Gateway, indicating that the TSQ is a complete unit of work (document group). |
| 3. | The Online Output Gateway returns to the interface program with a status code and error level. The status code indicates whether the gateway accepted all the records or rejected them in their entirety. |

In the case of large transactions from the batch translator, there may be more records than can be held in a TSQ (more than 32,760). In this situation, the system would repeat the steps above, with special indicators set to indicate the beginning and the end of the document group.

File Access

| File Description | DDname | File Access |
|---|---------|--------------------------|
| Sterling Gentran:Realtime Activity file | EDIRAPF | Read, write, and update. |

Control Structure

This section describes the control structure, which is the method the interface program uses with the gateway.

The interface program LINKs to the Online Output Gateway (EDIEOOG), which then RETURNS with a status code and error level.

The interface program may LINK to the gateway with a complete document group, or may issue a series of LINKS for a document group.

Examples

Example 1: The document group contains less than 32,760 records.

| Step | Description |
|------|--|
| 1. | The interface program creates a TSQ containing the records for the document group. |
| 2. | The interface program initializes the parameter list to the gateway and then LINKs to the gateway. The system sets the document group indicators to indicate both the beginning and end of the document group. |
| 3. | Control is returned to the interface program. The interface program examines the status code to determine whether the document group was accepted by the gateway, and examines the error level to determine whether the system encountered any errors. |
| 4. | The interface program deletes the TSQ created in step 1. |

Example 2: The document group for the batch translator contains more than 32,760 records.

| Step | Description |
|------|---|
| 1. | The interface program creates a TSQ containing the first part of the document group. |
| 2. | The interface program initializes the parameter list to the gateway and then LINKs to the gateway. The document group indicators are set to indicate the beginning, but not the end of the document group. |
| 3. | Control is returned to the interface program. The interface program examines the status code to determine whether the document group was accepted by the gateway, and examines the error level to determine if any errors were encountered. |
| 4. | The interface program deletes the TSQ created in step 1. |
| 5. | The interface program creates a TSQ containing the next part of the document group, and LINKs to the gateway, indicating that the document group neither begins nor ends on this call. Upon return, the interface checks the status code and error level as before and deletes the TSQ. |
| 6. | This process is repeated until the last part of the document group. On this LINK, the interface program indicates that the document group ends. |

Note: The entire document group must be processed in one CICS task (i.e. the interface program must start and end the document group in the same CICS task).

A second method of handling documents greater than 32,760 records is to write the data to multiple TSQs and chain them together. Chaining requires that you write a special eyecatcher record that has a pointer to the next TSQ in the chain.

See the sample program EDIRSOA for an example of how to write the eyecatcher record.

Parameters

The parameters for the Online Output Gateway (Copybook member: EDIEOGCA) are described below:

Values Passed to Gateway

| Record Position | Length | Format | Field Name | Value |
|-----------------|--------|--------|--------------------------|---|
| 0001 – 0003 | 3 | AN | System Image ID | |
| 0004 – 0006 | 3 | ZD | Queue File Number | Any queue file number that is defined with an online source |
| 0007 – 0014 | 8 | AN | Name of TS Queue | |
| 0015 – 0015 | 1 | AN | Begin Document Ind. | Y or N |
| 0016 – 0016 | 1 | AN | End Document Ind. | Y or N |
| 0017 – 0017 | 1 | AN | Init. Batch Process Ind. | Y or N |

Values Returned from Gateway

| Record Position | Length | Format | Field Name | Value |
|-----------------|--------|--------|----------------|-------|
| 0018 – 0019 | 2 | AN | Error Level | |
| 0020 – 0021 | 2 | AN | Status Code | |
| 0022 – 0121 | 100 | AN | Return Message | |

Field Descriptions

Values Passed to Gateway

System Image (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Queue File Number

The 3-digit queue file number. The document group will be added to this file.

Note: The queue file must be defined with an online source.

Name of TS Queue

The 1- to 8-character name of the TSQ to be processed by the Online Output Gateway.

Begin Document Ind.

A 1-character code that indicates whether the TS Queue contains the beginning of this document group. Valid values are **Y** and **N**.

End Document Ind.

A 1-character code that indicates whether the TS Queue contains the end of this document group. Valid values are **Y** and **N**.

Init. Batch Process Ind.

A 1-character code switch that indicates whether to immediately initiate batch processing at the completion of this document group. This should only be turned on if the End Document Ind.field also is on. If batch processing is requested, the queue options for this queue file must have an Action to Initiate value of **B**. The system uses the Batch JCL Name value from the queue options to determine what JCL to submit. Valid values are **Y** and **N**.

Values Returned from Gateway

Error Level

A 2-character code that displays the highest error level which occurred in the gateway or any of its sub-functions. A value of 00 indicates no errors occurred.

Status Code

A 2-character code that indicates success or failure of the requested function. Valid values are:

| | | |
|-------------------------|---|--|
| 01 | = | Document group accepted for processing. |
| 04 | = | Document group accepted but batch initiation was not successful. |
| 06 | = | Document group rejected; queue file not online write. |
| 08 | = | Document group rejected – queue file full. |
| 10 | = | Document group rejected – queue file disabled. |
| 12 | = | Document group rejected – queue file not defined. |
| 16 or greater | = | Document group rejected – The return message contains the error encountered. |

Note: The status codes 06, 08, 10, 12, and 16 are accompanied by an error level of 16.

Note: When processing a large document group without using TSQ chaining, the system only returns a status code 01 with an error level 00 on the final TSQ (when the End Document Indicator value is set to Y). The successful processing of all the other intermediate TSQs (when the End Document Indicator value is set to N) returns a status code 16 with an error level 00.

Return Message

A 1- to 100-position alphanumeric field displaying the text message of any error encountered by the gateway or its sub-functions.

Note: If a COMMAREA shorter than 121 characters is passed to the Online Output Gateway, an EDIL abend is issued.

Interface Design Considerations

This section describes important issues to consider when designing interface programs to the Online Output Gateway. The considerations are organized by outbound application interfaces and inbound communication interfaces.

Outbound Application Interfaces

- Outbound applications call (link) the Online Output Gateway to send application data to the Translator.
- The TSQ contains application record images that may have trailing spaces truncated (i.e. the record length may be variable). Each record must be between 1- and 5000-bytes in length.
- A document group is normally an individual document unless there is a need to make a series of documents a unit of work. A document group once accepted by the gateway is immediately available for processing.
- If a document group destined for the batch translator exceeds 32,760 records, multiple links to the Output Gateway are required to complete the document group (or the document must be written to multiple TSQs and the TSQs must be chained together). The Gateway holds the queue file through the series of links until the interface indicates that the document group ends. The application transaction must begin and end the document group within the same CICS task. If the application finds that it cannot complete the document group, it **MUST** terminate the current CICS task (to release the queue file).
- Access to an individual queue file is serialized. In particularly busy systems, the application interface should operate asynchronously from the rest of the application so as not to cause the rest of the application to serialize processing.
- The application must be capable of handling errors returned from the gateway. The status code and error level must be examined separately. The status code indicates whether the current function completed successfully, and the error level indicates the highest error that occurred. It is possible to have a successful status code and non-zero error level (e.g., the function completed successfully, but an error was detected in subsequent processing logic).
- The application (when in control) may terminate without affecting the queue file. The system discards any partial document group passed to the gateway, and CICS frees the queue file during task termination.

Note: Enqueues on CICS resources are performed with the TASK parameter to lock the resource until the task ends. This keeps the resource locked through syncpoint calls that may be performed by user applications.

Inbound Communication Interfaces

The same considerations apply to inbound communications as outbound applications, with the following differences:

- The TSQ contains record images of EDI data. The record images **MUST** be fixed in length, at 80-bytes.
- A document group may contain one or more interchanges.
- For ease of communication recovery, the document group may follow the unit of work grouping of the communication session.

Outbound Application Gateway

EDIR101

Purpose

The Sterling Gentran:Realtime Outbound Application Gateway invokes the Sterling Gentran:Realtime Outbound translation process.

Operation

The Outbound Application Gateway passes EDI documents from your application to Sterling Gentran:Realtime for outbound translation processing.

Either of two methods may invoke the gateway:

- If queue file input to the Sterling Gentran:Realtime translation process is being used, the Outbound Application Gateway is called (LINKED) by the Online Queue Read task. The Outbound Application Gateway calls (LINKS) the Sterling Gentran:Realtime Outbound translation process. When complete, it returns to the Online Queue Read task.
- A user application can invoke the gateway directly. The Sterling Gentran:Realtime Outbound Application Gateway then calls (LINKS) the Sterling Gentran:Realtime Outbound translation process. When complete, it returns to the user application task.

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|--|
| 1. | The interface program (application) prepares a CICS TSQ containing record images that represent a desired unit of work, called a document group. |
| 2. | The interface program links to the Outbound Application Gateway (EDIR101). |
| 3. | The Outbound Application Gateway links to the Sterling Gentran:Realtime outbound translation process. |
| 4. | The Outbound Application Gateway returns to the interface program with a status code, error level, and message. |

In the case of large transactions, there may be more records than can be held in a TSQ (more than 32,760). TSQ chaining is required to handle this situation.

See Chapter 6, “Configuration Strategies,” in the *IBM Sterling Gentran:Realtime for z/OS Release 6.6 User Guide* for more detailed information on TSQ chaining.

File Access

| File Description | DDname | File Access |
|---|---------|--------------------------|
| Sterling Gentran:Realtime Activity File | EDIRAPF | Read, write, and update. |

Control Structure

This section describes the processing logic that the interface program uses with the gateway.

The interface program links to the Outbound Application Gateway (EDIR101), which links to the Outbound Sterling Gentran:Realtime translation process and then returns with a status code, error level, and message.

Parameters

Your Gateway interface programs use a short list of parameters that identify to the gateway what processing options should be used. A Copybook member (EDIRGATE) has been provided with Sterling Gentran:Realtime that can be used in your interface programs. The following tables describe the parameters.

Note: If the COMMAREA is shorter than 129 characters when passed to the Gateway, an EDIL abend is issued.

Values Passed to Gateway

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|------------------------------|
| 0001 – 0003 | 3 | AN | System Image ID |
| 0004 – 0011 | 8 | AN | Name of TS Queue |
| 0012 – 0014 | 3 | AN | Immediate or Schedule Number |

Values Returned from Gateway

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|-------------------------------------|
| 0015 – 0016 | 2 | AN | Error Level |
| 0017 – 0018 | 2 | AN | Status Code |
| 0019 – 0118 | 100 | AN | Return Message |
| 0119 – 0125 | 7 | N | Task ID |
| 0126 – 0126 | 1 | AN | Process |
| 0127 – 0129 | 3 | AN | Queue File Number Field Description |
| 0130 – 0209 | 80 | AN | User Pass Thru Area (optional area) |

Field Descriptions

Values Passed to Gateway

System Image (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Name of TS Queue

The 1- to 8-character name of the TSQ to be processed by Sterling Gentran:Realtime. This TSQ is where the user program has stored the data.

Immediate or Schedule Number

The 3-digit identifier for the immediate or schedule request options to be used by Sterling Gentran:Realtime for processing the TSQ. Valid value is any number in the range of **200 – 499**.

Values Returned from Gateway

Error Level

A 2-character code that indicates the highest error level that occurred in the gateway or any of its sub-functions. A value of 00 indicates no errors occurred. A value of 16 or greater indicates that the entire document group was rejected.

Status Code

A 2-character code that indicates success or failure of the requested function. Valid values are:

| | | |
|-------------------------|---|---|
| 00 | = | Document Group processed. |
| 07 | = | Document Group rejected – Fatal error encountered |
| 08 | = | No Documents Generated |
| 16 or greater | = | Document group or interchange has been rejected. If returned to the gateway by an interface program, Sterling Gentran:Realtime invokes Rollback processing. |

See Copybook RTECODES in GENTRAN.V6X6.RTE.UTILITY.SOURCE for a complete list of status codes defining which program uses them.

Return Message

A 1- to 100-character text message of any error encountered by the gateway or its sub-functions.

Task ID

A 7-digit number assigned by CICS to the task that executed the gateway. The task ID is included in the Report Selection list for locating reports that were produced during the execution of the gateway.

Process

A 1-character indicator that identifies the type of option being performed by the gateway. Valid values are:

| | | |
|----------|---|--|
| I | = | Immediate. An Immediate Option is being performed. |
| Q | = | Queue. A queue option is being performed. |
| S | = | Schedule. A Schedule Option is being performed. |

Queue File Number

A 3-character indicator that holds the value of the queue file number being processed. This field displays a value only if the queue option is indicated in the Process field. Otherwise, this field is blank.

User Pass Thru Area (optional)

An 80-character alphanumeric field used to pass user information from the user program to the Sterling Gentran:Realtime data translation process. This area is passed to all user exit programs (all Mapper exits require the Parm Exit Version to be set to 2) and to the user destination programs. Any changes or modifications made to this area by these exits are passed through also. The program that originally started the translation then receives all changes made during the process.

This area passes information between user applications. The application that starts the translation can pass information in this area (or in a TSQ area that is named in this area) to the destination program.

| Step | Description |
|------|---|
| 1. | The interface program creates a TSQ containing the records for the document group. If there are more than 32,760 records, the program must create multiple TSQs and chain them together. |
| 2. | The interface program initializes the gateway's parameter list and then LINKs to the gateway. |
| 3. | When the outbound Sterling Gentran:Realtime translation process completes, control is returned to the interface program. The interface program examines the status code to determine whether the document group was successfully processed by outbound Sterling Gentran:Realtime, and examines the error level to determine if the system encountered any errors. The Return Message can be used for reporting back to the application. |
| 4. | The interface program deletes the TSQ created in step 1. |

Interface Design Considerations

This section describes important issues to consider when designing interface programs for the Outbound Application Gateway.

- Outbound applications link to the Outbound Application Gateway to send application data to Sterling Gentran:Realtime outbound translation processes.
- The TSQ contains application record images that may have trailing spaces truncated (i.e. the record length may be variable). Each record must be between 1- and 5000-bytes in length.
- A document group will normally be an individual document unless there is a need to make a series of documents a unit of work. A document group, once accepted by the Outbound Application Gateway, is processed immediately by Sterling Gentran:Realtime.
- Access to outbound Sterling Gentran:Realtime is serialized. In particularly busy systems, the application interface should operate asynchronously from the rest of the application so as not to cause the rest of the application to serialize processing.
- The application should be capable of handling errors returned from the gateway. The status code and error level must be examined separately. The status code indicates whether the current function completed successfully and the error level indicates the highest error that occurred. It is possible to have a successful status code and non-zero error level (e.g., the function completed successfully, but an error was detected in subsequent processing logic).
- The application that links to the gateway must have Recovery turned on. In the case that CICS terminates abnormally while Sterling Gentran:Realtime is running, all updates must be backed out. If Sterling Gentran:Realtime encounters a processing error that makes the data unprocessable, ROLLBACK will be executed. Any LOGGED application updates that the user does not want backed out should, therefore, be protected by a SYNCPOINT before calling the gateway.

Note: The sample program EDIRSOA provides an example of linking to the outbound gateway.

Outbound Communication Gateway

EDIR102

Purpose

The Outbound Communication Gateway invokes the Sterling Gentran:Realtime Online Queue Write program, or a user application.

Operation

The Outbound Communication Gateway is called (LINKED) by the Sterling Gentran:Realtime Outbound translation process. If a Queue Write was requested, the Outbound Communication Gateway calls (LINKS) the Online Queue Write program.

If a user application (communication) was requested, then the Sterling Gentran:Realtime Outbound Communication Gateway LINKS to the requested user program. When the user program returns, the gateway checks the status codes, and then returns to the Sterling Gentran:Realtime Outbound translation task.

The Outbound Communication Gateway passes EDI data from the Sterling Gentran:Realtime outbound translation process to your outbound communication processing.

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|---|
| 1. | The Sterling Gentran:Realtime Outbound Editor prepares a CICS TSQ containing record images (EDI data) that contain one document group, which could be one or more interchanges. |
| 2. | The Outbound Communication Gateway is LINKed to for each immediate option or queue options having data. |
| 3. | The Outbound Communication Gateway LINKs to the user-supplied interface program, indicating that the TSQ is a complete unit of work. |
| 4. | The interface program returns to the gateway with a status code. The status code indicates whether the interface program accepted all the records or rejected them in their entirety. |

File Access

None.

Control Structure

This section describes the processing logic the gateway uses with the interface program, and the logic the interface program performs upon returning to the gateway.

The Outbound Communication Gateway LINKs to the user-supplied communication interface program, which then RETURNs with a status code. The following table provides a more detailed description.

| Step | Description |
|------|--|
| 1. | The Sterling Gentran:Realtime Outbound Editor creates a TSQ containing the records for the interchange, then LINKs to the gateway. |
| 2. | The gateway program initializes the parameter list being passed to the interface program and then LINKs to the interface program. |
| 3. | The interface program processes the document group and then deletes the TSQ. |
| 4. | The interface program returns control to the gateway. The gateway examines the status code to determine whether the document group was accepted by the interface program. A status code of 16 indicates the document group was not accepted and Sterling Gentran:Realtime should invoke Rollback processing. |

Parameters

Your gateway interface programs will use a short list of parameters that will identify to the gateway what processing options should be used. A Copybook member (EDIRGATE) has been provided with Sterling Gentran:Realtime that can be used in your interface programs. The parameter list is described below:

Note: If the COMMAREA is shorter than 129 characters when passed to the Gateway, an EDIL abend is issued.

Values Passed to Outbound Communications

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|--|
| 0001 – 0003 | 3 | AN | System Image ID |
| 0004 – 0011 | 8 | AN | Name of TS Queue |
| 0012 – 0014 | 3 | AN | Immediate or Schedule Number or Queue File Number. |

Values Returned from Outbound Communications

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|----------------|
| 0015 – 0016 | 2 | AN | Error Level |
| 0017 – 0018 | 2 | AN | Status Code |
| 0019 – 0118 | 100 | AN | Return Message |

Additional Values Passed to Outbound Communications

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|---------------------|
| 0119 – 0125 | 7 | N | Task ID |
| 0126 – 0126 | 1 | AN | Process |
| 0127 – 0129 | 3 | AN | Path ID |
| 0130 – 0209 | 80 | AN | User Pass Thru Area |

Field Descriptions*Values Passed to Outbound Communications***System Image** (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Name of TS Queue

The 1- to 8-character name of the TSQ to be processed by the outbound communications programs. This TSQ is where the data has been stored by the Sterling Gentran:Realtime system.

Immediate, Schedule Number, or Queue File Number

The 3-digit identifier for the immediate, schedule, or queue file request options used by Sterling Gentran:Realtime for processing the TSQ. **This number will be in the range 001 – 999.**

*Values Returned from Outbound Communications***Error Level**

A 2-character code that indicates the highest error level that occurred in the interface program or any of its sub-functions. A value of 00 indicates no errors occurred. A value of 16 or greater indicates that the entire document group was rejected.

Status Code

A 2-character code that indicates success or failure of the requested function. Valid values are:

00 = Document group processed.

16 or greater = Document group or interchange has been rejected. If returned to the gateway by an interface program, Sterling Gentran:Realtime invokes Rollback processing.

Return Message

A 1- to 100-character text message of any error encountered by the interface program or its sub-functions.

Additional values passed to Outbound Communications

Task ID

A 7-digit number assigned by CICS to the task that executed the gateway. The task ID is included in the Report Selection list for locating reports that were produced during the execution of the gateway.

Process

A 1-character indicator that identifies the type of option being performed by the gateway. Valid values are:

| | | |
|----------|---|--|
| I | = | Immediate. An immediate option is being performed. |
| Q | = | Queue. A queue option is being performed. |
| S | = | Schedule. A schedule option is being performed. |

Path ID

A 3-character indicator that holds the value of the Path ID being processed.

User Pass Thru Area (optional area)

An 80-character alphanumeric field that passes user information from the user program to the Sterling Gentran:Realtime data translation process. This area is passed to all user exit programs (all Mapper exits require the Parm Exit Version to be set to 2) and to the user destination programs. Any changes or modifications made to this area by these exits are passed through also. The program that originally started the translation then receives all changes made during the process.

Interface Design Considerations

This section describes important issues to consider when designing interface programs for receiving EDI interchanges from the Outbound Communication Gateway.

- Outbound communications are called (LINKED) by the Outbound Communication Gateway to receive EDI data from the Sterling Gentran:Realtime translator.
- The TSQ to be processed by the communication interface program contains EDI record images with trailing spaces. Each record is 80-bytes in length.
- Each TSQ will contain one or more interchanges.
- If the application abends or returns a status code of 16, ROLLBACK is executed.

Note: The sample program EDIRTOOUT provides an example of the Linkage between the Outbound Communications Gateway and a user interface.

Inbound Communication Gateway

EDIR103

Purpose

The Sterling Gentran:Realtime Inbound Communication Gateway invokes the Sterling Gentran:Realtime inbound translation process.

Operation

The Inbound Communication Gateway program can be invoked either of two ways:

- If queue file input to the Sterling Gentran:Realtime translation process is being used, the Inbound Communications Gateway is called (LINKED) by the Sterling Gentran:Realtime Online Queue Read task. The Inbound Communication Gateway calls (LINKS) the Sterling Gentran:Realtime Inbound translation process. When complete, it returns to the Online Queue Read task.
- A user application invokes the gateway directly. The Sterling Gentran:Realtime Inbound Communication Gateway then calls (LINKS) the Sterling Gentran:Realtime Inbound translation process. When complete, it returns to the user application task.

The gateway sends EDI data to Sterling Gentran:Realtime inbound translation processing.

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|--|
| 1. | The communication interface program prepares a CICS TSQ containing record images that represent a desired unit of work called a document group. |
| 2. | The interface program links to the Inbound Communication Gateway. |
| 3. | The gateway links to Sterling Gentran:Realtime inbound translation processing. |
| 4. | The Inbound Communication Gateway returns to the interface program with a status code, error level, and return message. The status code indicates whether the Sterling Gentran:Realtime successfully processed all the records or rejected them in their entirety. |

File Access

| File Description | DDname | File Access |
|---|---------|--------------------------|
| Sterling Gentran:Realtime Activity File | EDIRAPF | Read, write, and update. |

Control Structure

This section describes the processing logic the interface program must use with the gateway.

The communication interface program LINKs to the Inbound Communication Gateway, which LINKs to the Sterling Gentran:Realtime inbound translation process and then RETURNs with a status code, error level, and return message. The following table provides a more detailed description.

| Step | Description |
|------|---|
| 1. | The interface program creates a TSQ containing the records for the document group. |
| 2. | The interface program initializes the gateway's parameter list and then LINKs to the gateway. |
| 3. | When the Sterling Gentran:Realtime inbound translation process completes, control is returned to the interface program. The interface program examines the status code to determine whether the document group was successfully processed by inbound translation processing, and examines the error level to determine whether the system encountered any errors. The Return Message can be used for reporting back to the application. |
| 4. | The interface program deletes the TSQ created in step 1. |

Parameters

Your gateway interface programs will use a short list of parameters that identify to the gateway what processing options should be used. A Copybook member (EDIRGATE) has been provided with Sterling Gentran:Realtime that can be used in your interface programs. The following tables describe the parameters.

Note: If the COMMAREA is shorter than 129 characters when passed to the gateway, an EDIL abend is issued.

Values Passed to Gateway:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|--|
| 0001 – 0003 | 3 | AN | System Image ID |
| 0004 – 0011 | 8 | AN | Name of TS Queue |
| 0012 – 0014 | 3 | AN | Immediate, Schedule, or Queue File Number |

Values Returned from Gateway

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|-------------------------------------|
| 0015 – 0016 | 2 | AN | Error Level |
| 0017 – 0018 | 2 | AN | Status Code |
| 0019 – 0118 | 100 | AN | Return Message |
| 0119 – 0125 | 7 | N | Task ID |
| 0126 – 0126 | 1 | AN | Process |
| 0127 – 0129 | 3 | AN | Queue File Number |
| 0130 – 0209 | 80 | AN | User Pass Thru Area (optional area) |

Field Descriptions*Values Passed to Gateway***System Image** (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Name of TS Queue

The 1- to 8-character name of the TSQ to be processed by Sterling Gentran:Realtime. This TSQ is where the user communications program has stored the data.

Immediate or Schedule Number

The 3-digit identifier for the immediate or schedule request options to be used by Sterling Gentran:Realtime for processing the TSQ. **This number must be in the range 200-399 for immediate options and 400-499 for schedule options.**

*Values Returned from Gateway***Error Level**

A 2-character code that indicates the highest error level that occurred in the gateway or any of its sub-functions. A value of 00 indicates no errors occurred. A value of 16 or greater indicates that the entire document group was rejected.

Status Code

A 2-character code that indicates success or failure of the requested function. Valid values are:

| | | |
|----------------------|---|---|
| 00 | = | Document group processed. |
| 07 | = | Document group rejected. Fatal error encountered. |
| 08 | = | No documents generated. |
| 16 or greater | = | Document group or interchange has been rejected. If returned to the gateway by an interface program, Sterling Gentran:Realtime invokes Rollback processing. |

See Copybook RTECODES in GENTRAN.V6X6.RTE.UTILITY.SOURCE for a complete list of status codes defining which program uses them.

Return Message

A 1- to 100-character text message of any error encountered by the Gateway or its sub-functions.

Task ID

A 7-digit number assigned by CICS to the task that executed the gateway. The task ID is included in the Report Selection list for locating reports that were produced during the execution of the gateway.

Process

A 1-character indicator that identifies the type of option being performed by the gateway. Valid values are:

| | | |
|----------|---|--|
| I | = | Immediate. An immediate option is being performed. |
| Q | = | Queue. A queue option is being performed. |
| S | = | Schedule. A schedule option is being performed. |

Queue File Number

A 3-character indicator that holds the value of the queue file number being processed. This field displays a value only if the queue option is indicated in the Process field. Otherwise, this field will be blank.

User Pass Thru Area (optional area)

An 80-character alphanumeric field used to pass user information from the user program to the Sterling Gentran:Realtime data translation process. This area is passed to all user exit programs (all Mapper exits require the Parm Exit Version to be set to 2) and to the user destination programs. Any changes or modifications made to this area by these exits are passed through also. The program that originally started the translation receives all changes made during the process.

Interface Design Considerations

This section describes important issues to consider when designing interface programs for the Inbound Communication Gateway.

- Inbound Communication applications Link to the Inbound Application Gateway to send EDI Interchanges to Sterling Gentran:Realtime inbound translation processing.
- The TSQ contains record images of EDI data. The record images are fixed length of 80 bytes.
- A document group may contain one or more interchanges. A document group is processed immediately by the inbound translation processing.
- For ease of communication recovery, the document group may follow the unit of work grouping of the communication session.
- Access to Sterling Gentran:Realtime inbound translation is serialized. In particularly busy systems, the communication interface should operate asynchronously from the rest of the communication application so as not to cause the rest of the application to serialize processing.
- The communication application should be capable of handling errors returned from the gateway. The status code and error level must be examined separately. The status code indicates whether the current function completed successfully and the error level indicates the highest error which occurred. It is possible to have a successful status code and non-zero error level (the function completed successfully, but an error was detected in subsequent processing logic).
- The application that links to the gateway must have Recovery turned on. In the case that CICS terminates abnormally while the Sterling Gentran:Realtime is running, all updates must be backed out. If Sterling Gentran:Realtime encounters a processing error that makes the data unprocessable, ROLLBACK will be executed. Any LOGGED application updates which the user does not want backed out should, therefore, be protected by a SYNCPOINT before calling the gateway.

Note: A sample program EDIRSOA demonstrates the conventions used to Link to the inbound gateway.

Inbound Application Gateway

EDIR104

Purpose

The Sterling Gentran:Realtime Inbound Application Gateway (EDIR104) invokes the Online Queue Write program or a user application.

Operation

The Inbound Application Gateway is called (LINKED) by the Sterling Gentran:Realtime Inbound translation process. If a Queue Write was requested, the Inbound Application Gateway calls (LINKS) the Online Queue Write task.

If a user application was requested, then the Inbound Application Gateway LINKS to the requested user program. When the user program returns, the gateway checks the status codes, and then returns to the Sterling Gentran:Realtime inbound translation task.

The Inbound Application Gateway passes application data from Sterling Gentran:Realtime inbound translation processing to your application interface.

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|--|
| 1. | The Sterling Gentran:Realtime Inbound Mapper prepares a CICS TSQ containing record images (application data), which contain one document group. The records will be variable length with trailing spaces truncated. |
| 2. | The Inbound Application Gateway is LINKed to for each path or queue having data. |
| 3. | The Inbound Applications Gateway links to the user-supplied application interface program indicating that the TSQ is a complete unit of work. |
| 4. | The application interface program returns to the gateway with a status code. The status code indicates whether the interface program accepted all the records or rejected them in their entirety. A status code greater than 00 indicates the records were rejected. |

File Access

None.

Control Structure

This section describes the processing logic that the gateway uses with the interface program and the logic that the interface program performs upon returning to the gateway.

The Inbound Application Gateway LINKs to the interface program, which then RETURNs with a status code. The following table provides a more detailed description.

| Step | Description |
|------|---|
| 1. | The Sterling Gentran:Realtime Inbound Mapper creates a TSQ containing the records for the document group, then LINKs to the gateway. |
| 2. | The Inbound Application Gateway initializes the parameter list that it passes to the interface program and then LINKs to the interface program. |
| 3. | The application interface program processes the application data and then deletes the TSQ. |
| 4. | Control is returned to the gateway. The gateway examines the status code to determine whether the application data was accepted by the application interface program. A status code of 16 indicates the interchange was not accepted and Sterling Gentran:Realtime should invoke Rollback processing. |

Parameters

Your gateway interface programs will use a short list of parameters that will identify to the gateway what processing options should be used. A Copybook member (EDIRGATE) has been provided with Sterling Gentran:Realtime that can be used in your interface programs. The following tables describe the parameters.

Note: If the COMMAREA is shorter than 129 characters when passed to the Gateway, an EDIL abend is issued.

Values Passed to Application Program

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|---|
| 0001 – 0003 | 3 | AN | System Image ID |
| 0004 – 0011 | 8 | AN | Name of TS Queue |
| 0012 – 0014 | 3 | AN | Immediate, Schedule, or Queue File Number |

Values Returned from Application Program

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|--------------------------------|
| 0015 – 0016 | 2 | AN | Error Level |
| 0017 – 0018 | 2 | AN | Status Code |
| 0019 – 0118 | 100 | AN | Return Message |
| 0119 – 0125 | 7 | N | Task ID |
| 0126 – 0126 | 1 | AN | Process |
| 0127 – 0129 | 3 | AN | Path ID |
| 0130 – 0209 | 80 | AN | User Pass Thru (optional area) |

Field Descriptions

Values Passed to Application Program

System Image (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Name of TS Queue

The 1- to 8-character name of the TSQ to be processed by the application interface program. This TSQ is where the data has been stored by the Sterling Gentran:Realtime system.

Immediate Schedule Number or Queue File Number

The 3-digit identifier for the immediate schedule or queue file request options used by Sterling Gentran:Realtime for processing the TSQ. **This number is in the range 001-999.**

Values Returned from Application Program

Error Level

A 2-character code that indicates the highest error level that occurred in the interface program or any of its sub-functions. A value of 00 indicates no errors occurred. A value of 16 or greater indicates that the entire document group was rejected.

Status Code

A 2-character code that indicates success or failure of the requested function. Valid values are:

00 = Document group processed.

16 or greater Document group or interchange has been rejected. If returned to the gateway by an interface program, Sterling Gentran:Realtime invokes Rollback processing.

Return Message

A 1- to 100-character text message of any error encountered by the interface program or its sub-functions.

Task ID

A 7-digit number assigned by CICS to the task that executed the gateway. The task ID is included in the Report Selection list for locating reports that were produced during the execution of the gateway.

Process

A 1-character indicator that identifies the type of option being performed by the Gateway. Valid values are:

| | | |
|----------|---|--|
| I | = | Immediate. An immediate option is being performed. |
| Q | = | Queue. A queue option is being performed. |
| S | = | Schedule. A schedule option is being performed. |

Path ID

A 3-character indicator that holds the value of the Path ID being processed.

User Pass Thru Area (optional area)

An 80-character alphanumeric field used to pass user information from the user program to the Sterling Gentran:Realtime data translation process. This area is passed to all user exit programs (all Mapper exits require the Parm Exit Version to be set to 2) and to the user destination programs. Any changes or modifications made to this area by these exits are passed through also. The program that originally started the translation receives all changes made during the process.

Interface Design Considerations

This section describes important issues to consider when designing interface programs to the Inbound Application Gateway.

- Inbound applications are called (LINKED) by the Inbound Application Gateway to receive application data from the Sterling Gentran:Realtime translator.
- The TSQ contains variable length application record images. Each record is 1- to 5000-bytes in length.
- A document group will be an individual document or multiple documents.
- If the application abends or returns a status code of 16, ROLLBACK is executed.

Application Log Interface

EDIR999

Purpose

The Application Log Interface program (EDIR999) allows user-application programs or user-communications programs to log information into Sterling Gentran:Realtime.

Operation

The Application Log Interface writes messages to the Online Log file (EDIOLF). The Online Log then becomes a window into the entire Sterling Gentran:Realtime process, containing information about the application processing, the gateways, Sterling Gentran:Realtime translation, and communications processing.

File Access

| File Description | DDname | File Access |
|------------------|--------|------------------|
| Online Log file | EDIOLF | Read and update. |

Control Structure

The following table describes the method by which a user online program may use the Application Log Interface program.

| Step | Description |
|------|---|
| 1. | A Copybook (EDIRLOG) is required in the working storage of the user application program. |
| 2. | User application must supply the system image ID, fill in the error severity code and the error level code, and text of the message that will be on the Online Log file. The error severity, error level, and message text fields are user-supplied and convey the importance of this error. The information provided should indicate the error's importance with a clear message of the problem. |
| 3. | The user application LINKs to the Application Log Interface when it wants to write a message to the Online Log file. |
| 4. | The Application Log Interface writes the message to the Online Log file. |
| 5. | The Application Log Interface then RETURNs to the user application and supplies a return error level and error message text if an error was detected while writing to the Online Log file. |

Parameters

The following tables describe the parameters passed to the Application Log Interface.

Values Passed to Application Log Interface

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|-----------------|
| 0001 – 0002 | 2 | BIN | Commarea Length |
| 0003 – 0005 | 3 | AN | System Image |
| 0006 – 0006 | 1 | AN | Error Severity |
| 0007 – 0008 | 2 | AN | Error Level |
| 0009 – 0098 | 90 | AN | Message Text |

Values Returned from Application Log Interface

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|--------------------|
| 0099 – 0100 | 2 | AN | Return Error Level |
| 0101 – 0130 | 30 | AN | Return Error Text |

Field Descriptions

Values Passed to Application Log Interface

Commarea Length

A 2-position binary (COMP) field for entering the length of the CICS communications area to be passed to the Application Log Interface. Enter a value of **130** (hex value: 82).

System Image (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Error Severity

A 1-position alphabetic field for entering the error severity code. Valid values are:

| | | |
|----------|---|-------------------------------|
| I | = | Informational Message |
| W | = | Warning |
| E | = | Error in data |
| S | = | Severe error, processing ends |
| F | = | Fatal error, processing ends |

The Application Log Interface places the value entered on the Online Log file record to indicate the severity for the action inferred. The error severity code will be listed on the Online Log display to identify various actions within the system by priority.

If no value is entered, the system default to the value **I**.

Note: Descriptions for the error severity values are generic in nature. These are user-defined values, however, we suggest that you follow these guidelines when defining your error severity codes.

Error Level

A 2-position numeric field for entering the code that indicates the highest error level that occurred. Valid values are:

| | | |
|-----------|---|--|
| 00 | = | Informational only (successful completion of task) |
| 04 | = | Warning indicator (no action required) |
| 08 | = | Warning indicator (some action may be required) |
| 12 | = | Severe error indicator (with a normal termination) |
| 16 | = | Fatal error indicator (with an abnormal termination) |

The Application Log Interface places the value entered on the Online Log file record to indicate the level for the action inferred. The error level code will be listed on the Online Log display to identify various actions within the system by priority.

If no value is entered, the system defaults to the value **00**.

Note: Descriptions for the error level values are generic in nature. These are user-defined values, however, we suggest that you follow these guidelines when defining your error level codes message text.

Message Text

A 90-position alphanumeric field used to enter the message text on the Online Log file. The message is user-defined text information and is listed on the Online Log display.

Values Returned from Application Log Interface

Return Error Level

A 2-position numeric field displaying the return error level. The Application Log Interface will place a value of 00 in this field if the write to the Online Log file was successful. Any value greater than 00 indicates that the Online Log file has not been updated.

Return Error Text

A 30-position alphanumeric field displaying the return error text. If an error has occurred while writing to the Online Log file, the Application Log Interface returns a description of the error.

Interface Design Considerations

This section describes important issues to consider when designing interfaces to the Application Log Interface.

- The system image should have the value for the system you defined. The error severity and level, and message text must be set up.
- No special action is taken by the system just because you write a severe error to the log.

- Check the return error level and error text before continuing. If the system returns a value other than 00, a problem with the Online Log file has occurred and should be attended to based upon the return error message text indicated.

Note: The sample programs EDIRXIT1 and EDIRXIT2 have examples of linking to the Application Log Interface.

Asynchronous Gateway

EDIRASYN

Purpose

The Asynchronous Gateway program (EDIRASYN) links to the Outbound Application Gateway (EDIR101), Inbound Communication Gateway (EDIR103), Online Output Gateway (EDIEOOG) and Separator Gateway (EDIR100) to run translation processes, queue file writes and the separator processes. This program provides user applications with interfaces to the primary Sterling Gentran:Realtime processes in an asynchronous method. This allows the user applications to start the processes across CICS regions and to continue processing independently of the Sterling Gentran:Realtime process.

Operation

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|--|
| 1. | User interface programs that would normally link to the gateways listed above issue a START on transaction EDIA transaction and pass the name of the gateway in the first eight bytes of the linkage area. |
| 2. | User interface programs format the linkage area in the same manner as if a LINK were being performed (except the gateway program name is in the first eight bytes). |
| 3. | The user program issues a START on the EDIA transaction. |
| 4. | The Asynchronous Gateway program verifies the linkage information, sets up the linkage area, links to the specified gateway, and, upon return, cleans up the TSQs passed to it. |

Control Structure

This section describes the processing logic the interface program must use with the gateway.

The user interface program STARTS the sync transaction EDIA and passes it the parameters described in the next section. The following table provides a more detailed description of the process.

| Step | Description |
|------|---|
| 1. | The interface program creates a TSQ containing the record for the document group. |
| 2. | The interface program initializes the gateway's parameter list and STARTS the EDIA transaction. |
| 3. | The Asynchronous Gateway retrieves the passed parameter list and LINKs to the gateway identified in the list. |
| 4. | The Asynchronous Gateway deletes the TSQ created in step 1. |

Parameters

The gateway interface programs use a short list of parameters that identify to the gateway what processing options should be used. The parameters used are the same as those passed to the gateways, with the addition of the parameter indicating which of these gateways is to be LINKed to. The following table describes the parameters (we do not include the parameters that apply to the other gateways).

Values Passed to Gateways

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|----------------------|
| 0001 – 0008 | 8 | AN | Gateway Name |
| 0009 – 0209 | 201 | AN | Gateway Linkage Area |

Field Descriptions

Values Passed to Gateway

Gateway Name

An 8-character field that holds the gateway program name that the Asynchronous Gateway is to LINK to. Valid values are: **EDIR101**, **EDIR103**, **EDIR100**, and **EDIEOOG**.

Gateway Linkage Area

A 201-character field that holds the linkage information for the gateway program being executed. The specific layout of this area is dependent upon the gateway being run.

See the section for the specific gateway program to find the layout required for linking to that program.

Interface Design Considerations

This section describes important issues to consider when designing interfaces to the Asynchronous Gateway. In addition to the considerations listed below, you must take into account the design considerations described for each of the other gateways.

- The Asynchronous Gateway deletes the TSQ passed from the user interface program.
- Since no return code can be received from the EDIRASYN gateway, we recommend that the Error User Exit be used on any of the options being processed through this gateway.
- If the Gateway Name passed is not EDIR101, EDIR103, EDIR100 or EDIEOOG, no data is processed and an error message is sent to the Online Log file.

Note: A sample program EDIRAGSP demonstrates the conventions used to start the Asynchronous Gateway.

Viewpoint Online Gateway

EDIX980

Purpose

The Viewpoint Online Gateway program (EDIX980) is the interface between the Sterling Gentran:Realtime processes and IBM® Sterling Gentran:Viewpoint®.

Operation

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|---|
| 1. | The Sterling Gentran:Realtime processes that have Viewpoint Exception enabled on their path screens call the program. |
| 2. | Error data is passed to EDIX980 so that a Sterling Gentran:Viewpoint staging TSQ can be created. |
| 3. | Sterling Gentran:Viewpoint reads the TSQ at a later time. |

There is no user interface to this gateway.

Inputs

None.

Outputs

None.

Reports

None.

Control Card Options

None.

Associated Data Gateway

EDIR106

Purpose

The Associated Data Gateway program (EDIR106) is used by the Inbound Editor to process Associated Data received on BIN, BDS, and UNO segments. Associated data is stored on the EDIASCDT file after the Editor has passed it to this gateway.

Operation

The following table provides a simplified overview of gateway operation.

| Step | Description |
|------|--|
| 1. | When the Inbound Editor encounters data on a BIN or BDS segment (or in a UNO transaction) it places the data on a separate TSQ and creates a pointer to this data in the EDI data. |
| 2. | At the end of processing, the Inbound Editor issues a START on the Asynchronous transaction (EDIA – program EDIRASYN) and specifies the gateway as EDIR106. |
| 3. | The Associated Data Gateway formats the linkage area and passes control to the Associated Data Write program (EDIR066). |
| 4. | The Associated Data Write program writes the data to the Associated Data VSAM file (EDIASCDT). |

There is no user interface to this gateway. Only Sterling Gentran:Realtime programs can use it.

Inputs

None.

Outputs

None.

Reports

None.

Control Cards

None.

Translation Programs

Overview

This chapter describes Sterling Gentran:Realtime translation programs.

This chapter contains the following topics:

| Topic | Page |
|---------------------------------------|--|
| Inbound Editor | EDIR001 3-2 |
| Outbound Editor | EDIR002 3-6 |
| Inbound Reject/Splitter | EDIR015 3-9 |
| Outbound Splitter | EDIR016 3-12 |
| Ack \$\$ADD Program | EDIR021 3-15 |
| Inbound Mapper | EDIR041 3-19 |
| Outbound Mapper..... | EDIR042 3-23 |
| Mapper Subroutines | EDIR043, EDIR044, EDIR045, EDIR046, EDIR047, EDIR049, EDIR050, EDIR051, EDIR056 3-27 |
| Acknowledgment Process Reformat | EDIR110 3-28 |
| Internal Standards Loader..... | EDIR113 3-30 |
| Dynamic Codes Validation | EDIR114 3-31 |
| Associated Data Read | EDIR065 3-32 |
| Associated Data Write | EDIR066 3-33 |

Inbound Editor

EDIR001

Purpose

The Sterling Gentran:Realtime Inbound Editor program (EDIR001) decompresses incoming data at the interchange level, compliance checks the data to standards, initiates the acknowledgment process, and prepares the data for the Inbound Mapper (EDIR041).

Operation

The Shell program (EDIR313) executes the Inbound Editor program when the Inbound Editor step selection switch is set to yes in the path being processed by the Shell program. The switch is set on the Shell Path Maintenance screen. An option (immediate or queued) is then set up to use the path that specifies the Inbound Editor.

The option/path is initiated in a number of ways:

- A user program can link to the Inbound Communication Gateway (EDIR103), specifying the immediate option.
- A queue file can be set up to initiate the path when data is placed on the queue file (as user application would then place the data on the queue file).
- The Separator subsystem can be set up to initiate the immediate option or queued option when a specific set of data is encountered.
- The Connect interface can be set up to initiate the immediate option or queued option when data is received on a mailbox.

Inputs

The Inbound Editor reads data from a TSQ. This TSQ can be created by a CICS user application that performs communication functions, or by the Sterling Gentran:Realtime Online Queue Read program. Only one queue file can be input into an Sterling Gentran:Realtime Editor run.

Subprograms Called

The subprograms called by the Inbound Editor are:

- EDID352 – Inbound EDI Databank Interface subroutine
- EDIRADDR – Internal Addressing routine
- EDIR113 – Optimized Standards Table I/O routine
- EDIR114 – Codes I/O routine
- EDIR066 – Associated Data Write routine

File Access

| File Description | DDname | File Access |
|--|---------|------------------|
| Trading Partner file | EDIPART | Read. |
| Trading Partner Cross-Reference file | EDIPREF | Read. |
| Trading Partner Inbound Control Number file | EDIPINB | Read and update. |
| Trading Partner Outbound Control Number file | EDIPOTB | Read and update. |
| Optimized Table File | EDISOPT | Read. |
| Report Control file | EDIRRC | Write. |
| Report Detail file | EDIRRD | Write. |
| Error Message and Control file | ERRCTL | Read. |
| Sterling Gentran:Realtime Acknowledgment Reconciliation file | EDIRDAR | Write. |
| Summary Statistics file (for internal codes) | EDIRSUM | Write. |

Reports

The Inbound Editor produces a summary report and an error report. You can view these reports with the Sterling Gentran:Realtime Online Reporting function.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

    Path ID.....: ____      Process....: _____
    Line Incrmt..: ____      Cond Code..: _ (Y)
    From Date....: _____  To Date....: _____ (MM/DD/YYYY)
    From Time....: _____  To Time....: _____ (HH:MM:SS)
    Task #.....: _____  Max Srch...: 0450
    Print Job Name: _____

    Generation      Path Process      Con Task      Control
    A   Date        Time   ID   Name   St Cd   #   Description  Address
    _ 06/01/2011 12:00:00 230 EDI01S W 00   529 U-TEST-EDIR001 161
    _ 06/01/2011 12:00:00 230 ACKFMT  00   529 U-TEST-EDIR001 162
    _ 06/01/2011 12:00:00 230 EDI01S W 00  1189 U-TEST-EDIR001 163
    _ 06/01/2011 12:00:00 230 EDI01E W 00  1189 U-TEST-EDIR001 164
    _ 06/01/2011 12:00:00 230 ACKFMT  00  1189 U-TEST-EDIR001 165
    _ 06/01/2011 12:00:00 230 EDI01S W 00  1550 U-TEST-EDIR001 166
    _ 06/01/2011 12:00:00 230 EDI01E W 00  1550 U-TEST-EDIR001 167
    _ 06/01/2011 12:00:00 230 ACKFMT  00  1550 U-TEST-EDIR001 168
    _ 06/01/2011 12:00:00 630 SEPDRV  00  1610 SEPARATOR DRIVE 169

Enter PF1=Help          PF3=Exit          PF5=Action
    PF7=Bwd  PF8=Fwd
    
```

Error Report (EDI01E)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY  XXX  06/01/2011
                                                12:00:00

Task ID: 0001550 Process Name: EDI01E
Search.: _____ Line Increment: ____ Job Name: _____

EDIR001 RUN 06/01/2011 TIME 12:00 ERRORS ENCOUNTERED PROCESSING +
ERROR RECORD SEG ELT/COMP/REPEAT
NUMBR NUMBER ID NBR INFORMATION ERROR MESSAGE

INTERCHANGE = VENDOR-1 - TYPE = ISA+
TUTORIAL - XYZ COMPUTER COMPANY
GROUP = VENDOR-1 - TYPE = IN +
EDI SENDER 121212121 -
EDI RECEIVER 987654321 -
TRANSACTION = INV01 TEST TYPE = 810+
*** DOCUMENT AUDIT ID AUDIT ID = INV01
TRANSACTION = INV02 TEST TYPE = 810+

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
    PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot
    
```


Summary Report (EDI01S)

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY XXX 06/01/2011
12:00:00

Task ID: 0001550 Process Name: EDI01S

Search.: _____ Line Increment: ____ Job Name: _____

EDIR001 RUN 06/01/2011 TIME 12:00 RUNTIME GLOBAL PARAMETER OVE+
EDIR001 RUN 06/01/2011 TIME 12:00 SYSTEM CONFIGURATION OPTIONS+
INTCHG VERSION = N
GROUP VERSION = N
TRANSACTION VERSION = N
TRADING PROFILE MODE PARTNER QUALIFIER
MULTIPLE ENVELOPE DISABLED
EDIR001 RUN 06/01/2011 TIME 12:00 GLOBAL PARAMETER LIST +
VERIFY PARTNER INTERCHANGE OFF
VERIFY PARTNER GROUP OFF
VERIFY PARTNER TRANSACTION OFF
VERIFY RECEIVER INTERCHANGE OFF
VERIFY RECEIVER GROUP OFF
ERROR REPORT ALWAYS

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot

Outbound Editor

EDIR002

Purpose

The Sterling Gentran:Realtime Outbound Editor program (EDIR002) receives outbound data from the Outbound mapper (EDIR042) or outbound acknowledgments from the Inbound Editor (EDIR001), and compliance checks the data against standards.

Operation

The Shell program (EDIR313) executes the Outbound Editor program when the Outbound Editor step selection switch is set to yes in the path being processed by the Shell program. The switch is set in the Shell Path Maintenance screens. An immediate or queued option is then set up to use the path that specifies the Outbound Editor.

The option/path is initiated in a number of ways:

- A user program can link to the Outbound Application Gateway (EDIR101), specifying the immediate option.
- A queue file can be set up to initiate the path when data is placed on the queue file (an Outbound Mapper path will place the data on the queue file).
- The Inbound Editor can create acknowledgment records and pass them directly to the Outbound Editor.
- The Inbound Editor can create acknowledgment records and write them to a queue file, which then passes the data to the Outbound Editor.

Inputs

The Outbound Editor reads data from a TSQ. This TSQ is passed from the Outbound Mapper.

Subprograms Called

The subprograms called by the Outbound Editor are:

- EDID252 – Outbound EDI Databank Interface subroutine
- EDIRADDR – Internal Addressing routine
- EDIR113 – Optimized Standards Table I/O routine
- EDIR114 – Codes I/O routine

File Access

| File Description | DDname | File Access |
|--|---------|-------------|
| Gentran Partner file | EDIPART | Read. |
| Gentran Partner Cross-reference file | EDIPREF | Read. |
| Optimized Table File | EDISOFT | Read. |
| Report Control file | EDIRRC | Write. |
| Report Detail file | EDIRRD | Write. |
| Error Message and File | ERRCTL | Read. |
| Summary Statistics file (for internal codes) | EDIRSUM | Write. |

Reports

The Outbound Editor produces a summary report and an error report. You can view these reports with the Sterling Gentran:Realtime Online Reporting function.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX   06/01/2011
                                                    12:00:00

  Path ID.....: ____      Process....: _____
  Line Incrmt..: ____      Cond Code..: _ (Y)
  From Date....: _____  To Date....: _____ (MM/DD/YYYY)
  From Time....: _____  To Time....: _____ (HH:MM:SS)
  Task #.....: _____  Max Srch...: 0450
  Print Job Name: _____

  Generation      Path Process   Con Task      Control
  A   Date        Time      ID   Name   St Cd   #   Description  Address
  _   06/01/2011  12:00:00  073  EDI41E  00   2789  EDIR083 SYSTEST  465
  _   06/01/2011  12:00:00  073  EDI41S  00   2789  EDIR083 SYSTEST  466
  _   06/01/2011  12:00:00  200  EDI42E  W 04  3274  ANSI O/B IVP    467
  _   06/01/2011  12:00:00  200  EDI42S  W 04  3274  ANSI O/B IVP    468
  _   06/01/2011  12:00:00  200  EDI02S  00   3274  ANSI O/B IVP    469
  _   06/01/2011  12:00:00  200  EDI02E  00   3274  ANSI O/B IVP    470
  _   06/01/2011  12:00:00  073  PREPRO  00   3279  EDIR083 SYSTEST  471
  _   06/01/2011  12:00:00  073  EDI41E  00   3279  EDIR083 SYSTEST  472
  _   06/01/2011  12:00:00  073  EDI41S  00   3279  EDIR083 SYSTEST  473

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd  PF8=Fwd
    
```

Error Report (EDI02E)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                12:00:00

Task ID: 0003274 Process Name: EDI02E
Search.: _____ Line Increment: ____ Job Name: _____
EDIR002   RUN 06/01/2011   TIME 12:00   ERRORS ENCOUNTERED PROCESSING +
ERROR RECORD SEG ELT/COMP
NUMBR NUMBER ID  NBR   INFORMATION           ERROR MESSAGE

*** DATABANK *****   RUN #   = 00000001

NO ERRORS OCCURRED DURING PROCESSING
PROCESSING ENDED NORMALLY

* * *   END OF REPORT   * * *

END OF ONLINE REPORTS
Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Summary Report (EDI02S)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                12:00:00

Task ID: 0003274 Process Name: EDI02S
Search.: _____ Line Increment: ____ Job Name: _____
EDIR002   RUN 06/01/2011   TIME 12:00   RUNTIME GLOBAL PARAMETER OVE+
EDIR002   RUN 06/01/2011   TIME 12:00   SYSTEM CONFIGURATION OPTIONS+
INTCHG VERSION           = N
GROUP VERSION            = N
TRANSACTION VERSION      = N
TRADING PROFILE MODE PARTNER QUALIFIER
MULTIPLE ENVELOPE DISABLED
EDIR002   RUN 06/01/2011   TIME 12:00   GLOBAL PARAMETER LIST   +
VERIFY PARTNER INTERCHANGE   OFF
VERIFY PARTNER GROUP         OFF
VERIFY PARTNER TRANSACTION   OFF
ERROR REPORT ALWAYS
ICS TABLES OFF
CODE CHECK ON

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Inbound Reject/Splitter

EDIR015

Purpose

The Inbound Reject/Splitter program (EDIR015) has two functions:

- Separate rejected data from accepted data.
- Split accepted data into separate files to be processed by distinct runs of the Inbound Mapper program.

The ability to split accepted data enables you to separate time-critical data from other data when some data of each type is in the same interchange or the same batch of data.

Operation

The Inbound Reject/Splitter program receives the expanded EDI data and control records from the Inbound Editor program and separates the rejected data from the accepted data. The program can also split the data into individual TSQs according to the options specified on the Partner file data separation records. The program executes this splitting function only when the value in the Splitter Switch field is set to 1 (for “on”) on the Shell Path – Translation Inbound screen (EDIM844). When the value for the switch is set to 0, the program separates only rejected data and ignores direction records.

The following table provides an overview of Splitter operation.

| Step | Description |
|------|--|
| 1. | The Inbound Reject/Splitter program is executed by the Shell program (EDIR313) (only when the Shell path parameters instruct the program to execute it). |
| 2. | The Inbound Editor creates the data that is used by the Splitter. The Editor must be run in the same processing stream with the Splitter. |
| 3. | The control records and the EDI data are passed to the Splitter in separate TSQs. |
| 4. | The program then creates multiple TSQs holding the separated data, the rejected data, and the control parameters for the TSQs. |
| 5. | Any EDI data that does not match the control records are written to a Slide file (TSQ), which is processed later in the inbound flow. |
| | The splitter passes the output TSQs to the Router program (EDIR945) for ultimate processing. |

Inputs

The following table describes inputs for the Inbound Reject/Splitter program.

| DDname | Description |
|--------|--------------------------------|
| ERRCTL | Error Message and Control file |

| TSQname | Description |
|----------|---------------------------|
| EDI3rrrr | Editor expanded EDI data. |
| EDI7rrrr | Reject control records. |
| EDIErrrr | Split control records. |

Outputs

The following table describes outputs for the Inbound Reject/Splitter program.

| DDname | Description |
|--------|--------------------------------|
| EDIRRC | Report Control File (updated). |
| EDIRRD | Report Detail File (updated). |

| TSQname | Description |
|----------|-------------------------|
| EDI9rrrr | Rejected EDI data. |
| EDIUssss | Split data. |
| EDIBrrrr | Slide data. |
| EDIKssss | Router Control records. |

Reports

The Inbound Splitter produces a detail report. The report is identified with EDI15R on the Report Selection screen.

You can view the reports from the Sterling Gentran:Realtime EDI Report Display screen.

Report Selection Screen

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt...: ____ Cond Code..: _ (Y)
From Date.....: _____ To Date....: _____ (MM/DD/CCYY)
From Time.....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: ____1239 Max Srch...: 0050
Print Job Name: _____

Generation      Path Process Con      Task      Control
A   Date       Time   ID   Name   St Cd   #   Description  Address
- 06/01/2011 12:00:00 222 EDI01E W 04  1239 INB SPLIT TST  1120
- 06/01/2011 12:00:00 222 EDI01S W 04  1239 INB SPLIT TST  1121
- 06/01/2011 12:00:00 222 ACKFMT  00  1239 INB SPLIT TST  1122
- 06/01/2011 12:00:00 222 EDI15R  00  1239 INB SPLIT TST  1123
-
-
-
-
-
EXCEEDED MAX SEARCH COUNT - PRESS PF7 OR PF8 TO CONTINUE SEARCH
Enter PF1=Help          PF3=Exit          PF5=Action
PF7=Bwd PF8=Fwd

```

Report Display (EDI15R)

```

EDIM311 _____ GENTRAN:REALTIME EDI Report Display  XXX  06/01/2011
                                                12:00:00

Task ID: 0001239 Process Name: EDI15R
Search.: _____ Line Increment: ____ Job Name: _____
TRANSACTION IS: 239028901--ST --ST *864*000000029;
SPLIT DATA: RECORD CNT=          24 IMMED OPTION=      QFNR OPTION=008 PRIO+
TRANSACTION IS: 239030201--ST --ST *864*000000030;
SPLIT DATA: RECORD CNT=          23 IMMED OPTION=      QFNR OPTION=008 PRIO+
EDIR015 RUN 06/01/2011 TIME 12:00 SUMMARY REPORT - REJECT/SPLI+
PROGRAM EDIR015 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6

PROCESSING BEGAN ON                06/01/2011 AT 12:00 AM.
INPUT RECORDS READ-----          372
REJECT RECORDS WRITTEN-----          0
SLIDE FILE RECORDS WRITTEN-----          0
EDI DATA RECORDS WRITTEN-----        390
PROCESSING ENDED NORMALLY ON        06/01/2011 AT 12:00 AM.
PROGRAM RETURN CODE-----          0

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot

```

Outbound Splitter

EDIR016

Purpose

The Outbound Splitter program (EDIR016) splits accepted data into separate files to be sent for processing by separate runs of either communications subsystems or user programs.

The ability to split accepted data enables you to separate data sent to the different communications systems that may be used.

Operation

The Outbound Splitter program receives the EDI data from the Outbound Editor and separates the data into individual TSQs according to the options specified on the Partner file data separation records.

The following table provides an overview of Splitter operation.

| Step | Description |
|------|--|
| 1. | The Outbound Splitter program is executed by the Shell program (EDIR313) (only when the Shell path parameters instruct the Shell to execute it). |
| 2. | The Outbound Editor creates the data that is used by the Splitter. The Editor must be run in the same processing stream with the Splitter. |
| 3. | The control records and the EDI data are passed to the Splitter in separate TSQs. |
| 4. | The program creates multiple TSQs holding the separated data and the control parameters for the TSQs. |
| 5. | The Splitter passes the output TSQs to the Router program (EDIR945) for routing to the processing specified on the direction records. |

Inputs

The following tables describe inputs for the Outbound Splitter program.

| DDname | Description |
|--------|--------------------------------|
| ERRCTL | Error Message and Control file |

| TSQname | Description |
|----------|-------------------------|
| EDI2rrrr | Editor EDI data. |
| EDIDrrrr | Editor control records. |

Outputs

The following tables describe outputs for the Outbound Reject/Splitter program.

| DDname | Description |
|--------|--------------------------------|
| EDIRRC | Report Control file (updated). |
| EDIRRD | Report Detail file (updated). |

| TSQname | Description |
|----------|--|
| EDIKrrrr | Router Control records. |
| EDISrrrr | Split data. |
| EDIBrrrr | Slide file for data with no direction records. |

Reports

The Outbound Splitter produces a detail report. The report is identified with EDI16R on the Report Selection screen.

You can view the reports from the Sterling Gentran:Realtime EDI Report Display screen.

Report Selection Screen

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION XXX 06/01/2011
                                           12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 3000
Print Job Name: _____

Generation Path Process Con Task Control
A Date Time ID Name St Cd # Description Address
_ 06/01/2011 12:00:00 200 EDI42E 00 1 X12 O/B IVP 1
_ 06/01/2011 12:00:00 200 EDI42S 00 1 X12 O/B IVP 2
_ 06/01/2011 12:00:00 200 EDI02S 00 1 X12 O/B IVP 3
_ 06/01/2011 12:00:00 200 EDI02E 00 1 X12 O/B IVP 4
_ 06/01/2011 12:00:00 200 EDI16R 00 1 X12 O/B IVP 5
-
-
-
-
-
Enter PF1=Help PF3=Exit PF5=Action
PF7=Bwd PF8=Fwd
    
```

Report Display (EDI16R)

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY XXX 06/01/2011
                                           12:00:00
Task ID: 0000001 Process Name: EDI16R
Search.: _____ Line Increment: ____ Job Name: _____

EDIR016 RUN 06/01/2011 TIME 12:00 SUMMARY REPORT - SPLITTER PR+
PROGRAM EDIR016 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6

SPLIT DATA: RECORD CNT= 22 IMMED OPTION= QFNR OPTION=008 PRIOR+
NO CONTROL RECORD FOR OPTION: - USING SLIDE FILE
SLIDE DATA: RECORD CNT= 19 IMMED OPTION= QFNR OPTION= PRIOR+
SPLIT DATA: RECORD CNT= 21 IMMED OPTION= QFNR OPTION=013 PRIOR+
SPLIT DATA: RECORD CNT= 18 IMMED OPTION= QFNR OPTION=023 PRIOR+

PROCESSING BEGAN ON 2/01/2008 AT 12:00 AM.
INPUT RECORDS READ----- 88
DIRECTION RECORDS READ----- 8
SLIDE FILE RECORDS WRITTEN----- 19
EDI DATA RECORDS WRITTEN----- 80

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot
    
```

Ack \$\$ADD Program

EDIR021

Purpose

The Ack \$\$ADD program (EDIR021) creates \$\$ADD records for the outbound acknowledgments created by the Inbound Editor. The \$\$ADD records identify to Connect the mailbox to which the acknowledgments will be directed.

Sterling Gentran:Realtime acknowledgments are identified by the remote ID on the interchange record of the Partner file. If an interchange record is present, and the remote ID is greater than spaces, the Ack \$\$ADD program creates a \$\$ADD record for that interchange. The Outbound Acknowledgments from the Inbound Editor must be processed through the Acknowledgment Process Reformat program (EDIR110) before the Ack \$\$ADD program.

The Ack \$\$ADD program pulls the Partner Key on the \$\$ADD records from the ###INT record that precedes the acknowledgment interchange. If no ###INT record is has been created, the Ack \$\$ADD program creates \$\$ADD record using the interchange record. GS/GE interchanges have no ###INT records; in this case the Ack \$\$ADD program pulls the Partner Key from the GS record. The interchange control number is used to create the \$\$ADD batch ID. This creates an audit trail between the Translation and Communications subsystems.

Operation

The Ack \$\$ADD program is executed when the Ack \$\$ADD gen switch is set to 1 on the Translation Step Maintenance screen (EDIM844).

The following table provides an overview of Ack \$\$ADD program operation.

| Step | Description |
|------|---|
| 1. | The Ack \$\$ADD program executes after the Ack Reformat program (EDIR110), and receive its input from that program. Note: If no acknowledgments are created in the Inbound Editor, then neither program executes. |
| 2. | The remote ID on the Partner file defines the mailbox to which the records are to be written. The Ack \$\$ADD program uses either the ###INT record or the interchange header (ISA, ICS, UNB, etc.) to determine the partner key. The Ack \$\$ADD program uses this key to access the Partner file. |

| Step | Description |
|------|--|
| 3. | <p>The Ack \$\$ADD program reads the remote ID on the Control record. If the remote ID is other than spaces, then Ack \$\$ADD adds a \$\$ADD record in front of the interchange. The batch ID on the \$\$ADD record has the interchange control number as its value.</p> <p>Optionally, you can enter an override to the batch ID on the Outbound ACK \$\$ADD Generate Maintenance screen (EDIM845). This screen enables you to enter a value for the remote ID and batch ID. When the remote ID on the \$\$ADD record matches one entered on this screen, then the program places the batch ID entered on the screen on the \$\$ADD record. This value is required when the data is being sent to IBM® Sterling B2B Collaboration Network and a password is needed in the Batch ID field.</p> |

Files Used

Inputs

The following tables describe inputs for the Ack \$\$ADD program.

| DDname | Description |
|---------|-------------------------------|
| EDIPART | Partner file. |
| EDIPREF | Partner Cross Reference file. |
| EDIPREL | Partner Relationship file. |

| TSQname | Description |
|----------|--|
| EDIPpppA | Path Control Record TSQ (ppp is the path number) |
| EDI6rrrr | Acknowledgment file (passed from EDIR110) |

Output

The following table describes output for the Ack \$\$ADD program.

| TSQname | Description |
|----------|---|
| EDIRrrrr | Acknowledgment file (with \$\$ADDrecords). Passed to the Outbound Editor (EDIR002). |

Reports

The Ack \$\$ADD program produces a detail report. The report is identified with ACK\$AD in the Process Name field.

You can view the report from the Report Selection screen.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION XXX 06/01/2011
                                           12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

Generation Path Process Con Task Control
A Date Time ID Name St Cd # Description Address
_ 06/01/2011 12:00:00 241 EDI41E 00 7155 UNIT TEST R041 472
_ 06/01/2011 12:00:00 262 EDI01E 00 7619 R021 TESTING 473
_ 06/01/2011 12:00:00 262 EDI01S 00 7619 R021 TESTING 474
_ 06/01/2011 12:00:00 262 ACKFMT 00 7619 R021 TESTING 475
_ 06/01/2011 12:00:00 262 ACK$AD 00 7619 R021 TESTING 476
_ 06/01/2011 12:00:00 262 EDI01S 00 7635 R021 TESTING 477
_ 06/01/2011 12:00:00 262 EDI01E 00 7635 R021 TESTING 478
_ 06/01/2011 12:00:00 262 ACKFMT 00 7635 R021 TESTING 479
_ 06/01/2011 12:00:00 262 ACK$AD 00 7635 R021 TESTING 480

Enter PF1=Help PF3=Exit PF5=Action
PF7=Bwd PF8=Fwd
    
```

Report Display (ACK\$AD)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY XXX 06/01/2011
                                           12:00:00

Task ID: 0007619 Process Name: ACK$AD
Search.: _____ Line Increment: ____ Job Name: _____

EDIR021 RUN 06/01/2011 TIME 12:00 ACK $$ADD GENERATE PROGRAM +
PROGRAM EDIR021 COMPILED ON 06/01/2011 AT 12.00.00 VERSION 6.6

BATCH ID OVERRIDE FOR REMOTE ID EDRMT BATCH ID OVERRIDE IS ED REMOTE ID
BATCH ID OVERRIDE FOR REMOTE ID TESTXXX BATCH ID OVERRIDE IS ED BATCH ID
$$ADD ID=TESTXXX BATCHID='ED BATCH ID ' MULTXMIT=N BATCH#=0000000
*****
RECORDS READ.....= 000000023
$$ADD RECS WRITTEN...= 000000001
DIR RECORDS DROPPED..= 000000000
RECORDS WRITTEN.....= 000000024
*****NORMAL END OF JOB*****
PROGRAM RETURN CODE----- 0

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot
    
```

Inbound Mapper

EDIR041

Purpose

The Inbound Mapper program (EDIR041) is the primary translation engine for mapping EDI data into an application layout. The Mapper translates variable delimited EDI data and fixed-format EDI data (Sterling Gentran:Structure is required to translate the fixed format data.) The Mapper receives its data from the Inbound Editor either directly or after it has been split by the Inbound Splitter program (EDIR015).

Operation

The Shell program (EDIR313) executes the Inbound Mapper program when the Inbound Mapper step selection switch is set to “yes” in the path being processed. The switch is set in the Shell Path Maintenance screens.

An immediate or queued option uses the path that specifies the Inbound Mapper. Either of two methods can initiate the option/path:

- A user program links to the Inbound EDI Gateway program (EDIR103), specifying the immediate option.
- A queue file can be set up to initiate the path when data is placed on the queue file.

Inputs

The Inbound Mapper reads EDI data from a TSQ.

Subprograms Called

The subprograms called by the Inbound Mapper are:

- EDID452 – Inbound Application Databank Interface subroutine
- EDIRADDR – Internal Addressing routine
- EDIR046 – Mapper subroutine
- EDIR049 – Mapper subroutine
- EDIR050 – Mapper subroutine
- EDIR043 – Mapper subroutine
- EDIR044 – Mapper subroutine

File Access

| File Description | DDname | File Access |
|--|---------------|--------------------|
| Codes | CDECDE | Read |
| Codes (Alt Index) | CDECDE1 | Read |
| Codes Define | CDEDEF | Read |
| Codes Data | CDEDTA | Read |
| Codes Data (Alt Index) | CDEDTA1 | Read |
| Codes Validation | CDEVAL | Read |
| Transaction Header | TRNHDR | Read |
| Transaction Segment | TRNSEG | Read |
| Transaction Segment (Alt Index) | TRNSEG1 | Read |
| Transaction Element | TRNELE | Read |
| Transaction Element | TRNELE1 | Read |
| Application Header | APPHDR | Read |
| Application Record | APPRCT | Read |
| Application Record (Alt Index) | APPRCT1 | Read |
| Application Field | APPFLD | Read |
| Application Field (Alt Index) | APPFLD1 | Read |
| Application Link | APPTLR | Read |
| Partner file | EDIPART | Read |
| Partner Cross-reference file | EDIPREF | Read |
| Report Control file | EDIRRC | Write |
| Report Detail file | EDIRRD | Write |
| Error Message and Control file | ERRCTL | Read |
| Summary Statistics file (for Internal Codes) | EDIRSUM | Write |

Reports

The Inbound Mapper produces a summary report and an error report.

The reports can be viewed with the Sterling Gentran:Realtime Online Reporting function.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path Process      Con Task      Control
  A  Date        Time      ID  Name      St Cd      #  Description  Address
  _  06/01/2011  12:00:00  000 AK-LOG      00      42 EDID515-EDILOG      20
  _  06/01/2011  12:00:00  000 AK-MON      00      42 EDID515-EDIMNTR     21
  _  06/01/2011  12:00:00  000 AK-REC      00      42 EDID515-EDIRECN     22
  _  06/01/2011  12:00:00  000 AK-SUM      00      42 EDID515-EDISUM      23
  _  06/01/2011  12:00:00  203 EDI01S      W 04     269 ANSI I/B IVP        24
  _  06/01/2011  12:00:00  203 EDI01E      W 04     269 ANSI I/B IVP        25
  _  06/01/2011  12:00:00  203 ACKFMT      00     269 ANSI I/B IVP        26
  _  06/01/2011  12:00:00  203 EDI41E      01     269 ANSI I/B IVP        27
  _  06/01/2011  12:00:00  203 EDI41S      01     269 ANSI I/B IVP        28

Enter PF1=Help          PF3=Exit          PF5=Action
    PF7=Bwd  PF8=Fwd
    
```

Error Report (EDI41E)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000269 Process Name: EDI41E
Search.: _____ Line Increment: ____ Job Name: _____
EDIR041   RUN 06/01/2011   TIME 12:00   ERRORS ENCOUNTERED MAPPING I+
ERROR    **RECORD**      FIELD SEG ELE
NUMBR    NBR ID          SEQ #  ID   SEQ  INFORMATION  ERROR MESSAGE
***** APPLICATION DEFINITION - INVFILE - LOADED *****
***** TRANSACTION DEFINITION - ANSI4030IN - LOADED *****
NO ERRORS OCCURRED DURING PROCESSING
PROCESSING ENDED NORMALLY - PROCESSING COUNTS BELOW
                                EDI RECORDS READ ----- 252
                                EDI RECORDS SUSPENDED ----- 0
                                APPLICATION RECORDS WRITTEN ---- 114
                                RETURN-CODE FOR MAPPING ----- 0

END OF ONLINE REPORTS
Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print       PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Summary Report (EDI41S)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000269 Process Name: EDI41S
Search.: _____ Line Increment: ____ Job Name: _____
EDIR041   RUN 06/01/2011   TIME 12:00   PROCESSING OPTIONS FOR MAPPI+
PROGRAM EDIR041 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
PROGRAM EDID452 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
PROGRAM EDIR043 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
PROGRAM EDIR044 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
APPLICATION TO PROCESS-----INVFILE
USER EXIT VERSION SUPPORTED-----1
APPLICATION DECIMAL INDICATOR IS-----.
RIGHT JUSTIFY ALL APPLICATION REALS-----N
HANDLE FLOATING NOTES WITHIN A SECTION--Y
DATABANK PROCESSING CONFIGURATION-----DIRECTORY AND MESSAGE STORE
DATABANK PROCESSING LEVEL-----DIRECTORY AND MESSAGE STORE
DATABANK RUN NUMBER-----00000001
DIRECTORY POSTING OPTION-----POST SENDER ONLY

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print       PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Outbound Mapper

EDIR042

Purpose

The Outbound Mapper program (EDIR042) is the primary translation engine for mapping application data into EDI data. The Mapper translates fixed format application data into variable delimited EDI data or fixed-format EDI data. (Sterling Gentran:Structure translates into only the fixed-format data.) The Mapper receives its data from a user application and then passes it to the Outbound Editor for compliance checking.

Operation

The Shell program (EDIR313) executes the Outbound Mapper when the Outbound Mapper step selection switch is set to “yes” in the path being processed. The switch is set in the Shell Path Maintenance screens. An immediate or queued option is then set up to use the path that specifies the Outbound Mapper

Either of two methods can initiate the option/path:

- A user program links to the Outbound Application Gateway (EDIR101) specifying the immediate option.
- A queue file can be set up to initiate the path when data is placed on the queue file.

Inputs

The Outbound Mapper reads application data from a TSQ. This TSQ is created by the user application or the Queue File Read process. The TSQ name passes through the Sterling Gentran:Realtime Gateway.

Subprograms Called

The subprograms called by the Outbound Mapper are:

- EDID152 – Outbound Application Databank Interface subroutine
- EDIRADDR – Internal Addressing routine
- EDIR056 – EDI Envelope Generator
- EDIR047 – Mapper subroutine
- EDIR049 – Mapper subroutine
- EDIR051 – Mapper subroutine
- EDIR043 – Mapper subroutine
- EDIR045 – Mapper subroutine
- EDIR065 – Associated Data Read

File Access

| File Description | DDname | File Access |
|--|---------|--|
| Codes | CDECDE | Read. |
| Codes (Alt Index) | CDECDE1 | Read. |
| Codes Define | CDEDEF | Read. |
| Codes Data | CDEDTA | Read. |
| Codes Data (Alt Index) | CDEDTA1 | Read. |
| Codes Validation | CDEVAL | Read. |
| Transaction Header | TRNHDR | Read. |
| Transaction Segment | TRNSEG | Read. |
| Transaction Segment (Alt Index) | TRNSEG1 | Read. |
| Transaction Element | TRNELE | Read. |
| Transaction Element | TRNELE1 | Read. |
| Application Header | APPHDR | Read. |
| Application Record | APPRCT | Read. |
| Application Record (Alt Index) | APPRCT1 | Read. |
| Application Field | APPFLD | Read. |
| Application Field (Alt Index) | APPFLD1 | Read. |
| Application Link | APPTLR | Read. |
| Partner File | EDIPART | Read. |
| Partner Cross-reference File | EDIPREF | Read. |
| Report Control File | EDIRRC | Write. |
| Report Detail File | EDIRRD | Write. |
| Error Message and Control File | ERRCTL | Read. |
| Partner File | EDIPART | Read and update through the EDIR011 routine. |
| Trading Partner Outbound Control Number File | EDIPOTB | Read and write. |
| Summary Statistics File (for Internal Codes) | EDIRSUM | Write. |

Reports

The Outbound Mapper produces a summary report and an error report.

View these reports with the Sterling Gentran:Realtime Online Reporting function.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path Process   Con Task          Control
A   Date         Time   ID   Name   St Cd   #   Description      Address
-  06/01/2011 12:00:00 200 EDI42S W 04   8195 ANSI O/B IVP    38
-  06/01/2011 12:00:00 200 EDI02E   00   8195 ANSI O/B IVP    39
-  06/01/2011 12:00:00 200 EDI02S   00   8195 ANSI O/B IVP    40
-  06/01/2011 12:00:00 200 CMBXOB   00   8195 ANSI O/B IVP    41
-  06/01/2011 12:00:00 200 EDI42E W 04   8203 ANSI O/B IVP    42
-  06/01/2011 12:00:00 200 EDI42S W 04   8203 ANSI O/B IVP    43
-  06/01/2011 12:00:00 200 EDI02E   00   8203 ANSI O/B IVP    44
-  06/01/2011 12:00:00 200 EDI02S   00   8203 ANSI O/B IVP    45
-  06/01/2011 12:00:00 200 CMBXOB   00   8203 ANSI O/B IVP    46

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd  PF8=Fwd
    
```

Error Report (EDI42E)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0008203 Process Name: EDI42E
Search.: _____ Line Increment: ____ Job Name: _____
EDIR042   RUN 06/01/2011   TIME 12:00   ERRORS ENCOUNTERED MAPPING O+
ERROR  **RECORD**          FIELD SEG  ELE
NUMBR   NBR ID            SEQ # ID  SEQ INFORMATION  ERROR MESSAGE
***** APPLICATION DEFINITION - POFILE - LOADED *****
***** TRANSACTION DEFINITION - ANSI4030PO - LOADED *****
NO ERRORS OCCURRED DURING PROCESSING
PROCESSING ENDED NORMALLY - PROCESSING COUNTS BELOW
                                APPLICATION RECORDS READ -----   68
                                APPLICATION RECORDS SUSPENDED -     0
                                TOTAL RECORDS WRITTEN -----   136
                                RETURN CODE FOR MAPPING -----     0

END OF ONLINE REPORTS
Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print       PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Summary Report (EDI42S)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0008203 Process Name: EDI42S
Search.: _____ Line Increment: ____ Job Name: _____
EDIR042   RUN 06/01/2011   TIME 12:00   PROCESSING OPTIONS FOR MAPPI+
PROGRAM EDIR042  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
PROGRAM EDID152  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
PROGRAM EDIR043  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
PROGRAM EDIR045  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
PROGRAM EDIR056  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
APPLICATION TO PROCESS-----POFILE
USER EXIT VERSION SUPPORTED-----1
APPLICATION DECIMAL INDICATOR IS-----.
DATABANK PROCESSING CONFIGURATION-----DIRECTORY AND MESSAGE STORE
DATABANK PROCESSING LEVEL-----DIRECTORY AND MESSAGE STORE
DATABANK RUN NUMBER-----00000010
PARTNER PROFILE MODE-----PARTNER/QUALIFIER MODE
PARTNER PROCESSING SEQUENCE-----SEARCH PARTNER FILE

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print       PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Mapper Subroutines

**EDIR043, EDIR044,
EDIR045, EDIR046,
EDIR047, EDIR049,
EDIR050, EDIR051,
EDIR056**

Purpose

The Mapper subroutine programs perform various data translation procedures.

Operation

The Inbound Mapper (EDIR041) and the Outbound Mapper (EDIR042) call the Mapper subroutine programs.

Inputs

None.

File Access

None.

Reports

None.

Acknowledgment Process Reformat

EDIR110

Purpose

The Acknowledgment Process Reformat program (EDIR110) removes the control information from the beginning of acknowledgment records generated by the Inbound Editor. In addition, this program moves the TA1 and AC1 segments to their proper location in the acknowledgment transaction.

Operation

The following table provides an overview of Acknowledgment Process Reformat program operation.

| Step | Description |
|------|--|
| 1. | The Shell program (EDIR313) calls the Acknowledgment Process Reformat program automatically when the Inbound Editor creates any acknowledgment transactions. |
| 2. | The program reads all the acknowledgment segments for a given interchange and removes the control information from the front end of each record. |
| 3. | The program places TA1 and/or AC1 records into their correct position. |
| 4. | The data is sorted internally in the program and then written to a TSQ that is passed on to the Outbound Editor. |

Inputs

The following table describes inputs for the Acknowledgment Process Reformat program.

| TSQname | Description |
|----------|-------------------------------------|
| EDIDrrrr | Acknowledgment control information. |
| EDI5rrrr | Acknowledgment segments. |

Output

The following table describes output for the Acknowledgment Process Reformat program.

| TSQname | Description |
|----------|---------------------------------|
| EDI6rrrr | Sorted Acknowledgment segments. |

Reports

The Acknowledgment Process Reformat program produces a detail report. The report is identified with ACKFMT on the Report Selection screen.

You can view the reports with the Sterling Gentran:Realtime Online Reporting function.

Report Selection Screen

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

    Path ID.....: ____      Process....: _____
    Line Incrmnt..: ____      Cond Code..: _ (Y)
    From Date.....: _____  To Date....: _____ (MM/DD/CCYY)
    From Time.....: _____  To Time....: _____ (HH:MM:SS)
    Task #.....: ___1336      Max Srch...: 0050
    Print Job Name: _____

    Generation      Path Process Con      Task
    A  Date         Time  ID  Name  St Cd  #   Description      Control
    _  06/01/2011  12:00:00  007 EDI01E  00  1336 INVFILE (Q-007)    1153
    _  06/01/2011  12:00:00  007 EDI01S  00  1336 INVFILE (Q-007)    1154
    _  06/01/2011  12:00:00  007 ACKFMT  00  1336 INVFILE (Q-007)    1155
    _  06/01/2011  12:00:00  007 EDI41E  00  1336 INVFILE (Q-007)    1156
    _  06/01/2011  12:00:00  007 EDI41S  00  1336 INVFILE (Q-007)    1157
    _
    _
    _
    _
    _
    EXCEEDED MAX SEARCH COUNT - PRESS PF7 OR PF8 TO CONTINUE SEARCH
    Enter PF1=Help          PF3=Exit          PF5=Action
        PF7=Bwd  PF8=Fwd
    
```

Detail Report (ACKFMT)

```

EDIM311 _____ GENTRAN:REALTIME EDI Report Display  XXX  06/01/2011
                                                12:00:00

Task ID: 0001336 Process Name: ACKFMT
Search.: _____ Line Increment: ____ Job Name: _____

EDIR110  RUN  06/01/2011  TIME 12:00  GENTRAN:REALTIME ACKNOWLEDGBEM+
PROGRAM EDIR110  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
INTCHG          REPORT
NUMBER          COUNT
    01          23
PARTNER: VENDOR-1
INTRCHG: ISA*00*          *00*          *ZZ*6147937000          *ZZ*5136666666 +

TOTALS
TOTAL ACK INTS READ:          1
TOTAL ACK SEGS READ:          23
TOTAL ACK SEGS WRITTEN:      23

Enter          PF2=Sum          PF3=Exit          PF5=Print          PF6=NxtEr
        PF7=Bwd  PF8=Fwd          PF10=Left PF11=Rgt PF12=Top  PF13=Bot
    
```

Internal Standards Loader

EDIR113

Purpose

The Internal Standards Loader program (EDIR113) reads the Optimized Standards file (EDISOPT) and loads the standards information into tables used by the Inbound and Outbound Editor programs (EDIR001 and EDIR002).

Operation

When the Sterling Gentran:Realtime editors encounter a standard during processing, a link is made to the Standards Loader to obtain the Transaction or Standard table needed to perform the editor validations.

Inputs

A linkage area from the editor specifies the transaction or standard to load, as well as the destination table.

File Access

The following table describes file access for the Internal Standards Loader program.

| DDname | Description | File Access |
|---------|--------------------------|-------------|
| EDISOPT | Optimized Standards file | Read |

Reports

None.

Dynamic Codes Validation

EDIR114

Purpose

This program reads the codes files EDISCD1, EDISCD2, EDISCD3, and EDISCD4 and loads the code information into tables used by the Inbound and Outbound Editor programs (EDIR001 and EDIR002).

Operation

When the Inbound or Outbound Editor encounters a code within a standard, a link is made to the Dynamic Codes Validation program to find the code for that element. The codes then reside in that table for the duration of that validation. Thus, only the codes loaded into storage are used during validation.

Inputs

A linkage area from the editor specifies the transaction, standard, element, or code to load, as well as the destination table.

File Access

The following table describes file access for the Dynamic Codes Validation program.

| DDname | Description | File Access |
|---------|---------------------|-------------|
| EDISCD1 | Standards Code file | Read |
| EDISCD2 | Standards Code file | Read |
| EDISCD3 | Standards Code file | Read |
| EDISCD4 | Standards Code file | Read |

Reports

None.

Associated Data Read

EDIR065

Purpose

The Associated Data Read program (EDIR065) is a subprogram used by the Outbound Mapper program (EDIR042) to write associated data (normally, binary data) into the output data of the Mapper.

Operation

The following table provides an overview of Associated Data Read program operation.

| Step | Description |
|------|--|
| 1. | When the Mapper encounters a segment that needs associated data (usually BIN, BDS and UNO segments), the Mapper links to the Associated Data Read program. |
| 2. | In the communication area, the Mapper sends the binary location key (defined in the map) and the name of the TSQ to which the data is to be written. |
| 3. | The Associated Data Read program reads the Associated Data file (EDIASCDT) and writes the data in blocks of 30,000 bytes into the output TSQ. |
| 4. | The Access program EDIRBIN places the data on the Associated Data file. See the “Configuring Associated Data Processing” section in Chapter 6, “Configuration Strategies” of the <i>IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide</i> for more information about associated data processing. |

Inputs

Input is a linkage area passed from the Outbound Mapper (EDIR042).

File Access

| DDname | Description | File Access |
|----------------------|-------------|-------------|
| Associated Data file | EDIASCDT | Read |

Reports

None.

Associated Data Write

EDIR066

Purpose

The Associated Data Write program (EDIR066) is used by the Inbound Editor (EDIR001) to write associated data to the Associated Data file (EDIASC DT).

Operation

The following table provides an overview of Associated Data Write program operation.

| Step | Description |
|------|---|
| 1. | When the Inbound Editor encounters associated data in a inbound EDI stream, it uses the Associated Data Write program to write the data (associated data is normally data in a BIN, BDS or UNO segment). |
| 2. | The Inbound Editor writes the data to a special TSQ and performs a START command on the EDIA transaction to run the Associated Data write program. The START command allows the translation process to continue and not be held while the I/O to the EDIASC DT file is performed. |
| 3. | The batch program EDIRBIN can be used to retrieve the data from the Associated Data file. See the “Configuring Associated Data Processing” section in Chapter 6, “Configuration Strategies” of the <i>IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide</i> for more information about associated data processing |

Inputs

Input is a communication area passed from the Inbound Editor (EDIR001).

File Access

| DDname | Description | File Access |
|----------------------|-------------|-------------|
| Associated Data file | EDIASC DT | Write |

Reports

None.

System Processor Programs

Overview

This chapter describes Sterling Gentran:Realtime system processor programs.

This chapter contains the following topics:

| Topic | Page |
|--|-------------|
| Online Scanner/InitiatorEDIEOSI..... | 4-2 |
| Internal Addressing RoutineEDIRADDR..... | 4-4 |
| Online Message HandlerEDIROMH..... | 4-5 |
| Shell ProgramEDIR313..... | 4-6 |
| Exception Program Exit.....EDIR852..... | 4-7 |

Online Scanner/Initiator

EDIEOSI

Purpose

The Online Scanner/Initiator (EDIEOSI) is the first program to execute in the CICS region for support of Sterling Gentran:Realtime EDI. The Online Scanner/Initiator performs Sterling Gentran:Realtime initialization functions and continuously scans queue files for activity and pending requests. You can start the Online Scanner/Initiator in any of the following ways:

- Define automatic start-up in the CICS PLT table.
- Type transaction EDII from a blank CICS screen.
- Press **PF13=Start** on the System Options screen.
- Use the Toggle transaction in EDIX from a batch program.

Operation

Sterling Gentran:Realtime initialization functions are performed the first time the Online Scanner/Initiator is executed, provided Sterling Gentran:Realtime is enabled (the value in the System Status field on the System Options Screen [EDIM301] is E). The initialization functions are:

- Writing TSQs for Sterling Gentran:Realtime processing.
- Linking to the Report Initiation program (EDIR312).
- Linking to the Sterling Gentran:Realtime Activity Initiation program (EDIR901).

The following table provides an overview of Online Scanner/Initiator operation.

| Step | Description |
|------|---|
| 1. | The Online Scanner/Initiator executes the initialization functions. |
| 2. | The Online Scanner/Initiator initiates a START on itself. |
| 3. | The START executes at the next scan interval defined on the System Options Screen (EDIM301). |
| 4. | On each succeeding START, the Online Scanner/Initiator: <ul style="list-style-type: none"> • Scans the queue files for unprocessed data. If a queue file has data and Trigger Level criteria has been met, the Online Scanner/Initiator performs the tasks defined in the Action to Initiate fields (via the Queue Options screen [EDIM303]). • Scans Schedule option Interval Time fields and initiates tasks or jobs defined by the Interval Action fields (via the Schedule Options screen [EDIM821]). |

The Online Scanner/Initiator performs no functions when Sterling Gentran:Realtime is disabled (when the value in the System Status field on the System Options Screen [EDIM301] is D). To reactivate the Online Scanner/Initiator, change the System Status to E (Enabled) and start the Online Scanner/Initiator as described in the “Purpose” section, above.

Inputs

There are no inputs on the initial start. Inputs for succeeding starts are passed from the previous start

File Access

| File Description | DDname | File Access |
|---|---------|-------------|
| Sterling Gentran:Realtime/ Control Checkpoint file | EDICKP | Read. |
| Online Control file | EDIOCF | Read. |
| Sterling Gentran:Realtime/ Control Queue file | EDIQnnn | Read. |

Reports

None.

Internal Addressing Routine

EDIRADDR

Purpose

The Internal Addressing Routine (EDIRADDR) moves the address of the first linkage field into the second linkage field.

Operation

The Inbound and Outbound Mapper programs (EDIR041 and EDIR042) call the Internal Addressing Routine during data translation.

Inputs

Inputs are passed from the Inbound and Outbound Mapper programs (EDIR041 and EDIR042).

File Access

None.

Reports

None.

Online Message Handler

EDIROMH

Purpose

The Online Message Handler program (EDIROMH) retrieves messages from the System Message File and records them on the Online Log file.

Operation

The Online Message Handler is called by Sterling Gentran:Realtime and some IBM® Sterling Gentran:Control® background CICS programs.

Inputs

Inputs are passed from the program calling the Online Message Handler.

File Access

| File Description | DDname | File Access |
|--------------------------------|---------|------------------|
| Online Log file | EDIOLF | Read and update. |
| Error Message and Control file | EDIERRC | Read. |

Reports

None.

Shell Program

EDIR313

Purpose

The Shell program (EDIR313) is an interface between the Sterling Gentran:Realtime gateways and the Sterling Gentran:Realtime “core” programs. It starts the proper processes for both inbound and outbound, such as acknowledgment processing for inbound data.

Operation

The Sterling Gentran:Realtime gateways invoke the Shell program. It uses a TSQ for the options, such as path ID, exit programs, etc.

Inputs

Inputs are passed from the Outbound Application gateway (EDIR101) and the Inbound EDI gateway (EDIR103).

File Access

| File Description | DDname | File Access |
|---|---------|-------------|
| Report Control file | EDIRRC | Write. |
| Report Detail file | EDIRRD | Write. |
| Sterling Gentran:Realtime Activity File | EDIRAPF | Update. |

Reports

None.

Exception Program Exit

EDIR852

Purpose

The Exception Program Exit writes any data passed to it to the Exception Processing files (EDIRHBP and EDIRDBP). The program is used primarily to save data that was suspended, rejected, or could not process because of a system problem.

Operation

The Exception Program Exit is an optional exit program. The program is executed from multiple processing areas in Sterling Gentran:Realtime, **only** when the program has been designated by the value EDIR852 entered in the Exception Pgm field on any or all of the following screens:

- The Queue Options Maintenance screen
- The General Shell Path Maintenance screen
- The Separator Systems Options Maintenance screen

Note: You can write your own exception program and designate it in the screen fields. Source code for EDIR852 is supplied in the UTILITY.SOURCE library.

Three situations may invoke the Exception Program Exit:

- A Sterling Gentran:Realtime process may invoke the program when data can not process because of system errors, suspension, error rejection, user error, etc.
- The Separator Driver program (EDIR930) links to the Exception Exit program when data can not be processed because it is an incomplete interchange, is not identified as a valid EDI document, or one of the priority processing programs returns an error when processing the interchange.
- A user application can link to this program to store data that it was unable to process.

The Exception Program Exit writes a header record to the Exception Processing Header Bypass file (EDIRHBP) and writes the individual data records to the Exception Processing Detail Bypass file (EDIRDBP).

Note: You can access this information from the Exception Processing files and the data can be reprocessed if needed.

File Access

| File Description | DDname | File Access |
|---|---------|-----------------|
| Exception Processing Header Bypass file | EDIRHBP | Read and write. |
| Exception Processing Detail Bypass file | EDIRDBP | Write. |

Control Structure

This section describes the control structure that Sterling Gentran:Realtime uses with the Exception Program Exit and the Exit returns to Sterling Gentran:Realtime.

- The Shell program LINKs to the Exception Program Exit program (specified on the Shell Path Maintenance screen), when an error is encountered.
(or)
- The Online Queue Read programs (EDIROQR and EDIEOQR) LINK to the exit program specified on the Queue Options Maintenance screen when an error is encountered that would cause the queue file to be disabled.
(or)
- The Exit program performs its processing using the data specified in the parameters.

The Exit program then RETURNS to Sterling Gentran:Realtime.

Parameters

The parameters passed to the Exception Program Exit are described below (also see SOURCE member EDIBPASS).

Values Passed to the Exit:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|-------------------|
| 0001 – 0003 | 3 | AN | Program Image ID |
| 0004 – 0006 | 3 | AN | System Image ID |
| 0007 – 0009 | 3 | ZD | Option Number |
| 0010 – 0017 | 8 | AN | Name of TS Queue |
| 0018 – 0019 | 2 | AN | Error Level |
| 0020 – 0021 | 2 | AN | Status Code |
| 0022 – 0121 | 100 | AN | Error Message |
| 0122 – 0123 | 2 | AN | Error Source Ind. |

Values Returned from Exit:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|-------------------------|
| 0124 – 0125 | 2 | AN | Return Error Level |
| 0126 – 0150 | 25 | AN | Reserved for Future Use |

Field Descriptions*Values Passed to the Exception Program Exit***System Image** (required)

A 3-character code indicating the system image ID. Valid values are any three alphanumeric characters (the first character must be alphabetic).

The default system image passed is **EDI**, if you do not have a different system image set.

In the CICS environment, a 3-character system image ID identifies all files belonging to a particular system image. All file DD names, CICS enqueue names, and so on, are prefixed by this 3-character system image ID.

Option Number

The 3-digit field indicating the Option Number. The Document Group received an error while processing with this option. Valid values are 001 to 999, with 200 to 399 indicating an immediate option).

Name of TS Queue

A 1- to 8-character field indicating the name of the TSQ holding the document group in error.

Error Level

A 2-character code that indicates the level of the error. Valid values are:

00 = Suspended data
08 = Rejected data
16 = Fatal error

Status Code

A 2-character code that indicates the failure of the document group.

Error Message

A 1- to 100-character field containing a text description of the error that caused this document group to be sent to the Exception Program Exit.

Error Source Ind.

A 2-character code that describes the program that generated the error or which program intercepted the error. Valid values are:

QB = The Queue Read program encountered the error.
OE = The Outbound Editor generated the error.
OM = The Outbound Mapper generated the error.
IE = The Inbound Editor generated the error.
IM = The Inbound Mapper generated the error.

Value Returned from the Exception Program Exit

Return Error Level

A 2-character code that indicates the highest error level that occurred in the Exception Program Exit. A value of **00** indicates that no errors have occurred.

Interface Design Considerations

This section describes important issues to consider when designing programs for the Exception Program Exits.

- Any files that your exit program writes to should have “logging” turned off. The Sterling Gentran:Realtime system performs a ROLLBACK after it has performed the Exception Exit.
- Your exit program should store the document group in a file or have some method of recreating the document group from the data’s original source.
- The CICS task ID number is the best method of linking the document group to any reports or log messages. This task ID is important information that should be placed on any file created.

Note: Since the Exit is LINKed to, its task ID will be the same as the translation process that caused an error in the document group.

Databank Utility Programs and Reports

Overview

This chapter describes Sterling Gentran:Realtime Databank utility programs and reports. This chapter contains the following topics:

| Topic | Page |
|--|-------------|
| EDI Databank Inquiry Report.....EDID550 | 5-2 |
| Application Databank Inquiry ReportEDID551 | 5-26 |
| Network Reconciliation.....EDID850 | 5-37 |
| Network Reconciliation MaintenanceEDID860 | 5-39 |
| Outbound Application Databank MaintenanceEDID151 | 5-42 |
| Outbound Application Databank Interface SubroutineEDID152 | 5-48 |
| Outbound EDI Databank Maintenance.....EDID251 | 5-49 |
| Outbound EDI Databank Interface SubroutineEDID252 | 5-55 |
| Outbound EDI Databank ExtractEDID255 | 5-56 |
| Inbound EDI Databank MaintenanceEDID351 | 5-59 |
| Inbound EDI Databank Interface SubroutineEDID352 | 5-65 |
| Inbound Application Databank Maintenance.....EDID451 | 5-66 |
| Inbound Application Databank Interface Subroutine.....EDID452 | 5-72 |
| Inbound Application Databank ExtractEDID455 | 5-73 |
| Acknowledgment Reconciliation/MonitorEDID515 | 5-79 |
| Acknowledgment Reconciliation/Monitor Reformatter....EDID516 | 5-89 |
| Change Audit MaintenanceEDID552 | 5-91 |
| Databank Status UpdateEDIR855 | 5-94 |
| Databank Reprocess DriverEDIR856 | 5-95 |

EDI Databank Inquiry Report

EDID550

Purpose

When the EDI Databank Inquiry Report batch program (EDID550) executes, it generates the EDI Databank Inquiry report. The EDI Databank Inquiry report contains a detailed inquiry, summary level inquiry, or processing log, based on the report-type control card value specified. This report displays information from the Inbound and Outbound EDI databanks. A wide range of selection criteria allows you to produce reports according to your specific requirements. These requirements may be based on the needs of the user who will view the reports, or they may be based on the information stored on the directories by the Inbound and Outbound Editors.

The Report-Structure control card is an option of the EDI Databank Inquiry Report program. This control card allows reporting based on:

- EDI interchange level directory information with all related group and transaction level information
- EDI Interchange level directory information only
- EDI group level directory information with all related transaction level information
- EDI Group level directory information only
- EDI transaction level directory information

The EDI Databank Inquiry program also produces a Statistics file, if requested. The EDI Databank Statistics file is a data file containing statistical information on inbound and outbound EDI data.

A Transaction file is produced for Sterling Gentran:Realtime databank updates for the Reported indicator. This file is created when the Reported selection criteria is set to NO or ALL and the Realtime-Databanks selection criteria is set to YES. The batch Queue Write program (EDIRQWR) must be executed to write the transaction file update information to queue file 096. The online Databank Status Update program (EDIR855) executes once there is data in queue file 096, and it applies the update information to the Sterling Gentran:Realtime databank files.

See the section “Configuring Databanking” in Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more information.

Note: For IBM® Sterling Gentran:Plus® users, the INS-TRADANET network status information is printed at the interchange level on the summary report.

Operation

The EDI Databank Inquiry Report program runs as a batch job step. To run this program, use the JCL located in EXEC550R in the JCL library.

Inputs

The inputs vary based on the Databank control card criteria used. Possible inputs to this program are:

| DDname | Description |
|---------|---|
| EDIIEA | Sterling Gentran:Realtime Inbound EDI Databank Directory |
| EDIOEA | Sterling Gentran:Realtime Outbound EDI Databank Directory |
| SYS090 | Partner file |
| EDICNTL | Control Card file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |

Outputs

The following databank files may be updated depending on the control card selection criteria used.

| DDname | Description |
|---------|------------------------------|
| EDISTX | EDI Databank Statistics file |
| EDIRTRN | Transaction file |

Reports

The following reports are generated by this program:

| DDname | Description |
|--------|----------------|
| EDIRPT | Inquiry Report |
| EDILOG | Processing Log |
| EDISUM | Summary report |

Control Card Options

The following databank inquiry operation and selection criteria are specified by control cards:

Operations

SELECT (Default Operation)

Selection Criteria

Defaults

| | |
|----------------------------|--------------------------|
| ACKNOWLEDGEMENT-STATUS | ALL |
| AGE-DAYS | ALL |
| AGE-HOURS | ALL |
| APPLICATION-DATA-ID | No default, must specify |
| DATABANK | ALL |
| DATABANK-RUN-NUMBER | ALL |
| DIVISION | ALL |
| ENVELOPE-VALIDATION-STATUS | ALL |
| FROM-DATE | 01/01/1900 |
| FROM-TIME | 00:00 |
| FUNCTIONAL-GROUP-ID | ALL |
| FUNCTIONAL-GROUP-ID-2 | No default, must specify |
| FUNCTIONAL-GROUP-ID-3 | No default, must specify |
| FUNCTIONAL-GROUP-ID-4 | No default, must specify |
| GROUP-ENV-REF-ID | ALL |
| INTERCHANGE-ENV-REF-ID | ALL |
| NETWORK | ALL |
| NETWORK-STATUS | ALL |
| PARTNER | ALL |
| PARTNER-QUALIFIER | ALL |
| REALTIME-DATABANKS | NO |
| REFERENCE-TAG | ALL |
| REPORTED | ALL |
| REPORT-DEFERRED | NO |
| REPORT-STRUCTURE | INTERCHANGE |
| REPORT-TYPE | SUMMARY |
| STATISTICS-FILE | NO |
| STATUS | ALL |
| TEST-PRODUCTION-STATUS | ALL |
| TO-DATE | 12/31/2099 |
| TO-TIME | 23:59 |
| TRANSACTION-ENV-REF-ID | ALL |
| TRANSACTION-SET-ID | ALL |
| TRANSACTION-SET-ID-2 | No default, must specify |
| TRANSACTION-SET-ID-3 | No default, must specify |
| TRANSACTION-SET-ID-4 | No default, must specify |
| USER | ALL |
| USER-DUPLICATE-IND | ALL |
| USER-REFERENCE | ALL |

Date and time selection criteria are evaluated independently. Time-based selection criteria are used to limit the data selected using the specified time range for each day within the date range. For example, selecting data with time selection criteria of 9 a.m. to 5 p.m. will select data processed between 9 a.m. and 5 p.m. on any day. Adding a date range further reduces the data selected to that which was processed between 9 a.m. and 5 p.m. on any day in the date range.

Valid Criteria Values

Acknowledgment-Status

Valid values are:

- ALL
- ACCEPTED
- ACCEPTED-WITH-ERRORS
- INDETERMINATE
- NOT-REQUIRED
- OVERDUE
- PARTIAL-ACCEPTANCE
- RECEIVED
- REJECTED
- MANUALLY-ACKNOWLEDGED
- WAITING

Age-Days

The age of the data in number of days. Enter a three-digit value to request documents that are the specified age or newer. Specify the value 000 to get only documents added on the current date. To request documents older than a specified age, enter a greater than sign and the age-days (e.g., enter >002 to select documents more than 2 days old). Valid values are:

- ALL** = Request all documents.
- 000** = Request only documents added on the current date.
- nnn (000-999)** = Request data documents this many days old or newer.
- >nnn** = Request documents older than this many days (where nnn is 000-999).

Age-Hours

The age of the data in number of hours. Enter a three-digit value to request documents that are a specified age or newer. To request documents older than the specified age, enter a greater than sign and the age-hours (e.g., enter >005 to select documents more than 5 hours old).

- ALL** = Request all documents.
- nnn (000-999)** = Request data documents this many hours old or newer.
- >nnn** = Request documents older than this many hours (where nnn is 000-999).

Application-Data-ID

Specifies the 1- to 12-character application ID. You can specify either an application data ID or the value ALL, for all application data. This criteria is only valid if the Report-Structure control card has a value of TRANSACTION. It is also only used for selection of outbound data.

Databank

Identifies which EDI databanks should be used for the inquiry.

| | | |
|---------------------|---|---|
| ALL | = | Select data from both Inbound and Outbound EDI databanks. |
| INBOUND-EDI | = | Select data from the Inbound EDI databank. |
| OUTBOUND-EDI | = | Select data from the Outbound EDI databank. |

Databank-Run-Number

An 8-digit number that identifies the run that last processed the document. You can specify either a databank run number (which must include leading zeros) or the value ALL, for all databank runs.

Division

Specifies the 3-character division code. You can specify either a division code or the value ALL, for all division codes.

Envelope-Validation-Status

Specifies the envelope validation status as assigned by the Inbound Editor. Only used for Inbound EDI data. Valid values are: **ALL, <08, <12, 00, 04, 08, 12, >00, >04, >08**

From-Date

For Inbound EDI data, this value specifies the Inbound Edited Date. For Outbound EDI data, this value specifies the date when the data was last output to communications. This could have been performed by either the Outbound Editor or the Outbound EDI Databank Extract program. This value starts the range; it is used with the To-Date value. The format is **MM/DD/CCYY**.

From-Time

For Inbound EDI data, this value specifies the Inbound Edited Time. For Outbound EDI data, this value specifies the time when the data was last output to communications. This could have been performed by either the Outbound Editor or the Outbound EDI Databank Extract program. This value starts the range; it is used with the To-Time value. The format is **HH:MM**.

Functional-Group-ID

Specifies the 1- to 6-character functional group identification. You can specify either a functional group ID or the value ALL, for all functional groups. This selection criteria is only valid if the Report-Structure control card selection criteria has a value of GROUP.

Functional-Group-ID-2

Specifies the 1- to 6-character functional group identification. This parameter is used in conjunction with the Functional-Group-ID parameter if you want to select a second functional group for your report. A valid functional group ID must be specified. A value of ALL is invalid. This selection criteria is valid only if the Report-Structure control card selection criteria has a value of GROUP.

Functional-Group-ID-3

Specifies the 1- to 6-character functional group identification. This parameter is used in conjunction with the Functional-Group-ID parameter if you want to select a third functional group for your report. A valid functional group ID must be specified. A value of ALL is invalid. This selection criteria is valid only if the Report-Structure control card selection criteria has a value of GROUP.

Functional-Group-ID-4

Specifies the 1- to 6-character functional group identification. This parameter is used in conjunction with the Functional-Group-ID parameter if you want to select a fourth functional group for your report. A valid functional group ID must be specified. A value of ALL is invalid. This selection criteria is valid only if the Report-Structure control card selection criteria has a value of GROUP.

Group-Env-Ref-ID

This selection criteria is only valid if the Report-Structure control card selection criteria has a value of GROUP. Valid values are:

- aaaaaaaaaaaaa** = EDIFACT
- nnnnnnnnnn** = X12 and TDCC – leading zeros required
- ALL** = All group envelope reference IDs

Interchange-Env-Ref-ID

This selection criteria is only valid if the Report-Structure control card selection criteria has a value of INTERCHANGE. Valid values are:

- aaaaaaaaaaaaa** = EDIFACT
- nnnnnnnnnn** = X12 and TDCC – leading zeros required
- ALL** = All interchange envelope reference IDs

Network

Specifies the 1- to 15-character network identifier. You can specify either a network identifier or the value ALL, for all networks. This selection criteria is only valid for Outbound EDI data.

Network Status

This selection criteria is only valid:

- If the Report-Structure control card selection criteria has a value of INTERCHANGE.
- For Outbound EDI Data.

Valid values are:

- ALL
- ERRORS-ENCOUNTERED
- MANUALLY-COMPLETED
- NOT-REQUIRED
- PARTNER-PICKED-UP
- RECEIVED-NETWORK
- SORTED-NETWORK
- WAITING

Partner

Valid values are ALL, or a 15-character partner ID (if the Trading-Profile-Mode is set to RELATIONSHIP), or a 35-character partner ID (if the Trading-Profile-Mode is set to PARTNER-QUALIFIER).

Partner Qualifier

The 4-character qualifier for the partner ID. You can specify a partner qualifier or ALL for all partner qualifiers. This is valid only if the Trading-Profile-Mode is set to PARTNER-QUALIFIER.

Reference-Tag

A 10-character reference tag assigned to the document/transaction by Sterling Gentran:Basic. This selection criteria is only valid if the Report-Structure control card selection criteria has a value of TRANSACTION. Valid values are:

ALL = All reference tags
aanntnnnnn = A reference tag, where *aa*=IE, IA, OE, or OA. Leading zeros must be specified for the 8-digit number.

Reported

This selection criteria limits selection based on what has been reported previously by an Inquiry report. Valid values are:

ALL = Selects everything regardless of previous reports and updates the reported status on the databank.
YES = Selects only what has been reported previously.
NO = Selects only what has not been reported previously and updates the reported status on the databank.
IGNORE = Selects everything regardless of previous reports and does not perform the databank update.

Realtime-Databanks

This selection criteria specifies whether the Sterling Gentran:Realtime databank files are being used for the inquiry and whether to create a Transaction file to contain Sterling Gentran:Realtime databank updates. Valid values are:

YES = Yes, Sterling Gentran:Realtime databank files are being used. Create a Transaction file for databank updates.
NO = No, Sterling Gentran:Realtime databank files are not being used. Do not create a Transaction file.

Report-Deferred

Controls whether the Inquiry Program reports Outbound EDI data which was deferred and unprocessed. Valid values are:

YES = Yes, print deferred and nondeferred transactions.
NO = No, do not print deferred transactions, but print nondeferred transactions.
ONLY = Print deferred transactions only.

Report-Structure

Specifies how the EDI Inquiry Report produced should be structured. Valid values are:

INTERCHANGE = All Groups and Transactions within Interchanges
INTERCHANGE ONLY = Interchanges only
GROUP = All Transaction within Groups
GROUP ONLY = Groups only
TRANSACTION = All Transactions only

Report-Type

Identifies the level at which the Inquiry should report. Valid values are:

- FULL** = Detailed information for each interchange, group and transaction that is selected is reported.
- SUMMARY** = Summary list of selected interchanges, groups and transactions.

Statistics-File

Specifies whether the EDI Databank Statistics file is to be created. Valid values:

- YES** = Yes, create the Statistics file, in addition to the inquiry reports.
- NO** = No, do not create the Statistics file.
- ONLY** = Create the Statistics file only, and do not print the inquiry reports.

Status

Specifies whether the data has been output to communications. Can be output by either the Outbound Editor or the Outbound EDI Databank Extract program.

- PROCESSED** = Has been output to communications.
- UNPROCESSED** = Has never been output to communications.

Test-Production-Status

Specifies the test/production status as assigned by Sterling Gentran:Basic that should be used for selecting documents.

- ALL** = Selects all data, whether test or production.
- PRODUCTION** = Selects the production data.
- TEST** = Selects the test data.

To-Date

For Inbound EDI data, this value specifies the Inbound Edited Date. For Outbound EDI data, this value specifies the date when the data was last output to communications. This could have been performed by either the Outbound Editor or the Outbound EDI Databank Extract program. This value ends the range; it is used with the From-Date value. The format is **MM/DD/CCYY**.

To-Time

For Inbound EDI data this value specifies the Inbound Edited Time. For Outbound EDI data this value specifies the time when the data was last output to communications. This could have been performed by either the Outbound Editor or the Outbound EDI Databank Extract program. This value ends the range; it is used with From-Time value. The format is **HH:MM**.

Transaction-Env-Ref-ID

This selection criteria is only valid if the Report-Structure control card selection criteria has a value of TRANSACTION. Valid values are:

- aaaaaaaaaaaa** = EDIFACT
- nnnnnnnnnn** = X12 and TDCC – leading zeros required
- ALL** = All transaction envelope reference ID's

Transaction-Set-ID

Specifies the 1- to 6-character transaction set identifier. You can specify either a transaction set ID or the value ALL, for all transaction sets. This selection criteria is only valid if the REPORT-STRUCTURE control card has a value of TRANSACTION.

Transaction-Set-ID-2

Specifies the 1- to 6-character transaction set identifier. This parameter is used in conjunction with the Transaction-Set-ID parameter if you want to select a second transaction set for your report. A valid transaction set ID must be specified. A value of ALL is invalid. This selection criteria is valid only if the Report-Structure control card selection criteria has a value of TRANSACTION.

Transaction-Set-ID-3

Specifies the 1- to 6-character transaction set identifier. This parameter is used in conjunction with the Transaction-Set-ID parameter if you want to select a third transaction set for your report. A valid transaction set ID must be specified. A value of ALL is invalid. This selection criteria is valid only if the Report-Structure control card selection criteria has a value of TRANSACTION.

Transaction-Set-ID-4

Specifies the 1- to 6-character transaction set identifier. This parameter is used in conjunction with the Transaction-Set-ID parameter if you want to select a fourth transaction set for your report. A valid transaction set ID must be specified. A value of ALL is invalid. This selection criteria is valid only if the Report-Structure control card selection criteria has a value of TRANSACTION.

User

Specifies the 1- to 15-character user ID. You can specify either a user ID or the value ALL, for all users. This selection criteria is only valid if the Trading-Profile-Mode control card is specified as RELATIONSHIP.

User-Duplicate-Ind.

Specifies whether a transaction has been marked as a user duplicate. This selection criteria is valid only if the REPORT STRUCTURE control card has a value of TRANSACTION. It is also only used for selection of Outbound EDI data. Valid values are:

| | | |
|------------|---|---|
| YES | = | Selects duplicate transactions. |
| NO | = | Selects non-duplicate transactions. |
| ALL | = | Selects all transactions, duplicate or non-duplicate. |

User-Reference

Specifies the 1- to 45-character user reference value. You can specify either a user reference or ALL for all user references. This selection criteria is only valid if the Report-Structure control card selection criteria has a value of TRANSACTION.

Reports

The EDI Databank Inquiry Report includes a Summary report (Figure 5.1), Processing Log (Figure 5.2), Detail Inquiry report (Figure 5.3), and Summary Inquiry report (Figure 5.4).

```

                                GENTRAN: BASIC
                                EDI DATABANK INQUIRY
                                SUMMARY REPORT

PAGE      : 00001
VERSION:  6.6

REPORT DATE: 06/01/2011
REPORT TIME: 12:00:00
REPORT ID  : EDI144

REQUESTED-OPERATION      = SELECT
ACKNOWLEDGEMENT-STATUS  = ALL
AGE-DAYS                  = ALL
AGE-HOURS                 = ALL
DATABANK                 = ALL
DATABANK-RUN-NUMBER     = ALL
DIVISION                 = ALL
ENVELOPE-VALIDATION-STATUS = ALL
FROM-DATE               = 01/01/1900
FROM-TIME               = 00:00
NETWORK                 = ALL
PARTNER                 = ALL
PARTNER-QUALIFIER      = ALL
REALTIME-DATABANKS     = YES
REPORTED                = ALL
REPORT-DEFERRED        = YES
REPORT-STRUCTURE       = INTERCHANGE
REPORT-TYPE            = SUMMARY
STATISTICS-FILE       = YES
STATUS                 = ALL
TEST-PRODUCTION-STATUS = ALL
TO-DATE                = 12/31/2099
TO-TIME                = 23:59
TRADING-PROFILE-MODE   = PARTNER-QUALIFIER
INTERCHANGE-ENV-REF-ID = ALL
NETWORK-STATUS        = ALL
USER-DUPLICATE-IND    = ALL
CONCURRENCY-ENABLED   = NO

PROCESSING SUMMARY
-----
INBOUND INTERCHANGES READ      : 1
OUTBOUND INTERCHANGES READ    : 4

INBOUND DATA SELECTED
INTERCHANGES                  : 1
GROUPS                        : 1
TRANSACTIONS                  : 6

OUTBOUND DATA SELECTED
INTERCHANGES                  : 4
GROUPS                        : 4
TRANSACTIONS                  : 4

STATISTICS FILE RECORDS WRITTEN : 23
NUMBER OF ERRORS THIS RUN      : 0
HIGHEST RETURN CODE THIS RUN   : 0
    
```

Figure 5.1 EDI Databank Inquiry Report (Summary Report)

```
REPORT DATE: 06/01/2011          GENTRAN: BASIC          PAGE : 00001
REPORT TIME: 12:00:00          EDI DATABANK INQUIRY  VERSION: 6.6
REPORT ID  : EDI142           PROCESSING LOG        COMPILE DATE: 06/01/11

MESSAGES
-----
EDI-042101-I 00 EDI DATABANK INQUIRY PROCESSING BEGINS . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-042102-I 00 EDI DATABANK INQUIRY PROCESSING ENDS . . . DATE: 06/01/2011, TIME: 12:00:00
```

**Figure 5.2 EDI Databank Inquiry Report
(Processing Log)**

PAGE : 00001
VERSION: 6.6

GENTRAN: BASIC
EDI DATABANK INQUIRY
DETAIL INQUIRY REPORT

REPORT DATE: 06/01/2011
REPORT TIME: 12:00:00
REPORT ID : EDI143

INBOUND EDI DATABANK

INTERCHANGE ID . . . : BELL
NAME :
ENV REF ID . . . : 000001345
DIVISION . . . : 000
DATABANK RUN NR: 00000163

GROUP ID : SND 004030
NAME :
ENV REF ID . . . : 000000372
DIVISION . . . : 000
FUNC GROUP ID : AC

TRANS ID : SND 004030
SET ID ENV REF ID USER REFERENCE
102 000000300 REF ID
102 000000301 REF ID
102 000000302 REF ID
102 000000303 REF ID

INTERCHANGE ID . . . : BELL
NAME :
ENV REF ID . . . : 000001345
DIVISION . . . : 000
DATABANK RUN NR: 00000178

GROUP ID : SND 004030
NAME :
ENV REF ID . . . : 000000372
DIVISION . . . : 000
FUNC GROUP ID : AC

TRANS ID : SND 004030
SET ID ENV REF ID USER REFERENCE
102 000000300 REF ID
102 000000301 REF ID
102 000000302 REF ID
102 000000303 REF ID

INTERCHANGE ID . . . : BELL
NAME :
ENV REF ID . . . : 000001345
DIVISION . . . : 000
DATABANK RUN NR: 00000348

GROUP ID : SND 004030
NAME :
ENV REF ID . . . : 000000372
DIVISION . . . : 000
FUNC GROUP ID : AC
831 0001 3

INTERCHANGE ID . . . : 3070-DUNS
NAME :
ENV REF ID . . . : 000000001
DIVISION . . . : 000

ACKNOWLEDGE :
GROUPS : 000001
TRANSACTIONS : 000004
CHARACTERS : 0000000482

ACKNOWLEDGE :
TRANS COUNT : 000004
TRANS ACKNOWLEDGED : 000004
TRANS ACCEPTED : 000004
CHARACTERS : 0000000360

DIVISION : 000
ACK STATUS CHARACTERS REF TAG PROC
0000000057 IE00023624 YES
0000000131 IE00023627 YES
0000000205 IE00023628 YES
0000000279 IE00023629 YES

ACKNOWLEDGE :
GROUPS : 000001
TRANSACTIONS : 000004
CHARACTERS : 0000000482

ACKNOWLEDGE :
TRANS COUNT : 000004
TRANS ACKNOWLEDGED : 000000
TRANS ACCEPTED : 000004
CHARACTERS : 0000000360

DIVISION : 000
ACK STATUS CHARACTERS REF TAG PROC
0000000057 IE00023793 YES
0000000131 IE00023796 YES
0000000205 IE00023797 YES
0000000279 IE00023798 YES

ACKNOWLEDGE :
GROUPS : 000001
TRANSACTIONS : 000004
CHARACTERS : 0000000482

ACKNOWLEDGE :
TRANS COUNT : 000004
TRANS ACKNOWLEDGED : 000000
TRANS ACCEPTED : 000004
CHARACTERS : 0000000360
ACCEPT 0000000065 IE00024378 YES

ACKNOWLEDGE :
GROUPS : 000002
TRANSACTIONS : 000005
CHARACTERS : 0000000482

Figure 5.3 EDI Databank Inquiry Report (Detail Inquiry Report)

```

DATABANK RUN NR: 00000229
GROUP ID . . . : 3070-DUNS
NAME . . . . :
ENV REF ID . . : 000000001
DIVISION . . . : 000
FUNC GROUP ID : RA
TRANS ID . . . : 3070-DUNS
SET ID ENV REF ID USER REFERENCE
820 0001 30701111
820 0002 30701111
820 0003 30701111
820 0004 30701111
GROUP ID . . . : 3070-DUNS
NAME . . . . :
ENV REF ID . . : 000000002
DIVISION . . . : 000
FUNC GROUP ID : CT
TRANS ID . . . : 3070-DUNS
SET ID ENV REF ID USER REFERENCE
831 0001 30701111
INTERCHANGE ID : 3070-DUNS
NAME . . . . :
ENV REF ID . . : 000000001
DIVISION . . . : 000
DATABANK RUN NR: 00000240
GROUP ID . . . : 3070-DUNS
NAME . . . . :
ENV REF ID . . : 000000001
DIVISION . . . : 000
FUNC GROUP ID : RA
CHARACTERS : 0000001531
ACKNOWLEDGE : ACCEPT
TRANS COUNT : 000004
TRANS ACKNOWLEDGED : 000004
TRANS ACCEPTED : 000004
CHARACTERS : 0000001260
QUAL :
ACK STATUS DIVISION : 000
ACCEPT      CHARACTERS REF TAG PROC
000000278 IE00024380 YES
000000578 IE00024383 YES
000000876 IE00024384 YES
000000176 IE00024385 YES
ACKNOWLEDGE : ACCEPT
TRANS COUNT : 000001
TRANS ACKNOWLEDGED : 000001
TRANS ACCEPTED : 000001
CHARACTERS : 0000000149
QUAL :
ACK STATUS DIVISION : 000
ACCEPT      CHARACTERS REF TAG PROC
000000065 IE00024386 YES
ACKNOWLEDGE :
GROUPS : 000002
TRANSACTIONS : 000005
CHARACTERS : 0000001531
QUAL :
LOADED : 06/01/2011 12:00
EDITED : 06/01/2011 12:00
QUAL :
ACKNOWLEDGE : ACCEPT
TRANS COUNT : 000004
TRANS ACKNOWLEDGED : 000004
TRANS ACCEPTED : 000004
CHARACTERS : 0000001260
    
```

Figure 5.4 EDI Databank Inquiry Report
(Detail Inquiry Report, Continued)

| GENTRAN: BASIC EDI DATABANK INQUIRY SUMMARY INQUIRY REPORT | | | | INBOUND EDI DATABANK | | PAGE : 00001 VERSION: 6.6 | |
|--|--------------|-------------------|------------------|----------------------|--------|------------------------------|-------------|
| DIR | TYPE PARTNER | ENVELOPE | LOADED | EDITED | ACK | GROUP/ | CHARACTER |
| | | QUAL REFERENCE ID | DATE/TIME | DATE/TIME | STATUS | TRANS | |
| I | BELL | ZZ 000001345 | 06/01/2011 12:00 | 06/01/2011 13:00 | | 000001 | 0000000482 |
| G | SND 004030 | 000000372 | | | | 000004 | 0000000360 |
| T | SND 004030 | 000000300 | | | | | 0000000057 |
| T | SND 004030 | 000000301 | | | | | 0000000131 |
| T | SND 004030 | 000000302 | | | | | 0000000205 |
| T | SND 004030 | 000000303 | | | | | 0000000279 |
| I | BELL | ZZ 000001345 | 06/01/2011 12:00 | 06/01/2011 13:00 | | 000001 | 0000000482 |
| G | SND 004030 | 000000372 | | | | 000004 | 0000000360 |
| T | SND 004030 | 000000300 | | | | | 0000000057 |
| T | SND 004030 | 000000301 | | | | | 0000000131 |
| T | SND 004030 | 000000302 | | | | | 0000000205 |
| T | SND 004030 | 000000303 | | | | | 0000000279 |
| I | BELL | ZZ 000001345 | 06/01/2011 12:00 | 06/01/2011 13:00 | | 000001 | 0000000482 |
| G | SND 004030 | 000000372 | | | | 000004 | 0000000360 |
| T | SND 004030 | 000000300 | | | | | 0000000057 |
| T | SND 004030 | 000000301 | | | | | 0000000131 |
| T | SND 004030 | 000000302 | | | | | 0000000205 |
| T | SND 004030 | 000000303 | | | | | 0000000279 |
| I | DAKOSY | B105904080698 | 06/01/2011 12:00 | 06/01/2011 13:00 | | 000000 | 00000001197 |
| I | DAKOSY | B105904080698 | 06/01/2011 12:00 | 06/01/2011 13:00 | | 000000 | 00000001197 |
| I | DAKOSY | 000000022 | 06/01/2011 12:00 | 06/01/2011 13:00 | | 000001 | 0000001069 |
| G | DEMQUJ-GS | 000000022 | | | | 000002 | 0000001069 |
| T | DEMQUJ-GS | 000220001 | | | | | 0000000489 |
| T | DEMQUJ-GS | 000220001 | | | | | 0000000996 |
| T | DEMQUJ-GS | 000220002 | | | | | 0000000996 |
| I | ET654-DUNS | 000000001 | 06/01/2011 12:00 | 06/01/2011 13:00 | ACCEPT | 000003 | 0000003079 |
| G | ET654-DUNS | 0001 | | | ACCEPT | 000001 | 0000000575 |
| T | ET654-DUNS | 000000002 | | | ACCEPT | 000002 | 0000000942 |
| T | ET654-DUNS | 0001 | | | ACCEPT | | 0000000484 |
| T | ET654-DUNS | 0002 | | | ACCEPT | | 0000000857 |
| T | ET654-DUNS | 000000003 | | | ACCEPT | 000003 | 0000001440 |
| T | ET654-DUNS | 0001 | | | ACCEPT | | 0000000322 |
| T | ET654-DUNS | 0002 | | | ACCEPT | | 0000000900 |
| T | ET654-DUNS | 0003 | | | ACCEPT | | 0000001355 |
| I | ET654-DUNS | 000000001 | 06/01/2011 12:00 | 06/01/2011 13:00 | | 000003 | 0000003079 |
| G | ET654-DUNS | 000000001 | | | | 000001 | 0000000575 |
| T | ET654-DUNS | 0001 | | | | | 0000000490 |
| G | ET654-DUNS | 000000002 | | | | 000002 | 0000000942 |
| T | ET654-DUNS | 0001 | | | | | 0000000484 |
| T | ET654-DUNS | 0002 | | | | | 0000000857 |
| G | ET654-DUNS | 000000003 | | | | 000003 | 0000001440 |
| T | ET654-DUNS | 0001 | | | | | 0000000322 |
| T | ET654-DUNS | 0002 | | | | | 0000000900 |

Figure 5.5 EDI Databank Inquiry Report (Summary Inquiry Report)

Field Descriptions

Summary Report

Options Used this Run:

This section of the report displays all the parameter options in effect for EDI Databank Inquiry report. Only those parameter options used are displayed.

Processing Summary:**Inbound Interchanges Read**

Displays the total number of inbound interchanges read.

Outbound Interchanges Read

Displays the total number of outbound interchanges read.

Inbound Data Selected Interchanges

Displays the total number of inbound interchanges selected.

Inbound Data Selected Groups

Displays the total number of inbound groups selected.

Inbound Data Selected Transactions

Displays the total number of inbound transactions selected.

Outbound Data Selected Interchanges

Displays the total number of outbound interchanges selected.

Outbound Data Selected Groups

Displays the total number of outbound groups selected.

Outbound Data Selected Transactions

Displays the total number of outbound transactions selected.

Number of Errors this Run

Displays the total number of errors that occurred on this run of the report.

Highest Return Code this Run

Displays the highest return code occurring on this run of the report.

Processing Log:**Messages**

Displays error and system messages pertaining to EDI Databank Inquiry Report processing.

Detail Inquiry Report:

The Detail Inquiry Report is produced when option **FULL** is specified for parameter REPORT-TYPE.

Interchange ID

Displays the interchange ID. The interchange ID is either a telephone number identifying a Trading Partner (if using the IBM Sterling Information Broker), or the partner ID of the trading partner (if using Sterling Gentran:Realtime). The system displays up to 10 interchange IDs starting with the interchange ID specified.

Partner Qual

Displays the partner qualifier.

Acknowledge Status

Restricts the list to functional groups with a specific acknowledgment status. Valid values are:

| | | |
|----------|---|-----------------------------|
| A | = | Accepted |
| E | = | Accepted with errors |
| I | = | Indeterminate |
| N | = | Not required |
| O | = | Overdue acknowledgment |
| P | = | Partial acceptance |
| R | = | Rejected |
| U | = | Manually acknowledged |
| W | = | Waiting acknowledgment |
| 4 | = | Rejected (EDIFACT only) |
| 7 | = | Acknowledged (EDIFACT only) |
| 8 | = | Received (EDIFACT only) |

Name

Displays a text description of the interchange ID.

Network Status

Indicates which network status type was used to build the list. If this field is left blank, all network status types are displayed. Valid values are:

| | | |
|----------|---|--|
| E | = | Errors were encountered during network processing. |
| N | = | As defined by the partner profile that was used to process this interchange, network tracking is not performed for this interchange. |
| P | = | Partner has picked up the interchange. |
| R | = | Network has received the interchange. |
| S | = | Network has sorted (processed) the interchange. |
| U | = | User has manually set to a network completed status. |
| W | = | Interchange is waiting for a response from the network. |

Env Ref ID

Displays the envelope reference ID for the interchange.

Edited

Displays the date (in MM/DD/YYYY format) and time (in HH:MM format) that the interchange was last edited.

Groups

Displays the total number of groups processed.

Division

Displays the division, defined to the partner file, that was used to process the groups being listed.

Output

For outbound interchanges, this field displays the date and time the interchange was output from the translation system. For inbound interchanges, the field displays the date and time the interchange was loaded to the translation system.

Transactions

Displays the total number of transaction processed.

Network

Displays the name of the network that processed this interchange (if applicable), as specified in the trading partner profile.

Acknowledge

Displays the date and time that acknowledgment reconciliation was performed against the transaction.

Characters

Displays the total number of characters processed.

Databank Run Nr

Displays the databank run number that was assigned to the interchange by Sterling Gentran:Realtime.

Proc

Indicates whether the transaction has been processed or has been output to communications.

User Dup

Indicates whether the Outbound EDI transaction was marked as a user duplicate.

Summary Inquiry Report:

The Summary Inquiry Report is produced when option SUMMARY is specified for parameter REPORT-TYPE.

Dir Type

This field indicates the type of record being displayed from the EDI Databank Directory. Valid values are:

| | | |
|----------|---|-------------|
| I | = | Interchange |
| G | = | Group |
| T | = | Transaction |

Partner

Displays the partner ID you have entered or selected.

Partner Qual

Displays the partner qualifier.

Envelope Reference ID

Displays the envelope reference ID for the interchange.

Edited Date/Time

Displays the last date (in MM/DD/YYYY format) and time (in HH:MM format) that the interchange was last edited.

Output Date/Time

For outbound interchanges, this field displays the date and time the interchange was output from the translation system. For inbound interchanges, this field displays the date and time the interchange was loaded to the translation system.

Status Net

Displays the current network status for the interchange. Valid values are:

| | | |
|----------|---|--|
| E | = | Errors were encountered during network processing. |
| N | = | As defined by the partner profile that was used to process this interchange, network tracking is not perform for this interchange. |
| P | = | Partner has received the interchange. |
| R | = | Network has received the interchange. |
| S | = | Network has sorted (processed) the interchange. |
| U | = | User has manually set to a network completed status. |
| W | = | Interchange is waiting for a response from the network. |
| 4 | = | Rejected (EDIFACT only). |
| 7 | = | Acknowledged (EDIFACT only). |
| 8 | = | Received (EDIFACT only). |

Status Ack

Displays the current acknowledgment status for the interchange. Valid values are:

| | | |
|----------|---|------------------------|
| A | = | Accepted |
| E | = | Accepted with errors |
| I | = | Indeterminate |
| N | = | Not Required |
| O | = | Overdue acknowledgment |
| P | = | Partial acceptance |
| R | = | Rejected |
| U | = | Manually acknowledged |
| W | = | Waiting acknowledgment |

Status Comm

If Sterling Gentran:Plus is installed, this field displays the first five VSAM batch status flags for the interchange.

Counts Group/Trans

Displays the total number of groups/transactions processed.

Counts Character

Displays the total number of characters processed.

User Dup

Indicates whether the Outbound EDI transaction was marked as a user duplicate.

EDI Databank Statistics File (EDISTX)

The EDI Databank Inquiry Report program (EDID550) produces the EDI Databank Statistics file. The file is an optional data file that contains statistical information on inbound and outbound EDI data. Its purpose is to provide statistical and performance information in a machine-readable format.

The EDI Databank Statistics file contains character and segment counts for each transaction, functional group, interchange, and summary record for the inquiry run. Statistical information cannot be generated for unprocessed deferred transactions.

You can tailor the level of detail reported in the EDI Databank Statistics file according to your requirements, using the EDI Databank Inquiry parameters.

Logical Structure

The EDI Databank Statistics file contains the following four types of logical data records:

- Transaction level
- Functional group level
- Interchange level
- Run level

Transaction level records consist of data that identify the *class* of the transaction (e.g., user, partner, network, application), as well as character and segment counts. There is one transaction level record per EDI Databank Directory Transaction record processed.

Functional group level records consist of data that identify the *class* of the functional group, as well as character and segment counts for the entire functional group, including character and segment counts attributable to the functional group envelopes. There is one functional group level record per EDI Databank Directory Group record processed.

Interchange level records consist of data that identify the *class* of the interchange, as well as character and segment counts for the entire interchange, including character and segment counts attributable to interchange envelopes. There is one interchange level record per EDI Databank Directory Interchange record processed.

Run level records consist of character, segment and record counts for the entire inquiry run. There is one run level record for each databank directory file (inbound and outbound) processed, and one run level record to summarize the entire inquiry run.

Physical Structure

The EDI Databank Statistics file is a physical sequential file that contains records created in one run of the EDI Databank Inquiry Report program. The file consists of fixed-length records and is 512 bytes in length.

The EDI Databank Statistics file contains one record for each *item* that occurs in the run. *Items* include:

- Transactions
- Functional groups
- Interchanges
- The inquiry run itself

The EDI Databank Statistics File consists of one physical record layout that is used for all item types. The contents of the record are produced for the indicated item (e.g., for inbound/outbound, I = interchange, G = group, T = transaction, and R = run).

Record Sequence

The file is sequenced as the inbound or outbound EDI data is processed. For example:

```

inbound transaction #1
inbound transaction #2
inbound functional group #1
inbound transaction #3
inbound transaction #4
inbound functional group #2
inbound interchange #1
inbound run totals
outbound transaction #1
outbound transaction #2
outbound functional group #1
outbound interchange #1
outbound run totals
inquiry run totals
    
```

Record Contents

The following record description will list the fields on the Statistics file, and the item for which they apply. The item types are denoted by the following abbreviations:

```

I           =   Interchange
G           =   Group
T           =   Transaction
R           =   Run
**         =   not available
    
```

| Record Position | Length | Format | Field Name | Inbound | Outbound |
|--|--------|--------|---------------------|---------|----------|
| 001 – 001 | 1 | AN | Direction Indicator | All | All |
| 002 – 002 | 1 | AN | Statistics Level | All | All |
| 003 – 042 | 40 | AN | Profile ID | I,G,T | I,G,T |
| The following fields apply when in Relationship mode on the databank. | | | | | |
| 003 – 003 | 1 | -- | Unused | | |
| 004 – 018 | 15 | AN | User ID | I,G,T | I,G,T |

| Record Position | Length | Format | Field Name | Inbound | Outbound |
|--|--------|--------|---------------------------|---------|----------|
| 019 – 033 | 15 | AN | Partner ID | I,G,T | I,G,T |
| 034 – 042 | 9 | -- | Unused | | |
| The following fields apply when in Partner-Qualifier mode on the databanks. | | | | | |
| 003 – 003 | 1 | -- | Unused | | |
| 004 – 038 | 35 | AN | Partner | I,G,T | I,G,T |
| 039 – 042 | 4 | AN | Partner Qualifier | I,G,T | I,G,T |
| The following fields apply to all modes. | | | | | |
| 043 – 056 | 14 | AN | Control Number | I,G,T | I,G,T |
| 057 – 071 | 15 | AN | Network ID | ** | I,G,T |
| 072 – 081 | 10 | AN | Application Data ID | T | T |
| 082 – 082 | 1 | AN | Test Production Status | I,G,T | I,G,T |
| 083 – 127 | 45 | AN | User Reference | T | T |
| 128 – 135 | 8 | N | Envelope Date (YYYYMMDD) | ** | I,G |
| 136 – 143 | 8 | N | Envelope Time (HHMMSSHS) | ** | I,G |
| 144 – 151 | 8 | N | Processed Date (YYYYMMDD) | I,G,T | I,G,T |
| 152 – 159 | 8 | N | Processed Time (HHMMSSHS) | I,G,T | I,G,T |
| 160 – 167 | 8 | AN | Databank Run Number | I,G,T | I,G,T |
| 168 – 175 | 8 | BIN | Number of Characters | All | All |
| 176 – 183 | 8 | BIN | Number of Segments | All | All |
| 184 – 191 | 8 | BIN | Total Sets | G,I,R | G,I,R |
| 192 – 199 | 8 | BIN | Total Groups | I,R | I,R |
| 200 – 207 | 8 | BIN | Total Interchanges | R | R |
| 208 – 213 | 6 | AN | Transaction Set ID | T | T |
| 214 – 225 | 12 | AN | Compliance Version | I,G,T | I,G,T |
| 226 – 231 | 6 | AN | Functional Group ID | G,T | G,T |
| 232 – 311 | 80 | AN | User Defined | ** | T |
| 312 – 323 | 12 | AN | Envelope Version | ** | G |
| 324 – 358 | 35 | AN | Envelope Sender ID | ** | G |
| 359 – 393 | 35 | AN | Envelope Receiver ID | ** | G |
| 394 – 396 | 3 | AN | Envelope Agency | ** | G |
| 397 – 512 | 116 | AN | Future Use | | |

Field Descriptions

Direction Indicator

The direction of the item. Valid values are:

| | | |
|--------------|---|--|
| I | = | Inbound |
| O | = | Outbound |
| blank | = | Both inbound and outbound (Run Totals) |

Statistics Level

The level of the statistics record. Valid values are:

| | | |
|----------|---|--------------------------|
| 1 | = | Inquiry Run level total |
| 2 | = | Databank Run level total |
| 3 | = | Interchange level |
| 4 | = | Functional Group level |
| 5 | = | Transaction level |

Profile ID

The user ID for the item, or the partner ID and partner qualifier for the item.

User ID

The user ID for the item.

Partner ID

The partner ID for the item.

Partner Qualifier

The partner qualifier for the item.

Control Number

A 1- to 14-character code containing the control number sent or received in the associated envelope segment.

Network ID

The network ID that identifies the source or destination of the item.

Application Data ID

A 1- to 10-character identifier for the application that is the originating or receiving destination for the transaction.

Test Production Status

The test production status obtained from the trading partner profiles used to process the item. Valid value are:

| | | |
|----------|---|------------|
| T | = | Test |
| P | = | Production |

User Reference

The user reference of the item.

Envelope Date

The date on which the item was enveloped by Sterling Gentran:Realtime. The format is **YYYYMMDD**.

Envelope Time

The time at which the item was enveloped by Sterling Gentran:Realtime. The format is **HHMMSSHS**.

Processed Date

The date on which the item was processed by Sterling Gentran:Realtime. The format is **YYYYMMDD**.

Processed Time

The time at which the item was processed by Sterling Gentran:Realtime. The format is **HHMMSSHS**.

Databank Run Number

A number assigned by the system that identifies when the item was added to the databank.

Number of Characters

The number of characters in the associated item.

Number of Segments

The number of segments in the associated item.

Total Sets

The total number of transaction sets in the item.

Total Groups

The total number of functional groups in the item.

Total Interchanges

The total number of interchanges selected in the run.

Transaction Set ID

The 6-character identifier of the EDI transaction set.

Compliance Version

A 1- to 12-character code containing the version used to perform compliance checking against the EDI document.

Functional Group ID

The 6-character identifier of the functional group.

User Defined

The 80-character application data link information extracted from the User Field (UF) application field type. This field contains customer-specific application information.

Envelope Version

The 12-character envelope version IDs for the GS08, UNG07, UNH02, and STX01 elements. This field contains the *actual* outbound version ID, not the compliance version. This field is used on outbound envelopes.

Envelope Sender ID

The 35-character outbound group envelope EDI identification for the GS02 and UNG0201 elements. This field contains the *actual* group EDI identification. This field is used on outbound envelopes.

Envelope Receiver ID

The 35-character outbound group envelope EDI identification for GS03 and UNG0203 elements. This field contains the *actual* group EDI identification. This field is used on outbound envelopes.

Envelope Agency

The 3-character agency code associated with the envelope version on outbound envelopes.

Application Databank Inquiry Report

EDID551

Purpose

When the Application Databank Inquiry Report program (EDID551) executes, the system generates the Application Databank Inquiry Report. The Application Databank Inquiry Report provides reporting against the Inbound and Outbound Application databanks. A wide range of selection criteria allows you to produce reports according to your specific requirements. The Application Databank Inquiry Report program runs as a batch job step.

The three figures in the “Reports” section later in this topic illustrate the Application Databank Inquiry report (Summary report), the Application Databank Inquiry report (Processing Log), and the Application Databank Inquiry report (Inquiry report).

The system produces a transaction file for Sterling Gentran:Realtime databank updates for the reported indicator. This file is created when the reported selection criteria is set to NO or ALL and the Realtime-Databanks selection criteria is set to YES. The batch Queue Write program (EDIRQWR) must be executed to write the transaction file update information to queue file 096. The online Databank Status Update program (EDIR855) begins executing once there is data in queue file 096, and it applies the update information to the Sterling Gentran:Realtime databank files.

See the section “Configuring Databanking” in Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more information.

Operation

The Application Databank Inquiry Report program runs as a batch job step. To run this program, use the JCL located in EXEC551R in the JCL library.

Inputs

The inputs vary based on the Databank control card criteria used. Possible inputs to this program are:

| DDname | File Name |
|---------|---|
| EDIIAA | Sterling Gentran:Realtime Inbound Application Databank Directory |
| EDIOAA | Sterling Gentran:Realtime Outbound Application Databank Directory |
| EDICNTL | Control Card file |
| ERRCTL | Error Message and Control file |
| EDICFG | System Configuration file |

Outputs

The following file may be updated, depending on the control card selection criteria used.

| DDname | Description |
|---------|------------------|
| EDIRTRN | Transaction file |

Control Card Options

The following databank inquiry operations and selection criteria are specified by control cards:

Operations

SELECT (Default Operation)

Selection Criteria

Defaults

| | |
|----------------------------|------------|
| ACKNOWLEDGEMENT-STATUS | ALL |
| AGE-DAYS | ALL |
| AGE-HOURS | ALL |
| APPLICATION-DATA-ID | ALL |
| DATABANK | ALL |
| DATABANK-RUN-NUMBER | ALL |
| DIVISION | ALL |
| ENVELOPE-VALIDATION-STATUS | ALL |
| FROM-DATE | 01/01/1900 |
| FROM-TIME | 00:00 |
| FUNCTIONAL-GROUP-ID | ALL |
| GROUP-ENV-REF-ID | ALL |
| INTERCHANGE-ENV-REF-ID | ALL |
| MAP-VALIDATION-STATUS | ALL |
| NETWORK | ALL |
| PARTNER | ALL |
| PARTNER-QUALIFIER | ALL |
| REALTIME-DATABANKS | NO |
| REFERENCE-TAG | ALL |
| REPORTED | ALL |
| STATUS | ALL |
| TEST-PRODUCTION-STATUS | ALL |
| TO-DATE | 12/31/2099 |
| TO-TIME | 23:59 |
| TRANSACTION-ENV-REF-ID | ALL |
| TRANSACTION-SET-ID | ALL |
| USER | ALL |
| USER-REFERENCE | ALL |

Note: Date and time selection criteria are evaluated independently. Time-based selection criteria are used to limit the data selected using the specified time range for

each day within the date range. For example, selecting data with time selection criteria of 9 a.m. to 5 p.m. will select data processed between 9 a.m. and 5 p.m. on any day. Adding a date range further reduces the data selected to that which was processed between 9 a.m. and 5 p.m. on any day in the date range.

Valid Criteria Values

Acknowledgment-Status

Note: This selection criteria is used *only* for inbound application searches.

Valid values are:

ALL
ACCEPTED
ACCEPTED-WITH-ERRORS
REJECTED

Age-Days

The age of the data in number of days. Enter a three-digit value to request documents that are the specified age or newer. Specify the value 000 to get only documents added on the current date. To request documents older than a specified age, enter a greater than sign and the age-days (e.g., enter >002 to select documents more than 2 days old). Valid values are:

| | | |
|----------------------|---|---|
| ALL | = | Request all documents. |
| 000 | = | Request only documents added on the current date. |
| nnn (000-999) | = | Request data documents this many days old or newer. |
| >nnn | = | Request documents older than this many days (where nnn is 000-999). |

Age-Hours

The age of the data in number of hours. Enter a three-digit value to request documents that are a specified age or newer. To request documents older than the specified age, enter a greater than sign and the age-hours (e.g., enter >005 to select documents more than 5 hours old).

| | | |
|----------------------|---|--|
| ALL | = | Request all documents. |
| nnn (000-999) | = | Request data documents this many hours old or newer. |
| >nnn | = | Request documents older than this many hours (where nnn is 000-999). |

Application-Data-ID

Specifies the 1- to 12-character application ID. You can specify either an application data ID or the value ALL, for all application data.

Databank

Identifies which application databanks should be used for the inquiry. Valid values are:

| | | |
|------------|---|---|
| ALL | = | Select data from both inbound and outbound application databanks. |
|------------|---|---|

INBOUND-APPLICATION = Select data from the Inbound Application databank only.

OUTBOUND-APPLICATION = Select data from the Outbound Application databank only.

Databank-Run-Number

An 8-digit number that identifies the run that last processed the document. You can specify either a databank run number (which must include leading zeros) or the value ALL, for all databank runs.

Division

Specifies the 3-character division code. You can specify either a division code or the value ALL, for all division codes.

Envelope-Validation-Status

Specifies the envelope validation status as assigned by the Inbound Editor. Only used for Inbound Application Databank search. Valid values are: **ALL, <08, <12, 00, 04, 08, 12, >00, >04, >08.**

From-Date

For outbound application data, this value specifies the last date the Outbound Mapper processed the data. For inbound application data, this value specifies the date the data was last output to an application. This could have been performed by either the Inbound Mapper or the Inbound Application Databank Extract program. This value starts the range; it is used with the To-Date value. The format is **MM/DD/YYYY.**

From-Time

For outbound application data, this value specifies the last time the Outbound Mapper processed the data. For inbound application data, this value specifies the time the data was last output to an application. This could have been performed by either the Inbound Mapper or the Inbound Application Databank Extract program. This value starts the range; it is used with the To-Time value. The format is **HH:MM.**

Functional-Group-ID

Specifies the 1- to 6-character functional group ID. You can specify either a functional group ID (for inbound application only) or the value ALL, for all functional groups.

Group-Env-Ref-ID

Only used for inbound application search. Valid values are:

aaaaaaaaaaaa = EDIFACT
nnnnnnnnnn = X12 and TDCC – leading zeros required
ALL = All group envelope reference IDs

Interchange-Env-Ref-ID

Only used for inbound application search. Valid values are:

aaaaaaaaaaaa = EDIFACT
nnnnnnnnnn = X12 and TDCC – leading zeros required
ALL = All interchange envelope reference IDs

Map-Validation-Status

Specifies the map validation status as assigned by either the Inbound or Outbound Mapper. Valid values are: **ALL**, **<08**, **<12**, **00**, **04**, **08**, **12**, **>00**, **>04**, **>08**, **ALL**

Network

Specifies the 1- to 15-character network identifier. You can specify either a network identifier (outbound application only) or the value **ALL**, for all networks.

Partner

Valid values are **ALL**, or a 15-character partner ID (if the Trading-Profile-Mode is set to **RELATIONSHIP**), or a 35-character partner ID (if the Trading-Profile-Mode is set to **PARTNER-QUALIFIER**).

Partner-Qualifier

The 4-character qualifier for the partner ID. You can specify a partner qualifier or **ALL** for all partner qualifiers. This is valid only if the Trading-Profile-Mode is set to **PARTNER-QUALIFIER**.

Realtime-Databanks

This selection criteria specifies whether or not the Sterling Gentran:Realtime databank files are being used for the inquiry and whether or not to create a transaction file to contain Sterling Gentran:Realtime databank updates. Valid values are:

| | | |
|------------|---|--|
| YES | = | Yes, Sterling Gentran:Realtime databank files are being used. Create a transaction file for databank updates. |
| NO | = | No, Sterling Gentran:Realtime databank files are not being used. Do not create a transaction file. |

Reference-Tag

A 10-character reference tag assigned to the document/transaction by Gentran. This selection criteria is only valid if the Report-Structure control card selection criteria has a value of **TRANSACTION**. Valid values are:

| | | |
|-------------------|---|--|
| ALL | = | All reference tags |
| aanntnnnnn | = | A reference tag, where <i>aa</i> =IE, IA, OE, or OA. Leading zeros must be specified for the 8-digit number. |

Reported

This selection criteria limits selection based on what has been reported previously by an inquiry report. Valid values are:

| | | |
|------------|---|--|
| ALL | = | Select everything regardless of previous reports. |
| YES | = | Select only what has been reported previously. |
| NO | = | Select only what has not been reported previously. |

Status

Specifies whether the data has been output to an application. Data can be output by either the Inbound Mapper or the Inbound Application Databank Extract program. Valid values are:

| | | |
|--------------------|---|--|
| PROCESSED | = | Has been output to application. |
| UNPROCESSED | = | Has never been output to an application. |

Test-Production-Status

Specifies the test/production status as assigned by Sterling Gentran that should be used for selecting documents. Valid values are **ALL**, **PRODUCTION**, and **TEST**.

To-Date

For Outbound Application data, this value specifies the last date the Outbound Mapper processed the data. For Inbound Application data, this value specifies the date the data was last output to an application. This could have been performed by either the Inbound Mapper or the Inbound Application Databank Extract program. This value ends the range; it is used with the From-Date value. Format is **MM/DD/YYYY**.

To-Time

For Outbound Application data, this value specifies the last time the Outbound Mapper processed the data. For Inbound Application data, this value specifies the time when the data was last output to an application. This could have been performed by either the Inbound Mapper or the Inbound Application Databank Extract program. This value ends the range; it is used with the From-Time value. Format is **HH:MM**.

Transaction-Env-Ref-ID

Only used for inbound application search. Valid values are:

| | | |
|---------------------|---|--|
| aaaaaaaaaaaa | = | EDIFACT |
| nnnnnnnnnn | = | X12 and TDCC – leading zeros required |
| ALL | = | All transaction envelope reference IDs |

Transaction-Set-ID

Specifies the 1- to 6-character transaction set ID. You can specify either a transaction set ID or the value **ALL**, for all transaction sets. This selection criteria is only used for inbound application search.

User

Specifies the 1- to 15-character user ID. You can specify either a user ID or the value **ALL**, for all users. This selection criteria is only valid if the Trading-Profile-Mode control card is specified as **RELATIONSHIP**.

User-Reference

Specifies the 1- to 45-character user reference value. You can specify either a user reference or **ALL** for all user references.

Reports

This program generates the following reports:.

| DDname | Description |
|---------------|--|
| EDIRPT | Application Databank Inquiry report (Figure 5.6) |
| EDILOG | Processing log (Figure 5.7) |
| EDISUM | Processing Summary report (Figure 5.8) |

PAGE : 00001
 VERSION: 6.6

GENTRAN: BASIC
 APPLICATION DATABANK INQUIRY
 SUMMARY REPORT

REPORT DATE: 06/01/2011
 REPORT TIME: 12:00:00
 REPORT ID : EDI151

OPTIONS USED THIS RUN

| | |
|----------------------------|---------------------|
| REQUESTED-OPERATION | = SELECT |
| ACKNOWLEDGEMENT-STATUS | = ALL |
| AGE-DAYS | = ALL |
| AGE-HOURS | = ALL |
| APPLICATION-DATA-ID | = ALL |
| DATABANK | = ALL |
| DATABANK-RUN-NUMBER | = ALL |
| DIVISION | = ALL |
| ENVELOPE-VALIDATION-STATUS | = ALL |
| FROM-DATE | = 01/01/1900 |
| FROM-TIME | = 00:00 |
| FUNCTIONAL-GROUP-ID | = ALL |
| GROUP-ENV-REF-ID | = ALL |
| INTERCHANGE-ENV-REF-ID | = ALL |
| MAP-VALIDATION-STATUS | = ALL |
| NETWORK | = ALL |
| PARTNER | = ALL |
| PARTNER-QUALIFIER | = ALL |
| REALTIME-DATABANKS | = YES |
| REFERENCE-TAG | = ALL |
| REPORTED | = ALL |
| STATUS | = ALL |
| TEST-PRODUCTION-STATUS | = ALL |
| TO-DATE | = 12/31/2099 |
| TO-TIME | = 23:59 |
| TRADING-PROFILE-MODE | = PARTNER-QUALIFIER |
| TRANSACTION-ENV-REF-ID | = ALL |
| TRANSACTION-SET-ID | = ALL |
| USER-REFERENCE | = ALL |
| CONCURRENCY-ENABLED | = NO |

| | |
|------------------------------|-----|
| PROCESSING SUMMARY | |
| ----- | |
| INBOUND DOCUMENTS | : 6 |
| OUTBOUND DOCUMENTS | : 4 |
| INBOUND DOCUMENTS SELECTED | : 6 |
| OUTBOUND DOCUMENTS SELECTED | : 4 |
| NUMBER OF ERRORS THIS RUN | : 0 |
| HIGHEST RETURN CODE THIS RUN | : 0 |

**Figure 5.6 Application Databank Inquiry Report
 (Summary Report)**


```
REPORT DATE: 06/01/2011  
REPORT TIME: 12:00:00  
REPORT ID : EDI149  
MESSAGE  
-----  
EDI-042301-I 00 APPLICATION DATABANK INQUIRY PROCESSING BEGINS . . . DATE: 06/01/2011, TIME: 12:00:00  
EDI-042302-I 00 APPLICATION DATABANK INQUIRY PROCESSING ENDS . . . DATE: 06/01/2011, TIME: 12:00:00  
  
GENTRAN: BASIC  
APPLICATION DATABANK INQUIRY  
PROCESSING LOG  
  
PAGE : 00001  
VERSION: 6.6  
COMPILE DATE: 06/01/11
```

**Figure 5.7 Application Databank Inquiry Report
(Processing Log)**

REPORT DATE: 06/01/2011
 REPORT TIME: 12:00:00
 REPORT ID : EDI150

GENTRAN: BASIC
 APPLICATION DATABANK INQUIRY
 INQUIRY REPORT

1 REPORT DATE: 06/01/2011
 REPORT TIME: 12:00:00
 REPORT ID : EDI150

PAGE : 00001
 VERSION: 6.6

| PARTNER | USER | QUAL | REFERENCE | APPLICATION DATA ID | REFERENCE TAG | DATE | MAPPING TIME | ST |
|---------------|----------------|------|-----------|---------------------|---------------|------------|--------------|----|
| | REF:OA00005979 | | | POPFILE | OA00005979 | 06/01/2011 | 12:00 | 12 |
| | REF:OA00006279 | | | POPFILE | OA00006279 | 06/01/2011 | 12:00 | 12 |
| | REF:OA00007391 | | | POPFILE | OA00007391 | 06/01/2011 | 12:00 | 12 |
| ADVDR-1 | PONUMBER-001 | | | POPFILE | OA00006766 | 06/01/2011 | 12:00 | 12 |
| ADVDR-1 | PONUMBER-001 | | | POPFILE | OA00006770 | 06/01/2011 | 12:00 | 12 |
| ADVDR-1 | PONUMBER-001 | | | POPFILE | OA00006865 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006774 | | | POPFILE | OA00007293 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006775 | | | RT-824 | OA00006774 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006776 | | | RT-824 | OA00006775 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006777 | | | RT-824 | OA00006776 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006778 | | | RT-824 | OA00006777 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006779 | | | RT-824 | OA00006778 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006780 | | | RT-824 | OA00006779 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006781 | | | RT-824 | OA00006780 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006782 | | | RT-824 | OA00006781 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006783 | | | RT-824 | OA00006782 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006784 | | | RT-824 | OA00006783 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006785 | | | RT-824 | OA00006784 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006786 | | | RT-824 | OA00006785 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006787 | | | RT-824 | OA00006786 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006788 | | | RT-824 | OA00006787 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006789 | | | RT-824 | OA00006788 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006790 | | | RT-824 | OA00006789 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006791 | | | RT-824 | OA00006790 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006792 | | | RT-824 | OA00006791 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006793 | | | RT-824 | OA00006792 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006794 | | | RT-824 | OA00006793 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006795 | | | RT-824 | OA00006794 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006796 | | | RT-824 | OA00006795 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006797 | | | RT-824 | OA00006796 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006798 | | | RT-824 | OA00006797 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006799 | | | RT-824 | OA00006798 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006800 | | | RT-824 | OA00006799 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006801 | | | RT-824 | OA00006800 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006802 | | | RT-824 | OA00006801 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006803 | | | RT-824 | OA00006802 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006804 | | | RT-824 | OA00006803 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006805 | | | RT-824 | OA00006804 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006806 | | | RT-824 | OA00006805 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006807 | | | RT-824 | OA00006806 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006808 | | | RT-824 | OA00006807 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006809 | | | RT-824 | OA00006808 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006810 | | | RT-824 | OA00006809 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006811 | | | RT-824 | OA00006810 | 06/01/2011 | 12:00 | 12 |
| EDI-TRAN-ORIG | REF:OA00006812 | | | RT-824 | OA00006811 | 06/01/2011 | 12:00 | 12 |

Figure 5.8 Application Databank Inquiry Report (Inquiry Report)

Field Descriptions

Summary Report

Options Used this Run:

This section of the report displays the parameter options for the EDI Databank Inquiry report. Only those parameter options used are displayed.

Processing Summary:**Inbound Documents**

This field displays the total number of inbound documents.

Outbound Documents

This field displays the total number of outbound documents.

Inbound Documents Selected

This field displays the total number of inbound documents selected.

Outbound Documents Selected

This field displays the total number of outbound documents selected.

Number of Errors this Run

This field displays the total number of errors that occurred on this run of the report.

Highest Return Code this Run

This field displays the highest return code occurring on this run of the report.

Processing Log

Messages

Displays error and system messages pertaining to EDI Databank Inquiry processing.

Inquiry Report

Partner

Displays the partner ID you have entered or selected.

Partner Qual

Displays the partner qualifier.

User Reference

Displays the user reference for the transaction. Depending on whether the transaction is inbound or outbound and how you have implemented the user reference options in data mapping, this field is created for the transaction by either editor processing or data mapping processing.

Application Data ID

A 12-character alphanumeric field to restrict the list to one application data ID for listing documents.

Reference Tag

Displays the reference tag Sterling Gentran:Realtime has assigned to the transaction/document.

Mapping Date

Displays the date and time the transaction was last mapped. Format is **MM/DD/YYYY**.

Mapping Time

Displays the date and time the transaction was last mapped. Format is **HH:MM**.

Mapping St

Displays the current mapping status for the document. Valid values are:

| | | |
|-----------|---|---|
| 00 | = | No errors were encountered during the mapping process for the document. |
| 04 | = | One or more requirement or relational condition errors were detected. |
| 08 | = | One or more unknown or unexpected segment errors were detected. |
| 12 | = | An inbound document could not be translated. |

Network Reconciliation

EDID850

Purpose

The Network Reconciliation program (EDID850) reconciles network status information received from your network(s), back to interchanges that have been sent.

The program produces a Transaction file for Sterling Gentran:Realtime databank network status updates. This file is created when the Realtime-Databanks selection criteria is set to YES. The batch Queue Write program (EDIRQWR) must be executed to write the transaction file update information to queue file 096, and it applies the update information to the Sterling Gentran:Realtime databank files.

Operation

The Network Reconciliation program runs as a batch job step.

The Network Reconciliation program should be executed after running one of the Network Response Processors. The Network Reconciliation program posts the formatted network information created by the Network Response Processor back to the EDI interchanges which were sent.

The Network Reconciliation program can process multiple formatted network files from the Network Response Processors in a single run.

To run this program, use the JCL located in EXEC850R in the JCL library.

Inputs

The Formatted Network file and the Network Reconciliation file are the principal inputs for this program.

| DDname | Description |
|--------|---------------------------------|
| EDIFNF | Formatted Network Response file |
| EDINRC | Network Reconciliation file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |

Outputs

The following file is updated by this program:

| DDname | Description |
|---------|------------------|
| EDIRTRN | Transaction file |

Reports

The Network Reconciliation program produces the following reports:

| DDname | Description |
|---------|---|
| EDIAUDT | Network Reconciliation Audit Trail report |
| EDILOG | Processing Log report |
| EDISUM | Summary report |

Sterling Gentran:Viewpoint

The following files are used in a Sterling Gentran:Viewpoint enabled Sterling Gentran:Realtime system only.

| DDname | Description |
|--------|--------------------|
| EDICFG | Configuration file |
| EDIVT | Trace ID file |
| EDIVP | Profile file |
| EDIVSF | Staging file |

Control Card Options

Operations

PROCESS (Default operation)

Selection Criteria

Defaults

AUDIT-LEVEL FULL
REALTIME-DATABANKS NO

Valid Criteria Values

Audit-Level

Valid values are:

EXCEPTION = Only report exceptions.
FULL = Report all activity.
NONE = No Audit level report produced.

Realtime-Databanks

This selection criteria specifies whether or not the Sterling Gentran:Realtime databank files are being used for the inquiry and whether or not to create a Transaction file to contain Sterling Gentran:Realtime databank updates. Valid values are:

YES = Yes, Sterling Gentran:Realtime databank files are being used.
Create a Transaction file for databank updates.

NO = No, Sterling Gentran:Realtime databank files are not being used.
Do not create a Transaction file.

Network Reconciliation Maintenance

EDID860

Purpose

The Network Reconciliation Maintenance program (EDID860) performs maintenance on the Network Reconciliation files (Sterling Gentran:Basic and Sterling Gentran:Realtime).

Operation

The network reconciliation programs are documented in Chapter 6, “Network Utility Programs,” of the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 Technical Reference Guide*.

To run this program, use the JCL located in EXEC860R in the JCL library.

Note: The Realtime Network Reconciliation file (EDIRNRC) must be closed on CICS to run this program.

Inputs

The Network Reconciliation file is the principal input for this program:

| DDname | Description |
|--------|---|
| EDINRC | Sterling Gentran:Realtime Network Reconciliation file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |

Output

The Network Reconciliation File is output for this program.

| DDname | Description |
|--------|---|
| EDINRC | Sterling Gentran:Realtime Network Reconciliation file |

Reports

The Network Reconciliation Maintenance program produces the following reports:

| DDname | Description |
|---------|-----------------------|
| EDILOG | Processing Log report |
| EDISUM | Summary report |
| EDIAUDT | Audit Trail report |

Control Card Options

Operations

HOUSEKEEPING (Default operation)

PURGE

Selection Criteria

Defaults

For Housekeeping operation:

RETENTION-DAYS-RECONCILED 030
RETENTION-DAYS-UNRECONCILED030

For Purge operation:

| | |
|------------------------|-----|
| DATABANK-RUN-NUMBER | ALL |
| DUPLICATE-INDICATOR | YES |
| RECEIVER-EDI-ID | ALL |
| RECONCILIATION-STATUS | ALL |
| SENDER-EDI-ID | ALL |
| INTERCHANGE-ENV-REF-ID | ALL |

Valid Criteria Values

Databank-Run-Number

An 8-digit number that identifies the run that last processed the document. You can specify either a databank run number (which must include leading zeros) or the value ALL, for all databank runs.

Duplicate-Indicator

Indicates whether the Expected Network Status record is for a duplicate on the Outbound EDI Databank. Valid values are:

| | | |
|------------|---|--|
| ALL | = | Select regardless of Duplicate indicator. |
| NO | = | Select only Expected Network Status records that are not duplicates. |
| YES | = | Select only Expected Network Status records that are duplicates. |

Interchange-Env-Ref-ID

This selection criteria is only valid if the Report-Structure control card selection criteria has a value of INTERCHANGE. Valid values are:

| | | |
|---------------------|---|--|
| aaaaaaaaaaaa | = | EDIFACT |
| nnnnnnnnnn | = | X12 and TDCC – leading zeros required |
| ALL | = | All interchange envelope reference IDs |

Receiver-EDI-ID

The receiver ID from the transmission-level EDI envelope.

Reconciliation-Status

Valid values are:

| | | |
|---------------------|---|--|
| ALL | = | Includes all reconciliation status values. |
| RECONCILED | = | Has been reconciled to the outbound EDI data on the databank. |
| EXPECTED | = | Awaiting status back from network.. |
| UNMATCHED | = | No longer able to find outbound EDI data on databank for status received from network. |
| UNRECONCILED | = | Includes both EXPECTED and UNMATCHED status values. |

Sender-EDI-ID

The sender ID from the transmission-level EDI envelope.

Outbound Application Databank Maintenance

EDID151

Purpose

The Outbound Application Databank Maintenance program (EDID151) deletes and optionally archives Databank Directory and/or Message Store records based on user-specified parameters.

Operation

The Outbound Application Databank Maintenance program reads the Request file to retrieve user-specified maintenance parameters defined on the Outbound Application Databank screen (EDIM863). The user-specified parameters indicate whether the Housekeeping operation or the Purge operation will be performed.

To perform Purge or Housekeeping, initiate the Outbound Application Databank Maintenance program by typing the CICS transaction ID EDI3 from a blank screen or via the schedule option 403.

If the transaction ID (EDI3) is specified without a schedule or immediate option ID, then the default Outbound Application Databank Maintenance path, OADB, is used. If the transaction ID is specified with a schedule or immediate option ID, then the last two digits of the path option ID specified on the Schedule Options or Immediate Options screen is used to obtain the databank maintenance path. For example, if EDI3 410 is specified and schedule option 410 has the path option ID of 001, then the Outbound Application Maintenance Path used is OA01.

Note: You can restore archived records using a batch job.

See the section “Outbound Application Databank Maintenance Program” in Chapter 5, “Databank Utility Programs and Reports” in the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for information on restoring Sterling Gentran:Realtime databank records.

Housekeeping Operation

If the Housekeeping operation is specified, the program deletes and optionally archives Databank records that exceed the retention period specified by the parameters. To perform Housekeeping on a periodic basis, initiate the Outbound Application Databank Maintenance program via a schedule option. A sample schedule option was defined for this purpose during Sterling Gentran:Realtime installation customization. Refer to option number 403 via the Schedule Options screen (EDIM821).

Purge Operation

If the Purge operation is requested, the program deletes and optionally archives Databank records that meet ALL criteria specified by the parameters.

Inputs

Inputs are only from the file(s) being read. See the “File Access” section, which follows.

File Access

| File Description | DDname | File Access |
|--|----------|------------------|
| Request file | EDIREQ | Read. |
| Outbound Application Databank Directory file | EDIROAA | Read and delete. |
| Outbound Application Databank Message Store file | EDIROAS | Read and delete. |
| Outbound Application Databank Archive file | EDIRAROA | Write. |
| Configuration file | EDICFG | Read. |
| Online Control file | EDIOCF | Read. |
| Report Control file | EDIRRC | Read and update. |
| Report Detail file | EDIRRD | Read and update. |

Reports

The Outbound Application Databank Maintenance program produces a summary report (OA-SUM) and an audit trail report (OA-AUD). You can view the reports using the Sterling Gentran:Realtime online reporting function.

Print the reports by typing a value of Y in the Report Print Sw field on the Outbound Application Databank screen (EDIR863).

See the figures below for illustrations.

The audit trail can be very large; to suppress the Audit Trail report, enter a value of Y in the Audit Report Suppress Sw field on the Outbound Application Databank screen (EDIR863).

Note: If you are specifying a databank retention days value for different Sterling Gentran:Realtime paths, the specified value is placed on the databank directory records and is displayed on the audit trail report when the records are deleted during the Housekeeping process. See the Databank Maintenance Scenario in the Configuring Databanking section in Chapter 6 of the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide*

for more information on setting up your databank maintenance parameters.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3 _____ REPORT SELECTION          XXX   06/01/2011
                                                    12:00:00

    Path ID.....: ____      Process....: _____
    Line Incrmt..: ____      Cond Code..: _ (Y)
    From Date....: _____  To Date....: _____ (MM/DD/YYYY)
    From Time....: _____  To Time....: _____ (HH:MM:SS)
    Task #.....: _____  Max Srch...: 0450
    Print Job Name: _____

    Generation      Path Process      Con Task      Control
    A   Date        Time      ID   Name      St Cd      #   Description      Address
    _   06/01/2011  12:00:00  000  IA-SUM     00  5713  IA DBK MAINT      48
    _   06/01/2011  12:00:00  000  OA-SUM     00  5773  OA DBK MAINT      49
    _   06/01/2011  12:00:00  000  OA-AUD     00  5773  OA DBK MAINT      50
    _   06/01/2011  12:00:00  200  EDI42E     00  5824  ANSI O/B IVP      51
    _   06/01/2011  12:00:00  200  EDI42S     00  5824  ANSI O/B IVP      52
    _   06/01/2011  12:00:00  200  EDI02E     00  5824  ANSI O/B IVP      53
    _   06/01/2011  12:00:00  200  EDI02S     00  5824  ANSI O/B IVP      54
    _   06/01/2011  12:00:00  000  OE-AUD     00  5836  OE DBK MAINT      55
    _   06/01/2011  12:00:00  000  OE-SUM     00  5836  OE DBK MAINT      56

Enter PF1=Help          PF3=Exit          PF5=Action
    PF7=Bwd  PF8=Fwd
    
```

Summary Report

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0005773 Process Name: OA-SUM
Search.: _____ Line Increment: ____ Job Name: _____
REPORT DATE: 06/01/2011 GENTRAN:REALTIME +
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0397
REPORT TIME: 12:00:00 OUTBOUND APPL DATABANK MAINTEN+
REPORT ID : EDID151-OA-SUM SUMMARY REPORT +

PROGRAM EDID151 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6

    OPTIONS USED THIS RUN
    -----

REALTIME-PATH-USED          = OADB
PATH-DESCRIPTION           = DEFAULT HOUSEKEEPING MAINT.
REQUESTED-OPERATION        = HOUSEKEEPING

Enter PF1=Help PF2=Sum      PF3=Exit          PF5=Print      PF6=NxtEr
    PF7=Bwd  PF8=Fwd          PF10=Left PF11=Rgt PF12=Top      PF13=Bot
    
```

Audit Trail Report

```
EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0005773 Process Name: OA-AUD
Search.: _____ Line Increment: ____ Job Name: _____
REPORT DATE: 06/01/2011 GENTRAN:REALTIME +
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0398
PROGRAM EDID151 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
REPORT TIME: 12:00:00 OUTBOUND APPL DATABANK MAINTEN+
REPORT ID : EDID151-OA-AUD AUDIT TRAIL +

DROPPED DOCUMENTS

PARTNER QUAL USER-REFERENCE +
REF:OA00005979 +
REF:OA00006279 +
REF:OA00007391 +
ADV DOR-1 PONUMBER-001 +

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot
```

```

1REPORT DATE: 06/01/2011                                GENTRAN:REALTIME
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0397
REPORT TIME: 12:00:00                                OUTBOUND APPL DATABANK MAINTENANCE
REPORT ID : EDID151-OA-SUM                          SUMMARY REPORT
PROGRAM EDID151  COMPILED ON 06/01/11 AT 12.00.00  VERSION6.6

OPTIONS USED THIS RUN
-----
REALTIME-PATH-USED
PATH-DESCRIPTION
REQUESTED-OPERATION
ARCHIVE
DATABANK-CONFIGURATION
DATABANK-DELETE-LEVEL
DATABANK-MODE
RETENTION-DAYS-LOADED
RETENTION-DAYS-MAPPED
TRADING-PROFILE-MODE
REPORT-PRINT-SW
AUDIT-RPT-SUPPRESS
REPORT DATE: 06/01/2011
REPORT TIME: 12:00:00
REPORT ID : EDID151-OA-SUM

= OADB
= DEFAULT HOUSEKEEPING MAINT.
= HOUSEKEEPING
= YES
= FULL
= ALL
= APPLICATION
= 002
= 002
= PARTNER-QUALIFIER
= NO
= NO

                                GENTRAN:REALTIME
                                OUTBOUND APPL DATABANK MAINTENANCE
                                SUMMARY REPORT

DIRECTOR RECORDS READ          : 1,094
DIRECTOR RECORDS PURGED       : 1,089
DIRECTOR RECORDS ARCHIVED     : 1,089
MESSAGE STORE RECORDS PURGED  : 18,558
MESSAGE STORE RECORDS ARCHIVED: 18,558

NUMBER OF ERRORS THIS RUN     : 0
HIGHEST RETURN CODE THIS RUN : 0
***** END OF SUMMARY REPORT *****
    
```

PAGE : 00001
VERSION: 6.6

PAGE : 00002
VERSION: 6.6

Figure 5.9 Outbound Application Databank Maintenance Report (Summary Report)

Outbound Application Databank Interface Subroutine

EDID152

Purpose

The Outbound Application Databank Interface Subroutine program (EDID152) writes databank records during Outbound Mapper processing.

Operation

The Outbound Application Databank Interface Subroutine is called by the Outbound Mapper (EDIR042) during data translation.

Inputs

Inputs are from the Outbound Mapper parameters and the file(s) being read.

See the “File Access” section, which follows.

File Access

| File Description | DDname | File Access |
|--|---------|--------------------------|
| Outbound Application Databank Directory file | EDIROAA | Read, write, and update. |
| Outbound Application Databank Message Store file | EDIROAS | Read, write, and update. |

Reports

None.

Outbound EDI Databank Maintenance

EDID251

Purpose

The Outbound EDI Databank Maintenance program (EDID251) deletes and optionally archives Databank Directory Message Store records based on user-specified parameters.

Operation

The Outbound EDI Databank Maintenance program reads the Request file to retrieve user-specified maintenance parameters defined on the Outbound EDI Databank screen (EDIM864). The user-specified parameters indicate whether the Housekeeping operation or the Purge operation will be performed.

To perform Purge or Housekeeping, initiate the Outbound EDI Databank Maintenance program by typing the CICS transaction ID EDI4 from a blank screen. If the transaction ID EDI4 is specified without a schedule or immediate option ID, then the default Outbound EDI Databank Maintenance path, OEDB, is used. If the transaction ID is specified with a schedule or immediate option ID, then the last two digits of the path option ID specified on the Schedule Options or Immediate Options screen is used to obtain the databank maintenance path. For example, if EDI4 410 is specified and the path option ID is 001, then the Outbound EDI Maintenance Path used is OE01.

Note: You can restore archived records using a batch job.

See the section “Outbound EDI Databank Maintenance Program” in Chapter 5, “Databank Utility Programs and Reports” in the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for information on restoring Sterling Gentran:Realtime databank records.

Housekeeping Operation

If the Housekeeping operation is requested, the program deletes and optionally archives databank records that exceed the retention period specified by the parameters. To perform Housekeeping on a periodic basis, initiate the Outbound EDI Databank Maintenance program by means of a schedule option. A sample schedule option was defined for this purpose during Sterling Gentran:Realtime installation customization. Refer to option number 404 via the Schedule Options screen (EDIM821).

Purge Operation

If the Purge operation is requested, the program deletes and optionally archives databank records that meet ALL criteria specified by the parameters.

Inputs

Inputs are only from file(s) being read.

See the “File Access” section, which follows.

File Access

| File Description | DDname | File Access |
|--|----------|------------------|
| Request file | EDIREQ | Read. |
| Outbound EDI Databank Directory file | EDIROEA | Read and delete. |
| Outbound EDI Databank Message Store file | EDIROES | Read and delete. |
| Outbound Application Databank Link file | EDIROAL | Read and delete. |
| Outbound EDI Databank Archive file | EDIRAROE | Write. |
| Configuration file | EDICFG | Read. |
| Online Control file | EDIOCF | Read. |
| Report Control file | EDIRRC | Read and update. |
| Report Detail file | EDIRRD | Read and update. |

Reports

The Outbound EDI Databank Maintenance program produces a summary report (OE-SUM) and an audit trail report (OE-AUD). You can view the reports using the Sterling Gentran:Realtime Online Reporting function.

Print the reports by typing a value of Y in the Report Print Sw field on the Outbound EDI Databank screen (EDIR864).

See the figures that follow for illustrations of the printed reports.

The audit trail can be large; to suppress the Audit report, type a value of Y in the Audit RPT Suppress Sw field on the Outbound EDI Databank screen (EDIR864).

Note: If you are specifying a databank retention days value for different Sterling Gentran:Realtime paths, the specified value is placed on the databank directory records and is displayed on the audit trail report when the records are deleted during the Housekeeping process. See the Databank Maintenance Scenario in the Configuring Databanking section in Chapter 6 of the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide*

for more information on setting up your databank maintenance parameters.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

    Path ID.....: ____      Process....: _____
    Line Incrmt..: ____      Cond Code..: _ (Y)
    From Date....: _____  To Date....: _____ (MM/DD/YYYY)
    From Time....: _____  To Time....: _____ (HH:MM:SS)
    Task #.....: _____  Max Srch...: 0450
    Print Job Name: _____

    Generation      Path Process      Con Task      Control
    A   Date        Time   ID   Name   St Cd   #   Description  Address
    _ 06/01/2011 12:00:00 203 EDI02S  00 5974 ANSI I/B IVP      64
    _ 06/01/2011 12:00:00 201 EDI42E  00 5991 EDIFACT O/B IVP      65
    _ 06/01/2011 12:00:00 201 EDI42S  00 5991 EDIFACT O/B IVP      66
    _ 06/01/2011 12:00:00 201 EDI02E  00 5991 EDIFACT O/B IVP      67
    _ 06/01/2011 12:00:00 201 EDI02S  00 5991 EDIFACT O/B IVP      68
    _ 06/01/2011 12:00:00 000 IE-AUD  00 6049 IE DBK MAINT      69
    _ 06/01/2011 12:00:00 000 IE-SUM  00 6049 IE DBK MAINT      70
    _ 06/01/2011 12:00:00 000 OE-AUD  00 6065 OE DBK MAINT      71
    _ 06/01/2011 12:00:00 000 OE-SUM  00 6065 OE DBK MAINT      72

Enter PF1=Help          PF3=Exit          PF5=Action
    PF7=Bwd  PF8=Fwd
    
```

Summary Report

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY  XXX  06/01/2011
                                                12:00:00

Task ID: 0006065 Process Name: OE-SUM
Search.: _____ Line Increment: ____ Job Name: _____

REPORT DATE: 06/01/2011          GENTRAN:REALTIME  +
REPORT TIME: 12:00:00          OUTBOUND EDI DATABANK MAINTEN+
REPORT ID : EDID251-OE-SUM      SUMMARY REPORT    +

PROGRAM EDID251  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6

    OPTIONS USED THIS RUN
    -----

REALTIME-PATH-USED          = OEDB
PATH-DESCRIPTION           = DEFAULT HOUSEKEEPING PARMS
REQUESTED-OPERATION        = HOUSEKEEPING
ARCHIVE                     = YES
CLEAN                       = YES

Enter PF1=Help PF2=Sum  PF3=Exit          PF5=Print  PF6=NxtEr
    PF7=Bwd  PF8=Fwd          PF10=Left PF11=Rgt PF12=Top  PF13=Bot
    
```

Audit Trail Report

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0006065 Process Name: OE-AUD
Search.: _____ Line Increment: ____ Job Name: _____

REPORT DATE: 06/01/2011                                GENTRAN:REALTIME  +
PROGRAM EDID251 COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
REPORT TIME: 12:00:00                                OUTBOUND EDI DATABANK MAINTEN+
REPORT ID : EDID251-OE-AUD                            AUDIT TRAIL      +

                                                    ARCHIVED DOCUMENTS
                                                    +
                                                    ENVELOPE        CHARACTER
                                                    REFERENCE ID    COUNT           USER REFERENCE  +

INTERCHANGE PARTNER: VENDOR-1                        (OUTPUT: 0+
  QUAL: 000000003  0000001129 (GROUPS: 000001, RUN#)+
GROUP PARTNER: VENDOR-1
  QUAL: 000000002  0000001007 (TRANSACTION+
        000000002  0000000956 PONUMBER-001      +

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
      PF7=Bwd  PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot
    
```

```

PAGE      : 00001
VERSION: 6.6

                                GENTRAN:REALTIME
                                OUTBOUND EDI DATABANK MAINTENANCE
                                SUMMARY REPORT

REPORT DATE: 06/01/2011
REPORT TIME: 12:00:00
REPORT ID  : EDID251-OE-SUM

PROGRAM EDID251  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6

OPTIONS USED THIS RUN
-----
REALTIME-PATH-USED           = OEDB
PATH-DESCRIPTION             = DEFAULT HOUSEKEEPING PARMS
REQUESTED-OPERATION         = HOUSEKEEPING
ARCHIVE                      = YES
CLEAN                       = YES
DATABANK-CONFIGURATION      = FULL
DATABANK-DELETE-LEVEL       = ALL
DATABANK-DIRECTORY-LEVEL    = INTERCHANGE
REPORT-TYPE                  = FULL
RETENTION-DAYS-PROCESSED    = 000
RETENTION-DAYS-UNPROCESSED = 000
TRADING-PROFILE-MODE        = PARTNER-QUALIFIER
REPORT-PRINT-SW             = NO
AUDIT-RPT-SUPPRESS         = NO

PROCESSING SUMMARY
-----
DIRECTORY RECORDS CLEANED      : 11
INTERCHANGE RECORDS READ      : 115
INTERCHANGE RECORDS PURGED    : 115
INTERCHANGE RECORDS ARCHIVED  : 115
GROUP RECORDS PURGED          : 115
GROUP RECORDS ARCHIVED        : 115
TRANSACTION RECORDS PURGED    : 140
TRANSACTION RECORDS ARCHIVED  : 140
OTHER DIRECTORY RECORDS PURGED : 362
OTHER RECORDS ARCHIVED        : 477
MESSAGE-STORE RECORDS READ    : 118
MESSAGE-STORE RECORDS PURGED  : 118
APPLICATION LINK RECORDS ARCHIVED : 136
INTERRUPTED DIRECTORY RECS PURGED : 1
INTERRUPTED MSG-STORE RECS PURGED : 0
TOTAL DIRECTORY RECORDS PURGED : 744
TOTAL DIRECTORY RECORDS ARCHIVED : 847

NUMBER OF ERRORS THIS RUN      : 0
HIGHEST RETURN CODE THIS RUN  : 0
***** END OF SUMMARY REPORT *****

```

Figure 5.11 Outbound EDI Databank Maintenance Report (Summary Report)

PAGE : 00001
VERSION: 6.6

GENTRAN: REALTIME
VERSION 6.6
OUTBOUND EDI DATABANK MAINTENANCE
AUDIT TRAIL

REPORT DATE: 06/01/2011
PROGRAM EDID251 COMPILED ON 06/01/11 AT 12.00.00
REPORT TIME: 12:00:00
REPORT ID : EDID251-OE-AUD

| ENVELOPE REFERENCE ID | CHARACTER COUNT | USER REFERENCE | ACK STATUS | REFERENCE TAG | RET DAYS |
|---|-----------------|---|------------------|---------------|----------|
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000093 GROUP PARTNER: VENDOR-1 QUAL: 000000074 QUAL: 000000074 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000046, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000094 GROUP PARTNER: VENDOR-1 QUAL: 000000075 QUAL: 000000075 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000047, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000095 GROUP PARTNER: VENDOR-1 QUAL: 000000076 QUAL: 000000076 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000048, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000096 GROUP PARTNER: VENDOR-1 QUAL: 000000077 QUAL: 000000077 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000049, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000097 GROUP PARTNER: VENDOR-1 QUAL: 000000078 QUAL: 000000078 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000050, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000098 GROUP PARTNER: VENDOR-1 QUAL: 000000079 QUAL: 000000079 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000051, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000099 GROUP PARTNER: VENDOR-1 QUAL: 000000080 QUAL: 000000080 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000052, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000100 GROUP PARTNER: VENDOR-1 QUAL: 000000081 QUAL: 000000081 | 0000001131 | (OUTPUT: 06/01/2011 12:00, STATUS - ACK:) (GROUPS: 000001, RUN#: 00000053, RET DAYS:) (TRANSACTIONS: 000001) PNUMBER-001 | INDET OVERDUE | NETWORK : | |

**Figure 5.12 Outbound EDI Databank Maintenance Report
(Audit Trail Report)**

Outbound EDI Databank Interface Subroutine

EDID252

Purpose

The Outbound EDI Databank Interface Subroutine (EDID252) writes databank records during Outbound Editor processing.

Operation

The Outbound Editor (EDIR002) calls the Outbound EDI Databank Interface Subroutine during data translation.

Inputs

Inputs are from the Outbound Editor and the file(s) being read.

File Access

| File Description | DDname | File Access |
|--|---------|--------------------------|
| Outbound EDI Databank Directory file | EDIROEA | Read, write, and update. |
| Outbound EDI Databank Message Store file | EDIROES | Read, write, and update. |
| Outbound Application Databank Link file | EDIROAL | Write. |
| Batch Number Cross Reference file | EDIRMXR | Write. |

Reports

None.

Outbound EDI Databank Extract

EDID255

Purpose

This program performs the extract function on the Sterling Gentran:Realtime Outbound EDI databank. The functionality is similar to the Sterling Gentran:Basic version of this program (EDID205).

Operation

The program will process in the same manner as the batch extract program. The same selection criteria can be set up using the Outbound EDI Databank Extract screens (EDIM868 and EDIM869).

You can use either of two methods to execute this program:

- To run as part of a translation process, simply select the extract as the last step in the process from the Shell Path – Translation Outbound Screen (EDIM839).
- To run it as a stand-alone process:
 - You must identify the transaction EDIE in the Schedule Options Screen for the extract schedule. At the scheduled intervals, the program then executes via the EDIE transaction. The schedule option must specify a path that has the extract program selected for execution on the Shell Path – Translation Outbound Screen (EDIM839).

OR

- Type EDIE 000, where 000 is the immediate option number.

Note: In these cases, only the extract program and the destination program should be set up on the option. Do not run the Mappers and Editors.

Inputs

The following tables describe inputs for the Outbound EDI Databank Extract program.

| DDname | Description |
|---------|--|
| EDIROEA | Outbound EDI Databank Directory file |
| EDIROES | Outbound EDI Databank Message Store file |
| EDIREQ | Request file |

| TSQname | Description |
|----------|---|
| EDIPpppX | Extract parameters. Where ppp = the path ID number. |

Outputs

The following tables describe outputs for the Outbound EDI Databank Extract program.

| DDname | Description |
|---------|--------------------------------------|
| EDIROEA | Outbound EDI Databank Directory file |
| EDIRNRC | Network Reconciliation file |
| EDIRRC | Report Control file |
| EDIRRD | Report Detail file |

| TSQname | Description |
|----------|---------------------|
| EDI2rrrr | Extracted EDI data. |

Reports

The Outbound EDI Databank Extract program produces a summary report (OEXSUM) and an audit trail report (OEXAUD). You can view the reports using the Sterling Gentran:Realtime Online Reporting function.

Print the reports by typing a value of Y in the Report Print Sw field on the Outbound EDI Databank Extract screen (EDIM868).

See the figures that follow for illustrations of the reports.

Processing Summary Report

The Processing Summary report is contained in the EDISUM output file. The report lists all criteria used, the results of processing, and fatal error conditions, if any exist.

The following figure illustrates a portion of the Processing Summary report.

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000001 Process Name: OEXSUM
Search.: _____ Line Increment: ____ Job Name: _____

PROGRAM EDID255  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
REPORT DATE: 06/01/2011                               GENTRAN:REALTIME  +
REPORT TIME: 12:00:00                                OUTBOUND EDI DATABANK EXTR+
REPORT ID  : EDID255-EDISUM                          SUMMARY REPORT    +

      OPTIONS USED THIS RUN
      -----

REQUESTED-OPERATION           = SELECT
DATABANK-CONFIGURATION       = FULL
DATABANK-RUN-NUMBER          = ALL
FROM-EDITED-DATE             = 01/01/1900
FROM-EDITED-TIME             = 00:00

Enter PF1=Help PF2=Sum      PF3=Exit          PF5=Print      PF6=NxtEr
      PF7=Bwd  PF8=Fwd          PF10=Left PF11=Rgt PF12=Top      PF13=Bot
    
```

Audit Trail Report

The Audit Trail report is contained in the EDIAUDT output file.

The following figure illustrates a portion of the Audit Trail report.

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000001 Process Name: OEXAUD
Search.: _____ Line Increment: ____ Job Name: _____

PROGRAM EDID255  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
REPORT DATE: 06/01/2011                               GENTRAN:REALTIME  +
REPORT TIME: 12:00:00                                OUTBOUND EDI DATABANK EXTR+
REPORT ID  : EDID255-EDIAUDT                        AUDIT TRAIL      +

DATABANK RUN NUMBER: 00000081
PARTNER                QUAL      ENV-REF-ID          GROUPS          +
VENDOR-1              000000048      00000001          00000001      +
VENDOR-2              000000041      00000001          00000001      +
VENDOR-3              000000041      00000001          00000001      +
VENDOR-4              000000041      00000001          00000001      +
*****

Enter PF1=Help PF2=Sum      PF3=Exit          PF5=Print      PF6=NxtEr
      PF7=Bwd  PF8=Fwd          PF10=Left PF11=Rgt PF12=Top      PF13=Bot
    
```

Inbound EDI Databank Maintenance

EDID351

Purpose

The Inbound EDI Databank Maintenance program (EDID351) deletes and optionally archives Databank Directory and Message Store records based on user-specified parameters.

Operation

The Inbound EDI Databank Maintenance program reads the Request File to retrieve user-specified maintenance parameters defined on the Inbound EDI Databank Screen (EDIM865). The user-specified parameters indicate whether the Housekeeping operation or the Purge operation is performed.

To perform the Purge or Housekeeping operation, initiate the Inbound EDI Databank Maintenance program by typing the CICS transaction ID EDI5 from a blank screen. If the transaction ID, EDI5, is specified without a schedule or immediate option ID, then the system uses the default inbound EDI databank maintenance path, IEDB.

If the transaction ID is specified with a schedule or immediate option ID, then the system uses the last two digits of the path option ID specified on the Schedule Options or Immediate Options screen to obtain the databank maintenance path. For example, if EDI5 410 is specified and the path option ID is 001, then the Inbound EDI Maintenance Path used is IE01.

Note: You can restore archived records with a batch job.

See the section “Inbound EDI Databank Maintenance Program” in Chapter 5, “Databank Utility Programs and Reports” in the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, “Configuration Strategies” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for information on restoring Sterling Gentran:Realtime databank records.

Housekeeping Operation

If the Housekeeping operation is requested, the program deletes and optionally archives databank records that exceed the retention period specified by the parameters. To perform Housekeeping on a periodic basis, initiate the Inbound EDI Databank Maintenance program via a schedule option. A sample Schedule option was defined for this purpose during Sterling Gentran:Realtime installation customization. Refer to option number 405 by means of the Schedule Options Screen (EDIM821).

Purge Operation

If the Purge operation is requested, the program deletes and optionally archives databank records that meet ALL criteria specified by the parameters.

Note: The Databank-Run-Number selection criteria must be used to Purge from the message store. All other selection criteria are ignored when purging interchanges for which message store data was saved.

File Access

| File Description | DDname | File Access |
|---|----------|------------------|
| Request file | EDIREQ | Read. |
| Inbound EDI Databank Directory file | EDIRIEA | Read and delete. |
| Inbound EDI Databank Message Store file | EDIRIES | Read and delete. |
| Inbound EDI Databank Archive file | EDIRARIE | Write. |
| Configuration file | EDICFG | Read. |
| Online Control file | EDIOCF | Read. |
| Report Control file | EDIRRC | Read and update. |
| Report Detail file | EDIRRD | Read and update. |

Reports

The Inbound EDI Databank Maintenance program produces a summary report (IE-SUM) and an audit trail report (IE-AUD). You can view the reports using the Sterling Gentran:Realtime Online Reporting function.

Print the reports by typing a value of 1 in the Report Print Sw field on the Inbound EDI Databank screen (EDIR865).

See the figures that follow for illustrations of the printed reports.

To suppress the audit report, type a value of Y in the Audit Report Suppress Sw field on the Inbound EDI Databank screen (EDIR865).

Note: If you are specifying a databank retention days value for different Sterling Gentran:Realtime paths, the specified value is placed on the databank directory records and is displayed on the audit trail report when the records are deleted during the Housekeeping process. See the Databank Maintenance Scenario in the Configuring Databanking section in Chapter 6 of the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more information on setting up your databank maintenance parameters.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX   06/01/2011
                                                12:00:00

Path ID.....: ___      Process....: _____
Line Incrmt..: ___      Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path  Process   Con  Task          Control
A  Date          Time  ID      Name    St Cd   #    Description  Address
-  06/01/2011 12:00:00 630  SEPDRV  00  7349  SEPARATOR DRIVE  102
-  06/01/2011 12:00:00 000  CA-AUD  00  7876  CA MAINT          103
-  06/01/2011 12:00:00 000  CA-SUM  00  7876  CA MAINT          104
-  06/01/2011 12:00:00 000  OA-AUD  00  8111  OA DBK MAINT     105
-  06/01/2011 12:00:00 000  OA-SUM  00  8111  OA DBK MAINT     106
-  06/01/2011 12:00:00 000  OE-AUD  00  8265  OE DBK MAINT     107
-  06/01/2011 12:00:00 000  OE-SUM  00  8265  OE DBK MAINT     108
-  06/01/2011 12:00:00 000  IE-AUD  00   155  IE DBK MAINT     109
-  06/01/2011 12:00:00 000  IE-SUM  00   155  IE DBK MAINT     110

Enter PF1=Help          PF3=Exit          PF5=Action
                        PF7=Bwd   PF8=Fwd

```

Summary Report

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000155 Process Name: IE-SUM
Search.: _____ Line Increment: ____ Job Name: _____
REPORT DATE: 06/01/2011                               GENTRAN:REALTIME  +
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0001
REPORT TIME: 12:00:00                                 INBOUND EDI DATABANK MAINTEN+
REPORT ID : EDID351-IE-SUM                             SUMMARY REPORT    +

PROGRAM EDID351 COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6

      OPTIONS USED THIS RUN
      -----

REALTIME-PATH-USED           = IEDB
PATH-DESCRIPTION             = DEFAULT DATABANK MAINT.
REQUESTED-OPERATION          = HOUSEKEEPING

Enter PF1=Help PF2=Sum      PF3=Exit          PF5=Print      PF6=NxtEr
      PF7=Bwd  PF8=Fwd      PF10=Left  PF11=Rgt  PF12=Top     PF13=Bot
    
```

Audit Trail Report

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000155 Process Name: IE-AUD
Search.: _____ Line Increment: ____ Job Name: _____
REPORT DATE: 06/01/2011                               GENTRAN:REALTIME  +
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0002
PROGRAM EDID351 COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
REPORT TIME: 12:00:00                                 INBOUND EDI DATABANK MAINTEN+
REPORT ID : EDID351-IE-AUD                             AUDIT TRAIL      +

                                                    DROPPED DOCUMENTS
                                                    ENVELOPE         CHARACTER        +
                                                    REFERENCE ID    COUNT           USER-REFERENCE  +

INTERCHANGE PARTNER: BELL                                (OUTPUT: 0+
      QUAL: ZZ 000001345      0000000482      (GROUPS: 0+
GROUP PARTNER: SND 004030                                (TRANSACTION: 0+

Enter PF1=Help PF2=Sum      PF3=Exit          PF5=Print      PF6=NxtEr
      PF7=Bwd  PF8=Fwd      PF10=Left  PF11=Rgt  PF12=Top     PF13=Bot
    
```

```

PAGE : 00001
VERSION: 6.6

GENTRAN:REALTIME
EDIQ0001
INBOUND EDI DATABANK MAINTENANCE
SUMMARY REPORT

PROGRAM EDID351 COMPILED ON 06/01/11 AT 12.00.00 VERSION6.6

OPTIONS USED THIS RUN
-----
REALTIME-PATH-USED = IEDB
PATH-DESCRIPTION = DEFAULT DATABANK MAINT.
REQUESTED-OPERATION = HOUSEKEEPING
ARCHIVE = YES
DATABANK-CONFIGURATION = FULL
DATABANK-DELETE-LEVEL = ALL
DATABANK-DIRECTORY-LEVEL = INTERCHANGE
REPORT-TYPE = FULL
RETENTION-DAYS-LOADED = 001
TRADING-PROFILE-MODE = PARTNER-QUALIFIER
REPORT-PRINT-SW = NO
AUDIT-RPT-SUPPRESS = NO

1REPORT DATE: 06/01/2011 GENTRAN:REALTIME
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDI00001
REPORT TIME: 12:00:00 INBOUND EDI DATABANK MAINTENANCE
REPORT ID : EDID351-IE-SUM SUMMARY REPORT

PROGRAM EDID351 COMPILED ON 06/01/11 AT 12.00.00 VERSION6.6

OPTIONS USED THIS RUN
-----
REALTIME-PATH-USED = IEDB
PATH-DESCRIPTION = DEFAULT DATABANK MAINT.
REQUESTED-OPERATION = HOUSEKEEPING
ARCHIVE = YES
DATABANK-CONFIGURATION = FULL
DATABANK-DELETE-LEVEL = ALL
DATABANK-DIRECTORY-LEVEL = INTERCHANGE
REPORT-TYPE = FULL
RETENTION-DAYS-LOADED = 001
TRADING-PROFILE-MODE = PARTNER-QUALIFIER
REPORT-PRINT-SW = NO
AUDIT-RPT-SUPPRESS = NO

1REPORT DATE: 06/01/2011 GENTRAN:REALTIME
REPORT TIME: 12:00:00 INBOUND EDI DATABANK MAINTENANCE
REPORT ID : EDID351-IE-SUM SUMMARY REPORT

INTERCHANGE RECORDS READ : 780
INTERCHANGE RECORDS PURGED : 390
INTERCHANGE RECORDS ARCHIVED : 390
GROUP RECORDS PURGED : 687
GROUP RECORDS ARCHIVED : 687
TRANSACTION RECORDS PURGED : 1,828
TRANSACTION RECORDS ARCHIVED : 1,828
OTHER RECORDS PURGED : 1,077
OTHER RECORDS ARCHIVED : 687
MESSAGE-STORE RECORDS PURGED : 612
MESSAGE-STORE RECORDS ARCHIVED : 612
INTERRUPTED DIRECTORY RECS PURGED : 19
INTERRUPTED MSG-STORE RECS PURGED : 33
TOTAL RECORDS ARCHIVED : 3,982
TOTAL RECORDS PURGED : 3,592

NUMBER OF ERRORS THIS RUN : 0
HIGHEST RETURN CODE THIS RUN : 0
***** END OF SUMMARY REPORT *****
    
```

Figure 5.13 Inbound EDI Databank Maintenance Report (Summary Report)

PAGE : 00001
VERSION: 6.6

GENTRAN:REALTIME
VERSION 6.6
INBOUND EDI DATABANK MAINTENANCE
AUDIT TRAIL

| ENVELOPE REFERENCE ID | CHARACTER COUNT | USER-REFERENCE | ACK STATUS | REFERENCE TAG | RET DAYS |
|--|-----------------|--|------------|---------------|----------|
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000005 | 0000006392 | (OUTPUT: 06/01/2011 10:25, STATUS - ACK:) (GROUPS: 000001, RET DAYS:) (TRANSACTIONS: 000006) | ACCEPT | IE00000194 | |
| GROUP PARTNER: VENDOR-1 QUAL: 000000007 | 0000006270 | INV01 | ACCEPT | IE00000193 | |
| QUAL: 000000001 | 0000001021 | INV02 | ACCEPT | IE00000196 | |
| QUAL: 000000002 | 0000001034 | INV03 | ACCEPT | IE00000197 | |
| QUAL: 000000003 | 0000001032 | INV04 | ACCEPT | IE00000198 | |
| QUAL: 000000004 | 0000001036 | INV05 | ACCEPT | IE00000199 | |
| QUAL: 000000005 | 0000001038 | INV06 | ACCEPT | IE00000200 | |
| QUAL: 000000006 | 0000001034 | INV06 | ACCEPT | IE00000200 | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000005 | 0000006392 | (OUTPUT: 06/01/2011 10:42, STATUS - ACK:) (GROUPS: 000001, RET DAYS:) (TRANSACTIONS: 000006) | ACCEPT | IE00000202 | |
| GROUP PARTNER: VENDOR-1 QUAL: 000000007 | 0000006270 | INV01 | ACCEPT | IE00000201 | |
| QUAL: 000000001 | 0000001021 | INV02 | ACCEPT | IE00000204 | |
| QUAL: 000000002 | 0000001034 | INV03 | ACCEPT | IE00000205 | |
| QUAL: 000000003 | 0000001032 | INV04 | ACCEPT | IE00000206 | |
| QUAL: 000000004 | 0000001036 | INV05 | ACCEPT | IE00000207 | |
| QUAL: 000000005 | 0000001038 | INV06 | ACCEPT | IE00000208 | |
| QUAL: 000000006 | 0000001034 | INV06 | ACCEPT | IE00000208 | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000005 | 0000006392 | (OUTPUT: 06/01/2011 10:48, STATUS - ACK:) (GROUPS: 000001, RET DAYS:) (TRANSACTIONS: 000006) | ACCEPT | IE00000210 | |
| GROUP PARTNER: VENDOR-1 QUAL: 000000007 | 0000006270 | INV01 | ACCEPT | IE00000209 | |
| QUAL: 000000001 | 0000001021 | INV02 | ACCEPT | IE00000212 | |
| QUAL: 000000002 | 0000001034 | INV03 | ACCEPT | IE00000213 | |
| QUAL: 000000003 | 0000001032 | INV04 | ACCEPT | IE00000214 | |
| QUAL: 000000004 | 0000001036 | INV05 | ACCEPT | IE00000215 | |
| QUAL: 000000005 | 0000001038 | INV06 | ACCEPT | IE00000216 | |
| QUAL: 000000006 | 0000001034 | INV06 | ACCEPT | IE00000216 | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000005 | 0000006392 | (OUTPUT: 06/01/2011 14:00, STATUS - ACK:) (GROUPS: 000001, RET DAYS:) (TRANSACTIONS: 000006) | ACCEPT | IE00000218 | |
| GROUP PARTNER: VENDOR-1 QUAL: 000000007 | 0000006270 | INV01 | ACCEPT | IE00000217 | |
| QUAL: 000000001 | 0000001021 | INV02 | ACCEPT | IE00000220 | |
| QUAL: 000000002 | 0000001034 | INV03 | ACCEPT | IE00000221 | |
| QUAL: 000000003 | 0000001032 | INV04 | ACCEPT | IE00000222 | |
| QUAL: 000000004 | 0000001036 | INV05 | ACCEPT | IE00000223 | |
| QUAL: 000000005 | 0000001038 | INV06 | ACCEPT | IE00000224 | |
| QUAL: 000000006 | 0000001034 | INV06 | ACCEPT | IE00000224 | |
| INTERCHANGE PARTNER: VENDOR-1 QUAL: 000000005 | 0000006392 | (OUTPUT: 06/01/2011 14:02, STATUS - ACK:) (GROUPS: 000001, RET DAYS:) (TRANSACTIONS: 000006) | ACCEPT | IE00000226 | |
| GROUP PARTNER: VENDOR-1 QUAL: 000000007 | 0000006270 | | ACCEPT | IE00000226 | |

Figure 5.14 Inbound EDI Databank Maintenance Report (Audit Trail Report)

Inbound EDI Databank Interface Subroutine

EDID352

Purpose

The Inbound EDI Databank Interface Subroutine (EDID352) writes databank records during Inbound Editor processing.

Operation

The Inbound EDI Databank Interface Subroutine is called by the Inbound Editor (EDIR001) during data translation.

Inputs

Inputs are from the Inbound Editor and the file(s) being read.

See the “File Access” section, which follows.

File Access

| File Description | DDname | File Access |
|---|---------|--------------------------|
| Inbound EDI Databank Directory file | EDIRIEA | Read, write, and update. |
| Inbound EDI Databank Message Store file | EDIRIES | Read, write, and update. |

Reports

None.

Inbound Application Databank Maintenance

EDID451

Purpose

The Inbound Application Databank Maintenance program (EDID451) deletes and optionally archives Databank Directory and Message Store records based on user-specified parameters.

Operation

The Inbound Application Databank Maintenance program reads the Request file to retrieve user-specified maintenance parameters defined on the Inbound Application Databank Screen (EDIM866). The user-specified parameters indicate whether the Housekeeping operation or the Purge operation will be performed.

To perform the Purge or Housekeeping operation, initiate the Inbound Application Databank Maintenance program by typing the CICS transaction ID EDI6 from a blank screen.

If the transaction ID EDI6 is specified without a schedule or immediate option ID, then the program uses the default Inbound Application Databank Maintenance path, IADB. If the transaction ID is specified with a schedule or immediate option ID, then the program uses the last two digits of the path option ID specified on the Schedule Options or Immediate Options screen to obtain the databank maintenance path. For example, if EDI6 410 is specified and the path option ID is 001, then the Inbound Application Maintenance path used is IA01.

Note: You can restore archived records using a batch job.

See the section “Inbound Application Databank Maintenance program” in Chapter 5, “Databank Utility Programs and Reports,” in the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for information on restoring Sterling Gentran:Realtime databank records.

Housekeeping Operation

If the Housekeeping operation is requested, the program deletes and optionally archives databank records that exceed the retention period specified by the parameters. To perform Housekeeping on a periodic basis, initiate the Inbound Application Databank Maintenance program by means of a schedule option. A sample schedule option was defined for this purpose during Sterling Gentran:Realtime installation customization. Refer to option number 406 by means of the Schedule Options Screen (EDIM821).

Purge Operation

If the Purge operation is requested, the program deletes and optionally archives databank records that meet ALL criteria specified by the parameters.

Inputs

Inputs are only from the file(s) being read.

See the “File Access” section, which follows.

File Access

| File Description | DDname | File Access |
|---|----------|------------------|
| Request file | EDIREQ | Read. |
| Inbound Application Databank Directory file | EDIRIAA | Read and delete. |
| Inbound Application Databank Message Store file | EDIRIAS | Read and delete. |
| Inbound EDI Link file | EDIRIEL | Read and delete. |
| Inbound Application Databank Archive file | EDIRARIA | Write. |
| Configuration file | EDICFG | Read. |
| Online Control file | EDIOCF | Read. |
| Report Control file | EDIRRC | Read and update. |
| Report Detail file | EDIRRD | Read and update. |

Reports

The Inbound Application Databank Maintenance program produces a summary report (IA-SUM) and an audit trail report (IA-AUD). You can view the reports using the Sterling Gentran:Realtime Online Reporting function.

Print the reports by typing a value of Y in the Report Print Sw field on the Inbound Application Databank screen (EDIR866).

See the figures that follow for illustrations of the printed reports.

To suppress the audit report, type a value of Y in the Audit RPT Suppress Sw field on the Inbound Application Databank screen (EDIR866).

Note: If you are specifying a databank retention days value for different Sterling Gentran:Realtime paths, the specified value is placed on the databank directory records and is displayed on the audit trail report when the records are deleted during the Housekeeping process. See the Databank Maintenance Scenario in the Configuring Databanking section in Chapter 6 of the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more information on setting up your databank maintenance parameters.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

Path ID.....: ___      Process....: _____
Line Incrmt..: ___      Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path Process  Con  Task      Control
A  Date          Time   ID   Name  St Cd  #   Description  Address
-  06/01/2011 12:00:00 000 CA-SUM 00 7876 CA MAINT      104
-  06/01/2011 12:00:00 000 OA-AUD 00 8111 OA DBK MAINT 105
-  06/01/2011 12:00:00 000 OA-SUM 00 8111 OA DBK MAINT 106
-  06/01/2011 12:00:00 000 OE-AUD 00 8265 OE DBK MAINT 107
-  06/01/2011 12:00:00 000 OE-SUM 00 8265 OE DBK MAINT 108
-  06/01/2011 12:00:00 000 IE-AUD 00 155  IE DBK MAINT 109
-  06/01/2011 12:00:00 000 IE-SUM 00 155  IE DBK MAINT 110
-  06/01/2011 12:00:00 000 IA-AUD 00 301  IA DBK MAINT 111
-  06/01/2011 12:00:00 000 IA-SUM 00 301  IA DBK MAINT 112

Enter PF1=Help      PF3=Exit      PF5=Action
      PF7=Bwd  PF8=Fwd
    
```

Summary Report

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY  XXX  06/01/2011
                                                12:00:00

Task ID: 0000301 Process Name: IA-SUM
Search.: _____ Line Increment: ___ Job Name: _____
REPORT DATE: 06/01/2011 GENTRAN:REALTIME +
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0003
REPORT TIME: 12:00:00 INBOUND APPLICATION DATABANK MAI+
REPORT ID : EDID451-IA-SUM SUMMARY REPORT +

PROGRAM EDID451 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6

OPTIONS USED THIS RUN
-----

REALTIME-PATH-USED = IADB
PATH-DESCRIPTION = DEFAULT DATABANK MAINTENANCE
REQUESTED-OPERATION = HOUSEKEEPING

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
      PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot
    
```



```

PAGE          : 00001
VERSION:6.6

1REPORT DATE: 06/01/2011          GENTRAN:REALTIME
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0003
REPORT TIME: 12:00:00            INBOUND APPLICATION DATABANK MAINTENANCE
REPORT ID : EDID451-IA-SUM      SUMMARY REPORT

PROGRAM EDID451 COMPILED ON 06/01/11 AT 12.00.00 VERSION6.6

OPTIONS USED THIS RUN
-----
REALTIME-PATH-USED              = IADB
PATH-DESCRIPTION                = DEFAULT DATABANK MAINTENANCE
REQUESTED-OPERATION             = HOUSEKEEPING
ARCHIVE                          = YES
DATABANK-CONFIGURATION          = FULL
DATABANK-DELETE-LEVEL           = ALL
RETENTION-DAYS-PROCESSED        = 002
TRADING-PROFILE-MODE            = PARTNER-QUALIFIER
STRUCTURE/APPL-SW               = APPLICATION
REPORT-PRINT-SW                 = NO
AUDIT-REPT-SUPPRESS             = NO

1REPORT DATE: 06/01/2011          GENTRAN:REALTIME
REPORT TIME: 12:00:00            INBOUND APPLICATION DATABANK MAINTENANCE
REPORT ID : EDID451-IA-SUM      SUMMARY REPORT

DIRECTORY RECORDS READ          : 7,475
DIRECTORY RECORDS PURGED        : 7,462
DIRECTORY RECORDS ARCHIVED      : 7,462
MESSAGE STORE RECORDS PURGED    : 22,841
MESSAGE STORE RECORDS ARCHIVED  : 22,841
EDI LINK RECORDS PURGED         : 439
INTERRUPTED DIRECTORY RECS PURGED : 4
INTERRUPTED MSG-STORE RECS PURGED : 0

NUMBER OF ERRORS THIS RUN      : 0
HIGHEST RETURN CODE THIS RUN   : 0
***** END OF SUMMARY REPORT *****
    
```

Figure 5.15 Inbound Application Databank Maintenance Report (Summary Report)

PAGE : 00001
VERSION: 6.6

GENTRAN:REALTIME
VERSION 6.6
INBOUND APPLICATION DATABANK MAINTENANCE
AUDIT TRAIL
DROPPED DOCUMENTS

| PARTNER | QUAL | USER REFERENCE | REF TAG | APPL ID | DB RUN# | RET DAYS |
|----------|------|----------------|------------|---------|----------|----------|
| VENDOR-1 | | INV01 | IE00000337 | INVFILE | 00000024 | |
| VENDOR-1 | | INV01 | IE00000345 | INVFILE | 00000025 | |
| VENDOR-1 | | INV01 | IE00000353 | INVFILE | 00000026 | |
| VENDOR-1 | | INV01 | IE00000361 | INVFILE | 00000027 | |
| VENDOR-1 | | INV01 | IE00000369 | INVFILE | 00000028 | |
| VENDOR-1 | | INV01 | IE00000377 | INVFILE | 00000029 | |
| VENDOR-1 | | INV01 | IE00000385 | INVFILE | 00000030 | |
| VENDOR-1 | | INV01 | IE00000393 | INVFILE | 00000031 | |
| VENDOR-1 | | INV01 | IE00000401 | INVFILE | 00000032 | |
| VENDOR-1 | | INV02 | IE00000340 | INVFILE | 00000024 | |
| VENDOR-1 | | INV02 | IE00000348 | INVFILE | 00000025 | |
| VENDOR-1 | | INV02 | IE00000356 | INVFILE | 00000026 | |
| VENDOR-1 | | INV02 | IE00000364 | INVFILE | 00000027 | |
| VENDOR-1 | | INV02 | IE00000372 | INVFILE | 00000028 | |
| VENDOR-1 | | INV02 | IE00000380 | INVFILE | 00000029 | |
| VENDOR-1 | | INV02 | IE00000388 | INVFILE | 00000030 | |
| VENDOR-1 | | INV02 | IE00000396 | INVFILE | 00000031 | |
| VENDOR-1 | | INV02 | IE00000404 | INVFILE | 00000032 | |
| VENDOR-1 | | INV03 | IE00000341 | INVFILE | 00000024 | |
| VENDOR-1 | | INV03 | IE00000349 | INVFILE | 00000025 | |
| VENDOR-1 | | INV03 | IE00000357 | INVFILE | 00000026 | |
| VENDOR-1 | | INV03 | IE00000365 | INVFILE | 00000027 | |
| VENDOR-1 | | INV03 | IE00000373 | INVFILE | 00000028 | |
| VENDOR-1 | | INV03 | IE00000381 | INVFILE | 00000029 | |
| VENDOR-1 | | INV03 | IE00000389 | INVFILE | 00000030 | |
| VENDOR-1 | | INV03 | IE00000397 | INVFILE | 00000031 | |
| VENDOR-1 | | INV04 | IE00000405 | INVFILE | 00000032 | |
| VENDOR-1 | | INV04 | IE00000342 | INVFILE | 00000024 | |
| VENDOR-1 | | INV04 | IE00000350 | INVFILE | 00000025 | |
| VENDOR-1 | | INV04 | IE00000358 | INVFILE | 00000026 | |
| VENDOR-1 | | INV04 | IE00000366 | INVFILE | 00000027 | |
| VENDOR-1 | | INV04 | IE00000374 | INVFILE | 00000028 | |
| VENDOR-1 | | INV04 | IE00000382 | INVFILE | 00000029 | |
| VENDOR-1 | | INV04 | IE00000390 | INVFILE | 00000030 | |
| VENDOR-1 | | INV04 | IE00000398 | INVFILE | 00000031 | |
| VENDOR-1 | | INV04 | IE00000406 | INVFILE | 00000032 | |
| VENDOR-1 | | INV05 | IE00000343 | INVFILE | 00000024 | |
| VENDOR-1 | | INV05 | IE00000351 | INVFILE | 00000025 | |
| VENDOR-1 | | INV05 | IE00000359 | INVFILE | 00000026 | |
| VENDOR-1 | | INV05 | IE00000367 | INVFILE | 00000027 | |
| VENDOR-1 | | INV05 | IE00000375 | INVFILE | 00000028 | |
| VENDOR-1 | | INV05 | IE00000383 | INVFILE | 00000029 | |
| VENDOR-1 | | INV05 | IE00000391 | INVFILE | 00000030 | |
| VENDOR-1 | | INV05 | IE00000399 | INVFILE | 00000031 | |
| VENDOR-1 | | INV05 | IE00000407 | INVFILE | 00000032 | |
| VENDOR-1 | | INV06 | IE00000344 | INVFILE | 00000024 | |
| VENDOR-1 | | INV06 | IE00000352 | INVFILE | 00000025 | |

Figure 5.16 Inbound Application Databank Maintenance Report (Audit Trail Report)

Inbound Application Databank Interface Subroutine

EDID452

Purpose

The Inbound Application Databank Interface Subroutine (EDID452) writes databank records during Inbound Mapper processing.

Operation

The Inbound Mapper (EDIR041) calls the Inbound Application Databank Interface Subroutine during data translation.

Inputs

Inputs are from the Inbound Mapper and the file(s) being read.

See the “File Access” section, which follows.

File Access

| File Description | DDname | File Access |
|---|---------|--------------------------|
| Inbound Application Databank Directory file | EDIRIAA | Read, write, and update. |
| Inbound EDI Databank Link file | EDIRIEL | Write. |
| Inbound Application Databank Message Store file | EDIRIAS | Read, write, and update. |

Reports

None.

Inbound Application Databank Extract

EDID455

Purpose

This program performs the extract function on the Sterling Gentran:Realtime Inbound Application Databank. The functionality is similar to the Sterling Gentran:Basic version of this program (EDID405).

Operation

The program processes in the same manner as the batch extract program. The same selection criteria can be set up.

You can use either of two methods to execute this program.

- To run as part of a translation process, simply select the extract as the last step in the process from the Additional Shell Steps Maintenance Screen (EDIM84F).
- To run as a stand-alone process:
 - You must identify the transaction EDIE in the Schedule Options Screen for the extract schedule. At the scheduled intervals, the program then executes by means of the EDIE transaction. The schedule option must specify a path that has the extract program selected for execution on the Additional Shell Steps Maintenance Screen (EDIM84F).
 - Enter EDIE 000, where 000 is the immediate option number.

Note: In these cases, only the extract program and the destination program should be set up on the option. Do not run the mappers and editors.)

Inputs

The following tables describe inputs for the Inbound Application Databank Extract program.

| DDname | Description |
|---------|---|
| EDIRIAA | Inbound Application Databank Directory file |
| EDIRIAS | Inbound Application Databank Message Store file |

| TSQname | Description |
|----------|---|
| EDIPpppT | Extract parameters. Where ppp = the path ID number. |

Outputs

The following tables describe outputs for the Inbound Application Databank Extract program.

| DDname | Description |
|--------|---------------------|
| EDIRRC | Report Control file |
| EDIRRD | Report Detail file |

| TSQname | Description |
|----------|----------------------------|
| EDI4rrrr | Extracted Application data |

Reports

The Inbound Application Databank Extract program produces a summary report (IAXSUM) and an audit trail report (IAXAUDT). You can view the reports using the Sterling Gentran:Realtime Online Reporting function.

Print the reports by typing a value of Y in the Report Print Sw field on the Inbound Application Databank Extract screen (EDIM872).

See the figures that follow for illustrations of the printed reports.

To suppress the audit report, type Y in the Audit RPT Suppress Sw field on the Inbound Application Databank Extract screen (EDIM872).

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                    12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path  Process  Con  Task          Control
  Date           Time  ID      Name  St Cd  #      Description  Address
_ 06/01/2011 12:00:00 000 OA-SUM  00 8111 OA DBK MAINT 106
_ 06/01/2011 12:00:00 000 OE-AUD  00 8265 OE DBK MAINT 107
_ 06/01/2011 12:00:00 000 OE-SUM  00 8265 OE DBK MAINT 108
_ 06/01/2011 12:00:00 000 IE-AUD  00 155  IE DBK MAINT 109
_ 06/01/2011 12:00:00 000 IE-SUM  00 155  IE DBK MAINT 110
_ 06/01/2011 12:00:00 000 IA-AUD  00 301  IA DBK MAINT 111
_ 06/01/2011 12:00:00 000 IA-SUM  00 301  IA DBK MAINT 112
_ 06/01/2011 12:00:00 302 IAXAUD  00 452  EDID455-EDIAUDT 113
_ 06/01/2011 12:00:00 302 IAXSUM  00 452  EDID455-EDISUM 114

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd  PF8=Fwd
    
```

Summary Report

The Processing Summary report is contained in the EDISUM output file. The report lists all criteria used, the results of processing, and fatal error conditions, if any exist.

The following figure illustrates a portion of the Processing Summary report

```
EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                12:00:00

Task ID: 0000452 Process Name: IAXSUM
Search.: _____ Line Increment: ____ Job Name: _____

REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0007
PROGRAM EDID455  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
REPORT DATE: 06/01/2011                                GENTRAN:REALTIME  +
REPORT TIME: 12:00:00                                INBOUND APPLICATION DATABANK E+
REPORT ID  : EDID455-EDISUM                            SUMMARY REPORT      +

      OPTIONS USED THIS RUN
      -----

REQUESTED-OPERATION          = SELECT
APPLICATION-DATA-ID          = INVFILE

Enter PF1=Help PF2=Sum      PF3=Exit          PF5=Print      PF6=NxtEr
      PF7=Bwd  PF8=Fwd          PF10=Left PF11=Rgt PF12=Top  PF13=Bot
```

Audit Trail Report

The Audit Trail Report is contained in the EDIAUDT output file.

The following figure illustrates a portion of the Audit Trail Report

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000452 Process Name: IAXAUD
Search.: _____ Line Increment: ____ Job Name: _____

REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0008
PROGRAM EDID455  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
REPORT DATE: 06/01/2011                                GENTRAN:REALTIME  +
REPORT TIME: 12:00:00                                  INBOUND APPLICATION DATABANK E+
REPORT ID  : EDID455-EDIAUDT                            AUDIT TRAIL      +

DATABANK RUN NUMBER: 00000335

PARTNER                QUAL      USER-REFERENCE      +
VENDOR-1                INV01                +
VENDOR-1                INV01                +
VENDOR-1                INV02                +

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print           PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top   PF13=Bot
    
```



```

PAGE          : 00001
VERSION:6.6

REPORT PROCESSING DONE BY: EDIRWRT FROM TSO NAMED: EDID0007
1 PROGRAM EDID455 COMPILED ON 06/01/11 AT 12.00.00 VERSION:6.6
REPORT DATE: 06/01/2011 GENTRAN:REALTIME
REPORT TIME: 12:00:00 INBOUND APPLICATION DATABANK EXTRACT
REPORT ID : EDID455-EDISUM SUMMARY REPORT

OPTIONS USED THIS RUN
-----
REQUESTED-OPERATION = SELECT
APPLICATION-DATA-ID = INVFILE
APPLY-UPDATES-ONLY = NO
DATABANK-CONFIGURATION = FULL
DATABANK-RUN-NUMBER = ALL
FROM-MAPPED-DATE = 01/01/1900
FROM-MAPPED-TIME = 00:00
FROM-OUTPUT-DATE = 01/01/1900
FROM-OUTPUT-TIME = 00:00
FUNCTIONAL-GROUP-ID = ALL
FUNCTIONAL-GROUP-ENV-REF-ID = ALL
INTERCHANGE-ENV-REF-ID = ALL
MAP-VALIDATION-STATUS = ALL
MAP-VALIDATION-STATUS = YES
ONLINE-UPDATE-REPORT = EDIAPP
OUTPUT-FILE = VENDOR-1
PARTNER = ALL
PARTNER-QUALIFIER = NONE
QUEUE-FILE-NUMBER = ALL
REFERENCE-TAG = PROCESSED
STATUS = ALL
TEST-PRODUCTION-STATUS = ALL
TO-MAPPED-DATE = 12/31/2099
TO-MAPPED-TIME = 23:59
TO-OUTPUT-DATE = 12/31/2099
TO-OUTPUT-TIME = 23:59
TRADING-PROFILE-MODE = PARTNER-QUALIFIER
TRANSACTION-SET-ID = ALL
TRANSACTION-SET-ENV-REF-ID = ALL
USER-REFERENCE = ALL
USER-DUPLICATE-INDICATOR = ALL

PROCESSING SUMMARY
-----
DIRECTORY RECORDS READ : 12
DIRECTORY RECS POSTED PROCESSED : 12
MESSAGE STORE RECORDS EXTRACTED : 228
NUMBER OF RECORDS WRITTEN TO EDIAPP : 228
NUMBER OF RECORDS WRITTEN TO QUEUE : 0
NUMBER OF ERRORS THIS RUN : 0
HIGHEST RETURN CODE THIS RUN : 0
*****


```

Figure 5.17 Inbound Application Databank Extract Report (Summary Report)

```

REPORT PROCESSING DONE BY: EDIWRPRT FROM TSQ NAMED: EDIQ0008
PROGRAM EDID455 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
REPORT DATE: 06/01/2011 GENTRAN: REALTIME
REPORT TIME: 12:00:00 INBOUND APPLICATION DATABANK EXTRACT
REPORT ID : EDID455-EDIAUDT AUDIT TRAIL
DATABANK RUN NUMBER: 00000335

PARTNER          USER-REFERENCE  QUAL
VENDOR-1        INV01
VENDOR-1        INV01
VENDOR-1        INV02
VENDOR-1        INV02
VENDOR-1        INV03
VENDOR-1        INV03
VENDOR-1        INV04
VENDOR-1        INV04
VENDOR-1        INV05
VENDOR-1        INV05
VENDOR-1        INV06
VENDOR-1        INV06
*****

```

```

PAGE : 00001
VERSION: 6.6

```

```

REF TAG
IE00026614
IE00026622
IE00026617
IE00026625
IE00026618
IE00026626
IE00026619
IE00026627
IE00026620
IE00026628
IE00026621
IE00026629

```

```

APPL DATA-ID
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE
INVFILE

```

Figure 5.18 Inbound Application Databank Extract Report (Audit Trail Report)

Acknowledgment Reconciliation/Monitor

EDID515

Purpose

The Acknowledgment Reconciliation/Monitor program (EDID515) reconciles incoming acknowledgments and monitors for expected acknowledgments based on user-specified parameters.

Operation

The Acknowledgment Reconciliation/Monitor program reads the Request file to retrieve user-specified maintenance parameters defined on the Acknowledgment Parameter Maintenance screen (EDIM867). The user-specified parameters indicate whether the Reconcile operation will be performed, the Monitor operation will be performed, or both will be performed.

The Acknowledgment Reconciliation/Monitor program can be initiated in either of the following ways:

- Via a schedule option. A sample schedule option was defined for this purpose during Sterling Gentran:Realtime installation customization. Refer to option number 407 via the Schedule Options Screen (EDIM821).
- By typing the CICS transaction ID EDI7 from a blank screen.

See the section “Configuring Databanking” in Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more information on acknowledgment processing.

Reconcile Operation

If the Reconcile operation is requested, the program reconciles incoming acknowledgments with the original outbound documents on the Sterling Gentran:Realtime Outbound EDI Databank. The program deletes incoming acknowledgments if the reconciliation was successful.

Acknowledgments that are not reconciled can be written to Queue 99 by means of the parameters on screen EDIM867 so that Batch EDID510 can be run.

Monitor Operation

If the Monitor operation is requested, the program reads databank files to determine if expected acknowledgments are overdue. The program writes notice of overdue acknowledgments to the Expected Acknowledgment Monitoring report. You can view the report via the Online Reporting function.

Monitor Operation Extension - Acknowledgment Overdue

Online screens are available to allow you to view Outbound EDI interchanges that are overdue and/or waiting acknowledgements. EDID515 can create the Acknowledgment Overdue file that will contain a copy of all interchanges with an acknowledgment status of overdue and waiting. This information can be viewed via the Sterling Gentran Online Databank subsystem. See the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 User Guide, Chapter 3* for more

information about these screens (EDIM240 and EDIM241). These screens allow access to the Databank Status screens to view information and to perform manual acknowledgments.

This feature is controlled by the system configuration option **Enable Ack Overdue** on record 2 - Databank Processing Options. See the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 User Guide, Chapter 4* for information on System Configuration Options.

The Acknowledgment Overdue file is allocated during your installation of Sterling Gentran:Realtime by job DEFDBRTE. This file is a VSAM reusable file. When EDID515 is executed with the Monitor parameter enabled and the feature is enabled on the system configuration record 2 - the program will generate a file that contains all records on the Sterling Gentran:Realtime EDI Outbound Directory databank that contains an acknowledgment status of overdue and waiting. A header record is written to the file to indicate when the information was placed on the file. The date and time is displayed on the online Acknowledgment Overdue screens (EDIM240 and EDIM241). This lets you know when the information on the Acknowledgment Overdue file was generated.

To use this feature you must complete the following steps.

1. Enable this feature via the online System Configuration Maintenance screen (EDIM231). Set **Enable Ack Overdue** to Y on record 2 - Databank Processing Options
2. Set the **Monitor** parameter to Y on the Acknowledgment Parameter Maintenance screen (EDIM867). See the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide, Chapter 5* for more information.

Inputs

Subprogram Called

- EDIEOOG – Online Output Gateway

File Access

| File Description | DDname | File Access |
|--|----------|------------------|
| Request file | EDIREQ | Read. |
| Sterling Gentran:Realtime Acknowledgment Reconciliation file | EDIRDAR | Read and delete. |
| Sterling Gentran:Realtime Acknowledgment Overdue File | EDIRACKO | Update. |
| Outbound EDI Databank Directory file | EDIROEA | Update. |
| Report Control file | EDIRRC | Read and update. |
| Report Detail file | EDIRRD | Read and update. |

| File Description | DDname | File Access |
|---|---------|---|
| Acknowledgment Reconciliation Output Queue file | EDIQ099 | Written through the Online Output Gateway (EDIEOOG) |
| Online Control file | EDIOCF | Read. |

Reports

The Acknowledgment Reconciliation/Monitor program produces a summary report (AK-SUM), an error message log report (AK-LOG), a reconciliation report when “Reconcile” is requested (AK-REC), and an expected acknowledgment report when “Monitor” is requested (AK-MON). You can view the reports using the Sterling Gentran:Realtime Online Reporting function.

Print the reports by typing a value of Y in the Print Report SW field on the Acknowledgment Parameter Maintenance screen (EDIM867).

See the figures that follow for example illustrations of the reports.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX   06/01/2011
                                                12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path Process   Con Task      Control
  A   Date        Time   ID   Name   St Cd   #   Description  Address
  _ 06/01/2011 12:00:00 223 ACKFMT   00 1711 ACK TEST-STEP 2 155
  _ 06/01/2011 12:00:00 223 EDI02E  W 04 1711 ACK TEST-STEP 2 156
  _ 06/01/2011 12:00:00 223 EDI02S  W 04 1711 ACK TEST-STEP 2 157
  _ 06/01/2011 12:00:00 224 EDI01S  W 04 1726 ACK TEST-STEP 3 158
  _ 06/01/2011 12:00:00 224 EDI01E  W 04 1726 ACK TEST-STEP 3 159
  _ 06/01/2011 12:00:00 000 AK-LOG   W 04 1730 EDID515-EDILOG 160
  _ 06/01/2011 12:00:00 000 AK-MON   W 04 1730 EDID515-EDIMNTR 161
  _ 06/01/2011 12:00:00 000 AK-REC   W 04 1730 EDID515-EDIRECN 162
  _ 06/01/2011 12:00:00 000 AK-SUM   W 04 1730 EDID515-EDISUM 163

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd   PF8=Fwd
    
```

Summary Report

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0001730 Process Name: AK-SUM
Search.: _____ Line Increment: ____ Job Name: _____

PROGRAM EDID515 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
REPORT DATE: 06/01/2011                                GENTRAN:REALTIME +
REPORT TIME: 12:00:00                                  ACKNOWLEDGEMENT RECONCILIATION/+
REPORT ID : EDI118                                     SUMMARY REPORT      +

      OPTIONS USED THIS RUN
      -----

REQUESTED-OPERATION      = PROCESS
MONITOR                  = YES
MONITOR-LEVEL            = NORMAL
MONITOR-REPORT           = ALL
MONITOR-SATURDAY        = NO

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print       PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top    PF13=Bot
    
```

Reconciliation Report

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0001730 Process Name: AK-REC
Search.: _____ Line Increment: ____ Job Name: _____

PROGRAM EDID515 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
REPORT DATE: 06/01/2011                                GENTRAN:REALTIME +
REPORT TIME: 12:00:00                                  ACKNOWLEDGEMENT RECONCILIATION+
REPORT ID : EDI116                                     RECONCILIATION REPORT +

PARTNER                  QUAL USER REFERENCE      +
VENDOR-1                 PONUMBER-001
VENDOR-1                 (FUNCTIONAL GROUP ENVELOPE REFEREN+
                        (FUNCTIONAL GROUP ID: PO   )
VENDOR-2                 PONUMBER-002      +
VENDOR-2                 (FUNCTIONAL GROUP ENVELOPE REFEREN+

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print       PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top    PF13=Bot
    
```

Expected Acknowledgment Monitoring Report

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0001730 Process Name: AK-MON
Search.: _____ Line Increment: ____ Job Name: _____

PROGRAM EDID515 COMPILED ON 06/01/11 AT 12.00.00   VERSION 6.6
REPORT DATE: 06/01/2011                               GENTRAN:REALTIM+
REPORT TIME: 12:00:00                               ACKNOWLEDGEMENT RECONCILIATION+
REPORT ID   : EDI117                               EXPECTED ACKNOWLEDGEMENT MONITOR+

PARTNER                                             +
QUAL USER REFERENCE                               +

VENDOR-1     LH  (INTERCHANGE ENVELOPE REFERENCE ID:+
VENDOR-1     LH  (FUNCTIONAL GROUP ENVELOPE REFERENC+
              (FUNCTIONAL GROUP ID: PO      )
              PONUMBER-001                 +

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top  PF13=Bot
    
```

Error Message Log Report

```

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0001730 Process Name: AK-LOG
Search.: _____ Line Increment: ____ Job Name: _____

PROGRAM EDID515 COMPILED ON 06/01/11 AT 12.00.00   VERSION 6.6
REPORT DATE: 06/01/2011                               GENTRAN:REALTIME +
REPORT TIME: 12:00:00                               ACKNOWLEDGEMENT RECONCILIATION+
REPORT ID   : EDI115                               ERROR MESSAGE LOG REPO+

MSG NR      MESSAGE DESCRIPTION

41417W 04   UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION; 000000368  +
41422W 04   UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:      000000302  +
41417W 04   UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION; 000000325  +
41422W 04   UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:      0000006167  +
41417W 04   UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION; 000000255  +
41422W 04   UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:      000000252  +

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top  PF13=Bot
    
```

```

PAGE      : 00001
VERSION: 6.6

PROGRAM EDID515  COMPILED ON 06/01/11 AT 12.00.00  VERSION 6.6
REPORT DATE: 06/01/2011  GENTRAN:REALTIME
REPORT TIME: 12:00:00    ACKNOWLEDGEMENT RECONCILIATION/MONITOR
REPORT ID  : ED1118      SUMMARY REPORT

OPTIONS USED THIS RUN
-----
REQUESTED-OPERATION      = PROCESS
MONITOR                  = YES
MONITOR-LEVEL            = NORMAL
MONITOR-REPORT           = ALL
MONITOR-SATURDAY        = NO
MONITOR-SUNDAY          = NO
RECONCILE                = YES
TRADING-PROFILE-MODE    = PARTNER-QUALIFIER
VIEWPOINT                = NO
DELETE--UNMATCHED--IND  = YES
UNMATCHED--QUEUE--NR    = 099

PROCESSING SUMMARY
-----
RECONCILIATION PROCESSING
INTERCHANGES           : 0
GROUPS                  : 12
TRANSACTIONS            : 12
UNMATCHED               : 90
TOTAL                   : 114

EXPECTED ACKNOWLEDGEMENTS OVERDUE
INTERCHANGES           : 0
GROUPS                  : 1
TRANSACTIONS            : 11
TOTAL                   : 12

DELETED COUNT          : 0

NUMBER OF ERRORS THIS RUN : 0
HIGHEST RETURN CODE THIS RUN : 4
***** NORMAL END OF JOB *****
    
```

Figure 5.19 Acknowledgment Reconciliation/Monitor Report (Summary Report)

PAGE: 00001
VERSION: 6.6

GENTRAN:REALTIME
ACKNOWLEDGEMENT RECONCILIATION/MONITOR
RECONCILIATION REPORT

| PARTNER | QUAL | USER REFERENCE | TRANSACTION ENVELOPE REF | EXPECTED DATE | EXPECTED TIME | ACK STATUS |
|----------|------|--|--------------------------|---------------|---------------|------------|
| VENDOR-1 | | PONUMBER-001 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000477) (FUNCTIONAL GROUP ID: PO) | 000000477 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-1 | | PONUMBER-002 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000412) (FUNCTIONAL GROUP ID: PO) | 000000412 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-2 | | PONUMBER-003 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000314) (FUNCTIONAL GROUP ID: PO) | 000000314 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-3 | | PONUMBER-004 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000370) (FUNCTIONAL GROUP ID: PO) | 000000370 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-4 | | PONUMBER-001 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000478) (FUNCTIONAL GROUP ID: PO) | 000000478 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-1 | | PONUMBER-002 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000413) (FUNCTIONAL GROUP ID: PO) | 000000413 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-2 | | PONUMBER-003 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000315) (FUNCTIONAL GROUP ID: PO) | 000000315 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-3 | | PONUMBER-004 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000371) (FUNCTIONAL GROUP ID: PO) | 000000371 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-4 | | PONUMBER-001 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000480) (FUNCTIONAL GROUP ID: PO) | 000000480 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-1 | | PONUMBER-002 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000415) (FUNCTIONAL GROUP ID: PO) | 000000415 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-2 | | PONUMBER-003 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000317) (FUNCTIONAL GROUP ID: PO) | 000000317 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-3 | | PONUMBER-004 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000373) (FUNCTIONAL GROUP ID: PO) | 000000373 | 06/01/2011 | 12:00 | ACCEPT |
| VENDOR-4 | | | | | | |

***** NORMAL END OF JOB *****

Figure 5.20 Acknowledgment Reconciliation/Monitor Report (Reconciliation Report)

PAGE : 0000
VERSION: 6.6

GENTRAN: REALTIME
ACKNOWLEDGEMENT RECONCILIATION/MONITOR
ERROR MESSAGE LOG REPORT

REPORT DATE: 06/01/2011
REPORT TIME: 12:00:00
REPORT ID : EDI115

| MSG NR | MESSAGE DESCRIPTION | TRANSACTION: | GROUP: |
|-----------|-------------------------------------|--------------|----------|
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000368 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000302 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000325 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006167 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000255 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000252 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000291 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000288 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000369 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000303 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000326 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006168 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000256 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000253 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000292 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000289 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000370 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000304 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000327 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006169 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000257 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000254 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000293 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000290 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000371 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000305 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000328 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006170 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000258 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000255 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000294 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000291 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000372 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000306 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000329 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006171 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000259 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000256 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000295 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000292 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000373 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000307 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000330 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000330 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006172 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000260 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000257 | TWOWAY |

Figure 5.21 Acknowledgment Reconciliation/Monitor Report (Error Message Log Report)

PAGE : 0000
VERSION: 6.6

REPORT DATE: 06/01/2011
REPORT TIME: 12:00:00
REPORT ID : ED115

GENTRAN:REALTIME
ACKNOWLEDGEMENT RECONCILIATION/MONITOR
ERROR MESSAGE LOG REPORT

| MSG NR | MESSAGE DESCRIPTION | TRANSACTION: | GROUP: | XYZ |
|-----------|-------------------------------------|--------------|-----------|----------|
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000368 | 000000303 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000302 | 000000302 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000325 | 000000325 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006167 | 000006167 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000255 | 000000255 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000252 | 000000252 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000291 | 000000291 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000288 | 000000288 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000369 | 000000369 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000303 | 000000303 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000326 | 000000326 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006168 | 000006168 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000256 | 000000256 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000253 | 000000253 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000292 | 000000292 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000289 | 000000289 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000370 | 000000370 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000304 | 000000304 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000327 | 000000327 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006169 | 000006169 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000257 | 000000257 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000254 | 000000254 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000293 | 000000293 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000290 | 000000290 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000371 | 000000371 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000305 | 000000305 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000328 | 000000328 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006170 | 000006170 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000258 | 000000258 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000255 | 000000255 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000294 | 000000294 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000291 | 000000291 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000372 | 000000372 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000306 | 000000306 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000329 | 000000329 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006171 | 000006171 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000259 | 000000259 | TWOWAY |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000256 | 000000256 | TWOWAY |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000295 | 000000295 | RANDOM |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000292 | 000000292 | RANDOM |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000373 | 000000373 | XYZ |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000307 | 000000307 | XYZ |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000330 | 000000330 | BULKPAPR |
| 41422W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000006172 | 000006172 | BULKPAPR |
| 41417W 04 | UNEXPECTED ACKNOWLEDGMENT RECEIVED, | 000000260 | 000000260 | TWOWAY |

Figure 5.22 Acknowledgment Reconciliation/Monitor Report (Error Message Log Report)

```

REPORT DATE: 06/01/2011          GENTRAN:REALTIME          PAGE: 00001
REPORT TIME: 12:00:00          ACKNOWLEDGMENT RECONCILIATION/MONITOR          VERSION: 6.6
REPORT ID : ED117             EXPECTED ACKNOWLEDGEMENT MONITORING REPORT
                                TRANSACTION ENVELOPE REF DATE SENT TIME DATE EXPECTED TIME
PARTNER                        QUAL USER REFERENCE
VENDOR-1                      (INTERCHANGE ENVELOPE REFERENCE ID: 000000550 )
VENDOR-1                      (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000381 ) 06/01/2011 12:00 06/01/2011 12:00
                                (FUNCTIONAL GROUP ID: PO )
                                PONUMBER-001 000000474
VENDOR-2                      (INTERCHANGE ENVELOPE REFERENCE ID: 000000388 )
VENDOR-2                      (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000006249 ) 06/01/2011 12:00 06/01/2011 12:00
                                (FUNCTIONAL GROUP ID: PO )
                                PONUMBER-002 000000408
VENDOR-2                      (INTERCHANGE ENVELOPE REFERENCE ID: 000000389 )
VENDOR-2                      (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000006250 ) 06/01/2011 12:00 06/01/2011 12:00
                                (FUNCTIONAL GROUP ID: PO )
                                PONUMBER-002 000000409
VENDOR-3                      (INTERCHANGE ENVELOPE REFERENCE ID: 000000307 )
VENDOR-3                      (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000307 ) 06/01/2011 12:00 06/01/2011 12:00
                                (FUNCTIONAL GROUP ID: PO )
                                PONUMBER-003 000000310
VENDOR-3                      (INTERCHANGE ENVELOPE REFERENCE ID: 000000308 )
VENDOR-3                      (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000308 ) 06/01/2011 12:00 06/01/2011 12:00
                                (FUNCTIONAL GROUP ID: PO )
                                PONUMBER-003 000000311
VENDOR-5                      (INTERCHANGE ENVELOPE REFERENCE ID: 000000000000067)
VENDOR-5                      (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000000000067) 06/01/2011 12:00 06/01/2011 12:00
                                (FUNCTIONAL GROUP ID: ORDERS)
                                PONUMBER-001 000000000000095
                                PONUMBER-002 000000000000096
                                PONUMBER-003 000000000000097
                                PONUMBER-004 000000000000098
***** NORMAL END OF JOB *****
    
```

Figure 5.23 Acknowledgment Reconciliation/Monitor Report (Expected Acknowledgment Monitor Report)

Acknowledgment Reconciliation/Monitor Reformatter

EDID516

Purpose

The Acknowledgment Reconciliation/Monitor Reformatter program (EDID516) reformats each batch acknowledgment into a Sterling Gentran:Realtime acknowledgment.

Operation

The Acknowledgment Reconciliation/Monitor Reformatter program reads the acknowledgments stored on a queue file (queue file 098 is the default) that were created by the Sterling Gentran batch system. The program adds a 20-byte key (date, time, sequence number) as a prefix to each record, and writes it to the Sterling Gentran:Realtime Acknowledgment Reconciliation file (EDIRDAR).

The Acknowledgment Reconciliation/Monitor Reformatter program is initiated by a queue option. A sample queue option was defined for this purpose during Sterling Gentran:Realtime installation customization. Refer to option number 098 via the Queue Options Screen (EDIM303).

See the section “Configuring Databanking” in Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more information on acknowledgment processing.

File Access

| File Description | DDname | File Access |
|--|---------|-------------------------|
| Sterling Gentran:Realtime Acknowledgment Reconciliation file | EDIRDAR | Read and delete. |
| Acknowledgment Reconciliation Input Queue file | EDIQ098 | Read (through EDIEOQR). |
| Report Control file | EDIRRC | Read and update. |
| Report Detail file | EDIRRD | Read and update. |

Reports

The Acknowledgment Reconciliation/Monitor Reformatter program produces an error message log report (ACK-FM).

You can view the report using the Sterling Gentran:Realtime Online Reporting function.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX  06/01/2011
                                                12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path Process      Con Task      Control
  A   Date        Time      ID   Name      St Cd      #   Description      Address
  _ 06/01/2011 12:00:00 256 EDI42E   W 04      2066 ACK TEST          164
  _ 06/01/2011 12:00:00 256 EDI42S   W 04      2066 ACK TEST          165
  _ 06/01/2011 12:00:00 256 EDI02E    00      2066 ACK TEST          166
  _ 06/01/2011 12:00:00 256 EDI02S    00      2066 ACK TEST          167
  _ 06/01/2011 12:00:00 842 EDI01S   W 04      2077 ACK TEST          168
  _ 06/01/2011 12:00:00 842 EDI01E   W 04      2077 ACK TEST          169
  _ 06/01/2011 12:00:00 842 ACKFMT    00      2077 ACK TEST          170
  _ 06/01/2011 12:00:00 842 EDI02S    00      2077 ACK TEST          171
  _ 06/01/2011 12:00:00 000 ACK-FM     00      2105 ACKNOWLEDGMENT    172

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd  PF8=Fwd
    
```

Error Message Log Report

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY  XXX  06/01/2011
                                                12:00:00

Task ID: 0002105 Process Name: ACK-FM
Search.: _____ Line Increment: ____ Job Name: _____

PROGRAM EDID516 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6
REPORT DATE: 06/01/11 GENTRAN:BASIC +
REPORT TIME: 12:00:00 ACKNOWLEDGMENT REFORMAT PROGRAM
REPORT ID : EDID516 ACKNOWLEDGMENT REPORT +
MESSAGE COUNT
ACKS READ..... 8
DAR WRITTEN... 8
***** NORMAL END OF JOB *****

END OF ONLINE REPORTS
Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
    
```

Change Audit Maintenance

EDID552

Purpose

The Change Audit Maintenance program (EDID552) performs maintenance on the Sterling Gentran:Realtime Change Audit files. Its functions include deleting and archiving the change audit information. The Restore operation must be performed by the Sterling Gentran:Basic Change Audit program (EDID502).

Operation

The transaction EDIG starts this program. The EDIG transaction can be started by the Schedule subsystem or by the transaction being entered on a terminal. The program operates in the Periodic Housekeeping and Ad Hoc Maintenance general modes:

Periodic Housekeeping

On a periodic basis (daily or weekly, depending upon the volume and retention requirements) the Housekeeping operation can be used to delete and optionally archive data based on specified retention periods.

Ad Hoc Maintenance

On a specific run, the Purge operation can be performed to delete and optionally archive selected data.

Inputs

The following table describes inputs for the Change Audit Maintenance program.

| DDname | Description |
|----------|---|
| EDIRIACA | Inbound Application Databank Change Audit file |
| EDIRIECA | Inbound EDI Databank Change Audit file |
| EDIROACA | Outbound Application Databank Change Audit file |
| EDIROECA | Outbound EDI Databank Change Audit file |
| ERRCTL | Error Message and Control file |
| EDIREQ | Request file |

Outputs

The following table describes outputs for the Change Audit Maintenance program.

| DDname | Description |
|----------|---|
| EDIRARCH | Change Audit Archive file |
| EDIRIACA | Inbound Application Databank Change Audit file |
| EDIRIECA | Inbound EDI Databank Change Audit file |
| EDIROACA | Outbound Application Databank Change Audit file |
| EDIROECA | Outbound EDI Databank Change Audit file |

Reports

The Change Audit Maintenance program creates two reports.

- The CA-SUM report shows processing parameters and summary totals.
- The CA-AUD report has an audit listing of all records purged.

Print the reports by typing a value of Y in the Report Print SW field on the Change Audit Maintenance screen (EDIM874).

Report Selection

```

Select Print Log Exception Activity
EDIM310 RTE.RSEL__      REPORT SELECTION      XXX      06/01/2011
                                                              12:00:00

Path ID.....: ____      Process....: _____
Line Incrmt..: ____      Cond Code..: _ (Y)
From Date....: _____      To Date....: _____      (MM/DD/YYYY)
From Time....: _____      To Time....: _____      (HH:MM:SS)
Task #.....: ____133      Max Srch...: 0050
Print Job Name: _____

  Generation      Path Process      Con Task      Control
A   Date         Time      ID  Name  St Cd  #   Description      Address
_  06/01/2011 12:00:00  000 CA-SUM  00  133 CA MAINT          305
_  06/01/2011 12:00:00  000 CA-AUD  00  133 CA MAINT          306
-
-
-
-

Enter PF1=Help      PF3=Exit      PF5=Action
      PF7=Bwd      PF8=Fwd
    
```


Summary Report

```
EDIM311 RTE.RDIS__  GENTRAN:REALTIME EDI Report Display  XXX      06/01/2011
                                                                12:00:00
```

```
Task ID: 0000133 Process Name: CA-SUM
Search.: _____ Line Increment: ____ Job Name: _____
REPORT DATE: 06/01/2011                               GENTRAN:REALTIME  +
REPORT TIME: 12:00:00                                  DATABANK CHANGE AUDIT MAINTEN+
REPORT ID  : EDID552-CA-SUM                            SUMMARY REPORT    +
```

```
PROGRAM EDID552  COMPILED ON 06/01/2011 AT 12.00.00  VERSION 6.6
```

```
OPTIONS USED THIS RUN
-----
```

```
REQUESTED-OPERATION      = HOUSEKEEPING
ARCHIVE                   = NO
DATABANK                  = INBOUND-APPLICATION
RETENTION-DAYS-UPDATE-APPLIED = 030
```

```
Enter PF1=Help PF2=Sum  PF3=Exit          PF5=Print    PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top   PF13=Bot
```

Audit Trail Report

```
EDIM311 RTE.RDIS__  GENTRAN:REALTIME EDI Report Display  XXX      06/01/2011
                                                                12:00:00
```

```
Task ID: 0000207 Process Name: CA-AUD
Search.: _____ Line Increment: ____ Job Name: _____
REPORT DATE: 06/01/2011                               GENTRAN:REALTIME  +
PROGRAM EDID552  COMPILED ON 06/01/2011 AT 12.00.00  VERSION 6.6
REPORT TIME: 12:00:00                                  DATABANK CHANGE AUDIT MAINTEN+
REPORT ID  : EDID552-CA-AUD                            AUDIT TRAIL       +
```

```
DROPPED DOCUMENTS
```

```
VENDOR-1          PONUMBER-001          +
VENDOR-1          PONUMBER-001          +
*** SYNCPOINT PERFORMED*****
REPORT DATE: 06/01/2011                               GENTRAN:BASIC    +
REPORT TIME: 12:00:00                                  DATABANK CHANGE AUDIT MAINTEN+
```

```
Enter PF1=Help PF2=Sum  PF3=Exit          PF5=Print    PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top   PF13=Bot
```

Databank Status Update

EDIR855

Purpose

The Databank Status Update (EDIR855) program updates the reported flag and the network flag on the Sterling Gentran:Realtime databanks. The data is passed to it from the Basic Databank Inquiry programs (EDID550 and EDID551) and from the Basic Network Reconciliation program (EDID850).

Operation

The program starts when the trigger level is reached for the queue file that holds the data passed from the Sterling Gentran:Basic programs. Transactions are used as data to tell the program what databank to update, the key of the record to update, and which flag must be updated.

Inputs

The following table describes inputs for the Databank Status Update program.

| TSQname | Description |
|----------|--|
| EDITppp# | TSQ passed from the Online Queue Read program. Where ppp = the path ID number. |

Outputs

The following table describes outputs for the Databank Status Update program.

| DDname | Description |
|---------|--|
| EDIRIEA | Inbound EDI Databank Directory file |
| EDIROEA | Outbound EDI Databank Directory file |
| EDIRIAA | Inbound Application Databank Directory file |
| EDIROAA | Outbound Application Databank Directory file |

Reports

None.

Databank Reprocess Driver

EDIR856

Purpose

The Databank Reprocess Driver program (EDIR856) begins the reprocess flow for Sterling Gentran:Realtime databanks. It creates the processing parameters that the Outbound Mapper and the Inbound Editor use to reprocess data from the Outbound Application databank and the Inbound EDI databank.

Operation

When Reset is specified on the Interchange Status screen (EDIX251) or the Document Status screen (EDIX263) for Sterling Gentran:Realtime databanks, these programs issue a start command for transaction EDIF, which runs the Databank Reprocess Driver program.

Inputs

None.

Output

The following table describes output for the Databank Reprocess Driver program.

| TSQname | Description |
|----------|-----------------------|
| EDIKnnnn | Reprocess parameters. |

Reports

None.

Separator Utilities

Overview

This chapter describes Sterling Gentran:Realtime separator utilities.

This chapter contains the following topics:

| Topic | Page |
|--|-------------|
| Separator DriverEDIR930 | 6-2 |
| ANSI Interchange Priority LookupEDIR931 | 6-6 |
| EDIFACT Interchange Priority LookupEDIR932 | 6-8 |
| TRADACOMS Interchange Priority LookupEDIR933 | 6-10 |
| Monitor I/OEDIR940 | 6-12 |
| RouterEDIR945 | 6-14 |

Separator Driver

EDIR930

Purpose

The Separator Driver program (EDIR930) processes inbound EDI data and separates it into individual interchanges for processing by the Interchange Priority Lookup and the Router programs. The program verifies the presence of headers and trailers and sends unrecognizable data to a user program.

Operation

The following table provides an overview of Separator Driver operation.

| Step | Description |
|------|--|
| 1. | Data is passed from a user application, a queue file, or the Connect Inbound Interface. |
| 2. | A TSQ passes data to the Separator Gateway. |
| 3. | The Separator Driver reads the TSQ and determines the beginning and ends of interchanges and writes them to individual TSQs. |
| 4. | The Driver passes these TSQs to the individual Interchange Priority Lookup programs (EDIR931, EDIR932, and EDIR933), which evaluate the interchange and determine the priority and processing to be performed on this interchange. |
| 5. | The Interchange Lookup programs pass control back to the Driver, which creates a record in the Control TSQ. Optionally, the Separator can call the Monitor I/O program (EDIR940) to store header and optionally the data. |
| 6. | After all data has been processed, the Driver links to the Router program (EDIR945), which starts the translation processes in the order of the priorities assigned. |

Inputs

The following table describes inputs for the Separator Driver program.

| DDname | Description |
|---------|------------------------|
| EDIRSEP | Separator Control file |

| TSQname | Description |
|----------|----------------------------|
| nnnnnnnn | TSQ name passed in linkage |
| EDIXTSNS | Sequence numbering TSQ |

Outputs

The following table describes outputs for the Separator Driver program.

| DDname | Description |
|--------|---------------------|
| EDIRRC | Report Control file |
| EDIRRD | Report Detail file |

| TSQname | Description |
|----------|-------------------------------------|
| EDIYssss | Multiple TSQs (one per interchange) |
| EDIKssss | Interchange Control TSQ |

Reports

A new report is generated to show:

- The interchanges that are found.
- Any unrecognizable data.
- The totals of record counts and processes started during processing.

See Process Name **SEPDRV** in the following screen:

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX   06/01/2011
                                                    12:00:00

  Path ID.....: ____      Process....: _____
  Line Incrmt..: ____      Cond Code..: _ (Y)
  From Date....: _____  To Date....: _____ (MM/DD/YYYY)
  From Time....: _____  To Time....: _____ (HH:MM:SS)
  Task #.....: _____  Max Srch...: 0450
  Print Job Name: _____

  Generation      Path Process      Con Task      Control
  A   Date        Time   ID   Name   St Cd   #   Description  Address
  _ 06/01/2011 12:00:00 201 EDI02E 00 2250 EDIFACT O/B IVP 183
  _ 06/01/2011 12:00:00 211 EDI01S 00 2298 IVP - 3030-810 184
  _ 06/01/2011 12:00:00 211 EDI01E 00 2298 IVP - 3030-810 185
  _ 06/01/2011 12:00:00 211 ACKFMT 00 2298 IVP - 3030-810 186
  _ 06/01/2011 12:00:00 211 EDI41S W 04 2298 IVP - 3030-810 187
  _ 06/01/2011 12:00:00 211 EDI41E W 04 2298 IVP - 3030-810 188
  _ 06/01/2011 12:00:00 211 EDI02E 00 2298 IVP - 3030-810 189
  _ 06/01/2011 12:00:00 211 EDI02S 00 2298 IVP - 3030-810 190
  _ 06/01/2011 12:00:00 800 SEPDRV 00 2792 SEPARATOR DRIVE 191

Enter PF1=Help          PF3=Exit          PF5=Action
    PF7=Bwd  PF8=Fwd
    
```

Separator Driver Report

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0002792 Process Name: SEPDRV
Search.: _____ Line Increment: ____ Job Name: _____

EDIR930   RUN 06/01/2011   TIME 12:00   Separator Driver Processing +
PROGRAM EDIR930   COMPILED ON 06/01/11 AT 12.00.00   VERSION 6.6

PROCESSING BEGAN ON                               06/01/2011 AT 12:00 PM.
PROCESSING OPTION: 203 / PRIORITY: 1 / IMAGES SYS-PGM: P62-E62
PROCESSING OPTION: 204 / PRIORITY: 5 / IMAGES SYS-PGM: P62-E62
PROCESSING OPTION: 205 / PRIORITY: 3 / IMAGES SYS-PGM: P62-E62

SUMMARY COUNTS
INPUT RECORDS READ:                               186
INTERCHANGES READ:                               3
BAD TRAILERS FOUND:                               0
BAD INTERCHGS FOUND:                              0

Enter PF1=Help PF2=Sum   PF3=Exit                 PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top PF13=Bot
    
```

Separator Driver Report (Continued)

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0002792 Process Name: SEPDRV
Search.: _____ Line Increment: ____ Job Name: _____

BAD INTERCHGS FOUND:                               0
UNKNOWN DATA FOUND:                               3
OUTPUT RECORDS WRITTEN:                            189

PROCESSED COUNTS FROM EDIR945
Router Counts--> RTE IMMED CNT:                    3 QUEUE WRITES CNT:    0 USER LINK+
PROCESSING ENDED NORMALLY ON                       06/01/2011 AT 12:00 PM.

PROGRAM RETURN CODE----- 0

END OF ONLINE REPORTS
Enter PF1=Help PF2=Sum   PF3=Exit                 PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top PF13=Bot
    
```

Control Card Options

Control is passed from a user program which will use the same linkage area that is used by Control gateways. The Separator Gateway (EDIR100) then passes control to the Separator Driver (EDIR930).

The layout of the linkage area is:

```
05  LOOG-COMMAREA .
    10  LOOG-ENTRY-VALUES .
        15  LOOG-SYSIMAGE          PIC X(03) .
        15  LOOG-QFNR              PIC 9(03) .
        15  LOOG-TDQNAME           PIC X(08) .
        15  LOOG-BEG-OF-DOCGROUP-IND  PIC X(01) .
            88  LOOG-BEG-OF-DOCGROUP-YES  VALUE 'Y' .
        15  LOOG-END-OF-DOCGROUP-IND  PIC X(01) .
            88  LOOG-END-OF-DOCGROUP-YES  VALUE 'Y' .
        15  LOOG-INIT-BATCH-IND      PIC X(01) .
            88  LOOG-INIT-BATCH-YES      VALUE 'Y' .
    10  LOOG-RETURN-VALUES .
        15  LOOG-ERROR-LEVEL        PIC X(02) .
        15  LOOG-STATUS-CODE        PIC X(02) .
        15  LOOG-FORMATTED-ERROR-MSG  PIC X(100) .
```

X12 Interchange Priority Lookup

EDIR931

Purpose

The X12 Interchange Priority Lookup program (EDIR931) evaluates ASCX12 EDI data passed to it from the Separator Driver program (EDIR930) and determines the priority and the process that the data is to be assigned.

Operation

The following table provides an overview of ANSI Interchange Priority Lookup operation.

| Step | Description |
|------|---|
| 1. | The Separator Driver program: <ul style="list-style-type: none"> • Separates the interchanges into individual TSQs and then passes them to the Interchange Priority Lookup program. • Writes all the header envelopes to a separate TSQ. • Sends all X12 interchanges to EDIR931. |
| 2. | The Lookup program then uses information from the envelopes* (ISA, GS, and ST) to look up the process to be performed. (Process in this context is the Priority and the specific Immediate Option, Queue Option or user program that will process the data.) Key Usage Indicators on the Separator System Options Maintenance screen (EDIM935) instruct the program as to which fields to use during the look for the process. All of the fields used are used to construct keys to the Separator Control file and then to read the file and return the results of the first match. |
| 3. | The program passes the information back in the linkage area to the Separator Driver. |

* The information used from the envelopes is:

- Interchange Sender ID and Qualifier
- Interchange Receiver ID and Qualifier
- Interchange Test/Production Indicator
- Group Functional ID
- Group Version
- Group Sender ID
- Group Receiver ID
- Transaction ID.

See the section “Configuring Separator/Router/Splitter Processing” in Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more details on the system.

Inputs

The following table describes inputs for the X12 Interchange Priority Lookup program.

| DDname | Description |
|---------|------------------------|
| EDIRSEP | Separator Control file |

| TSQname | Description |
|---------|-----------------------------|
| EDIYsss | TSQ name passed in linkage. |

Outputs

The following table describes outputs for the X12 Interchange Priority Lookup program.

| TSQname | Description |
|----------|-------------------------|
| EDIKssss | Interchange Control TSQ |

Reports

None.

EDIFACT Interchange Priority Lookup

EDIR932

Purpose

The EDIFACT Interchange Priority Lookup program (EDIR932) evaluates EDIFACT EDI data passed to it from the Separator (EDIR930) and determines the priority and the process that the data is to be assigned.

Operation

The following table provides an overview of EDIFACT Interchange Priority Lookup operation.

| Step | Description |
|------|---|
| 1. | <p>The Separator Driver program:</p> <ul style="list-style-type: none"> • Separates the interchanges into individual TSQs and then passes them to the Interchange Priority Lookup program. • Writes all the header envelopes to a separate TSQ. • Sends all EDIFACT interchanges to EDIR932. |
| 2. | <p>The Lookup program uses information from the envelopes* (UNA, UNB, UNG, and UNH) to look up the process to be performed. (Process in this context is the Priority and the specific Immediate Option, Queue Option, or user program that will process the data). Key Usage Indicators on the Separator System Options Maintenance Screen (EDIM935) instruct the program as to which fields to use during the look for the process. All of the fields used are used to construct keys to the Separator Control file and then to read the file and return the results of the first match.</p> |
| 3. | <p>The program passes information back in the linkage area to the Separator Driver.</p> |

* The information used from the envelopes is:

- Interchange Sender ID and Qualifier
- Interchange Receiver ID and Qualifier
- Interchange Test/Production Indicator
- Group Functional ID
- Group Version
- Group Sender ID
- Group Receiver ID
- Transaction ID.

See the section “Configuring Separator/Router/Splitter Processing” in Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more details on the system.

Inputs

The following table describes inputs for the EDIFACT Interchange Priority Lookup program.

| DDname | Description |
|---------|------------------------|
| EDIRSEP | Separator Control file |

| TSQname | Description |
|----------|----------------------------|
| EDIYssss | TSQ name passed in linkage |

Outputs

The following table describes outputs for the EDIFACT Interchange Priority Lookup program.

| TSQname | Description |
|----------|-------------------------|
| EDIKssss | Interchange Control TSQ |

Reports

None.

TRADACOMS Interchange Priority Lookup

EDIR933

Purpose

The TRADACOMS Interchange Priority Lookup program (EDIR933) evaluates TRADACOMS EDI data passed to it from the Separator Driver program (EDIR930) and determines the priority and the process that the data is to be assigned.

Operation

The following table provides an overview of TRADACOMS Interchange Priority Lookup operation.

| Step | Description |
|------|--|
| 1. | <p>The Separator Driver program:</p> <ul style="list-style-type: none"> • Separates the interchanges into individual TSQs and then passes them to the Interchange Priority Lookup. • Writes all the header envelopes to a separate TSQ. • Sends all TRADACOMS interchanges to EDIR933. |
| 2. | <p>The Lookup program uses information from the envelopes* (SCH, STX, and MHD) to look up the process to be performed. (Process in this context is the Priority and the specific Immediate Option, Queue Option or user program the will process the data.) Key Usage Indicators on the Separator System Options Maintenance screen (EDIM935) instruct the program as to which fields to use during the look for the process. All of the fields uses are used to construct keys to the Separator Control file and then to read the file and return the results of the first match.</p> |
| 3. | <p>The program passes the information back in the linkage area to the Separator Driver.</p> |

* The information used from the envelopes is:

- Interchange Sender ID and Qualifier
- Interchange Receiver ID and Qualifier
- Interchange Test/Production Indicator
- Group Functional ID
- Group Version
- Group Sender ID
- Group Receiver ID
- Transaction ID.

See the section “Configuring Separator/Router/Splitter Processing” in Chapter 6, “Configuration Strategies,” in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more details on the system.

Inputs

The following table describes inputs for the TRADACOMS Interchange Priority Lookup program.

| DDname | Description |
|---------|------------------------|
| EDIRSEP | Separator Control file |

| TSQname | Description |
|----------|----------------------------|
| EDIYssss | TSQ name passed in linkage |

Outputs

The following table describes outputs for the TRADACOMS Interchange Priority Lookup program.

| TSQname | Description |
|----------|-------------------------|
| EDIKssss | Interchange Control TSQ |

Reports

None.

Monitor I/O

EDIR940

Purpose

The Monitor I/O program (EDIR940) is an optional program that stores control information (on the EDIRMNH file) and the data (on the EDIRMNS file) after Separator/Router/Splitter operations have separated the interchanges. The primary use of this information is for tracking the Separation process.

Operation

The Monitor I/O program is called by the Separator Driver program (EDIR930), the Router program (EDIR945), the Inbound Reject/Splitter program (EDIR015), the Asynchronous Gateway (EDIRASYN) and the Outbound Splitter (EDIR016).

- The Separator program calls it to add and update records on the two monitor files after the batch has been separated into interchanges and the priority and process have been determined by the lookup programs.
- The Router program updates the Monitor Header File (EDIRMNH) after the process has been completed for the interchange.
- The Asynchronous Gateway also updates the Monitor Header file after the process has completed.
- The Splitter programs add or update records before the process starts and after the process is completed.

The operations are controlled by the switches set on the Separator System Options Maintenance screen (EDIM935). You can disable the I/O to both files or only the storage of data on EDIRMNS, using the Monitor Indicator/Store Switches on the screen.

Inputs

The following table describes inputs for the Monitor I/O program.

| DDname | Description |
|---------|---------------------|
| EDIRMNH | Monitor Header file |
| EDIRMNS | Monitor Store file |

| TSQname | Description |
|----------|-------------------------------|
| EDIYssss | TSQ name passed in linkage |
| EDIKssss | Control TSQ passed in linkage |

Outputs

The following table describes outputs for the Monitor I/O program.

| DDname | Description |
|---------|---------------------|
| EDIRMNH | Monitor Header file |
| EDIRMNS | Monitor Store file |

Reports

None.

Router Program

EDIR945

Purpose

The Router program (EDIR945) is the driver for the processing of the separated interchanges that have been created by the Separator Driver or of the splits performed by the Inbound or Outbound Splitter programs.

Operation

A control TSQ is passed to the Router from the Separator Driver, the Inbound Splitter or the Outbound Splitter. This control TSQ contains information about where data can be found and what the processing characteristics are for that data (e.g. process option, priority).

The Router performs the processes in the order of the priorities. If the process involves a Sterling Gentran:Realtime immediate option, then the Router starts transaction EDIA (Sterling Gentran:Realtime Asynchronous Gateway task) and passes it the information needed in its link area.

A time delay is set on all priorities that are greater than 1. Each priority has a 10-second time delay over the previous priority (e.g. priority 2 gets a 10-second delay, priority 7 gets a 60-second delay, etc.). If the process is to write to a queue file, the process is done immediately (i.e. there will be no time delay). If the process is to send the data to a user program, that process is done immediately.

A maximum start count and delay time (entered on the Separator Systems Options Maintenance screen) causes an additional delay when the maximum start count is reached.

Inputs

The following table describes inputs for the Router program.

| TSQname | Description |
|----------|-------------------------------|
| EDIYssss | TSQ name passed in linkage |
| EDIKssss | Control TSQ passed in linkage |

Outputs

The following table describes outputs for the Router program.

| DDname | Description |
|--------|---------------------|
| EDIRRC | Report Control file |
| EDIRRD | Report Detail file |

Reports

None.

Communication Utilities

Overview

This chapter describes Sterling Gentran:Realtime communication utilities.

This chapter contains the following topics:

| Topic | Page |
|--|--------------------|
| Connect Outbound Interface.....EDIR314 | 7-2 |
| Connect Monitor Wakeup | EDIR315 7-6 |
| Connect Inbound Interface | EDIR316 7-7 |
| Connect Batch Number Update | EDIR317 7-11 |

Connect Outbound Interface

EDIR314

Purpose

The Connect Outbound Interface program (EDIR314) provides a direct connection from Sterling Gentran:Realtime to Connect for outbound EDI documents. In the Outbound translation process, the data can be placed directly on Connect queue files and optionally transmitted immediately.

Operation

The following table provides an overview of Connect Outbound Interface operation.

| Step | Description |
|------|--|
| 1. | <p>The Connect Outbound Interface is initiated by the Shell Routine program (EDIR313) when its switch is set to yes on the Additional Shell Steps Maintenance screen (EDIM84E). The program reads its parameters from the Request file (EDIREQ). The parameters are located in the file with the path number and a suffix of C.</p> <p>See the section “Connect Path Maintenance Screen” in Chapter 4 “Translation Parameter Screens” in the <i>IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide</i> for more information on the parameters.</p> |
| 2. | <p>The interface reads the EDI data TSQ and sends the data to Connect through the interface program CM62002. If an auto-connect is requested at that time, the program issues the auto-connect through the interface and then ends.</p> <p>Another way of executing the auto-connect is to set up the transaction EDIE in the schedule options, and then define a path that runs the Connect interface program with the auto-connect switch set to yes.</p> |
| 3. | <p>The program creates an output TSQ that is a copy of the data written to Connect, and sends this TSQ to the destination program at the conclusion of the writes to Connect.</p> |

Inputs

The following table describes inputs for the Connect Outbound Interface program.

| TSQname | Description |
|----------|---|
| EDIPpppC | Request parameters. Where ppp = the path ID number. |
| nnnnnnnn | Passed in linkage. |

Output

The following table describes output for the Connect Outbound Interface program.

| TSQname | Description |
|----------|----------------------------------|
| EDI5rrrr | Copy of data written to Connect. |

Reports

A summary report (CMBXOB) shows the parameters used and the totals written to Connect.

To print this report, type a value of Y on the Report Print Switch field on the Connect path Maintenance screen (EDIM842). This screen is only available for outbound processes.

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX   06/01/2011
                                                12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path  Process  Con  Task      Control
A   Date         Time   ID   Name  St Cd  #   Description  Address
-  06/01/2011 12:00:00 231  EDI01E W 04  7906 MBX TEST      17
-  06/01/2011 12:00:00 231  EDI01S W 04  7906 MBX TEST      18
-  06/01/2011 12:00:00 231  ACKFMT  00  7906 MBX TEST      19
-  06/01/2011 12:00:00 303  EDI42E W 04  8106 OUTBND CONNECT 20
-  06/01/2011 12:00:00 303  EDI42S W 04  8106 OUTBND CONNECT 21
-  06/01/2011 12:00:00 303  EDI02S  00  8106 OUTBND CONNECT 22
-  06/01/2011 12:00:00 303  EDI02E  00  8106 OUTBND CONNECT 23
S  06/01/2011 12:00:00 303  CMBXOB  00  8106 OUTBND CONNECT 24
-  06/01/2011 12:00:00 000  CONBUP  00  8195 CONNECT BATCH U 25

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd  PF8=Fwd

```

Summary Report

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY XXX 06/01/2011
12:00:00

Task ID: 0008106 Process Name: CMBXOB

Search.: _____ Line Increment: ____ Job Name: _____

EDIR314 RUN 06/01/2011 TIME 12:00 SUMMARY REPORT - CONNECT OUTBO+
PROGRAM EDIR314 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6

| PARAMETER FIELD | VALUE |
|------------------------------------|----------|
| AUTO CONNECT REQUEST----- | NO |
| GENERAL/SPECIFIC AUTO CONNECT----- | GENERAL |
| FRIENDLY MAILBOX NAME----- | MAILBOX1 |
| CONNECT SYSTEM IMAGE----- | CM |
| MAILBOX ID----- | REMOTE1 |
| USER BATCH ID----- | |
| LIST NAME 1----- | |
| CONNECT USER ID----- | |
| CONNECT PASSWORD----- | |

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot

Summary Report 2

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY XXX 06/01/2011
12:00:00

Task ID: 0008106 Process Name: CMBXOB

Search.: _____ Line Increment: ____ Job Name: _____

| | |
|--------------------------------------|----------------|
| CONNECT PASSWORD----- | |
| JCL FILE-NAME----- | |
| PLUS USE INDICATOR----- | PROCESS |
| WAKEUP AUTO CONNECT MONITOR IND----- | NO |
| WAKEUP AUTO CONNECT TRANSACTION----- | |
| DATA STORAGE FORMAT----- | STRUCTURE=FILE |
| PATH BEING USED----- | 300 |

Databank XREF updated -- Batch #=0000119 XREF #=0000111 DBkey=I VENDOR-1 +
Batch written -- Batch #=0000119 Batch id=00000000000072

| SUMMARY COUNTS | |
|-------------------------|-------------------------|
| PROCESSING BEGAN ON | 06/01/2011 AT 12:00 PM. |
| INPUT RECORDS READ----- | 45 |

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot

Connect Monitor Wakeup

EDIR315

Purpose

The Connect Monitor Wakeup program (EDIR315) provides information about an auto-connect request that has been submitted. The results of an auto-connect are sent back to Sterling Gentran:Realtime through this program. Parameters can be set to monitor the results of the auto-connect and then to notify a user if an error has occurred.

Operation

This program is executed by the transaction EDIO entered in the Wakeup Auto-Connect Trans switch field on the Outbound Connect Path Maintenance screen (EDIM842). Connect starts the EDIO transaction after the auto-connect operation completes. The program receives messages detailing the results of the auto-connect and creates a report with the messages and a return code that describes the result. If the 'Wakeup Auto-Connect Monitor' switch is set to a value of 1, then the program links to the Error User Error Exit (entered on the Immediate Option screen, EDIM811) and pass the messages. The error exit can then notify a user tracking system.

Input

The following table describes input for the Connect Monitor Wakeup program.

| TSQname | Description |
|----------|---|
| EDIPpppB | Request parameters. Where ppp = the path ID number. |

Output

None.

Reports

A summary report (CMBXWK) shows the parameters used and the totals read from Connect.

View the report using the Sterling Gentran:Realtime online reporting function.

To print the summary report, type a value of Y in the Report Print Switch field on the Connect Path Maintenance screen (EDIM842).

Connect Inbound Interface

EDIR316

Purpose

The Connect Inbound Interface program (EDIR316) provides a direct connection between Sterling Gentran:Realtime and Connect for inbound EDI documents. In the inbound translation process, the data can be read directly from Connect queue files and then processed through a Sterling Gentran:Realtime immediate option.

Operation

The Connect Inbound Interface may be initiated by either the Connect Online Exits, the Connect Application Agents, or by means of a terminal or schedule option. In either case, the Connect Inbound Interface reads its parameters from the Request file (EDIREQ). The parameters are located in the file having the path number and a suffix of B.

See the section “Connect Path Maintenance Screen EDIM843” in Chapter 4, “Translation Parameter Screens” of the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for more information on the parameters that can be entered.

Connect Online Exits/Application Agents

For information about using these two methods to initiate the Connect Inbound Interface, see the “Configuring Communications” section in Chapter 6, “Configuration Strategies,” of the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide*.

When the Convert Inbound Interface is started by either the Online Exits or the Application Agents, the system passes it a specific batch number which it retrieves from Connect by calling the Connect program (CM62002). The program determines the process to be performed by reading the records on the Request file having a suffix of B.

Terminal or Schedule Option

The transaction EDIC may be entered on a terminal or through a schedule option to initiate the Connect Inbound Interface program.

When the Convert Inbound Interface is started by means of a terminal or through a schedule option, it must receive an immediate option number to determine the parameters it needs to process. The option number must be entered with the transaction (i.e., ‘EDIC 311’) or in the Path ID field on the Schedule Options screen (EDIM821).

Input

The following table describes input for the Connect Inbound Interface program.

| TSQname | Description |
|---------|---------------------|
| EDIREQ | Request file |
| EDIOCF | Online Control file |

Output

The following table describes output for the Connect Inbound Interface program.

| TSQname | Description |
|----------|-----------------------------|
| EDIRrrrr | Data received from Connect. |

Reports

A summary report (CMBXIB) shows the parameters used and the totals read from Connect.

You can view the report using the Sterling Gentran:Realtime online reporting function.

Print the Summary report by typing a value of Y in the Report Print SW field on the Inbound Connect Path Maintenance screen (EDIM843).

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX   06/01/2011
                                                12:00:00

    Path ID.....: ___      Process....: _____
    Line Incrmt..: ___      Cond Code..: _ (Y)
    From Date.....: _____ To Date....: _____ (MM/DD/YYYY)
    From Time.....: _____ To Time....: _____ (HH:MM:SS)
    Task #.....: _____ Max Srch...: 0450
    Print Job Name: _____

    Generation      Path Process   Con  Task      Control
    A  Date         Time  ID    Name    St Cd   #    Description  Address
    _  06/01/2011  12:00:00  244  EDI02S   00   521  POFILE        218
    _  06/01/2011  12:00:00  244  EDI02E   00   521  POFILE        219
    _  06/01/2011  12:00:00  244  CMBXOB   00   521  POFILE        220
    S  06/01/2011  12:00:00  411  CMBXIB   00   589  DEFAULT INBOUND  221
    _  06/01/2011  12:00:00  203  EDI01S   00   638  X12 I/B IVP     222
    _  06/01/2011  12:00:00  203  EDI01E   00   638  X12 I/B IVP     223
    _  06/01/2011  12:00:00  203  ACKFMT   00   638  X12 I/B IVP     224
    _  06/01/2011  12:00:00  203  EDI41E   00   638  X12 I/B IVP     225
    _  06/01/2011  12:00:00  203  EDI41S   00   638  X12 I/B IVP     226

Enter PF1=Help          PF3=Exit          PF5=Action
    PF7=Bwd  PF8=Fwd
    
```

Summary Report (CMBXIB) 1

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000589 Process Name: CMBXIB
Search.: _____ Line Increment: ____ Job Name: _____

  EDIR316   RUN 06/01/2011   TIME 12:00   SUMMARY REPORT - CONNECT INBOU+
PROGRAM EDIR316   COMPILED ON 06/01/11 AT 12.00.00   VERSION 6.6

REQUEST INITIATED BY SCHEDULED TRANSACTION
  Schedule option:411

PARAMETER FIELD                               VALUE
OPTION BEING USED----- 411
PATH BEING USED----- 311
FRIENDLY MAILBOX NAME----- CRDXV110
CONNECT SYSTEM IMAGE----- CR
MAILBOX ID----- FROMCM31
BATCH NUMBER-----

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Summary Report (CMBXIB) 2

```

EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00

Task ID: 0000589 Process Name: CMBXIB
Search.: _____ Line Increment: ____ Job Name: _____

  BATCH NUMBER-----
  USER BATCH ID----- BATCH WITHOUT $$ADD
  CONNECT USER ID-----
  CONNECT PASSWORD-----
  PROCESSING OPTIONS*****
  EXPAND RECORDS TO 80 CHAR SWITCH----- 1
  REALTIME IMMEDIATE OPTION----- 231
  QUEUE FILE NUMBER-----
  USER PROGRAM NAME-----
  TRANSACTION ID-----

  Batch being extracted - Batch #:0000122 Batch id:BATCH WITHOUT $$ADD
  Batch being extracted - Batch #:0000125 Batch id:BATCH WITHOUT $$ADD
  Batch being extracted - Batch #:0000128 Batch id:BATCH WITHOUT $$ADD

Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd           PF10=Left PF11=Rgt PF12=Top   PF13=Bot

```

Summary Report (CMBXIB) 3

```
EDIM311 _____ GENTRAN:REALTIME EDI REPORT DISPLAY   XXX   06/01/2011
                                                    12:00:00
```

```
Task ID: 0000589 Process Name: CMBXIB
```

```
Search.: _____ Line Increment: ____ Job Name: _____
```

```
Changed status flag to delete for Batch #:0000122
Changed status flag to delete for Batch #:0000125
Changed status flag to delete for Batch #:0000128
Changed status flag to delete for Batch #:0000133
```

```
PROCESSING BEGAN ON                               06/01/2011 AT 12:00 PM.
RECORDS READ FROM CONNECT-----                     4
RECORDS WRITTEN-----                               320
NUMBER OF BATCHES RECEIVED-----                     4
NUMBER OF PROCESSES STARTED-----                     1
PROCESSING ENDED NORMALLY ON                       06/01/2011 AT 12:00 PM.
PROGRAM RETURN CODE-----                             0
```

```
END OF ONLINE REPORTS
```

```
Enter PF1=Help PF2=Sum   PF3=Exit           PF5=Print   PF6=NxtEr
      PF7=Bwd  PF8=Fwd   PF10=Left PF11=Rgt PF12=Top  PF13=Bot
```

Connect Batch Number Update

EDIR317

Purpose

The Connect Batch Number Update program (EDIR317) updates the batch number on the Sterling Gentran:Realtime Outbound EDI databanks.

Operation

The Connect Batch Number Update program reads the Sterling Gentran:Realtime Connect Cross Reference file (EDIRMXR) and uses the records to update the Interchange record on the Sterling Gentran:Realtime Outbound EDI databank.

The Outbound EDI databank I/O program (EDID252) writes cross reference records to the EDIRMXR file when \$\$ADD records are created in the Outbound Mapper. When the Connect Outbound Interface program (EDIR314) is run, the program updates these records with the batch number that Connect assigns to the data.

The Connect Batch Number Update file reads through the whole file and updates the databank when it finds a batch number on the cross reference record. After the update is complete, the program deletes the record from the file. If no batch number is present on the record, the update program checks the date the record was added to the file. If the date is older than seven days, the program deletes the record. Otherwise, the program lets it remain on the file.

The Connect Batch Number Update program can be initiated in either of the following ways:

- Via a schedule option. A sample schedule option was defined for this purpose during Sterling Gentran:Realtime installation customization. Refer to option number 411 via the Schedule Options Screen (EDIM821).
- By typing the CICS transaction ID EDI0 from a blank screen.

Input

The following table describes input for the Connect Batch Number Update program.

| DDname | Description |
|---------|---|
| EDIRMXR | Sterling Gentran:Realtime Connect Cross Reference file. |

Output

The following table describes output for the Connect Batch Number Update program.

| DDname | Description |
|---------|---|
| EDIROEA | Sterling Gentran:Realtime Outbound EDI Directory. |

Reports

A summary report (CONBUP) shows the counts for records read, updated and deleted.

You can view the report using the Sterling Gentran:Realtime online reporting function.

Print the Summary report by typing a value of Y in the Report Print SW field on the Connect Path Maintenance screen (EDIM843).

Report Selection

```

Select Print Log Exception Activity
EDIM310 8.3_____ REPORT SELECTION          XXX   06/01/2011
                                                12:00:00

Path ID.....: ____ Process....: _____
Line Incrmt..: ____ Cond Code..: _ (Y)
From Date....: _____ To Date....: _____ (MM/DD/YYYY)
From Time....: _____ To Time....: _____ (HH:MM:SS)
Task #.....: _____ Max Srch...: 0450
Print Job Name: _____

  Generation      Path Process   Con Task      Control
A   Date         Time   ID   Name   St Cd   #   Description  Address
_  06/01/2011 12:00:00 231 EDI01E W 04   7906 MBX TEST      17
_  06/01/2011 12:00:00 231 EDI01S W 04   7906 MBX TEST      18
_  06/01/2011 12:00:00 231 ACKFMT   00   7906 MBX TEST      19
_  06/01/2011 12:00:00 303 EDI42E W 04   8106 OUTBND CONNECT 20
_  06/01/2011 12:00:00 303 EDI42S W 04   8106 OUTBND CONNECT 21
_  06/01/2011 12:00:00 303 EDI02S   00   8106 OUTBND CONNECT 22
_  06/01/2011 12:00:00 303 EDI02E   00   8106 OUTBND CONNECT 23
_  06/01/2011 12:00:00 303 CMBXOB W 04   8106 OUTBND CONNECT 24
S  06/01/2011 12:00:00 000 CONBUP   00   8195 CONNECT BATCH U 25

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd  PF8=Fwd

```

Summary Report (CONBUP)

EDIM311 _____ GENTRAN:Realtime EDI REPORT DISPLAY XXX 06/01/2011
12:00:00

Task ID: 0008195 Process Name: CONBUP

Search.: _____ Line Increment: ____ Job Name: _____

EDIR317 RUN 06/01/2011 TIME 12:00 SUMMARY REPORT - CONNECT BATCH+
PROGRAM EDIR317 COMPILED ON 06/01/11 AT 12.00.00 VERSION 6.6

| | |
|--------------------------------|-------------------------|
| PROCESSING BEGAN ON | 06/01/2011 AT 12:00 PM. |
| CONNECT XREF RECORDS READ----- | 4 |
| DATABANK RECORDS UPDATED----- | 4 |
| MXR XREF RECORDS DELETED----- | 4 |
| PROCESSING ENDED NORMALLY ON | 06/01/2011 AT 12:00 PM. |
| PROGRAM RETURN CODE----- | 0 |

END OF ONLINE REPORTS

Enter PF1=Help PF2=Sum PF3=Exit PF5=Print PF6=NxtEr
PF7=Bwd PF8=Fwd PF10=Left PF11=Rgt PF12=Top PF13=Bot

Queue File Utilities

Overview

This chapter describes Sterling Gentran:Realtime Queue File utilities.

This chapter contains the following topics:

| Topic | Page | |
|--|--------------------------|------|
| Queue File Maintenance.....EDIEQMT | 8-2 | |
| Queue Read.....EDIRQRD..... | 8-5 | |
| Queue Write | EDIRQWR..... 8-10 | |
| Central Multi-Queue Read Subroutine | EDIRCMR | 8-15 |
| Central Multi-Queue Write Subroutine | EDIRCMW | 8-16 |
| Remote Single-Queue Read Subroutine | EDIERSR..... | 8-17 |
| Remote Single-Queue Write Subroutine | EDIERSW..... | 8-23 |
| Sample Queue Read..... | EDIESQR..... | 8-28 |
| Sample Queue Write..... | EDIESQW | 8-29 |
| Journal Subroutine..... | EDIJNL..... | 8-30 |
| Logging Subroutine..... | EDILOG..... | 8-31 |
| Online Batch Initiator | EDIEOBI | 8-32 |
| Online Queue Read | EDIEOQR, EDIROQR..... | 8-33 |
| Online Queue Write..... | EDIEOQW, EDIROQW..... | 8-34 |

Queue File Maintenance

EDIEQMT

Purpose

The Queue File Maintenance program (EDIEQMT) initializes queue files for use with Sterling Gentran:Control and Sterling Gentran:Realtime. This process involves filling the file with records containing low-values (hexadecimal values of zero). When a boundary violation or the count parameter indicates that the file has become full, the system updates the first two records with control information. The control information consists of the record counts, pointers, dates, times, and other internal information.

Operation

The Queue File Maintenance program runs as a batch job step. Sample JCL to delete, define, and initialize is located in member EXECQMT in the JCL library.

Inputs

The inputs for the Queue File Maintenance program follow:

| DDname | Description |
|---------|--------------------------------|
| EDICNTL | Control Card file |
| EDIQF | Queue file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |

Outputs

One queue file is the only significant output. In addition, the Checkpoint file is updated.

| DDname | Description |
|--------|----------------------------|
| EDIQF | Queue file (formatted). |
| EDICKP | Checkpoint file (updated). |

Reports

The reports created by this program are:

| DDname | Description |
|--------|---------------------------|
| EDISUM | Processing Summary report |
| EDILOG | Processing Log report |

Processing Summary Report

The Processing Summary report is contained in the EDISUM output file. The report lists all criteria used, the results of processing, and fatal error conditions, if any exist.

A fatal error has a return code of 08 or greater. This return code is determined by the ERRCTL file and can be changed by the user.

Figure 8.24 illustrates a portion of the Processing Summary report.

```

REPORT DATE: 06/01/2011                STERLING GENTRAN:CONTROLPAGE   : 00001
REPORT TIME: 12:00:00                  QUEUE FILE MAINTENANCE        :
REPORT ID  : EDIEQMT-EDISUM            SUMMARY VERSION: 6.6

      OPTIONS USED THIS RUN
      -----

REQUESTED-OPERATION                    = FORMAT
QUEUE-FILE-NUMBER                      = 009
QUEUE-RECORD-COUNT                    = 152

      PROCESSING SUMMARY
      -----

RECORDS FORMATTED                      :          48
NUMBER OF ERRORS THIS RUN              :           0
HIGHEST RETURN CODE THIS RUN          :           0

```

Figure 8.24 Sample Processing Summary Report

Processing Log Report

The Processing Log report is contained in the EDILOG output file. The report is created by the subroutine EDILOG, which is included in Sterling Gentran:Realtime.

Figure 8.25 illustrates a portion of the Processing Log report.

```

REPORT DATE: 06/01/2011                STERLING GENTRAN:CONTROLPAGE   : 00001
REPORT TIME: 12:00:00                  QUEUE FILE MAINTENANCEVERSION: 6.6
REPORT ID  : EDIEQMT-EDILOG            PROCESSING LOGCOMPILE DATE: 06/01/11

      MESSAGES
      -----

EDI-010701-I 00 QUEUE FILE MAINTENANCE PROCESSING BEGINS . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-009021-I 00 CHECK-POINT NOW INACTIVE . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-010702-I 00 QUEUE FILE MAINTENANCE PROCESSING ENDS . . . DATE: 06/01/2011, TIME: 12:00:00

```

Figure 8.25 Sample Processing Log Report

Control Card Options

Operations

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|----------------|--------------|
| 01 – 06 | 06 | AN | Operation file | FORMAT |
| 07 – 80 | 74 | AN | Filler | spaces |

Operation Criteria

Queue File Identification Criteria (Required)

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|--------------------|--|
| 01 – 02 | 02 | AN | Filler | spaces |
| 03 – 34 | 32 | AN | Operation Criteria | 'QUEUE-FILE-NUMBER' |
| 35 – 37 | 03 | ZD | Queue file number | Valid values are: 001 – 999 Required |
| 38 – 38 | 01 | AN | Filler | Spaces |
| 39 – 47 | 09 | ZD | Record count | Optional Default=999999999 (program runs until End of File is reached) |
| 48 – 80 | 33 | AN | Filler | spaces |

Queue Read

EDIRQRD

The Queue Read batch program (EDIRQRD) reads either application data or EDI data from even- and odd-numbered queue files.

Operation

Control cards enable the Queue Read program to read input transactions from one or multiple queue files. Sample JCL to run this program is located in member EXECQRD in the JCL library.

Inputs

The Queue Read program reads either application data or EDI data.

| DDname | Description |
|----------|--|
| EDICNTL | Control Card file |
| EDIQInnn | Queue file (where: nnn is the number that you specify on the control card) |
| ERRCTL | Error Message and Control file |
| EDIOCF | Online Control file |
| EDICFG | System Configuration file |

Outputs

The Queue Read program outputs a variable-length or fixed-length sequential file which contains either application or EDI data. The characteristics of the file must be identified in the control card criteria.

| DDname | Description |
|----------|---|
| EDIOUS | Output data (DDname can be altered via control cards) |
| EDIQInnn | Queue file (pointers are updated) (where: nnn is the number that you specify on the control card) |
| EDICKP | Checkpoint file (updated) |

Reports

The following table describes the reports created by this program.

| DDname | Description |
|--------|---------------------------|
| EDISUM | Processing Summary report |
| EDILOG | Processing Log report |

Processing Summary Report

The Processing Summary report is contained in the EDISUM output file. The report displays the processing results for the execution, the number of records read, and the return code for the execution.

A return code of 4 indicates that the queue file contains no data. A fatal error causes a return code of 8 or greater during processing.

Figure 8.26 illustrates the Processing Summary report.

```

REPORT DATE: 06/01/2011          STERLING GENTRAN:CONTROL          PAGE   : 00001
REPORT TIME: 12:00:00           BATCH QUEUE READ              VERSION: 6.6
REPORT ID  : EDIRQRD-EDISUM     SUMMARY REPORT

```



```

      OPTIONS USED THIS RUN
      -----
REQUESTED-OPERATION              = READ
-----
INPUT DDNAME                     = EDIQI001
OUTPUT DDNAME                    = EDIOU1
OUTPUT FILE TYPE                  = V
OUTPUT FILE LRECL                 = 2044
QUEUE FILE NUMBER                 = 024

```



```

RECORDS READ FROM Q FILE: 024.....:      330
RECORDS WRITTEN TO FILE: EDIOU1...:      330

```



```

      PROCESSING SUMMARY
      -----
NUMBER OF RECORDS READ FROM QUEUES :      330

```



```

NUMBER OF ERRORS THIS RUN         :          0
HIGHEST RETURN CODE THIS RUN      :          0

```

Figure 8.26 Sample Processing Summary Report

Processing Log Report

The Processing Log report is contained in the EDILOG output file. The report contains information and error messages; it is created by the subroutine EDILOG, which is included in the Sterling Gentran:Basic system.

Figure 8.27 illustrates the Processing Log report.

```

REPORT DATE: 06/01/2011          STERLING GENTRAN:CONTROL          PAGE   : 00001
REPORT TIME: 12:00:00           BATCH QUEUE READ              VERSION: 6.6
REPORT ID  : EDIRQRD-EDILOG     PROCESSING LOG                 COMPILE DATE: 06/01/11

  MESSAGES
  -----

EDI-010104I 00 CENTRAL BATCH QUEUE FILE READ BEGINS . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-009021I 00 CHECK-POINT NOW INACTIVE . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-010105I 00 CENTRAL BATCH QUEUE FILE READ ENDS . . . . DATE: 06/01/2011, TIME: 12:00:00

```

Figure 8.27 Sample Processing Log Report

Special JCL Requirements

DD statements for each queue file specified in the control cards are required. The DDname should be in the format EDIQInnn, where 'nnn' is the number specified on the control card. Default output is to the file EDIOUT, but you can change this destination on the control cards.

Note: 'nnn' must be a number from 001 to 100. This number is *not* related to the internal Queue file number.

Control Card Options

Control cards specify which queue files are to be read by EDIRQRD. Up to 50 QUEUE-FILE control cards can be specified. Only those queue files specified are processed. Prior to specifying which queue files to read, you must specify the process to be performed. Specify the process by entering **READ** in columns one through four of the first control card.

Operations

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|------------|--------------|
| 01 – 04 | 04 | AN | Operation | READ |
| 05 – 80 | 76 | AN | Filler | spaces |

Operation Criteria

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|-------------------------------|---|
| 01 – 02 | 02 | AN | Filler | spaces |
| 03 – 29 | 27 | AN | Queue identifier | QUEUE-FILE |
| 30 – 37 | 08 | ZD | Queue file DD name | EDIQInnn Note: nnn must be a number in the range of 001 – 100 |
| 38 – 38 | 01 | AN | Filler | spaces |
| 39 – 44 | 06 | AN | Output file name | Optional Default=EDIOUT |
| 45 – 45 | 01 | AN | Filler | spaces |
| 46 – 46 | 01 | AN | Output file Record format | V or F Default=V |
| 47 – 47 | 01 | AN | Filler | spaces |
| 48 – 53 | 06 | ZD | Output file LRECL | Six-digit number Default=002040 Maximum is 008000 |
| 54 – 54 | 01 | AN | Filler | spaces |
| 55 – 57 | 01 | ZD | Internal Queue file number | A 3-digit number that represents the queue file number |

Example

```

//EDIQI001 DD DSN=GENTRAN.V6X6.CTL.VSAM.EDIQ789,
//          DISP=SHR
//EDIQI002 DD DSN=GENTRAN.V6X6.CTL.VSAM.EDIQ601,
//          DISP=SHR
//EDIQI003 DD DSN=GENTRAN.V6X6.CTL.VSAM.EDIQ024,
//          DISP=SHR
//EDIQI004 DD DSN=GENTRAN.V6X6.CTL.VSAM.EDIQ754,
//          DISP=SHR
//EDIQI001 DD DSN=GENTRAN.V6X6.SEQ.QFOUT1,
//          DISP=(MOD,CATLG),UNIT=SYSDA,
//          SPACE=(TRK,(5,5)),DCB=(LRECL=2044,RECFM=VB,BLKSIZE=2048)
//EDIQI002 DD DSN=GENTRAN.V6X6.SEQ.QFOUT2,
//          DISP=(MOD,CATLG),UNIT=SYSDA,
//          SPACE=(TRK,(5,5)),DCB=(LRECL=80,RECFM=FB,BLKSIZE=7200)
//EDIQI003 DD DSN=GENTRAN.V6X6.SEQ.QFOUT3,
//          DISP=(MOD,CATLG),UNIT=SYSDA,
//          SPACE=(TRK,(5,5)),DCB=(LRECL=250,RECFM=FB,BLKSIZE=7500)
//EDICNTL DD *
READ
QUEUE-FILE      EDIQI001 EDIOU1 V 002044 789
QUEUE-FILE      EDIQI002 EDIOU2 F 000080 601
QUEUE-FILE      EDIQI003 EDIOU1 V 002044 024
QUEUE-FILE      EDIQI004 EDIOU3 F 000250 754

```

1
2
3

| Marker | Description |
|--------|--|
| 1. | The queue file defined with DDname EDIQI001 is read. |
| 2. | The data read from EDIQI001 is written to a queue file with the DDname EDIOU1. |
| 3. | The queue file defined by EDIQI001 is assigned an internal queue file number of 789. |

Queue Write

EDIRQWR

The Queue Write batch program (EDIRQWR) writes either application data or EDI data to any queue file by calling the Multi-Queue Write subroutine (EDIRCMW). The queue file must be defined with the source as Batch (see screen EDIM303).

Operation

Control cards enable the Queue Write program to write output transactions to a queue file. Sample JCL to run this program is located in member EXECQWR in the JCL library.

Inputs

The following table describes inputs for the Queue Write program.

| DDname | Description |
|---------|---|
| EDICNTL | Control Card file |
| EDIIN | Input data (use control card to modify the DD name) |
| ERRCTL | Error Message and Control file |
| EDICFG | System Configuration file |
| EDIOCF | Online Control file |

Note: Data can be either application data or EDI data, but not both.

Outputs

Output for the Queue Write program is a queue file that contains either application data or EDI data.

| DDname | Description |
|----------|--|
| EDIQOnnn | Queue file (pointers are updated) (where 'nnn' is the number you specify on the control card.) |
| EDICKP | Checkpoint file (updated) |

Reports

The reports created by this program are:

| DDname | Description |
|--------|---------------------------|
| EDISUM | Processing Summary report |
| EDILOG | Processing Log report |

Processing Summary Report

The Processing Summary report is contained in the EDISUM output file. The report displays the options used for the execution, the number of records read, and the return code for the execution.

A return code of 4 indicates that the Input file contains no data. A fatal error causes a return code of 8 or greater during processing.

Figure 8.28 illustrates the Processing Summary report.

| | | |
|---|--------------------------|--------------|
| REPORT DATE: 06/01/2011 | STERLING GENTRAN:CONTROL | PAGE : 00001 |
| REPORT TIME: 12:00:00 | BATCH QUEUE WRITE | |
| REPORT ID : EDIRQWR-EDISUM | SUMMARY REPORT | VERSION: 6.6 |
| <p>OPTIONS USED THIS RUN</p> <p>-----</p> | | |
| REQUESTED-OPERATION | = WRITE | |
| ----- | | |
| OUTPUT QUEUE-FILE-DDNAME | = EDIQQ001 | |
| INPUT FILE NAME | = EDIIN2 | |
| INPUT FILE TYPE | = V | |
| INPUT FILE LRECL | = 2044 | |
| QUEUE-FILE-NUMBER | = 002 | |
| ----- | | |
| OUTPUT QUEUE-FILE-DDNAME | = EDIQQ002 | |
| INPUT FILE NAME | = EDIIN | |
| INPUT FILE TYPE | = V | |
| INPUT FILE LRECL | = 2044 | |
| QUEUE-FILE-NUMBER | = 024 | |
| ----- | | |
| OUTPUT QUEUE-FILE-DDNAME | = EDIQQ007 | |
| INPUT FILE NAME | = EDIIN | |
| INPUT FILE TYPE | = V | |
| INPUT FILE LRECL | = 2044 | |
| QUEUE-FILE-NUMBER | = 199 | |
| ----- | | |
| TOTAL RECORDS READ FROM EDIIN2 | : | 68 |
| TOTAL RECORDS WRITTEN TO 002 | : | 68 |
| TOTAL RECORDS READ FROM EDIIN | : | 80 |
| TOTAL RECORDS WRITTEN TO 024 | : | 80 |
| TOTAL RECORDS READ FROM EDIIN | : | 80 |
| TOTAL RECORDS WRITTEN TO 199 | : | 80 |
| PROCESSING SUMMARY | | |
| ----- | | |
| TOTAL # OF RECS WRITTEN TO QUEUES | : | 228 |
| ----- | | |
| NUMBER OF ERRORS THIS RUN | : | 0 |
| HIGHEST RETURN CODE THIS RUN | : | 0 |

Figure 8.28 Sample Processing Summary Report

Processing Log Report

The Processing Log report is created by the subroutine EDILOG, which is included in the Sterling Gentran:Basic system.

Figure 8.29 illustrates the Processing Log report.

```

REPORT DATE: 06/01/2011          STERLING GENTRAN:CONTROL          PAGE   : 00001
REPORT TIME: 12:00:00           BATCH QUEUE WRITE              VERSION: 6.6
REPORT ID  : EDIRQWR-EDILOG     PROCESSING LOG           COMPILE DATE: 06/01/11

  MESSAGES
  -----

EDI-010116I 00 CENTRAL BATCH QUEUE FILE WRITE BEGINS . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-009021I 00 CHECK-POINT NOW INACTIVE . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-010117I 00 CENTRAL BATCH QUEUE FILE WRITE ENDS . . . DATE: 06/01/2011, TIME: 12:00:00

```

Figure 8.29 Sample Processing Log Report

Special JCL Requirements

A DD statement for the queue file specified in the control cards is required. The DDname should be in the format EDIQOnnn, where 'nnn' is the number specified in the control card. An additional 150K of region size also is required. Default input is from the file EDIIN, but this DDname can be changed on the control cards.

Control Card Options

Control cards specify which queue file to write. Only one queue file is processed. Prior to specifying the queue file to write, you must specify the process to be performed by entering WRITE in columns one through five of the first control card.

Operations

Required

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|------------|--------------|
| 01-05 | 05 | AN | Operation | WRITE |
| 06-80 | 75 | AN | Filler | spaces |

*Operation Criteria***Required**

| Position | Length | Format | Field Name | Values/Edits |
|-----------------|---------------|---------------|----------------------------|--|
| 01 – 02 | 02 | AN | Filler | spaces |
| 03 – 29 | 27 | AN | Queue file identifier | QUEUE-FILE |
| 30 – 37 | 08 | AN | Queue file DD Name | EDIQOnnn 3-digit number Required |
| 38 – 38 | 01 | AN | Filler | spaces |
| 39 – 44 | 06 | AN | Input file name | DD name of input data Default=EDIIN |
| 45 – 45 | 01 | AN | Filler | spaces |
| 46 – 46 | 01 | AN | Input file RECFM | V or F Default=V |
| 47 – 47 | 01 | AN | Filler | spaces |
| 48 – 53 | 06 | ZD | Input file LRECL | 6-digit number Default=002040 The maximum LRECL is 8000. |
| 54 – 54 | 01 | AN | Filler | spaces |
| 55 – 57 | 03 | ZD | Internal queue file number | A 3-digit number that represents the queue file number |

Example

```

//EDIQ001 DD DSN=GENTRAN.V6X6.CTL.VSAM.EDIQ824
//
//EDIQ002 DD DSN=GENTRAN.V6X6.CTL.VSAM.EDIQ017,
//          DISP=SHR
//EDIIN DD DSN=INPUT.FILE.ONE,
//         DISP=SHR
//EDIIN2 DD DSN=INPUT.FILE.TWO,
//         DISP=SHR
//EDICNTL DD *
WRITE
QUEUE-FILE
QUEUE-FILE

```

EDIQ001 → EDIQ001 EDIQ824 → 824
EDIQ001 → EDIQ0001 EDIQ824 → 824
EDIQ002 → EDIQ0002 EDIQ824 → 824
EDIIN → EDIIN 824 → 824
EDIIN2 → EDIIN2 824 → 824

2 1 3

| Marker | Description |
|--------|---|
| 1. | The data in the file defined with the DDname EDIIN is read. |
| 2. | The data written to a queue file with a DDname of EDIQ001. |
| 3. | The queue file defined by EDIQ001 is assigned an internal queue file number of 824. |

Central Multi-Queue Read Subroutine

EDIRCMR

Purpose

The Central Multi-Queue Read subroutine (EDIRCMR) is a batch program used by the inbound and outbound Sterling Gentran:Realtime and Sterling Gentran:Control systems to read odd- and even-numbered queue files.

Operation

The Central Multi-Queue Read subroutine is called by the Queue Read program (EDIRQRD); it can not be executed as a stand-alone program. This program's functions include:

- Opening and closing queue files.
- Reading the queue file specified in its parameters.
- Deblocking the records stored on the queue file.
- Passing individual records to the calling program.
- Updating the pointers on the queue file upon successful completion.

Inputs

The following table describes the inputs for the Central Multi-Queue Read Subroutine program.

| DDname | Description |
|----------|---|
| EDIQInnn | Queue file (where 'nnn' is the queue file number) |

Outputs

The program passes the records that are read off the queue file back to the Queue Read batch program.

Central Multi-Queue Write Subroutine

EDIRCMW

Purpose

The Central Multi-Queue Write subroutine (EDIRCMW) is a batch program used by the inbound and outbound Sterling Gentran:Realtime and Sterling Gentran:Control systems to write to even- and odd-numbered queue files.

Operation

The Central Multi-Queue Write subroutine is called by the Queue Write program (EDIRQWR); it can not be executed as a stand-alone program. This program's functions include:

- Opening and closing queue files.
- Formatting (blocking) application records onto queue file records.
- Writing queue file records.
- Updating the pointers on the queue file.

Inputs

The Central Batch Write program passes the individual records to EDIRQWR, which writes them on the queue file.

Outputs

The following table describes the output for the Central Multi-Queue Write subroutine program.

| DDname | Description |
|----------|---|
| EDIQOnnn | Queue file (where 'nnn' is the queue file number) |

Remote Single-Queue Read Subroutine

EDIERSR

Purpose

The Remote Single-Queue Read (or Batch Queue Read) subroutine (EDIERSR) is a batch program that enables batch applications to read even-numbered queue files created by Sterling Gentran:Control and Sterling Gentran:Realtime.

Operation

User-supplied programs executing in a batch environment call the Remote Single-Queue Read subroutine. The Sample Queue Read (EDIESQR) program demonstrates the use of the EDIERSR subroutine.

See the section “Sample Queue Read” in this chapter for program description information about EDIESQR.

Note: The Remote Single-Queue Read subroutine can not be executed as a stand-alone program.

Inputs

The inputs for the Remote Single-Queue Read program follow:

| DDname | Description |
|--------|--------------------------------|
| EDIQF | Queue file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |

Outputs

The outputs for the Remote Single-Queue Read program follow:

| DDname | Description |
|--------|------------------------------------|
| EDIQF | Queue file (pointers are updated). |
| EDICKP | Checkpoint file (updated). |

Reports

The report created by this program is:

| DDname | Description |
|--------|-----------------------|
| EDILOG | Processing Log report |

Processing Log Report

The subroutine EDILOG creates the Processing Log report. EDILOG is included in the Sterling Gentran:Realtime system.

Figure 8.30 illustrates a portion of the Processing Log report.

```

REPORT DATE: 06/01/2011                STERLING GENTRAN:CONTROLPAGE: 00001
REPORT TIME: 12:00:00                 REMOTE SINGLE QUEUE READVERSION: 6.6
REPORT ID  : EDIERSR-EDILOG           PROCESSING LOGCOMPILE DATE: (06/01/2011)

  MESSAGES
  -----

EDI-010951-I 00 REMOTE SINGLE QUEUE READ PROCESSING BEGINS . . . DATE: 06/01/11, TIME: 12:00:00
EDI-010952-I 00 REMOTE SINGLE QUEUE READ PROCESSING ENDS . . . DATE: 06/01/11, TIME: 12:00:00

```

Figure 8.30 Sample Processing Log Report

Special JCL Requirements

Application job steps using the Remote Single-Queue Read subroutine must include the following DD statements:

```

//EDICKP          DD  DSN=.....EDICKP,DISP=SHR
//ERRCTL          DD  DSN=.....ERRCTL,DISP=SHR
//EDIQF           DD  DSN=.....EDIQnnn,DISP=SHR
                  (where 'nnn' is the even number of the queue file to be read).
//EDILOG          DD  SYSOUT=*

```

Control Card Options

This program does not have control card options; all requests and criteria are passed through the call interface from the user-supplied calling program.

Call Interface Description

The Remote Single-Queue Read subroutine is a batch interface. The program receives application data and EDI data from the batch translation system by means of the queue file process for even-numbered queue files. Thus, inbound applications and outbound communications may use this subroutine to receive application data and EDI data respectively from the Sterling Gentran:Realtime system.

EDIERSR functions as an input/output routine with one exception. Calls are made to the subroutine to open the queue file, read a record, and close the queue file. One additional function call is used to commit all previous reads. The Commit function may be issued only on document group boundaries, and enables job steps to be check-pointed by the user program.

Control Structure

The control structure for calling EDIERSR involves the user application calling EDIERSR to perform the following functions:

| Step | Description |
|------|--|
| 1. | EDIERSR initializes for processing (e.g., open files). |
| 2. | EDIERSR reads a record image from the queue file and returns with either one record image or a “no queue data” indication (analogous to End-of-File). An initialization function must have been previously completed successfully. |
| 3. | EDIERSR terminates (e.g., close files). An initialization function must have been previously completed successfully. |
| 4. | EDIERSR commits all previous records read as being processed. If the run terminates without a Commit being issued, then the queue file remains intact (as if the records never were read). A Commit function may be issued only between document group boundaries. |

Parameters

The parameters for the Remote Single-Queue Read program follow.

| Position | Length | Format | Field Name |
|-------------------------------------|--------|--------|---------------------|
| Control Values to Subroutine | | | |
| 0001 – 0001 | 1 | AN | Entry Point |
| Control Values Returned | | | |
| 0002 – 0003 | 2 | AN | Status Code |
| 0004 – 0005 | 2 | AN | Error Level |
| 0006 – 0105 | 100 | AN | Return Message |
| Values to Subroutine | | | |
| 0106 – 0108 | 3 | ZD | Queue File Number |
| Values Returned | | | |
| 0109 – 0109 | 1 | AN | End of Queue Ind. |
| 0110 – 0110 | 1 | AN | Begin Document Ind. |
| 0111 – 0111 | 1 | AN | End Document Ind. |
| 0112 – 0113 | 2 | BIN | Record Length |
| 0114 – 2153 | 2040 | AN | Record Image |

COBOL Layout

The COBOL layout for the interface parameters is located in the Sample Queue Read program (EDIESQR) in the Sterling Gentran:Realtime library:
GENTRAN.V6X6.RTE.UTILITY.SOURCE.

Figure 8.31 illustrates a sample COBOL communication area layout.

```

*
*  REMOTE SINGLE QUEUE READ - COMM AREA INTERFACE LAYOUT
*
01  LRSR-COMMAREA.
05  LRSR-CONTROL-VALUES-TO-Q-READ.
    10  LRSR-ENTRY-POINT                PIC X(01).
        88  LRSR-EP-INITIALIZATION      VALUE '1'.
        88  LRSR-EP-READ-RECORD        VALUE '2'.
        88  LRSR-EP-COMMIT              VALUE '8'.
        88  LRSR-EP-TERMINATION         VALUE '9'.
05  LRSR-CONTROL-VALUES-RETURNED.
    10  LRSR-STATUS-CODE                PIC X(02).
    10  LRSR-ERROR-LEVEL                PIC X(02).
    10  LRSR-RETURN-MESSAGE             PIC X(100).
05  LRSR-INFO-TO-Q-READ.
    10  LRSR-QUEUE-FILE-NUMBER          PIC 9(03).
05  LRSR-RETURN-FIELDS-RETURNED.
    10  LRSR-END-OF-FILE-IND            PIC X(01).
        88  LRSR-END-OF-FILE-YES       VALUE 'Y'.
    10  LRSR-BEGIN-DOCUMENT-GROUP-IND  PIC X(01).
        88  LRSR-BEGIN-DOCUMENT-GROUP-YES VALUE 'Y'.
    10  LRSR-END-DOCUMENT-GROUP-IND    PIC X(01).
        88  LRSR-END-DOCUMENT-GROUP-YES VALUE 'Y'.
    10  LRSR-RECORD-LENGTH              PIC 9(04) COMP.
    10  LRSR-RECORD-IMAGE               PIC X(8000).
/

```

Figure 8.31 Sample COBOL Communication Area Layout

Field Descriptions

Control Value Passed:

Entry Point

A 1-position numeric field indicating the function for which you are calling EDIERSR.
Valid values are:

| | | |
|----------|---|------------|
| 1 | = | Initialize |
| 2 | = | Read |
| 8 | = | Commit |
| 9 | = | Terminate |

Control Values Returned:

Status Code

A 2-position numeric field indicating the success or failure of the requested function.
Valid values are:

| | | |
|-----------|---|----------------------------------|
| 00 | = | Function completed successfully. |
|-----------|---|----------------------------------|

16 = Function failed.

Error Level

A 2-position numeric field indicating the highest error level that occurred in the subroutine. A value of **00** indicates no errors occurred.

Return Message

A 1- to 100-position numeric field containing the textual message of any error encountered by EDIERSR.

Value Passed:**Queue File Number**

A 3-position numeric field displaying the even queue file number. The document group is obtained from this queue file.

Values Returned:**End of File Ind.**

A 1-position alphabetic field indicating to the calling program when the end of file has been reached. Valid values are:

Y = Yes; the end of file has been reached.
N = No; the end of file has not been reached.

Begin Document Ind.

A 1-position alphabetic field indicating whether or not this is the first record in the document group. Valid values are:

Y = Yes; this is the first record in the document group.
N = No; this is not the first record in the document group.

End Document Ind.

A 1-position alphabetic field indicating whether or not this is the last record in the document group. Valid values are:

Y = Yes; this is the last record in the document group.
N = No; this is not the last record in the document group.

Record Length

A 2-byte binary value field indicating the length of the record image returned.

Record Image

A 1- to 8000-position numeric field containing the returned record.

Interface Design Considerations

Familiarize yourself with the following information before designing interface programs to the Remote Single-Queue Read program.

Inbound Application Interface Considerations

- A document group contains all records for the application.
- The application must be coded to be capable of handling errors returned from the EDIERSR. The status code and error level must be examined separately. The status code indicates whether the current function completed successfully; the error level indicates the highest error that occurred.
- The application (when in control) may terminate without affecting the queue file. Any document group data passed to the application that has not been committed remains on the queue file.

Outbound Communication Interface Considerations

- The considerations for inbound applications described in the previous section also apply to outbound applications, with the following difference: a document group contains one or more interchanges.
- For ease of communication recovery, the Commit function can be used to follow the unit of work grouping of the communication session.

Remote Single-Queue Write Subroutine

EDIERSW

Purpose

The Remote Single-Queue Write (or Batch Queue Write) subroutine (EDIERSW) is a batch program that enables batch applications to write to odd-numbered queue files, which are input to Sterling Gentran:Control and Sterling Gentran:Realtime.

Operation

The Remote Single-Queue Write subroutine can be called by user-supplied programs executing in a batch environment. The Sample Queue Write program (EDIESQW) demonstrates the use of the EDIERSW subroutine.

See the section “Sample Queue Write” in this chapter for program description information about EDIESQW.

Note: EDIERSW can not be executed as a stand-alone program.

Inputs

The inputs for the Remote Single-Queue Write program follow:

| DDname | Description |
|--------|---------------------------------|
| EDIQF | Queue File (pointers are read). |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |

Outputs

The outputs for the Remote Single-Queue Write program follow:

| DDname | Description |
|--------|----------------------------|
| EDIQF | Queue file |
| EDICKP | Checkpoint file (updated). |

Reports

The reports created by this program are:

| DDname | Description |
|--------|-----------------------|
| EDILOG | Processing Log Report |

Processing Log Report

The subroutine EDILOG, which is included in Sterling Gentran:Realtime, creates the Processing Log report.

Figure 8.32 illustrates a portion of the Processing Log report.

```

REPORT DATE: 06/01/2011          STERLING GENTRAN:CONTROLPAGE   : 00001
REPORT TIME: 12:00:00           REMOTE SINGLE QUEUE WRITEVERSION: 6.6
REPORT ID  : EDIERSW-EDILOG      PROCESSING LOGCOMPILE DATE: (06/01/11)

  MESSAGES
  -----

EDI-010976-I 00 REMOTE SINGLE QUEUE WRITE PROCESSING BEGINS . . . DATE: 06/01/11, TIME: 12:00:00
EDI-010977-I 00 REMOTE SINGLE QUEUE WRITE PROCESSING ENDS . . . DATE: 06/01/11, TIME: 12:00:00

```

Figure 8.32 Sample Processing Log Report

Special JCL Requirements

Application job steps using the Remote Single-Queue Write subroutine must include the following DD statements:

```

//EDICKP          DD DSN=.....EDICKP,DISP=SHR
//ERRCTL          DD DSN=.....ERRCTL,DISP=SHR
//EDIQF           DD DSN=.....EDIQnnn,DISP=SHR
                  (where 'nnn' is the odd number of the queue file to be written)

//EDILOG          DD SYSOUT=*

```

Control Card Options

None for this program; all requests and criteria are passed through the Call Interface of the user-supplied program.

Call Interface Description

The Remote Single-Queue Write subroutine is a batch interface. The program sends application data and EDI data to the batch translation system via the queue file process for odd-numbered queue files. Thus, outbound applications and inbound communications may use EDIERSW to send application data and EDI data respectively to Sterling Gentran:Realtime.

EDIERSW functions as an input/output routine with one exception. Calls are made to EDIERSW to open the queue file, write a record, and close the queue file. One additional function call is used to commit all previous writes. The Commit function may be issued only on document group boundaries; the Commit function enables job steps to be check-pointed by the user program.

Control Structure

The control structure for calling EDIERSW involves the user application calling EDIERSW to perform the following functions:

| Step | Description |
|------|---|
| 1. | EDIERSW initializes for processing (e.g., open files). |
| 2. | EDIERSW writes a record image to the queue file and returns with either a successful completion or error indication. An initialization function must have been completed successfully previously. |
| 3. | EDIERSW terminates (e.g., close files). An initialization function must have been completed successfully previously. |
| 4. | EDIERSW commits all previous records written. If the run terminates without a Commit being issued, the queue file remains intact (as if the records were never written). A Commit function should be issued only between document group boundaries. |

Parameters

The parameters for the Remote Single-Queue Write subroutine follow.

| Position | Length | Format | Field Name |
|-------------------------------------|--------|--------|---------------------|
| Control Values to Subroutine | | | |
| 0001 – 0001 | 1 | AN | Entry Point |
| Control Values Returned | | | |
| 0002 – 0003 | 2 | AN | Status Code |
| 0004 – 0005 | 2 | AN | Error Level |
| 0006 – 0105 | 100 | AN | Return Message |
| Values to Subroutine | | | |
| 0106 – 0108 | 3 | ZD | Queue File Number |
| 0109 – 0109 | 1 | AN | Begin Document Ind. |
| 0110 – 0111 | 2 | BIN | Record Length |
| 0112 – 2151 | 2040 | AN | Record Image |

COBOL Layout

The COBOL layout for the interface parameters is located in the Sample Queue Write program (EDIESQW) in the Sterling Gentran:Realtime library: GENTRAN.V6X6.RTE.UTILITY.SOURCE.

Figure 8.33 illustrates a sample COBOL communication area layout.

```

*
*  REMOTE SINGLE QUEUE WRITE - COMM AREA INTERFACE LAYOUT
*
01  LRSW-COMMAREA.
    05  LRSW-CONTROL-VALUES-TO-Q-WRITE.
        10  LRSW-ENTRY-POINT                PIC X(01).
            88  LRSW-EP-INITIALIZATION      VALUE '1'.
            88  LRSW-EP-WRITE-RECORD       VALUE '2'.
            88  LRSW-EP-COMMIT              VALUE '8'.
            88  LRSW-EP-TERMINATION        VALUE '9'.
    05  LRSW-CONTROL-VALUES-RETURNED.
        10  LRSW-STATUS-CODE                PIC X(02).
        10  LRSW-ERROR-LEVEL               PIC X(02).
        10  LRSW-RETURN-MESSAGE            PIC X(100).
    05  LRSW-VALUES-TO-Q-WRITE.
        10  LRSW-QUEUE-FILE-NUMBER         PIC 9(03).
        10  LRSW-BEGIN-DOCUMENT-GROUP-IND  PIC X(01).
        10  LRSW-RECORD-LENGTH             PIC 9(04)COMP.
        10  LRSW-RECORD-IMAGE              PIC X(8000).

```

Figure 8.33 Sample COBOL Communication Area Layout

Field Descriptions

Control Values Passed:

Entry Point

A 1-position numeric field indicating the function for which you are calling EDIERSW.

Valid values are:

| | | |
|----------|---|------------|
| 1 | = | Initialize |
| 2 | = | Write |
| 8 | = | Commit |
| 9 | = | Terminate |

Control Values Returned:

Status Code

A 2-position numeric field indicating the success or failure of the requested function.

Valid values are:

| | | |
|-----------|---|----------------------------------|
| 00 | = | Function completed successfully. |
| 08 | = | Queue file full. |
| 16 | = | Function failed. |

Error Level

A 2-position numeric field indicating the highest error level that occurred in EDIERSW. A value of **00** indicates no errors occurred.

Return Message

A 1- to 100-position numeric field containing a textual message of any error encountered by EDIERSW.

*Values Passed:***Queue File Number**

A 3-position numeric field indicating the number of the odd-numbered queue file to which the document group is written.

Begin Document Ind.

A 1-position alphanumeric field indicating whether this is the first record in the document group. Valid values are:

| | | |
|----------|---|--|
| Y | = | Yes; this is the first record in the document group |
| N | = | No; this is not the first record in the document group |

Record Length

A 2-byte numeric, binary value field indicating the length of the record image to be written. The length must be greater than zero and less than 2040.

Record Image

A 1- to 8000-position numeric field containing the record to write.

Interface Design Considerations

Familiarize yourself with the following information before designing interface programs to the Remote Single-Queue Write program.

Outbound Application Interface Considerations

- A document group may consist of one or more documents.
- The application must be coded to be capable of handling errors returned from EDIERSW. The status code and error level must be examined separately. The status code indicates whether or not the current function completed successfully, and the error level indicates the highest error that occurred.
- The application (when in control) may terminate without affecting the queue file. Any records passed to EDIERSW since the last Commit function are discarded.

Inbound Communication Interface Considerations

- The considerations for Outbound Applications described above also apply to inbound applications, with the following difference: a document group may contain one or more interchanges.
- For ease of communication recovery, the Commit function can be used to follow the unit of work grouping of the communication session.

Sample Queue Read

EDIESQR

The Sample Queue Read batch program (EDIESQR) demonstrates how a batch program can read an even-numbered queue file containing data from the Sterling Gentran:Realtime system. The sample program uses the Remote Single-Queue Read Subroutine (EDIERSR) to access the queue file.

The Sample Queue Read program can be used to create sequential files of application data or EDI data. The program does not distinguish between application and EDI data, therefore, the Sample Queue Read program is used in the same manner for both types of data.

COBOL source code for this program is located in the Sterling Gentran:Realtime Source Library (GENTRAN.V6X6.RTE.UTILITY.SOURCE).

Operation

The Sample Queue Read program reads data from Queue File 2 and writes it to a sequential file.

Special JCL Requirements

The sample program requires the following DD statements in addition to those required by EDIERSR, for the user-defined output data file:

```
//EDIMTF    DD    DSN=..... .MTFDATA,  
//                               DCB=(LRECL=512,RECFM=FB,...),...
```

See member EXECSQR in the *JCL library* for additional JCL requirement information.

Sample Queue Write

EDIESQW

The Sample Queue Write batch program (EDIESQW) demonstrates how a batch program can write data to queue files which are input to Sterling Gentran:Realtime. The sample program uses the Remote Single-Queue Write subroutine (EDIERSW) to access the queue file.

EDIESQW can be used to load a queue file from a sequential file containing application data or EDI data. The Sample Queue Write program does not distinguish between application and EDI data, therefore, the program is used in the same manner for both types of data.

COBOL source code for EDIESQW is contained in the Sterling Gentran:Realtime Source Library GENTRAN.V6X6.RTE.UTILITY.SOURCE.

Operation

The Sample Queue Write program reads data from a sequential file and writes it to Queue file 1.

Special JCL Requirements

The program requires the following DD statement in addition to those required by EDIERSR:

```
//EDIMTF                DD  DSN=..... .MTFDATA,DISP=SHR
```

See member EXECSQW in the *JCL library* for additional JCL requirement information.

Journal Subroutine

EDIJNL

Purpose

The Sterling Gentran:Realtime batch programs use the Journal subroutine program (EDIJNL) to update the Check-Point file.

Operation

This subroutine cannot be executed as a stand-alone program. It is not directly accessible to user applications or communications.

Logging Subroutine**EDILOG****Purpose**

The Sterling Gentran:Realtime batch programs use the Logging Subroutine (EDILOG) to create the Processing Log report.

Operation

This subroutine cannot be executed as a stand-alone program. It is not directly accessible to user applications or communications.

Online Batch Initiator

EDIEOBI

The Online Batch Initiator program initiates batch processing by submitting JCL to the Internal Reader.

Operation

The Online Batch Initiator program is started as a CICS task by either the Online Scanner/Initiator program (EDIEOSI) or the Online Output Gateway (EDIEOOG). The Online Batch Initiator retrieves its task data, serializes on the Internal Reader destination, and copies the JCL specified on the Online Control file to the Internal Reader. The Batch Initiator checks the Sterling Gentran:Control configuration record to determine whether a user submit exit is specified. If an exit is present, the Batch Initiator writes the JCL to a TSQ and then passes this to the user exit. This provides the capability of using different scheduling products to perform the actual submit and control of the batch output and processes. A sample exit (EDISUBXT) is included on the UTILITY.SOURCE library.

Inputs

The following table describes inputs for the Online Batch Initiator program.

| DDname | Description |
|---------|-------------|
| EDIRJCL | JCL file |

Outputs

The following table describes outputs for the Online Batch Initiator program.

| DDname | Description |
|--------|---------------------------|
| EDIINT | Internal Reader DCT entry |

Control Structure

The control structure that Sterling Gentran:Control uses with the Online Batch Initiator program requires that processing be started by the Online Scanner/Initiator (EDIEOSI).

Online Queue Read

EDIEOQR,EDIROQR

Purpose

The Sterling Gentran:Control Online Queue Read programs (EDIEOQR and EDIROQR) read data from the Queue fields, write the data to a temporary storage queue, and then pass the data to the application program specified on the Queue Options Maintenance Screen (EDIM303).

Operation

The Online Scanner/Initiator uses the parameters specified for the trigger levels on the Queue Options Maintenance Screen (EDIM303) to determine if the data on the Queue file is ready for processing. When the trigger levels have been met, the Online Scanner/Initiator starts the Queue Read transaction (EDIR) that will run one of these programs. Which program is determined by whether the queue file is even or odd numbered.

These programs will build a single temporary storage queue or multiple ones depending upon the size of the data and the processing options specified on the Queue Options Maintenance Screen. The name of this TSQ(s) is passed in linkage to the Online Input Gateway (EDIEOIG) that will format a communication area and then link to the program specified on the application program (Appl.Prog field on the screen).

The number of TSQs and the method of passing TSQs is determined by the fields – Doc Groups per Run and TSQ Store Sw on the Queue Options Maintenance Screen. The Doc Groups per Run determines how many document groups on the Queue file will be grouped together and passed to the application program in each execution of the Online Queue Read program. The TSQ Store Sw determines the number of links to be used to pass all the data to the application program when the data is longer than 32,767 records in length. See the description of these fields in the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for a complete description of their usage.

Inputs

None.

File Access

| File Description | DDname | File Access |
|---|---------|------------------|
| (Sterling Gentran:Realtime and Sterling Gentran:Control) Queue file | EDIQnnn | Read and update. |

Reports

None.

Online Queue Write

EDIEOQW,EDIROQW

Purpose

The Sterling Gentran:Control/Realtime Online Queue Write programs (EDIEOQW and EDIROQW) read data from TSQs and write the data to the Queue files.

Operation

A user application (or Realtime process) that wants to write data to a Queue file uses these programs to perform that function. The data must be written to one or more TSQs (these TSQs can be chained together – see the *IBM® Sterling Gentran:Realtime® for z/OS® Release 6.6 User Guide* for information on chaining TSQs). The invoking program will then link to the Online Output Gateway (EDIEOOG) and pass a linkage area that identifies the queue file to receive the data and the name of the TSQ that holds the data. The Online Output Gateway will verify parameters and then link to either EDIEOQW or EDIROQW to write the data. Upon return the Online Output Gateway passes a return code back to the invoking program.

Inputs

Inputs are passed from the Online Output Gateway (EDIEOOG).

File Access

| File Description | DDname | File Access |
|--|---------|------------------|
| (Sterling Gentran:Realtime or Sterling Gentran:Control) Queue file | EDIQnnn | Read and update. |

Reports

None.

Support Utilities

Overview

This chapter describes Sterling Gentran:Realtime support utilities.

This chapter contains the following topics:

| Topic | Page |
|--|--------------------|
| Online Report File Maintenance.....EDIR305B | 9-2 |
| Online Report File Lister.....EDIR306B | 9-5 |
| Realtime Activity Maintenance | EDIRAMT 9-7 |
| Batch Option and Path Copy Maintenance.....EDIROCP | 9-9 |
| OCF Change Audit Inquiry | EDIR330 9-12 |
| OCF Change Audit Maintenance Program | EDIR331 9-15 |
| Request Change Audit Inquiry | EDIR890 9-19 |
| Request Change Audit Maintenance Program | EDIR891 9-22 |

Online Report File Maintenance

EDIR305B

Purpose

The Online Report File Maintenance program (EDIR305B) initializes the Online Report files for use with the Sterling Gentran:Realtime online system.

Operation

Sample JCL to run this program can be found in the member EXEC305 in the JCL library.

Inputs

The inputs for the Online Report File Maintenance program follow:

| DDname | Description |
|---------|--------------------------------|
| EDIRRC | Report Control file |
| EDIRRD | Report Detail file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |
| EDICNTL | Control Card |

Outputs

The outputs for the Online Report File Maintenance program follow:

| DDname | Description |
|--------|---------------------|
| EDIRRC | Report Control file |
| EDIRRD | Report Detail file |

Reports

The reports created by this program are:

| DDname | Description |
|--------|---------------------------|
| EDISUM | Processing Summary report |
| EDILOG | Processing Log report |

Processing Summary Report

The Processing Summary report is contained in the EDISUM output file. The report lists all criteria used, the results of processing, and fatal error conditions, if any exist.

A fatal error has a return code of 08 or greater. This return code is determined by the ERRCTL file and can be changed by the user.

Figure 9.34 illustrates a portion of the Processing Summary report.

```

REPORT DATE: 06/01/2011                GENTRAN:REALTIME                PAGE : 00001
REPORT TIME: 12:00:00                 REAL-TIME EDI REPORT FILE INITIATOR  VERSION: 6.6
REPORT ID : EDIR305B-EDISUM           SUMMARY REPORT

      OPTIONS USED THIS RUN
      -----
REAL-TIME EDI REPORT                   = PROCESS
REQUESTED-OPERATION                   = FORMAT
CONTROL-FILE-COUNT                    =      2000
DETAIL-FILE-COUNT                     =     10000

      PROCESSING SUMMARY
      -----
CONTROL RECORDS FORMATTED              :      1,999
DETAIL RECORDS FORMATTED               :      9,999
NUMBER OF ERRORS THIS RUN              :           0
HIGHEST RETURN CODE THIS RUN          :           0

```

Figure 9.34 Sample Processing Summary Report

Processing Log Report

The Processing Log report is contained in the EDILOG output file. The report is created by the subroutine EDILOG, which is included in the Sterling Gentran:Basic system.

Figure 9.35 illustrates a portion of the Processing Log report.

```

REPORT DATE: 06/01/2011                GENTRAN:REALTIME                PAGE : 00001
REPORT TIME: 12:00:00                 REAL-TIME EDI REPORT FILE INITIATOR  VERSION: 6.6
REPORT ID : EDIR305B-EDILOG           PROCESSING LOG                   COMPILE DATE: 06/01/2011

      MESSAGES
      -----
EDI-020901-I 00 ONLINE REPORT FILE MAINTENANCE PROCESSING BEGINS . . . DATE: 06/01/2011, TIME: 12:00:00
EDI-020902-I 00 ONLINE REPORT FILE MAINTENANCE PROCESSING ENDS . . . DATE: 06/01/2011, TIME: 12:00:00

```

Figure 9.35 Sample Processing Log Report

Control Card Options

Operations

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|----------------|--------------|
| 01 – 06 | 06 | AN | Operation file | FORMAT |
| 07 – 80 | 74 | AN | Filler | spaces |

Operation Criteria

Format Count Criteria

| Position | Length | Format | Field Name | Values/Edits |
|----------------------|--------|--------|------------------|----------------|
| Control Count | | | | |
| 01 – 02 | 02 | AN | Filler | spaces |
| 03 – 34 | 32 | AN | Count Identifier | CONTROL-COUNT |
| 35 – 43 | 09 | ZD | Count Value | 9 digit number |
| 44 – 80 | 37 | AN | Filler | spaces |
| Detail Count | | | | |
| 01 – 02 | 02 | AN | Filler | spaces |
| 03 – 34 | 32 | AN | Count Identifier | DETAIL-COUNT |
| 35 – 43 | 09 | ZD | Count Value | 9 digit number |
| 44 – 80 | 37 | AN | Filler | spaces |

Online Report File Lister

EDIR306B

Purpose

The Online Report File Lister program (EDIR306B) prints the Sterling Gentran:Realtime reports from the Online Report files selected by the user via the Sterling Gentran:Realtime Report Selection and Sterling Gentran:Realtime Report Display screens.

Operation

The sample JCL to run this program can be found in the member EXEC306 in the JCL library.

Inputs

The inputs for the Online Report File Lister program follow:

| DDname | Description |
|--------|--------------------------------|
| SYSUT1 | Control Card |
| EDIRRC | Report Control file |
| EDIRRD | Report Detail file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |

Outputs

The only output for the Online Report File Lister program are the reports.

Reports

The reports created by this program are:

| DDname | Description |
|--------|---------------------------|
| SYSUT2 | Listing report |
| EDISUM | Processing Summary report |
| EDILOG | Processing Log report |

Control Card Options

Format 1

| Column | Length | Description |
|---------|--------|---|
| 01 – 08 | 8 | Task identification number or ALL. |
| 10 – 15 | 6 | Process name or ALL. |
| 17 – 22 | 6 | BEFORE, AFTER, ONDATE, AGE, LAST. |
| 24 – 33 | 10 | Date in the format MM/DD/YYYY or 3-digit day or 8-digit control address number. |
| 35 – 42 | 8 | (Optional) Time in the format HH:MM:SS |
| 44 – 46 | 3 | (Optional) Path ID specified as numeric, ALL, or spaces. |

Example:

```
00000157 EDI02E AFTER 06/09/1992 14:10:05
```

Format 2

| Column | Length | Description |
|---------|--------|--|
| 01 – 08 | 8 | Task identification number. |
| 10 – 15 | 6 | Process name. |
| 17 – 22 | 6 | CADDR control. |
| 24 – 33 | 10 | Control address number. |
| 35 – 42 | 8 | (Optional) Time in the format HH:MM:SS. |
| 44 – 46 | 3 | (Optional) Path ID specified as numeric, ALL, or spaces. |

Example:

```
00000063 EDI42E CADDR 00000486
```

Note: In the sample JCL to run program EDIR306B, the character string “PARM RECORDS” follows the SYSUTI DDname. If this JCL member is being copied to the EDIRJCL file to allow Sterling Gentran:Realtime reports to be printed from the online report screens (EDIR310 and EDIR311), do not delete the “PARM RECORDS” control card record. The online report screens use this character string to determine where to place the parameter card when the EXEC306 job is submitted.

Realtime Activity Maintenance

EDIRAMT

Purpose

The Realtime Activity Maintenance program (EDIRAMT) initializes the Activity file.

Operation

Sample JCL to run this program can be found in the member EXECAMT in the JCL library.

Inputs

The input for the Realtime Activity Maintenance program follows:

| DDname | Description |
|---------|---|
| EDIRAPF | Sterling Gentran:Realtime Activity file |
| ERRCTL | Error Message and Control file |
| EDICFG | Configuration file |
| EDICKP | Checkpoint file (updated) |
| EDICNTL | Control Parameter file |

Outputs

The only output for the Realtime Activity Maintenance program follows:

| DDname | Description |
|---------|---|
| EDIRAPF | Sterling Gentran:Realtime Activity file |

Reports

This program generates the following reports.

| DDname | Description |
|--------|---------------------------|
| EDISUM | Processing Summary report |
| EDILOG | Processing Log report |

Processing Summary Report

The Processing Summary report is contained in the EDISUM output file. The report lists all criteria used, the results of processing, and fatal error conditions, if any exist.

A fatal error has a return code of 08 or greater. This return code is determined by the ERRCTL file and can be changed by the user.

Figure 9.36 illustrates a portion of the Processing Summary report.

| | | |
|------------------------------|------------------------------|--------------|
| REPORT DATE: 06/01/2011 | GENTRAN:REALTIME | PAGE : 00001 |
| REPORT TIME: 12:00:00 | ACTIVE PATH FILE MAINTENANCE | |
| REPORT ID : EDIRAMT-EDISUM | SUMMARY REPORT | VERSION: 6.6 |
| OPTIONS USED THIS RUN | | |
| ----- | | |
| REQUESTED-OPERATION | = FORMAT | |
| ACTIVITY-COUNT | = 3960 | |
| PROCESSING SUMMARY | | |
| ----- | | |
| RECORDS FORMATTED | : 3,960 | |
| NUMBER OF ERRORS THIS RUN | : 0 | |
| HIGHEST RETURN CODE THIS RUN | : 0 | |

Figure 9.36 Sample Processing Summary Report

Control Card Options

Operations

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|----------------|--------------|
| 01 – 06 | 06 | AN | Operation file | FORMAT |
| 07 – 80 | 74 | AN | Filler | spaces |

Operation Criteria

Format Count Criteria

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|------------------|----------------|
| 01 – 02 | 02 | AN | Filler | spaces |
| 03 – 34 | 32 | AN | Count Identifier | ACTIVITY-COUNT |
| 35 – 43 | 09 | ZD | Count Value | 9 digit number |
| 44 – 80 | 37 | AN | Filler | spaces |

Batch Option and Path Copy Maintenance

EDIROCP

Purpose

The Batch Option and Path Copy Maintenance program (EDIROCP) copies option or path information from one system to another in a batch environment.

Operation

Sample JCL to run this program can be found in the member EXECOCP in the JCL library.

Inputs

The input for the Batch Option and Path Copy Maintenance program follows:

| DDname | Description |
|----------|---------------------------|
| EDIINOCF | Online Control file |
| EDIINREQ | Request file |
| EDIPARM | Control Card |
| EDICFG | System Configuration File |

Outputs

The output for the Batch Option and Path Copy Maintenance program follows:

| DDname | Description |
|----------|--|
| EDIOTOCF | Online Control file |
| EDIOTREQ | Request file |
| EDIOCHA | Online Control Change Audit File Note: If using the Change Audit feature, make sure that the DD in your EXECOCP JCL for this file contains the dataset name as it appears in your target (output) CICS region. |
| EDIQCHA | Request Change Audit File Note: If using the Change Audit feature, make sure that the DD in your EXECOCP JCL for this file contains the dataset name as it appears in your target (output) CICS region. |

Reports

The report produced by the Batch Option and Path Copy Maintenance program follows:

| DDname | Description |
|--------|---------------------------|
| SYSOUT | Processing Summary report |

SYSOUT Report

Figure 9.37 illustrates a portion of the Processing Summary Report.

```

REPORT DATE: 06/01/2011                GENTRAN:REALTIME                PAGE   : 00001
REPORT TIME: 12:00:00                OCF/REQ PATH COPY MAINTENANCE    VERSION: 6.6
                                       SUMMARY REPORT

  OPTIONS USED THIS RUN
  -----
COPY   OPTION   097

COPIED RECORD:
097..AQINBOUND EDI DATABANK QUEUE FILE      LEAVE STATUS AS D AND ACTION AS N      DO.....N

  SUMMARY REPORT
  -----
  1 RECORDS WERE COPIED TO  FILE EDIOTOCF

NORMAL END OF PROGRAM EDIROCP

```

Figure 9.37 Sample Processing Summary Report

Control Card Options

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|--------------------|--|
| 01 – 09 | 09 | AN | Function | Copy or Replace |
| 10 – 19 | 10 | AN | Operation Criteria | 'OPTION' or 'PATH' |
| 20 – 22 | 03 | ZD | Path/Option number | This must be numeric. This number cannot be 000 when the Type field is 'OPTION'. |

Control Card Examples

The following are Copy and Replace control card examples.

Example 1 (Copy)

If the control card is set up as:

```
COPY  PATH  111
```

The program copies all headers and path records with a value of 111 from the input Request file to the output Request file. If a record already exists on the output file, the copy function is not performed, and processing ends abnormally with a return code of 12.

Example 2 (Replace)

If the control card is set up as:

```
REPLACE OPTION  111
```

The program copies the option record with a key value of 111 from the input Online Control file to the output Online Control file. If the record already exists on the output file, it is replaced with the new record.

OCF Change Audit Inquiry

EDIR330

The Sterling Gentran:Realtime Online Control File (OCF) Change Audit Inquiry Report program (EDIR330) enables you to produce reports for OCF maintenance updates that have been applied to the Online Control file. This program produces a detail level report of activity that shows all update activity, including before and after images of any "edit" updates.

The OCF change audit file contains records that track changes made to the Online Control file. Add, delete and update functions via the online Realtime System Maintenance subsystem result in records being written to the OCF Change Audit file. The batch copy utility (EDIROCP) and online copy utility (EDIR077) also write records to the OCF change audit file indicating add, delete and replace functions. The programs that change the status of the scanner (EDIEOSI, EDIETOGL, EDIRSTOP) will also create change audit records indicating the change in the scanner's status when the scanner is in the process of being started or stopped.

Operation

The OCF Change Audit Inquiry program runs as a batch job step.

Files Used

Input

The following files are used as input:

| Filename | Description |
|----------|--------------------------------|
| EDIOCHA | OCF Change Audit File |
| EDICNTL | Control Card File |
| ERRCTL | Error Message and Control File |
| EDICFG | System Configuration File |

Output

None.

Reports

Program EDIR330 produces the following reports:

| Report Name | Description |
|-------------|---------------------------------|
| EDIRPT | OCF Change Audit Inquiry Report |
| EDILOG | OCF Change Audit Processing Log |
| EDISUM | OCF Change Audit Summary Report |

Control Card Options

The following OCF Change Audit Inquiry operations and selection criteria are specified by control cards.

Operations

SELECT (Default Operation)

Selection Criteria

Defaults

| | |
|------------------|------------|
| FROM-UPDATE-DATE | 01/01/1900 |
| FROM-UPDATE-TIME | 00:00 |
| TO-UPDATE-DATE | 12/31/2099 |
| TO-UPDATE-TIME | 23:59 |
| USER | ALL |
| OPTION-ID | ALL |

Valid Criteria Values

From-Update-Date

Specifies the date that the update was applied to the OCF file. Starts the range. Used with To-Update-Date.

MM/DD/YYYY

From-Update-Time

Specifies the time that the update was applied to the OCF file. Starts the range. Used with To-Update-Time.

HH:MM

To-Update-Date

Specifies the date that the update was applied to the OCF file. Ends the range. Used with From-Update-Date.

MM/DD/YYYY

To-Update-Time

Specifies the time that the update was applied to the OCF file. Ends the range. Used with From-Update-Time.

HH:MM

User

Specifies the ID of online user who applied the change to the OCF file records.

ALL
XXX

Option-Id

Identifies the option ID used to restrict which OCF change audit records are used to create the inquiry report.

ALL

Indicates that all option IDs will be used to create the inquiry report.

XXX

Includes only the change audit records found for the specific option ID.

OCF Change Audit Maintenance Program

EDIR331

The Sterling Gentran:Realtime Online Control File (OCF) Change Audit Maintenance program (EDIR331) maintains the OCF change audit file. The program functions include deleting, housekeeping, and restoring change audit information.

The OCF change audit file contains records that track changes made to the Online Control file. Add, delete and update functions via the online Realtime System Maintenance subsystem result in records being written to the OCF Change Audit file. The batch copy utility (EDIROCP) and online copy utility (EDIR077) also write records to the OCF change audit file indicating add, delete and replace functions. The programs that change the status of the scanner (EDIEOSI, EDIETOGL, EDIRSTOP) will also create change audit records indicating the change in the scanner's status when the scanner is in the process of being started or stopped.

Operation

The OCF Change Audit Maintenance program operates in the following general modes:

Periodic Housekeeping

On a periodic basis (anywhere from daily to monthly depending on volume and retention requirements) the Housekeeping operation deletes and optionally archives data based on specified retention periods.

Ad Hoc Maintenance (Purge and Restore)

In addition to the regularly scheduled housekeeping runs, the OCF Change Audit Maintenance's Purge and Restore functions deletes and optionally archives selected data and restores data from archives.

Processing

The OCF Change Audit Maintenance program processes documents using the following three operations:

- Housekeeping
- Purge
- Restore

Housekeeping Operation

If the Housekeeping operation is requested, OCF Change Audit Maintenance deletes and optionally archives the change audit records that exceed the retention periods specified in the control cards. An option of the Housekeeping operation is to archive all selected change audit records to a sequential output file.

Purge Operation

If the Purge operation is requested, change records are removed if they match *all* criteria specified. An option of the Purge operation is to archive selected change audit records to a sequential output file.

Restore Operation

If the Restore operation is requested, change audit records are restored from the Archive file to the Change Audit file if the records match *all* selection criteria specified.

Files Used

Input

Control cards and the OCF Change Audit files are the principal input to OCF Change Audit Maintenance.

The following files are used as input:

| DDname | Filename |
|---------|--------------------------------|
| OCFARCH | OCF Change Audit Archive File |
| EDIOCHA | OCF Change Audit File |
| EDICNTL | Control Card File |
| ERRCTL | Error Message and Control File |
| EDICFG | System Configuration File |

Output

The following files are used as output:

| DDname | Filename |
|---------|-------------------------------|
| OCFARCH | OCF Change Audit Archive File |
| EDIOCHA | OCF Change Audit File |

Reports

Program EDIR331 produces the following reports:

| DDname | Filename |
|---------|-------------------------------------|
| OCFAUDT | OCF Change Audit Maintenance Report |
| EDILOG | OCF Change Audit Processing Log |
| EDISUM | OCF Change Audit Summary Report |

Control Card Options

Operations

HOUSEKEEPING (Default Operation)
PURGE
RESTORE

Selection Criteria

Defaults

For Housekeeping operation:

RETENTION-DAYS 030

For Purge and Restore operations:

FROM-UPDATE-DATE 01/01/1900

FROM-UPDATE-TIME 00:00

TO-UPDATE-DATE 12/31/2099

TO-UPDATE-TIME 23:59

OPTION-ID ALL

For Purge and Housekeeping operations:

ARCHIVE NO

Valid Criteria Values

Option ID

A 3-character identification used to restrict maintenance by Option ID.

ALL
XXX

Archive

This controls whether an archive is to be created for deleted change records.

NO
YES

From-Update-Date

Specifies the date that the update was applied to the OCF record. Starts the range. Used with To-Update-Date.

MM/DD/YYYY

From-Update-Time

Specifies the time that the update was applied to the OCF record. Starts the range. Used with To-Update-Time.

HH:MM

Retention-Days

Specifies the number of days that have elapsed since the update was applied.

000 - 999

To-Update-Date

Specifies the date that the update was applied to the OCF record. Ends the range. Used with From-Update-Date.

MM/DD/YYYY

To-Update-Time

Specifies the time that the update was applied to the OCF record. Ends the range. Used with From-Update-Time.

HH:MM

Request Change Audit Inquiry

EDIR890

The Sterling Gentran:Realtime Request Change Audit Inquiry Report program (EDIR890) enables you to produce reports for maintenance updates that have been applied to the Request file. This program produces a detail level report of activity that shows all update activity, including before and after images of any "edit" updates.

The Request change audit file contains records that track changes made to the Request file. Add, delete and update functions via the online Realtime System Maintenance subsystem result in records being written to the Request Change Audit file. The batch copy utility (EDIROCP) and online copy utility (EDIR077) also write records to the Request change audit file indicating add and replace functions.

Operation

The Request Change Audit Inquiry program runs as a batch job step.

Files Used

Input

The following files are used as input:

| Filename | Description |
|----------|--------------------------------|
| EDIQCHA | Request Change Audit File |
| EDICNTL | Control Card File |
| ERRCTL | Error Message and Control File |
| EDICFG | System Configuration File |

Output

None.

Reports

Program EDIR890 produces the following reports:

| Report Name | Description |
|-------------|-------------------------------------|
| EDIRPT | Request Change Audit Inquiry Report |
| EDILOG | Request Change Audit Processing Log |
| EDISUM | Request Change Audit Summary Report |

Control Card Options

The following Request Change Audit Inquiry operations and selection criteria are specified by control cards.

Operations

SELECT (Default Operation)

Selection Criteria

Defaults

| | |
|------------------|------------|
| FROM-UPDATE-DATE | 01/01/1900 |
| FROM-UPDATE-TIME | 00:00 |
| TO-UPDATE-DATE | 12/31/2099 |
| TO-UPDATE-TIME | 23:59 |
| USER | ALL |
| PATH-ID | ALL |

Valid Criteria Values

From-Update-Date

Specifies the date that the update was applied to the Request file. Starts the range. Used with To-Update-Date.

MM/DD/YYYY

From-Update-Time

Specifies the time that the update was applied to the Request file. Starts the range. Used with To-Update-Time.

HH:MM

To-Update-Date

Specifies the date that the update was applied to the Request file. Ends the range. Used with From-Update-Date.

MM/DD/YYYY

To-Update-Time

Specifies the time that the update was applied to the Request file. Ends the range. Used with From-Update-Time.

HH:MM

User

Specifies the ID of online user who applied the change to the Request file records.

ALL
XXX

Path-Id

Identifies the Path ID used to restrict which Request change audit records are used to create the inquiry report.

ALL

Indicates that all Path IDs will be used to create the inquiry report.

XXXX

Includes only the change audit records found for the specific Path ID.

Request Change Audit Maintenance Program

EDIR891

The Sterling Gentran:Realtime Request Change Audit Maintenance program (EDIR891) maintains the Request change audit file. The program functions include deleting, housekeeping, and restoring change audit information.

The Request change audit file contains records that track changes made to the Request file. Add, delete and update functions via the online Realtime System Maintenance subsystem result in records being written to the Request Change Audit file. The batch copy utility (EDIROCP) and online copy utility (EDIR077) also write records to the Request change audit file indicating add and replace functions.

Operation

The Request Change Audit Maintenance program operates in the following general modes:

Periodic Housekeeping

On a periodic basis (anywhere from daily to monthly depending on volume and retention requirements) the Housekeeping operation deletes and optionally archives data based on specified retention periods.

Ad Hoc Maintenance (Purge and Restore)

In addition to the regularly scheduled housekeeping runs, the Request Change Audit Maintenance Purge and Restore functions deletes and optionally archives selected data and restores data from archives.

Processing

The Request Change Audit Maintenance program processes documents using the following three operations:

- Housekeeping
- Purge
- Restore

Housekeeping Operation

If the Housekeeping operation is requested, Request Change Audit Maintenance deletes and optionally archives the change audit records that exceed the retention periods specified in the control cards. An option of the Housekeeping operation is to archive all selected change audit records to a sequential output file.

Purge Operation

If the Purge operation is requested, change records are removed if they match *all* criteria specified. An option of the Purge operation is to archive selected change audit records to a sequential output file.

Restore Operation

If the Restore operation is requested, change audit records are restored from the Archive file to the Change Audit file if the records match *all* selection criteria specified.

Files Used

Input

Control cards and the Request Change Audit files are the principal input to Request Change Audit Maintenance.

The following files are used as input:

| DDname | Filename |
|---------|-----------------------------------|
| REQARCH | Request Change Audit Archive File |
| EDIQCHA | Request Change Audit File |
| EDICNTL | Control Card File |
| ERRCTL | Error Message and Control File |
| EDICFG | System Configuration File |

Output

The following files are used as output:

| DDname | Filename |
|---------|-----------------------------------|
| REQARCH | Request Change Audit Archive File |
| EDIQCHA | Request Change Audit File |

Reports

Program EDIR891 produces the following reports:

| DDname | Filename |
|---------|---|
| REQAUDT | Request Change Audit Maintenance Report |
| EDILOG | Request Change Audit Processing Log |
| EDISUM | Request Change Audit Summary Report |

Control Card Options

Operations

HOUSEKEEPING (Default Operation)
 PURGE
 RESTORE

Selection Criteria

Defaults

For Housekeeping operation:

RETENTION-DAYS 030

For Purge and Restore operations:

FROM-UPDATE-DATE 01/01/1900

FROM-UPDATE-TIME 00:00

TO-UPDATE-DATE 12/31/2099

TO-UPDATE-TIME 23:59

PATH-ID ALL

For Purge and Housekeeping operations:

ARCHIVE NO

Valid Criteria Values

Path ID

A 4-character identification used to restrict maintenance by Path ID.

ALL
 XXXX

Archive

This controls whether an archive is to be created for deleted change records.

NO
 YES

From-Update-Date

Specifies the date that the update was applied to the Request record. Starts the range. Used with To-Update-Date.

MM/DD/YYYY

From-Update-Time

Specifies the time that the update was applied to the Request record. Starts the range. Used with To-Update-Time.

HH:MM

Retention-Days

Specifies the number of days that have elapsed since the update was applied.

000 - 999

To-Update-Date

Specifies the date that the update was applied to the Request record. Ends the range. Used with From-Update-Date.

MM/DD/YYYY

To-Update-Time

Specifies the time that the update was applied to the Request record. Ends the range. Used with From-Update-Time.

HH:MM

Start-Up Utilities

Overview

This chapter describes Sterling Gentran:Realtime start-up utilities.

This chapter contains the following topics:

| Topic | Page |
|-------------------------------------|---------------------|
| Report Initiation.....EDIR312 | 10-2 |
| Request File Initiation | EDIR900 10-3 |
| Activity Initiation | EDIR901 10-4 |
| Automatic System Start-Up..... | EDIRPLT 10-5 |
| Remote System Stop/Start | EDIRSTOP 10-6 |
| System Status Toggle Program..... | EDIETOGL..... 10-8 |
| Batch Wait Utility | EDIWAITD..... 10-9 |

Report Initiation

EDIR312

Purpose

The Sterling Gentran:Realtime Report Initiation program (EDIR312) creates a temporary storage queue (TSQ) used by the Sterling Gentran:Realtime background CICS programs to write to the report files. It is also used for recovery purposes to recreate the pointer on the Report Detail file.

Operation

The Online Scanner Initiator program (EDIEOSI) invokes the Report Initiation program during Sterling Gentran:Realtime startup.

Inputs

None.

File Access

| File Description | DDname | File Access |
|---------------------|--------|------------------|
| Report Control file | EDIRRC | Read and update. |
| Report Detail file | EDIRRD | Read. |

Reports

None.

Request File Initiation

EDIR900

Purpose

The Request File Initiation program (EDIR900) creates TSQs used by the Sterling Gentran:Realtime background CICS programs for control information.

Operation

The Online Scanner Initiator program (EDIEOSI) invokes the Request File Initiation program during Sterling Gentran:Realtime startup.

Inputs

None.

File Access

| File Description | DDname | File Access |
|------------------|--------|-------------|
| Request file | EDIREQ | Read. |

Reports

None.

Activity Initiation

EDIR901

Purpose

The Activity Initiation program initializes the Sterling Gentran:Realtime Activity file (EDIRAPF). This program sets the totals for all paths to zero.

Operation

The Online Scanner/Initiator program (EDIEOSI) invokes the Activity Initiation program during Sterling Gentran:Realtime start-up.

Inputs

None.

File Access

| File Description | DDname | File Access |
|---|---------|------------------|
| Sterling Gentran:Realtime Activity file | EDIRAPF | Read and update. |

Reports

None.

Automatic System Start-Up

EDIRPLT

Purpose

The Automatic System Start-up program (EDIRPLT) starts the Sterling Gentran:Realtime system during CICS initialization.

Operation

The CICS Program Load Table (PLT) invokes the Automatic System Start-up program, which then issues a CICS START for transaction EDII.

Inputs

None.

File Access

None.

Reports

None.

Remote System Stop/Start

EDIRSTOP

Purpose

The Remote System Stop/Start program (EDIRSTOP) disables and stops Sterling Gentran:Realtime, then enables and restarts the system.

Operation

The program is invoked by the entering of the Transaction ID EDIS from a CICS terminal or by linking from another program. EDIRSTOP then reverses the system status:

- If the system status is *enabled*, EDIRSTOP *disables* the system. After the Online Scanner Initiator (EDIEOSI) identifies that the system has been disabled by EDIRSTOP, it issues a Quiet Shutdown message.
- If the system status is *disabled*, EDIRSTOP *enables* the system.
- If a translation is in process, (identified on the Sterling Gentran:Realtime Activity screen), you receive a message and the Stop/Start function is not performed.

When the transaction ID starts the program, EDIRSTOP sends a message to the screen and requests that a confirmation key be entered. This request is optional. To bypass confirmation, enter EDIS Y. The intention of this transaction is to enable operations personnel to shut down the system without signing onto EDI. Access to this transaction should be restricted through user security.

Inputs

Inputs are passed from the screen or from linkage (if used).

File Access

| File Description | DDname | File Access |
|---|---------|------------------|
| Online Control file | EDIOCF | Read and update. |
| Sterling Gentran:Realtime Activity file | EDIRAPF | Read. |

Reports

None.

Control Card Options

If you wish to shut down the Realtime from a user written program, use the following 80-byte layout to link to EDIRSTOP.

```

01 COMMAREA.
  03 RECEIVE-AREA.
    05 INPUT-TRANSID.
      10 INPUT-SYSIMAGE PIC X(03) VALUE 'EDI'.
      10 INPUT-SUFFIX   PIC X(01) VALUE SPACES.

    05 FILLER           PIC X(01) VALUE SPACES.

    05 BYPASS-CONFIRMATION PIC X(01) VALUE 'Y'.
  03 SYSTEM-STATUS     PIC X(01) VALUE SPACES.

  03 PROGRAM-IMAGE     PIC X(03) VALUE 'EDI'.
  03 RETURN-CODE       PIC 9(02) VALUE ZERO.
  03 MESSAGE           PIC X(68) VALUE SPACES.

```

Control Card Field Descriptions

SYSTEM-STATUS

Contains the value of the system status after the operation is completed. Valid values are:

| | | |
|---|---|-----------|
| E | = | Enabled |
| D | = | Disabled. |

RETURN-CODE

Indicates whether the operation performed correctly or was not performed. Valid values are:

| | | |
|-------|---|---------------------------------------|
| zeros | = | The operation is performed correctly. |
| 16 | = | The operation is not performed. |

MESSAGE

Contains text related to any problems. This field displays a value only if the RETURN-CODE field has a value of 16.

System Status Toggle Program

EDIETOGL

The System Status Toggle program (EDIETOGL) toggles the system status. This process enables the system to be shut down gracefully, allowing active processing to complete before the system is disabled. This process can also be used to START (enable) a system that has been stopped (disabled).

Operation

The EDIX transaction executes this program. Batch processes use System Status Toggle to shut down the system for maintenance and then restart the system after the maintenance has been performed. The customer adds two steps around their maintenance job. Each step executes a utility program that starts the EDIX transaction in the CICS region.

Note: The specific utility program is system-dependent. You should consult your systems programmers to determine which utility to use.

You can include specific parameters with the transaction to ensure shutdown and restart of the system. For example, if EDIX-X is entered, then the Toggle program always changes the system status to disabled and stops the system. If EDIX-S is entered, then the Toggle program always changes the system status to enabled and starts the system. The EDIX transaction with no parameters always toggles between enabled and disabled.

Processing

The program checks the current status of the system and then sets the status according to the parameters supplied with it. Next, the program starts the EDII transaction (which runs the Online Scanner Initiator – EDIEOSI).

Files Used

Input

| Name | Description |
|---------|-------------------|
| EDICFGQ | Configuration TSQ |

Output

| Name | Description |
|--------|----------------------|
| EDIOCF | Online Control file |
| EDIICF | In-Core Control file |

Batch Wait Utility

EDIWAITD

The Batch Wait Utility program is used to delay the execution of batch programs that must close/deallocate the online files for maintenance until all online activity has ended and the system has been disabled.

Operation

The JCL to execute this program can be found in the JCL member EXECWAIT

Processing

The EDIWAITD program reads the OCF file and checks the system status. If the system status is “Q”, it goes into a wait state for an interval equal to the scanner interval, and repeats the check until the system has been disabled.

An optional input parameter enables you to indicate a maximum wait time in seconds. This allows you to limit the length of time that the EDIWAITD program will wait. If the maximum wait time is exceeded, the program ends with a return code of 8.

There are three return codes: 0=System is now disabled, 8=Maximum wait interval exceeded, and 16=System is enabled (e.g. it will not become disabled without intervention). EDIWAITD must run after the EDIX transaction (program EDIETOGL) has been started. The EDIX transaction can be started manually by entering it on a CICS screen or from a batch step. EDIWAITD must be executed before other steps that will use the online files. Subsequent steps should check for the 0 return code before executing.

Input

| Name | Description |
|--------|-----------------|
| EDIOCF | Online Control |
| SYS030 | Input Parameter |

Output

This program produces no output.

Control Card Options

Control cards specify the maximum wait time this program will wait.

| Position | Length | Format | Field Name | Values/Edits |
|----------|--------|--------|--------------------------|--|
| 01-11 | 11 | AN | Operation | MAXTIME= |
| 12-15 | 4 | AN | Max Wait Time in seconds | Numeric value between 0000 and 9999 to indicate the maximum wait time for the EDIWAITD program |

Copy Utilities

Overview

This chapter describes Sterling Gentran:Realtime copy utilities.

This chapter contains the following topics:

| Topic | Page |
|--|-------------|
| Online Application Data ID CopyEDIR060 | 11-2 |
| Online Translation Table CopyEDIR076 | 11-3 |
| Online Option and Path CopyEDIR077 | 11-4 |
| Online Transaction Mapping CopyEDIR080 | 11-5 |
| Online Partner Xref CopyEDIR086 | 11-6 |
| Online Partner CopyEDIR087 | 11-7 |

Online Application Data ID Copy

EDIR060

Purpose

The Online Application Data ID Copy program (EDIR060) provides the facility to copy from one CICS region to another and/or from one system image to another.

Operation

The program is called (LINKED) by the Online Copy Maintenance program (EDIR860). It reads from the source files and writes the records to the target files.

If the change audit feature is being used, a record will be written to the Application Change Audit file indicating the copy of the Application Data ID.

Note: This program is provided by Sterling Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 User Guide* for information about the screen.

Inputs

Inputs are passed from the Online Copy Maintenance screen.

File Access

| File Description | DDname | File Access |
|----------------------------|---------|-----------------|
| Gentran Application Header | APPHDR | Read and write. |
| Gentran Application Record | APPRCT | Read and write. |
| Gentran Application Field | APPFLD | Read and write. |
| Application Change Audit | EDIACHA | Write. |

Reports

None.

Online Translation Table Copy

EDIR076

Purpose

The Online Translation Table Copy program (EDIR076) provides the facility to copy from one CICS region to another and/or from one system image to another.

Operation

The program is called (LINKED) by the Online Copy Maintenance program (EDIR860). It reads from the source files and writes the records to the target files.

If the change audit feature is being used, a record will be written to the Code Table Change Audit file indicating the copy of the Code Table.

Note: This program is provided by Sterling Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 User Guide* for information about the screen.

Inputs

Inputs are passed from the Online Copy Maintenance screen.

File Access

| File Description | DDname | File Access |
|------------------------------|---------|-----------------|
| Gentran Codes | CDECDE | Read and write. |
| Gentran Codes Define | CDEDEF | Read and write. |
| Gentran Codes Data | CDEDAT | Read and write. |
| Gentran Codes Validation | CDEVAL | Read and write. |
| Code Table Change Audit file | EDICCHA | Write. |

Reports

None.

Online Option and Path Copy

EDIR077

Purpose

The Online Option and Path Copy program (EDIR077) provides the facility to copy either option or path information from one CICS region to another and/or from one system image to another.

Operation

The program is called (LINKED) by the Online Copy Maintenance program (EDIR860). It reads from the source files and writes the records to the target files.

If the change audit feature is being used, a record will be written to the OCF Change Audit file indicating the copy of the Option ID or the Request Change Audit file indicating the copy of the Path ID.

Inputs

Inputs are passed from the Online Copy Maintenance screen.

File Access

| File Description | DDname | File Access |
|---------------------------|---------|-----------------|
| Online Control file | EDIOCF | Read and write. |
| Request file | EDIREQ | Read and write. |
| OCF Change Audit file | EDIOCHA | Write. |
| Request Change Audit file | EDIQCHA | Write. |

Reports

None.

Online Transaction Mapping Copy

EDIR080

Purpose

The Online Transaction Mapping Copy program (EDIR080) provides the facility to copy from one CICS region to another and/or from one system image to another.

Operation

The program is called (LINKED) by the Online Copy Maintenance program (EDIR860). It reads from the source files and writes the records to the target files.

If the change audit feature is being used, a record will be written to the Transaction Change Audit file indicating the copy of the Transaction Map.

Note: This program is provided by Sterling Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 User Guide* for information about the screen.

Inputs

Inputs are passed from the Online Copy Maintenance screen.

File Access

| File Description | DDname | File Access |
|-------------------------------|---------|-----------------|
| Gentran Transaction Header | TRNHDR | Read and write. |
| Gentran Transaction Segment | TRNSEG | Read and write. |
| Gentran Transaction Element | TRNELE | Read and write. |
| Gentran Application Link | APPTLR | Read and write. |
| Transaction Change Audit file | EDITCHA | Write. |

Reports

None.

Online Partner Xref Copy

EDIR086

Purpose

The Online Partner Xref Copy program (EDIR086) provides the facility to copy from one CICS region to another and/or from one system image to another.

Operation

The program is called (LINKED) by the Online Copy Maintenance program (EDIR860). It reads from the source files and writes the records to the target files.

If the change audit feature is being used, a record will be written to the Partner Change Audit file indicating the copy of the Cross Reference ID.

Inputs

Inputs are passed from the Online Copy Maintenance screen.

File Access

| File Description | DDname | File Access |
|--------------------------------------|---------|-----------------|
| Gentran Partner Cross-reference file | EDIPREF | Read and write. |
| Partner Change Audit file | EDIPCHA | Write. |

Reports

None.

Online Partner Copy

EDIR087

Purpose

The Online Partner Copy program (EDIR087) provides the facility to copy from one CICS region to another and/or from one system image to another.

Operation

The program is called (LINKED) by the Online Copy Maintenance program (EDIR860). It reads from the source files and writes the records to the target files.

If the change audit feature is being used, a record will be written to the Partner Change Audit file indicating the copy of the Partner Profile.

Note: This program is provided by Sterling Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 User Guide* for information about the screen.

Inputs

Inputs are passed from the Online Copy Maintenance screen.

File Access

| File Description | DDname | File Access |
|--|---------|------------------|
| Gentran Partner file | EDIPART | Read and write. |
| Gentran Trading Partner Inbound Control Number file | EDIPINB | Read and update. |
| Gentran Trading Partner Outbound Control Number file | EDIPOTB | Read and update. |
| Partner Change Audit file | EDIPCHA | Write. |

Reports

None.

Overview

This chapter describes Sterling Gentran:Realtime User Exits.

This chapter contains the following topics:

| Topic | Page |
|---|-------------|
| Online Shell Path User Exit Interface.....EDIRXIT1 | 12-2 |
| Online Error User Exit.....EDIRXIT2 | 12-6 |
| Online Mapper User Exit Interfaces EDIXIT3, EDIXIT4, EDIXIT5, EDISGXT, EDIRENV EDIVING..... | 12-8 |
| Online Shell Path User Tracking Exit Data CaptureEDIRCAP | 12-11 |

Online Shell Path User Exit Interface

EDIRXIT1

Purpose

The Online Shell Path User Exit Interface (EDIRXIT1) enables monitoring of the processing of Sterling Gentran:Realtime by receiving information at critical points within the process.

Operation

This exit is called:

- Immediately before the first link to the Sterling Gentran:Realtime core system
- Immediately after the last link to the Sterling Gentran:Realtime core system
- Before and after each link to a core program.

The exit receives:

- The name of the temporary storage queue (TSQ) in which the data has been stored
- Names of fields identifying it as the start or end of the process
- Indication whether it is inbound or outbound.

The Shell program links to the user program at the start of the process, immediately before transferring to any core program. If there are no errors, it links to the program at the end.

Parameters

The Online Shell Path User Exit Interface parameters are described below (see copybook member RTEELS):

Values Passed to User Exit:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|-------------------------------|
| 0001 – 0001 | 1 | AN | Step Indicator |
| 0002 – 0002 | 1 | AN | Process Indicator |
| 0003 – 0010 | 8 | AN | Ready to Execute Program Name |
| 0011 – 0054 | 44 | AN | Program Description |
| 0055 – 0062 | 8 | AN | TSQ Name |
| 0063 – 0082 | 20 | AN | User Exit Data |

User Exit Return Values:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|----------------------|
| 0083 – 0084 | 2 | AN | Return Error Level |
| 0085 – 0184 | 100 | AN | Return Error Message |
| 0185 – 0264 | 80 | AN | User Pass Thru Area |

Note: The sample program EDIRXIT1 in the source library provides an example of coding for this exit.

Field Descriptions**Step Indicator**

A 1-position alphabetic field set by the Shell program to indicate whether Sterling Gentran:Realtime has executed. Valid values are:

- S** = Start of the process. Sterling Gentran:Realtime has not processed yet (e.g., the Shell program has just received control from the gateway).
- E** = End of the process. Sterling Gentran:Realtime has processed (e.g., the Shell program has just finished processing all the translation steps and is about to link to the gateway).
- blank** = About to execute a core process. The Shell program is about to execute the program named in the Program to be Executed field.

Process Indicator

A 1-position alphabetic field that identifies the type of process being performed. Valid values are:

- I** = Inbound processing
- O** = Outbound processing

Execute Pgm Name

An 8-position alphanumeric field that indicates the name of the program about to be executed or that has already been processed.

Execute Pgm Desc.

A 44-position description of the program.

TSQ Name

An 8-position alphanumeric field that indicates the name of the TSQ in which the data is stored.

Depending upon the step and the process being performed, the data can be either application or EDI standards data, as indicated in the following table.

| When the Step value is ... | And the Process value is... | Then: |
|----------------------------|-----------------------------|---|
| S | O | Application data is present on the TSQ. |
| E | O | EDI data is present on the TSQ. |
| S | I | EDI data is present on the TSQ. |
| E | I | Application data is present on the TSQ. |
| blank | | The data can be application, EDI, or intermediate data on the TSQ, depending on the program about to be executed. |

User Exit Data

A 20-character alphanumeric field. containing data the user has entered on the Shell Path Maintenance screen. This data can be used to provide information to the program to distinguish one path from another.

Return Error Level

A 2-character numeric field. This information is passed back to the Shell program by the exit. It can be used to pass an error back to the Sterling Gentran:Realtime system and stop the translation process from continuing. Valid values are:

00 = Normal completion
16 = Error - stop processing

Return Error Msg.

A 100-character alphanumeric field. This information is passed back to the Shell program by the exit. It is the message that accompanies the error level.

User Pass Thru Area

An 80-character alphanumeric field holding the information that the user sent in the Pass Thru Area of the linking to the gateway program. If no area was passed from the initial user program, this area contains spaces.

Interface Design Considerations

The following list details important items to consider when designing programs for the Online Shell Path User Exit Interface.

- Do not use this exit to change data on the TSQ, especially not the data at the start of the process.
- You can use this exit to back up critical data (such as a specific transaction or trading partner) that you can identify by its path.
- You can use this exit to monitor the system (send a message to announce specific data has been received or sent).

Online Error User Exit

EDIRXIT2

Purpose

The Online Error User Exit program (EDIRXIT2) can optionally be used to pass error notification to user systems.

Operation

When activated through any of the options, this exit is called (LINKED) when an error is encountered for the specified process. The program should take any required action and return.

Control Structure

This section describes the control structure that Sterling Gentran:Realtime uses with the Online Error User Exit, as well as the control structure that the exit returns to Sterling Gentran:Realtime.

- Sterling Gentran:Realtime LINKs to the Online Error User Exit program, specified in the option, when the system encounters an error.
- The Online Error User Exit program performs its processing using the data specified on the option.
- The Online Error User Exit then RETURNs to Sterling Gentran:Realtime.

Note: The sample program EDIRXIT2 in the source library provides an example of coding for this exit.

Parameters

The parameters passed to the Online Error User Exit are described below.

Values Passed to User Exit:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|---|
| 0001 – 0005 | 5 | ZD | Error Message Number |
| 0006 – 0025 | 20 | AN | Error Exit Data |
| 0026 – 0028 | 3 | ZD | Immediate, Queue, or Schedule Option Number |
| 0029 – 0031 | 3 | AN | System Image |
| 0032 – 0032 | 1 | AN | Dash |
| 0033 – 0037 | 5 | AN | Error Number |
| 0038 – 0038 | 1 | AN | Filler |
| 0039 – 0039 | 1 | AN | Status |
| 0040 – 0041 | 2 | AN | Return Code |
| 0042 – 0148 | 107 | AN | Freeform Message |

Field Descriptions

Values to User Exit:

Error Message Number

Contains the 5-digit error number that the system generated for the error encountered. This number is the Message Number that can be found on the ERRCTL (Error Message and Control file). Refer to the Message Maintenance screen (EDIM213) and the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 System Messages Guide* for more information.

Error Exit Data

A 20-character data area as specified in the Online Control file for this option. This information is the data entered on the Options maintenance screens.

Immediate, Queue, or Schedule Option Number

The 3-digit Option Number that was being processed when the error occurred.

System Image

A 3-character alphanumeric field containing the system image of the system calling the exit.

Dash

A 1-character field identifying the source of the message.

Error Number

A 5-character field containing the error number encountered.

Status

A 1-character field containing the status.

Return Code

A 2-character error return code.

Freeform Message

A 107-character alphanumeric field containing the text message area.

Interface Design Considerations

The following list details items to consider when designing programs for the Online Error User Exit.

- The error exit data should be set up on the options screens so that the particular error exit can be distinguished. This data is especially important if one program is being used for multiple exits.
- You can use the value of the path number to identify whether an immediate option (values 200 to 399), a queue option (values of 001 to 999), or a schedule option (values 400 to 499) is being processed.

Online Mapper User Exit Interfaces

**EDIXIT3, EDIXIT4,
EDIXIT5, EDISGXT,
EDIRENV, EDIVING**

Purpose

Sterling Gentran:Realtime can handle exceptional situations that regular mapping cannot resolve. Examples of two such situations are accessing files outside of the system and accessing nonstandard data conversions.

Several different exit programs (EDIXIT3, EDIXIT4, EDIXIT5, EDISGXT, EDIRENV, EDIVING) enable you to execute user-written routines to handle exceptional situations. You can use the different exit programs to perform operations on the data at the:

- Start of a mapping process
- End of a mapping process
- Envelope generation level
- Application record level
- Segment level
- Element level

See the section “Processing Option – User Exits” in Chapter 2, “Inbound Processing Programs,” in the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 Technical Reference Guide* for more information about the user exit interfaces.

Operation

To specify these exits, you must use the following screens:

- For **start and end processing**, you use the Sterling Gentran:Realtime Mapper parameters screens:
 - Outbound Mapper-1 Path Maintenance screen (EDIM83D)
 - Inbound Mapper-1 Path Maintenance screen (EDIM832).
- For **envelope processing**, you use the Outbound Mapper-3 Path Maintenance screen (EDIM83E).
- For **application record processing**, you use the mapping application screen, Application Records screen (EDIM553).

- For **segment and element level processing**, you use the transaction mapping screens:
 - Segments Mapping screen (EDIM504)
 - Extended Element Mapping Inbound screen (EDIM513)
 - Extended Element Mapping Outbound screen (EDIM508).

Communications Areas

Two different versions of the communications areas are used in these exits. The five sample programs provided in the Sterling Gentran:Realtime Utility Source library show the linkage used to communicate with these exits.

- EDIXIT3 is a Version 1 Element level exit.
- EDIXIT4 is a Version 1 Segment level exit.
- EDIXIT5 is a Version 2 Application level exit
- EDISGXT is a Version 2 Element and Segment level exit.
- EDIRENV is a Version 2 Envelope processing level exit
- EDIVING is a Version 2 Envelope processing level exit

Enabling Version 2 Exits

To enable the Version 2 level exits, you must set the User Exit Version field values in the mapper path parameters screens, as illustrated in the following diagrams.

For Outbound

```

EDIM83E _____ OUTBOUND MAPPER-3 PATH MAINTENANCE      XXX  06/01/2011
                                                    12:00:00

Path ID.....: 001M  OUTBOUND TO CONNECT EXAMPLE

Default Partner ID.....: TESTS_____ Qual: ZZ__
Default User ID.....:  TESTR_____ Qual: ZZ__
Partner Read Switch....: 0 (0=Part/1=Xref/2=PartP/3=XrefP)
Partner Print Switch...: N (Y=Print/N=No Print)
Gen MaxLen GS Time SW.: _ (Y/Blank)
Blank Partner Error SW.: Y (Y/1/Blank)
Default Outbound Ver...: _____
Outbound Env User Exit.: OBEXIT_
User Exit Version.....: 2 (1=Old Linkage/2=New Linkage for User Exit)

                                                    Last Update Date: 06/01/2011
                                                    Time: 12:00:00
                                                    User: SCI

Enter PF1=Help          PF3=Exit PF4=Dir          PF6=Shell
      PF7=Map2 PF8=Map4          PF10=Updt
    
```

For Inbound

```

EDIM84K _____ INBOUND MAPPER-2 PATH MAINTENANCE      XXX 06/01/2011
                                                    12:00:00

Path ID.....: 203M X12 I/B IVP (MAPPER PARMS - IMM 203)

Document Tracking.....: 1          (1=Prt Error Audit/2=Prt Audit all)
Support Quote Switch...: _          (Y/Blank)
Verify Map Version.....: _          (Y=Verify Partner Specific Map)
Partner Print Switch...: N          (Y=Print/N=No Print)
First Segment Mandatory: _          (Y/X/Blank)
User Exit Version.....: 2          (1=Old Linkage/2=New Linkage for User Exit)

                                                    Last Update Date: 06/01/2011
                                                    Time: 12:00:00
                                                    User: SCI

Enter PF1=Help          PF3=Exit PF4=Dir          PF6=Shell
      PF7=Map1 PF8=Map3          PF10=Updt PF11=Del

```

See the section “Processing Option – User Exits” in Chapter 2, “Inbound Processing Programs,” in the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 Technical Reference Guide* for a complete description of the fields that are passed in these exits.

Interface Design Considerations

When designing programs for the Online Mapper User Exits, remember that Mapper exits that are already setup for batch Sterling Gentran *cannot* be used for Sterling Gentran:Realtime. The exits must be written to perform on a CICS system.

Online Shell Path Capture Exit

EDIRCAP

Purpose

The Online Shell Path Capture Exit program (EDIRCAP) enables you to monitor Sterling Gentran:Realtime processing by receiving information at critical points within the process.

Operation

This exit is called:

- Immediately before the first link to the Sterling Gentran:Realtime core system
- Immediately after the last link to the Sterling Gentran:Realtime core system
- Before and after each link to a core program

The exit receives the name of the TSQ in which the data has been stored, the fields identifying it as the start or end of the process, and indication of whether it is inbound or outbound.

The Online Shell Path Capture Exit program captures production data that you can use in your test region to run parallel tests. To activate the program, type the program name in the Exit Pgm field, and type the queue file number in the Pgm Data field on the Additional Shell Path Maintenance screen (EDIM84B).

Note: We recommend that you use multiple queue files and that each holds a different type of data.

Using the Program

To use the EDIRCAP program to capture data onto a queue file, add the program to your CICS region. Then, enter the program name in the Exit Pgm field on the Additional Shell Path Maintenance screen; enter the queue file number in the first three characters of the Exit Data field.

The following example illustrates the completed Additional Shell Path Maintenance screen.

```

EDIM84B _____ ADDITIONAL SHELL PATH MAINTENANCE XXX 06/01/2011
                                                    12:00:00

Path ID.....: 203S X12 I/B IVP (SHELL PARMS - IMM 203)
Process Indicator...: I (I=Inbound/O=Outbound)
Current Steps... EDITOR /MAPPER /ACK EDT /

Tracking Exit *****
Exit Pgm.....: EDIRCAP_ * Transfer to: _ *
Exit Data.....: 012_____ * 1. General Path Options *
Reporting * 2. Translation Steps *
Process Name.....: _____ * 3. Mapper Parameters *
Performance Related Parm * 4. Editor Parameters *
Write Summary....: _ (N=No Summary file) * 5. CONNECT Parameters *
Timer Switch.....: _ (Y=Produce Timer Rpt) * 6. Inbound Appl Extract *
* 7. Acknowledgements *
*****

Last Update Date....: 06/01/2011 Time: 12:00:00 User: SCI

Enter PF1=Help PF3=Exit PF4=Dir PF5=Transfer
PF10=Updt PF11=Del
    
```

Parameters

The Online Shell Path User Tracking Exit Data Capture program parameters are described below (see copybook member RTEELS).

Values Passed to User Exit:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|-------------------------------|
| 0001 – 0001 | 1 | AN | Step Indicator |
| 0002 – 0002 | 1 | AN | Process Indicator |
| 0003 – 0010 | 8 | AN | Ready to Execute Program Name |
| 0011 – 0054 | 44 | AN | Program Description |
| 0055 – 0062 | 8 | AN | TSQ Name |
| 0063 – 0082 | 20 | AN | User Exit Data |

User Exit Return Values:

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|----------------------|
| 0083 – 0084 | 2 | AN | Return Error Level |
| 0085 – 0184 | 100 | AN | Return Error Message |
| 0185 – 0264 | 80 | AN | User Pass Thru Area |

Note: The test program EDIRCAP is located in the UTILITY.SOURCE library.

Field Descriptions

Step Indicator

A 1-position alphabetic field set by the Shell program to indicate whether Sterling Gentran:Realtime has executed. Valid values are:

| | | |
|--------------|---|---|
| S | = | Start of the process; Sterling Gentran:Realtime has not processed yet (e.g., the Shell program has just received control from the gateway). |
| E | = | End of the process; Sterling Gentran:Realtime has processed (e.g., the Shell program has just finished processing all the translation steps and is about to link to the gateway). |
| blank | = | About to execute a core process. The Shell program is about to execute the program named in the Program to be Executed field. |

Process Indicator

A 1-position alphabetic field that identifies the type of process being performed. Valid values are:

| | | |
|----------|---|--|
| I | = | Inbound processing |
| N | = | Inbound process (a version of Mapper) |
| O | = | Outbound processing |
| U | = | Outbound process (a version of Mapper) |

Program to be Executed

An 8-position alphanumeric field indicating the name of the Sterling Gentran:Realtime core program that is about to be executed.

Description of Program to be Executed

A 44-position alphanumeric field that holds the description of the Sterling Gentran:Realtime core program that is about to be executed.

Execute Pgm Name

An 8-position alphanumeric field that indicates the name of the program about to be executed or that has already been processed.

Execute Pgm Desc.

A 44-position description of the program.

TSQ Name

An 8-position alphanumeric field that indicates the name of the TSQ in which the data is stored.

Depending upon the step and the process being performed, the data can be either application or EDI standards data, as indicated in the following table.

| When the Step value is ... | And the Process value is... | Then: |
|----------------------------|-----------------------------|---|
| S | O | Application data is present on the TSQ. |
| E | O | EDI data is present on the TSQ. |
| S | I | EDI data is present on the TSQ. |
| E | I | Application data is present on the TSQ. |
| blank | | The data can be application, EDI, or intermediate data on the TSQ, depending on the program about to be executed. |

User Exit Data

A 20-character alphanumeric field. This information is the data that the user has entered on the Shell Path Maintenance screen. This data can be used to provide information to the program to distinguish one path from another.

Return Error Level

A 2-character numeric field. This information is passed back to the Shell program by the exit. It can be used to pass an error back to the Sterling Gentran:Realtime system and stop the translation process from continuing. Valid values are:

00 = Normal completion
16 = Error - stop processing

Return Error Msg.

A 100-character alphanumeric field containing the message that accompanies the error level. This information is passed back to the Shell program by the exit.

User Pass Thru Area

An 80-character alphanumeric field holding the information that the user sent in the Pass Thru Area of the linking to the gateway program. If no area was passed from the initial user program, this area contains spaces.

Test Programs

Overview

This chapter describes Sterling Gentran:Realtime test programs.

This chapter contains the following topics:

| Topic | Page |
|---|-------------|
| Installation Checkout Procedures Output TestEDIRTOUT..... | 13-2 |
| Sample Online ApplicationEDIRSOA..... | 13-3 |
| Online Test Program.....EDITPGM..... | 13-6 |
| Batch Test Load ProgramEDITPGMX..... | 13-8 |
| Results Program.....EDIRSLTS..... | 13-10 |
| Batch Results ProgramEDIRSLTX..... | 13-12 |

Installation Checkout Procedures Output Test

EDIRTOUT

Purpose

The Installation Checkout Procedures Output Test program (EDIRTOUT) performs one of the following based on user-specified parameters:

- Writes the results of data translation (of EDI or application data) to a temporary storage queue (TSQ).
- Writes the results of data translation (of EDI or application data) to a user-specified queue file.
- Causes a data translation error level code of 16 to occur.

Operation

The Installation Checkout Procedures Output Test program (“Output Test program”) is initiated by entering the value EDIRTOUT in the Destination User Pgm field on the General Shell Path Maintenance screen.

Once all data translation processing has occurred, the Outbound Communications gateway or the Inbound Applications gateway links to the Output Test program.

When the value NODELETE is entered in the Destination TSQ Name field, the Output Test program writes the results of data translation to a TSQ. The user can then browse this TSQ via the CICS transID CEBR.

When the value EDI2Qnnn is entered in the Destination TSQ Name field, the Output Test program writes the results of data translation to the queue file specified as nnn. The user can then view this queue file.

When the value BADCODE is entered in the Destination TSQ Name field, the Output Test program causes a data translation error level code of 16 to occur. This allows testing of user-error handling routines.

Inputs

Subprograms Called

- EDIEOOG – Online Output gateway
- EDIR999 – Application Log Interface

File Access

None.

Reports

None.

Sample Online Application

EDIRSOA

Purpose

The Sample Online Application program (EDIRSOA) is used during the installation verification process to confirm the installation process and to demonstrate the processes that can be performed with the Sterling Gentran:Realtime system. This program is located in the Utility.Source file and can be used as an example of the linkage areas needed to interface with many of the gateways.

Operation

This program is executed by entering the test transaction ID EDIT on a CICS terminal, by entering the transaction ID in the Schedule options or by having the program entered in the APPL PROG field on the Queue Options screen (EDIM303).

Overview

This program verifies whether it has been started by the Online Input gateway (EDIEOIG) from a queue file option, or if it has been started by the scheduler options, or if it has been started by the transaction EDIT. The program then fills the appropriate linkage areas for the process it is to execute (i.e. writing to a queue file via the Online Output gateway), initiating an immediate outbound translation, an Immediate inbound translation or initiating the separator process.

File Access

| File Description | DDname | File Access |
|--------------------|----------|-------------|
| Inbound Test data | EDIDAT | Read. |
| Inbound Test data | EDIDAT1 | Read. |
| Inbound Test data | EDIDAT2 | Read. |
| Outbound Test data | EDIAPPL | Read. |
| Outbound Test data | EDIAPPL1 | Read. |
| Outbound Test data | EDIAPPL2 | Read. |

Parameters

For schedule options, the interface program retrieves the following set of parameters to use in its processing and to pass to the gateways. A copybook member (EDIRSCHD) has been provided with Sterling Gentran:Realtime that can be used in the interface programs. The following table describes the parameter list.

Values Passed to Interface

| Record Position | Length | Format | Field Name |
|-----------------|--------|--------|------------------------|
| 0001 – 0003 | 3 | AN | System Image ID |
| 0004 – 0006 | 3 | AN | Program Image ID |
| 0007 – 0009 | 3 | N | Schedule Path ID |
| 0010 – 0017 | 8 | AN | Online Program |
| 0018 – 0018 | 1 | AN | Trace Indicator |
| 0019 – 0026 | 8 | AN | User Exit Program Name |
| 0027 – 0046 | 20 | AN | User Exit Data |

Field Descriptions

Values Passed to Interface:

System Image

A 3-character field used to indicate the system image ID. Valid values are any three alphanumeric characters, however, the first character must be alphabetic.

Program Image

A 3-character code used to indicate the program image ID. This value will be used in future releases of Sterling Gentran:Realtime, but at this time it is a constant value of EDI.

Schedule Path

A 3-character numeric field used to identify the specific schedule path that was processed by the Scanner/Initiator.

Online Program

A 1- to 8-character field used to enter the program name on the Schedule Options Maintenance screen. This name may be used by the interface program to transfer to another program for additional processing.

Trace Ind.

A 1-character field used to indicate to the program whether the trace has been enabled or disabled.

User Exit Program Name

A 1- to 8-character field used to enter the program name on the Schedule Options Maintenance screen. The user exit program receives control when the system encounters errors.

User Exit Data

The 20-character field used to enter data on the Schedule Options Maintenance screen.

For immediate options, see the sections “Outbound Application Gateway” and “Inbound Communication Gateway” in Chapter 2, “Interface Programs” in this guide.

For queue options, see the section “Online Output Gateway” in Chapter 2, “Interface Programs” in this guide.

Online Test Program

EDITPGM

Purpose

The Online Test program (EDITPGM) reads data from the EDITDATA file and begins Sterling Gentran:Realtime inbound or outbound translations or queue file writes.

This program is intended for use in a test region so that you can process data through Sterling Gentran:Realtime without having to use your own programs.

Operation

Run this program using the EDIK test transaction. When executing the transaction, parameters are provided that instruct the program to either start an inbound translation, an outbound translation, a separator process or a queue file write. Also, parameters specify the option to use in the process and which set of data to read from the EDITDATA file.

Inputs

The command format is:

EDIK P A TESTDATA 200 B SIM PIM

Note: This layout shows spaces between the fields. When you type it on a CICS screen, there are no spaces.

Where:

| Columns | Field Content | Description |
|---------|---|--|
| 01 – 04 | EDIK (e.g., SIMK where SIM is the system image) | Transaction ID. |
| 05 – 05 | Possible values are: I - inbound translation O - outbound translation S - separator process Q - queue file write blank results in an outbound translation | Input process |
| 06 – 06 | Async switch value | A value of A instructs the program to run the input process as an asynchronous transaction (the EDIA transaction is started to run the specific input process). This aids in testing when you need to run multiple translations and not have to wait for completion of each one. Note: The system creates a TSQ (RTEMPGM) that holds the results of each translation. |

| Columns | Field Content | Description |
|---------|-----------------------|---|
| 07 – 14 | Testdata group ID | This is the group ID that was used as the key when writing the data to the testdata file. See JCL member TESTLOAD and program EDITPGMX. |
| 15 – 17 | Option number value | This is the immediate option number or the queue file option number that the data will be processed through. If the process is the separator then this should be 600 . |
| 18 – 18 | Batch indicator value | This is used only with queue processes. If the queue file submits a batch job to process it, then setting this value to B starts the batch job immediately. |
| 19 – 21 | System image value | Enter a value for this field if the system image that you wish to run the process in is different than the one associated with the EDIK transaction. |
| 22 – 24 | Program image value | Enter a value for this field if the program image that you wish to run the process in is different than the one associated with the EDIK transaction. |

File Access

The following table lists the file access for the Online Test program.

| DDname | Description | File Access |
|----------|----------------|-------------|
| EDITDATA | Test Data file | Read |

Reports

None.

Batch Test Load Program

EDITPGMX

Purpose

The Batch Test Load program (EDITPGMX) loads data to the EDITDATA file for use with the Online Test program (EDITPGM). This data can be used to test Sterling Gentran:Realtime translations.

This program is intended for use in a test region so that you can process data through Sterling Gentran:Realtime without having to use your own programs.

Operation

JCL member TESTLOAD activates this program.

Input

Input parameters (from file PARM) tell the program the name to give the test data and whether data is being added or deleted from the EDITDATA file.

Parameters

The parameters are of the following format:

```
ADD TESTINME   EDIKI TESTINME200   INBOUND TRANSLATION
DEL TEST1NME
GET TEST2NME
```

Where:

| Columns | Field Content | Description |
|--|--|--|
| 01 – 03 | ADD, DEL, or GET | Operation to be performed. |
| 05 – 12 | Test data group name value | In the format TESTNAME. |
| The following fields are only required for the ADD operation: | | |
| 13 – 15 | Spaces | |
| 16 – 20 | Values are: EDIKI - for inbound tests. EDIKO - for outbound tests EDIKQ - for queue file tests EDIKS - for Separator tests | Transaction value. Note: Change the characters EDI to reflect your own system image. |
| 21 – 21 | Spaces | |
| 22 – 29 | Test data group name value. | This is the same as the value in columns 05-12. |

| Columns | Field Content | Description |
|---------|------------------------|--|
| 30 – 32 | Option value. | <ul style="list-style-type: none"> For EDIKI and EDIKO, this is a 3-digit immediate option number. For EDIKQ this is a 3-digit queue file number. For EDIKS this value should be 600. |
| 33 – 33 | Spaces | |
| 34 – 80 | A general description. | |

File Access

The file access for the Batch Test Load program follow:

| DDname | Description | File Access |
|----------|----------------------|------------------|
| EDITDATA | Test Data file | Write and Delete |
| SEQTEST | Sequential test data | Read |

Reports

This report generates one report that displays the function, Test Data ID, and the number of records written to the TESTDATA file.

Results Program

EDIRSLTS

Purpose

The Results program (EDIRSLTS) stores the results of any Sterling Gentran:Realtime translation onto the Results file (EDIRSLTS). This program can be used as the destination program on the General Shell Path Maintenance screen (EDIM831) to store the translated data on the VSAM file. The key to the VSAM is the CICS Task number that wrote the data to the Results file.

This program is intended only for use in a test system and is not part of the production environment. The program's source is located in the UTILITY.SOURCE library.

The batch program EDIRSLTX reads data from the EDIRSLTS file and writes it to a sequential file for batch processing.

See JCL EXECRSLT for information on how to run the batch job.

Operation

Type the program information in the appropriate fields on the General Shell Path Maintenance Screen (EDIM831) as shown in the following illustration.

```

EDIM831 8.1.9_____ GENERAL SHELL PATH MAINTENANCE          XXX 06/01/20118
                                                12:00:00

Path ID.....: 001S  OUTBOUND_TO_CONNECT_EXAMPLE_____
Process Indicator...: 0   (I=Inbound/O=Outbound)
Step.....: X   (M=Mapr/E=Editr/B=Both/X=eXtd/A=Appl)
Current Steps... MAPPER /EDITOR /CONNECT /
Destination of Translated data: *****
  User Pgm.....: EDIRSLTS          * Transfer to: _ *
  TSQ Name.....: _____        * 1. Additional Shell Parm *
  Queue File Nbr...: _____    * 2. Translation Steps   *
                                           * 3. Mapper Parameters   *
Error Handling:                               * 4. Editor Parameters   *
  Exception Pgm....: EDIR852_       * 5. CONNECT Parameters  *
Reporting:                                       * 6. Outbound EDI Extract *
  Description.....: POFILE_____   *
  Suppress Rpts....: _              *
Storage Performance:                          *
  MAP Store Sw.....: _              *****

Last Update Date....: 06/01/11  Time: 12:00:00  User: SCI

Enter PF1=Help          PF3=Exit PF4=Dir          PF5=Transfer
                        PF9=Add PF10=Updt PF11=Del

```

Input

The linkage area is the only input. The TSQ passed in the linkage area is written to the EDIRSLTS file.

Output

The Results program writes to the EDIRSLTS file.

Reports

There are no reports, but one message is written to the Log file, as shown in the following illustration.

```

Reports Exception Activity Select
EDIM304 8.2_____ ONLINE LOG DISPLAY          XXX   06/01/2018
                                           12:00:00
Start: 06/01/20118 12.00.00 Stop:          Last: 12:00:00 Scan: 0020
Filters===>  Errors Only:  _   Program: _____
Position      Task #      TranID      Time          Date          Max Count
Criteria===>  _____  _____  _____  _____  _____  0450

A   Task   Tran    Time      Date      Term   Program   Error Code
-   02075  EDIQ    12:00:00  06/01/20118  EDIRWRPT  EDI-00007-T 00
    STARTED PROCESSING: EDIRWRPT
-   02075  EDIQ    12:00:00  06/01/20118  EDIRWRPT  EDI-00007-T 00
    PROGRAM EDIRWRPT COMPILED ON 06/01/20118 AT 12.00.00  VERSION 6.6
-   02075  EDIQ    12:00:00  06/01/20118  EDIRWRPT  EDI-00007-T 00
    PROCESSING FIRST TSQ: EDIQ0103
-   02073  EDIT    12:00:00  06/01/20118  TS07  EDIRPGM  EDI-00000-I 00
    DEST USER PGM-EDIRSLTS FINISHED  COUNT: 00000050 FROM TSQ:EDI20104
-   02073  EDIT    12:00:00  06/01/20118  TS07  EDIR102  EDI-20101-I 00
    SUCCESSFUL LINK TO PROGRAM : EDIRSLTS STATUS CODE: 00 ERROR LVL: 00
-   02073  EDIT    12:00:00  06/01/20118  TS07  EDIR102  EDI-20104-I 00
    RTE GATEWAY ENDS: OUTBOUND TO USER

Enter PF1=Help          PF3=Exit          PF5=Action
      PF7=Bwd  PF8=Fwd

```

Batch Results Program

EDIRSLTX

Purpose

The Batch Results program (EDIRSLTX) retrieves the data stored on the Results file (EDIRSLTS) and writes it to a sequential file. Parameters supplied to the program identify the data to be read and the characteristics of the data.

This program is intended for use in a test system; it would not be part of a production environment. The source for the program is located in the UTILITY.SOURCE library.

Operation

The online Results program EDIRSLTS is used as the Destination User program (in the Shell Path). This program will place the data from a Sterling Gentran:Realtime translation onto the Results file. Then the Batch Results program can be used to retrieve the data from the file. Once the data is on the sequential file the user can use this file to verify the translated data.

See the JCL member EXECRSLT for running the EDIRSLTX program.

Input

Input files are:

- **PARMS**
Identifies the data to be extracted.
- **EDIRSLTS**
The source of the data

Output

The output file is SEQRSLTS, a variable-length sequential file that holds the data.

Reports

There are no reports. The system prints some display fields that identify the parameters and the number of records written.

Overview

This chapter provides file descriptions for each Sterling Gentran:Realtime system file. In some cases, files are set up through the installation of Sterling Gentran:Basic and used by Sterling Gentran:Realtime.

The installation procedure defines each of the following files for the purpose of installation verification tests. Some of these files may be associated with specific system functions you do not use. Many of them are optional and you may discard them. In some cases, a subfunction with a given function is not used and some of the files can be either left empty or discarded. (that is, the archive subfunction of databanking can be removed and the files associated with it can be discarded).

This chapter contains the following topics:

| Topic | Page |
|--|-------------|
| Breakdown of Files by Function | 14-4 |
| Sterling Gentran:Realtime Files (in alphabetical order)..... | 14-5 |
| Performing File Maintenance | 14-9 |
| File Maintenance Procedures | 14-9 |
| Error Recovery Procedures..... | 14-10 |
| Associated Data File.....EDIASCDT..... | 14-11 |
| Error Message File.....EDIERRC | 14-13 |
| Online Control File.....EDIOCF | 14-15 |
| Online Log File.....EDIOLF | 14-17 |
| Queue Files | 14-19 |
| EDIQnnn | 14-19 |
| Report Request Queue File.....EDIQ092..... | 14-22 |
| Status Update Input Queue File.....EDIQ096..... | 14-24 |
| Acknowledgment Reconciliation Input Queue File | 14-26 |
| EDIQ098..... | 14-26 |
| Acknowledgment Reconciliation Output Queue File..... | 14-29 |
| EDIQ099..... | 14-29 |
| Checkpoint File.....EDICKP | 14-31 |
| Sterling Gentran:Realtime Activity File.....EDIRAPF..... | 14-33 |
| Change Audit Databank Archive File | 14-35 |
| EDIRARCH..... | 14-35 |
| Inbound Application Databank Archive File..... | 14-36 |
| EDIRARIA | 14-36 |
| Inbound EDI Databank Archive File..... | 14-38 |
| EDIRARIE..... | 14-38 |
| Outbound Application Databank Archive File..... | 14-40 |
| EDIRAROA..... | 14-40 |

| | | |
|--|---|--------|
| Outbound EDI Databank Archive File | EDIRAROE | 14-42 |
| Sterling Gentran:Realtime Acknowledgment Reconciliation File.. | EDIRDAR | 14-44 |
| Request File | EDIREQ | 14-46 |
| Exception Processing Detail Bypass File | EDIRDBP | 14-49 |
| Exception Processing Header Bypass File | EDIRHBP | 14-51 |
| Inbound Application Databank Directory | EDIRIAA | 14-53 |
| Inbound Application Databank Change Audit File | EDIRIACA | 14-55 |
| Inbound Application Databank Message Store | EDIRIAS | 14-57 |
| Inbound EDI Databank Directory..... | EDIRIEA | 14-59 |
| Inbound EDI Databank Change Audit File | EDIRIECA | 14-61 |
| Inbound EDI Databank Link File | EDIRIEL | 14-63 |
| Inbound EDI Databank Message Store File | EDIRIES | 14-65 |
| Monitor Header File | EDIRMNH | 14-68 |
| Monitor Store File | EDIRMNS | 14-69 |
| Network Reconciliation File..... | EDIRNRC | 14-71 |
| Outbound Application Databank Directory..... | EDIROAA | 14-73 |
| Outbound Application Databank Change Audit File | EDIROACA | 14-75 |
| Outbound Application Databank Link File | EDIROAL | 14-77 |
| Outbound Application Databank Message Store..... | EDIROAS | 14-79 |
| Outbound EDI Databank Directory | EDIROEA | 14-81 |
| Outbound EDI Databank Change Audit File..... | EDIROECA | 14-83 |
| Outbound EDI Databank Message Store..... | EDIROES | 14-85 |
| Batch Number Cross Reference File | EDIRMXR | 14-88 |
| Report Control File..... | EDIRRC | 14-90 |
| Report Detail File | EDIRRD | 14-92 |
| Summary Statistics File..... | EDIRSUM | 14-94 |
| Sample Application Data Files | EDIAPPL, EDIAPPL1, EDIAPPL2 | 14-96 |
| Sample EDI Inbound Data Files | EDIDAT, EDIDAT1, EDIDAT2 | 14-97 |
| Test Data File..... | EDITDATA | 14-98 |
| Translation Results File | EDIRSLTS | 14-100 |
| Online Control Change Audit File..... | EDIOCHA | 14-101 |
| Request Change Audit File..... | EDIQCHA | 14-103 |
| Acknowledgment Reconciliation File | EDIRDAR..... | 14-106 |

Acknowledgment Overdue File.....EDIRACKO..... 14-108

Breakdown of Files by Function

The following table lists files and their specific requirements by file function. The Mandatory/Optional column indicates whether Sterling Gentran:Realtime requires the file (i.e. a required file is Mandatory; a file that is not required is Optional). The Files column lists the files used by each file function.

| File Function | Mandatory/Optional | Files |
|--|--------------------|--|
| Sample files used in testing and installation verification (mandatory during installation verification; optional for production) | M/O | EDIAPPL, 1, 2 EDIDAT, 1, 2 EDIRSLTS EDITDATA |
| Files shared with Sterling Gentran:Basic and other Sterling Gentran products | M | EDIERRC EDIOLF |
| Files for queue file processing (shared with Sterling Gentran:Control) (at least one queue file is mandatory) | M/O | EDIQnnn EDICKP EDIRJCL |
| Files used to hold the control and processing parameters for Sterling Gentran:Realtime | M | EDIOCF EDIREQ |
| File used to monitor Sterling Gentran:Realtime processing | M | EDIRAPF |
| Files used for reporting and statistics | M | EDIRRC EDIRRD EDIRSUM EDIQ092 |
| Files used for Exception processing | M | EDIRDBP EDIRHBP |
| Acknowledgment Reconciliation files | O | EDIQ098 EDIQ099 EDIRDAR |
| Databank Directory files | O | EDIRIEA EDIROEA EDIRIAA EDIROAA EDIROAL EDIRIEL |
| Associated Data file | M | EDIASCDT |
| Connect Batch Number Cross Reference | O | EDIRMXR |

| File Function | Mandatory/ Optional | Files |
|--|------------------------|--|
| Databank Message Store files | O | EDIRIES EDIROES EDIRIAS EDIROAS |
| Databank Change Audit files | O | EDIRIECA EDIROECA EDIRIACA EDIROACA |
| Databank Archive files | O | EDIRARIA EDIRARIE EDIRAROA EDIRAROE EDIRARCH |
| Databank Network Reconciliation file | O | EDIRNRC |
| File used for Databank Status Update | O | EDIQ096 |
| Separator control and processing files | O | EDIRSEP EDIRMNH EDIRMNS |
| Change Audit files | O | EDIOCHA EDIQCHA |

Sterling Gentran:Realtime Files (in alphabetical order)

Sterling Gentran:Realtime makes use of at least 32 VSAM datasets:

| VSAM Dataset Name | VSAM Dataset Title | Description |
|-------------------|-------------------------------|--|
| EDIAPPL | Sample Application Data file | Optional file containing outbound application data for testing (used to test system installation). Alternatives: EDIAPPL1, EDIAPPL2. |
| EDIASCDT | Associated Data file | Used to hold associated data that is either to be added to outbound interchanges or has been extracted from inbound interchanges. |
| EDICKP | Checkpoint file | Used to checkpoint queue usage. |
| EDIDAT | Sample EDI Inbound Data files | Optional file containing inbound EDI data for testing (used to test system installation). (Alternates: EDIDAT1, EDIDAT2.) |
| EDIERRC | Error Message file | Contains all Sterling Gentran:Realtime and Sterling Gentran:Basic system messages. |

| VSAM Dataset Name | VSAM Dataset Title | Description |
|--------------------------|--|---|
| EDIOCF | Online Control file | Contains various parameters for the Sterling Gentran:Realtime/Sterling Gentran:Control online system. |
| EDIOCHA | Online Control Change Audit file | Contains change audit tracking information for the Online Control file. |
| EDIOLF | Online Log file | Used by online programs to record errors and other trace information. |
| EDIQCHA | Request Change Audit file | Contains change audit tracking information for the Request file. |
| EDIQnnn | Queue files | Used to transport data between CICS and Batch, or CICS applications and the Sterling Gentran:Realtime translator. There may be up to 999 queue files. Queue files 091 through 99 are reserved for Sterling Gentran use. |
| EDIQ092 | Report Request Queue File | Used when the Print Switch parameter requests are set to 'Yes' – the queue file holds the print request parameters. |
| EDIQ096 | Status Update Input Queue File | Used by batch databank status to hold transactions that are used to update the databank reporting statuses. |
| EDIQ098 | Acknowledgment Reconciliation Input Queue file | Contains acknowledgments generated during batch processing. Passed to online system for reconciliation. |
| EDIQ099 | Acknowledgment Reconciliation Output Queue file | Contains unmatched acknowledgments generated online. Passed to the batch system for reconciliation. |
| EDIRAPF | Sterling Gentran:Realtime Activity file | Contains all path activity information. |
| EDIRARIA | Inbound Application Databank Archive file | Used for Sterling Gentran:Realtime Databank archiving. |
| EDIRARIE | Inbound EDI Databank Archive file | Used for Sterling Gentran:Realtime Databank archiving. |
| EDIRAROA | Outbound Application Databank Archive file | Used for Sterling Gentran:Realtime Databank archiving. |
| EDIRAROE | Outbound EDI Databank Archive file | Used for Sterling Gentran:Realtime Databank archiving. |
| EDIRDAR | Sterling Gentran:Realtime Acknowledgment Reconciliation file | Contains acknowledgment/reconciliation records generated by the Inbound Editor during online Inbound translation. |
| EDIRDBP | Exception Processing Detail Bypass file | Contains all exception data. |

| VSAM Dataset Name | VSAM Dataset Title | Description |
|--------------------------|--|---|
| EDIREQ | Request file | Contains control information for the Sterling Gentran:Realtime translator. These types of files are more closely related to parameter records from the batch environment. |
| EDIRHBP | Exception Processing Header Bypass file | Contains header information for all exception data. |
| EDIRIAA | Inbound Application Databank Directory file | Used for Sterling Gentran:Realtime Databanking. |
| EDIRIAS | Inbound Application Databank Message Store file | Used for Sterling Gentran:Realtime Databanking. |
| EDIRIEA | Inbound EDI Databank Directory file | Used for Sterling Gentran:Realtime Databanking. |
| EDIRIEL | Inbound EDI Databank Link file | Used to link EDI document to its' corresponding Application document within Sterling Gentran:Realtime databanking. |
| EDIRIES | Inbound EDI Databank Message Store file | Used for Sterling Gentran:Realtime Databanking. |
| EDIRJCL | Sterling Gentran:Realtime JCL file | Contains JCL members for special jobs submitted by Sterling Gentran:Realtime. |
| EDIRMXR | Connect Batch Number Cross Reference file | Used to hold the Connect batch number and the databank cross reference number for adding the batch number to the Sterling Gentran:Realtime outbound EDI databank. |
| EDIROAA | Outbound Application Databank Directory file | Used for Sterling Gentran:Realtime Databanking. |
| EDIROAL | Outbound Application Databank Link file | Used to link an Application document to its corresponding EDI document within Sterling Gentran:Realtime Databanking. |
| EDIROAS | Outbound Application Databank Message Store file | Used for Sterling Gentran:Realtime Databanking. |
| EDIROEA | Outbound EDI Databank Directory file | Used for Sterling Gentran:Realtime Databanking. |
| EDIROES | Outbound EDI Databank Message Store file | Used for Sterling Gentran:Realtime databanking. |
| EDIRRC | Report Control file | Contains control information for the Sterling Gentran:Realtime reports. |
| EDIRRD | Report Detail file | Contains actual Sterling Gentran:Realtime reports. |
| EDIRSLTS | Results Dataset | Used as a destination file by the program EDIRSLTS. This file is optional and is only used during testing. |

| VSAM Dataset Name | VSAM Dataset Title | Description |
|--------------------------|--|---|
| EDIRSUM | Summary Statistics file (for internal codes) | Contains summary translation statistics generated by the Sterling Gentran:Realtime Editors and Mappers. |
| EDITDATA | Test Data file | This file holds test data. The file is optional and is used during testing. JCL is provided to load this file; online transaction EDIK (program EDITPGM) can be used to run your test data through Sterling Gentran:Realtime. |

Performing File Maintenance

File Maintenance Procedures

Sterling Gentran:Realtime requires various online files to process and control the system. The majority of these files are defined by the IDCAMS utility and initially loaded by the IDCAMS REPRO command. However, you must preformat some files with a maintenance program before the system can use them. The JCL to create all these files is in the Sterling Gentran:Realtime JCL library.

Note: You must disable the Sterling Gentran:Realtime online system before redefining or initializing critical shared assets.

Online Log File

The Online Log file stores messages from the Sterling Gentran:Realtime process. You must preformat it using the EXECLMT routine. The JCL is in the Sterling Gentran:Realtime JCL library.

Online Queue File(s)

The Online Queue file(s) provide a means for the system to process scheduled and/or cross region data. You must preformat these files using the EDIEQMT program before use within Sterling Gentran:Realtime. The JCL to run the program is in member EXECQMT in the Sterling Gentran:Realtime JCL library.

Realtime Activity File

The Sterling Gentran:Realtime Activity file stores activity records for tracking the processing within the system. View this file from the Sterling Gentran:Realtime Activity screen. You must preformat this file using the EDIRAMT program before use within Sterling Gentran:Realtime. The JCL procedure EXECAMT (in the Sterling Gentran:Realtime JCL Library) contains the formatting steps.

Online Reporting System Report Control and Data Files

The Online Reporting system provides an easy and efficient method of reviewing Sterling Gentran:Realtime reports online or in printed form. To use this system, you must preformat the Report Control and Report Data files using the EDIR305 routine (EXEC305 member in the JCL library).

Error Recovery Procedures

The Sterling Gentran:Realtime online system relies on the standard CICS file recovery and dynamic transaction backout procedures (DTB) to perform error recovery from fatal errors.

Some files in Sterling Gentran:Realtime will not use recovery processing because either the file contains error and recovery information (a backout would remove the information needed to determine the error), or the system must perform a logical update as well as a physical update on the file. A logical update implies that the system updates a special pointer and/or counter before the physically written data is available. Without the pointer update, the data is not accessible or usable.

User programs and files that will interface with Sterling Gentran:Realtime should have the appropriate recovery procedures (which may involve issuing SYNCPOINTS during processing). Care should be taken in designing these procedures.

See the individual file descriptions in this guide for more information on the design of the interfaces.

Associated Data File

EDIASCDT

Description

This file holds the associated data extracted from inbound EDI and data to be added to outbound EDI. It stores any binary data from X12 data or object packets from EDIFACT that are greater than 760 bytes in length.

For inbound processing, the Inbound Editor pulls the data from the segment and passes it to the EDIR066 program to store on this file. A package reference identifier is placed in the data in place of the associated data.

For outbound processing, the data must be placed on this file (by the EDIRBIN program – JCL EXECBIN) before the outbound process runs. A package reference identifier must be supplied and this ID must match the ID in the outbound data. The Outbound Mapper program calls the EDIR065 program to insert the associated data into the data stream.

See the section “EDIFACT Packages – Associated Data” in Chapter 7 of the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 User Guide* for a full description of how associated data is handled.

Activity

This is dependent upon the number of associated data packets received and sent in your system.

Program References

The following programs access the Associated Data file:

| Program | Purpose |
|---------------------------------------|---|
| Associated Data Read (EDIR065) | Read the associated data file and insert the data into the output data stream |
| Associated Data Write (EDIR066) | Writes associated data found in the inbound EDI stream to the file |
| Associated Data Maintenance (EDIRBIN) | Writes, reads and reports on the data in the associated data file. |

Disk Space Requirements

The space requirements depend on the frequency of use of associated data and the size of the data.

Dataset Recovery

Make backups of this file on a nightly basis. Recovery should be set up in the CICS environment. Close this file on CICS when the maintenance program (EDIRBIN) runs. Run periodic reports and purge the file to free up space. To purge the data, use IDCAMS to either delete and redefine the whole file or selectively extract data from the file then delete/define it and then add the data back to the file.

VSAM Dataset Information

```
/* ASSOCIATED DATA FILE                               */
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIASCDT) -
  TRACKS(100 50)          -
  FREESPACE(10 10)       -
  KEYS(44 0)              -
  RECORDSIZE(45 32044)   -
  NOREUSE                  -
  SHR(2 3))               -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIASCDT.DATA) -
  CISZ(4096))             -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIASCDT.INDEX))
```

Error Message File

EDIERRC

Description

This file contains the standard error codes and messages that may occur within Sterling Gentran:Realtime. Each record contains the error message number, the severity indicator, error code, and a text description.

See the *IBM® Sterling Gentran:Basic® for z/OS® Release 6.6 System Message Guide* for detailed error messages.

Activity

This is a low activity file.

Program References

Access the Error Message file with the following programs:

| Program | Purpose |
|----------------------------------|---|
| Online Message Handler (EDIROMH) | Reads the Error Message file with the error number passed and returns with the error message and processing indicators. |
| Online Message Handler (EDIEOMH) | Reads the Error Message file with the error number passed and returns with the error message and processing indicators. |

A Sterling Gentran:Realtime or Sterling Gentran:Control program that needs an error message links to the appropriate message handler program with an error number.

Disk Space Requirements

This file is of moderate size and requires about one cylinder on a 3390 disk drive.

Dataset Recovery

Error Message updates occur mainly in batch, but a new screen in the Administrative Maintenance subsystem allows online updates. This should be a low-volume operation. Therefore, recovery should not be a major concern. However, you should create a backup of the Error Message file after initial loading by Sterling Gentran:Realtime, after any updates by other Sterling Gentran add-on products, and after any user changes. Use the backup for recovery purposes.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.VSAM.ERRCTL)-  
  VOLUME(XXXXXX)           -  
  TRACKS(10 5)             -  
  CISZ(2048)                -  
  KEYS(9 0)                 -  
  RECORDSIZE(270 270)      -  
  SHR(2 3)                  -  
  DATA(NAME(GENTRAN.V6X6.VSAM.ERRCTL.DATA)-  
  INDEX(NAME(GENTRAN.V6X6.VSAM.ERRCTL.INDEX))-
```

Note: The Error Message file is also used by Sterling
Gentran:Basic, Sterling Gentran:Viewpoint, Sterling
Gentran:Plus, and Sterling Gentran:Control.

Online Control File**EDIOCF****Description**

Sterling Gentran:Realtime uses the Online Control file to hold the records that control the values of the Immediate options, queue files, and Scheduled options. This file is a VSAM key sequenced dataset loaded during Sterling Gentran:Realtime Installation. A TSQ also contains this information, providing more immediate access without I/O contention.

Activity

Activity in this file is low, and depends on how often you add new options (immediate, queue, or scheduled).

Program References

The following programs access the Online Control file:

| Program | Purpose |
|---|---|
| Remote System Stop/Start (EDIRSTOP) | Reads and updates option records. |
| Online Scanner/Initiator (EDIEOSI) | Reads the control file for use in updating the TSQ. |
| System Options Maintenance (EDIX301, EDIR301) | Reads and updates option records. |
| Immediate Directory (EDIR810) | Reads option records. |
| Immediate Options Maintenance (EDIR811) | Reads and updates option records. |
| Queue Options Directory (EDIX302, EDIR302) | Reads option records. |
| Queue Options Maintenance (EDIX303, EDIR303) | Reads and updates option records. |
| Queue Extended Options Maintenance (EDIX305, EDIR305) | Reads and updates option records. |
| Queue Debug Detail (EDIX306, EDIR306) | Reads option records. |
| Queue Data Detail (EDIX307, EDIR307) | Reads option records. |
| Schedule Directory (EDIR820) | Reads option records. |
| Schedule Options Maintenance (EDIR821) | Reads and updates option records. |
| Extended Schedule Options (EDIR822) | Reads and updates option records. |
| All batch programs | Reads option records. |

Disk Space Requirements

The Online Control file is of moderate size and should require about 10 tracks on a 3390 disk drive.

Dataset Recovery

Recreate the Online Control file from either a recent backup or by reload it from the Sterling Gentran:Realtime installation seed file.

If you use the installation seed file, or if the backup is not recent, you must use the Sterling Gentran:Realtime maintenance functions to re-enter your configuration information.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIOCF)-
  VOLUME(XXXXXX)           -
  RECORDS(550)              -
  FREESPACE(10 10)         -
  KEYS(3 0)                 -
  RECORDSIZE(091 450)      -
  NOREUSE                   -
  SHR(2 3)                  -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIOCF.DATA)-
  CISZ(4096))               -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIOCF.INDEX))
```


Online Log File

EDIOLF

Description

Online programs use the Online Log file to record errors and other trace information. The Online Log file is a continuous wrap-around type log relative record data set (RRDS).

Activity

Volume in this file is dependent upon whether trace is enabled on the system or on individual options (immediate, queue, or schedule). In normal production mode with trace disabled, only errors appear on the log. In this mode, volume should be very low. In a test environment with many traces, the update volume can be very high.

Program References

The following programs reference the Online Log file:

| Program | Purpose |
|---|---|
| Online Log Display (EDIR304) | Reads log records. |
| Online Log Detail (EDIR308) | Reads log records. |
| Online Log Display (EDIX304) | Reads log records. |
| Online Log Detail (EDIX308) | Reads log records. |
| Online Message Handler (EDIEOMH, EDIROMH) | Updates the file, over-writing earlier log entries. |
| Application Log Interface (EDIR999) | Allows the user to place messages on the online log file. |

Disk Space Requirements

The space requirements for the Online Log file depend on the desired retention of messages on the log. The file will hold the number defined for RECORDS less 1 record reserved for control information. Using the sample DEFINE JCL below, the file would contain 2999 detail records (3000 – 1).

A file of 3,000 records will handle most requirements. This file should be about 15 tracks on a 3390 disk drive.

Dataset Recovery

Recreate the Online Log file by redefining and then running the batch program, Log File Maintenance (EDIELMT), to initialize the file.

Note: Do not make this file recoverable in CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.VSAM.EDI.EDIOLF)-  
  VOLUME(XXXXXX)           -  
  RECORDS(3000)             -  
  NUMBERED                  -  
  RECORDSIZE(128 128)      -  
  SHR(2 3))                 -  
  DATA(NAME(GENTRAN.V6X6.VSAM.EDI.EDIOLF.DATA)-  
  CISZ(1024))
```

Note: The Online Log file is also used by Sterling
Gentran:Basic, Sterling Gentran:Viewpoint, and Sterling
Gentran:Control.

Queue Files

EDIQnnn

Description

The system uses Online Queue files to store or retrieve data from Sterling Gentran:Realtime through the Queue Handling modules. The files are VSAM relative record datasets (RRDS) with two header records and multiple data records. The first header record contains counts of data records that are compared to the second header record by the Scanner/Initiator to determine system activity. When a trigger level is met, the Scanner/Initiator initiates the task that is mentioned in the Queue Options Maintenance screen.

In Sterling Gentran:Realtime you can define up to 999 queue files. The queue file name has a numeric suffix with a value from 001 to 999 (for example, queue file 10 would be EDIQ010). The system reserves queue files 91 to 99 for Sterling Gentran:Basic and Sterling Gentran:Realtime processing.

Activity

These are high activity operational files. The activity in the files depends on the types and volume of data written to or read from the individual queues.

Program References

The following programs reference the Online queue files.

| Program | Purpose |
|---|--|
| Online Batch Initiator (EDIEOBI) | Reads a given Queue Header record and determines if a batch job needs to start, based upon the record counts for a given queue. If a batch job is started, the Queue Header record is updated with a new record count. |
| Online Queue Read (EDIROQR, EDIEOQR) | Started by Initiator program. It reads the queue file into CICS temporary-storage and calls the appropriate gateway. |
| Online Queue Write (EDIROQW, EDIEOQW) | Optionally called by the output gateway(s). It writes from CICS temporary-storage into the queue file. |
| Online Scanner/Initiator (EDIEOSI) | Reads EACH Queue Header record and determines if an online job needs to start based upon the record counts. |
| Central Multi-Queue Read Subroutine (EDIECMR, EDIRCMR) | Reads record images. |
| Central Multi-Queue Write Subroutine (EDIECMW, EDIRCMW) | Updates records (writes new record images). |
| Remote Single-Queue Read Subroutine (EDIERSR) | Reads record images. |

| Program | Purpose |
|--|--|
| Remote Single-Queue Write Subroutine (EDIERSW) | Updates records (writes new record images). |
| Queue Options Directory (EDIX302, EDIR302) | Reads to determine whether queue file has been formatted. |
| Queue Options Maintenance (EDIX303, EDIR303) | Reads the queue file. |
| Queue Debug Detail (EDIX306, EDIR306) | Reads header record to display summary information. Updates pointers on header record. |
| Queue Data Detail (EDIX307, EDIR307) | Reads and displays data on file. |
| Batch Queue Format (EDIEQMT) | Writes the header records and formats the file. |

Disk Space Requirements

The space requirement for an individual queue file equals the largest volume of transaction data “queued” at one time between the batch and CICS system.

Record images are stored on the queue file in a blocked format (as in multiple variable length record images per fixed length queue file record). A queue file record stores approximately 4050 bytes of record image data.

Example

The queue file is used for outbound application data. The largest number of documents expected between processing cycles is 100 transactions. Each transaction consists of 200 application records with an average record length of 250 bytes.

$$\begin{aligned} \# \text{ records} &= (100 \text{ transactions} \times 200 \text{ records} \times 250 \text{ bytes}) / 4050 \\ &= 1234 \text{ records.} \end{aligned}$$

Dataset Recovery

When recreating queue files, you must define the dataset and then use Queue File Maintenance (EDIEQMT) to initialize the dataset.

Any transaction data logically “queued” between the batch and CICS system at the time of dataset failure will be lost.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQnnn)-
  VOLUME(XXXXXX)           -
  RECORDS(250)              -
  NUMBERED                  -
  RECORDSIZE(4088 4088)    -
  SHR(4 3)                  -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQnnn.DATA)-
  CISZ(4096))
```

Where nnn is the queue file number from 001 to 999.

Note: The queue file must not have a secondary allocation.

Report Request Queue File

EDIQ092

Description

This file stores the Report Requests created by multiple Realtime processes (for example, mapping, databank maintenance). This file is a VSAM RRDS initialized during Sterling Gentran:Realtime installation.

When the Print Sw is set to 'Yes', the Realtime processes write a print request transaction to this file. The JCL found in EXECPRT should be customized (during Realtime installation) to read these transactions and create the reports. The reports can be either printed on paper or written to a file for use as an audit trail of the processes associated with the reports.

Activity

Activity depends upon the number of processes run with the Print switch on and how often the EXECPRT job runs.

Program References

The following programs reference the Report Request Queue file:

| Program | Purpose |
|---|--|
| Online Batch Initiator (EDIEOBI) | Reads a given Queue Header record and determines if a batch job needs to start, based upon the record counts for a given queue. If a batch job is started, the Queue Header record is updated with a new record count. |
| Online Queue Read (EDIROQR, EDIEOQR) | Started by Initiator program. It reads the queue file into CICS temporary-storage and calls the appropriate gateway. |
| Online Queue Write (EDIROQW, EDIEOQW) | Optionally called by the output gateway(s). It writes from CICS temporary-storage into the queue file. |
| Online Scanner/Initiator (EDIEOSI) | Reads EACH Queue Header record and determines if an online job needs to start based upon the record counts. |
| Central Multi-Queue Read Subroutine (EDIECMR, EDIRCMR) | Reads record images. |
| Central Multi-Queue Write Subroutine (EDIECMW, EDIRCMW) | Updates records (writes new record images). |
| Remote Single-Queue Read Subroutine (EDIERSR) | Reads record images. |
| Remote Single-Queue Write Subroutine (EDIERSW) | Updates records (writes new record images). |
| Queue Options Directory (EDIX302, EDIR302) | Reads to determine whether queue file has been formatted. |

| Program | Purpose |
|--|--|
| Queue Options Maintenance (EDIX303, EDIR303) | Reads the queue file. |
| Queue Debug Detail (EDIX306, EDIR306) | Reads header record to display summary information. Updates pointers on header record. |
| Queue Data Detail (EDIX307, EDIR307) | Reads and displays data on file. |
| Batch Queue Format (EDIEQMT) | Writes the header records and formats the file. |

Disk Space Requirements

Make the number of blocks greater than the number of Trigger document groups set on the Queue options maintenance. Set the installation default to 10 and the number of blocks on the initial define to 1000. As long as the trigger level for the document counts stays under 1000 the initial define should be sufficient.

Dataset Recovery

To recreate queue files you must define the dataset and then use Queue File Maintenance to initialize the dataset.

VSAM Dataset Information

```

DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ092)-
  VOLUME(XXXXXX)           -
  RECORDS(1000)            -
  NUMBERED                 -
  RECORDSIZE(4088 4088)   -
  SHR(4 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ092.DATA)-
  CISZ(4096))

```

Status Update Input Queue File

EDIQ096

Description

This file stores batch Reported Status and Network Status transaction records for the Sterling Gentran:Realtime Databank files. The file is a VSAM RRDS initialized during Sterling Gentran:Realtime Installation.

Activity

Activity depends on the number of times the Application Databank Inquiry Report (EDID551), EDI Databank Inquiry Report (EDID550), and Network Reconciliation (EDID850) are run, and the number of update records these programs generate. The JCL to run these programs is in EXEC551R, EXEC550R, and EXEC850R respectively.

Program References

The following programs reference the Status Update Input Queue file:

| Program | Purpose |
|---|--|
| Online Batch Initiator (EDIEOBI) | Reads a given Queue Header record and determines if a batch job needs to start, based upon the record counts for a given queue. If a batch job is started, the Queue Header Record is updated with a new record count. |
| Online Queue Read (EDIROQR, EDIEOQR) | Started by Initiator program. It reads the queue file into CICS temporary-storage and calls the appropriate gateway. |
| Online Queue Write (EDIROQW, EDIEOQW) | Optionally called by the output gateway(s). It writes from CICS temporary-storage into the queue file. |
| Online Scanner/Initiator (EDIEOSI) | Reads EACH Queue Header record and determines if an online job needs to start based upon the record counts. |
| Central Multi-Queue Read Subroutine (EDIECMR, EDIRCMR) | Reads record images. |
| Central Multi-Queue Write Subroutine (EDIECMW, EDIRCMW) | Updates records (writes new record images). |
| Remote Single-Queue Read Subroutine (EDIERSR) | Reads record images. |
| Remote Single-Queue Write Subroutine (EDIERSW) | Updates records (writes new record images). |
| Queue Options Directory (EDIX302, EDIR302) | Reads to determine whether queue file has been formatted. |
| Queue Options Maintenance (EDIX303, EDIR303) | Reads to determine whether the queue file has been formatted. |

| Program | Purpose |
|---------------------------------------|--|
| Queue Debug Detail (EDIX306, EDIR306) | Reads header record to display summary information. Updates pointers on header record. |
| Queue Data Detail (EDIX307, EDIR307) | Reads and displays data on file. |
| Central Batch Write (EDIECBW) | Writes batch acknowledgment reconciliation records. |
| Databank Status Update (EDIR855) | Reads the Report Status and updates the databank records. |
| Batch Queue Format | Formats the queue file. |

Central Batch Write executes via JCL members EXEC551R, EXEC550R, and EXEC850R.

Disk Space Requirements

The space requirement for this queue file depends on the largest volume of status updates “queued” at one time between the batch and CICS system.

The system stores record images on the queue file in a blocked format (as in multiple variable length record images per fixed length queue file record). A queue file record can store approximately 4050 bytes of record image data.

Status update records are 220 bytes in length. One queue file can store a maximum of 18 records.

records = (4050 / 220 bytes)
 = 18 records

Dataset Recovery

To recreate queue files you must define the dataset and then use Queue File Maintenance to initialize the dataset.

Any reported status data logically “queued” between the batch and CICS system at the time of dataset failure will be lost.

VSAM Dataset Information

```

DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ096)-
    VOLUME(XXXXXX)           -
    RECORDS(250)              -
    NUMBERED                  -
    RECORDSIZE(4088 4088)    -
    SHR(4 3))                -
    DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ096.DATA)-
    CISZ(4096))
    
```

Note: The Status Update Input Queue file must not have secondary allocation.

Acknowledgment Reconciliation Input Queue File

EDIQ098

Description

This file stores batch acknowledgment reconciliation records. The file is a VSAM RRDSRRDS initialized during Sterling Gentran:Realtime Installation. The system uses this file only if Sterling Gentran:Basic Databanking is installed at the user site.

Activity

This file contains moderate volume. Activity depends on the number of inbound acknowledgments received by the Sterling Gentran:Basic Inbound Editor.

Program References

The following programs reference the Acknowledgment Reconciliation Input Queue file:

| Program | Purpose |
|---|--|
| Online Batch Initiator (EDIEOBI) | Reads a given Queue Header record and determines if a batch job needs to start, based upon the record counts for a given queue. If a batch job is started, the Queue Header Record is updated with a new record count. |
| Online Queue Read (EDIROQR, EDIEOQR) | Started by Initiator program. It reads the queue file into CICS temporary-storage and calls the appropriate gateway. |
| Online Queue Write (EDIROQW, EDIEOQW) | Optionally called by the output gateway(s). It writes from CICS temporary-storage into the queue file. |
| Online Scanner/Initiator (EDIEOSI) | Reads EACH Queue Header record and determines if an online job needs to start based upon the record counts. |
| Central Multi-Queue Read Subroutine (EDIECMR, EDIRCMR) | Reads record images. |
| Central Multi-Queue Write Subroutine (EDIECMW, EDIRCMW) | Updates records (writes new record images). |
| Remote Single-Queue Read Subroutine (EDIERSR) | Reads record images. |
| Remote Single-Queue Write Subroutine (EDIERSW) | Updates records (writes new record images). |
| Queue Options Directory (EDIX302, EDIR302) | Reads to determine whether queue file has been formatted. |
| Queue Options Maintenance (EDIX303, EDIR303) | Reads to determine whether the queue file has been formatted. |

| Program | Purpose |
|---|--|
| Queue Debug Detail (EDIX306, EDIR306) | Reads header record to display summary information. Updates pointers on header record. |
| Queue Data Detail (EDIX307, EDIR307) | Reads and displays data on file. |
| Central Batch Write (EDIECBW) | Writes batch acknowledgment reconciliation records. |
| Acknowledgment Reconciliation/Monitor Reformatter (EDID516) | Reads batch acknowledgment reconciliation records (and reformats them for use by the Acknowledgment Reconciliation/Monitor (EDID515)). |
| Batch Queue Format (EDIEQMT) | Formats the queue file. |

Central Batch Write executes via JCL member EXECQ98. Acknowledgment Reconciliation/Monitor Reformatter executes via Queue option 098.

Disk Space Requirements

The space requirement for this queue file depends on the largest volume of acknowledgments “queued” at one time between the batch and CICS system.

The system stores record images on the queue file in a blocked format (as in multiple variable length record images per fixed length queue file record). Each queue file record stores approximately 4050 bytes of record image data.

Acknowledgment records are 215 bytes in length. One queue file can store a maximum of 18 records.

$$\begin{aligned} \# \text{ records} &= (4050 / 215 \text{ bytes}) \\ &= 18 \text{ records} \end{aligned}$$

Dataset Recovery

To recreate Queue files you must define the dataset and then use Queue File Maintenance to initialize the dataset.

Any acknowledgment data logically “queued” between the batch and CICS system at the time of dataset failure will be lost.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ098)-
  VOLUME(XXXXXX) -
  RECORDS(250) -
  NUMBERED -
  RECORDSIZE(4088 4088) -
  SHR(4 3)) -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ098.DATA)-
  CISZ(4096))
```

Note: The Acknowledgment Reconciliation Input Queue file must not have secondary allocation.

Acknowledgment Reconciliation Output Queue File**EDIQ099****Description**

This file stores online acknowledgment reconciliation records that could not be reconciled against documents on the Sterling Gentran:Realtime Outbound EDI Databank. This file is a VSAM RRDS initialized during Sterling Gentran:Realtime Installation. The system uses this file only if Sterling Gentran:Basic Databanking is installed at the user site.

Activity

The system writes this file when the Acknowledgment Reconciliation/Monitor (EDID515) program runs (this program runs on a scheduled basis). This program is read when the JCL member EXECACKS runs. The frequency of these runs depends on the Acknowledgment Reconciliation/Monitor program schedule.

Program References

The following programs reference the Acknowledgment Reconciliation Output Queue file:

| Program | Purpose |
|--|--|
| Online Batch Initiator (EDIEOBI) | Reads a given Queue Header record and determines if a batch job needs to start, based upon the record counts for a given queue. If a batch job is started, the Queue Header Record is updated with a new record count. |
| Online Queue Read (EDIROQR, EDIEOQR) | Started by Initiator program. It reads the queue file into CICS temporary-storage and calls the appropriate gateway. |
| Online Queue Write (EDIROQW, EDIEOQW) | Optionally called by the output gateway(s). It writes from CICS temporary-storage into the queue file. |
| Online Scanner/Initiator (EDIEOSI) | Reads EACH Queue Header record and determines if an online job needs to start based upon the record counts. |
| Central Multi-Queue Read Subroutine (EDIECMR) | Reads record images. |
| Central Multi-Queue Write Subroutine (EDIECMW) | Updates records (writes new record images). |
| Remote Single-Queue Read Subroutine (EDIERSR) | Reads record images. |
| Remote Single-Queue Write Subroutine (EDIERSW) | Updates records (writes new record images). |
| Queue Options Directory (EDIX302, EDIR302) | Reads to determine whether queue file has been formatted. |

| Program | Purpose |
|---|--|
| Queue Options Maintenance (EDIX303, EDIR303) | Reads to determine whether queue file has been formatted. |
| Queue Debug Detail (EDIX306, EDIR306) | Reads header record to display summary information. Updates pointers on header record. |
| Queue Data Detail (EDIX307, EDIR307) | Reads and displays data on file. |
| Central Batch Read (EDIECBR) | Reads online acknowledgment reconciliation records. |
| Acknowledgment Reconciliation/Monitor (EDID515) | Writes online acknowledgment reconciliation records. |
| Batch Queue Format (EDIEQMT) | Formats the queue file. |

Central Batch Read executes via JCL member EXECACKS. (JCL member EXECACKS also executes batch Acknowledgment Reconciliation/Monitor (EDID515). Acknowledgment Reconciliation/Monitor (EDID515) executes by transaction ED17 in Schedule option 407.

Disk Space Requirements

The space requirement for this queue file depends on the largest volume of acknowledgments “queued” at one time between the batch and CICS system.

The queue file stores record images in a blocked format (as in multiple variable length record images per fixed length queue file record). One queue file record can store approximately 4050 bytes of record image data.

Acknowledgment records are 215 bytes in length. One queue file record can store a maximum of 18 records.

records = (4050 / 215 bytes)
 = 18 records

Dataset Recovery

Recreate queue files by defining the dataset. Use Queue File Maintenance to initialize the dataset.

Any acknowledgment data logically “queued” between the batch and CICS system at the time of dataset failure will be lost.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ099)-
  VOLUME(XXXXXX)           -
  RECORDS(250)              -
  NUMBERED                  -
  RECORDSIZE(4088 4088)    -
  SHR(4 3))                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIQ099.DATA)-
  CISZ(4096))
```

Note: The Acknowledgment Reconciliation Output Queue file must not have a secondary allocation.

Checkpoint File

EDICKP

Description

The Checkpoint file is a VSAM RRDS that holds pointer information about the queue files defined in Sterling Gentran:Realtime and Sterling Gentran:Control.

The file holds an individual record for each queue file created for Sterling Gentran:Control and Sterling Gentran:Realtime processing. These records hold pointer values that must match the values of pointers that are on the first two records of the queue files. You must use only Sterling Gentran:Realtime utilities to update the Checkpoint file to guarantee that the pointer values match.

Note: If Sterling Gentran:Control has been installed prior to Sterling Gentran:Realtime, you can use the Checkpoint file created by Sterling Gentran:Control.

Activity

The Checkpoint file's initial allocation is the maximum size to which it can grow. The first time the Queue File Maintenance program (EDIEQMT) runs, it creates all the records needed for processing the Checkpoint file. Subsequent runs of EDIEQMT update the appropriate record in the Checkpoint file. In addition, all programs that read or write a queue file update the Checkpoint file. In all cases, only two records are read and one is rewritten.

Frequency of activity depends on the number of batch processes run to read or write the queue files.

Program References

The following Sterling Gentran:Control and Sterling Gentran:Realtime programs access the Checkpoint file.

| Program | Purpose |
|--|--|
| Online Scanner/Initiator (EDIEOSI) | Reads the Checkpoint file during each scan to obtain current queue file information. |
| Online Queue Write (EDIROQW, EDIEOQW) | Reads and updates the Checkpoint file. |
| Online Queue Directory (EDIR302, EDIX302) | Reads the Checkpoint file. |
| Online Queue Debug Detail (EDIR306, EDIX306) | Reads the Checkpoint file and displays the values of the internal pointers. |
| Batch Queue Read (EDIRQRD) | Reads and updates the Checkpoint file. |
| Batch Queue Write (EDIRQWR) | Reads and updates the Checkpoint file. |
| Queue File Maintenance (EDIEQMT) | Reads and updates the Checkpoint file. |
| Remote Single Queue Read Subroutine (EDIERSR) | Reads and updates the Checkpoint file. |
| Remote Single Queue Write Subroutine (EDIERSW) | Reads and updates the Checkpoint file. |

| Program | Purpose |
|---|----------------------------|
| Sterling Gentrans:Realtime Activity Maintenance (EDIRAMT) | Reads the Checkpoint file. |
| Batch Queue Format (EDIEQMT) | Formats the queue file. |

Disk Space Requirements

The initial definition of 30 tracks for the Checkpoint file is sufficient, because the Checkpoint file does not grow any larger after it is created.

Note: All disk space requirements in this chapter are expressed in 3390s-type tracks.

Dataset Recovery

The records on the Checkpoint file hold pointer values that must match the values of the pointers that are on the first two records of the queue files. If these pointers are corrupted, the queue file delivers inconsistent results.

If only one queue file is experiencing problems, perform a delete/define on the queue file to recover datasets, then run EDIEQMT to redefine the queue file. Any data on the queue file is lost, but all other queue files are unaffected.

If the entire Checkpoint file is corrupted, you can recreate it by performing a delete/define on the Checkpoint file and all queue files, and re-running the EDIEQMT program for each queue file. If you complete this re-creation, however, *all* data on the queue files is lost. Attempt to unload all queue files before performing the delete/define. To unload the queue files, disable the Sterling Gentrans:Realtime system, then use the batch read program (EDIRQRD) to read all data to sequential files.

Note: Maintaining nightly backups of the Checkpoint file does not provide a recoverable dataset, because the pointers will not match the current values on the queue files. Backups would have to be kept of each queue file and the Checkpoint file after each program that reads or writes a queue file.

VSAM Dataset Information

The JCL to define and load the Checkpoint file is in the JCL library in member DEFRTTE.

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDICKP)-
  VOLUME(XXXXXX)           -
  TRACKS(30)                -
  NUMBERED                  -
  RECORDSIZE(200 200)      -
  SHR(4 3)                  -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDICKP.DATA)-
  CISZ(2048))
```

Note: The Checkpoint file must not have a secondary allocation.

Sterling Gentran:Realtime Activity File

EDIRAPF

Description

This file holds the summary and detail activity records created when the Active Path Trace indicator is enabled for a path or for the whole system. This file is a VSAM RRDS that processes in a continuous wrap-around manner.

Activity

This is a low-volume file with intermittent activity (reads and updates). The system performs one read and one update per Sterling Gentran:Realtime process (e.g., Inbound Mapper, Inbound Editor, Outbound Mapper, etc.). The activity depends on whether or not the “Active Path” switch is enabled.

Program References

The following programs reference the Sterling Gentran:Realtime Activity file:

| Program | Purpose |
|---|---|
| Outbound Application Gateway (EDIR101) | Writes new entries for each path, updates the grand totals and the path summary totals. |
| Inbound Communication Gateway (EDIR103) | Writes new entries for each path, updates the grand totals and the path summary totals. |
| Shell Routine (EDIR313) | Updates the entry during processing. |
| Realtime Activity Summary (EDIR870) | Displays the grand totals and the path summary totals records. |
| Realtime Activity Detail (EDIR871) | Displays the path summary totals and the detail records. |

Disk Space Requirements

The space requirements depend on the desired retention of detail records on the file. The file holds the number defined for RECORDS less 51 records reserved for summary information. Using the sample DEFINE JCL below, the file would contain 1949 detail records (2000 – 51). Determine how many document groups will be processed daily and then determine how many days of data are desired to review.

Dataset Recovery

Recreate the Activity file by redefining and then running the batch program, Sterling Gentran:Realtime Activity Maintenance (EDIRAMT) to initialize the file.

Note: Do not make this file recoverable in CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRAPF)-  
  VOLUME(XXXXXX)           -  
  RECORDS (2000)           -  
  NUMBERED                  -  
  RECORDSIZE(250 250)      -  
  SHR(2 3)                  -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRAPF.DATA)-  
  CISZ(1024))
```

Note: The Sterling Gentran:Realtime Activity file must not have a secondary allocation.

Change Audit Databank Archive File

EDIRARCH

Description

The Change Audit Databank Archive file (EDIRARCH) stores Change Audit Databank records archived during maintenance. It is a VSAM key sequential dataset that is initialized during the Sterling Gentran:Realtime installation process. The system writes data to this file only when the Archive field on the Change Audit Maintenance screen has a value of Y.

Activity

The Archive file is a transaction file. Its volume depends on the number of records being archived from the Databank files.

Program Reference

The following program references the Change Audit Databank Archive file:

| Program | Purpose |
|---|--|
| Change Audit Databank Maintenance (EDID552) | Writes Databank records deleted via the Purge and Housekeeping options (when the value in the Archive field is Y). |

Schedule Option 450 executes the Change Audit Databank Maintenance program (transID EDIG starts EDID552).

Note: The IBM utility program IDCAMS is used to read the data from this file for sequential backup.

Disk Space Requirements

The space requirement for this file depends on the:

- frequency of databank maintenance performed (via EDID552)
- volume of data being archived
- frequency of file initialization performed (via EXECARCH).

The space requirements are related to the number of online databank changes that are performed.

We recommend that you initially allocate as much space to the archive file as was allocated for the Sterling Gentran:Realtime Inbound EDI Databank Change Audit file (EDIRIECA), Outbound EDI Databank Change Audit file (EDIROECA), Inbound Application Databank Change Audit file (EDIRIACA), and/or Outbound Application Databank Change Audit file (EDIROACA).

Continually monitor the amount of space being used by the archive file to determine whether the amount should be increased or decreased.

Inbound Application Databank Archive File

EDIRARIA

Description

This file stores Inbound Application Databank records archived during maintenance. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file only when the Archive field on the Inbound Application Databank Maintenance screen is set to Y.

Activity

The Archive file is a transaction file. Its volume depends on the number of documents being archived from the Databank files.

Program References

The following programs reference the Inbound Application Databank Archive file:

| Program | Purpose |
|--|--|
| Inbound Application Databank Maintenance (EDID451) | Writes Databank records deleted via the Purge and Housekeeping options (when the value in the Archive field is Y). |

Inbound Application Databank Maintenance executes by means of the Schedule option 406 (EDID451 is started by means of the transaction ID EDI6).

Note: The IBM Utility program IDCAMS is used to read the data from this file for sequential backup.

Disk Space Requirements

The space requirement for this file depends on:

- Frequency of Databank maintenance performed (via EDID451)
- Volume of data being archived
- Frequency of file initialization performed (via EXECARIA)

The space requirements change as you receive increased amounts of data from your trading partners.

We recommend you initially allocate as much space to the archive file as was allocated for the Sterling Gentran:Realtime Inbound Application Databank Directory file (EDIRIAA) and/or the Inbound Application Databank Message Store file (EDIRIAS). Continually monitor the amount of space used by the archive file to determine if you should increase or decrease it.

Dataset Recovery

Back up this file (via the IBM Utility program IDCAMS) after each run of the Inbound Application Databank Maintenance program (EDID451). Use the IDCAMS utility to restore from the backup.

Submit JCL member EXECARIA periodically (typically after each maintenance run) to delete, redefine, and reformat the Inbound Application Databank Archive file. Run job EXECARIA when CICS is down or when the archive file is deallocated from CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHIAA) -  
  VOLUME(XXXXXX)           -  
  RECORDS(1000 1000)        -  
  FREESPACE(40 40)         -  
  KEYS(20 0)                -  
  RECORDSIZE(822 5102)     -  
  SHR(2 3)                  -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHIAA.DATA)-  
  CISZ(8192))              -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHIAA.INDEX))
```

Inbound EDI Databank Archive File

EDIRARIE

Description

This file stores Inbound EDI Databank records archived during maintenance. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file only when the value in the Archive field on the Inbound EDI Databank Maintenance screen is set to Y.

Activity

The Archive file is a transaction file. Its volume depends on the number of records being archived from the Databank files.

Program References

The following program references the Inbound EDI Databank Archive file:

| Program | Purpose |
|--|--|
| Inbound EDI Databank Maintenance (EDID351) | Writes Databank records deleted via the Purge and Housekeeping options (when the value in the Archive field is Y). |

Inbound EDI Databank Maintenance executes by means of the Schedule option 405 (EDID351 is started by means of transID EDI5).

Note: The IBM Utility program IDCAMS is used to read the data from this file for sequential backup.

Disk Space Requirements

The space requirement for this file depends on:

- Frequency of Databank maintenance performed (via EDID351)
- Volume of data being archived
- Frequency of file initialization performed (via EXECARIE)

The space requirements change as you receive increased amounts of data from your trading partners.

We recommend you initially allocate as much space to the archive file as was allocated for the Sterling Gentran:Realtime Inbound EDI Databank Directory file (EDIRIEA) and/or Inbound EDI Databank Message Store file (EDIRIES). Continually monitor the amount of space used by the archive file to determine if you should increase or decrease it.

Dataset Recovery

Back up this file (via the IBM Utility program IDCAMS) after each run of the Inbound EDI Databank Maintenance program (EDID351). Use the IDCAMS utility to restore from the backup.

Submit JCL member EXECARIE periodically (typically after each maintenance run) to delete, redefine, and reformat the Inbound EDI Databank Archive file. Run job EXECARIE when CICS is down or when the archive file is deallocated from CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHIEA)-  
  VOLUME(XXXXXX)           -  
  RECORDS(1000 1000)        -  
  FREESPACE(40 40)          -  
  KEYS(20 0)                 -  
  RECORDSIZE(822 4072)      -  
  SHR(2 3)                   -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHIEA.DATA)-  
  CISZ(8192))                -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHIEA.INDEX))
```

Outbound Application Databank Archive File

EDIRAROA

Description

This file stores Outbound Application Databank records archived during maintenance. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file only when the Archive field on the Outbound Application Databank Maintenance screen is set to Y.

Activity

The Archive file is a transaction file. Its volume depends on the number of documents being archived from the Databank files.

Program References

The following program references the Outbound Application Databank Archive file:

| Program | Purpose |
|---|--|
| Outbound Application Databank Maintenance (EDID151) | Writes databank records deleted via the Purge and Housekeeping options (when the value in the Archive field is Y). |

Outbound Application Databank Maintenance executes by means of the Schedule option 403 (EDID151 is started by means of transID EDI3).

Note: The IBM Utility program IDCAMS is used to read the data from this file for sequential backup.

Disk Space Requirements

The space requirement for this file depends on:

- Frequency of Databank maintenance performed (via EDID151)
- Volume of data being archived
- Frequency of file initialization performed (via EXECAROA)

The space requirements change as you receive increased amounts of data from your trading partners.

We recommend you initially allocate as much space to the archive file as was allocated for the Sterling Gentran:Realtime Outbound Application Databank Directory file (EDIROAA) and/or Outbound Application Databank Message Store file (EDIROAS). Continually monitor the amount of space used by the archive file to determine if you should increase or decrease it.

Dataset Recovery

Back up this file (by means of the IBM Utility program IDCAMS) after each run of the Outbound Application Databank Maintenance program (EDID151). Use the IDCAMS utility to restore from the backup.

Submit JCL member EXECAROA periodically (typically after each maintenance run) to delete, redefine, and reformat the Outbound Application Databank Archive file. You must run Job EXECAROA when CICS is down or when the archive file is deallocated from CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHOAA) -  
  VOLUME(XXXXXX)           -  
  RECORDS(1000 1000)        -  
  FREESPACE(40 40)         -  
  KEYS(20 0)                -  
  RECORDSIZE(822 5102)     -  
  SHR(2 3)                  -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHOAA.DATA)-  
  CISZ(8192))               -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHOAA.INDEX))
```

Outbound EDI Databank Archive File

EDIRAROE

Description

This file stores Outbound EDI Databank records archived during maintenance. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file only when the Archive field on the Outbound EDI Databank Maintenance screen is set to Y.

Activity

The Archive file is a transaction file. Its volume depends on the number of records being archived from the Databank files.

Program References

The following program references the Outbound EDI Databank Archive file:

| Program | Purpose |
|---|--|
| Outbound EDI Databank Maintenance (EDID251) | Writes Databank records deleted via the Purge and Housekeeping options (when the value in the Archive field is Y). |

Outbound EDI Databank Maintenance executes by means of the Schedule option 404 (EDID251 is started by means of transID EDI4).

Note: The IBM Utility program IDCAMS is used to read the data from this file for sequential backup.

Disk Space Requirements

The space requirement for this file depends on:

- Frequency of Databank maintenance performed (via EDID251)
- Volume of data being archived
- Frequency of file initialization performed (via EXECAROE)

The space requirements change as you receive increased amounts of data from your trading partners.

We recommend you initially allocate as much space to the archive file as was allocated for the Sterling Gentran:Realtime Outbound EDI Databank Directory file (EDIROEA) and/or Outbound EDI Databank Message Store file (EDIROES). Continually monitor the amount of space used by the archive file to determine if you should increase or decrease it.

Dataset Recovery

Back up this file (by means of the IBM Utility program IDCAMS) after each run of the Outbound EDI Databank Maintenance program (EDID251). Use the IDCAMS utility to restore from the backup.

Submit JCL member EXECAROE periodically (typically after each maintenance run) to delete, redefine, and reformat the Outbound EDI Databank Archive file. You must run Job EXECAROE when CICS is down or when the archive file is deallocated from CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHOE)-  
  VOLUME(XXXXXX)           -  
  RECORDS(1000 1000)       -  
  FREESPACE(40 40)         -  
  KEYS(20 0)               -  
  RECORDSIZE(822 4072)     -  
  SHR(2 3)                 -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHOE.DATA)-  
  CISZ(8192))              -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.ARCHOE.INDEX))
```

Sterling Gentran:Realtime Acknowledgment Reconciliation File EDIRDAR

Description

This file stores acknowledgments received from your trading partners. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file when the Sterling Gentran:Realtime Inbound Editor encounters acknowledgment transactions during inbound EDI processing, and when the Acknowledgment Reconciliation/Monitor Reformatter receives data from the Sterling Gentran:Basic inbound process.

Activity

This file is relatively stable, with data written in small volumes whenever the Inbound Editor runs. When the Acknowledgment Reconciliation/Monitor (EDID515) program runs, the data is removed.

Note: You can suppress writes to this file by setting the Ack Recon Bypass switch to N. This switch is on the Sterling Gentran:Realtime Global Path Maintenance screen (EDIM833).

Program References

The following programs reference the Sterling Gentran:Realtime Acknowledgment Reconciliation file.

| Program | Purpose |
|---|--|
| Inbound Editor (EDIR001) | Writes inbound acknowledgments. |
| Acknowledgment Reconciliation/Monitor Reformatter (EDID516) | Reformats and writes inbound acknowledgments received from batch processing. |
| Acknowledgment Reconciliation/Monitor (EDID515) | Reads and deletes acknowledgment records. |

Sterling Gentran:Realtime Inbound Editor executes whenever the Sterling Gentran:Realtime Inbound process is performed. Acknowledgment Reconciliation/Monitor Reformatter executes by means of Queue option 098 (when Appl.Prog is "EDID516"). Acknowledgment Reconciliation/Monitor executes via Schedule option 407 (via transID EDI7).

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online and batch Inbound EDI acknowledgments received
- Frequency of acknowledgment reconciliation maintenance performed (via EDID515)
- Value of the Delete Unmatched ACKs field on the Acknowledgment Parameter Maintenance screen.

The space requirements will change as you send increased amounts of data to your trading partners.

Dataset Recovery

Because this file is updated only by CICS, you can use recovery and journaling facilities to recover this file.

The JCL member DEF RTE has the initial define of this file. Create a separate set of JCL to Delete/Define this file for maintenance.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDAR)-
  VOLUME(XXXXXX)           -
  RECORDS(200 100)         -
  FREESPACE(10 10)        -
  KEYS(17 0)               -
  RECORDSIZE(215 2000)    -
  NOREUSE                  -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDAR.DATA)-
  CISZ(8000))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDAR.INDEX))
```

Request File**EDIREQ****Description**

The Request file contains multiple sets of control cards that make up the Sterling Gentran:Realtime Path parameters required for the Shell, Mapper, and Editor processes. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Activity

This file has moderate activity when the system is initially setup, but after setup the activity is low.

Program References

The Request file is referenced by the following programs:

| Program | Purpose |
|--|-----------------------------|
| Outbound Appl Databank Maint (EDID151) | Reads records. |
| Outbound EDI Databank Maint (EDID251) | Reads records. |
| Outbound EDI Databank Extract (EDID255) | Reads records. |
| Inbound EDI Databank Maint (EDID351) | Reads records. |
| Inbound Appl Databank Maint (EDID451) | Reads records. |
| Inbound Appl Databank Extract (EDID455) | Reads records. |
| Acknowledgement Reconciliation/Monitor (EDID515) | Reads records. |
| Databank Change Audit Maint (EDID552) | Reads records. |
| Batch Option/Path Copy (EDIROCP) | Writes and updates records. |
| Option/Path Copy (EDIR077) | Writes records. |
| Databank Extract Driver (EDIR105) | Reads records. |
| Queue Options (EDIR303) | Reads records. |
| Connect Inbound Interface (EDIR316) | Reads records. |
| Outbound Editor Path Maint (EDIR83A) | Writes records. |
| Outbound Editor Path Maint-1 (EDIR83B) | Writes records. |
| Outbound Editor Path Maint-2 (EDIR83C) | Writes records. |
| Outbound Mapper Path Maint-1 (EDIR83D) | Writes records. |
| Outbound Mapper Path Maint-3 (EDIR83E) | Writes records. |
| Path Options Directory (EDIR830) | Reads records. |
| Shell Path Maint (EDIR831) | Writes records. |
| Inbound Mapper Path Maint-1 (EDIR832) | Writes records. |
| Inbound Editor Path Maint (EDIR833) | Writes records. |
| Inbound Editor Path Maint-1 (EDIR834) | Writes records. |
| Inbound Editor Path Maint-2 (EDIR835) | Writes records. |

| Program | Purpose |
|--|-----------------|
| Inbound Editor Path Maint-3 (EDIR836) | Writes records. |
| Inbound Mapper Path Maint-3 (EDIR837) | Writes records. |
| Outbound Envelope Path Maint (EDIR838) | Writes records. |
| Outbound Translation Shell Path Maint (EDIR839) | Writes records. |
| Outbound Editor Path Maint-3 (EDIR84A) | Writes records. |
| Additional Shell Path Maint (EDIR84B) | Writes records. |
| Outbound Editor Path Maint-4 (EDIR84C) | Writes records. |
| Outbound Editor Path Maint-5 (EDIR84D) | Writes records. |
| Additional Outbound Translation Shell Path Maint (EDIR84E) | Writes records. |
| Additional Inbound Translation Shell Maint (EDIR84F) | Writes records. |
| Outbound Mapper Path Maint-2 (EDIR84I) | Writes records. |
| Outbound Mapper Path Maint-4 (EDIR84J) | Writes records. |
| Inbound Mapper Path Maint-2 (EDIR84K) | Writes records. |
| Outbound Connect Path Maint (EDIR842) | Writes records. |
| Inbound Connect Path Maint (EDIR843) | Writes records. |
| Inbound Translation Shell Path Maint (EDIR844) | Writes records. |
| Outbound Ack \$\$ADD Maint (EDIR845) | Writes records. |
| Inbound Editor Path Maint-4 (EDIR846) | Writes records. |
| Inbound Editor Path Maint-5 (EDIR847) | Writes records. |
| Inbound Editor Path Maint-6 (EDIR848) | Writes records. |
| Inbound Editor Path Maint-7 (EDIR849) | Writes records. |
| Outbound Appl Databank Maint (EDIR863) | Writes records. |
| Outbound EDI Databank Maint (EDIR864) | Writes records. |
| Inbound EDI Databank Maint (EDIR865) | Writes records. |
| Inbound Appl Databank Maint (EDIR866) | Writes records. |
| Acknowledgment Maint (EDIR867) | Writes records. |
| Outbound EDI Databank Extract Maint (EDIR868) | Writes records. |
| Outbound EDI Databank Extract Maint-2 (EDIR869) | Writes records. |
| Activity Summary (EDIR870) | Reads records. |
| Inbound Appl Databank Extract Maint (EDIR872) | Writes records. |
| Inbound Appl Databank Extract Maint-2 (EDIR873) | Writes records. |
| Databank Change Audit Maint (EDIR874) | Writes records. |
| Request File Initiation (EDIR900) | Reads records. |

Disk Space Requirements

This file contains a small number of records. One record for each control statement (i.e one record per card-image). This file requires about 10 tracks on a 3390 disk drive.

Dataset Recovery

Recreate the Request file from either a recent backup or reload it from the Sterling Gentran:Realtime installation seed file.

If you use the installation seed file, or if the backup is not recent, you must use the Sterling Gentran:Realtime maintenance functions to re-enter your configuration information.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIREQ)-
  VOLUME(XXXXXX)           -
  RECORDS(750 250)         -
  FREESPACE(10 10)         -
  KEYS(7 0)                 -
  RECORDSIZE(106 106)      -
  SHR(2 3)                  -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIREQ.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIREQ.INDEX))
```


Exception Processing Detail Bypass File

EDIRDBP

Description

This file holds data records that have encountered errors, or were suspended or rejected during translation. It is intended to be a temporary repository for the data. Review and reprocess (or delete) the data. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Note: To write data to this file, the Exception Program Exit (EDIR852) must be set on the Shell Path Maintenance screen or on the Queue Options screen.

Activity

This file contains a low frequency of activity, but may involve high volumes of data, depending on the number of translation runs that use the Exception Exit and the number of runs that have severe errors.

Program References

The following programs reference the Exception Processing Detail Bypass file:

| Program | Purpose |
|--|--|
| Exception Program Exit (EDIR852) | Adds records to the detail file whenever a document group is bypassed. |
| Exception Processing Directory (EDIR850) | Displays the records from this file. |
| Exception Data List (EDIR851) | Displays the records from this file and updates them when deactivate or activate is specified. |
| Exception Data Detail (EDIR853) | Displays the records from this file. |

Disk Space Requirements

The space requirements for this file depend on how many document groups are rejected or experience errors during processing. Also, you should reprocess data placed on this file as soon as possible to release space.

Dataset Recovery

Depending on the number of exceptions written to this file, you may need to perform backups weekly or daily, or even more frequently. Perform recovery should from the latest backup.

Note: Do not use CICS RECOVERY on this file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDBP)-
  VOLUME(XXXXXX)           -
  TRACKS(500 80)           -
  FREESPACE(10 10)         -
  KEYS(25 0)               -
  RECORDSIZE(35 32756)     -
  SPANNED                   -
  NOREUSE                   -
  SHR(2 3))                -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDBP.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDBP.INDEX))
```

Exception Processing Header Bypass File

EDIRHBP

Description

This file holds header information about the document groups placed on the detail bypass file. This file is a VSAM key sequenced data set.

Because data placed on this file is only for errors and is suspended or rejected data, review this file frequently and delete or reprocess the data.

Note: The system writes data only if the Exception Program Exit (EDIR852) is specified on either the Shell Path Maintenance or Queue Options Maintenance screen.

Activity

This file contains low frequency of activity with only one write. The system writes (or reads) to this file one time for each translation.

Program References

The following programs reference the Exception Processing Header Bypass file:

| Program | Purpose |
|--|---|
| Exception Program Exit (EDIR852) | Adds a record to the header file whenever a document group is being bypassed. |
| Exception Processing Directory (EDIR850) | Displays the records from this file and deletes them when reprocess or delete is specified. |

Disk Space Requirements

The space requirements for this file depend on how many document groups are rejected or experience errors during processing. Reprocess data that is placed on this file as soon as possible to release space.

Dataset Recovery

Backups should be made weekly, daily, or even more frequently, depending on the volume of data. Use the latest backup for recovery.

Note: Do *not* use CICS RECOVERY on this file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRHBP)-
  VOLUME(XXXXXX)           -
  RECORDS(200 80)          -
  FREESPACE(10 10)        -
  KEYS(17 0)               -
  RECORDSIZE(080 0250)    -
  NOREUSE                  -
  SHR(2 3))                -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRHBP.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRHBP.INDEX))
```

Inbound Application Databank Directory**EDIRIAA****Description**

This file stores application transaction information about the EDI documents received from your trading partners. This file is a VSAM key sequenced dataset and is initialized during the Sterling Gentran:Realtime Installation process. The system writes data to the file when the Sterling Gentran:Realtime Inbound Mapper executes.

Activity

This is a high activity operational file.

Program References

The following programs reference the Inbound Application Databank Directory:

| Program | Purpose |
|--|---|
| Inbound Mapper (EDIR041) | Writes information (via Inbound Application Databank Maintenance Subroutine EDID452) about all inbound application records. |
| Inbound Application Databank Maintenance (EDID451) | Reads and deletes databank records. |
| Inbound Application Databank Extract (EDID455) | Updates the databank records. |
| Application Databank Inquiry Report (EDID551) | Reads the databank records and creates a transaction file (EDIRTRN) for any Databank updates. |
| Databank Status Update (EDIR855) | Updates the databank records from the transaction file created by EDID551. |
| Online Databank Maintenance Screens | Reads and updates databank records. |

Sterling Gentran:Realtime Inbound Mapper is executed whenever the Sterling Gentran:Realtime Inbound process is performed. Inbound Application Databank Maintenance executes by means of Schedule option 406 (via transID EDI6). Inbound Application Databank Extract executes by means of Schedule Option 408 (via transID EDIE).

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online Inbound EDI documents received
- Frequency of Databank maintenance performed (via EDID451)

Note: The volume of information written to this file can be controlled by the Databank Config. Sw and the Databank Proc. Level fields on the Mapper-1 Path Maintenance screen.

The space requirements change as you receive increased amounts of data from your trading partners.

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover this file. Do not use recovery facilities on this file because it causes all processing to be single threaded.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIAA)-
  VOLUME(XXXXXX)           -
  RECORDS(200 100)         -
  FREESPACE(40 40)         -
  KEYS(110 0)              -
  RECORDSIZE(800 800)      -
  SHR(2 3)                  -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIAA.DATA)-
  CISZ(8000))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIAA.INDEX))
```

Inbound Application Databank Change Audit File**EDIRIACA****Description**

The Inbound Application Databank Change Audit file contains detailed audit information of all online updates applied to the databank. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. This information is available for online or batch inquiry.

Activity

This is a low activity operational file.

Program References

The following programs reference the Inbound Application Databank Change Audit file:

| Program | Purpose |
|---|---|
| CICS Databank Maintenance | Reads and updates the file. |
| Databank Change Audit Inquiry (EDID500) | Reads the file. |
| Change Audit Maintenance (EDID552) | Reads and deletes Change Audit records. |

Disk Space Requirements

The system creates one Change Audit record for each update performed against the Inbound Application Databank. Space utilization for this file is maintained with retention periods.

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period, and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period, and cycle into these calculations. The example shows one possible method.

Example

An average of two updates are performed each day against the Inbound Application Databank.

The Databank Change Audit Maintenance program runs once a month with a retention period of 30 days specified.

1. Calculate the average monthly volume (30 days * 2 updates per day).

Updates per month = 60

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation, assume that all updates are successful within one day.

| | | |
|--|---|-----------|
| Records created over retention period | = | 60 |
| Records created between maintenance runs | = | <u>60</u> |
| Records on file | = | 120 |

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover this file. Do not use recovery facilities on this file because it will cause all processing to be single threaded.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIACA)-
  VOLUME(XXXXXX)           -
  RECORDS(120 30)          -
  FREESPACE(30 10)         -
  KEYS(116 0)              -
  RECORDSIZE(1700 2100)    -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIACA.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIACA.INDEX))
```


Inbound Application Databank Message Store

EDIRIAS

Description

The Inbound Application Databank Message Store file contains the application data as it is received from the Inbound Mapper program. You can view and edit the application data on the Inbound Application Databank Message Store file using CICS Databank Maintenance. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Activity

This file is optional. If your installation maintains inbound application data at the message store-level, you must define this file.

If used, this is a high activity operational file.

Program References

The following programs reference the Inbound Application Databank Message Store:

| Program | Purpose |
|--|---|
| Inbound Mapper (EDIR041) | Writes records (via the Inbound Application Databank Maintenance Subroutine EDID452). |
| Inbound Application Databank Maintenance (EDID451) | Reads and deletes records. |
| Inbound Application Databank Extract (EDID455) | Reads and updates the file. |
| CICS Databank Maintenance | Reads and updates records. |

Disk Space Requirements

The space requirements for this file depend on:

- Volume of online inbound EDI documents received
- Frequency of Databank maintenance performed (via EDID451)

Note: The volume of information written to this file can be controlled by the Databank Config. Sw and the Databank Proc. Level fields on the Mapper-1 Path Maintenance screen.

The space requirements change as you receive increased amounts of data from your trading partner.

Use the following formula to calculate approximate space requirements:

of Records = # of inbound application records

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period, and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period, and cycle into these calculations. The example shows one possible method.

Example

An average of 150 Purchase Orders are received each day.

The Inbound Application Databank Maintenance program runs twice per week, with a Retention-Days-Loaded specifying 4 days.

1. Calculate the average daily volumes.
(# of documents * average records generated by each purchase order.)

| | |
|--|-----------------------|
| # of documents | = 150 purchase orders |
| Average records generated by each purchase order | = 75 |
| Average # of records per day | = 11,250 |

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation assume that all documents are successfully processed within one day.

| | |
|--|----------|
| Records created over retention period (11,250 *4 days) | = 45,000 |
| Records created between maintenance runs (11,250 * 4 days) | = 45,000 |
| Records on file (45,000 + 45,000) | = 90,000 |

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover this file. Do not use recovery facilities on this file because it will cause all processing to be single threaded.

VSAM Dataset Definition

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIAS)-
  VOLUME(XXXXXX)           -
  RECORDS(1000 1000)        -
  FREESPACE(00 00)         -
  KEYS(16 0)                -
  RECORDSIZE(250 5076)     -
  SHR(2 3))                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIAS.DATA)-
  CISZ(8192))               -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIAS.INDEX))
```

Inbound EDI Databank Directory

EDIRIEA

Description

This file stores EDI interchange, group and transaction information about the EDI documents received from your trading partners. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. Data is written to this file when the Sterling Gentran:Realtime Inbound Editor executes.

Activity

This is a high activity operational file.

Program References

The following programs reference the Inbound EDI Databank Directory:

| Program | Purpose |
|--|---|
| Inbound Editor (EDIR001) | Writes information (via Inbound EDI Databank Maintenance Subroutine EDID352) about the inbound EDI records. |
| Inbound EDI Databank Maintenance (EDID351) | Reads and deletes Databank records. |
| EDI Databank Inquiry Report (EDID550) | Reads the Databank records and creates a Transaction file (EDIRTRN) for any Databank updates. |
| Databank Status Update (EDIR855) | Updates the Databank records from the Transaction file created by EDID550. |
| Online Databank Maintenance Screens | Reads and updates Databank records. |

Sterling Gentran:Realtime Inbound Editor executes whenever the Sterling Gentran:Realtime Inbound process runs. Inbound EDI Databank Maintenance executes via Schedule option 405 (via transID EDI5).

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online Inbound EDI documents received
- Frequency of Databank maintenance performed (via EDID351)

Note: The volume of information written to this file can be controlled by the EDI Databank Int, the EDI Databank Group, and the EDI Databank Trans fields on the Global Parameter Override Maint-1 screen.

The space requirements change as you receive increased amounts of data from your trading partners.

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover this file. Do not use recovery facilities on this file because it will cause all processing to be single threaded.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIEA)-
  VOLUME(XXXXXX)           -
  RECORDS(200 100)         -
  FREESPACE(40 40)        -
  KEYS(125 0)              -
  RECORDSIZE(800 800)     -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIEA.DATA)-
  CISZ(8000))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIEA.INDEX))
```

Inbound EDI Databank Change Audit File

EDIRIECA

Description

The Inbound EDI Databank Change Audit file contains detailed audit information for online updates to the Inbound EDI Databank. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. This information is available for online or batch inquiry.

Activity

This is a low activity operational file.

Program References

The following programs reference the Inbound EDI Databank Change Audit file:

| Program | Purpose |
|---|---|
| Databank Change Audit Inquiry (EDID500) | Reads the file. |
| Change Audit Maintenance (EDID552) | Reads and deletes the Change Audit records. |
| CICS Databank Maintenance | Reads and updates the file. |

Disk Space Requirements

One Change Audit record is created for each update performed against the Inbound EDI Databank. Space utilization for this file is maintained with retention periods.

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period, and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period, and cycle into these calculations. The example shows one possible method.

Example

An average of 2 updates are performed each day against the Inbound EDI Databank.

The Databank Change Audit Maintenance program runs once a month with a retention period of 30 days specified.

1. Calculate the average monthly volume.

Updates per month (30 days * 2 updates per day)= 60

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation, assume that all updates are successfully processed within one day.

| | |
|--|-------|
| Records created over retention period | = 60 |
| Records created between maintenance runs | = 60 |
| Records on file | = 120 |

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover this file. Do not use recovery facilities on this file because it will cause all processing to be single threaded.

VSAM Dataset Information

```

DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIECA)-
  VOLUME(XXXXXX)           -
  RECORDS(120 30)          -
  FREESPACE(30 10)        -
  KEYS(116 0)              -
  RECORDSIZE(2100 2100)   -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIECA.DATA)-
  CISZ(8192))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIECA.INDEX))

```

Inbound EDI Databank Link File**EDIRIEL****Description**

This file stores key information needed to link the Inbound EDI Databank Directory with the Inbound Application Databank Directory. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Activity

This file is relatively stable.

Program References

The following programs reference the Inbound EDI Databank Link file:

| Program | Purpose |
|--|---|
| Inbound Mapper (EDIR041) | Writes information (via the Inbound Application Databank Maintenance Subroutine EDID452) about the keys of the inbound EDI and application records. |
| Inbound Application Databank Maintenance (EDID451) | Reads and deletes records. |
| Transaction Status Detail Screen (EDIX258) | Reads the records. |

Sterling Gentran:Realtime Inbound Mapper executes whenever the Sterling Gentran:Realtime Inbound process runs. Inbound Application Databank Maintenance executes by means of Schedule option 406 (via transID EDI6).

Disk Space Requirements

The space requirement for this file depends on:

- volume of online Inbound EDI documents received
- frequency of Databank maintenance performed (via EDID451)

The space requirements change as you receive increased amounts of data from your trading partners.

Dataset Recovery

Because this file is updated only by CICS, you can use journaling facilities to recover this file. Do not use recovery facilities on this file because it will cause all processing to be single threaded.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIEL) -  
  VOLUME(XXXXXX)           -  
  RECORDS(200 100)         -  
  FREESPACE(40 40)        -  
  KEYS(126 0)              -  
  RECORDSIZE(237 237)     -  
  SHR(2 3)                 -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIEL.DATA)-  
  CISZ(4096))              -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIEL.INDEX))
```


Inbound EDI Databank Message Store File**EDIRIES****Description**

The Inbound EDI Databank Message Store file contains the actual EDI data in its entirety as received from your trading partner. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. View the EDI data on the Inbound EDI Databank Message Store file using CICS Databank Maintenance.

Activity

This is a high activity operational file, if Message Store level data is maintained by your installation.

Program References

The following programs reference the Inbound EDI Databank Message Store:

| Program | Purpose |
|--|--|
| Inbound Editor (EDIR001) | Writes databank records (via the Inbound EDI Databank Maintenance Subroutine EDID352). |
| Inbound EDI Databank Maintenance (EDID351) | Reads and deletes databank records. |
| CICS Databank Maintenance | Reads and updates databank records. |

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online Inbound EDI documents received
- Frequency of Databank maintenance performed (via EDID351)

Note: The volume of information written to this file can be controlled by the EDI Databank Int, the EDI Databank Group, and the EDI Databank Trans fields on the Global Parameter Override Maint-1 screen.

The space requirements change as you receive increased amounts of data from your trading partners. Use the following formula to calculate approximate space requirements:

of Records = # of EDI transactions

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period and cycle into these calculations. The example shows one possible method.

Example

An average of 150 Purchase Orders are received each day, on an average of 50 orders per run. The average size of a purchase order is 2700 characters.

The Inbound EDI Databank Maintenance program runs twice per week, with a Retention-Days-Loaded control card specifying 4 days.

1. Calculate the average daily volumes:

| | |
|---|-----------------------|
| # of transactions | = 150 purchase orders |
| average char./transaction | = 2700 |
| average total characters/day (# of transactions * average char./transaction) | = 405,000 |

2. Determine the average number of records created per day, based on the maximum record length of 4000.

| | |
|---|-------|
| average # of records created per day (average total characters / 4000) | = 101 |
|---|-------|

3. Determine the number of records on file, given the retention options chosen. To simplify the calculation assume that all documents are successfully processed within one day.

| | |
|--|-------|
| Records created over retention period (101 * 4 days) | = 404 |
| Records created between maintenance runs (101 * 4 days) | = 404 |
| Records on file (404 + 404) | = 808 |
| Dataset Recovery | |

Because only CICS updates this file, you can use journaling facilities to recover this file. Do not use recovery facilities on this file because it causes all processing to be single threaded.

VSAM Dataset Definition

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIES) -  
  VOLUME(XXXXXX)           -  
  RECORDS(100 100)         -  
  FREESPACE(00 00)        -  
  KEYS(16 0)               -  
  RECORDSIZE(2050 4050)   -  
  SHR(2 3)                 -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIES.DATA)-  
  CISZ(4096))              -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRIES.INDEX))
```

Monitor Header File

EDIRMNH

Description

This file stores header information about the data processed during the Separator Driver program (EDIR930) and Splitter (EDIR015 and EDIR016) processing. When monitoring is enabled (from screen EDIR935) the separator and splitter programs instruct the Monitor I/O program (EDIR940) to store tracking information about the interchanges that have been separated. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Activity

This file can have heavy activity if many Interchanges are processed through the separator or if splitting is performed on interchanges with large numbers of transactions.

Program References

The following programs access the Monitor Header file:

| Program | Purpose |
|---------------------------------------|---|
| Monitor I/O (EDIR940) | Writes, reads, updates, and deletes the Header records. |
| Separator Monitor Directory (EDIR938) | Reads the Header file. |

Disk Space Requirements

The system generates one record for each interchange processed through the Separator and for each split in the Splitter program. The file should be large enough to handle two days of data.

Note: Each split can be at a Transaction or at an Interchange level.

Dataset Recovery

Redefine the file, since it is only a temporary file and the data is written and deleted within a 24 hours. The transaction EDI1 on schedule option 402 removes old data from this file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMNH)-
  VOLUME(XXXXXX)           -
  TRACKS(25 22)            -
  FREESPACE(10 10)         -
  KEYS(23 0)               -
  RECORDSIZE(220 220)      -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMNH.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMNH.INDEX))-
```

Monitor Store File**EDIRMNS****Description**

The file stores the data that has been processed through the Separator Driver program (EDIR930) or the splitter programs (EDIR015 or EDIR016). Data storage on this file is controlled by the Monitor Store switch found on the Separator Systems Options Maintenance screen (EDIR935). This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. During separator processing the system stores each interchange, along with header information on the monitor header file (EDIRMHN), on this file. The Inbound splitter processing stores individual split files on this file. The Outbound splitter processing stores individual interchanges on this file.

Activity

Activity can be very heavy depending upon how much data is processed through the Separator and splitters, and whether the Store Switch is enabled (located on the Separator System Options Maintenance screen (EDIR935)).

Program References

The following programs access the Monitor Store file:

| Program | Purpose |
|---------------------------------------|--------------------------------------|
| Monitor I/O (EDIR940) | Reads, writes, and deletes the data. |
| Separator Monitor Directory (EDIR938) | Reads the data. |

Disk Space Requirements

Space depends on the number of separate Interchanges processed in one day, and the number of splits performed. The file should be large enough to handle two days of data.

Dataset Recovery

Redefine the file, since it is only a temporary file and the data is written and deleted within a 24 hours. The Transaction EDI1 on schedule option 402 removes old data from this file.

VSAM Dataset Information

```

DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMNS)-
  VOLUME(XXXXXX)           -
  TRACKS(55 20)            -
  FREESPACE(10 10)         -
  KEYS(26 0)               -
  RECORDSIZE(106 4212)     -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMNS.DATA)-
  CISZ(4096))              -

```

INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMNS.INDEX))-

Network Reconciliation File

EDIRNRC

Description

The Network Reconciliation file stores expected Network status information records. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Activity

This is an operational file which normally has low activity.

Program References

The following programs reference the Network Reconciliation file:

| Program | Purpose |
|--|------------------------------------|
| Network Reconciliation (EDID850) | Reads the file. |
| Network Reconciliation Maintenance (EDID860) | Reads and deletes Network records. |
| Outbound Editor (EDIR002) | Updates the file. |
| Outbound EDI Databank Extract (EDID255) | Updates the file. |

Disk Space Requirements

The space requirements for this file depend on:

- Volume of outbound interchanges for which Network Tracking has been specified
- Retention period selected
- Frequency of the Network Reconciliation Maintenance performed (via EDID860)

There is one record for each outbound interchange being tracked.

Dataset Recovery

Recreate the Network Reconciliation file by restoring it from the most recent backup.

For file **recovery** purposes, you must complete a backup of the Network Reconciliation file prior to running the above programs, Network Reconciliation and Network Reconciliation Maintenance. To **restart** these programs, restore the Network Reconciliation file using the backup created prior to the run and rerun of the program.

Note: To run the Network Reconciliation Maintenance program (EDID860), you must disable the EDIRNRC file on CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRNRC)-  
  VOLUME(XXXXXX)           -  
  RECORDS(100 100)         -  
  FREESPACE(10 10)         -  
  KEYS(130 0)              -  
  RECORDSIZE(300 300)      -  
  SHR(2 3))                -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRNRC.DATA)-  
  CISZ(4096))              -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIRNRC.INDEX))
```


Outbound Application Databank Directory**EDIROAA****Description**

This file stores application transaction information about the documents being sent to your trading partners. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file when the Sterling Gentran:Realtime Outbound Mapper executes.

Activity

This is a high activity operational file.

Program References

The following programs reference the Outbound Application Databank Directory:

| Program | Purpose |
|---|---|
| Outbound Mapper (EDIR042) | Writes information (via Outbound Application Databank Maintenance Subroutine EDID152) about all outbound application records. |
| Outbound Application Databank Maintenance (EDID151) | Reads and deletes records. |
| Application Databank Inquiry Report (EDID551) | Reads the Databank records and creates a transaction file (EDIRTRN) for any Databank updates. |
| Databank Status Update (EDIR855) | Updates the Databank records from the transaction file created by EDID551. |
| Online Databank Maintenance Screens | Reads and updates Databank records. |

Sterling Gentran:Realtime Outbound Mapper executes whenever the Sterling Gentran:Realtime Outbound process runs. Outbound Application Databank Maintenance executes by means of Schedule option 403 (via transID EDI3).

Disk Space Requirements

The space requirements for this file depend on:

- Volume of online Outbound documents being sent
- Frequency of Databank maintenance performed (via EDID151)

Note: The volume of information written to this file can be controlled by the Databank Config. Sw and the Databank Proc. Level fields on the Mapper-1 Path Maintenance screen.

The space requirements change as you send increased amounts of data to your trading partners.

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover it. Do not use recovery facilities on this file because it causes all processing to be single threaded.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAA)-
  VOLUME(XXXXXX)           -
  RECORDS(200 100)         -
  FREESPACE(40 40)         -
  KEYS(110 0)              -
  RECORDSIZE(800 800)      -
  SHR(2 3))                -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAA.DATA)-
  CISZ(8000))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAA.INDEX))
```

Outbound Application Databank Change Audit File**EDIROACA****Description**

The Outbound Application Databank Change Audit file contains detailed audit information of all online updates applied to the Outbound Application Databank. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. This information is available for online or batch inquiry.

Activity

This is a low activity file.

Program References

The following programs reference the Outbound Application Databank Change Audit:

| Program | Purpose |
|---|---|
| Databank Change Audit Inquiry (EDID500) | Reads the file. |
| Change Audit Maintenance (EDID552) | Reads and deletes change audit records. |
| CICS Databank Maintenance | Reads and updates the file. |

Disk Space Requirements

The system creates one Change Audit record for each update performed against the Outbound Application Databank. Space utilization for this file is maintained with retention periods.

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period, and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period, and cycle into these calculations. The example shows one possible method.

Example

An average of two updates are performed each day against the Outbound Application Databank.

The Databank Change Audit Maintenance program runs once a month with a retention period of 30 days specified.

1. Calculate the average monthly volume.

Updates per month (30 days * 2 updates per day)= 60

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation, assume that all updates are successful within one day.

| | |
|--|-------|
| Records created over retention period | = 60 |
| Records created between maintenance runs | = 60 |
| Records on file (60 + 60) | = 120 |

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover it.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROACA)-
  VOLUME(XXXXXX)           -
  RECORDS(120 30)          -
  FREESPACE(30 10)         -
  KEYS(116 0)              -
  RECORDSIZE(1700 2100)    -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROACA.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROACA.INDEX))
```

Outbound Application Databank Link File**EDIROAL****Description**

This file stores key information needed to link the Outbound Application Databank Directory with the Outbound EDI Databank Directory. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Activity

This file is relatively stable.

Program References

The following programs reference the Outbound Application Databank Link file:

| Program | Purpose |
|---|---|
| Outbound Editor (EDIR002) | Writes information (via Outbound EDI Databank Maintenance Subroutine EDID252) about the keys of the outbound application and EDI records. |
| Outbound EDI Databank Maintenance (EDID251) | Reads and deletes records. |
| Document Status Detail Screen (EDIX265) | Reads the records. |

Sterling Gentran:Realtime Outbound Editor executes whenever the Sterling Gentran:Realtime Outbound process runs. Outbound EDI Databank Maintenance executes by means of Schedule option 404 (via transID EDI4).

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online Outbound EDI documents sent
- Frequency of Databank maintenance performed (via EDID251)

The space requirements change as you send increased amounts of data to your trading partners.

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover it. Do not use recovery facilities on this file because it causes all processing to be single threaded.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAL)-  
  VOLUME(XXXXXX)           -  
  RECORDS(200 100)         -  
  FREESPACE(40 40)        -  
  KEYS(111 0)              -  
  RECORDSIZE(237 237)     -  
  SHR(2 3)                 -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAL.DATA) -  
  CISZ(8000))              -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAL.INDEX))
```

Outbound Application Databank Message Store

EDIROAS

Description

The Outbound Application Databank Message Store contains the application data in the same format as received from the application. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. View and edit the application data on the Outbound Application Databank Message Store file using CICS Databank Maintenance.

Activity

This file is optional. If your installation maintains outbound application data at the message store-level, you must define this file.

If used, this is a high activity operational file.

Program References

The following programs reference the Outbound Application Databank Message Store file:

| Program | Purpose |
|---|---|
| Outbound Mapper (EDIR042) | Writes databank records (via Outbound Application Databank Maintenance Subroutine EDID152). |
| Outbound Application Databank Maintenance (EDID151) | Reads and deletes databank records. |
| CICS Databank Maintenance | Reads and updates databank records. |

Disk Space Requirements

The space requirements for this file depends on:

- Volume of online Outbound documents being sent
- Frequency of Databank maintenance performed (via EDID151)

Note: The volume of information written to this file can be controlled by the Databank Config. Sw and the Databank Proc. Level fields on the Mapper-1 Path Maintenance screen.

The space requirements change as you receive increased amounts of data from your trading partner. Use the following formula to calculate approximate space requirements:

of Records = # of outbound application document records

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period and cycle into these calculations. The example shows one possible method.

Example

An average of 150 Purchase Orders are sent each day.

The Outbound Application Databank Maintenance program runs twice per week, with a Retention-Days-Loaded control card specifying 4 days.

1. Calculate the average daily volumes.

| | |
|---|-----------------------|
| # of documents | = 150 purchase orders |
| Average records/documents | = 75 |
| Average # of records per day (# of documents * average records/document) | = 11,250 |

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation assume that all documents are successfully processed within one day.

| | |
|---|----------|
| Records created over retention period (11,250 * 4 days) | = 45,000 |
| Records created between maintenance runs (11,250 * 4 days) | = 45,000 |
| Records on file (45,000 + 45,000) | = 90,000 |

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover it. Do not use recovery facilities on this file because it will cause all processing to be single threaded.

VSAM Dataset Definition

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAS)-
  VOLUME(XXXXXX)           -
  RECORDS(1000 1000)       -
  FREESPACE(00 00)        -
  KEYS(16 0)               -
  RECORDSIZE(250 5076)    -
  SHR(2 3))                -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAS.DATA)-
  CISZ(8192))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROAS.INDEX))
```


Outbound EDI Databank Directory**EDIROEA****Description**

This file stores EDI interchange, group, and transaction information about the EDI documents being sent to your trading partners. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data is written to this file when the Sterling Gentran:Realtime Outbound Editor executes.

Activity

This is a high activity operational file.

Program References

The following programs reference the Outbound EDI Databank Directory:

| Program | Purpose |
|---|---|
| Outbound Editor (EDIR002) | Writes information (via Outbound EDI Databank Maintenance Subroutine EDID252) about all outbound EDI records. |
| Outbound EDI Databank Maintenance (EDID251) | Reads and deletes records. |
| Acknowledgment Reconciliation/Monitor (EDID515) | Updates records with the acknowledgment information received from your trading partner. |
| Outbound EDI Databank Extract (EDID255) | Updates the Databank records. |
| EDI Databank Inquiry Report (EDID550) | Reads the Databank records and creates a Transaction file (EDIRTRN) for any Databank updates. |
| Databank Status Update (EDIR855) | Updates the Databank records from the transaction file created by EDID550. |
| Online Databank Maintenance Screens | Reads and updates Databank records. |

Sterling Gentran:Realtime Outbound Editor executes whenever the Sterling Gentran:Realtime Outbound process runs. Outbound EDI Databank Maintenance executes by means of Schedule option 404 (via transID EDI4). Acknowledgment Reconciliation/Monitor executes by means of Schedule option 407 (via transID EDI7). Outbound EDI Databank Extract executes by means of Schedule option 408 (via transID EDIE).

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online Outbound EDI documents being sent
- Frequency of Databank maintenance performed (via EDID251)

Note: The volume of information written to this file can be controlled by the EDI Databank Int, the EDI Databank Group, and the EDI Databank Trans fields on the Global Parameter Override Maint-1 screen.

The space requirements change as you send increased amounts of data to your trading partners.

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover it. Do not use recovery facilities on this file because it will cause all processing to be single threaded.

VSAM Dataset Information

```

DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROEA)-
  VOLUME(XXXXXX)           -
  RECORDS(200 100)         -
  FREESPACE(40 20)        -
  KEYS(125 0)              -
  RECORDSIZE(900 900)     -
  SHR(2 3))
DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROEA.DATA)-
  CISZ(4096))
INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROEA.INDEX))

```

Outbound EDI Databank Change Audit File

EDIROECA

Description

The Outbound EDI Databank Change Audit file contains detailed audit information for online updates which are applied to the Outbound EDI Databank. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. This information is available for online or batch inquiry.

Activity

This is a low activity operational file.

Program References

The following programs reference the Outbound EDI Databank Change Audit file:

| Program | Purpose |
|---|---|
| Change Audit Maintenance (EDID552) | Reads and deletes change audit records. |
| Databank Change Audit Inquiry (EDID500) | Reads the file. |
| CICS Databank Maintenance | Reads and updates the file. |

Disk Space Requirements

The system creates one Change Audit record for each update performed against the Outbound EDI Databank. Space utilization for this file is maintained with retention periods.

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period, and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period, and cycle into these calculations. The example shows one possible method.

Example

An average of 2 updates are performed each day against the Outbound EDI Databank.

The Databank Change Audit Maintenance program runs once a month with a retention period of 30 days specified.

1. Calculate the average monthly volume.

Updates per month (30 days * 2 updates per day)= 60

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation, assume that all updates are successfully processed within one day.

| | |
|--|-------|
| Records created over retention period | = 60 |
| Records created between maintenance runs | = 60 |
| Records on file (60 + 60) | = 120 |

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover it.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROECA)-
  VOLUME(XXXXXX)           -
  RECORDS(120 30)          -
  FREESPACE(30 10)         -
  KEYS(116 0)              -
  RECORDSIZE(2300 2300)    -
  SHR(2 3)                  -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROECA.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROECA.INDEX))
```

Outbound EDI Databank Message Store

EDIROES

Description

The Outbound EDI Databank Message Store contains EDI data in the same format as that sent to your trading partners. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. View the EDI data on the Outbound EDI Databank Message Store file using CICS Databank Maintenance.

Activity

This file is optional. If your installation maintains outbound EDI data at the message store-level, you must define this file.

If used, this is a high activity operational file.

Program References

The following programs reference the Outbound EDI Databank Message Store file:

| Program | Purpose |
|---|---|
| Outbound Editor (EDIR002) | Writes databank records (via the Outbound EDI Databank Maintenance Subroutine EDID252). |
| Outbound EDI Databank Extract (EDID255) | Reads the file. |
| Outbound EDI Databank Maintenance (EDID251) | Reads and deletes databank records. |
| CICS Databank Maintenance | Reads databank records. |

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online Outbound EDI documents being sent
- Deferred enveloping and/or nondeferred enveloping implementation
- Frequency of Databank maintenance performed (via EDID251)

Note: The volume of information written to this file can be controlled by the EDI Databank Int, the EDI Databank Group, and the EDI Databank Trans fields on the Global Parameter Override Maint-1 screen.

The space requirements change as you send increased amounts of data to your trading partners. Use the following formula to calculate approximate space requirements:

$$\text{Total \# of records} = \text{\# of non-deferred EDI interchanges} + \text{\# of deferred EDI transactions}$$

Note: Maintaining Message Store data on the Outbound EDI Databank is optional. Message Store usage is controlled by a combination of trading profile and control card options. The calculation shown below assumes that all outbound EDI data sent is being placed on the Outbound EDI Databank Message Store.

Example

An average of 100 purchase orders are sent each day using deferred enveloping. The average size of a purchase order is 2700 characters.

An average of 50 invoices are sent each day via non-deferred envelope processing. The average size of an invoice is 1500 characters. An average interchange contains 25 invoices; therefore, the average invoice interchange size is 37500 characters.

The Outbound EDI Databank Maintenance program runs twice per week with a Retention-Days-Loaded control card specifying four days.

The maximum size of the Message Store record is 4000.

1. Calculate daily volumes of deferred and non-deferred processing.

Deferred requirements:

$$\text{\# of deferred transactions per day} = 100$$

$$\text{average \# of characters per deferred transaction} = 2700$$

$$\begin{aligned} &\text{Average \# of deferred Message Store records per transaction} \\ &\text{(Divide the average \# of characters per deferred transaction} \\ &\text{by the Max \# of characters per Message Store record and} \\ &\text{round to the nearest whole number.)} \\ &(2700/4000) \end{aligned} = 1$$

$$\begin{aligned} &\text{Average \# of Message Store records per day} \\ &\text{(Multiply the average \# of Message Store records} \\ &\text{per transaction by the \# of deferred transactions per day)} \\ &(1 * 100) \end{aligned} = 100$$

Non-deferred requirements:

of non-deferred interchanges per day = 2

average # of characters per interchange = 37500

Average # of non-deferred Message Store records per interchange
(Divide the average # of characters per interchange
by the Max # of characters per Message Store record)
and round to the nearest whole number
(37500 / 4000) = 10

Average # of Message Store records per day
(Multiply the average # of Message Store records per interchange
by # of non-deferred interchanges per day)
(10 * 2) = 20

Total # of records per day
(# of non-deferred records per day + # of deferred records per day)
(20 + 100) = 120

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation assume that all documents are successfully processed within one day.

Records created over retention period (120 * 4) = 480

Records created between maintenance runs (120 * 4) = 480

Records on file (480 + 480) = 960

Dataset Recovery

Because only CICS updates this file, you can use journaling facilities to recover it. Do not use recovery facilities on this file because it causes all processing to be single threaded.

VSAM Dataset Definition

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROES)-
  VOLUME(XXXXXX)           -
  RECORDS(960 480)         -
  FREESPACE(00 00)        -
  KEYS(16 0)              -
  RECORDSIZE(2050 4050)   -
  SHR(2 3))               -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROES.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDI.EDIROES.INDEX))
```

Batch Number Cross Reference File

EDIRMXR

Description

The Batch number cross reference file holds the interchange key of the Sterling Gentran:Realtime Outbound EDI databank and the cross reference batch number from the \$\$ADD card. When the Outbound Connect API program (EDIR314) passes the batch to the Connect system, it generates a batch number used to update the Cross Reference file. The Connect Batch Number Update program (EDIR317) reads this file and updates the Sterling Gentran:Realtime Outbound EDI databank with the batch number. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Activity

This is dependent upon the use of the Connect API program (EDIR314) and \$\$ADD cards. If neither is used then no data is written to the file.

Program References

The following programs access the Batch Number Cross Reference file:

| Program | Purpose |
|-------------------------------------|--|
| Outbound EDI Databank I/O (EDID251) | Writes a cross reference record. |
| Outbound Connect API (EDIR314) | Updates the file with the batch number. |
| Connect Batch Update (EDIR317) | Updates the Outbound EDI Databank with the batch number. |

Disk Space Requirements

The Connect Batch Update program (EDIR317) deletes all records updated on the databank. The size of the file depends on the number of batches processed through the Connect API and the frequency of running EDIR317. The program is run by the transaction EDI0 and should run on a scheduled basis.

Dataset Recovery

Perform nightly backups with recovery setup on the file in the CICS environment.

VSAM Dataset Information

```
/* MAILBOX BATCH NUMBER CROSS REFERENCE FILE      */
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMXR) -
  RECORDS(210 110)          -
  FREESPACE(00 00)         -
  KEYS(7 0)                 -
  RECORDSIZE(180 180)      -
  SHR(2 3))                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMXR.DATA) -
  CISZ(4096))               -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRMXR.INDEX))
```

Report Control File**EDIRRC****Description**

This file controls and records all reports written by the Sterling Gentran:Realtime core system. The Report Control file is a continuous wrap-around type file (RRDS).

Activity

This is a high activity file. This file contains one read and one rewrite for every report generated by the online Sterling Gentran:Realtime programs.

Program References

The following programs access the Report Control file:

| Program | Purpose |
|---|---|
| Report Selection (EDIR310) | Reads the Report Control file to determine which reports are available for display. |
| Report Display (EDIR311) | Reads the Report Control file to determine the location of a specific report in the Report Detail file. |
| Report Initiation (EDIR312) | Creates an incore header for use by the Sterling Gentran:Realtime core programs when writing reports. |
| Outbound Application Databank Maintenance (EDID151) | Updates the Report Control file when writing reports. |
| Acknowledgment Reconciliation/Monitor (EDID515) | Updates the Report Control file when writing reports. |
| Acknowledgment Reconciliation/Monitor Reformatter (EDID516) | Updates the Report Control file when writing reports. |
| Inbound Editor (EDIR001) | Updates the Report Control file when writing reports. |
| Outbound Editor (EDIR002) | Updates the Report Control file when writing reports. |
| Inbound Mapper (EDIR041) | Updates the Report Control file when writing reports. |
| Outbound Mapper (EDIR042) | Updates the Report Control file when writing reports. |
| Shell Routine (EDIR313) | Updates the Report Control file when writing reports. |
| Outbound EDI Databank Extract (EDID255) | Updates the Report Control file when writing reports. |
| Inbound Application Databank Extract (EDID455) | Updates the Report Control file when writing reports. |
| Outbound EDI Databank Maintenance (EDID251) | Updates the Report Control file when writing reports. |

| Program | Purpose |
|--|---|
| Inbound EDI Databank Maintenance (EDID351) | Updates the Report Control file when writing reports. |
| Inbound Application Databank Maintenance (EDID451) | Updates the Report Control file when writing reports. |
| Connect Outbound Interface (EDIR314) | Updates the Report Control file when writing reports. |
| Connect Monitor Wakeup (EDIR315) | Updates the Report Control file when writing reports. |
| Connect Inbound Interface (EDIR316) | Updates the Report Control file when writing reports. |
| Connect Batch Number Update (EDIR317) | Updates the Report Control file when writing reports. |
| Inbound Reject/Splitter (EDIR015) | Updates the Report Control file when writing reports. |
| Outbound Splitter (EDIR016) | Updates the Report Control file when writing reports. |
| Change Audit Maintenance (EDID552) | Updates the Report Control file when writing reports. |
| ACK \$\$ADD Generate (EDIR021) | Updates the Report Control file when writing reports. |

Disk Space Requirements

One record is required for each report. The size depends on the volume of activity on your Sterling Gentran:Realtime system and on the length of time that you want to have reports available online. The file wraps automatically.

Dataset Recovery

Recreate the Report Control file by redefining and then running Report File Maintenance (EDIR305) to initialize the file.

Define this file as non-recoverable in CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRRC)-
  VOLUME(XXXXXX)           -
  RECORDS(8000)             -
  NUMBERED                  -
  RECORDSIZE(100 100)      -
  SHR(2 3)                  -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRRC.DATA)-
  CISZ(2048))
```

Note: The Report Control file must not have a secondary allocation.

Report Detail File**EDIRRD****Description**

This file contains all reports written by the Sterling Gentran:Realtime core system. The Report Detail file is a continuous wrap-around VSAM RRDS type file.

Activity

This is a high activity file. This is a high-volume file, dependent on the parameters used in the Sterling Gentran:Realtime translators.

Program References

The following programs accessed the Report Detail file:

| Program | Purpose |
|---|---|
| Report Display (EDIR311) | Reads the Report Detail file and creates online displays. |
| Report Initiation (EDIR312) | Creates an incore header for use by the Sterling Gentran:Realtime core programs when writing reports. |
| Outbound Application Databank Maintenance (EDID151) | Updates the Report Detail file. |
| Acknowledgment Reconciliation/Monitor (EDID515) | Updates the Report Detail file. |
| Acknowledgment Reconciliation/Monitor Reformatter (EDID516) | Updates the Report Detail file. |
| Inbound Editor (EDIR001) | Updates the Report Detail file. |
| Outbound Editor (EDIR002) | Updates the Report Detail file. |
| Inbound Mapper (EDIR041) | Updates the Report Detail file. |
| Outbound Mapper (EDIR042) | Updates the Report Detail file. |
| Shell Routine (EDIR313) | Updates the Report Detail file. |
| Outbound EDI Databank Extract (EDID255) | Updates the Report Detail file. |
| Inbound Application Databank Extract (EDID455) | Updates the Report Detail file. |
| Outbound EDI Databank Maintenance (EDID251) | Updates the Report Detail file. |
| Inbound EDI Databank Maintenance (EDID351) | Updates the Report Detail file. |
| Inbound Application Databank Maintenance (EDID451) | Updates the Report Detail file. |

| Program | Purpose |
|---------------------------------------|---------------------------------|
| Connect Outbound Interface (EDIR314) | Updates the Report Detail file. |
| Connect Monitor Wakeup (EDIR315) | Updates the Report Detail file. |
| Connect Inbound Interface (EDIR316) | Updates the Report Detail file. |
| Connect Batch Number Update (EDIR317) | Updates the Report Detail file. |
| Inbound Reject/Splitter (EDIR015) | Updates the Report Detail file. |
| Outbound Splitter (EDIR016) | Updates the Report Detail file. |
| Change Audit Maintenance (EDID552) | Updates the Report Detail file. |
| ACK \$\$ADD Generate (EDIR021) | Updates the Report Detail file. |

Disk Space Requirements

One record is required for **EACH LINE** on each report. The size depends on the volume of activity on your Sterling Gentran:Realtime system and on the length of time that you want to have reports available online. The file wraps automatically.

Dataset Recovery

Recreate the Report Detail file by redefining and then running Report File Maintenance (EDIR305) to initialize the file.

Define this file as non-recoverable in CICS.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRRD)-
  VOLUME(XXXXXX)           -
  RECORDS(10000)           -
  NUMBERED                 -
  RECORDSIZE(175 175)      -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRRD.DATA)-
  CISZ(2048))
```

Note: The Report Detail file must not have a secondary allocation.

Summary Statistics File

EDIRSUM

Description

This file stores statistical records for each of the main programs in the Sterling Gentran:Realtime translation process. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. Data written to the Sterling Gentran:Realtime Reporting Subsystem during Sterling Gentran:Realtime translation is written to the Summary Statistics file. This file provides a source for user-generated reports. The record layout is in the source utility member EDIRSUM.

Activity

Each Mapper and Editor run writes one record to this file.

Program References

The following programs reference the Summary Statistics file:

| Program | Purpose |
|---------------------------|--|
| Outbound Mapper (EDIR042) | Writes one statistics record each time the program executes. |
| Outbound Editor (EDIR002) | Writes one statistics record each time the program executes. |
| Inbound Editor (EDIR001) | Writes one statistics record each time the program executes. |
| Inbound Mapper (EDIR041) | Writes one statistics record each time the program executes. |

These programs execute during inbound or outbound Sterling Gentran:Realtime translation.

Disk Space Requirements

The space requirement for this file depends on:

- Volume of translations processed
- Frequency unloading of file is performed (via EDISUMBK)

Since each program in a translation process writes out a record, multiply the number of outbound translations per day by 2 and multiply the number of inbound translations per day by 2. Multiply the sum by the average size of each record (930).

of bytes per day = ((# of outbound * 2) + (# of inbound * 2)) = sum * 930

Dataset Recovery

Because only CICS updates this file, you can use recovery and journaling facilities to recover it.

If you do not use recovery for this file, the file will contain statistical records for unsuccessful translations. If you do use recovery, these “errored” statistical records will be removed during backout processing. Design your reports with this in mind.

JCL member EDISUMBK uses IBM utility IDCAMS to copy the Summary Statistics file to a sequential file, then redefines the Summary Statistics file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRSUM)-
  VOLUME(XXXXXX)           -
  RECORDS(200 100)         -
  FREESPACE(10 10)        -
  KEYS(17 0)               -
  RECORDSIZE(609 2000)    -
  NOREUSE                  -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRSUM.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRSUM.INDEX))
```

Sample Application Data Files

**EDIAPPL, EDIAPPL1,
EDIAPPL2**

Description

These files test the outbound translation process using given sets of data. Each file is loaded with a different set of application data translated into a different EDI standard. The EDIAPPL data generates ANSI data, EDIAPPL1 generates EDIFACT data, and EDIAPPL2 generates TRADACOMS data. This file is a VSAM RRDS that processes in a continuous wrap-around manner.

Activity

Load these files by running the DEFRTTE installation JCL. Once loaded, the only activities done by the CICS test program EDIRSOA are reads. You can optionally reload these files with your own data and test processing of this data. See the JCL member DEFUAPP for the reload processing.

Program References

The following programs access the Sample Application Data files:

| Program | Purpose |
|-------------------------------------|--|
| Sample Online Application (EDIRSOA) | Read the data and pass it to the Sterling Gentran:Realtime Outbound translation process with comparable results to the batch translation system. |

Disk Space Requirements

These files are very small test files and require less than 5 tracks on a 3390 disk drive.

Dataset Recovery

Rebuild the Sample Application files using a backup of the datasets. No data is changed in processing, so a simple backup of these files is needed.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIAPPL)-
  VOLUME(XXXXXX)           -
  TRACKS(2 1)              -
  NUMBERED                 -
  RECORDSIZE(250 250)     -
  SHR(2 3))                -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIAPPL.DATA)-
  CISZ(1024))
```


Sample EDI Inbound Data Files

EDIDAT, EDIDAT1, EDIDAT2

Description

These files test the inbound translation process using given sets of data. Each file is loaded with a different set of EDI data. Each set is from a different standard and will be translated into application data during testing. The EDIDAT file has ANSI data, the EDIDAT1 has EDIFACT data and EDIDAT2 has TRADACOMS data.

Activity

Load these files by running the DEFRTTE installation JCL. Once loaded, the only activities are reads which are done by the CICS test program EDIRSOA. You can optionally reload these files with their own data and test processing of this data. See the JCL member DEFUDAT for the reload processing.

Program References

The following program accesses the Sample EDI Inbound Data files:

| Program | Purpose |
|-------------------------------------|--|
| Sample Online Application (EDIRSOA) | Reads the data and passes it to the Sterling Gentran:Realtime Inbound translation process with comparable results to the batch translation system. |

Disk Space Requirements

These files are very small and require less than 5 tracks on a 3390 disk drive.

Dataset Recovery

Rebuild the Sample EDI files using a backup of the datasets. No data is changed in processing, so a simple backup of these files is needed.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIDAT)-
  VOLUME(XXXXXX)           -
  TRACKS(2 1)              -
  NUMBERED                  -
  RECORDSIZE(80 80)        -
  SHR(2 3))                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIDAT.DATA)-
  CISZ(1024))
```

Test Data File

EDITDATA

Description

Job DEF RTE creates the Test Data file (EDITDATA) during Sterling Gentran:Realtime installation. You can use JCL member TESTLOAD to load test data to this file. An online transaction (EDIK) passes data to a queue file or a Sterling Gentran:Realtime Immediate Option. This enables you to test Sterling Gentran:Realtime processes without having to change user programs. EDITDATA holds both inbound and outbound data. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Note: This file is for testing purposes only. Do not install it in your production environment.

Activity

This file holds application data for inbound and outbound processes. The JCL in member TESTLOAD loads data to this file. The transaction EDIK processes the test data through Sterling Gentran:Realtime.

Program References

The following programs access the Test Data file:

| Program | Purpose |
|-------------------------------|---|
| Online Test program (EDITPGM) | This program is for online data testing (through the EDIK transaction). |
| Batch Test program (EDITPGMX) | This program is for batch loading and data deletions. |

Disk Space Requirements

Since this file contains test data only, its space requirement is based on the volume of the test data.

Dataset Recovery

We recommend that you make scheduled backups of this file using IDCAMS or restore with a static sequential file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.TESTDATA) -  
  VOLUME(XXXXXX) -  
  RECORDS(5000 1800) -  
  FREESPACE(10 10) -  
  KEYS(16 0) -  
  RECORDSIZE(036 30016) -  
  NOREUSE -  
  SHR(2 3)) -  
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.TESTDATA.DATA) -  
    CISZ(4096)) -  
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.TESTDATA.INDEX))
```

Translation Results File

EDIRSLTS

Description

This file holds the results of inbound and outbound translation tests. It is only for testing purposes and should not be moved to production. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation.

Program EDIRSLTS is the destination program for the Path being processed (located on the Shell-1 Path Maintenance screen – EDIR831). Use batch program EDIRSLTX (JCL member EXECRSLT) to copy the data to a sequential file.

Activity

File activity depends on usage of the EDIRSLTS program as a destination for the translated data.

Program References

The following programs access the Translation Results file:

| Program | Purpose |
|---|-------------------------------|
| Online Translation Results program EDIRSLTS | This program writes the data. |
| Batch Translation Results program EDIRSLTX | This program reads the data. |

Disk Space Requirements

Disk space requirements depend on the amount of test data. You can remove data by using delete/define on the file.

Dataset Recovery

No recovery is needed since this file is used only for testing.

VSAM Dataset Information

```

DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRSLTS) -
  VOLUME(XXXXXX)           -
  RECORDS(8000 5000)       -
  FREESPACE(10 10)        -
  KEYS(24 0)               -
  RECORDSIZE(30 8056)     -
  NOREUSE                  -
  SHR(2 3))               -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRSLTS.DATA) -
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRSLTS.INDEX))

```

Online Control Change Audit File

EDIOCHA

Description

The Online Control Change Audit file contains detailed audit information of all online updates applied to the Online Control file. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. This information is available for online or batch inquiry.

Activity

This is a low activity file.

Program References

The following programs reference the Online Control Change Audit file:

| Program | Purpose |
|---|-----------------------------|
| Online Scanner/Initiator (EDIEOSI) | Writes records. |
| Shutdown or Start Scanner (EDIETOGL) | Writes records. |
| Batch Option/Path Copy (EDIROCP) | Writes and updates records. |
| Remote System Start / Stop (EDIRSTOP) | Writes records. |
| Option/Path Copy (EDIR077) | Writes records. |
| System Options Maintenance (EDIR301) | Writes records. |
| Queue Options Maintenance (EDIR303) | Writes records. |
| Extended Queue Options Maintenance (EDIR305) | Writes records. |
| OCF Change Audit Directory (EDIR320) | Reads records. |
| OCF Change Audit Status (EDIR321) | Reads records. |
| OCF Change Audit Detail (EDIR322) | Reads records. |
| Batch OCF Change Audit Inquiry (EDIR330) | Reads records. |
| Batch OCF Change Audit Maintenance (EDIR331) | Reads and deletes records. |
| Immediate Options Maintenance (EDIR811) | Writes records. |
| Schedule Options Maintenance (EDIR821) | Writes records. |
| Extended Schedule Options Maintenance (EDIR822) | Writes records. |

Disk Space Requirements

The system creates one Change Audit record for each update performed against the Online Control file. Space utilization for this file is maintained with retention periods.

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period, and cycle. For the purposes of simplicity, the following calculations do not include these

factors. You must factor system activity, retention period, and cycle into these calculations. The example shows one possible method.

Example

An average of two updates are performed each day against the Online Control file.

The Online Control Change Audit Maintenance program runs once a month with a retention period of 30 days specified.

1. Calculate the average monthly volume.

Updates per month (30 days * 2 updates per day)= 60

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation, assume that all updates are successful within one day.

Records created over retention period = 60

Records created between maintenance runs = 60

Records on file (60 + 60) = 120

Dataset Recovery

Recreate the file from either a recent backup or reload it from the Sterling Gentran:Realtime installation seed file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.OCF.CHGAUD)-
  VOLUME(XXXXXX)           -
  RECORDS(15 15)           -
  FREESPACE(00 00)        -
  KEYS(90 0)               -
  RECORDSIZE(662 662)     -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.OCF.CHGAUD.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENRAN.V6X6.RTE.VSAM.OCF.CHGAUD.INDEX))
```

Request Change Audit File**EDIQCHA****Description**

The Request Change Audit file contains detailed audit information of all online updates applied to the Request file. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. This information is available for online or batch inquiry.

Activity

This is a low activity file.

Program References

The following programs reference the Request Change Audit file:

| Program | Purpose |
|--|-----------------------------|
| Batch Option/Path Copy (EDIROCP) | Writes and updates records. |
| Option/Path Copy (EDIR077) | Writes records. |
| Outbound Editor Path Maint (EDIR83A) | Writes records. |
| Outbound Editor Path Maint-1 (EDIR83B) | Writes records. |
| Outbound Editor Path Maint-2 (EDIR83C) | Writes records. |
| Outbound Mapper Path Maint-1 (EDIR83D) | Writes records. |
| Outbound Mapper Path Maint-3 (EDIR83E) | Writes records. |
| Shell Path Maint (EDIR831) | Writes records. |
| Inbound Mapper Path Maint-1 (EDIR832) | Writes records. |
| Inbound Editor Path Maint (EDIR833) | Writes records. |
| Inbound Editor Path Maint-1 (EDIR834) | Writes records. |
| Inbound Editor Path Maint-2 (EDIR835) | Writes records. |
| Inbound Editor Path Maint-3 (EDIR836) | Writes records. |
| Inbound Mapper Path Maint-3 (EDIR837) | Writes records. |
| Outbound Envelope Path Maint (EDIR838) | Writes records. |
| Outbound Translation Shell Path Maint (EDIR839) | Writes records. |
| Outbound Editor Path Maint-3 (EDIR84A) | Writes records. |
| Additional Shell Path Maint (EDIR84B) | Writes records. |
| Outbound Editor Path Maint-4 (EDIR84C) | Writes records. |
| Outbound Editor Path Maint-5 (EDIR84D) | Writes records. |
| Additional Outbound Translation Shell Path Maint (EDIR84E) | Writes records. |
| Additional Inbound Translation Shell Maint (EDIR84F) | Writes records. |
| Outbound Mapper Path Maint-2 (EDIR84I) | Writes records. |
| Outbound Mapper Path Maint-4 (EDIR84J) | Writes records. |

| | |
|--|----------------------------|
| Inbound Mapper Path Maint-2 (EDIR84K) | Writes records. |
| Outbound Connect Path Maint (EDIR842) | Writes records. |
| Inbound Connect Path Maint (EDIR843) | Writes records. |
| Inbound Translation Shell Path Maint (EDIR844) | Writes records. |
| Outbound Ack \$\$ADD Maint (EDIR845) | Writes records. |
| Inbound Editor Path Maint-4 (EDIR846) | Writes records. |
| Inbound Editor Path Maint-5 (EDIR847) | Writes records. |
| Inbound Editor Path Maint-6 (EDIR848) | Writes records. |
| Inbound Editor Path Maint-7 (EDIR849) | Writes records. |
| Outbound Appl Databank Maint (EDIR863) | Writes records. |
| Outbound EDI Databank Maint (EDIR864) | Writes records. |
| Inbound EDI Databank Maint (EDIR865) | Writes records. |
| Inbound Appl Databank Maint (EDIR866) | Writes records. |
| Acknowledgment Maint (EDIR867) | Writes records. |
| Outbound EDI Databank Extract Maint (EDIR868) | Writes records. |
| Outbound EDI Databank Extract Maint-2 (EDIR869) | Writes records. |
| Inbound Appl Databank Extract Maint (EDIR872) | Writes records. |
| Inbound Appl Databank Extract Maint-2 (EDIR873) | Writes records. |
| Databank Change Audit Maint (EDIR874) | Writes records. |
| Request Change Audit Directory (EDIR880) | Reads records. |
| Request Change Audit Status (EDIR881) | Reads records. |
| Request Change Audit Detail (EDIR882) | Reads records. |
| Batch Request Change Audit Inquiry (EDIR890) | Reads records. |
| Batch Request Change Audit Maintenance (EDIR891) | Reads and deletes records. |

Disk Space Requirements

The system creates one Change Audit record for each update performed against the Request file. Space utilization for this file is maintained with retention periods.

Note: In calculating the number of records, there are several equivalent methods of accounting for system activity, retention period, and cycle. For the purposes of simplicity, the following calculations do not include these factors. You must factor system activity, retention period, and cycle into these calculations. The example shows one possible method.

Example

An average of two updates are performed each day against the Request file.

The Request Change Audit Maintenance program runs once a month with a retention period of 30 days specified.

1. Calculate the average monthly volume.

Updates per month (30 days * 2 updates per day)= 60

2. Determine the number of records on file, given the retention options chosen. To simplify the calculation, assume that all updates are successful within one day.

Records created over retention period = 60

Records created between maintenance runs = 60

Records on file (60 + 60) = 120

Dataset Recovery

Recreate the file from either a recent backup or reload it from the Sterling Gentran:Realtime installation seed file.

VSAM Dataset Information

```

DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.REQ.CHGAUD)-
  VOLUME(XXXXXX)           -
  RECORDS(15 5)            -
  FREESPACE(00 00)         -
  KEYS(90 0)               -
  RECORDSIZE(662 662)      -
  SHR(2 3))                -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.REQ.CHGAUD.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENRAN.V6X6.RTE.VSAM.REQ.CHGAUD.INDEX))

```

Sterling Gentran:Realtime Acknowledgment Reconciliation File EDIRDAR

Description

This file stores acknowledgments received from your trading partners. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file when the Sterling Gentran:Realtime Inbound Editor encounters acknowledgment transactions during inbound EDI processing, and when the Acknowledgment Reconciliation/Monitor Reformatter receives data from the Sterling Gentran:Basic inbound process.

Activity

This file is relatively stable, with data written in small volumes whenever the Inbound Editor runs. When the Acknowledgment Reconciliation/Monitor (EDID515) program runs, the data is removed.

Note: You can suppress writes to this file by setting the Ack Recon Bypass switch to N. This switch is on the Sterling Gentran:Realtime Global Path Maintenance screen (EDIM833).

Program References

The following programs reference the Sterling Gentran:Realtime Acknowledgment Reconciliation file.

| Program | Purpose |
|---|--|
| Inbound Editor (EDIR001) | Writes inbound acknowledgments. |
| Acknowledgment Reconciliation/Monitor Reformatter (EDID516) | Reformats and writes inbound acknowledgments received from batch processing. |
| Acknowledgment Reconciliation/Monitor (EDID515) | Reads and deletes acknowledgment records. |

Sterling Gentran:Realtime Inbound Editor executes whenever the Sterling Gentran:Realtime Inbound process is performed. Acknowledgment Reconciliation/Monitor Reformatter executes by means of Queue option 098 (when Appl.Prog is "EDID516"). Acknowledgment Reconciliation/Monitor executes via Schedule option 407 (via transID EDI7).

Disk Space Requirements

The space requirement for this file depends on:

- Volume of online and batch Inbound EDI acknowledgments received
- Frequency of acknowledgment reconciliation maintenance performed (via EDID515)
- Value of the Delete Unmatched ACKs field on the Acknowledgment Parameter Maintenance screen.

The space requirements will change as you send increased amounts of data to your trading partners.

Dataset Recovery

Because this file is updated only by CICS, you can use recovery and journaling facilities to recover this file.

The JCL member DEF RTE has the initial define of this file. Create a separate set of JCL to Delete/Define this file for maintenance.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDAR)-
  VOLUME(XXXXXX)           -
  RECORDS(200 100)         -
  FREESPACE(10 10)        -
  KEYS(17 0)               -
  RECORDSIZE(215 2000)    -
  NOREUSE                  -
  SHR(2 3)                 -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDAR.DATA)-
  CISZ(8000))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.EDIRDAR.INDEX))
```

Sterling Gentran:Realtime Acknowledgment Overdue File EDIRACKO

Description

This file stores acknowledgment overdue information. This file is a VSAM key sequenced dataset initialized during Sterling Gentran:Realtime Installation. The system writes data to this file when the Acknowledgment Reconciliation/Monitor program is run to monitor for overdue acknowledgments.

Activity

When the Acknowledgment Reconciliation/Monitor (EDID515) program runs, the data is completely rewritten.

Note: You can suppress writes to this file by setting the Enable Overdue switch to N. This switch is on the Configuration Maintenance Record Type 2 screen (EDIM231).

Program References

The following programs reference the Sterling Gentran:Realtime Acknowledgment Overdue file.

| Program | Purpose |
|---|---------------------------|
| Acknowledgment Overdue Directory screen (EDIM240) | Reads records. |
| Acknowledgment Overdue Detail screen (EDIM241) | Reads records. |
| Acknowledgment Reconciliation/Monitor (EDID515) | Adds and deletes records. |

Disk Space Requirements

The space requirement for this file depends on the frequency of acknowledgment reconciliation maintenance performed (via EDID515).

The space requirements will change as you send increased amounts of data to your trading partners.

Dataset Recovery

Because this file is updated only by CICS, you can use recovery and journaling facilities to recover this file.

The JCL member DEFDBRTE has the initial define of this file. Create a separate set of JCL to Delete/Define this file for maintenance.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X6.RTE.VSAM.ACK.OVERDUE)-
  VOLUME(XXXXXX)           -
  RECORDS(100 100)         -
  FREESPACE(10 10)        -
  KEYS(147 0)              -
  RECORDSIZE(1059 1059)   -
  REUSE                     -
  SHR(2 3))                -
  DATA(NAME(GENTRAN.V6X6.RTE.VSAM.ACK.OVERDUE.DATA)-
  CISZ(4096))              -
  INDEX(NAME(GENTRAN.V6X6.RTE.VSAM.ACK.OVERDUE.INDEX))
```


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Glossary

Definition of Terms

acknowledgment

A special transaction set (e.g., 997, 999, or CONTRL) that is transmitted to the original sender to indicate the status of a transmission with respect to standards adherence. Indicators exist to imply acceptance of the contents of the associated transaction sets.

Sterling Gentran differentiates between inbound acknowledgments (received from your trading partner) and outbound acknowledgments (sent to your trading partner). Sterling Gentran also deals with *expected acknowledgments*, which should be satisfied by inbound acknowledgments.

Acknowledgments are also known as Functional Acknowledgments (the 997 transaction set), Accept/Reject Advices (the 999 transaction set), and Syntax and Service Report Message (the CONTRL message).

See also *functional acknowledgment*.

addressing method

A means of identifying the sender and intended receiver of an incoming EDI message. Sterling Gentran supports several addressing methods to enable you to configure the system to your current technique or to your industry's preferences.

application

An in-house program or series of programs designed to process specific jobs. These programs are formatted by the customer for their business needs (e.g., payroll).

application databank

One of two application databanks available: inbound (incoming) and outbound (outgoing). The databank contains application documents as well as control and routing information. Inquiry capabilities are available both online and in batch processing to provide fast answers to the operation of your EDI system. Document archive, restore, and reset capabilities complete the picture to address audit, retransmit, and operational requirements.

application gateway

A type of Sterling Gentran:Realtime gateway that enables online applications to interface to Sterling Gentran:Realtime. The application gateways provide program-level interface (API) for CICS applications to send and receive documents to and from Sterling Gentran:Realtime.

application data ID

An identification of the application definition as defined by the user via the Mapping subsystem. This definition is used by the Mappers to process a user's application file.

application definition

The definition of the application interface file used during the mapping process.

application ID

See *application data ID*.

archive

A permanent record of messages transmitted or received.

asynchronous processing

Processing that enables Sterling Gentran:Realtime to accept data from the application without the application having to wait for translation. In Sterling Gentran:Realtime, the queue options provide an asynchronous interface to the system.

See also *queue options*.

batch processing

A type of data processing operation and data communications transmission during which related transactions are grouped together and transmitted for processing. Usually batch processing occurs by the same computer and under the same application. It is generally regarded as non–Sterling Gentran:Realtime data traffic consisting of large files: batch processing is used for the type of data traffic for which network response time is not critical, compared with interactive processing.

communications gateway

A type of Sterling Gentran:Realtime gateway that enables online and batch communications programs to interface to Sterling Gentran:Realtime. The open architecture structure for the communications gateways supported by Sterling Gentran:Realtime work with either user-written or third-party communications software.

compress

An automatic process in the outbound flow of Sterling Gentran:Realtime that remove all leading zeroes and trailing spaces from an EDI data element. Empty elements and subelements (those containing all spaces) are set to a null or zero length. All trailing data elements (those data elements between the last element containing information and the segment terminator) are removed, along with their respective element separators. The segment terminator is then shifted to the end of the last element. For real-type data elements, the zero significant digit just before and just after a decimal point is not removed.

conditional code

The relational definition of data elements within an EDI segment. There are these five conditional codes: P, R, E, C, and L. These codes are defined through the Segment Element Conditional Code Maintenance screen (in Sterling Gentran:Basic for z/OS) and are used by the Inbound Editor program (EBDI001) and the Outbound Editor program (EBDI002). The five conditional codes are listed and described below:

| | | |
|----------|---|--|
| P | = | <i>(Paired)</i> If any of the referenced data elements is present, they all must be present. |
| R | = | <i>(Required)</i> At least one of the referenced data elements must be present. |
| E | = | <i>(Exclusive)</i> Only one of the referenced data elements may be present. |
| C | = | <i>(Conditional)</i> If the first referenced data element is used, then all remaining referenced data elements must be used. |
| L | = | <i>(List Conditional Paired)</i> If the first referenced data element is used, then at least one of the remaining referenced data elements must be used. |

condition code

A numeric value issued by a program to indicate the status of its execution. This status value is also called a *return code*. A condition code can range in value from 0 to 4096. Testing a condition code in a JCL job stream requires a COND parameter.

All main processing programs (inbound and outbound) issue condition codes in Sterling Gentran:Realtime. However, the key programs are Inbound Editor (EBDI001), Inbound Mapper (EBDI041), Outbound Mapper (EBDI042), and Outbound Editor (EBDI002).

control number

See *databank envelope reference ID*.

Core Process

See *Sterling Gentran:Realtime core process*.

Databank

A repository for storing document/transaction data and any related control information. Using the Databank subsystem, you can control and monitor the document/transaction flow through the Sterling Gentran:Realtime system. The four databanks are: outbound application databank, outbound EDI databank, inbound EDI databank, and inbound application databank.

databank change audit

The file that stores detailed information about all user updates performed against the databanks using the Databank subsystem. There is one Change Audit file for each databank.

databank configuration

Identification of how you have configured a databank. For each of the databanks, the following configurations are valid:

| | | |
|-----------|---|---|
| Directory | = | Only Directory data is maintained. |
| Full | = | Both Directory and Message Store data are maintained. |
| None | = | Neither Directory nor Message Store data is maintained. |

Full databanking is not available for Sterling Gentran:Structure customers' fixed-format data.

databank directory

The area of a databank that stores control and status information (e.g., interchange envelope reference ID, acknowledgment status, document mapped status, etc.). There is one directory for each databank.

databank envelope reference ID

An ID used to uniquely identify an EDI envelope for a trading partner. Formerly called *control number*. The envelope reference IDs used in the databank are: interchange envelope reference ID, group envelope reference ID, transaction envelope reference ID.

databank message store

The area of a databank in which the actual application records or EDI segments are stored. There is one message store for each databank.

databank run number

An eight-digit number assigned by Sterling Gentran:Realtime to identify the run that processed the document for a databank.

data dictionary

The publication that defines all of the data elements that exist for a standard. The data dictionary describes data types (e.g., length and usage) and all code values for an element, if applicable.

data element

See *element*.

data element dictionary

See *data dictionary*.

data element separator

See *delimiter*.

data segment

See *segment*.

decompress

An automatic process in the Inbound Editor that expands each data element to its maximum length as defined by the online EDI standards. Decompression of data elements is accomplished by inserting trailing spaces or leading zeroes into each element until the element is at its maximum length. All numeric data elements automatically have three bytes added to their maximum length. These three bytes contain a sign (space or “-”), along with the number of decimal positions for the data element.

delimiter

A special character used to separate and mark the end of data segments, data elements, and data subelements within an EDI standard. The data segment terminator, data element separator, and data subelement separator must each contain unique special characters.

distribution

The process of controlling and reporting the flow of documents to and from user applications and outside networks/partners. This distribution function is supported by the EDI Databank application. See also *EDI databank*.

document

See *message*.

document group

One or more documents (for online applications) grouped as a unit of work.

See also *unit of work*.

document status

A code that describes the current status of a document on the databanks. For example, an EDI document placed on the databank would have a status of “acknowledged” after the acknowledgment is received from the trading partner.

EDI (electronic data interchange)

The exchange of routine business transactions in a computer-processible format, covering such traditional applications as inquiries, planning, purchasing, acknowledgments, pricing, order status, scheduling, test results, shipping and receiving, invoices, payments, and financial reporting.

EDI databank

One of two EDI databanks: inbound (incoming) and outbound (outgoing). The databank contains EDI documents, as well as control and routing information. Inquiry capabilities are available both online and in batch processing to provide quick answers to the operation of your EDI system. Document archive, restore, and reset capabilities complete the picture to address audit, retransmit, and operational requirements.

EDI Databank Inquiry

An online reporting tool used to determine the status and other significant information about EDI messages. Sterling Gentran also provides this function in batch mode. A multitude of selection criteria can be specified to quickly locate any documents of interest.

Editor

One of two editors: the Inbound Editor (EBDI001) and the Outbound Editor (EBDI002). The Inbound Editor uses predetermined instructions to verify, check, and possibly reject the EDI standard data you have received from a trading partner, and moves the edited data to split files and then to the appropriate inbound application files via Mapping. The Outbound Editor prepares your data for transmission to your trading partners. The Editor checks all data to ensure compliance with the selected public standard and wraps the data based on compression method.

element

The smallest named item in a segment that can convey data. For example, “Bill To City” is one data element within a segment in an EDI standard.

envelope

The transmission header and trailer enclosing an EDI document. The envelope is automatically generated by Sterling Gentran using the information on the Partner file. Envelopes exist at the interchange, group, and transaction levels.

EOT

End of Transmission.

field

The smallest item of information in a record in a defined application.

functional acknowledgment

A special transaction set transmitted by a receiver as an affirmative response to the sender. Sterling Gentran:Realtime automatically generates a functional acknowledgment for documents received. There is never an acknowledgment generated for an acknowledgment.

See also *acknowledgment*.

header

The portion of a message that precedes the body and trailer of the business transaction.

immediate option

A path parameter used for time-critical processing. Use an immediate option when the application or communications program requires an immediate response from Sterling Gentran:Realtime regarding the translation process results. Data passed to Sterling Gentran:Realtime via an immediate option is processed immediately by the translation system. Results are then passed to the application or communications program without interruption.

See also *path parameter* and *synchronous processing*.

inbound processing

Processing that is comprised of these two main processes:

- The Inbound Editor verifies that the EDI data received is compliant with the EDI standards, and creates acknowledgments for the EDI documents.
- The Inbound Mapper converts the EDI data to the application data format.

in-house interface

Routine(s) developed by application personnel that connect application systems to Sterling Gentran. These routines either create Application Interface files for outbound transactions or process an Application Interface file containing inbound transactions.

logical document

The treating of several related ANA TRADACOMS messages as one document. A basic TRADACOMS document contains a header message, a detail message, and a summary message. Each message has its own envelope. Individually, they are meaningless, but together they represent a whole (complete) document.

mandatory

A requirement designator value indicating that a segment, element, or component data element *must* be used within an EDI standard.

mapping

Map processing that uses user-defined transaction maps to translate business documents from the internal application data format to the selected EDI standard, or from the EDI standard to an internal application format. Transaction maps are defined using the Mapping subsystem.

message

An identified and structured set of elements and segments covering the requirements for a specific transaction.

message status level

A status level given to messages. The three status levels are listed and described below:

- Status 0 (draft document for information only)
- Status 1 (draft document approved for formal trial)
- Status 2 (recommended approved by the UN/EDIFACT governing body WP.4)

UN/EDIFACT messages need to be submitted, reviewed, and added to by regional boards.

network

A third-party EDI facilitator (EDI mailbox). Networks are defined to Sterling Gentran for reconciliation purposes only.

outbound processing

Processing that is comprised of these two main processes:

- The Outbound Mapper converts the application data to EDI-formatted and enveloped data.
- The Outbound Editor verifies that the EDI data is compliant with the EDI standards, and prepares it for transmission.

path

A route, either inbound or outbound, defined to Sterling Gentran:Realtime along which documents flow. This path has processes associated with it (e.g., the Mapper and Outbound Editor). Each of the processes along a path has processing criteria assigned to it called *path parameters*. A path is made up of one option (immediate, queue, or schedule) and one set of parameters that includes Shell, Mapper, and Editor.

See also *path parameters*.

path parameters

User-defined parameters that control the Sterling Gentran:Realtime core processing. Path parameters (immediate option, queue option, and schedule option) are defined to each of the processes associated with a specific option.

See also *immediate option*, *queue option*, and *schedule option*.

queue file

An RRDS-type VSAM dataset that implements a “FIFO wraparound”-type queue. The queue is designed to transport transaction data efficiently. Queue files queue data between the user and Sterling Gentran:Realtime processes, and between CICS and batch processes. Each queue file has one *source* process and one *server* process (such as one process that writes to the queue, and one process that reads from the queue). These processes may be either online or batch. Queue files do not require any ongoing maintenance or reorganization.

queue option

A path parameter used for trigger-level processing. Use a queue option when the application or communications program cannot wait on a response from Sterling Gentran:Realtime regarding the translation process results. Data passed to Sterling Gentran:Realtime via a queue option is stored in queue files until the trigger levels are met. When the trigger levels are met, the translation process occurs, and results are passed to an application or communications program.

See also *path parameter* and *trigger level*.

record

A logical collection of data elements (fields) grouped together.

release character

A syntax character defined in the ANA TRADACOMS and EDIFACT standards to override a special character used in the text of a document differently than its system definition. For example, if a quote is defined as a segment terminator and is used in the content of a text message as a quote, the release character must precede the quote in the text to indicate to the system that the character is only a character and not a segment terminator.

release indicator

See *release character*.

return code

See *condition code*.

schedule option

A path parameter used for time-based processing. Schedule options can start periodic online housekeeping activities and online batch communications.

See also *path parameters* and *trigger level*.

segment

A logical group of data elements. The data elements are sequentially placed within the group. A segment starts with a segment code and ends with a segment terminator within an EDI standard.

segment separator

A syntax character used in the ANA TRADACOMS standards to isolate the segment ID from the rest of the data elements in a segment. The only valid value to be used as a segment separator under current TRADACOMS standards is an equals sign (=).

segment terminator

The delimiter that identifies the end of a segment. This delimiter must be a special character (e.g., no alphabetic or numerics or space permitted).

selection criteria

Criteria used to control document processing and reporting functions. Examples of some of the fields available for use as selection criteria are the following: User Document Reference (P.O. Number, Invoice Number), User, Partner, Network, Application, Transaction Type, Date, Time, Document Status, Document Acknowledgment Status, Document Validation Status, Duplicate Status, Test/Production Status, Interchange Control Numbers, and other EDI envelope information.

simple data element

A data element whose data item representation embodies a single concept (i.e., a data element that is not made up of component data elements).

Sterling Gentran:Control

An add-on product to Sterling Gentran that enables you to automate the EDI processing stream and prioritize processing by trading partner and/or type of document. Sterling Gentran:Control enables you to organize processing and responsiveness based upon business criteria, not system limitations. In addition, the application and communications gateways expedite the movement of documents across the batch/CICS barrier.

Sterling Gentran:Plus

A comprehensive software system that provides a seamless application-to-EDI interface. Sterling Gentran:Plus can work in conjunction with Sterling Gentran:Basic for z/OS and Sterling Gentran:Realtime, or as a stand-alone product. Sterling Gentran:Plus contains these three subsystems: Communications, Translation, and Communications Setup and Management. Sterling Gentran:Plus can accommodate an unlimited number of transactions while using an unlimited number of EDI standards versions. It supports multiple lines with different protocols for concurrent EDI sessions. This combination of translation, communications, and mailboxing represents a highly efficient EDI resource that can be used to automate your communications needs.

Sterling Gentran:Realtime

An add-on product to Sterling Gentran that facilitates the transmission of data processing in an operating mode when data is entered in an interactive session, as opposed to a batch session. Response time is drastically reduced over batch processing, providing the competitive benefits of online speed, flexible control, and universal EDI standards to many business applications.

Sterling Gentran:Realtime core process

A combination of mapping, compliance acknowledgment processing, and all auditing. The mapping function either converts application data to EDI data or converts EDI data to application data. The compliance checking function checks every document that comes in to or goes out of the system as it pertains to the EDI standards. The acknowledgment function creates functional acknowledgments for inbound documents and reconciles received functional acknowledgments with outbound documents. The auditing function records detailed information about every document in or out of the system at the interchange, group, and transaction levels via databanking.

Sterling Gentran:Structure

An add-on product to Sterling Gentran that enables you to define proprietary fixed-format standards using the Standards subsystem, and map to and from these standards using the Inbound and Outbound Mapping programs.

Sterling Gentran:Viewpoint

A Sterling Gentran product that consists of these two modules: Exception Management and Tracking Management. Exception Management enables you to capture exception information, notify the appropriate user, and optionally take automated action for exceptions that are specific to their EDI business needs. Tracking Management is an optional module that enables you to query on the status and history of a document as it moves through the entire end-to-end EDI environment.

subelement separator

A syntax character that is used to separate the components of an element. The syntax character must be a special character (alphabetic and numeric not allowed) that does not appear in any of the text for a document. It must also be different from the segment terminator and data element separator.

summary area

The portion of a message that follows the body of the message and contains summary information relating to the entire message.

synchronous processing

Processing that enables the Sterling Gentran:Realtime system to accept data from the application and have the application wait for translation. Immediate options provide a synchronous interface to the system.

See also *immediate option*.

trading partner

Any organization with whom you do business. Typically, trading partners are customers, suppliers, and intra-company divisions.

transaction map

A set of instructions detailing the correspondence between the EDI message standard and your application transaction. The transaction map is also used to document your application's use of EDI and to document your data requirements to your partners.

transaction set

See *message*.

trigger level

User-defined criterion (an absolute number of documents, a combination of number of documents and a time delay, or date/time intervals) used to initiate processing. Queue options are used for trigger-level processing. Trigger levels are specified via queue and schedule options.

See also *queue options* and *schedule options*.

turnaround time

The maximum allowable time between the sending of a document and the return of its acknowledgment. If the acknowledgment is not received within this time, an alert is raised and the originating document is flagged as “Overdue.”

unit of work

A processing group designed as a file protection/recovery feature to provide a secure environment for concurrent online and batch processing. If the unit of work is not processed successfully in its entirety, then none of it is considered to be processed, and all processing that took place for the unit of work is rolled back. For online applications, the unit of work is one or more documents, called a *document group*. For online communications, the unit of work is one or more interchanges of EDI data.

See also *document group*.

unwrap

To identify each EDI segment of a wrapped document and spread them so that each segment begins its own record. If the record is defined as fixed length, it is padded with spaces. The Sterling Gentran programs that unwrap segments are the Inbound Unwrap (EBDI010 and EBDI010A) and Inbound Editor (EBDI001).

user

The term used to identify your organization to Sterling Gentran. You may define one or more users for your organization, with each user having its own unique EDI identifier. This is used when defining a user/partner relationship providing enhanced auditing capabilities.

user document reference

A user-defined field that provides a way of referring to EDI documents by your existing methods (e.g., documents can be referred to by your purchase order number rather than by referring to an EDI control number). The user document reference is supported for both inbound and outbound documents.

wrap

The process of removing all trailing spaces between EDI segments. That is, the start of each new segment immediately follows the terminator of the previous segment. The Sterling Gentran programs that wrap segments are the Outbound Editor (EBDI002) and the Outbound Databank Extract (EDID205).

Reserved Word Constants

Inbound and Outbound:

The following reserved word constants are available for use in both inbound and outbound map fields:

CONSTANT-01 through CONSTANT-99

These constants can be used on maps to hold alphanumeric information that is needed later in the map, either to be moved to an output field or used in a conditional statement. Generally, the constants are used for:

- Loading common data into each application record during an inbound map (e.g., a sort key).
- Loading input header information into output detail or summary areas.

The following descriptions discuss unique characteristics about the constant field ranges:

CONSTANT-01 through CONSTANT-40

These constants are initialized to spaces at the beginning of each document generated (outbound) or document read (inbound).

CONSTANT-41 through CONSTANT-45

These constants are initialized to spaces at the beginning of each functional group generated (outbound) or functional group read (inbound).

CONSTANT-46 through CONSTANT-50

These constants are initialized to spaces at the beginning of each interchange generated (outbound) or interchange read (inbound).

CONSTANT-51 through CONSTANT-55

These constants are initialized to spaces at the beginning of the mapping run only.

CONSTANT-56 through CONSTANT-99

These constants are initialized to spaces at the beginning of each document generated (outbound) or document read (inbound).

HASH-TOTAL-01 through HASH-TOTAL-20

Hash totals can be used on maps to accumulate predefined input fields that are needed later in the map, either to be moved to an output field or used in a conditional statement. Generally, hash totals are used in maps to accumulate numeric field values (e.g., quantity, dollars, etc.), and map the accumulated total into a control total field.

The following descriptions discuss unique characteristics about the hash total field ranges:

HASH-TOTAL-01 through HASH-TOTAL-05

These hash totals are initialized to zeros at the beginning of each document that is generated (outbound), or each document that is read (inbound).

HASH-TOTAL-06 through HASH-TOTAL-10

These hash totals are initialized to zeros at the beginning of each functional group that is generated (outbound), or each functional group that is read (inbound).

HASH-TOTAL-11 through HASH-TOTAL-15

These hash totals are initialized to zeros at the beginning of each interchange that is generated (outbound), or each interchange that is read (inbound).

HASH-TOTAL-16 through HASH-TOTAL-20

These hash totals are initialized to zeros only at the beginning of the mapping run.

ACCUMULATOR-01 through ACCUMULATOR-20

Accumulators can be used on maps to maintain counters that are incremented by one that are needed later in the map, either to be moved to an output field or used in a conditional statement. Generally, accumulators are used to:

- Count the occurrence of a specific entity such as a line item.
- Generate increasing/sequential record/line item numbers.

The following descriptions discuss unique characteristics about the accumulator field ranges:

ACCUMULATOR-01 through ACCUMULATOR-05

These accumulators are initialized to zeros at the beginning of each document that is generated (outbound), or each document that is read (inbound).

ACCUMULATOR-06 through ACCUMULATOR-10

These accumulators are initialized to zeros at the beginning of each functional group that is generated (outbound), or each functional group that is read (inbound).

ACCUMULATOR-11 through ACCUMULATOR-15

These accumulators are initialized to zeros at the beginning of each interchange that is generated (outbound), or each interchange that is read (inbound)

ACCUMULATOR-16 through ACCUMULATOR-20

These accumulators are initialized to zeros only at the beginning of the mapping run.

CURRENT-DATE

This constant contains the 6 position current system date. This field may be mapped to any of the valid date formats (both six and eight character). If it is mapped to an alphanumeric field, it is in YYMMDD for six byte fields and YYYYMMDD for eight byte fields. If it is mapped to an alphanumeric field, it is in YYMMDD for six byte fields and YYYYMMDD for eight byte fields.

CURRENT-DATE-8

This constant contains the 8 position current system date in the format of the YYYYMMDD. This field may be mapped to any of the valid date formats (both six and eight character).

CURRENT-TIME

This constant contains the 4 position current system time in the format of HHMM.

CURRENT-TIME-6

This constant contains the 6 position current system time in the format of HHMMSS.

CURRENT-TIME-8

This constant contains the 8 position current system time in the format of HHMMSShh.

TOTAL-SEGMENTS

This constant contains either the number of segments read (inbound) or the number of segments written (outbound). It is available to be moved into a numeric application field (inbound) or a numeric EDI element (outbound).

On inbound maps only, segments defined to the map are counted and the count will only be valid after all segments have been read. For this reason, this constant should only load an application field defined in the summary section of the application. On outbound maps this constant will not contain a valid value if more than one segment is generated in the summary section of the EDI document. Envelopes are not counted in either direction.

TOTAL-ITEMS

This constant contains the number of line items generated for an application (inbound) or an EDI document (outbound). A line item is defined as the segments or records in the detail section of the application or EDI document. It is available to be moved into a numeric application field (inbound) or a numeric EDI element (outbound). This constant should only be used in the summary section of the EDI document or application.

Inbound Only:

The following reserved word constants are all preset by the inbound mapping program. They are available to be moved into an appropriate application field.

SENDER-ID

This constant contains the resolved sender ID (partner cross-reference is used) as determined by the inbound editor.

SENDER-ID-Q

This constant contains the resolved sender ID qualifier, if used, (cross-reference is used) as determined by the inbound editor.

RECEIVER-ID

This constant contains the resolved receiver ID (partner cross-reference is used) as determined by the inbound editor.

RECEIVER-ID-Q

This constant contains the resolved receiver ID qualifier, if used, (cross-reference is used) as determined by the inbound editor.

PART-TEST-FLAG

This constant contains a "P: if the transaction record on the partner file for the sender has a Production status. If the trading partner is not on file or the transaction record found is not set to production status, this constant contains a value of "T."

PROD-TEST-FLAG

This constant contains a “P” if the transaction status (in the Mapping subsystem) is set to Production. This constant contains a “T” if the transaction status (in the Mapping subsystem) is set to Test.

ISA01 through ISA16

The constants contain the values of each element received in the ISA segment.

ICS01 through ICS12

The constants contain the values of each element received in the ICS segment.

BG01 through BG07

The constants contain the values of each element received in the BG segment.

UNA01 through UNA06

The constants contain the values of each element received in the UNA segment.

UNB01 through UNB18

The constants contain the values of each element received in the ISA segment.

GS01 through GS08

The constants contain the values of each element received in the GS segment.

UNG01 through UNG13

The constants contain the values of each element received in the UNG segment.

ST01 through ST02

The constants contain the values of each element received in the ST segment.

UNH01 through UNH09

The constants contain the values of each element received in the UNH segment.

SCH01 through SCH05

The constants contain the values of each element received in the SCH segment.

STX01 through STX12

The constants contain the values of each element received in the STX segment.

BAT01 through BAT02

The constants contain the values of each element received in the BAT segment.

MHD01 through MHD03

The constants contain the values of each element received in the MHD segment.

Application Data Types

When defining an application field, the length of the field and the field data type must be specified. The length of the field is the physical field length or the number of bytes of storage the data field will occupy in the file. The data type of the field will depend on the use and format of the field.

The value is not always the same as its logical length.

Alphanumeric Data Types:

The alphanumeric data types are designed to describe fields that hold free-form data that contains any characters (letters, numbers, and special characters) including spaces. Data is moved to and from these fields, character-by-character, without editing. The data in the receiving field is left-justified. During inbound processing, these fields are initialized to spaces. Fields will be truncated because of field/element length considerations without causing an error condition.

If data is moved from a numeric EDI element to an alphanumeric field during an inbound map process, the numeric EDI element will be moved to the application field starting with the first significant digit of the number. Any real or implied decimal points will be shown in the data as a real decimal point.

For example:

- (1) EDI alphanumeric (length 35) to Application alphanumeric (length 20)

AB CORPORATION - BILLING DEPARTMENT =====>

AB CORPORATION - BIL

- (2) EDI numeric (type N2, length 6) to Application alphanumeric (length 8)

123456 (logically 1234.56) =====>

1234.56<space><space>

AN (Alphanumeric)

This is the data type used to describe 99.9 percent of the alphanumeric fields in applications.

For “AN” data types, the length of the field is the number of characters to be written in the field.

AS (Application Select)

This data type describes a field with the same data characteristics as “AN.” The difference is that this field also tells the mapper to select appropriate maps based on the value of the data contained in this field. Only one application select field should be coded for an application definition.

Numeric Data Types:

The numeric data types are designed to describe application fields that contain numeric data. Unlike the alphanumeric data types, which are interchangeable, the numeric types have very specific formats that must be adhered to. The numeric application data can be mapped to and from an alphanumeric EDI element.

B (Binary)

This data type supports full word, positive, binary numbers for outbound applications only. The field lengths specified must be in full-word increments (e.g., 2 bytes, 4 bytes, 6 bytes, and 8 bytes). These data types are represented in COBOL as PIC 9(#) COMP, where # is a multiple of 4.

N# (Signed Numeric; # = number of implied decimal positions. Valid values are N0 through N9)

This data type is similar to the EDI “N” data type except that the entire length of the field must be filled with numeric values. Its length is defined as the number of digits in the number. Negative numbers have an explicit minus sign (-) in the first byte. It is recommended that this data type be used for only data values that will always be positive. For example, a 6-position number with two implied decimal positions is defined to the application as data type “N2” with a length of 6. It is represented in a COBOL program as PIC 9(4)V9(2).

ND (Numeric Display – Outbound Applications Only)

This data type is similar to the “R” data type except that any special characters encountered when translating from this field are ignored. This data type was developed to allow limited numeric processing capabilities when the application file is in report format. These fields will be converted as shown in the following example. (Assume moving to “R” type EDI element.)

- (1) \$ 120.00=====>120
- (2) \$*****1.00=====>1
- (3) - 1.2=====>-1.2
- (4) 1.2 CR=====>-1.2

Remember, this data type can be used only in outbound application definitions.

P# (Signed Packed; # = number of implied decimal positions. Valid values are P0 through P9)

This data type is commonly called “packed decimal.” Its length is defined as the number of digits in the number divided by 2, plus 1. The sign is represented in the last half-byte of the number (D-negative; C or F-positive). A 6-position number with two implied decimal positions would be defined to the application as data type “P2” with a length of 4. It is represented in a COBOL program as PIC S9(4)V9(2) COMP-3.

R# (Real; # = number of decimal positions. Valid values are R0 through R9))

This data type is similar to the EDI “R” data type except that the entire length of the field must be filled with numeric values. Its length is defined as the number of digits in the number. Negative numbers have an explicit minus sign (-) in the first byte. Decimal positions are indicated with a real decimal point. It is recommended that this data type be used only when absolutely necessary because there is a considerable amount of programming required to generate or interpret this data type compared to the other types. A 6-position number with two positions after the decimal appears as “1234.56”. For inbound, the field is padded on the right with trailing zeros. As a result, the number one (“1”) appears in a 6-position application field as “1.0000”.

R Real

This data type is defined as having a real decimal point and an explicit minus (-) sign, if the value is negative. The value of 1.23 in an “R” element, with a minimum length of one, is 1.23.

S# (Signed Numeric; # = number of implied decimal positions. Valid values are S0 through S9)

This data type is commonly called “zoned decimal.” Its length is defined as the number of digits in the number. The sign is represented by an “overpunch” in the last byte of the number. A six-position number with two implied decimal positions is defined to the application as data type “S2,” with a length of 6. It is represented in a COBOL program as PIC S9(4)V9(2).

U# (Unsigned Packed; # = number of implied decimal positions. Valid values are U0 through U9)

This data type is the same as the packed data type (P#) above except that the last half-byte of the number that contains the sign will always have an “F.” A 6-position number with two implied decimal positions is defined to the application as data type “U2” with a length of 4. It is represented in a COBOL program as PIC 9(4)V9(2) COMP-3.

Date Data Types:

| | |
|-----------|---|
| CD | Date is in DDMMYYYY format. Field is not packed. The length is 8 bytes. |
| CM | Date is in MMDDYYYY format. Field is not packed. The length is 8 bytes. |
| CY | Date is in YYYYMMDD format. Field is not packed. The length is 8 bytes. |
| DD | Date is in DDMMYY format. Field is not packed. The length is 6 bytes. |
| J8 | Date is in YYYYDDD format. Field is not packed. The length is 7 bytes. |
| JD | Date is in YYDDD (Julian) format. Field is not packed. The length is 5 bytes. |
| MM | Date is in MMDDYY format. Field is not packed. The length is 6 bytes. |
| PD | Date is in DDMMYY format. Field is packed. The length is 4 bytes. |
| PJ | Date is in YYDDD (Julian) format. Field is packed. The length is 3 bytes. |
| PM | Date is in MMDDYY format. Field is packed. The length is 4 bytes. |
| PY | Date is in YYMMDD format. Field is packed. The length is 4 bytes. |
| T6 | Time is in HHMMSS format. Field is not packed. The length is 6 bytes. |
| T8 | Time is in HHMMSSHH format. Field is not packed. The length is 8 bytes. |
| TM | Time is in HHMM format. Field is not packed. The length is 4 bytes. |
| YY | Date is in YYMMDD format. Field is not packed. The length is 6 bytes. |
| ZD | Date is in DDMMYYYY format. Field is packed. The length is 5 bytes. |
| ZJ | Date is in YYYYDDD format. Field is packed. The length is 4 bytes. |
| ZM | Date is in MMDDYYYY format. Field is packed. The length is 5 bytes. |
| ZY | Date is in YYYYMMDD format. Field is packed. The length is 5 bytes. |

EDI Data Types

The following data types are used to describe all of the elements in an EDI document.

Alphanumeric Data Types

AN Alphanumeric

The Alphanumeric data type is used to describe most of the alphanumeric elements in EDI documents. The data in “AN” field types is free-form text.

ID Identification

The Identification data type describes a data field that is alphanumeric, but may contain only specified code values. If the number of these code values has a realistic, finite limit (e.g., unit of measure), then the values in the fields are validated during compliance checking. If the number of valid values has no real defined limit (e.g., DUNS number), then the value is not validated.

Numeric Data Types

N# Signed Numeric(# = number of implied decimal positions. Valid values are N0 through N9)

The Numeric data type is defined as having an implied decimal point and an explicit minus (-) sign, if the value is negative. The value of 1.23 in an “N3” element, with a minimum length of one, is 1230.

R# (Real; # = number of decimal positions. Valid values are R0 through R9))

This data type is similar to the EDI “R” data type except that the entire length of the field must be filled with numeric values. Its length is defined as the number of digits in the number. Negative numbers have an explicit minus sign (-) in the first byte. Decimal positions are indicated with a real decimal point. It is recommended that this data type be used only when absolutely necessary because there is a considerable amount of programming required to generate or interpret this data type compared to the other types. A 6-position number with two positions after the decimal appears as “1234.56”. For inbound, the field is padded on the right with trailing zeros. As a result, the number one (“1”) appears in a 6-position application field as “1.0000”.

R Real

This data type is defined as having a real decimal point and an explicit minus (-) sign, if the value is negative. The value of 1.23 in an “R” element, with a minimum length of one, is 1.23.

Date Data Types

D8 Date

Date is in YYYYMMDD format. Field is not packed. The length is eight bytes.

DT Date

Date is in YYYYMMDD or YYMMDD depending on standard definition.

T6 Time

Time is in HHMMSS format. Field is not packed. The length is six bytes.

T8 Time

Time is in HHMMSSHS format. Field is not packed. The length is eight bytes.

TM Time

Time is in HHMM format. The length is four bytes.

Index

Symbols

###INT record 3-15

A

Ack \$\$ADD program (EDIR021) 3-15
Acknowledgement Reconciliation Input Queue file (EDIQ098) 14-26
Acknowledgement Reconciliation Output Queue file (EDIQ099) 14-29
Acknowledgement Reconciliation/Monitor program (EDID515) 5-83
Acknowledgement Reconciliation/Monitor Reformatter program (EDID516) 5-93
acknowledgment
 definition G-1
Acknowledgment Process Reformat program (EDIR110) 3-28
Activity file
 initializing 9-7
Activity file (EDIRAPF) 10-4
Activity Initiation program (EDIR901) 10-4
 linked by Online Scanner/Initiator 4-2
addressing method G-1
ANA TRADACOMS standards
 syntax character G-8
application data
 reading from queue files 8-5
 writing to queue files 8-10
application data ID
 definition G-1
application data, types G-16
application databank
 definition G-1
Application Databank Inquiry report (EDID551) 5-26, 5-36
application definition
 definition G-2
application gateway

 definition G-1
application ID
 definition G-2
Application Log Interface program (EDIR999) 2-38
 parameters 2-39
archive
 definition G-2
Associated Data File (EDIASCDT) 14-11
Associated Data file (EDIASCDT) 3-32, 3-33
Associated Data Gateway program (EDIR106) 2-45
Associated Data Read program (EDIR065) 3-32
Associated Data VSAM file (EDIASCDT) 2-45
Associated Data Write program (EDIR066) 2-45, 3-33
Asynchronous Gateway program (EDIRASYN)
 parameters 2-43
Asynchronous Gateway program (EDIRSYN) 2-42
asynchronous processing
 definition G-2
Automatic System Start-Up program (EDIRPLT) 10-5

B

batch
 processing
 definition G-2
Batch Number Cross Reference File (EDIRMXR) 14-88
Batch Option and Path Maintenance program (EDIROCP) 9-9
batch processing
 initiation 8-32
batch program interfaces
 Central Multi-Queue Write Subroutine program (EDIECMW) 8-16
 Journal Subroutine program (EDIJNL) 8-30
 Logging Subroutine (EDILOG) 8-31

Remote Single-Queue Read Subroutine program (EDIERSR) 8-17
Remote Single-Queue Write Subroutine program (EDIERSW) 8-23
batch programs
 Application Databank Inquiry Report (EDID551) 5-26
 Batch Option and Path Maintenance program (EDIROCP) 9-9
 Central Multi-Queue Read subroutine (EDIRCMR) 8-15
 EDI Databank Inquiry report (EDID550) 5-2
 Network Reconciliation Maintenance program (EDID860) 5-40
 Network Reconciliation program (EDID850) 5-37
 Online Batch Initiator program (EDIEOBI) 8-32
 Online Report File Maintenance program (EDIR305B) 9-2
 Queue Read program (EDIRQRD) 8-5
 Queue Write program (EDIRQWR) 8-10
 reading queue files 8-28
 Realtime Activity Maintenance program (EDIRAMT) 9-7
 writing data to queue files 8-29
batch programs (Online Report File Lister program (EDIR306B) 9-5
Batch Queue Read Subroutine program (EDIERSR) 8-17
Batch Queue Write Subroutine (EDIERSW) 8-23
Batch Results Program (EDIRSLTX) 13-12
Batch Test Load Program (EDITPGMX) 13-8
Batch Wait Utility program (EDIWAITD) 10-9

C

CD data type G-18
Central Multi-Queue Read subroutine (EDIRCMR) 8-15
Central Multi-Queue Write subroutine (EDIRCMW) 8-16
Central Multi-Queue Write Subroutine program (EDIECMW) 8-16
Change Audit Databank Archive file (EDIRARCH) 14-35
Change Audit Maintenance program (EDID552) 5-95
Checkpoint file (EDICKP) 14-31, 14-97
CICS Program Descriptions
 JCL File Maintenance - EDIRJCLX 4-10

CM data type G-18
COMMAREA
 shorter than 121 characters 2-17
communications gateway
 definition G-2
compress
 definition G-2
condition code
 definition G-3
conditional code
 definition G-3
Connect Batch Number Update program (EDIR317) 7-11
Connect Inbound Interface program (EDIR316) 7-7
Connect Monitor Wakeup program (EDIR315) 7-6
Connect Outbound Interface program (EDIR314) 7-2
control cards
 enabling Queue Read program 8-5
 enabling Queue Write program 8-10
 Report Structure 5-2
control number G-4
 definition G-3
Copybook member
 EDIRGATE 2-21, 2-26, 2-30, 2-35
Copybook members
 EDIEIGCA 2-8
 EDIEOGCA 2-15
 EDIRLOG 2-38
 RTECODES 2-9
Copybook RTECODES 2-32
core process
 definition G-3
CURRENT-DATE G-13
CURRENT-TIME G-13
CY data type G-18

D

D8 data type G-19
data dictionary
 definition G-4
data element
 definition G-4
data element dictionary
 definition G-4
data element separator

definition G-4
 data segment
 definition G-4
 databank
 definition G-3
 databank change audit
 definition G-3
 databank configuration
 definition G-3
 databank directory
 definition G-4
 databank envelope reference ID
 definition G-4
 Databank Extract Driver program (EDIR105) 2-4
 databank message store
 definition G-4
 Databank Reprocess Driver program (EDIR856)
 5-99
 databank run number
 definition G-4
 Databank Status Update program (EDIR855) 5-2,
 5-26, 5-98
 DD data type G-18
 decompress
 definition G-4
 delimiter
 definition G-4
 DIRHBP
 see Exception Processing Header Bypass file
 distribution
 definition G-5
 document
 definition G-5
 document group
 definition G-5
 document status
 definition G-5
 DT data type G-19
 Dynamic Codes Validation program (EDIR114)
 3-31

E

EDI (electronic data interchange)
 data types G-19
 definition G-5
 segments
 removing spaces between G-11
 EDI data
 reading from queue files 8-5

 writing to queue files 8-10
 EDI databank
 definition G-5
 EDI Databank Inquiry
 definition G-5
 EDI Databank Inquiry report (EDID550) 5-2, 5-
 23
 EDI Databank Statistics File 5-20
 EDI Databank Statistics file 5-2
 EDI Databank Statistics file (EDISTX) 5-20–5-
 23
 EDIA transaction 2-2, 3-33
 EDIAPPL
 see Sample Application Data files
 EDIAPPL1
 see Sample Application Data files
 EDIAPPL2
 see Sample Application Data files
 EDIASCDT
 see Associated Data File
 EDIASCDT file 2-45, 3-33
 EDICKP
 see Checkpoint file
 EDID151
 see Outbound Application Databank Maintenance
 program
 EDID152
 see Outbound Application Databank Interface
 Subroutine program
 see Outbound EDI Databank Maintenance
 program
 EDID251
 see Outbound EDI Databank Maintenance
 program
 EDID252
 see Outbound EDI Databank Interface Subroutine
 program
 EDID255
 see Outbound EDI Databank Extract program
 EDID351
 see Inbound EDI Databank Maintenance program
 EDID352
 see Inbound EDI Databank Interface Subroutine
 program
 EDID451
 see Inbound Application Databank Maintenance
 program
 EDID452
 see Inbound Application Databank Interface
 Subroutine program
 EDID455

Index

- see* Inbound Application Databank Extract program
- EDID515
 - see* Acknowledgment Reconciliation/Monitor program
- EDID516
 - see* Acknowledgment Reconciliation/Monitor Reformatter program
- EDID550
 - see* EDI Databank Inquiry Report program
- EDID551
 - see* Application Databank Inquiry Report program
- EDID552
 - see* Change Audit Maintenance program
- EDID850
 - see* Application Databank Inquiry Report program
 - see* Network Reconciliation program
- EDID860
 - see* Network Reconciliation Maintenance program
- EDIDAT
 - see* Sample EDI Inbound Data files
- EDIDAT1
 - see* Sample EDI Inbound Data files
- EDIDAT2
 - see* Sample EDI Inbound Data files
- EDIDATA
 - see* Test Data File
- EDIE transaction 2-4
- EDIEIGCA 2-8
- EDIEOBI
 - see* Online Batch Initiator program
- EDIEOGCA 2-15
- EDIEOIG
 - see* Online Input Gateway program
- EDIEOOG
 - see* Online Output Gateway program
- EDIEOQR
 - see* Online Queue Read program
- EDIEOQW
 - see* Online Queue Write program
- EDIEOSI
 - see* Online Scanner/Initiator program
- EDIEQMT
 - see* Queue File Maintenance program
- EDIERRC
 - see* Error Message file
- EDIERSR
 - see* Remote Single-Queue Read Subroutine program
- see* Remote Single-Queue Read Subroutine program
- EDIERSW
 - see* Remote Single-Queue Write Subroutine program
- EDIESQR
 - see* Sample Queue Read program
- EDIESQW
 - see* Sample Queue Write program
- EDIETOGL
 - see* System Status Toggle program
- EDIFACT Interchange Priority Lookup program (EDIR932) 6-8
- EDIJNL
 - see* Journal Subroutine program
- EDIL abend 2-17
 - COMMAREA shorter than 129 characters 2-21, 2-26
 - when COMMAREA is shorter than 129 characters 2-30, 2-35
- EDILOG
 - see* Logging Subroutine program
- EDIOCF
 - see* Online Control file
- EDIOCF file 2-5
- EDIOLF
 - see* Online Log file
- EDIQ092
 - see* Report Request Queue file
- EDIQ096
 - see* Status Update Input Queue file
- EDIQ098
 - see* Acknowledgment Reconciliation Input Queue file
- EDIQ099
 - see* Acknowledgment Reconciliation Output Queue file
- EDIQnnn*see* Queue files
- EDIR001
 - see* Inbound Editor program
- EDIR002
 - see* Outbound Editor program
- EDIR015
 - see* Inbound Reject/Splitter program
- EDIR016
 - see* Outbound Reject/Splitter program
- EDIR021
 - see* Ack \$\$ADD program
- EDIR041
 - see* Inbound Mapper program
- EDIR042
 - see* Outbound Mapper program

-
- EDIR043
see Mapper Subroutine programs
- EDIR044
see Mapper Subroutine programs
- EDIR045
see Mapper Subroutine programs
- EDIR046
see Mapper Subroutine programs
- EDIR047
see Mapper Subroutine programs
- EDIR049
see Mapper Subroutine programs
- EDIR050
see Mapper Subroutine programs
- EDIR051
see Mapper Subroutine programs
- EDIR056
see Mapper Subroutine programs
- EDIR060
see Online Application Data ID Copy program
- EDIR065
see Associated Data Read program
see Associated Data Write program
- EDIR076
see Online Translation Table Copy program
- EDIR080
see Online Transaction Mapping Copy program
- EDIR086
see Online Partner Xref Copy program
- EDIR087
see Online Partner Copy program
- EDIR100
see Separator Gateway program
- EDIR101
see Outbound Application Gateway program
- EDIR102
see Outbound Communication Gateway program
- EDIR103
see Inbound Communication Gateway program
- EDIR104
see Inbound Application Gateway program
- EDIR105
see Databank Extract Driver program
- EDIR106
see Associated Data Gateway program
- EDIR110
see Acknowledgment Process Reformat program
- EDIR113
see Internal Standards Loader
- EDIR114
see Dynamic Codes Validation
- EDIR305B
see Online Report File Maintenance program
- EDIR306B
see Online Report File Lister program
- EDIR312
see Report Initiation program
- EDIR313
see Shell program
- EDIR314
see Connect Outbound Interface program
- EDIR315
see Connect Monitor Wakeup program
- EDIR316
see Connect Inbound Interface program
- EDIR317
see Connect Batch Number Update program
- EDIR852
see Exception Program Exit program
- EDIR855
see Databank Status Update program
- EDIR856
see Databank Reprocess Driver program
- EDIR900
see Request File Initiation program
- EDIR901
see Activity Initiation program
see Activity Initiator program
- EDIR930
see Separator Driver program
- EDIR931
see X12 Interchange Priority Lookup program
- EDIR932
see EDIFACT Interchange Priority Lookup program
- EDIR933
see TRADACOMS Interchange Priority Lookup program
- EDIR940
see Monitor I/O program
- EDIR945
see Router program
- EDIR999
see Application Log Interface program
- EDIRADDR
see Internal Addressing Routine program
- EDIRAMT
see Realtime Activity Maintenance program
- EDIRAPF
see Gentran:Realtime Activity Path file
- EDIRARCH
see Change Audit Databank Archive file
- EDIRARIA
see Inbound Application Databank Archive file
-

- EDIRARIE
 - see* Inbound EDI Databank Archive file
- EDIRAROA
 - see* Outbound Application Databank Archive file
- EDIRAROE
 - see* Outbound EDI Databank Archive file
- EDIRASYN
 - see* Asynchronous Gateway program
- EDIRBIN 3-33
- EDIRCAP
 - see* Online Shell Path User Tracking Exit Data Capture program
- EDIRCMR
 - see* Central Multi-Queue Read Subroutine program
- EDIRCMW
 - see* Central Multi-Queue Write Subroutine program
- EDIRDAR
 - see* Gentran:Realtime Acknowledgment Overdue file
 - see* Gentran:Realtime Acknowledgment Reconciliation file
- EDIRDBP
 - see* Exception Processing Detail Bypass file
- EDIRENV
 - see* Online Mapper User Exit Interface programs
- EDIREQ
 - see* Request file
- EDIRIAA
 - see* Inbound Application Databank Directory file
- EDIRIACA
 - see* Inbound Application Databank Change Audit file
- EDIRIAS
 - see* Inbound Application Databank Message Store file
- EDIRIEA
 - see* Inbound EDI Databank Directory file
 - see* Inbound EDI Databank Message Store file
- EDIRIECA
 - see* Inbound EDI Databank Change Audit file
- EDIRIEL
 - see* Inbound EDI Databank Link file
- EDIRMNH
 - see* Monitor Header file
- EDIRMNS
 - see* Monitor Store file
- EDIRMXR
 - see* Batch Number Cross Reference File
- EDIRNRC
 - see* Network Reconciliation file
- EDIROAA
 - see* Outbound Application Databank Directory file
- EDIROACA
 - see* Outbound Application Databank Change Audit file
- EDIROAL
 - see* Outbound Application Databank Link file
- EDIROAS
 - see* Outbound Application Databank Message Store file
- EDIROCP
 - see* Batch Option and Path Copy Maintenance program
- EDIROEA
 - see* Outbound EDI Databank Directory file
- EDIROECA
 - see* Outbound EDI Databank Change Audit file
- EDIROES
 - see* Outbound EDI Databank Message Store file
- EDIROMH
 - see* Online Message Handler program (EDIROMH)
- EDIRPLT
 - see* Automatic System Start-Up program
- EDIRQRD
 - see* Queue Read program
- EDIRQRD - Queue Read program 8-5
- EDIRQWR
 - see* Queue Write program
- EDIRRC
 - see* Report Control file
- EDIRRD
 - see* Report Detail file
- EDIRSLTS
 - see* Results Program
 - see* Translation Results File
- EDIRSLTX
 - see* Batch Results Program
- EDIRSOA
 - eyecatcher record sample 2-14
 - see* Sample Online Application program
 - see* Sample Online Application program
- EDIRSTOP
 - see* Remote System Stop/Start program
- EDIRSUM
 - see* Summary Statistics file
- EDIRTOUT
 - see* Installation Checkout Procedures Output Test program
- EDIRXIT1
 - see* Online Shell User Exit program

-
- EDIRXIT2
see Online Error User Exit program
- EDISGXT
see Online Mapper User Exit Interface programs
- EDISTX
see EDI Databank Statistics file
- Editor
 definition G-5
- EDITPGM
see Online Test Program
- EDITPGMX
see Batch Test Load Program
- EDIVING
see Online Mapper User Exit Interface programs
- EDIX980
see Viewpoint Online Gateway program
- EDIXIT3
see Online Mapper User Exit Interface programs
- EDIXIT4
see Online Mapper User Exit Interface programs
see Online Mapper User Exit Interface programs
- EDIXIT5
see Online Mapper User Exit Interface programs
- electronic data interchange
 definition G-5
- element
 definition G-5
- envelope
 definition G-6
- EOT
 definition G-6
- Error Message file (EDIERRC) 14-13
- error recovery procedures 14-10
- Exception Processing Detail Bypass file
 (EDIRDBP) 4-7, 14-49
- Exception Processing files (EDIRHBP and
 EDIRDBP) 4-7
- Exception Processing Header Bypass file
 (EDIRHBP) 4-7, 14-51
- Exception Program Exit program (EDIR852) 4-7
 parameters 4-8
- EXEC551R JCL 5-26
- eyecatcher record for chaining TSQs
 sample program 2-14
- F**
-
- field
 definition G-6
- FIFO wraparound-type queue G-8
- file descriptions 14-1
- file maintenance
 performing 14-9
 procedures 14-9
- files
 Acknowledgement Reconciliation Input Queue
 file (EDIQ098) 14-26
 Acknowledgement Reconciliation Output Queue
 file (EDIQ099) 14-29
 Associated Data File (EDIASCDT) 14-11
 Batch Number Cross Reference File (EDIRMXR)
 14-88
 Change Audit Databank Archive file
 (EDIRARCH) 14-35
 Checkpoint file (EDICKP) 14-31, 14-97
 Error Message file (EDIERRC) 14-13
 Exception Processing Detail Bypass file
 (EDIRDBP) 14-49
 Exception Processing Header Bypass file
 (EDIRHBP) 14-51
 Inbound Application Databank Archive file
 (EDIRARIA) 14-36
 Inbound Application Databank Change Audit file
 (EDIRIACA) 14-55
 Inbound Application Databank Message Store file
 (EDIRIAS) 14-57
 Inbound EDI Databank Archive file (EDIRARIE)
 14-38
 Inbound EDI Databank Change Audit file
 (EDIRIECA) 14-61
 Inbound EDI Databank Directory file (EDIRIEA)
 14-59
 Inbound EDI Databank Link file (EDIRIEL) 14-
 63
 Inbound EDI Databank Message Store file
 (EDIRIES) 14-65
 Monitor Header file (EDIRMNH) 14-68
 Monitor Store file (EDIRMNH) 14-69
 Network Reconciliation file (EDIRNRC) 14-71
 Online Control file (EDIOCF) 14-15
 Online Log file (EDIOLF) 14-17
 Outbound Application Databank Archive file
 (EDIRAROA) 14-40
 Outbound Application Databank Change Audit
 file (EDIROACA) 14-75
 Outbound Application databank Directory file
 (EDIROAA) 14-73
 Outbound Application Databank Link file
 (EDIROAL) 14-77
 Outbound Application databank Message Store
 file (EDIROAS) 14-79
-

Outbound EDI Databank Archive file (EDIRAROE) 14-42
Outbound EDI Databank Change Audit file (EDIROECA) 14-83
Outbound EDI Databank Directory file (EDIROEA) 14-81
Outbound EDI Databank Message Store file (EDIROES) 14-85
Queue files (EDIQnnn) 14-19
Report Control file (EDIRRC) 14-90
Report Detail file (EDIRRD) 14-92
Report Request Queue file (EDIQ092) 14-22
Request file (EDIREQ) 14-46
Sample Application Data files (EDIAPPL, EDIAPPL1, and EDIAPPL2) 14-96
Sample EDI Inbound Data file (EDIDAT) 14-97
Status Update Input Queue file (EDIQ096) 14-24
Summary Statistics file (EDIRSUM) 14-94
Test Data File (EDIDATA) 14-98
Translation Results File (EDIRSLTS) 14-100
functional acknowledgment
 definition G-6

G

Gentran:Realtime Online Log
 error messages from Online Input Gateway program (EDIEOIG) 2-7, 2-8

H

header
 definition G-6
How to Get Help 1-1

I

immediate option
 definition G-6
Inbound Application Databank Archive file (EDIRARIA) 14-36
Inbound Application Databank Change Audit file (EDIRIACA) 14-55
Inbound Application Databank Directory file (EDIRIAA) 14-53
Inbound Application Databank Extract program (EDID455) 5-77

Inbound Application Databank Maintenance program (EDID451) 5-70
Inbound Application Databank Maintenance Subroutine program (EDID452) 5-76
Inbound Application Databank Message-Store file (EDIRIAS) 14-57
Inbound Application Gateway program (EDIR104) 2-34
Inbound Communication Gateway program (EDIR103) 2-29
 parameters 2-30
Inbound EDI Databank Archive file (EDIRARIE) 14-38
Inbound EDI Databank Change Audit file (EDIRIECA) 14-61
Inbound EDI Databank Directory file (EDIRIEA) 14-59
Inbound EDI Databank Link file (EDIRIEL) 14-63
Inbound EDI Databank Maintenance program (EDID351) 5-63
Inbound EDI Databank Maintenance Subroutine program (EDID352) 5-69
Inbound EDI Databank Message-Store file (EDIRIES) 14-65
Inbound Mapper program (EDIR041) 3-19
inbound processing
 definition G-6
Inbound Reject/Splitter program (EDIR015) 3-9
in-house interface
 definition G-6
Installation Checkout Procedures Output Test program (EDIRTOUT) 13-2
interchange record, Partner file 3-15
Internal Addressing Routine program (EDIRADDR) 4-4
Internal Standards Loader program (EDIR113) 3-30
introduction to Gentran:Realtime 1-1

J

J8 data type G-18
JCL
 EXEC550R 5-2
JCL File Maintenance - EDIRJCLX 4-10
JD data type G-18
Journal Subroutine program (EDIJNL) 8-30

L

Logging Subroutine (EDILOG) 8-31
 logical data records 5-20
 logical document
 definition G-6

M

mandatory
 definition G-7
 Mapper Subroutine programs (EDIR043-
 EDIR049, EDIR051, and EDIR056) 3-27
 mapping
 definition G-7
 message
 definition G-7
 message status level
 definition G-7
 MM data type G-18
 Monitor Header file (EDIRMNH) 14-68
 Monitor I/O program (EDIR940) 6-12
 Monitor Store file (EDIRMNH) 14-69

N

network
 definition G-7
 Network Reconciliation file (EDIRNRC) 14-71
 Network Reconciliation Maintenance program
 (EDID860) 5-40
 Network Reconciliation program (EDID850) 5-
 37

O

Online Application Data ID Copy program
 (EDIR060) 11-2
 Online Batch Initiator program (EDIEOBI) 8-32
 Online Control file
 JCL specified on 8-32
 Online Control file (EDIOCF) 14-15
 Online Copy Maintenance program (EDIR860)
 calling EDIR060 11-2
 calling EDIR076 11-3

calling EDIR077 11-4
 calling EDIR080 11-5
 calling EDIR086 11-6
 calling EDIR087 11-7
 Online Error User Exit program (EDIRXIT2) 12-
 6
 Online Input Gateway program (EDIEOIG) 2-5
 parameters 2-8
 Online Log file (EDIOLF) 14-17
 Online Mapper User Exit Interface programs
 (EDIXIT3, EDIXIT4, EDIXIT5,
 EDISGXT, EDIRENV) 12-8
 Online Message Handler program (EDIR0MH)
 4-5
 Online Output Gateway
 starting Online Batch Initiator 8-32
 Online Output Gateway program (EDIEOOG) 2-
 12
 parameters 2-15
 Online Partner Copy program (EDIR087) 11-7
 Online Partner Xref Copy program (EDIR086)
 11-6
 online program interfaces
 Application Log Interface program (EDIR999) 2-
 38
 Associated Data Gateway program (EDIR106) 2-
 45
 Asynchronous Gateway program (EDIRSYN) 2-
 42
 Inbound Application Gateway program
 (EDIR104) 2-34
 Inbound Communication Gateway program
 (EDIR103) 2-29
 Online Input Gateway program (EDIEOIG) 2-5
 Online Output Gateway program (EDIEOOG) 2-
 12
 Outbound Application Gateway program
 (EDIR101) 2-20
 Outbound Communication Gateway program
 (EDIR102) 2-25
 Viewpoint Online Gateway program (EDIX980)
 2-44
 online programs
 Ack \$\$ADD program (EDIR021) 3-15
 Acknowledgement Reconciliation/Monitor
 program (EDID515) 5-83
 Acknowledgement Reconciliation/Monitor
 Reformatter program (EDID516) 5-93
 Acknowledgment Process Reformat program
 (EDIR110) 3-28
 Activity Initiation program (EDIR901) 10-4
 Associated Data Read program (EDIR065) 3-32

- Associated Data Write program (EDIR066) 3-33
- Automatic System Start-Up program (EDIRPLT) 10-5
- Batch Wait Utility program (EDIWAITD) 10-9
- Change Audit Maintenance program (EDID552) 5-95
- Connect Batch Number Update program (EDIR317) 7-11
- Connect Inbound Interface program (EDIR316) 7-7
- Connect Monitor Wakeup program (EDIR315) 7-6
- Connect Outbound Interface program (EDIR314) 7-2
- Databank Reprocess Driver program (EDIR856) 5-99
- Databank Status Update program (EDIR855) 5-98
- Dynamic Codes Validation (EDIR114) 3-31
- EDIFACT Interchange Priority Lookup program (EDIR932) 6-8
- Inbound Application Databank Extract program (EDID455) 5-77
- Inbound Application Databank Maintenance program (EDID451) 5-70
- Inbound Application Databank Maintenance Subroutine program (EDID452) 5-76
- Inbound EDI Databank Maintenance program (EDID351) 5-63
- Inbound EDI Databank Maintenance Subroutine program (EDID352) 5-69
- Inbound Mapper program (EDIR041) 3-19
- Inbound Reject/Splitter program (EDIR015) 3-9
- Installation Checkout Procedures Output Test program (EDIRTOU) 13-2
- Internal Standards Loader program (EDIR113) 3-30
- Mapper Subroutine programs (EDIR043-EDIR049, EDIR050, EDIR051, and EDIR056) 3-27
- Monitor I/O program (EDIR940) 6-12
- Online Application Data ID Copy program (EDIR060) 11-2
- Online Partner Copy program (EDIR087) 11-7
- Online Partner Xref Copy program (EDIR086) 11-6
- Online Queue Read program (EDIEOQR) 8-33
- Online Queue Write program (EDIEOQW) 8-34
- Online Transaction Mapping Copy program (EDIR080) 11-5
- Online Translation Table Copy program (EDIR076) 11-3, 11-4
- Outbound Application Databank Maintenance program (EDID151) 5-43
- Outbound Application Databank Maintenance Subroutine program (EDID152) 5-50
- Outbound EDI Databank Extract program (EDID255) 5-59
- Outbound EDI Databank Maintenance program (EDID251) 5-51
- Outbound EDI Databank Maintenance Subroutine program (EDID252) 5-58
- Outbound Editor program (EDIR002) 3-6
- Outbound Mapper program (EDIR042) 3-23
- Outbound Reject/Splitter program (EDIR016) 3-12
- Remote System Stop/Start program (EDIRSTOP) 10-6
- Report Initiation program (EDIR312) 10-2
- Request File Initiation program (EDIR900) 10-3
- Router program (EDIR945) 6-14
- Sample Online Application program (EDIRSOA) 13-3
- System Status Toggle program (EDIETOGL) 10-8
- TRADACOMS Interchange Priority Lookup program (EDIR933) 6-10
- X12 Interchange Priority Lookup program (EDIR931) 6-6
- Online Queue Read program (GENRAN Control) (EDIEOQR) 8-33
- Online Queue Read programs (EDIEOQR and EDIROQR) with Online Input Gateway program (EDIEOIG) 2-5
- Online Queue Write program (Gentran:Control) (EDIEOQW) 8-34
- Online Report File Lister program (EDIR306B) 9-5
- Online Report File Maintenance program (EDIR305B) 9-2
- Online Scanner Initiator program (EDIEOSI) and Online Input Gateway process 2-5
- Online Scanner/Initiator program (EDIEOSI) 4-2 starting Online Batch Initiator program 8-32
- Online Shell Path User Exit Interface program (EDIRXIT1) 12-2
- Online Shell Path User Tracking Exit Data Capture program (EDIRCAP) 12-11
- Online Test program (EDITPGM) 13-6
- Online Transaction Mapping Copy program (EDIR080) 11-5
- Online Translation Table Copy program (EDIR076) 11-3, 11-4
- Optimized Standards file (EDISOPT) 3-30

Outbound Acknowledgment program (EBDI021)
3-15

Outbound Application Databank Archive file
 (EDIRAROA) 14-40

Outbound Application Databank Change Audit
 file (EDIROACA) 14-75

Outbound Application Databank Directory file
 (EDIROAA) 14-73

Outbound Application Databank Link file
 (EDIROAL) 14-77

Outbound Application Databank Maintenance
 program (EDID151) 5-43

Outbound Application Databank Maintenance
 Subroutine program (EDID152) 5-50

Outbound Application Databank Message Store
 file (EDIROAS) 14-79

Outbound Application Gateway program
 (EDIR101) 2-20
 parameters 2-21

Outbound Communication Gateway program
 (EDIR102) 2-25
 parameters 2-26

Outbound EDI Databank Archive file
 (EDIRAROE) 14-42

Outbound EDI Databank Change Audit file
 (EDIROECA) 14-83

Outbound EDI Databank Directory file
 (EDIROEA) 14-81

Outbound EDI Databank Extract program
 (EDID255) 5-59

Outbound EDI Databank Maintenance program
 (EDID251) 5-51

Outbound EDI Databank Maintenance
 Subroutine program (EDID252) 5-58

Outbound EDI Databank Message Store file
 (EDIROES) 14-85

Outbound Editor program (EDIR002) 3-6

Outbound Mapper program (EDIR042) 3-23

outbound processing
 definition G-7

Outbound Reject/Splitter program (EDIR016) 3-
 12

P

Partner file 3-15
 interchange record 3-15
 path

definition G-7

path parameters
 definition G-7

PD data type G-18

PJ data type G-18

PM data type G-18

processing
 initiating
 batch 8-32

programs

Ack \$\$ADD program (EDIR021) 3-15

Acknowledgement Reconciliation/Monitor
 program (EDID515) 5-83

Acknowledgement Reconciliation/Monitor
 Reformatter program (EDID516) 5-93

Acknowledgment Process Reformat program
 (EDIR110) 3-28

Activity Initiation program (EDIR901) 10-4

Application Databank Inquiry Report (EDID551)
 5-26

Application Log Interface program (EDIR999) 2-
 38

Associated Data Gateway program (EDIR106) 2-
 45

Associated Data Read program (EDIR065) 3-32

Associated Data Write program (EDIR066) 3-33

Asynchronous Gateway program (EDIRSYN) 2-
 42

Automatic System Start-Up program (EDIRPLT)
 10-5

Batch Option and Path Maintenance program
 (EDIROCP) 9-9

Batch Results Program (EDIRSLTX) 13-12

Batch Test Load Program (EDITPGMX) 13-8

Batch Wait Utility program (EDIWAITD) 10-9

Central Multi-Queue Read subroutine
 (EDIRCMR) 8-15

Central Multi-Queue Write Subroutine program
 (EDIECMW) 8-16

Change Audit Maintenance program (EDID552)
 5-95

Connect Batch Number Update program
 (EDIR317) 7-11

Connect Inbound Interface program (EDIR316)
 7-7

Connect Outbound Interface program (EDIR314)
 7-2

ConnectMonitor Wakeup program (EDIR315) 7-
 6

Databank Extract Driver (EDIR105) 2-4

Databank Extract Driver program (EDIR105) 2-4

Databank Reprocess Driver program (EDIR856)
 5-99

- Databank Status Update program (EDIR855) 5-98
- Dynamic Codes Validation (EDIR114) 3-31
- EDI Databank Inquiry Report (EDID550) 5-2
- EDIFACT Interchange Priority Lookup program (EDIR932) 6-8
- EDIR100 2-2
- Exception Program Exit program (EDIR852) 4-7
- Inbound Application Databank Extract program (EDID455) 5-77
- Inbound Application Databank Maintenance program (EDID451) 5-70
- Inbound Application Databank Maintenance Subroutine program (EDID452) 5-76
- Inbound Application Gateway program (EDIR104) 2-34
- Inbound Communication Gateway program (EDIR103) 2-29
- Inbound EDI Databank Maintenance program 5-63
- Inbound EDI Databank Maintenance Subroutine program (EDID352) 5-69
- Inbound Mapper program (EDIR041) 3-19
- Inbound Reject/Splitter program (EDIR015) 3-9
- Installation Checkout Procedures Output Test program (EDIRTOUT) 13-2
- Internal Addressing Routine program (EDIRADDR) 4-4
- Internal Standards Loader program (EDIR113) 3-30
- Journal Subroutine program (EDIJNL) 8-30
- Logging Subroutine (EDIALOG) 8-31
- Mapper Subroutine programs (EDIR043-EDIR049, EDIR050, EDIR051, and EDIR056) 3-27
- Monitor I/O program (EDIR940) 6-12
- Network Reconciliation Maintenance program (EDID860) 5-40
- Network Reconciliation program (EDID850) 5-37
- Online Application Data ID Copy program (EDIR060) 11-2
- Online Batch Initiator program (EDIEOBI) 8-32
- Online Error User Exit program (EDIRXIT2) 12-6
- Online Input Gateway program (EDIEOIG) 2-5
- Online Mapper User Exit Interface programs (EDIXIT3, EDIXIT4, EDIXIT5, EDISGXT, EDIRENV) 12-8
- Online Message Handler program (EDIROMH) 4-5
- Online Output Gateway program (EDIEOOG) 2-12
- Online Partner Copy program (EDIR087) 11-7
- Online Partner Xref Copy program (EDIR086) 11-6
- Online Queue Read program (EDIEOQR) 8-33
- Online Queue Write program (EDIEOQW) 8-34
- Online Report File Lister program (EDIR306B) 9-5
- Online Report File Maintenance program (EDIR305B) 9-2
- Online Scanner/Initiator program (EDIEOSI) 4-2
- Online Shell Path User Exit Interface program (EDIRXIT1) 12-2
- Online Shell Path User Tracking Exit Data Capture program (EDIRCAP) 12-11
- Online Test Program (EDITPGM) 13-6
- Online Transaction Mapping Copy program (EDIR080) 11-5
- Online Translation Table Copy program (EDIR076) 11-3, 11-4
- Outbound Application Databank Maintenance program (EDID151) 5-43
- Outbound Application Databank Maintenance Subroutine program (EDID152) 5-50
- Outbound Application Gateway program (EDIR101) 2-20
- Outbound Communication Gateway program (EDIR102) 2-25
- Outbound EDI Databank Extract program (EDID255) 5-59
- Outbound EDI Databank Maintenance program (EDID251) 5-51
- Outbound EDI Databank Maintenance Subroutine program (EDID252) 5-58
- Outbound Editor program (EDIR002) 3-6
- Outbound Mapper program (EDIR042) 3-23
- Outbound Reject/Splitter program (EDIR016) 3-12
- Queue Read program (EDIRQRD) 8-5
- Queue Write program (EDIRQWR) 8-10
- Realtime Activity Maintenance program (EDIRAMT) 9-7
- Remote Single-Queue Read Subroutine program (EDIERSR) 8-17
- Remote Single-Queue Write Subroutine program (EDIERSW) 8-23
- Remote System Stop/Start program (EDIRSTOP) 10-6
- Report Initiation program (EDIR312) 10-2
- Request File Initiation program (EDIR900) 10-3
- Results Program (EDIRSLTS) 13-10
- Router program (EDIR945) 6-14
- Sample Online Application program (EDIRSOA) 13-3
- Sample Queue Read program (EDIESQR) 8-28
- Sample Queue Write program (EDIESQW) 8-29

Separator Driver program (EDIR930) 6-2
 Shell program (EDIR313) 4-6
 System Status Toggle program (EDIETOGL) 10-8
 TRADACOMS Interchange Priority Lookup program (EDIR933) 6-10
 Viewpoint Online Gateway program (EDIX980) 2-44
 X12 Interchange Priority Lookup program (EDIR931) 6-6
 PY data type G-18

Q

queue file
 accessing via EDIERSW 8-29
 definition G-8
 loading from a sequential file 8-29
 opening and closing 8-15, 8-16
 read by batch programs 8-28
 reading even and odd numbered 8-15
 updating pointers 8-15, 8-16
 writing to even and odd numbered 8-16
 written to by batch programs 8-29
 queue file records
 formatting application records 8-16
 writing 8-16
 Queue files (EDIQnnn) 14-19
 queue option
 definition G-8
 Queue Read program (EDIRQRD) 8-5
 calling Central Multi-Queue Read subroutine (EDIRCMR) 8-15
 Queue Write program (EDIRQWR) 5-26, 8-10
 calling Central Multi-Queue Write subroutine (EDIRCMW) 8-16

R

Realtime Activity Maintenance program (EDIRAMT) 9-7
 Realtime Databank Extract programs (EDID255 and EDID455)
 startup parameters 2-4
 record
 ###INT 3-15
 definition G-8
 release character
 definition G-8

release indicator
 definition G-8
 remote ID 3-15
 Remote Single-Queue Read subroutine (EDIERSR)
 accessing Queue files for Sample Queue Read program 8-28
 Remote Single-Queue Read Subroutine program (EDIERSR) 8-17
 Remote Single-Queue Write subroutine (EDIERSW)
 accessing queue files for Sample Queue Write program 8-29
 Remote Single-Queue Write Subroutine program (EDIERSW) 8-23
 Remote System Stop/Start program (EDIRSTOP) 10-6
 Report Control file (EDIRRC) 14-90
 Report Detail file (EDIRRD) 14-92
 Report Initiation program (EDIR312) 10-2
 linked by Online Scanner/Initiator 4-2
 Report Request Queue file (EDIQ092) 14-22
 Report Structure control card 5-2
 reports
 Application Databank Inquiry Report (EDID551) 5-26
 EDI Databank Inquiry report 5-2
 EDI Databank Inquiry Report (EDID550) 5-2
 Request file (EDIREQ) 14-46
 Request File Initiation program (EDIR900) 10-3
 reserved word constants G-12
 Results Program (EDIRSLTS) 13-10
 return code
 definition G-3, G-8
 Router program (EDIR945) 6-14
 role in Inbound Reject/Splitter operation 3-9
 RTECODES 2-9

S

Sample Application Data files (EDIAPPL, EDIAPPL1, and EDIAPPL2) 14-96
 Sample EDI Inbound Data file (EDIDAT) 14-97
 Sample Online Application program (EDIRSOA) 13-3
 Sample Queue Read program (EDIESQR) 8-17, 8-28
 Sample Queue Write program (EDIESQW) 8-29
 schedule option

- definition G-8
- segment
 - definition G-8
- segment separator
 - definition G-8
- segment terminator
 - definition G-9
- selection criteria
 - definition G-9
- Separator Drive program (EDIR930)
 - linking to Exception Program Exit 4-7
- Separator Driver program (EDIR930) 2-2, 6-2
- Separator Gateway program (EDIR100) 2-2
- Separator subsystem
 - application interface to (EDIR100) 2-2
- separator utility programs
 - Separator Driver program (EDIR930) 6-2
- sequential files, creating 8-28
- Shell program (EDIR313) 4-6
 - executing Inbound Editor 3-2
 - executing Inbound Mapper program (EDIR041) 3-19
 - executing Inbound Reject/Splitter program 3-9
 - executing Outbound Editor 3-6
 - executing Outbound Reject/Splitter program 3-12
 - executing Outbound Mapper program (EDIR042) 3-23
- simple data element
 - definition G-9
- Status Update Input Queue file (EDIQ096) 14-24
- subelement separator
 - definition G-10
- summary area
 - definition G-10
- Summary Statistics file (EDIRSUM) 14-94
- synchronous processing
 - definition G-10
- system processor programs
 - Exception Program Exit program (EDIR852) 4-7
 - Internal Addressing Routine program (EDIRADDR) 4-4
 - Online Message Handler program (EDIROMH) 4-5
 - Online Scanner/Initiator program (EDIEOSI) 4-2
 - Shell program (EDIR313) 4-6
- System Status Toggle program (EDIETOGL) 10-8

T

- T6 data type G-18, G-19
- T8 data type G-18, G-19
- temporary storage queue
 - and Separator Gateway program (EDIR100) 2-2
- Test Data File (EDIDATA) 14-98
- test programs
 - Batch Results Program (EDIRSLTX) 13-12
 - Batch Test Load Program (EDITPGMX) 13-8
 - Online Test Program (EDITPGM) 13-6
 - Results Program (EDIRSLTS) 13-10
- TM data type G-18, G-19
- TRADACOMS Interchange Priority Lookup program (EDIR933) 6-10
- trading partner
 - definition G-10
- transaction map
 - definition G-10
- transaction set
 - definition G-10
- Translation Results File (EDIRSLTS) 14-100
- trigger level
 - definition G-10
- trigger levels G-8
- TSQ
 - and Separator Gateway program (EDIR100) 2-2
 - eyecatcher record for chaining 2-14
- turnaround time
 - definition G-11

U

- unit of work
 - definition G-11
- unwrap
 - definition G-11
- user
 - definition G-11
- user document reference
 - definition G-11
- user exits
 - Online Error User Exit program (EDIRXIT2) 12-6
 - Online Mapper User Exit Interface programs (EDIXIT3, EDIXIT4, EDIXIT5, EDISGXT, EDIRENV) 12-8
 - Online Shell Path User Exit Interface program (EDIRXIT1) 12-2

Online Shell Path User Tracking Exit Data
Capture program (EDIRCAP) 12-11

V

Viewpoint Online Gateway program (EDIX980)
2-44

W

wrap
definition G-11

X

X12 Interchange Priority Lookup program
(EDIR931) 6-6

Y

YY data type G-18

Z

ZD data type G-18
ZJ data type G-18
ZM data type G-18
ZY data type G-18

