Gentran:Realtime® for zSeries

Technical Reference Guide

Release 6.4

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An IBM Company

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Gentran:Realtime for zSeries

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Chapter

1

Getting Started

Overview

Welcome to Gentran:Realtime for zSeries Release 6.4.

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

The *Gentran:Realtime for zSeries Release 6.4 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:

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

See Chapter 1, “Getting Started” in the *Gentran:Realtime for zSeries Release 6.4 User’s Guide* for introductory information on system interaction.

Chapter

2

Interface Programs

Overview

This chapter describes Gentran:Realtime interface programs.

This chapter contains the following topics:

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 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 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 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, Gentran 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 Gentran:Realtime translation is being executed for the queue file data.

File Access

File Description	DDname	File Access
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 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 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 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 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 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 Gentran:Realtime or 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 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 Gentran:Realtime and one interchange from 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 Gentran:Realtime or 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
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 Gentran:Realtime Outbound Application Gateway invokes the Gentran:Realtime Outbound translation process.

Operation

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

Either of two methods may invoke the gateway:

- If queue file input to the 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 Gentran:Realtime Outbound translation process. When complete, it returns to the Online Queue Read task.
- A user application can invoke the gateway directly. The Gentran:Realtime Outbound Application Gateway then calls (LINKS) the 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 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 *Gentran:Realtime for zSeries Release 6.4 User’s Guide* for more detailed information on TSQ chaining.

File Access

File Description	DDname	File Access
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 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 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 – 210	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 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 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, Gentran:Realtime invokes Rollback processing.

See Copybook RTECODES in GENTRAN.V6X4.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 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 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 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 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 Gentran:Realtime.
- Access to outbound 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 Gentran:Realtime is running, all updates must be backed out. If 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 Gentran:Realtime Online Queue Write program, or a user application.

Operation

The Outbound Communication Gateway is called (LINKED) by the 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 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 Gentran:Realtime Outbound translation task.

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

The following table provides a simplified overview of gateway operation.

Step	Description
1.	The 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 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 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 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 – 0210	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 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 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, 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 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 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 EDIRTOUT provides an example of the Linkage between the Outbound Communications Gateway and a user interface.

Inbound Communication Gateway EDIR103

Purpose

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

Operation

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

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

The gateway sends EDI data to 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 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 Gentran:Realtime successfully processed all the records or rejected them in their entirety.

File Access

File Description	DDname	File Access
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 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 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 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 – 0210	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 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 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, Gentran:Realtime invokes Rollback processing.

See Copybook RTECODES in GENTRAN.V6X4.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 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 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 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 Gentran:Realtime is running, all updates must be backed out. If 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 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 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 Gentran:Realtime inbound translation task.

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

The following table provides a simplified overview of gateway operation.

Step	Description
1.	The 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 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 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 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 – 0210	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 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 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, 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 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 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 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 Gentran:Realtime process, containing information about the application processing, the gateways, 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 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 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 Gentran:Realtime processes and Gentran:Viewpoint.

Operation

The following table provides a simplified overview of gateway operation.

Step	Description
1.	The 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 Gentran:Viewpoint staging TSQ can be created.
3.	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 Gentran:Realtime programs can use it.

Inputs

None.

Outputs

None.

Reports

None.

Control Cards

None.

Chapter

3

Translation Programs

Overview

This chapter describes Gentran:Realtime translation programs.

This chapter contains the following topics:

Inbound Editor EDIR001

Purpose

The 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 Gentran:Realtime Online Queue Read program. Only one queue file can be input into an 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
Gentran Partner file	EDIPART	Read.
Gentran Partner Cross-Reference file	EDIPREF	Read.
Gentran Trading Partner Inbound Control Number file	EDIPINB	Read and update.
Gentran Trading Partner Outbound Control Number file	EDIPOTB	Read and update.
Gentran Standards table	EDISOPT	Read.
Report Control file	EDIRRC	Write.
Report Detail file	EDIRRD	Write.
Error Message and Control file	ERRCTL	Read.
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 Gentran:Realtime Online Reporting function.

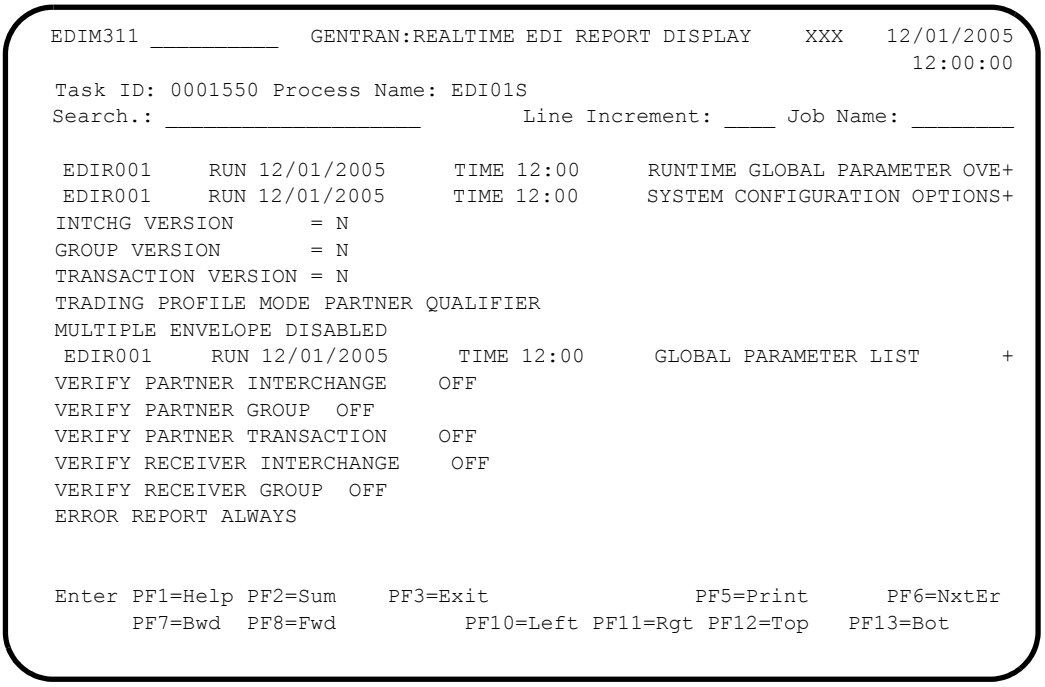
Report Selection

```
Select Print Log Exception Activity
EDIM310 8.3_______         REPORT SELECTION                 XXX    12/01/2005
                                                                     12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  230  EDI01S   W 00     529  U-TEST-EDIR001       161
 _  12/01/2005 12:00:00  230  ACKFMT     00     529  U-TEST-EDIR001       162
 _  12/01/2005 12:00:00  230  EDI01S   W 00    1189  U-TEST-EDIR001       163
 _  12/01/2005 12:00:00  230  EDI01E   W 00    1189  U-TEST-EDIR001       164
 _  12/01/2005 12:00:00  230  ACKFMT     00    1189  U-TEST-EDIR001       165
 _  12/01/2005 12:00:00  230  EDI01S   W 00    1550  U-TEST-EDIR001       166
 _  12/01/2005 12:00:00  230  EDI01E   W 00    1550  U-TEST-EDIR001       167
 _  12/01/2005 12:00:00  230  ACKFMT     00    1550  U-TEST-EDIR001       168
 _  12/01/2005 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    12/01/2005
                                                                     12:00:00

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

 EDIR001    RUN 12/01/2005   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   12/01/2005
                                                                    12:00:00
Task ID: 0001550 Process Name: EDI01S
Search.: ____________________        Line Increment: ____ Job Name: ________

 EDIR001     RUN 12/01/2005     TIME 12:00     RUNTIME GLOBAL PARAMETER OVE+
 EDIR001     RUN 12/01/2005     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 12/01/2005     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 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.
Gentran Standards Table	EDISOPT	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 Gentran:Realtime Online Reporting function.

Report Selection

```
 Select Print Log Exception Activity
EDIM310 8.3_______         REPORT SELECTION                XXX    12/01/2005
                                                                    12:00:00

      Path ID.......: ___          Process....: ______
      Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  073  EDI41E     00    2789  EDIR083 SYSTEST      465
 _  12/01/2005 12:00:00  073  EDI41S     00    2789  EDIR083 SYSTEST      466
 _  12/01/2005 12:00:00  200  EDI42E   W 04    3274  ANSI O/B IVP         467
 _  12/01/2005 12:00:00  200  EDI42S   W 04    3274  ANSI O/B IVP         468
 _  12/01/2005 12:00:00  200  EDI02S     00    3274  ANSI O/B IVP         469
 _  12/01/2005 12:00:00  200  EDI02E     00    3274  ANSI O/B IVP         470
 _  12/01/2005 12:00:00  073  PREPRO     00    3279  EDIR083 SYSTEST      471
 _  12/01/2005 12:00:00  073  EDI41E     00    3279  EDIR083 SYSTEST      472
 _  12/01/2005 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   12/01/2005
                                                                    12:00:00

 Task ID: 0003274 Process Name: EDI02E
 Search.: ____________________        Line Increment: ____ Job Name: ________
  EDIR002     RUN 12/01/2005    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   12/01/2005
                                                                    12:00:00

 Task ID: 0003274 Process Name: EDI02S
 Search.: ____________________        Line Increment: ____ Job Name: ________
  EDIR002     RUN 12/01/2005     TIME 12:00      RUNTIME GLOBAL PARAMETER OVE+
  EDIR002     RUN 12/01/2005     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 12/01/2005      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 Gentran:Realtime EDI Report Display screen.

Report Selection Screen

```
Select Print Log Exception Activity
 EDIM310 8.3_______         REPORT SELECTION                XXX    12/01/2005
                                                                      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 #........: ___1239      Max Srch...: 0050
      Print Job Name: ________
        Generation        Path  Process  Con    Task                    Control
  A     Date       Time    ID   Name    St Cd     #     Description      Address
  _  12/01/2005 12:00:00  222  EDI01E   W 04    1239  INB SPLIT TST       1120
  _  12/01/2005 12:00:00  222  EDI01S   W 04    1239  INB SPLIT TST       1121
  _  12/01/2005 12:00:00  222  ACKFMT     00    1239  INB SPLIT TST       1122
  _  12/01/2005 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    12/01/2005
                                                                      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 12/01/2005     TIME 12:00      SUMMARY REPORT - REJECT/SPLI+
 PROGRAM EDIR015  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4

  PROCESSING BEGAN ON                    12/01/2005 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            12/01/2005 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 Reject/Splitter EDIR016

Purpose

The Outbound Reject/Splitter program (EDIR016) has two functions:

- Separate rejected data from accepted data.
- Split 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 Reject/Splitter program receives the wrapped EDI data from the Outbound Editor 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 following table provides an overview of Splitter operation.

Step	Description
1.	The Outbound Reject/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, the rejected 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 Reject/Splitter program.

DDname	Description
ERRCTL	Error Message and Control file

TSQname	Description
EDI2rrrr	Editor wrapped 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.
EDI9rrrr	Rejected EDI data.

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 Gentran:Realtime EDI Report Display screen.

Report Selection Screen

```
Select Print Log Exception Activity
 EDIM310 8.3_______         REPORT SELECTION                 XXX    12/01/2005
                                                                      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 #........: ___1322     Max Srch...: 0050
      Print Job Name: ________
        Generation       Path  Process  Con    Task                    Control
 A     Date       Time    ID   Name    St Cd     #     Description      Address
 _  12/01/2005 12:00:00  300  EDI42E     00    1322  ANSI OUT SPLIT       1149
 _  12/01/2005 12:00:00  300  EDI42S     00    1322  ANSI OUT SPLIT       1150
 _  12/01/2005 12:00:00  300  EDI02S     00    1322  ANSI OUT SPLIT       1151
 _  12/01/2005 12:00:00  300  EDI16R     00    1322  ANSI OUT SPLIT       1152
 _
 _
 _
 _
 _
EXCEEDED MAX SEARCH COUNT - PRESS PF7 OR PF8 TO CONTINUE SEARCH
Enter PF1=Help           PF3=Exit              PF5=Action
      PF7=Bwd  PF8=Fwd
```

Report Display (EDI16R)

```
EDIM311 __________   GENTRAN:REALTIME EDI Report Display     XXX    12/01/2005
                                                                      12:00:00

Task ID: 0001322 Process Name: EDI16R
Search.: ____________________        Line Increment: ____ Job Name: ________

 EDIR016     RUN 12/01/2005      TIME 12:00      SUMMARY REPORT - SPLITTER PR+
PROGRAM EDIR016  COMPILED ON 12/01/2005 AT 12.00.00   VERSION 6.4

 SPLIT DATA:  RECORD CNT=        22  IMMED OPTION=     QFNR OPTION=008  PRIOR+
NO CONTROL RECORD FOR OPTION:   0 - 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                     12/01/2005 AT 12:00 AM.
 INPUT RECORDS READ----------------------                   88
 REJECT RECORDS WRITTEN------------------                    0
 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.

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.	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. 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 Commerce:Network and a password is needed in the Batch ID field.

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    12/01/2005
                                                                     12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  241  EDI41E     00    7155  UNIT TEST R041       472
 _  12/01/2005 12:00:00  262  EDI01E     00    7619  R021 TESTING         473
 _  12/01/2005 12:00:00  262  EDI01S     00    7619  R021 TESTING         474
 _  12/01/2005 12:00:00  262  ACKFMT     00    7619  R021 TESTING         475
 _  12/01/2005 12:00:00  262  ACK$AD     00    7619  R021 TESTING         476
 _  12/01/2005 12:00:00  262  EDI01S     00    7635  R021 TESTING         477
 _  12/01/2005 12:00:00  262  EDI01E     00    7635  R021 TESTING         478
 _  12/01/2005 12:00:00  262  ACKFMT     00    7635  R021 TESTING         479
 _  12/01/2005 12:00:00  262  ACK$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    12/01/2005
                                                                     12:00:00

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

 EDIR021     RUN 12/01/2005     TIME 12:00     ACK $$ADD GENERATE PROGRAM  +
PROGRAM EDIR021  COMPILED ON 12/01/2005 AT 12.00.00   VERSION 6.4

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 (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
Gentran Codes	CDECDE	Read
Gentran Codes (Alt Index)	CDECDE1	Read
Gentran Codes Define	CDEDEF	Read
Gentran Codes Data	CDEDTA	Read
Gentran Codes Data (Alt Index)	CDEDTA1	Read
Gentran Codes Validation	CDEVAL	Read
Gentran Transaction Header	TRNHDR	Read
Gentran Transaction Segment	TRNSEG	Read
Gentran Transaction Segment (Alt Index)	TRNSEG1	Read
Gentran Transaction Element	TRNELE	Read
Gentran Transaction Element	TRNELE1	Read
Gentran Application Header	APPHDR	Read
Gentran Application Record	APPRCT	Read
Gentran Application Record (Alt Index)	APPRCT1	Read
Gentran Application Field	APPFLD	Read
Gentran Application Field (Alt Index)	APPFLD1	Read
Gentran Application Link	APPTLR	Read
Gentran Partner file	EDIPART	Read
Gentran 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 Gentran:Realtime Online Reporting function.

Report Selection

```
Select Print Log Exception Activity
EDIM310 8.3_______         REPORT SELECTION                XXX    12/01/2005
                                                                    12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  000  AK-LOG     00      42  EDID515-EDILOG         20
 _  12/01/2005 12:00:00  000  AK-MON     00      42  EDID515-EDIMNTR        21
 _  12/01/2005 12:00:00  000  AK-REC     00      42  EDID515-EDIRECN        22
 _  12/01/2005 12:00:00  000  AK-SUM     00      42  EDID515-EDISUM         23
 _  12/01/2005 12:00:00  203  EDI01S   W 04     269  ANSI I/B IVP           24
 _  12/01/2005 12:00:00  203  EDI01E   W 04     269  ANSI I/B IVP           25
 _  12/01/2005 12:00:00  203  ACKFMT     00     269  ANSI I/B IVP           26
 _  12/01/2005 12:00:00  203  EDI41E     01     269  ANSI I/B IVP           27
 _  12/01/2005 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    12/01/2005
                                                                    12:00:00

Task ID: 0000269 Process Name: EDI41E
Search.: ____________________        Line Increment: ____ Job Name: ________
 EDIR041     RUN 12/01/2005     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    12/01/2005
                                                                    12:00:00

Task ID: 0000269 Process Name: EDI41S
Search.: ____________________        Line Increment: ____ Job Name: ________
 EDIR041     RUN 12/01/2005     TIME 12:00     PROCESSING OPTIONS FOR MAPPI+
PROGRAM EDIR041  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
PROGRAM EDID452  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
PROGRAM EDIR043  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
PROGRAM EDIR044  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 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. (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 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
Gentran Codes	CDECDE	Read.
Gentran Codes (Alt Index)	CDECDE1	Read.
Gentran Codes Define	CDEDEF	Read.
Gentran Codes Data	CDEDTA	Read.
Gentran Codes Data (Alt Index)	CDEDTA1	Read.
Gentran Codes Validation	CDEVAL	Read.
Gentran Transaction Header	TRNHDR	Read.
Gentran Transaction Segment	TRNSEG	Read.
Gentran Transaction Segment (Alt Index)	TRNSEG1	Read.
Gentran Transaction Element	TRNELE	Read.
Gentran Transaction Element	TRNELE1	Read.
Gentran Application Header	APPHDR	Read.
Gentran Application Record	APPRCT	Read.
Gentran Application Record (Alt Index)	APPRCT1	Read.
Gentran Application Field	APPFLD	Read.
Gentran Application Field (Alt Index)	APPFLD1	Read.
Gentran Application Link	APPTLR	Read.
Gentran Partner File	EDIPART	Read.
Gentran Partner Cross-reference File	EDIPREF	Read.
Report Control File	EDIRRC	Write.
Report Detail File	EDIRRD	Write.
Error Message and Control File	ERRCTL	Read.
Gentran Partner File	EDIPART	Read and update through the EDIR011 routine.
Gentran 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 Gentran:Realtime Online Reporting function.

Report Selection

```
Select Print Log Exception Activity
EDIM310 8.3_______         REPORT SELECTION                 XXX    12/01/2005
                                                                    12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  200  EDI42S   W 04    8195  ANSI O/B IVP          38
 _  12/01/2005 12:00:00  200  EDI02E     00    8195  ANSI O/B IVP          39
 _  12/01/2005 12:00:00  200  EDI02S     00    8195  ANSI O/B IVP          40
 _  12/01/2005 12:00:00  200  CMBXOB     00    8195  ANSI O/B IVP          41
 _  12/01/2005 12:00:00  200  EDI42E   W 04    8203  ANSI O/B IVP          42
 _  12/01/2005 12:00:00  200  EDI42S   W 04    8203  ANSI O/B IVP          43
 _  12/01/2005 12:00:00  200  EDI02E     00    8203  ANSI O/B IVP          44
 _  12/01/2005 12:00:00  200  EDI02S     00    8203  ANSI O/B IVP          45
 _  12/01/2005 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   12/01/2005
                                                                   12:00:00

 Task ID: 0008203 Process Name: EDI42E
 Search.: ____________________        Line Increment: ____ Job Name: ________
  EDIR042     RUN 12/01/2005     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   12/01/2005
                                                                   12:00:00

 Task ID: 0008203 Process Name: EDI42S
 Search.: ____________________        Line Increment: ____ Job Name: ________
  EDIR042     RUN 12/01/2005     TIME 12:00     PROCESSING OPTIONS FOR MAPPI+
 PROGRAM EDIR042  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 PROGRAM EDID152  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 PROGRAM EDIR043  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 PROGRAM EDIR045  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 PROGRAM EDIR056  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
  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 Gentran:Realtime Online Reporting function.

Report Selection Screen

```
Select Print Log Exception Activity
 EDIM310 8.3_______         REPORT SELECTION                 XXX    12/01/2005
                                                                      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                    Control
 A     Date       Time    ID   Name    St Cd     #     Description      Address
 _  12/01/2005 12:00:00  007  EDI01E     00    1336  INVFILE (Q-007)      1153
 _  12/01/2005 12:00:00  007  EDI01S     00    1336  INVFILE (Q-007)      1154
 _  12/01/2005 12:00:00  007  ACKFMT     00    1336  INVFILE (Q-007)      1155
 _  12/01/2005 12:00:00  007  EDI41E     00    1336  INVFILE (Q-007)      1156
 _  12/01/2005 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    12/01/2005
                                                                      12:00:00

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

 EDIR110    RUN  12/01/2005     TIME 12:00     GENTRAN:REALTIME ACKNOWLEDGBEM+
PROGRAM EDIR110  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 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 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 *Gentran:Realtime for zSeries Release 6.4 User's Guide* 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 (EDIASCDT).

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 EDIASCDT 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 *Gentran:Realtime for zSeries Release 6.4 User's Guide* 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	EDIASCDT	Write

Reports

None.

Chapter

4

System Processor Programs

Overview

This chapter describes Gentran:Realtime system processor programs.

This chapter contains the following topics:

Online Scanner/Initiator EDIEOSI

Purpose

The Online Scanner/Initiator (EDIEOSI) is the first program to execute in the CICS region for support of Gentran:Realtime EDI. The Online Scanner/Initiator performs 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

Gentran:Realtime initialization functions are performed the first time the Online Scanner/Initiator is executed, provided 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 Gentran:Realtime processing.
- Linking to the Report Initiation program (EDIR312).
- Linking to the 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: • 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 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
Gentran:Realtime/Control Checkpoint file	EDICKP	Read.
Online Control file	EDIOCF	Read.
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 Gentran:Realtime and some 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 Gentran:Realtime gateways and the Gentran:Realtime "core" programs. It starts the proper processes for both inbound and outbound, such as acknowledgment processing for inbound data.

Operation

The 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.
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 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 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 Gentran:Realtime uses with the Exception Program Exit and the Exit returns to 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 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 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.

Chapter

5

Databank Utility Programs and Reports

Overview

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

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 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 Gentran:Realtime databank files.

See the section “Configuring Databanking” in Chapter 6, “Configuration Strategies,” in the *Gentran:Realtime for zSeries Release 6.4 User’s Guide* for more information.

Note: For 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	Gentran:Realtime Inbound EDI Databank Directory
EDIOEA	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:

aaaaaaaaaaaaaa	=	EDIFACT
nnnnnnnnn	=	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:

aaaaaaaaaaaaaa	=	EDIFACT
nnnnnnnnn	=	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 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
aannnnnnnn	=	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 Gentran:Realtime databank files are being used for the inquiry and whether to create a Transaction file to contain Gentran:Realtime databank updates. Valid values are:

YES	=	Yes, Gentran:Realtime databank files are being used. Create a Transaction file for databank updates.
NO	=	No, 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 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:

aaaaaaaaaaaaaa	=	EDIFACT
nnnnnnnnn	=	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).

```
REPORT DATE: 12/01/2005                              GENTRAN:BASIC                                    PAGE   : 00001
REPORT TIME: 12:00:00                             EDI DATABANK INQUIRY
REPORT ID  : EDI144                                  SUMMARY REPORT                                   VERSION: 6.4


    OPTIONS USED THIS RUN
    ---------------------

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: 12/01/2005                           GENTRAN:BASIC                                        PAGE   : 00001
REPORT TIME: 12:00:00                         EDI DATABANK INQUIRY                                     VERSION:6.4
REPORT ID  : EDI142                              PROCESSING LOG                                    COMPILE DATE: 12/01/05

    MESSAGES
    --------

EDI-042101-I 00 EDI DATABANK INQUIRY PROCESSING BEGINS . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-042102-I 00 EDI DATABANK INQUIRY PROCESSING ENDS . . . . DATE: 12/01/2005, TIME: 12:00:00
```

Figure 5.2 EDI Databank Inquiry Report (Processing Log)

```
1REPORT DATE: 12/01/2005                              GENTRAN:BASIC                                       PAGE   : 00001
 REPORT TIME: 12:00:00                             EDI DATABANK INQUIRY
 REPORT ID  : EDI143                               DETAIL INQUIRY REPORT                                VERSION:6.4

                                                    INBOUND EDI DATABANK

  INTERCHANGE ID . : BELL                            QUAL : ZZ                                  ACKNOWLEDGE :
    NAME . . . . . :
    ENV REF ID . . : 000001345                   LOADED : 12/01/2005 12:00                           GROUPS : 000001
    DIVISION . . . : 000                         EDITED : 12/01/2005 12:00                     TRANSACTIONS : 000004
    DATABANK RUN NR: 00000163                                                                    CHARACTERS : 0000000482

  GROUP ID . . . . : SND 004030                      QUAL :                                     ACKNOWLEDGE :
    NAME . . . . . :                                                                            TRANS COUNT : 000004
    ENV REF ID . . : 000000372                                                           TRANS ACKNOWLEDGED : 000000
    DIVISION . . . : 000                                                                     TRANS ACCEPTED : 000004
    FUNC GROUP ID  : AC                                                                          CHARACTERS : 0000000360

    TRANS ID . . . : SND 004030                      QUAL :                                        DIVISION : 000
      SET ID  ENV REF ID      USER REFERENCE                             ACK STATUS  CHARACTERS  REF TAG     PROC
      102     000000300       REF ID                                                 0000000057  IE00023624  YES
      102     000000301       REF ID                                                 0000000131  IE00023627  YES
      102     000000302       REF ID                                                 0000000205  IE00023628  YES
      102     000000303       REF ID                                                 0000000279  IE00023629  YES

  INTERCHANGE ID . : BELL                            QUAL : ZZ                                  ACKNOWLEDGE :
    NAME . . . . . :
    ENV REF ID . . : 000001345                   LOADED : 12/01/2005 12:00                           GROUPS : 000001
    DIVISION . . . : 000                         EDITED : 12/01/2005 12:00                     TRANSACTIONS : 000004
    DATABANK RUN NR: 00000178                                                                    CHARACTERS : 0000000482

  GROUP ID . . . . : SND 004030                      QUAL :                                     ACKNOWLEDGE :
    NAME . . . . . :                                                                            TRANS COUNT : 000004
    ENV REF ID . . : 000000372                                                           TRANS ACKNOWLEDGED : 000000
    DIVISION . . . : 000                                                                     TRANS ACCEPTED : 000004
    FUNC GROUP ID  : AC                                                                          CHARACTERS : 0000000360

    TRANS ID . . . : SND 004030                      QUAL :                                        DIVISION : 000
      SET ID  ENV REF ID      USER REFERENCE                             ACK STATUS  CHARACTERS  REF TAG     PROC
      102     000000300       REF ID                                                 0000000057  IE00023793  YES
      102     000000301       REF ID                                                 0000000131  IE00023796  YES
      102     000000302       REF ID                                                 0000000205  IE00023797  YES
      102     000000303       REF ID                                                 0000000279  IE00023798  YES

  INTERCHANGE ID . : BELL                            QUAL : ZZ                                  ACKNOWLEDGE :
    NAME . . . . . :
    ENV REF ID . . : 000001345                   LOADED : 12/01/2005 12:00                           GROUPS : 000001
    DIVISION . . . : 000                         EDITED : 12/01/2005 12:00                     TRANSACTIONS : 000004
    DATABANK RUN NR: 00000348                                                                    CHARACTERS : 0000000482

  GROUP ID . . . . : SND 004030                      QUAL :                                     ACKNOWLEDGE :
    NAME . . . . . :                                                                            TRANS COUNT : 000004
    ENV REF ID . . : 000000372                                                           TRANS ACKNOWLEDGED : 000000
    DIVISION . . . : 000                                                                     TRANS ACCEPTED : 000004
    FUNC GROUP ID  : AC                                                                          CHARACTERS : 0000000360
      831     0001            3                                          ACCEPT      0000000065  IE00024378  YES

  INTERCHANGE ID . : 3070-DUNS                       QUAL : 01                                  ACKNOWLEDGE :
    NAME . . . . . :
    ENV REF ID . . : 000000001                   LOADED : 12/01/2005 12:00                           GROUPS : 000002
    DIVISION . . . : 000                         EDITED : 12/01/2005 12:00                     TRANSACTIONS : 000005
```

Figure 5.3 EDI Databank Inquiry Report (Detail Inquiry Report)

```
  DATABANK RUN NR: 00000229                                                              CHARACTERS : 0000001531

GROUP ID . . . . : 3070-DUNS                        QUAL :                              ACKNOWLEDGE : ACCEPT
  NAME . . . . . :                                                                      TRANS COUNT : 000004
  ENV REF ID . . : 000000001                                                     TRANS ACKNOWLEDGED : 000004
  DIVISION . . . : 000                                                              TRANS ACCEPTED : 000004
  FUNC GROUP ID  : RA                                                                    CHARACTERS : 0000001260

  TRANS ID . . . : 3070-DUNS                        QUAL :                                  DIVISION : 000
    SET ID  ENV REF ID      USER REFERENCE                              ACK STATUS  CHARACTERS  REF TAG     PROC
    820     0001            30701111                                    ACCEPT      0000000278  IE00024380  YES
    820     0002            30701111                                    ACCEPT      0000000578  IE00024383  YES
    820     0003            30701111                                    ACCEPT      0000000876  IE00024384  YES
    820     0004            30701111                                    ACCEPT      0000001176  IE00024385  YES

GROUP ID . . . . : 3070-DUNS                        QUAL :                              ACKNOWLEDGE : ACCEPT
  NAME . . . . . :                                                                      TRANS COUNT : 000001
  ENV REF ID . . : 000000002                                                     TRANS ACKNOWLEDGED : 000001
  DIVISION . . . : 000                                                              TRANS ACCEPTED : 000001
  FUNC GROUP ID  : CT                                                                    CHARACTERS : 0000000149

  TRANS ID . . . : 3070-DUNS                        QUAL :                                  DIVISION : 000
    SET ID  ENV REF ID      USER REFERENCE                              ACK STATUS  CHARACTERS  REF TAG     PROC
    831     0001            3                                           ACCEPT      0000000065  IE00024386  YES

INTERCHANGE ID . : 3070-DUNS                        QUAL : 01                           ACKNOWLEDGE :
  NAME . . . . . :
  ENV REF ID . . : 000000001                    LOADED : 12/01/2005 12:00                       GROUPS : 000002
  DIVISION . . . : 000                          EDITED : 12/01/2005 12:00                 TRANSACTIONS : 000005
  DATABANK RUN NR: 00000240                                                              CHARACTERS : 0000001531

GROUP ID . . . . : 3070-DUNS                        QUAL :                              ACKNOWLEDGE : ACCEPT
  NAME . . . . . :                                                                      TRANS COUNT : 000004
  ENV REF ID . . : 000000001                                                     TRANS ACKNOWLEDGED : 000004
  DIVISION . . . : 000                                                              TRANS ACCEPTED : 000004
  FUNC GROUP ID  : RA                                                                    CHARACTERS : 0000001260
```

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

```
1REPORT DATE: 12/01/2005                         GENTRAN:BASIC                                    PAGE   : 00001
 REPORT TIME: 12:00:00                        EDI DATABANK INQUIRY
 REPORT ID  : EDI143                         SUMMARY INQUIRY REPORT                               VERSION:6.4

                                               INBOUND EDI DATABANK

 DIR                                       ENVELOPE       LOADED           EDITED             ACK              GROUP/
 TYPE PARTNER                         QUAL REFERENCE ID   DATE/TIME        DATE/TIME          STATUS           TRANS  CHARACTER

  I   BELL                            ZZ   000001345      12/01/2005 12:00 12/01/2005 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      12/01/2005 12:00 12/01/2005 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      12/01/2005 12:00 12/01/2005 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  12/01/2005 12:00 12/01/2005 13:00                    000000 0000001197
  I   DAKOSY                               B105904080698  12/01/2005 12:00 12/01/2005 13:00                    000000 0000001197
  I   DEMOJD-GS                            000000022      12/01/2005 12:00 12/01/2005 13:00                    000001 0000001069
  G   DEMOJD-GS                            000000022                                                           000002 0000001069
  T   DEMOJD-GS                            000220001                                                                  0000000489
  T   DEMOJD-GS                            000220002                                                                  0000000996
  I   DEMOJD-GS                            000000022      12/01/2005 12:00 12/01/2005 13:00                    000001 0000001069
  G   DEMOJD-GS                            000000022                                                           000002 0000001069
  T   DEMOJD-GS                            000220001                                                                  0000000489
  T   DEMOJD-GS                            000220002                                                                  0000000996
  I   ET654-DUNS                      01   000000001      12/01/2005 12:00 12/01/2005 13:00                    000003 0000003079
  G   ET654-DUNS                           000000001                                          ACCEPT           000001 0000000575
  T   ET654-DUNS                           0001                                               ACCEPT                  0000000490
  G   ET654-DUNS                           000000002                                          ACCEPT           000002 0000000942
  T   ET654-DUNS                           0001                                               ACCEPT                  0000000484
  T   ET654-DUNS                           0002                                               ACCEPT                  0000000857
  G   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                      01   000000001      12/01/2005 12:00 12/01/2005 13:00                    000003 0000003079
  G   ET654-DUNS                           000000001                                          ACCEPT           000001 0000000575
  T   ET654-DUNS                           0001                                               ACCEPT                  0000000490
  G   ET654-DUNS                           000000002                                          ACCEPT           000002 0000000942
  T   ET654-DUNS                           0001                                               ACCEPT                  0000000484
  T   ET654-DUNS                           0002                                               ACCEPT                  0000000857
  G   ET654-DUNS                           000000003                                          ACCEPT           000003 0000001440
  T   ET654-DUNS                           0001                                               ACCEPT                  0000000322
  T   ET654-DUNS                           0002                                               ACCEPT                  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 Commerce:Network), or the partner ID of the trading partner (if using 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 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 Gentran:Plus for zSeries 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 Gentran:Realtime. The format is **YYYYMMDD**.

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

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

Processed Time
The time at which the item was processed by 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 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 Gentran:Realtime databank files.

See the section "Configuring Databanking" in Chapter 6, "Configuration Strategies," in the *Gentran:Realtime for zSeries Release 6.4 User's 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	Gentran:Realtime Inbound Application Databank Directory
EDIOAA	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:

aaaaaaaaaaaaaa	=	EDIFACT
nnnnnnnnn	=	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:

aaaaaaaaaaaaaa	=	EDIFACT
nnnnnnnnn	=	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 Gentran:Realtime databank files are being used for the inquiry and whether or not to create a transaction file to contain Gentran:Realtime databank updates. Valid values are:

YES	=	Yes, Gentran:Realtime databank files are being used. Create a transaction file for databank updates.
NO	=	No, 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
aannnnnnnn	=	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	=	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 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:

aaaaaaaaaaaaaa	=	EDIFACT
nnnnnnnnn	=	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)

```
REPORT DATE: 12/01/2005                  GENTRAN:BASIC                        PAGE   : 00001
REPORT TIME: 12:00:00              APPLICATION DATABANK INQUIRY
REPORT ID  : EDI151                      SUMMARY REPORT                       VERSION: 6.4


    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)

```
1REPORT DATE: 12/01/2005                              GENTRAN:BASIC                                          PAGE   : 00001
 REPORT TIME: 12:00:00                        APPLICATION DATABANK INQUIRY                                   VERSION:6.4
 REPORT ID  : EDI149                                 PROCESSING LOG                                     COMPILE DATE: 12/01/05

     MESSAGES
     --------

 EDI-042301-I 00 APPLICATION DATABANK INQUIRY PROCESSING BEGINS . . . DATE: 12/01/2005, TIME: 12:00:00
 EDI-042302-I 00 APPLICATION DATABANK INQUIRY PROCESSING ENDS . . . . DATE: 12/01/2005, TIME: 12:00:00
```

Figure 5.7 Application Databank Inquiry Report (Processing Log)

```
1REPORT DATE: 12/01/2005                              GENTRAN:BASIC                                            PAGE   : 00001
 REPORT TIME: 12:00:00                           APPLICATION DATABANK INQUIRY
 REPORT ID  : EDI150                                  INQUIRY REPORT                                           VERSION:6.4

                                                 OUTBOUND APPLICATION DATABANK

                                           USER                                               APPLICATION  REFERENCE          MAPPING
 PARTNER                              QUAL REFERENCE                                          DATA ID      TAG        DATE        TIME  ST

                                           REF:OA00005979                                     POFILE       OA00005979 12/01/2005 12:00 12
                                           REF:OA00006279                                     POFILE       OA00006279 12/01/2005 12:00 12
                                           REF:OA00007391                                     POFILE       OA00007391 12/01/2005 12:00 12
 ADVDOR-1                                  PONUMBER-001                                       POFILE       OA00006766 12/01/2005 12:00 12
 ADVDOR-1                                  PONUMBER-001                                       POFILE       OA00006770 12/01/2005 12:00 12
 ADVDOR-1                                  PONUMBER-001                                       POFILE       OA00006865 12/01/2005 12:00 12
 ADVDOR-1                                  PONUMBER-001                                       POFILE       OA00007293 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006774                                     RT-824       OA00006774 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006775                                     RT-824       OA00006775 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006776                                     RT-824       OA00006776 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006777                                     RT-824       OA00006777 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006778                                     RT-824       OA00006778 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006779                                     RT-824       OA00006779 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006780                                     RT-824       OA00006780 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006781                                     RT-824       OA00006781 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006782                                     RT-824       OA00006782 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006783                                     RT-824       OA00006783 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006784                                     RT-824       OA00006784 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006785                                     RT-824       OA00006785 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006786                                     RT-824       OA00006786 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006787                                     RT-824       OA00006787 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006788                                     RT-824       OA00006788 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006789                                     RT-824       OA00006789 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006790                                     RT-824       OA00006790 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006791                                     RT-824       OA00006791 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006792                                     RT-824       OA00006792 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006793                                     RT-824       OA00006793 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006794                                     RT-824       OA00006794 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006795                                     RT-824       OA00006795 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006796                                     RT-824       OA00006796 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006797                                     RT-824       OA00006797 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006798                                     RT-824       OA00006798 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006799                                     RT-824       OA00006799 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006800                                     RT-824       OA00006800 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006801                                     RT-824       OA00006801 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006802                                     RT-824       OA00006802 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006803                                     RT-824       OA00006803 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006804                                     RT-824       OA00006804 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006805                                     RT-824       OA00006805 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006806                                     RT-824       OA00006806 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006807                                     RT-824       OA00006807 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006808                                     RT-824       OA00006808 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006809                                     RT-824       OA00006809 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006810                                     RT-824       OA00006810 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006811                                     RT-824       OA00006811 12/01/2005 12:00 12
 EDI-TRAN-ORIG                             REF:OA00006812                                     RT-824       OA00006812 12/01/2005 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 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 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 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

Gentran:Viewpoint

The following files are used in a **Gentran:Viewpoint** enabled 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 Gentran:Realtime databank files are being used for the inquiry and whether or not to create a Transaction file to contain Gentran:Realtime databank updates. Valid values are:

YES	=	Yes, Gentran:Realtime databank files are being used. Create a Transaction file for databank updates.
NO	=	No, 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 (Gentran:Basic and Gentran:Realtime).

Operation

The network reconciliation programs are documented in Chapter 6, "Network Utility Programs," of the *Gentran:Basic for zSeries Release 6.4 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	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	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-UNRECONCILED	030

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:

aaaaaaaaaaaaaa	=	EDIFACT
nnnnnnnnn	=	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 *Gentran:Basic for zSeries Release 6.4 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, "Configuration Strategies," in the *Gentran:Realtime for zSeries Release 6.4 User's Guide* for information on restoring 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 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 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 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 *Gentran:Realtime User's Guide* for more information on setting up your databank maintenance parameters.

Report Selection

```
Select Print Log Exception Activity
  EDIM310 8.3_______          REPORT SELECTION                 XXX    12/01/2005
                                                                        12:00:00

       Path ID.......: ___          Process....: ______
       Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  000  IA-SUM     00    5713  IA DBK MAINT           48
 _  12/01/2005 12:00:00  000  OA-SUM     00    5773  OA DBK MAINT           49
 _  12/01/2005 12:00:00  000  OA-AUD     00    5773  OA DBK MAINT           50
 _  12/01/2005 12:00:00  200  EDI42E     00    5824  ANSI O/B IVP           51
 _  12/01/2005 12:00:00  200  EDI42S     00    5824  ANSI O/B IVP           52
 _  12/01/2005 12:00:00  200  EDI02E     00    5824  ANSI O/B IVP           53
 _  12/01/2005 12:00:00  200  EDI02S     00    5824  ANSI O/B IVP           54
 _  12/01/2005 12:00:00  000  OE-AUD     00    5836  OE DBK MAINT           55
 _  12/01/2005 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    12/01/2005
                                                                      12:00:00

 Task ID: 0005773 Process Name: OA-SUM
 Search.: _____________________        Line Increment: ____ Job Name: ________
 REPORT DATE: 12/01/2005                                GENTRAN:REALTIME  +
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0397
 REPORT TIME: 12:00:00                          OUTBOUND APPL DATABANK MAINTE+
 REPORT ID  : EDID151-OA-SUM                          SUMMARY REPORT     +

 PROGRAM EDID151  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4


     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    12/01/2005
                                                                      12:00:00

 Task ID: 0005773 Process Name: OA-AUD
 Search.: _____________________        Line Increment: ____ Job Name: ________
 REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0398
 PROGRAM EDID151  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT TIME: 12:00:00                          OUTBOUND APPL DATABANK MAINTE+
 REPORT ID  : EDID151-OA-AUD                               AUDIT TRAIL      +

                                                          DROPPED DOCUMENTS

  PARTNER                              QUAL      USER-REFERENCE               +

                                                 REF:OA00005979               +
                                                 REF:OA00006279               +
                                                 REF:OA00007391               +
  ADVDOR-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: 12/01/2005                                    GENTRAN:REALTIME                                                                      PAGE   : 00001
 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                                                                        VERSION:6.4

 PROGRAM EDID151  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4


     OPTIONS USED THIS RUN
     ---------------------

 REALTIME-PATH-USED                 = OADB
 PATH-DESCRIPTION                   = DEFAULT HOUSEKEEPING MAINT.
 REQUESTED-OPERATION                = HOUSEKEEPING
 ARCHIVE                            = YES
 DATABANK-CONFIGURATION             = FULL
 DATABANK-DELETE-LEVEL              = ALL
 DATABANK-MODE                      = APPLICATION
 RETENTION-DAYS-LOADED              = 002
 RETENTION-DAYS-MAPPED              = 002
 TRADING-PROFILE-MODE               = PARTNER-QUALIFIER
 REPORT-PRINT-SW                    = NO
 AUDIT-RPT-SUPPRESS                 = NO
 REPORT DATE: 12/01/2005                                    GENTRAN:REALTIME                                                                      PAGE   : 00002
 REPORT TIME: 14:17:42                           OUTBOUND APPL DATABANK MAINTENANCE
 REPORT ID  : EDID151-OA-SUM                                SUMMARY REPORT                                                                        VERSION:6.4


 DIRECTORY RECORDS READ             :      1,094
 DIRECTORY RECORDS PURGED           :      1,089
 DIRECTORY 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
0***** END OF SUMMARY REPORT  *****
```

Figure 5.9 Outbound Application Databank Maintenance Report (Summary Report)

```
1REPORT DATE: 12/01/2005                              GENTRAN:REALTIME                                          PAGE   : 00001
 PROGRAM EDID151  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 REPORT TIME: 12.00.00                           OUTBOUND APPL DATABANK MAINTENANCE
 REPORT ID  : EDID151-OA-AUD                          AUDIT TRAIL                                               VERSION: 6.4

                                                     DROPPED DOCUMENTS

  PARTNER                            QUAL  USER-REFERENCE                                  APPL ID     REF TAG     DB RUN#  RET DAYS

  VENDOR-1                                 PONUMBER-001                                    POFILE      OA00000085  00000023   001
  VENDOR-1                                 PONUMBER-001                                    POFILE      OA00000097  00000026   001
  VENDOR-1                                 PONUMBER-001                                    POFILE      OA00000101  00000027   001
  VENDOR-1                                 PONUMBER-001                                    POFILE      OA00000105  00000028   001
  VENDOR-1                                 PONUMBER-001                                    POFILE      OA00000109  00000029   001
  VENDOR-1                                 PONUMBER-001                                    POFILE      OA00000117  00000031   000
  VENDOR-2                                 PONUMBER-002                                    POFILE      OA00000086  00000023   001
  VENDOR-2                                 PONUMBER-002                                    POFILE      OA00000098  00000026   001
  VENDOR-2                                 PONUMBER-002                                    POFILE      OA00000102  00000027   001
  VENDOR-2                                 PONUMBER-002                                    POFILE      OA00000106  00000028   001
  VENDOR-2                                 PONUMBER-002                                    POFILE      OA00000110  00000029   001
  VENDOR-2                                 PONUMBER-002                                    POFILE      OA00000118  00000031   000
  VENDOR-3                                 PONUMBER-003                                    POFILE      OA00000087  00000023   001
  VENDOR-3                                 PONUMBER-003                                    POFILE      OA00000099  00000026   001
  VENDOR-3                                 PONUMBER-003                                    POFILE      OA00000103  00000027   001
  VENDOR-3                                 PONUMBER-003                                    POFILE      OA00000107  00000028   001
  VENDOR-3                                 PONUMBER-003                                    POFILE      OA00000111  00000029   001
  VENDOR-3                                 PONUMBER-003                                    POFILE      OA00000119  00000031   000
  VENDOR-4                                 PONUMBER-004                                    POFILE      OA00000088  00000023   001
  VENDOR-4                                 PONUMBER-004                                    POFILE      OA00000100  00000026   001
  VENDOR-4                                 PONUMBER-004                                    POFILE      OA00000104  00000027   001
  VENDOR-4                                 PONUMBER-004                                    POFILE      OA00000108  00000028   001
  VENDOR-4                                 PONUMBER-004                                    POFILE      OA00000112  00000029   001
  VENDOR-4                                 PONUMBER-004                                    POFILE      OA00000120  00000031   000
```

Figure 5.10 Outbound Application Databank Maintenance Report (Audit Trail 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 *Gentran:Basic for zSeries Release 6.4 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, "Configuration Strategies," in the *Gentran:Realtime for zSeries Release 6.4 User's Guide* for information on restoring 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 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 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 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 *Gentran:Realtime User's Guide* for more information on setting up your databank maintenance parameters.

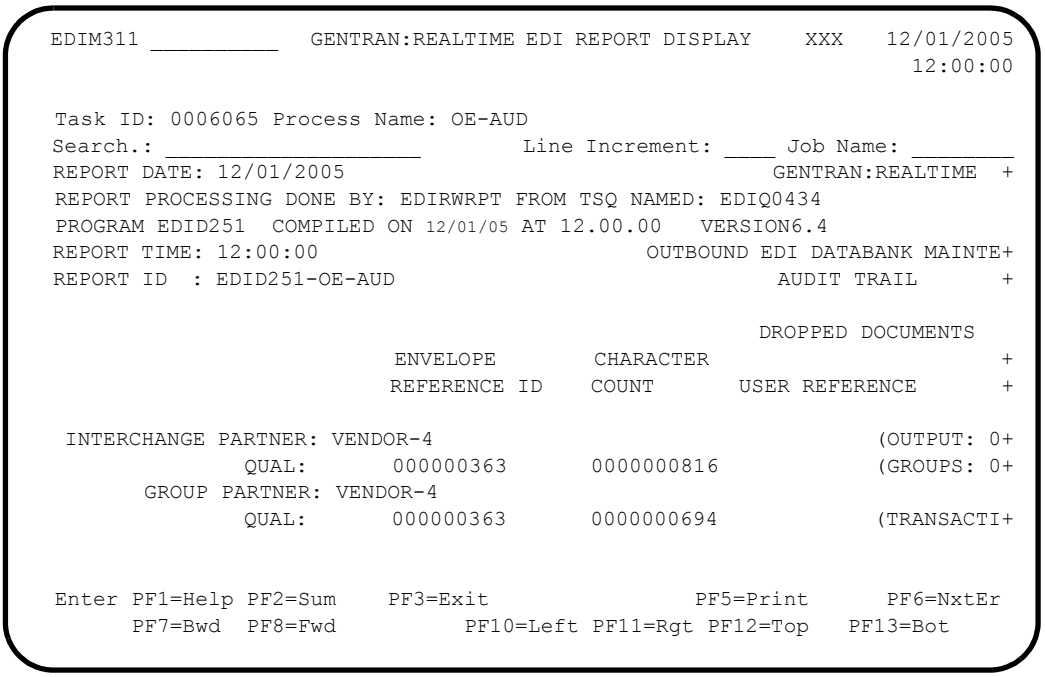
Report Selection

```
Select Print Log Exception Activity
 EDIM310 8.3_______        REPORT SELECTION                XXX    12/01/2005
                                                                    12:00:00

      Path ID.......: ___          Process....: ______
      Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  203  EDI02S     00    5974  ANSI I/B IVP           64
 _  12/01/2005 12:00:00  201  EDI42E     00    5991  EDIFACT O/B IVP        65
 _  12/01/2005 12:00:00  201  EDI42S     00    5991  EDIFACT O/B IVP        66
 _  12/01/2005 12:00:00  201  EDI02E     00    5991  EDIFACT O/B IVP        67
 _  12/01/2005 12:00:00  201  EDI02S     00    5991  EDIFACT O/B IVP        68
 _  12/01/2005 12:00:00  000  IE-AUD     00    6049  IE DBK MAINT           69
 _  12/01/2005 12:00:00  000  IE-SUM     00    6049  IE DBK MAINT           70
 _  12/01/2005 12:00:00  000  OE-AUD     00    6065  OE DBK MAINT           71
 _  12/01/2005 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    12/01/2005
                                                                    12:00:00

 Task ID: 0006065 Process Name: OE-SUM
 Search.: _____________________        Line Increment: ____ Job Name: ________
 REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0433
 REPORT TIME: 12:00:00                          OUTBOUND EDI DATABANK MAINTE+
 REPORT ID  : EDID251-OE-SUM                              SUMMARY REPORT     +

 PROGRAM EDID251  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4


     OPTIONS USED THIS RUN
     ---------------------

 REALTIME-PATH-USED                  = OE02
 PATH-DESCRIPTION                    = SPECIAL PURGE OF QCPARTNER1
 REQUESTED-OPERATION                 = PURGE


 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   12/01/2005
                                                                    12:00:00

 Task ID: 0006065 Process Name: OE-AUD
 Search.: ____________________        Line Increment: ____ Job Name: ________
 REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0434
 PROGRAM EDID251  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT TIME: 12:00:00                          OUTBOUND EDI DATABANK MAINTE+
 REPORT ID  : EDID251-OE-AUD                              AUDIT TRAIL       +

                                                        DROPPED DOCUMENTS
                           ENVELOPE        CHARACTER                        +
                           REFERENCE ID    COUNT       USER REFERENCE       +

  INTERCHANGE PARTNER: VENDOR-4                                    (OUTPUT: 0+
                QUAL:       000000363       0000000816             (GROUPS: 0+
        GROUP PARTNER: VENDOR-4
                QUAL:       000000363       0000000694             (TRANSACTI+


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: 12/01/2005                                    GENTRAN:REALTIME                                         PAGE   : 00001
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0433
 REPORT TIME: 12:00:00                            OUTBOUND EDI DATABANK MAINTENANCE
 REPORT ID  : EDID251-OE-SUM                                SUMMARY REPORT                                           VERSION:6.4

 PROGRAM EDID251  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4


     OPTIONS USED THIS RUN
     ---------------------

 REALTIME-PATH-USED                  = OE02
 PATH-DESCRIPTION                    = SPECIAL PURGE OF QCPARTNER1
 REQUESTED-OPERATION                 = PURGE
 ARCHIVE                             = Y
 DATABANK-CONFIGURATION              = FULL
 DATABANK-DELETE-LEVEL               = ALL
 DATABANK-DIRECTORY-LEVEL            = INT
 DATABANK-LOGICAL-DELETES            = NO
 DATABANK-RUN-NUMBER                 = ALL
 FROM-EDITED-DATE                    = 01/01/1900
 FROM-EDITED-TIME                    = 00:00
 FROM-OUTPUT-DATE                    = 01/01/1900
 FROM-OUTPUT-TIME                    = 00:00
 INTERCHANGE-ENV-REF-ID              = ALL
 NETWORK                             = ALL
 NETWORK-STATUS                      = ALL
 PARTNER                             = VENDOR-4
 PARTNER-QUALIFIER                   = ALL
 REPORTED                            = ALL
 REPORT-TYPE                         = FULL
 STATUS                              = PROCESSED
 TO-EDITED-DATE                      = 12/31/2099
 TO-EDITED-TIME                      = 23:59
 TO-OUTPUT-DATE                      = 12/31/2099
 TO-OUTPUT-TIME                      = 23:59
 TRADING-PROFILE-MODE                = PARTNER-QUALIFIER
 REPORT-PRINT-SW                     = NO
 AUDIT-RPT-SUPPRESS                  = NO
1REPORT DATE: 12/01/2005                                    GENTRAN:REALTIME                                         PAGE   : 00002
 REPORT TIME: 14:48:49                            OUTBOUND EDI DATABANK MAINTENANCE
 REPORT ID  : EDID251-OE-SUM                                SUMMARY REPORT                                           VERSION:6.4


 DIRECTORY RECORDS CLEANED           :          0
 INTERCHANGE RECORDS READ            :          9
 INTERCHANGE RECORDS PURGED          :          2
 INTERCHANGE RECORDS ARCHIVED        :          2
 GROUP RECORDS PURGED                :          2
 GROUP RECORDS ARCHIVED              :          2
 TRANSACTION RECORDS PURGED          :          2
 TRANSACTION RECORDS ARCHIVED        :          2
 OTHER DIRECTORY RECORDS PURGED      :          6
 OTHER RECORDS ARCHIVED              :          8
 MESSAGE-STORE RECORDS READ          :          2
 MESSAGE-STORE RECORDS PURGED        :          2
 MESSAGE-STORE RECORDS ARCHIVED      :          2
 APPLICATION LINK RECORDS PURGED     :          2
 TOTAL DIRECTORY RECORDS PURGED      :         12
 TOTAL RECORDS ARCHIVED              :         14

 NUMBER OF ERRORS THIS RUN           :          0
 HIGHEST RETURN CODE THIS RUN        :          0
0***** END OF SUMMARY REPORT  *****
```

Figure 5.11 Outbound EDI Databank Maintenance Report (Summary Report)

```
1REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME                                          PAGE   : 00001
 PROGRAM EDID251  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 REPORT TIME: 12.00.00                          OUTBOUND EDI DATABANK MAINTENANCE
 REPORT ID  : EDID251-OE-AUD                              AUDIT TRAIL                                               VERSION: 6.4

                                                      DROPPED DOCUMENTS
                           ENVELOPE        CHARACTER                                              ACK      REFERENCE    RET
                           REFERENCE ID    COUNT       USER REFERENCE                             STATUS     TAG        DAYS

  INTERCHANGE PARTNER: VENDOR-1                                   (OUTPUT: 12/01/2005 11:52, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000033       0000000235  (GROUPS: 000001, RUN#: 00000007, RET DAYS:    )
        GROUP PARTNER: VENDOR-1
                 QUAL:     000000029       0000000113             (TRANSACTIONS: 000001)                      OE00000122
                           000000029       0000000053                                                         OE00000121

  INTERCHANGE PARTNER: VENDOR-1                                   (OUTPUT: 12/01/2005 13:48, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000034       0000000235  (GROUPS: 000001, RUN#: 00000008, RET DAYS:    )
        GROUP PARTNER: VENDOR-1
                 QUAL:     000000030       0000000113             (TRANSACTIONS: 000001)                      OE00000142
                           000000030       0000000053                                                         OE00000141

  INTERCHANGE PARTNER: VENDOR-1                                   (OUTPUT: 12/01/2005 13:48, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000035       0000000235  (GROUPS: 000001, RUN#: 00000009, RET DAYS:    )
        GROUP PARTNER: VENDOR-1
                 QUAL:     000000031       0000000113             (TRANSACTIONS: 000001)                      OE00000162
                           000000031       0000000053                                                         OE00000161

  INTERCHANGE PARTNER: VENDOR-1                                   (OUTPUT: 12/01/2005 13:51, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000036       0000000235  (GROUPS: 000001, RUN#: 00000010, RET DAYS:    )
        GROUP PARTNER: VENDOR-1
                 QUAL:     000000032       0000000113             (TRANSACTIONS: 000001)                      OE00000182
                           000000032       0000000053                                                         OE00000181

  INTERCHANGE PARTNER: VENDOR-1                                   (OUTPUT: 12/01/2005 14:59, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000044       0000001129  (GROUPS: 000001, RUN#: 00000011, RET DAYS:    )
        GROUP PARTNER: VENDOR-1
                 QUAL:     000000005       0000001007             (TRANSACTIONS: 000001)             WAITING  OE00000202
                           000000005       0000000956  PONUMBER-001                                  WAITING  OE00000201

  INTERCHANGE PARTNER: VENDOR-1                                   (OUTPUT: 12/01/2005 15:38, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000045       0000001129  (GROUPS: 000001, RUN#: 00000012, RET DAYS:    )
        GROUP PARTNER: VENDOR-1
                 QUAL:     000000006       0000001007             (TRANSACTIONS: 000001)             WAITING  OE00000222
                           000000006       0000000956  PONUMBER-001                                  WAITING  OE00000221

  INTERCHANGE PARTNER: VENDOR-1                                   (OUTPUT: 12/01/2005 15:45, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000090       0000001131  (GROUPS: 000001, RUN#: 00000033, RET DAYS: 000)
        GROUP PARTNER: VENDOR-1
                 QUAL:     000000021       0000001009             (TRANSACTIONS: 000001)             WAITING  OE00000642   000
                           000000021       0000000956  PONUMBER-001                                  WAITING  OE00000641   000

  INTERCHANGE PARTNER: VENDOR-2                                   (OUTPUT: 12/01/2005 14:59, STATUS - ACK:    NETWORK :  )
                 QUAL:     000000005       0000000832  (GROUPS: 000001, RUN#: 00000011, RET DAYS:    )
        GROUP PARTNER: VENDOR-2
                 QUAL:     000005866       0000000710             (TRANSACTIONS: 000001)             WAITING  OE00000205
                           000000005       0000000648  PONUMBER-002                                  WAITING  OE00000204
```

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 Gentran:Realtime Outbound EDI databank. The functionality is similar to the 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.

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

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
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 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   12/01/2005
                                                                    12:00:00

 Task ID: 0006650 Process Name: OEXSUM
 Search.: ____________________        Line Increment: ____ Job Name: ________
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0475
 PROGRAM EDID255  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT DATE: 12/01/2005                                GENTRAN:REALTIME  +
 REPORT TIME: 12:00:00                             OUTBOUND EDI DATABANK EXTR+
 REPORT ID  : EDID255-EDISUM                              SUMMARY REPORT     +



     OPTIONS USED THIS RUN
     ---------------------

 REQUESTED-OPERATION                = SELECT
 APPLY-UPDATES-ONLY                 = NO
 DATABANK-CONFIGURATION             = FULL


 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    12/01/2005
                                                                     12:00:00

 Task ID: 0006650 Process Name: OEXAUD
 Search.: _____________________        Line Increment: ____ Job Name: ________
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0476
 PROGRAM EDID255  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
 REPORT TIME: 12:00:00                               OUTBOUND EDI DATABANK EXTR+
 REPORT ID  : EDID255-EDIAUDT                                AUDIT TRAIL      +

 DATABANK RUN NUMBER: 00000397
 PARTNER                            QUAL      ENV-REF-ID         GROUPS      +

 VENDOR-4                                     000000365          00000001    +
 VENDOR-4                                     000000366          00000001    +
 ****************************************



 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
```

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 *Gentran:Basic for zSeries Release 6.4 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, “Configuration Strategies” in the *Gentran:Realtime for zSeries Release 6.4 User’s Guide* for information on restoring 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 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.

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 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 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 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 *Gentran:Realtime User's Guide* for more information on setting up your databank maintenance parameters.

Report Selection

```
Select Print Log Exception Activity
  EDIM310 8.3_______         REPORT SELECTION                XXX    12/01/2005
                                                                      12:00:00

       Path ID.......: ___          Process....: ______
       Line Incrmnt..: ____         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
  _  12/01/2005 12:00:00  630  SEPDRV     00    7349  SEPARATOR DRIVE       102
  _  12/01/2005 12:00:00  000  CA-AUD     00    7876  CA MAINT              103
  _  12/01/2005 12:00:00  000  CA-SUM     00    7876  CA MAINT              104
  _  12/01/2005 12:00:00  000  OA-AUD     00    8111  OA DBK MAINT          105
  _  12/01/2005 12:00:00  000  OA-SUM     00    8111  OA DBK MAINT          106
  _  12/01/2005 12:00:00  000  OE-AUD     00    8265  OE DBK MAINT          107
  _  12/01/2005 12:00:00  000  OE-SUM     00    8265  OE DBK MAINT          108
  _  12/01/2005 12:00:00  000  IE-AUD     00     155  IE DBK MAINT          109
  _  12/01/2005 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    12/01/2005
                                                                      12:00:00

 Task ID: 0000155 Process Name: IE-SUM
 Search.: ____________________        Line Increment: ____ Job Name: ________
 REPORT DATE: 12/01/2005                                GENTRAN:REALTIME  +
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0001
 REPORT TIME: 12:00:00                            INBOUND EDI DATABANK MAINTE+
 REPORT ID  : EDID351-IE-SUM                              SUMMARY REPORT     +

 PROGRAM EDID351  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4


     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   12/01/2005
                                                                    12:00:00

 Task ID: 0000155 Process Name: IE-AUD
 Search.: _____________________        Line Increment: ____ Job Name: ________
 REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0002
 PROGRAM EDID351  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT TIME: 12:00:00                          INBOUND EDI DATABANK MAINTE+
 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                                  (TRANSACTI+


 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: 12/01/2005                                    GENTRAN:REALTIME                                         PAGE   : 00001
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0001
 REPORT TIME: 12:00:00                               INBOUND EDI DATABANK MAINTENANCE
 REPORT ID  : EDID351-IE-SUM                                 SUMMARY REPORT                                          VERSION:6.4

 PROGRAM EDID351  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4


     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: 12/01/2005                                    GENTRAN:REALTIME                                         PAGE   : 00002
 REPORT TIME: 12:00:00                               INBOUND EDI DATABANK MAINTENANCE
 REPORT ID  : EDID351-IE-SUM                                 SUMMARY REPORT                                          VERSION:6.4


 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 ARCHIVED              :      1,077
 OTHER RECORDS PURGED                :        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
0***** END OF SUMMARY REPORT  *****
```

Figure 5.13 Inbound EDI Databank Maintenance Report (Summary Report)

```
1REPORT DATE: 12/01/2005                                   GENTRAN:REALTIME                                          PAGE   : 00001
 PROGRAM EDID351  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 REPORT TIME: 12.00.00                             INBOUND EDI DATABANK MAINTENANCE
 REPORT ID  : EDID351-IE-AUD                                AUDIT TRAIL                                              VERSION: 6.4

                                                         DROPPED DOCUMENTS
                             ENVELOPE        CHARACTER                                                ACK        REFERENCE    RET
                             REFERENCE ID    COUNT       USER-REFERENCE                               STATUS     TAG          DAYS

  INTERCHANGE PARTNER: VENDOR-1                                      (OUTPUT: 12/01/2005 10:25, STATUS - ACK:  )
                QUAL:        000000005       0000006392  (GROUPS: 000001, RET DAYS:    )
        GROUP PARTNER: VENDOR-1                                      (TRANSACTIONS: 000006)
                QUAL:        000000007       0000006270                                               ACCEPT     IE00000194
                QUAL:        000070001       0000001021  INV01                                        ACCEPT     IE00000193
                QUAL:        000070002       0000001034  INV02                                        ACCEPT     IE00000196
                QUAL:        000070003       0000001032  INV03                                        ACCEPT     IE00000197
                QUAL:        000070004       0000001036  INV04                                        ACCEPT     IE00000198
                QUAL:        000070005       0000001038  INV05                                        ACCEPT     IE00000199
                QUAL:        000070006       0000001034  INV06                                        ACCEPT     IE00000200

  INTERCHANGE PARTNER: VENDOR-1                                      (OUTPUT: 12/01/2005 10:42, STATUS - ACK:  )
                QUAL:        000000005       0000006392  (GROUPS: 000001, RET DAYS:    )
        GROUP PARTNER: VENDOR-1                                      (TRANSACTIONS: 000006)
                QUAL:        000000007       0000006270                                               ACCEPT     IE00000202
                QUAL:        000070001       0000001021  INV01                                        ACCEPT     IE00000201
                QUAL:        000070002       0000001034  INV02                                        ACCEPT     IE00000204
                QUAL:        000070003       0000001032  INV03                                        ACCEPT     IE00000205
                QUAL:        000070004       0000001036  INV04                                        ACCEPT     IE00000206
                QUAL:        000070005       0000001038  INV05                                        ACCEPT     IE00000207
                QUAL:        000070006       0000001034  INV06                                        ACCEPT     IE00000208

  INTERCHANGE PARTNER: VENDOR-1                                      (OUTPUT: 12/01/2005 10:48, STATUS - ACK:  )
                QUAL:        000000005       0000006392  (GROUPS: 000001, RET DAYS:    )
        GROUP PARTNER: VENDOR-1                                      (TRANSACTIONS: 000006)
                QUAL:        000000007       0000006270                                               ACCEPT     IE00000210
                QUAL:        000070001       0000001021  INV01                                        ACCEPT     IE00000209
                QUAL:        000070002       0000001034  INV02                                        ACCEPT     IE00000212
                QUAL:        000070003       0000001032  INV03                                        ACCEPT     IE00000213
                QUAL:        000070004       0000001036  INV04                                        ACCEPT     IE00000214
                QUAL:        000070005       0000001038  INV05                                        ACCEPT     IE00000215
                QUAL:        000070006       0000001034  INV06                                        ACCEPT     IE00000216

  INTERCHANGE PARTNER: VENDOR-1                                      (OUTPUT: 12/01/2005 14:00, STATUS - ACK:  )
                QUAL:        000000005       0000006392  (GROUPS: 000001, RET DAYS:    )
        GROUP PARTNER: VENDOR-1                                      (TRANSACTIONS: 000006)
                QUAL:        000000007       0000006270                                               ACCEPT     IE00000218
                QUAL:        000070001       0000001021  INV01                                        ACCEPT     IE00000217
                QUAL:        000070002       0000001034  INV02                                        ACCEPT     IE00000220
                QUAL:        000070003       0000001032  INV03                                        ACCEPT     IE00000221
                QUAL:        000070004       0000001036  INV04                                        ACCEPT     IE00000222
                QUAL:        000070005       0000001038  INV05                                        ACCEPT     IE00000223
                QUAL:        000070006       0000001034  INV06                                        ACCEPT     IE00000224

  INTERCHANGE PARTNER: VENDOR-1                                      (OUTPUT: 12/01/2005 14:02, STATUS - ACK:  )
                QUAL:        000000005       0000006392  (GROUPS: 000001, RET DAYS:    )
        GROUP PARTNER: VENDOR-1                                      (TRANSACTIONS: 000006)
                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 *Gentran:Basic for zSeries Release 6.4 Technical Reference Guide* for more information on restoring databank records.

See Chapter 6, "Configuration Strategies," in the *Gentran:Realtime for zSeries Release 6.4 User's Guide* for information on restoring 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 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 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 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 *Gentran:Realtime User's Guide* for more information on setting up your databank maintenance parameters.

Report Selection

```
Select Print Log Exception Activity
 EDIM310 8.3_______        REPORT SELECTION                XXX    12/01/2005
                                                                    12:00:00

      Path ID.......: ___          Process....: ______
      Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  000  CA-SUM     00    7876  CA MAINT             104
 _  12/01/2005 12:00:00  000  OA-AUD     00    8111  OA DBK MAINT         105
 _  12/01/2005 12:00:00  000  OA-SUM     00    8111  OA DBK MAINT         106
 _  12/01/2005 12:00:00  000  OE-AUD     00    8265  OE DBK MAINT         107
 _  12/01/2005 12:00:00  000  OE-SUM     00    8265  OE DBK MAINT         108
 _  12/01/2005 12:00:00  000  IE-AUD     00     155  IE DBK MAINT         109
 _  12/01/2005 12:00:00  000  IE-SUM     00     155  IE DBK MAINT         110
 _  12/01/2005 12:00:00  000  IA-AUD     00     301  IA DBK MAINT         111
 _  12/01/2005 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    12/01/2005
                                                                    12:00:00

 Task ID: 0000301 Process Name: IA-SUM
 Search.: ____________________        Line Increment: ____ Job Name: ________
 REPORT DATE: 12/01/2005                                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 12/01/05 AT 12.00.00   VERSION6.4


     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
```

Audit Trail Report

```
EDIM311 __________   GENTRAN:REALTIME EDI REPORT DISPLAY    XXX   12/01/2005
                                                                   12:00:00

 Task ID: 0000301 Process Name: IA-AUD
 Search.: ____________________        Line Increment: ____ Job Name: ________
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0004
 PROGRAM EDID451  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT TIME: 12:00:00                      INBOUND APPLICATION DATABANK MAI+
 REPORT ID  : EDID451-IA-AUD                              AUDIT TRAIL      +

                                                        DROPPED DOCUMENTS

  PARTNER                            QUAL     USER REFERENCE               +

  HSC00055F                                   REF:IE00026506               +
  HSC00454F                                   REF:IE00026509               +
  HSP40228F                                   REF:IE00026503               +
  LAWNVEND                                    IN-220                       +
  LAWNVEND                                    IN-220                       +


 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: 12/01/2005                                    GENTRAN:REALTIME                                         PAGE   : 00001
 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                                           VERSION:6.4

 PROGRAM EDID451  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4


     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
 RETENTION-DAYS-UNPROCESSED          = 002
 TRADING-PROFILE-MODE                = PARTNER-QUALIFIER
 STRUCTURE/APPL-SW                   = APPLICATION
 REPORT-PRINT-SW                     = NO
 AUDIT-RPT-SUPPRESS                  = NO
1REPORT DATE: 12/01/2005                                    GENTRAN:REALTIME                                         PAGE   : 00002
 REPORT TIME: 12:00:00                         INBOUND APPLICATION DATABANK MAINTENANCE
 REPORT ID  : EDID451-IA-SUM                                SUMMARY REPORT                                           VERSION:6.4


 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
0***** END OF SUMMARY REPORT  *****
```

Figure 5.15 Inbound Application Databank Maintenance Report (Summary Report)

```
1REPORT DATE: 12/01/2005                               GENTRAN:REALTIME                                        PAGE   : 00001
 PROGRAM EDID451  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4
 REPORT TIME: 12.00.00                      INBOUND APPLICATION DATABANK MAINTENANCE
 REPORT ID  : EDID451-IA-AUD                           AUDIT TRAIL                                             VERSION: 6.4

                                                    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                                   INV03                                       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 Gentran:Realtime Inbound Application Databank. The functionality is similar to the 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 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    12/01/2005
                                                                       12:00:00

       Path ID.......: ___          Process....: ______
       Line Incrmnt..: ____         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
  _  12/01/2005 12:00:00  000  OA-SUM     00    8111  OA DBK MAINT          106
  _  12/01/2005 12:00:00  000  OE-AUD     00    8265  OE DBK MAINT          107
  _  12/01/2005 12:00:00  000  OE-SUM     00    8265  OE DBK MAINT          108
  _  12/01/2005 12:00:00  000  IE-AUD     00     155  IE DBK MAINT          109
  _  12/01/2005 12:00:00  000  IE-SUM     00     155  IE DBK MAINT          110
  _  12/01/2005 12:00:00  000  IA-AUD     00     301  IA DBK MAINT          111
  _  12/01/2005 12:00:00  000  IA-SUM     00     301  IA DBK MAINT          112
  _  12/01/2005 12:00:00  302  IAXAUD     00     452  EDID455-EDIAUDT       113
  _  12/01/2005 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   12/01/2005
                                                                    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 12/01/05 AT 12.00.00   VERSION6.4
REPORT DATE: 12/01/2005                                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   12/01/2005
                                                                    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 12/01/05 AT 12.00.00   VERSION6.4
 REPORT DATE: 12/01/2005                                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
```

```
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0007
1PROGRAM EDID455  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT DATE: 12/01/2005                                 GENTRAN:REALTIME                                                                PAGE   : 00001
 REPORT TIME: 12:00:00                             INBOUND APPLICATION DATABANK EXTRACT
 REPORT ID  : EDID455-EDISUM                                 SUMMARY REPORT                                                              VERSION:6.4


     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
 ONLINE-UPDATE-REPORT                 = YES
 OUTPUT-FILE                          = EDIAPP
 PARTNER                              = VENDOR-1
 PARTNER-QUALIFIER                    = ALL
 QUEUE-FILE-NUMBER                    = NONE
 REFERENCE-TAG                        = ALL
 STATUS                               = PROCESSED
 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: EDIRWRPT FROM TSQ NAMED: EDIQ0008
1PROGRAM EDID455  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT DATE: 12/01/2005                           GENTRAN:REALTIME                                        PAGE   : 00001
 REPORT TIME: 12:00:00                       INBOUND APPLICATION DATABANK EXTRACT
 REPORT ID  : EDID455-EDIAUDT                           AUDIT TRAIL                                        VERSION:6.4

  DATABANK RUN NUMBER: 00000335

  PARTNER                            QUAL      USER-REFERENCE                               APPL DATA-ID     REF TAG

  VENDOR-1                                     INV01                                        INVFILE          IE00026614
  VENDOR-1                                     INV01                                        INVFILE          IE00026622
  VENDOR-1                                     INV02                                        INVFILE          IE00026617
  VENDOR-1                                     INV02                                        INVFILE          IE00026625
  VENDOR-1                                     INV03                                        INVFILE          IE00026618
  VENDOR-1                                     INV03                                        INVFILE          IE00026626
  VENDOR-1                                     INV04                                        INVFILE          IE00026619
  VENDOR-1                                     INV04                                        INVFILE          IE00026627
  VENDOR-1                                     INV05                                        INVFILE          IE00026620
  VENDOR-1                                     INV05                                        INVFILE          IE00026628
  VENDOR-1                                     INV06                                        INVFILE          IE00026621
  VENDOR-1                                     INV06                                        INVFILE          IE00026629
 ******************************************
```

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 either of the following ways:

- Via a schedule option. A sample schedule option was defined for this purpose during 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 *Gentran:Realtime for zSeries Release 6.4 User’s 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 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.

Inputs

Subprogram Called

- EDIEOOG – Online Output Gateway

File Access

File Description	DDname	File Access
Request file	EDIREQ	Read.
Gentran:Realtime Acknowledgment Reconciliation file	EDIRDAR	Read and delete.
Outbound EDI Databank Directory file	EDIROEA	Update.
Report Control file	EDIRRC	Read and update.
Report Detail file	EDIRRD	Read and update.
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 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    12/01/2005
                                                                   12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  223  ACKFMT     00    1711  ACK TEST-STEP 2       155
 _  12/01/2005 12:00:00  223  EDI02E   W 04    1711  ACK TEST-STEP 2       156
 _  12/01/2005 12:00:00  223  EDI02S   W 04    1711  ACK TEST-STEP 2       157
 _  12/01/2005 12:00:00  224  EDI01S   W 04    1726  ACK TEST-STEP 3       158
 _  12/01/2005 12:00:00  224  EDI01E   W 04    1726  ACK TEST-STEP 3       159
 _  12/01/2005 12:00:00  000  AK-LOG   W 04    1730  EDID515-EDILOG        160
 _  12/01/2005 12:00:00  000  AK-MON   W 04    1730  EDID515-EDIMNTR       161
 _  12/01/2005 12:00:00  000  AK-REC   W 04    1730  EDID515-EDIRECN       162
 _  12/01/2005 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    12/01/2005
                                                                   12:00:00

Task ID: 0001730 Process Name: AK-SUM
Search.: ____________________        Line Increment: ____ Job Name: ________

REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0088
PROGRAM EDID515  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
REPORT TIME: 12:00:00                          ACKNOWLEDGEMENT RECONCILIATION/+
REPORT ID  : EDI118                                      SUMMARY REPORT     +



    OPTIONS USED THIS RUN
    ---------------------

REQUESTED-OPERATION                = PROCESS
MONITOR                            = YES


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   12/01/2005
                                                                    12:00:00

 Task ID: 0001730 Process Name: AK-REC
 Search.: _____________________        Line Increment: ____ Job Name: ________

 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0089
  REPORT DATE: 12/01/2005                                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                  +


 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   12/01/2005
                                                                    12:00:00

 Task ID: 0001730 Process Name: AK-MON
 Search.: _____________________        Line Increment: ____ Job Name: ________

 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0090
  REPORT DATE: 12/01/2005                                 GENTRAN:REALTIM+
  REPORT TIME: 12:00:00                      ACKNOWLEDGEMENT RECONCILIATION+
  REPORT ID  : EDI117                      EXPECTED ACKNOWLEDGEMENT MONITOR+



                                                                          +
  PARTNER                             QUAL USER REFERENCE                 +


  VENDOR-1                                (INTERCHANGE ENVELOPE REFERENCE ID:+
  VENDOR-1                                (FUNCTIONAL GROUP ENVELOPE REFERENC+
                                            (FUNCTIONAL GROUP ID: PO    )


 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   12/01/2005
                                                                   12:00:00

 Task ID: 0001730 Process Name: AK-LOG
 Search.: ____________________        Line Increment: ____ Job Name: ________

 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0091
  REPORT DATE: 12/01/2005                                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:       000006167   +
  41417W 04    UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000255   +


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

```
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0088
1PROGRAM EDID515  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT DATE: 12/01/2005                                    GENTRAN:REALTIME                                            PAGE   : 00001
 REPORT TIME: 12:00:00                         ACKNOWLEDGEMENT RECONCILIATION/MONITOR
 REPORT ID  : EDI118                                        SUMMARY REPORT                                              VERSION:6.4



     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-NBR                  = 099
0    PROCESSING SUMMARY
     ------------------

  RECONCILIATION PROCESSING
0   INTERCHANGES                      :           0
    GROUPS                            :          12
    TRANSACTIONS                      :          12
    UNMATCHED                         :          90
    TOTAL                             :         114

0 EXPECTED ACKNOWLEDGEMENTS OVERDUE
    INTERCHANGES                      :           0
    GROUPS                            :           6
    TRANSACTIONS                      :           9
    TOTAL                             :          15
 DELETED  COUNT                       :         114

 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)

```
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0089
1 REPORT DATE: 12/01/2005                         GENTRAN:REALTIME                                                 PAGE: 00001
  REPORT TIME: 12:00:00                   ACKNOWLEDGEMENT RECONCILIATION/MONITOR
  REPORT ID  : EDI116                              RECONCILIATION REPORT                                           VERSION:6.4

                                                                                               TRANSACTION      EXPECTED       ACK
  PARTNER                              QUAL  USER REFERENCE                                    ENVELOPE REF    DATE      TIME  STATUS

  VENDOR-1                                   PONUMBER-001                                      000000477                       ACCEPT
  VENDOR-1                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000384      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-2                                   PONUMBER-002                                      000000412                       ACCEPT
  VENDOR-2                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000006253      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-3                                   PONUMBER-003                                      000000314                       ACCEPT
  VENDOR-3                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000311      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-4                                   PONUMBER-004                                      000000370                       ACCEPT
  VENDOR-4                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000367      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-1                                   PONUMBER-001                                      000000478                       ACCEPT
  VENDOR-1                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000385      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-2                                   PONUMBER-002                                      000000413                       ACCEPT
  VENDOR-2                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000006254      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-3                                   PONUMBER-003                                      000000315                       ACCEPT
  VENDOR-3                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000312      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-4                                   PONUMBER-004                                      000000371                       ACCEPT
  VENDOR-4                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000368      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-1                                   PONUMBER-001                                      000000480                       ACCEPT
  VENDOR-1                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000387      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-2                                   PONUMBER-002                                      000000415                       ACCEPT
  VENDOR-2                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000006256      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-3                                   PONUMBER-003                                      000000317                       ACCEPT
  VENDOR-3                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000314      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
  VENDOR-4                                   PONUMBER-004                                      000000373                       ACCEPT
  VENDOR-4                                   (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000370      )     12/01/2005 12:00  ACCEPT
                                             (FUNCTIONAL GROUP ID: PO    )
 *********** NORMAL END OF JOB ************
```

Figure 5.20 Acknowledgment Reconciliation/Monitor Report (Reconciliation Report)

```
REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0091
 REPORT DATE: 12/01/2005                                GENTRAN:REALTIME                                                PAGE   : 0000
 REPORT TIME: 12:00:00                     ACKNOWLEDGEMENT RECONCILIATION/MONITOR
 REPORT ID  : EDI115                               ERROR MESSAGE LOG REPORT                                             VERSION:6.4


 MSG NR        MESSAGE DESCRIPTION

 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000368      XYZ
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000302      XYZ
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000325      BULKPAPR
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006167      BULKPAPR
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000255      TWOWAY
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000252      TWOWAY
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000291      RANDOM
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000288      RANDOM
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000369      XYZ
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000303      XYZ
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000326      BULKPAPR
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006168      BULKPAPR
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000256      TWOWAY
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000253      TWOWAY
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000292      RANDOM
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000289      RANDOM
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000370      XYZ
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000304      XYZ
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000327      BULKPAPR
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006169      BULKPAPR
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000257      TWOWAY
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000254      TWOWAY
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000293      RANDOM
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000290      RANDOM
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000371      XYZ
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000305      XYZ
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000328      BULKPAPR
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006170      BULKPAPR
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000258      TWOWAY
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000255      TWOWAY
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000294      RANDOM
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000291      RANDOM
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000372      XYZ
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000306      XYZ
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000329      BULKPAPR
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006171      BULKPAPR
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000259      TWOWAY
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000256      TWOWAY
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000295      RANDOM
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000292      RANDOM
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000373      XYZ
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000307      XYZ
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000330      BULKPAPR
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006172      BULKPAPR
 41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000260      TWOWAY
 41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000257      TWOWAY
```

Figure 5.21 Acknowledgment Reconciliation/Monitor Report (Error Message Log Report)

```
MSG NR        MESSAGE DESCRIPTION

41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000296      RANDOM
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000293      RANDOM
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000374      XYZ
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000308      XYZ
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000331      BULKPAPR
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006173      BULKPAPR
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000261      TWOWAY
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000258      TWOWAY
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000297      RANDOM
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000294      RANDOM
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000375      XYZ
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000309      XYZ
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000332      BULKPAPR
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006174      BULKPAPR
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000262      TWOWAY
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000259      TWOWAY
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000298      RANDOM
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000295      RANDOM
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000376      XYZ
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000310      XYZ
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000333      BULKPAPR
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006175      BULKPAPR
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000263      TWOWAY
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000260      TWOWAY
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000299      RANDOM
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000296      RANDOM
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000341      BULKPAPR
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000006183      BULKPAPR
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000271      TWOWAY
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000268      TWOWAY
41417W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, TRANSACTION: 000000307      RANDOM
41422W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, GROUP:        000000304      RANDOM
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      XYZ COMPUTERS                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      BULK PAPER CO                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      TWO WAY COMMN                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      RANDOM OFFICE                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      XYZ COMPUTERS                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      BULK PAPER CO                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      TWO WAY COMMN                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      RANDOM OFFICE                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      XYZ COMPUTERS                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      BULK PAPER CO                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      TWO WAY COMMN                       ZZ
41423W 04     UNEXPECTED ACKNOWLEDGMENT RECEIVED, INTCHG:       000000000      RANDOM OFFICE                       ZZ
*********** NORMAL END OF JOB ************
```

Figure 5.22 Acknowledgment Reconciliation/Monitor Report (Error Message Log Report, Continued)

```
 REPORT PROCESSING DONE BY: EDIRWRPT FROM TSQ NAMED: EDIQ0090
1 REPORT DATE: 12/01/2005                              GENTRAN:REALTIME                                              PAGE: 00001
  REPORT TIME: 12:00:00                       ACKNOWLEDGEMENT RECONCILIATION/MONITOR
  REPORT ID  : EDI117                        EXPECTED ACKNOWLEDGEMENT MONITORING REPORT                             VERSION:6.4

                                                                                   TRANSACTION         SENT         EXPECTED
  PARTNER                             QUAL USER REFERENCE                         ENVELOPE REF DATE       TIME  DATE        TIM

  VENDOR-1                                 (INTERCHANGE ENVELOPE REFERENCE ID: 000000550      )
  VENDOR-1                                 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000381     ) 12/01/2005 12:00 12/01/2005 12:0
                                           (FUNCTIONAL GROUP ID: PO    )
                                           PONUMBER-001                            000000474

  VENDOR-2                                 (INTERCHANGE ENVELOPE REFERENCE ID: 000000388      )
  VENDOR-2                                 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000006249     ) 12/01/2005 12:00 12/01/2005 12:0
                                           (FUNCTIONAL GROUP ID: PO    )
                                           PONUMBER-002                            000000408

  VENDOR-2                                 (INTERCHANGE ENVELOPE REFERENCE ID: 000000389      )
  VENDOR-2                                 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000006250     ) 12/01/2005 12:00 12/01/2005 12:0
                                           (FUNCTIONAL GROUP ID: PO    )
                                           PONUMBER-002                            000000409

  VENDOR-3                                 (INTERCHANGE ENVELOPE REFERENCE ID: 000000307      )
  VENDOR-3                                 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000307     ) 12/01/2005 12:00 12/01/2005 12:0
                                           (FUNCTIONAL GROUP ID: PO    )
                                           PONUMBER-003                            000000310

  VENDOR-3                                 (INTERCHANGE ENVELOPE REFERENCE ID: 000000308      )
  VENDOR-3                                 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 000000308     ) 12/01/2005 12:00 12/01/2005 12:0
                                           (FUNCTIONAL GROUP ID: PO    )
                                           PONUMBER-003                            000000311

  VENDOR-5                                 (INTERCHANGE ENVELOPE REFERENCE ID: 00000000000067)
  VENDOR-5                                 (FUNCTIONAL GROUP ENVELOPE REFERENCE ID: 00000000000067) 12/01/2005 12:00 12/01/2005 12:0
                                           (FUNCTIONAL GROUP ID: ORDERS)
                                           PONUMBER-001                            00000000000095
                                           PONUMBER-002                            00000000000096
                                           PONUMBER-003                            00000000000097
                                           PONUMBER-004                            00000000000098
 *********** 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 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 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 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 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 *Gentran:Realtime for zSeries Release 6.4 User's Guide* for more information on acknowledgment processing.

File Access

File Description	DDname	File Access
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 Gentran:Realtime Online Reporting function.

Report Selection

```
Select Print Log Exception Activity
EDIM310 8.3_______         REPORT SELECTION                 XXX    12/01/2005
                                                                    12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  256  EDI42E   W 04    2066  ACK TEST             164
 _  12/01/2005 12:00:00  256  EDI42S   W 04    2066  ACK TEST             165
 _  12/01/2005 12:00:00  256  EDI02E     00    2066  ACK TEST             166
 _  12/01/2005 12:00:00  256  EDI02S     00    2066  ACK TEST             167
 _  12/01/2005 12:00:00  842  EDI01S   W 04    2077  ACK TEST             168
 _  12/01/2005 12:00:00  842  EDI01E   W 04    2077  ACK TEST             169
 _  12/01/2005 12:00:00  842  ACKFMT     00    2077  ACK TEST             170
 _  12/01/2005 12:00:00  842  EDI02S     00    2077  ACK TEST             171
 _  12/01/2005 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    12/01/2005
                                                                    12:00:00

Task ID: 0002105 Process Name: ACK-FM
Search.: ____________________        Line Increment: ____ Job Name: ________

PROGRAM EDID516  COMPILED ON 12/01/05 AT 12.00.00   VERSION6.4
 REPORT DATE: 12/01/05                                    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 Gentran:Realtime Change Audit files. Its functions include deleting and archiving the change audit information. The Restore operation must be performed by the 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    12/01/2005
                                                                    12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  000  CA-SUM     00     133  CA MAINT            305
 _  12/01/2005 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      12/01/2005
                                                                      12:00:00

Task ID: 0000133 Process Name: CA-SUM
Search.: _____________________         Line Increment: ____ Job Name: ________
REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
REPORT TIME: 12:00:00                              DATABANK CHANGE AUDIT MAINTE+
REPORT ID  : EDID552-CA-SUM                                SUMMARY REPORT     +

PROGRAM EDID552  COMPILED ON 12/01/2005 AT 12.00.00   VERSION6.4


    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    12/01/2005
                                                                      12:00:00

Task ID: 0000207 Process Name: CA-AUD
Search.: _____________________         Line Increment: ____ Job Name: ________
REPORT DATE: 12/01/2005                                  GENTRAN:REALTIME  +
PROGRAM EDID552  COMPILED ON 12/01/2005 AT 12.00.00  VERSION6.4
REPORT TIME: 12:00:00                              DATABANK CHANGE AUDIT MAINTE+
REPORT ID  : EDID552-CA-AUD                                 AUDIT TRAIL       +

                                                       DROPPED DOCUMENTS



 VENDOR-1                              PONUMBER-001                          +
 VENDOR-1                              PONUMBER-001                          +
*** SYNCPOINT PERFORMED**********************
REPORT DATE: 12/01/2005                                    GENTRAN:BASIC     +
REPORT TIME: 12:00:00                              DATABANK CHANGE AUDIT MAINTE+


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 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 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 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 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.

Chapter

6 Separator Utilities

Overview

This chapter describes Gentran:Realtime separator utilities.

This chapter contains the following topics:

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    12/01/2005
                                                                      12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  201  EDI02E     00    2250  EDIFACT O/B IVP      183
 _  12/01/2005 12:00:00  211  EDI01S     00    2298  IVP - 3030-810       184
 _  12/01/2005 12:00:00  211  EDI01E     00    2298  IVP - 3030-810       185
 _  12/01/2005 12:00:00  211  ACKFMT     00    2298  IVP - 3030-810       186
 _  12/01/2005 12:00:00  211  EDI41S   W 04    2298  IVP - 3030-810       187
 _  12/01/2005 12:00:00  211  EDI41E   W 04    2298  IVP - 3030-810       188
 _  12/01/2005 12:00:00  211  EDI02E     00    2298  IVP - 3030-810       189
 _  12/01/2005 12:00:00  211  EDI02S     00    2298  IVP - 3030-810       190
 _  12/01/2005 12:00:00  600  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   12/01/2005
                                                                    12:00:00
Task ID: 0002792 Process Name: SEPDRV
Search.: ____________________        Line Increment: ____ Job Name: ________


 EDIR930     RUN 12/01/2005     TIME 12:00     Separator Driver Processing +
PROGRAM EDIR930  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4

 PROCESSING BEGAN ON                     12/01/2005 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   12/01/2005
                                                                    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            12/01/2005 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: • 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 *Gentran:Realtime for zSeries Release 6.4 User’s 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.	The Separator Driver program: • 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.	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.
3.	The program passes 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 *Gentran:Realtime for zSeries Release 6.4 User’s 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.	The Separator Driver program: • 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.	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.
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 *Gentran:Realtime for zSeries Release 6.4 User’s 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 Reject/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 Gentran:Realtime immediate option, then the Router starts transaction EDIA (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.

Chapter

7

Communication Utilities

Overview

This chapter describes Gentran:Realtime communication utilities.

This chapter contains the following topics:

Connect Outbound Interface EDIR314

Purpose

The Connect Outbound Interface program (EDIR314) provides a direct connection from 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.	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. See the section "Connect Path Maintenance Screen" in Chapter 4 "Translation Parameter Screens" in the *Gentran:Realtime for zSeries Release 6.4 User's Guide* for more information on the parameters.
2.	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. 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.
3.	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.

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    12/01/2005
                                                                    12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  231  EDI01E   W 04    7906  MBX TEST             17
 _  12/01/2005 12:00:00  231  EDI01S   W 04    7906  MBX TEST             18
 _  12/01/2005 12:00:00  231  ACKFMT     00    7906  MBX TEST             19
 _  12/01/2005 12:00:00  303  EDI42E   W 04    8106  OUTBND CONNECT       20
 _  12/01/2005 12:00:00  303  EDI42S   W 04    8106  OUTBND CONNECT       21
 _  12/01/2005 12:00:00  303  EDI02S     00    8106  OUTBND CONNECT       22
 _  12/01/2005 12:00:00  303  EDI02E     00    8106  OUTBND CONNECT       23
 S  12/01/2005 12:00:00  303  CMBXOB   W 04    8106  OUTBND CONNECT       24
 _  12/01/2005 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    12/01/2005
                                                                    12:00:00

 Task ID: 0001436 Process Name: CMBXOB
 Search.: ____________________        Line Increment: ____ Job Name: ________

  EDIR314     RUN 12/01/2005    TIME 12:00      SUMMARY REPORT - CONNECT OUTBO+
 PROGRAM EDIR314  COMPILED ON 12/01/2005 AT 12.00.00   VERSION 6.4

  PARAMETER FIELD                          VALUE
  AUTO CONNECT REQUEST------------------- YES
  GENERAL/SPECIFIC AUTO CONNECT---------- GENERAL
  FRIENDLY MAILBOX NAME------------------ CRDXV110
  CONNECT SYSTEM IMAGE------------------- CR
  MAILBOX ID----------------------------- TOMBX311
  USER BATCH ID-------------------------- TEST FROM RTE
  LIST NAME 1---------------------------- TOMBX31L
  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    12/01/2005
                                                                    12:00:00

 Task ID: 0001436 Process Name: CMBXOB
 Search.: ____________________        Line Increment: ____ Job Name: ________
  CONNECT PASSWORD-----------------------
  JCL FILE-NAME--------------------------
  PLUS USE INDICATOR---------------------- PROCESS
  WAKEUP AUTO CONNECT MONITOR IND-------- YES
  WAKEUP AUTO CONNECT TRANSACTION-------- EDIO

 Databank XREF updated -- Batch #=0000162 XREF #=0002051 DBkey=I CONTST-1    +
  Batch written -- Batch #=0000162 Batch id=00000000000883
 Databank XREF updated -- Batch #=0000163 XREF #=0002052 DBkey=I CONTST-2    +
  Batch written -- Batch #=0000163 Batch id=00000000000605
 Databank XREF updated -- Batch #=0000164 XREF #=0002053 DBkey=I CONTST-3    +
  Batch written -- Batch #=0000164 Batch id=00000000000497
 Databank XREF updated -- Batch #=0000165 XREF #=0002054 DBkey=I CONTST-4    +
  Batch written -- Batch #=0000165 Batch id=00000000000573


 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 3

```
EDIM311 __________   GENTRAN:REALTIME EDI REPORT DISPLAY    XXX    12/01/2005
                                                                    12:00:00

 Task ID: 0001436 Process Name: CMBXOB
 Search.: ____________________         Line Increment: ____ Job Name: ________
  Batch written -- Batch #=0000165 Batch id=00000000000573
  Batch written -- Batch #=0000165 Batch id=00000000000573

    SUMMARY COUNTS
  PROCESSING BEGAN ON                      12/01/2005 AT 12:00 PM.
  INPUT RECORDS READ----------------------                    62
  RECORDS WRITTEN TO CONNECT--------------                    50
  NUMBER OF BATCHES SENT------------------                     4
  NUMBER OF AUTO-CONNECTS (ATTEMPTED)----                      1
  NUMBER OF AUTO-CONNECTS (SUCCESSFUL)---                      1
  PROCESSING ENDED NORMALLY ON             12/01/2005 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 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 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 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 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 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 *Gentran:Realtime for zSeries Release 6.4 User's 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 *Gentran:Realtime for zSeries Release 6.4 User's 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 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    12/01/2005
                                                                    12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  244  EDI02S     00     521  POFILE               218
 _  12/01/2005 12:00:00  244  EDI02E     00     521  POFILE               219
 _  12/01/2005 12:00:00  244  CMBXOB     00     521  POFILE               220
 S  12/01/2005 12:00:00  411  CMBXIB     00     589  DEFAULT INBOUND      221
 _  12/01/2005 12:00:00  203  EDI01S     00     638  X12 I/B IVP          222
 _  12/01/2005 12:00:00  203  EDI01E     00     638  X12 I/B IVP          223
 _  12/01/2005 12:00:00  203  ACKFMT     00     638  X12 I/B IVP          224
 _  12/01/2005 12:00:00  203  EDI41E     00     638  X12 I/B IVP          225
 _  12/01/2005 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   12/01/2005
                                                                   12:00:00

 Task ID: 0000589 Process Name: CMBXIB
 Search.: ____________________        Line Increment: ____ Job Name: ________

  EDIR316    RUN 12/01/2005   TIME 12:00     SUMMARY REPORT - CONNECT INBOU+
 PROGRAM EDIR316  COMPILED ON 12/01/05 AT 12.00.00   VERSION 6.4

  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   12/01/2005
                                                                   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   12/01/2005
                                                                    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                      12/01/2005 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             12/01/2005 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 Gentran:Realtime Outbound EDI databanks.

Operation

The Connect Batch Number Update program reads the Gentran:Realtime Connect Cross Reference file (EDIRMXR) and uses the records to update the Interchange record on the 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.

Input

The following table describes input for the Connect Batch Number Update program.

DDname	Description
EDIRMXR	Gentran:Realtime Connect Cross Reference file.

Output

The following table describes output for the Connect Batch Number Update program.

DDname	Description
EDIROEA	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 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    12/01/2005
                                                                    12:00:00

     Path ID.......: ___          Process....: ______
     Line Incrmnt..: ____         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
 _  12/01/2005 12:00:00  231  EDI01E   W 04    7906  MBX TEST              17
 _  12/01/2005 12:00:00  231  EDI01S   W 04    7906  MBX TEST              18
 _  12/01/2005 12:00:00  231  ACKFMT     00    7906  MBX TEST              19
 _  12/01/2005 12:00:00  303  EDI42E   W 04    8106  OUTBND CONNECT        20
 _  12/01/2005 12:00:00  303  EDI42S   W 04    8106  OUTBND CONNECT        21
 _  12/01/2005 12:00:00  303  EDI02S     00    8106  OUTBND CONNECT        22
 _  12/01/2005 12:00:00  303  EDI02E     00    8106  OUTBND CONNECT        23
 _  12/01/2005 12:00:00  303  CMBXOB   W 04    8106  OUTBND CONNECT        24
 S  12/01/2005 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    12/01/2005
                                                                    12:00:00

 Task ID: 0008195 Process Name: CONBUP
 Search.: ____________________        Line Increment: ____ Job Name: ________

  EDIR317     RUN 12/01/2005    TIME 12:00      SUMMARY REPORT - CONNECT BATCH+


  PROCESSING BEGAN ON                      12/01/2005 AT 12:00 PM.
  CONNECT XREF RECORDS READ--------------                   20
  DATABANK RECORDS UPDATED---------------                   12
  MXR XREF RECORDS DELETED---------------                   12
  PROCESSING ENDED NORMALLY ON             12/01/2005 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
```

Chapter

8 Queue File Utilities

Overview

This chapter describes Gentran:Realtime Queue File utilities.

This chapter contains the following topics:

Queue File Maintenance EDIEQMT

Purpose

The Queue File Maintenance program (EDIEQMT) initializes queue files for use with Gentran:Control and 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: 12/01/2005                          GENTRAN:CONTROLPAGE   : 00001
REPORT TIME: 12:00:00                         QUEUE FILE MAINTENANCE
REPORT ID  : EDIEQMT-EDISUM                     SUMMARY VERSION: 6.4


    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 Gentran:Realtime.

Figure 8.25 illustrates a portion of the Processing Log report.

```
REPORT DATE: 12/01/2005                          GENTRAN:CONTROLPAGE   : 00001
REPORT TIME: 12:00:00                         QUEUE FILE MAINTENANCEVERSION: 6.4
REPORT ID  : EDIEQMT-EDILOG                        PROCESSING LOGCOMPILE DATE: 12/01/05

    MESSAGES
    --------

EDI-010701-I 00 QUEUE FILE MAINTENANCE PROCESSING BEGINS . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-009021-I 00 CHECK-POINT NOW INACTIVE . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-010702-I 00 QUEUE FILE MAINTENANCE PROCESSING ENDS . . . . DATE: 12/01/2005, 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
EDIOUT	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: 12/01/2005                  GENTRAN:CONTROL                    PAGE   : 00001
REPORT TIME: 12:00:00                         BATCH QUEUE READ
REPORT ID  : EDIRQRD-EDISUM                 SUMMARY REPORT                    VERSION: 6.4



    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 Gentran:Basic system.

Figure 8.27 illustrates the Processing Log report.

```
REPORT DATE: 12/01/2005                  GENTRAN:CONTROL                      PAGE   : 00001
REPORT TIME: 12:00:00                     BATCH QUEUE READ                     VERSION: 6.4
REPORT ID  : EDIRQRD-EDILOG              PROCESSING LOG                COMPILE DATE: 12/01/05

    MESSAGES
    --------

EDI-010104I 00 CENTRAL BATCH QUEUE FILE READ BEGINS . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-009021I 00 CHECK-POINT NOW INACTIVE . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-010105I 00 CENTRAL BATCH QUEUE FILE READ ENDS . . . . DATE: 12/01/2005, 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 changed 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.

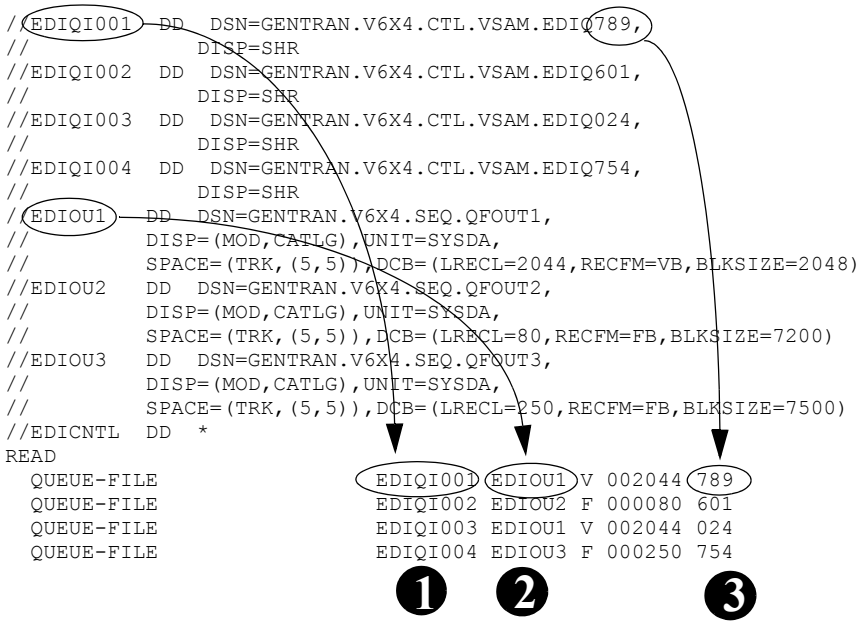
Operations

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



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: 12/01/2005                          GENTRAN:CONTROL                    PAGE   : 00001
REPORT TIME: 12:00:00                              BATCH QUEUE WRITE
REPORT ID  : EDIRQWR-EDISUM                        SUMMARY REPORT                    VERSION: 6.4


    OPTIONS USED THIS RUN
    ---------------------

REQUESTED-OPERATION                = WRITE
_____________________________________________
OUTPUT QUEUE-FILE-DDNAME           = EDIQO0001
INPUT FILE NAME                    = EDIIN2
INPUT FILE TYPE                    = V
INPUT FILE LRECL                   = 2044
QUEUE-FILE-NUMBER                  = 002
_____________________________________________
OUTPUT QUEUE-FILE-DDNAME           = EDIQO0002
INPUT FILE NAME                    = EDIIN
INPUT FILE TYPE                    = V
INPUT FILE LRECL                   = 2044
QUEUE-FILE-NUMBER                  = 024
_____________________________________________
OUTPUT QUEUE-FILE-DDNAME           = EDIQO0007
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 Gentran:Basic system.

Figure 8.29 illustrates the Processing Log report.

```
REPORT DATE: 12/01/2005                  GENTRAN:CONTROL                          PAGE   : 00001
REPORT TIME: 12:00:00                    BATCH QUEUE WRITE                         VERSION: 6.4
REPORT ID  : EDIRQWR-EDILOG              PROCESSING LOG                  COMPILE DATE: 12/01/05

    MESSAGES
    --------

EDI-010116I 00 CENTRAL BATCH QUEUE FILE WRITE BEGINS . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-009021I 00 CHECK-POINT NOW INACTIVE . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-010117I 00 CENTRAL BATCH QUEUE FILE WRITE ENDS . . . . DATE: 12/01/2005, 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

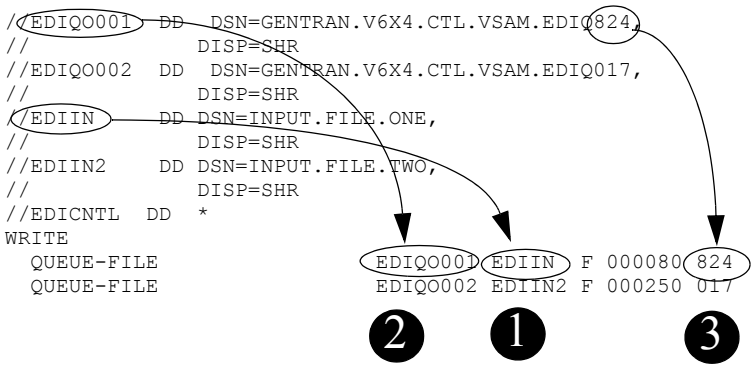
Position	Length	Format	Field Name	Values/Edits
01-05	05	AN	Operation	WRITE
06-80	75	AN	Filler	spaces

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



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 EDIQO001.
3.	The queue file defined by EDIQO001 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 Gentran:Realtime and 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 programs 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 Gentran:Realtime and 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 Gentran:Control and 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 Gentran:Realtime system.

Figure 8.30 illustrates a portion of the Processing Log report.

```
REPORT DATE: 12/01/2005                          GENTRAN:CONTROLPAGE   : 00001
REPORT TIME: 12:00:00                      REMOTE SINGLE QUEUE READVERSION: 6.4
REPORT ID  : EDIERSR-EDILOG                      PROCESSING LOGCOMPILE DATE: (12/01/2005)

    MESSAGES
    --------

EDI-010951-I 00 REMOTE SINGLE QUEUE READ PROCESSING BEGINS . . . DATE: 12/01/05, TIME: 12:00:00
EDI-010952-I 00 REMOTE SINGLE QUEUE READ PROCESSING ENDS . . . . DATE: 12/01/05, 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 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 Gentran:Realtime library: GENTRAN.V6X4.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 Gentran:Control and 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 Gentran:Realtime, creates the Processing Log report.

Figure 8.32 illustrates a portion of the Processing Log report.

```
REPORT DATE: 12/01/2005                    GENTRAN:CONTROLPAGE   : 00001
REPORT TIME: 12:00:00                  REMOTE SINGLE QUEUE WRITEVERSION: 6.4
REPORT ID  : EDIERSW-EDILOG                  PROCESSING LOGCOMPILE DATE: (12/01/05)

    MESSAGES
    --------

EDI-010976-I 00 REMOTE SINGLE QUEUE WRITE PROCESSING BEGINS . . . DATE: 12/01/05, TIME: 12:00:00
EDI-010977-I 00 REMOTE SINGLE QUEUE WRITE PROCESSING ENDS . . . . DATE: 12/01/05, 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 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 Gentran:Realtime library: GENTRAN.V6X4.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 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 Gentran:Realtime Source Library (GENTRAN.V6X4.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 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 Gentran:Realtime Source Library GENTRAN.V6X4.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 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 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 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 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 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 Users Guide for a complete description of their usage.

Inputs

None.

File Access

File Description	DDname	File Access
(Gentran:Realtime and Gentran:Control) Queue file	EDIQnnn	Read and update.

Reports

None.

Online Queue Write EDIEOQW,EDIROQW

Purpose

The 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 Realtime Users 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
(Gentran:Realtime or Gentran:Control) Queue file	EDIQnnn	Read and update.

Reports

None.

Chapter

9

Support Utilities

Overview

This chapter describes Gentran:Realtime support utilities.

This chapter contains the following topics:

Online Report File Maintenance EDIR305B

Purpose

The Online Report File Maintenance program (EDIR305B) initializes the Online Report files for use with the 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: 12/01/2005                        GENTRAN:REALTIME                              PAGE   : 00001
REPORT TIME: 12:00:00                       REAL-TIME EDI REPORT FILE INITIATOR
REPORT ID  : EDIR305B-EDISUM                   SUMMARY REPORT                              VERSION: 6.4


    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 Gentran:Basic system.

Figure 9.35 illustrates a portion of the Processing Log report.

```
REPORT DATE: 12/01/2005                          GENTRAN:REALTIME                                PAGE   : 00001
REPORT TIME: 12:00:00                       REAL-TIME EDI REPORT FILE INITIATOR                   VERSION: 6.4
REPORT ID  : EDIR305B-EDILOG                      PROCESSING LOG                  COMPILE DATE: 12/01/2005

    MESSAGES
    --------

EDI-020901-I 00 ONLINE REPORT FILE MAINTENANCE PROCESSING BEGINS . . . DATE: 12/01/2005, TIME: 12:00:00
EDI-020902-I 00 ONLINE REPORT FILE MAINTENANCE PROCESSING ENDS . . . . DATE: 12/01/2005, 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 Gentran:Realtime reports from the Online Report files selected by the user via the Gentran:Realtime Report Selection and 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 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	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	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: 12/01/2005                    GENTRAN:REALTIME                          PAGE   : 00001
REPORT TIME: 12:00:00                         ACTIVE PATH FILE MAINTENANCE
REPORT ID  : EDIRAMT-EDISUM                   SUMMARY REPORT                         VERSION: 6.4


    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: 12/01/2005                          GENTRAN:REALTIME                PAGE   : 00001
REPORT TIME: 12:00:00                       OCF/REQ PATH COPY MAINTENANCE
                                                   SUMMARY REPORT                VERSION: 6.4

     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 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 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-APPLIED-DATE	12/31/2099
TO-UPDATE-APPLIED-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 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 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-APPLIED-DATE	12/31/2099
TO-UPDATE-APPLIED-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

Chapter

10 Start-Up Utilities

Overview

This chapter describes Gentran:Realtime start-up utilities.

This chapter contains the following topics:

Report Initiation EDIR312

Purpose

The Gentran:Realtime Report Initiation program (EDIR312) creates a temporary storage queue (TSQ) used by the 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 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 Gentran:Realtime background CICS programs for control information.

Operation

The Online Scanner Initiator program (EDIEOSI) invokes the Request File Initiation program during 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 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 Gentran:Realtime start-up.

Inputs

None.

File Access

File Description	DDname	File Access
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 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 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 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.
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

Chapter

11 Copy Utilities

Overview

This chapter describes Gentran:Realtime copy utilities.

This chapter contains the following topics:

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 Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *Gentran:Basic for zSeries Release 6.3 User's 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 Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *Gentran:Basic for zSeries Release 6.3 User's 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 Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *Gentran:Basic for zSeries Release 6.3 User's 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 Gentran:Basic and is also used in the upload process (Upload Process Maintenance screen – EDIM235).

See Chapter 5 of the *Gentran:Basic for zSeries Release 6.3 User's 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.

Chapter

12 User Exits

Overview

This chapter describes Gentran:Realtime User Exits.

This chapter contains the following topics:

Online Shell Path User Exit Interface EDIRXIT1

Purpose

The Online Shell Path User Exit Interface (EDIRXIT1) enables monitoring of the processing of Gentran:Realtime by receiving information at critical points within the process.

Operation

This exit is called:

- Immediately before the first link to the Gentran:Realtime core system
- Immediately after the last link to the 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 Gentran:Realtime has executed. Valid values are:

S = Start of the process. Gentran:Realtime has not processed yet (e.g., the Shell program has just received control from the gateway).

E = End of the process. 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 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 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 Gentran:Realtime uses with the Online Error User Exit, as well as the control structure that the exit returns to Gentran:Realtime.

- 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 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 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

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 *Gentran:Basic for zSeries Release 6.3 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 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 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

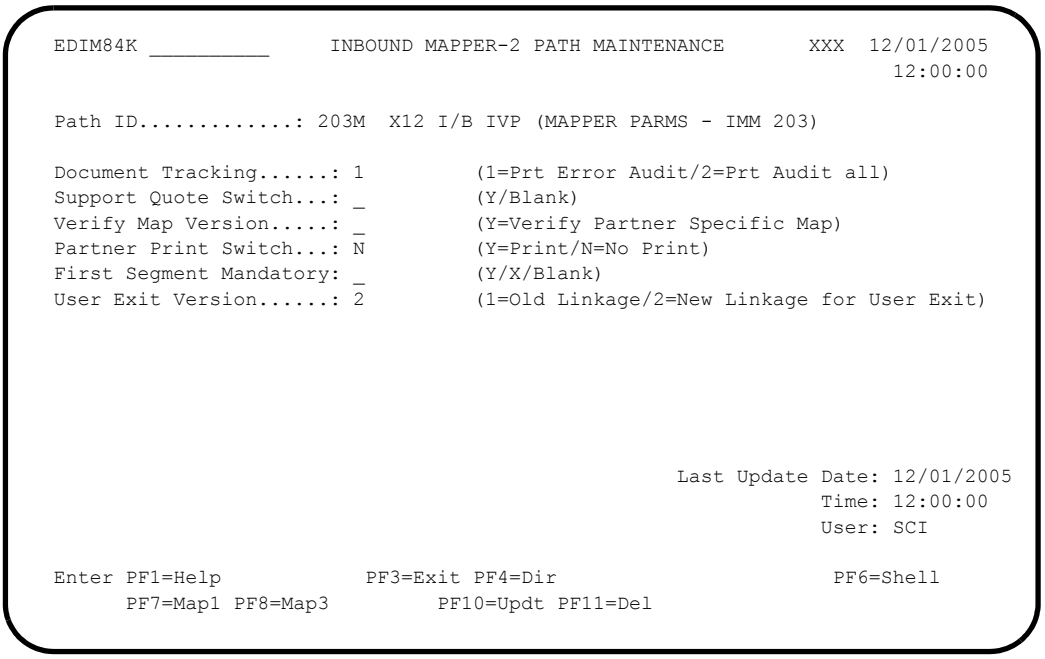
Enabling Version 2 Exits

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  12/01/2005
                                                                      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: 12/01/2005
                                                             Time: 12:00:00
                                                             User: SCI

Enter PF1=Help            PF3=Exit PF4=Dir                     PF6=Shell
      PF7=Map2 PF8=Map4         PF10=Updt
```

For Inbound



See the section "Processing Option – User Exits" in Chapter 2, "Inbound Processing Programs," in the *Gentran:Basic for zSeries Release 6.3 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 Gentran ***cannot*** be used for 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 Gentran:Realtime processing by receiving information at critical points within the process.

Operation

This exit is called:

- Immediately before the first link to the Gentran:Realtime core system
- Immediately after the last link to the 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 us 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  12/01/2005
                                                                      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    *
                                               * 2. Translation Steps       *
Reporting                                      * 3. Mapper Parameters       *
   Process Name.....: ____                     * 4. Editor Parameters       *
                                               * 5. CONNECT Parameters      *
Performance Related Parms                      * 6. Inbound Appl Extract    *
   Write Summary....: _ (N=No Summary file)    * 7. Acknowledgements        *
   Timer Switch.....: _ (Y=Produce Timer Rpt) *                            *
                                               *                           *
                                               ****************************

Last Update Date....: 12/01/2005  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 Gentran:Realtime has executed. Valid values are:

S	=	Start of the process; Gentran:Realtime has not processed yet (e.g., the Shell program has just received control from the gateway).
E	=	End of the process; 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 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 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 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.

Chapter

13 Test Programs

Overview

This chapter describes Gentran:Realtime test programs.

This chapter contains the following topics:

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 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 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 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 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 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 Gentran:Realtime translations.

This program is intended for use in a test region so that you can process data through 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.	• 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 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 a four-byte number with is the last four digits of 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  12/01/2005
                                                                       12:00:00
Path ID.............: 001S  OUTBOUND_TO_CONNECT_EXAMPLE_____________
Process Indicator...: O   (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 Parms *
   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....: 12/01/05  Time: 12:00:00  User: SCI

Enter PF1=Help            PF3=Exit PF4=Dir        PF5=Transfer
                       PF9=Add PF10=Updt PF11=Del
```

Input

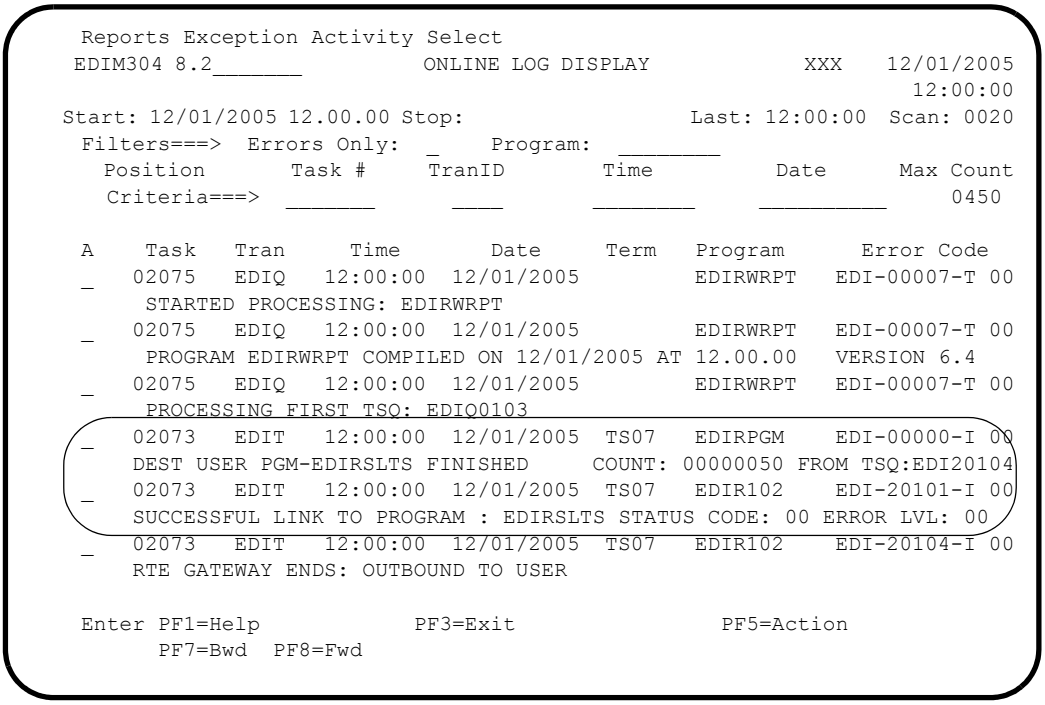
The linkage area is the only input. The TSQ passed in the linkage area is written to the EDIRSLTS file.

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.



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 not 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 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.

Chapter

14 File Descriptions

Overview

This chapter provides file descriptions for each Gentran:Realtime system file. In some cases, files are set up through the installation of Gentran:Basic and used by 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

The following table lists files and their specific requirements by file function. The Mandatory/ Optional column indicates whether 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 Gentran:Basic and other Gentran products	M	EDIERRC EDIOLF
Files for queue file processing (shared with Gentran:Control) (at least one queue file is mandatory)	M/O	EDIQnnn EDICKP EDIRJCL
Files used to hold the control and processing parameters for Gentran:Realtime	M	EDIOCF EDIREQ
File used to monitor 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
Databank Message Store files	O	EDIRIES EDIROES EDIRIAS EDIROAS

File Function	Mandatory/ Optional	Files
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

Gentran:Realtime Files (in alphabetical order)

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 Gentran:Realtime and Gentran:Basic system messages.
EDIOCF	Online Control file	Contains various parameters for the Gentran:Realtime/Gentran:Control online system.
EDIOCHA	Online Control Change Audit file	Contains change audit tracking information for the Online Control file.

VSAM Dataset Name	VSAM Dataset Title	Description
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 Gentran:Realtime translator. There may be up to 999 queue files. Queue files 091 through 99 are reserved for 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	Gentran:Realtime Activity file	Contains all path activity information.
EDIRARIA	Inbound Application Databank Archive file	Used for Gentran:Realtime Databank archiving.
EDIRARIE	Inbound EDI Databank Archive file	Used for Gentran:Realtime Databank archiving.
EDIRAROA	Outbound Application Databank Archive file	Used for Gentran:Realtime Databank archiving.
EDIRAROE	Outbound EDI Databank Archive file	Used for Gentran:Realtime Databank archiving.
EDIRDAR	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.
EDIREQ	Request file	Contains control information for the 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.

VSAM Dataset Name	VSAM Dataset Title	Description
EDIRIAA	Inbound Application Databank Directory file	Used for Gentran:Realtime Databanking.
EDIRIAS	Inbound Application Databank Message Store file	Used for Gentran:Realtime Databanking.
EDIRIEA	Inbound EDI Databank Directory file	Used for Gentran:Realtime Databanking.
EDIRIEL	Inbound EDI Databank Link file	Used to link EDI document to its' corresponding Application document within Gentran:Realtime databanking.
EDIRIES	Inbound EDI Databank Message Store file	Used for Gentran:Realtime Databanking.
EDIRJCL	Gentran:Realtime JCL file	Contains JCL members for special jobs submitted by 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 Gentran:Realtime outbound EDI databank.
EDIROAA	Outbound Application Databank Directory file	Used for Gentran:Realtime Databanking.
EDIROAL	Outbound Application Databank Link file	Used to link an Application document to its corresponding EDI document within Gentran:Realtime Databanking.
EDIROAS	Outbound Application Databank Message Store file	Used for Gentran:Realtime Databanking.
EDIROEA	Outbound EDI Databank Directory file	Used for Gentran:Realtime Databanking.
EDIROES	Outbound EDI Databank Message Store file	Used for Gentran:Realtime databanking.
EDIRRC	Report Control file	Contains control information for the Gentran:Realtime reports.
EDIRRD	Report Detail file	Contains actual 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.
EDIRSUM	Summary Statistics file (for internal codes)	Contains summary translation statistics generated by the 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 Gentran:Realtime.

Performing File Maintenance

File Maintenance Procedures

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 Gentran:Realtime JCL library.

> **Note:** You must disable the Gentran:Realtime online system before redefining or initializing critical shared assets.

Online Log File

The Online Log file stores messages from the Gentran:Realtime process. You must preformat it using the EXECLMT routine. The JCL is in the 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 Gentran:Realtime. The JCL to run the program is in member EXECQMT in the Gentran:Realtime JCL library.

Realtime Activity File

The Gentran:Realtime Activity file stores activity records for tracking the processing within the system. View this file from the Gentran:Realtime Activity screen. You must preformat this file using the EDIRAMT program before use within Gentran:Realtime. The JCL procedure EXECAMT (in the 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 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 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 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 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 *Gentran:Basic for zSeries Release 6.3 User's 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.V6X4.RTE.VSAM.EDIASCDT)    -
                TRACKS(100 50)                  -
                FREESPACE(10 10)                -
                KEYS(44 0)                      -
                RECORDSIZE(45 32044)            -
                NOREUSE                         -
                SHR(2 3))                       -
                DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIASCDT.DATA) -

                   CISZ(4096))                  -
                INDEX(NAME(GENTRAN.V6X4.RTE.VSAM.EDIASCDT.INDEX))
```

Error Message File EDIERRC

Description

This file contains the standard error codes and messages that may occur within Gentran:Realtime. Each record contains the error message number, the severity indicator, error code, and a text description.

See the *Gentran:Basic for zSeries Release 6.3 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 Gentran:Realtime or 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 Gentran:Realtime, after any updates by other Gentran add-on products, and after any user changes. Use the backup for recovery purposes.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X4.VSAM.ERRCTL)-
        VOLUME(XXXXXX)              -
        TRACKS(10 5)                -
        CISZ(2048))                 -
        KEYS(9 0)                   -
        RECORDSIZE(270 270)         -
        SHR(2 3))                   -
        DATA(NAME(GENTRAN.V6X4.VSAM.ERRCTL.DATA)-
        INDEX(NAME(GENTRAN.V6X4.VSAM.ERRCTL.INDEX))-
```

Note: The Error Message file is also used by Gentran:Basic, Gentran:Viewpoint, Gentran:Plus, and Gentran:Control.

Online Control File EDIOCF

Description

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 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 Gentran:Realtime installation seed file.

If you use the installation seed file, or if the backup is not recent, you must use the Gentran:Realtime maintenance functions to re-enter your configuration information.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X4.RTE.VSAM.EDIOCF)-
    VOLUME(XXXXXX)                -
    RECORDS(550)                  -
    FREESPACE(10 10)              -
    KEYS(3 0)                     -
    RECORDSIZE(091 450)           -
    NOREUSE                       -
    SHR(2 3))                     -
    DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIOCF.DATA)-
    CISZ(4096))                   -
    INDEX(NAME(GENTRAN.V6X4.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.V6X4.VSAM.EDI.EDIOLF)-
        VOLUME(XXXXXX)                  -
        RECORDS(3000)                   -
        NUMBERED                        -
        RECORDSIZE(128 128)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.VSAM.EDI.EDIOLF.DATA)-
        CISZ(1024))
```

Note: The Online Log file is also used by Gentran:Basic, Gentran:Viewpoint, and Gentran:Control.

Queue Files EDIQnnn

Description

The system uses Online Queue files to store or retrieve data from 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 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 Gentran:Basic and 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.
Remote Single-Queue Write Subroutine (EDIERSW)	Updates records (writes new record images).

Program	Purpose
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.

```
# records     =     (100 transactions x 200 records x 250 bytes) / 4050
              =     1234 records.
```

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.V6X4.RTE.VSAM.EDIQnnn)-
       VOLUME(XXXXXX)                -
       RECORDS(250)                  -
       NUMBERED                      -
       RECORDSIZE(4088 4088)         -
       SHR(4 3))                     -
       DATA(NAME(GENTRAN.V6X4.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 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 EXECRPT 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 EXECRPT 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.V6X4.RTE.VSAM.EDIQ092)-
        VOLUME(XXXXXX)                  -
        RECORDS(1000)                   -
        NUMBERED                        -
        RECORDSIZE(4088 4088)           -
        SHR(4 3))                       -
        DATA(NAME(GENTRAN.V6X4.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 Gentran:Realtime Databank files. The file is a VSAM RRDS initialized during 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.V6X4.RTE.VSAM.EDIQ096)-
        VOLUME(XXXXXX)                  -
        RECORDS(250)                    -
        NUMBERED                        -
        RECORDSIZE(4088 4088)           -
        SHR(4 3))                       -
        DATA(NAME(GENTRAN.V6X4.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 Gentran:Realtime Installation. The system uses this file only if 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 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.

records = (4050 / 215 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 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.V6X4.RTE.VSAM.EDIQ098)-
       VOLUME(XXXXXX)                  -
       RECORDS(250)                    -
       NUMBERED                        -
       RECORDSIZE(4088 4088)           -
       SHR(4 3))                       -
       DATA(NAME(GENTRAN.V6X4.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 Gentran:Realtime Outbound EDI Databank. This file is a VSAM RRDS initialized during Gentran:Realtime Installation. The system uses this file only if 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.V6X4.RTE.VSAM.EDIQ099)-
        VOLUME(XXXXXX)                  -
        RECORDS(250)                    -
        NUMBERED                        -
        RECORDSIZE(4088 4088)           -
        SHR(4 3))                       -
        DATA(NAME(GENTRAN.V6X4.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 Gentran:Realtime and Gentran:Control.

The file holds an individual record for each queue file created for Gentran:Control and 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 Gentran:Realtime utilities to update the Checkpoint file to guarantee that the pointer values match.

Note: If Gentran:Control has been installed prior to Gentran:Realtime, you can use the Checkpoint file created by 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 Gentran:Control and 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
Gentran: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 Gentran: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 DEFRTE.

```
DEFINE CLUSTER(NAME(GENTRAN.V6X4.RTE.VSAM.EDICKP)-
       VOLUME(XXXXXX)                  -
       TRACKS(30)                      -
       NUMBERED                        -
       RECORDSIZE(200 200)             -
       SHR(4 3))                       -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDICKP.DATA)-
       CISZ(2048))
```

> **Note:** The Checkpoint file must not have a secondary allocation.

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 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 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, 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.V6X4.RTE.VSAM.EDIRAPF)-
        VOLUME(XXXXXX)                  -
        RECORDS (2000)                  -
        NUMBERED                        -
        RECORDSIZE(250 250)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRAPF.DATA)-
        CISZ(1024))
```

Note: The 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 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 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 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 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.V6X4.RTE.VSAM.EDI.ARCHIAA) -
        VOLUME(XXXXXX)                  -
        RECORDS(1000 1000)              -
        FREESPACE(40 40)                -
        KEYS(20 0)                      -
        RECORDSIZE(622 5102)            -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.ARCHIAA.DATA)-
        CISZ(8192))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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 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.V6X4.RTE.VSAM.EDI.ARCHIEA)-
        VOLUME(XXXXXX)                  -
        RECORDS(1000 1000)              -
        FREESPACE(40 40)                -
        KEYS(20 0)                      -
        RECORDSIZE(822 4072)            -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.ARCHIEA.DATA)-
        CISZ(8000))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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 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.V6X4.RTE.VSAM.EDI.ARCHOAA) -
        VOLUME(XXXXXX)                  -
        RECORDS(1000 1000)              -
        FREESPACE(40 40)                -
        KEYS(20 0)                      -
        RECORDSIZE(622 4072)            -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.ARCHOAA.DATA)-
        CISZ(8000))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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 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.V6X4.RTE.VSAM.EDI.ARCHOEA)-
        VOLUME(XXXXXX)                  -
        RECORDS(1000 1000)              -
        FREESPACE(40 40)                -
        KEYS(20 0)                      -
        RECORDSIZE(822 4072)            -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.ARCHOEA.DATA)-
        CISZ(8000))                     -
        INDEX(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.ARCHOEA.INDEX))
```

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 Gentran:Realtime Installation. The system writes data to this file when the Gentran:Realtime Inbound Editor encounters acknowledgment transactions during inbound EDI processing, and when the Acknowledgment Reconciliation/Monitor Reformatter receives data from the 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 Gentran:Realtime Global Path Maintenance screen (EDIM833).

Program References

The following programs reference the 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.

Gentran:Realtime Inbound Editor executes whenever the 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 DEFRTE 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.V6X4.RTE.VSAM.EDIRDAR)-
        VOLUME(XXXXXX)                  -
        RECORDS(200 100)                -
        FREESPACE(10 10)                -
        KEYS(17 0)                      -
        RECORDSIZE(215 2000)            -
        NOREUSE                         -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRDAR.DATA)-
        CISZ(8000))                     -
        INDEX(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRDAR.INDEX))
```

Request File EDIREQ

Description

The Request file contains multiple sets of control cards that make up the Gentran:Realtime Path parameters required for the Shell, Mapper, and Editor processes. This file is a VSAM key sequenced dataset initialized during 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 and updates records.
Outbound EDI Databank Maint (EDID251)	Reads and updates records.
Outbound EDI Databank Extract (EDID255)	Reads records.
Inbound EDI Databank Maint (EDID351)	Reads and updates records.
Inbound Appl Databank Maint (EDID451)	Reads and updates 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 Gentran:Realtime installation seed file.

If you use the installation seed file, or if the backup is not recent, you must use the Gentran:Realtime maintenance functions to re-enter your configuration information.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X4.RTE.VSAM.EDIREQ)-
        VOLUME(XXXXXX)                  -
        RECORDS(750 250)                -
        FREESPACE(10 10)                -
        KEYS(7 0)                       -
        RECORDSIZE(106 106)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIREQ.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDIRDBP)-
        VOLUME(XXXXXX)                  -
        TRACKS(500 80)                  -
        FREESPACE(10 10)                -
        KEYS(25 0)                      -
        RECORDSIZE(35 33000)            -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRDBP.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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.V6X4.RTE.VSAM.EDIRHBP)-
        VOLUME(XXXXXX)                  -
        RECORDS(200 80)                 -
        FREESPACE(10 10)                -
        KEYS(17 0)                      -
        RECORDSIZE(080 0250)            -
        NOREUSE                         -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRHBP.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 Gentran:Realtime Installation process. The system writes data to the file when the 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.

Gentran:Realtime Inbound Mapper is executed whenever the 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.V6X4.RTE.VSAM.EDI.EDIRIAA)-
       VOLUME(XXXXXX)                  -
       RECORDS(200 100)                -
       FREESPACE(40 40)                -
       KEYS(110 0)                     -
       RECORDSIZE(800 800)             -
       SHR(2 3))                       -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRIAA.DATA)-
       CISZ(8000))                     -
       INDEX(NAME(GENTRAN.V6X4.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 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	=	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.V6X4.RTE.VSAM.EDI.EDIRIACA)-
       VOLUME(XXXXXX)                  -
       RECORDS(120 30)                 -
       FREESPACE(30 10)                -
       KEYS(116 0)                     -
       RECORDSIZE(1700 2100)           -
       SHR(2 3))                       -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRIACA.DATA)-
       CISZ(4096))                     -
       INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDI.EDIRIAS)-
        VOLUME(XXXXXX)                  -
        RECORDS(1000 1000)              -
        FREESPACE(00 00)                -
        KEYS(16 0)                      -
        RECORDSIZE(250 5076)            -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRIAS.DATA)-
        CISZ(8192))                     -
        INDEX(NAME(GENTRAN.V6X4.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 Gentran:Realtime Installation. Data is written to this file when the 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.

Gentran:Realtime Inbound Editor executes whenever the 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.V6X4.RTE.VSAM.EDI.EDIRIEA)-
        VOLUME(XXXXXX)                  -
        RECORDS(200 100)                -
        FREESPACE(40 40)                -
        KEYS(125 0)                     -
        RECORDSIZE(800 800)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRIEA.DATA)-
        CISZ(8000))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDI.EDIRIECA)-
        VOLUME(XXXXXX)                  -
        RECORDS(120 30)                 -
        FREESPACE(30 10)                -
        KEYS(116 0)                     -
        RECORDSIZE(2100 2100)           -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRIECA.DATA)-
        CISZ(8192))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.

Gentran:Realtime Inbound Mapper executes whenever the 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.V6X4.RTE.VSAM.EDI.EDIRIEL) -
        VOLUME(XXXXXX)                  -
        RECORDS(200 100)                -
        FREESPACE(40 40)                -
        KEYS(126 0)                     -
        RECORDSIZE(237 237)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRIEL.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDI.EDIRIES) -
        VOLUME(XXXXXX)                  -
        RECORDS(100 100)                -
        FREESPACE(00 00)                -
        KEYS(16 0)                      -
        RECORDSIZE(2050 4050)           -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRIES.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDIRMNH)-
        VOLUME(XXXXXX)                  -
        TRACKS(25 22)                   -
        FREESPACE(10 10)                -
        KEYS(23 0)                      -
        RECORDSIZE(220 220)             -
        SHR(2 3)                        -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRMNH.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDIRMNS)-
        VOLUME(XXXXXX)                  -
        TRACKS(55 20)                   -
        FREESPACE(10 10)                -
        KEYS(26 0)                      -
        RECORDSIZE(106 4212)            -
        SHR(2 3)                        -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRMNS.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDI.EDIRNRC)-
        VOLUME(XXXXXX)                  -
        RECORDS(100 100)                -
        FREESPACE(10 10)                -
        KEYS(130 0)                     -
        RECORDSIZE(300 300)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIRNRC.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 Gentran:Realtime Installation. The system writes data to this file when the 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.

Gentran:Realtime Outbound Mapper executes whenever the 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.V6X4.RTE.VSAM.EDI.EDIROAA)-
       VOLUME(XXXXXX)                  -
       RECORDS(200 100)                -
       FREESPACE(40 40)                -
       KEYS(110 0)                     -
       RECORDSIZE(800 800)             -
       SHR(2 3))                       -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROAA.DATA)-
       CISZ(8000))                     -
       INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDI.EDIROACA)-
       VOLUME(XXXXXX)                  -
       RECORDS(120 30)                 -
       FREESPACE(30 10)                -
       KEYS(116 0)                     -
       RECORDSIZE(1700 2100)           -
       SHR(2 3))                       -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROACA.DATA)-
       CISZ(4096))                     -
       INDEX(NAME(GENRAN.V6X4.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 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.

Gentran:Realtime Outbound Editor executes whenever the 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.V6X4.RTE.VSAM.EDI.EDIROAL)-
        VOLUME(XXXXXX)                  -
        RECORDS(200 100)                -
        FREESPACE(40 40)                -
        KEYS(111 0)                     -
        RECORDSIZE(237 237)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROAL.DATA) -
        CISZ(8000))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDI.EDIROAS)-
       VOLUME(XXXXXX)                                 -
       RECORDS(1000 1000)                             -
       FREESPACE(00 00)                               -
       KEYS(16 0)                                     -
       RECORDSIZE(250 5076)                           -
       SHR(2 3))                                      -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROAS.DATA)-
       CISZ(8192))                                    -
       INDEX(NAME(GENTRAN.V6X4.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 Gentran:Realtime Installation. The system writes data is written to this file when the 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.

Gentran:Realtime Outbound Editor executes whenever the 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.V6X4.RTE.VSAM.EDI.EDIROEA)-
       VOLUME(XXXXXX)                  -
       RECORDS(200 100)                -
       FREESPACE(40 40)                -
       KEYS(125 0)                     -
       RECORDSIZE(800 800)             -
       SHR(2 3))                       -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROEA.DATA)-
       CISZ(8000))                     -
       INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDI.EDIROECA)-
       VOLUME(XXXXXX)                  -
       RECORDS(120 30)                 -
       FREESPACE(30 10)                -
       KEYS(116 0)                     -
       RECORDSIZE(2100 2100)           -
       SHR(2 3))                       -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROECA.DATA)-
       CISZ(4096))                     -
       INDEX(NAME(GENTRAN.V6X4.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 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:

Total # of records= # of non-deferred EDI interchanges + # 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:

   # of deferred transactions per day = 100

   average # of characters per deferred transaction = 2700

   Average # of deferred Message Store records per transaction
   (Divide the average # of characters per deferred transaction by the Max # of characters per Message Store record and round to the nearest whole number.)
   (2700/4000) = 1

   Average # of Message Store records per day
   (Multiply the average # of Message Store records per transaction by the # of deferred transactions per day)
   (1 * 100) = 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.V6X4.RTE.VSAM.EDI.EDIROES)-
        VOLUME(XXXXXX)                  -
        RECORDS(960 480)                -
        FREESPACE(00 00)                -
        KEYS(16 0)                      -
        RECORDSIZE(2050 4050)           -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROES.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.RTE.VSAM.EDI.EDIROES.INDEX))
```

Batch Number Cross Reference File EDIRMXR

Description

The Batch number cross reference file holds the interchange key of the 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 Gentran:Realtime Outbound EDI databank with the batch number. This file is a VSAM key sequenced dataset initialized during 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.V6X4.RTE.VSAM.EDIRMXR)    -
        RECORDS(210 110)                 -
        FREESPACE(00 00)                 -
        KEYS(7 0)                        -
        RECORDSIZE(180 180)              -
        SHR(2 3))                        -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRMXR.DATA)  -
        CISZ(4096))                      -
        INDEX(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRMXR.INDEX))
```

Report Control File EDIRRC

Description

This file controls and records all reports written by the 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 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 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 Reject/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 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.V6X4.RTE.VSAM.EDIRRC)-
       VOLUME(XXXXXX)                  -
       RECORDS(8000)                   -
       NUMBERED                        -
       RECORDSIZE(100 100)             -
       SHR(2 3)                        -
       DATA(NAME(GENTRAN.V6X4.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 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 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 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 Reject/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 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.V6X4.RTE.VSAM.EDIRRD)-
        VOLUME(XXXXXX)                  -
        RECORDS(10000)                  -
        NUMBERED                        -
        RECORDSIZE(175 175)             -
        SHR(2 3)                        -
        DATA(NAME(GENTRAN.V6X4.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 Gentran:Realtime translation process. This file is a VSAM key sequenced dataset initialized during Gentran:Realtime Installation. Data written to the Gentran:Realtime Reporting Subsystem during 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 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.V6X4.RTE.VSAM.EDIRSUM)-
        VOLUME(XXXXXX)                  -
        RECORDS(200 100)                -
        FREESPACE(10 10)                -
        KEYS(17 0)                      -
        RECORDSIZE(609 2000)            -
        NOREUSE                         -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRSUM.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 DEFRTE 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 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.V6X4.RTE.VSAM.EDIAPPL)-
        VOLUME(XXXXXX)                  -
        TRACKS(2 1)                     -
        NUMBERED                        -
        RECORDSIZE(250 250)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.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 DEFRTE 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 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.V6X4.RTE.VSAM.EDIDAT)-
        VOLUME(XXXXXX)                  -
        TRACKS(2 1)                     -
        NUMBERED                        -
        RECORDSIZE(80 80)               -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIDAT.DATA)-
        CISZ(1024))
```

Test Data File EDITDATA

Description

Job DEFRTE creates the Test Data file (EDITDATA) during 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 Gentran:Realtime Immediate Option. This enables you to test 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 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 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.V6X4.RTE.VSAM.TESTDATA) -
        VOLUME(XXXXXX)                  -
        RECORDS(5000 1800)              -
        FREESPACE(10 10)                -
        KEYS(16 0)                      -
        RECORDSIZE(036 30016)           -
        NOREUSE                         -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.TESTDATA.DATA) -
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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.V6X4.RTE.VSAM.EDIRSLTS) -
        VOLUME(XXXXXX)                  -
        RECORDS(8000 5000)              -
        FREESPACE(10 10)                -
        KEYS(8 0)                       -
        RECORDSIZE(018 2056)            -
        NOREUSE                         -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.EDIRSLTS.DATA) -
        CISZ(4096))                     -
        INDEX(NAME(GENTRAN.V6X4.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 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 Gentran:Realtime installation seed file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X4.RTE.VSAM.OCF.CHGAUD)-
       VOLUME(XXXXXX)                -
       RECORDS(15 15)                -
       FREESPACE(00 00)              -
       KEYS(90 0)                    -
       RECORDSIZE(662 662)           -
       SHR(2 3))                     -
       DATA(NAME(GENTRAN.V6X4.RTE.VSAM.OCF.CHGAUD.DATA)-
       CISZ(4096))                   -
       INDEX(NAME(GENRAN.V6X4.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 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 Gentran:Realtime installation seed file.

VSAM Dataset Information

```
DEFINE CLUSTER(NAME(GENTRAN.V6X4.RTE.VSAM.REQ.CHGAUD)-
        VOLUME(XXXXXX)                  -
        RECORDS(15 5)                   -
        FREESPACE(00 00)                -
        KEYS(90 0)                      -
        RECORDSIZE(662 662)             -
        SHR(2 3))                       -
        DATA(NAME(GENTRAN.V6X4.RTE.VSAM.REQ.CHGAUD.DATA)-
        CISZ(4096))                     -
        INDEX(NAME(GENRAN.V6X4.RTE.VSAM.REQ.CHGAUD.INDEX))
```

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.

Gentran differentiates between inbound acknowledgments (received from your trading partner) and outbound acknowledgments (sent to your trading partner). 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. 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 Gentran:Realtime gateway that enables online applications to interface to Gentran:Realtime. The application gateways provide program-level interface (API) for CICS applications to send and receive documents to and from 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 Gentran:Realtime to accept data from the application without the application having to wait for translation. In 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–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 Gentran:Realtime gateway that enables online and batch communications programs to interface to Gentran:Realtime. The open architecture structure for the communications gateways supported by Gentran:Realtime work with either user-written or third-party communications software.

compress

An automatic process in the outbound flow of 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 Gentran:Basic) 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	=	(*Paired*) If any of the referenced data elements is present, they all must be present.
R	=	(*Required*) At least one of the referenced data elements must be present.
E	=	(*Exclusive*) Only one of the referenced data elements may be present.
C	=	(*Conditional*) If the first referenced data element is used, then all remaining referenced data elements must be used.
L	=	(*List Conditional Paired*) 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 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 *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 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 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 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. 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 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. Gentran:Realtime automatically generates a functional acknowledgment for documents received. There is never an acknowledgment generated for an acknowledgment.

See also *acknowledgment*.

Gentran:Control

An add-on product to Gentran that enables you to automate the EDI processing stream and prioritize processing by trading partner and/or type of document. 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.

Gentran:Plus

A comprehensive software system that provides a seamless application-to-EDI interface. Gentran:Plus can work in conjunction with Gentran:Basic and Gentran:Realtime, or as a stand-alone product. Gentran:Plus contains these three subsystems: Communications, Translation, and Communications Setup and Management. 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.

Gentran:Realtime

An add-on product to 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.

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.

Gentran:Structure

An add-on product to 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.

Gentran:Viewpoint

A 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.

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 Gentran:Realtime regarding the translation process results. Data passed to 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 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 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 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 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 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 Gentran:Realtime regarding the translation process results. Data passed to 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).

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 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 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 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 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.

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