IBM Sterling Gentran:Server for iSeries

Extension for SAP

Release 3.6

IBM

This edition applies to the 3.6 Version of IBM® Sterling Gentran:Server® for iSeries® and to all subsequent releases and modifications until otherwise indicated in new editions.

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

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Before You Begin

Introduction

The IBM® Sterling Gentran:Server® Extension for SAP (Sterling Gentran:Server Extension) is a comprehensive, "off-the-shelf" interface product for the receipt and transmission of electronic data interchange (EDI) transactions with SAP application software. Status reporting is provided for outbound processes.

Required Knowledge

Sterling Gentran:Server Extension is easy to use. You do not need programming knowledge to accomplish most tasks. However, to set up and fully use the capabilities of Sterling Gentran:Server Extension, you should fully understand:

- iSeries operating system
- EDI processing environment
- SAP processing environment

How To Get Help

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

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

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

Using this Guide

Documentation Organization

This manual is a combination installation and user guide; it is organized to provide reference material about Sterling Gentran:Server Extension processing and components, as well as simple-to-follow installation and configuration steps.

Sterling Gentran:Server Extension online help contains additional reference material (for example, panel definitions, field definitions). This manual is intended to complement and enhance the online help.

The following table lists the location of different types of documented information you may need as you use Sterling Gentran:Server Extension.

To locate information about...	Use the...
Specific processes, tasks, and procedures	Table of Contents
Individual panels	Index
Panel field descriptions	Index
Detailed descriptions of individual panels	Online Help
Detailed descriptions of field definitions as they apply to each panel	Online Help

✎ **NOTE**

For information on using online help, see the "Using the Function Keys" section in Chapter 1 of your *IBM® Sterling Gentran:Server® for iSeries® Release 3.6 User Guide*.

Chapter Descriptions

The chapters in this guide are described in the following table.

✍ **NOTE** _____

If you are familiar with the Sterling Gentran:Server and SAP systems, you may not need to read every chapter in this manual. You can use the following chapter summaries to determine which areas you need to read to install and use the system.

Chapter	Title	Description
1	Processing Overview	This chapter provides an overview of the Sterling Gentran:Server Extension system, including an outline of Sterling Gentran:Server Extension components. Inbound and outbound processing are explained at both high and detailed levels.
2	Installation	This chapter presents step-by-step procedures for installing Sterling Gentran:Server Extension, including copying application template maps and setting up SAP system parameters.
3	Configure the Operating Parameters	This chapter presents step-by-step procedures for configuring Sterling Gentran:Server Extension to work with your installation of SAP, including: • Setting parameters to allow Sterling Gentran:Server Extension to contact SAP • Selecting the fields from the SAP control record that will be used to associate the SAP partner fields with the Sterling Gentran:Server trading partner.
4	Configuring Trading Partner Lookups	This chapter explains the procedure you must follow to create the association between your SAP trading partners and Sterling Gentran:Server.
5	Mapping Considerations	This chapter describes the steps you must follow when creating new applications and maps to work with Sterling Gentran:Server Extension.
A	Appendix A Supported SAP Status Codes	This appendix lists the SAP status codes used by Sterling Gentran:Server Extension during outbound processing of IDOCs created by SAP.
B	Appendix B Program Descriptions	This appendix lists and describes the programs that make up Sterling Gentran:Server Extension.

Related Documentation

SAP and Sterling Gentran:Server documentation to which you may want to refer as you use Sterling Gentran:Server Extension are listed and described in this section.

✎ **NOTE**

This guide assumes that you are familiar with Sterling Gentran:Server use and operations. If you are a new Sterling Gentran:Server user needing information about how Sterling Gentran:Server works, you must locate the information you need in the Sterling Gentran:Server documentation set.

Sterling Gentran:Server

The following publications are available as part of the Sterling Gentran:Server licensed system.

Sterling Gentran:Server documentation	Description
User Guide	This guide is a task-oriented manual designed to help you locate information about specific tasks and procedures, as well as information regarding individual panels and field definitions.
Manager's Implementation Planner	This manual is designed to assist you with the process of collecting, organizing, and prioritizing the information required to successfully implement EDI. The Planner includes EDI tutorial materials and other planning and implementation materials.
Technical Reference Guide	This guide provides information on advanced topics and technical system information for operating the Sterling Gentran:Server system. The guide includes system messages and program and command names.
Communications Guide	This guide includes a communications tutorial, detailed descriptions of communication configurations, and troubleshooting techniques.

SAP

The following table lists related SAP publications.

SAP documentation	Description
SAP System EDI Configuration Manual	This manual contains SAP system information.
WF-EDI Intermediate Document -Triggering	This document explains how processing is triggered between the SAP system and Sterling Gentran:Server, as well as the technical setup within the SAP system that is required to enable Sterling Gentran:Server to send IDOC files to the SAP system by way of the STARTRFC program.
The EDI Interface – Basis Document	This document contains information describing processing within the SAP system.

Chapter

1 Processing Overview

Introduction

This chapter explains the process flow within the IBM® Sterling Gentran:Server® Extension for SAP.

In this Chapter

This chapter contains the following sections:

For information on...	See section...
High-level discussion of Sterling Gentran:Server Extension operations	A
Concepts to know	B
Inbound processing	C
Outbound processing	D

Section A: Processing at a High Level

Introduction

This section provides high-level descriptions of how Sterling Gentran:Server Extension processing works. If you want detailed information, skip this section and proceed to the remaining sections in this chapter.

Sterling Gentran:Server Extension Function

The Sterling Gentran:Server Extension enables data to pass bi-directionally between the Sterling Gentran:Server and SAP systems.

Example

An organization uses both an SAP system and Sterling Gentran:Server to exchange electronic documents. During an inbound process, a purchase order is received from a trading partner. The Sterling Gentran:Server Extension sends the document to Sterling Gentran:Server for translation and then sends the translation result to SAP for order processing.

During an outbound process, a purchase order is created in SAP and sent to the Sterling Gentran:Server Extension. The Sterling Gentran:Server Extension accepts the document and sends it to Sterling Gentran:Server for translation. Status messages are transmitted to SAP. The file can then be transmitted to a trading partner.

Processing Stages

Table 1: Inbound Processing

This table describes how an inbound document is processed using the Sterling Gentran:Server Extension.

Stage	Description
1	During a communication session, an inbound document is received by the Sterling Gentran:Server system.
2	The Sterling Gentran:Server Extension is initiated and Sterling Gentran:Server inbound processing is executed.
3	The Sterling Gentran:Server Extension prepares the information for SAP processing.
4	The Sterling Gentran:Server Extension starts the SAP process.

Table 2: Outbound Processing

This table describes how an outbound document is processed using the Sterling Gentran:Server Extension.

Stage	Description
1	SAP starts the Sterling Gentran:Server Extension by sending information to Sterling Gentran:Server.
2	The Sterling Gentran:Server Extension determines the partner(s) and application(s) to process, and places the information in the appropriate files.
3	The Sterling Gentran:Server Extension initiates Sterling Gentran:Server outbound processing.
4	Status messages are sent back to SAP.
5	The outbound EDI file that was created can be transmitted to a trading partner.

Section B: Concepts to Know

Introduction

This section explains concepts associated with Sterling Gentran:Server Extension processing and describes SAP programs used in Sterling Gentran:Server Extension processing.

IDOC Concepts

This table defines *IDOC* and *IDOC file,* two terms crucial to Sterling Gentran:Server Extension processing.

Term	Definition
IDOC	An intermediate document in a standardized format. The Sterling Gentran:Server Extension uses IDOC format to transmit data to and from SAP.
IDOC file	The SAP system uses an IDOC file to perform its processing. The file is a flat file that contains a header record for each document to process, followed by several data records that contain the documents information. One IDOC file may contain one or more IDOCs. **NOTE:** A separate file is created during Sterling Gentran:Server Extension processing for each different document type (IDOC type).

Definitions for the terms explained here are also listed, along with many others, in the Glossary.

Programs

This table explains SAP programs involved in Sterling Gentran:Server Extension processing.

Program	Description
RFCEXEC	SAP-supplied Remote Function Call (RFC) program used to call and execute the CL program that starts Sterling Gentran:Server Extension outbound processing
STARTRFC	SAP-supplied Remote Function Call (RFC) program executed by the Sterling Gentran:Server Extension STARTRFC is passed system control parameters including SAP system ID, logon ID, password, client, language, application server and gateway information, inbound path name, and file name. As a result of executing STARTRFC, the SAP system reads in the IDOCs contained in the filename, which is passed in the control parameters.

For detailed program descriptions of Sterling Gentran:Server Extension programs, see Appendix B *Program Descriptions*.

Section C: Inbound Processing

The following table illustrates the Sterling Gentran:Server Extension inbound processing flow.

Diagram	Stage	Description
	1	Inbound operations are initiated, which starts the SAPIN command after a communications session has taken place.
	2	SAPIN initiates the Sterling Gentran:Server inbound EDI process (Editor, Mapper).
	3	The EDI process creates an application file in the form of an IDOC file.
	4	SAPARCHCL is called to archive the new IDOC file: • SAPARCHCL looks for the System Parameter file (SAPSYS) for archiving instructions. • If SAPARCHCL cannot locate SAPSYS or SAPSYS contains no data, SAPARCHCL notifies SAP and the system operator that the file was not archived (the inbound process continues). • If SAPARCHCL locates SAPSYS and it contains instructions, SAPARCHCL archives the IDOC file in the designated library, using the file name SAPINARC40. The member name will be unique.
	5	Upon completion of SAPARCHCL, SAPIN3 is called to manipulate the IDOC file in preparation for SAP processing.
	6	SAPIN4 is then called to copy the database file to a stream file.
	7	SAPIN4 starts the SAP process by executing STARTRFC.

The diagram column contains the following flow:

```
Communications
   1
     |
     v
   SAPIN
   2
     |
     v
STERLING
GENTRAN:
 SERVER
 EDITOR
 MAPPER
   3
     |
     v
 IDOC          4
 FILE  <---->  SAPARCHCL
   5
     |
     v
 SAPIN3
   6
     |
     v
 SAPIN4
   7
     |
     v
 STARTRFC   SAP
```

Section D: Outbound Processing

The tables in this section illustrate the Sterling Gentran:Server Extension outbound processing flow.

Outbound Flow: Part 1

Diagram	Stage	Description
	1	SAP initiates outbound processing by creating an IDOC file (containing one or more IDOCs). **NOTE:** Each IDOC is a separate transaction (for example, a purchase order or an invoice).
	2	SAP calls RFCEXEC.
	3	RFCEXEC calls SAPOUT and passes to SAPOUT the stream file pathname containing the IDOCs to be processed.
	4	Using the parameter that was passed, SAPOUT removes all null characters to obtain a valid pathname and copy the stream file to a database file for processing. Once the IDOC file is copied, SAPARCHCL is called to archive the IDOC file. **NOTE:** If an error is received during translation, notification is sent that the file to process is in error, and the outbound process terminates.
	5	SAPARCHCL: • Looks for the system parameter file (SAPSYS) for archiving instructions. • If SAPARCHCL cannot locate SAPSYS or SAPSYS contains no data, SAPARCHCL sends notification that the file was not archived (the outbound process continues). • If SAPARCHCL locates SAPSYS and it contains instructions, SAPARCHCL archives the file in the designated library, using the file name SAPOUARC40. The member name will be unique.

The diagram column shows the flow: SAP (containing IDOC) → (2) → RFCEXEC → (3) → SAPOUT ↔ (4,5) SAPARCHCL → (6 cont'd on next page) → SAPPREO.

Outbound Flow: Part 2

Diagram	Stage	Description

	6	When SAPARCHCL completes, the SAPPREO program is executed. SAPPREO:
		
		• Determines whether the IDOC contains a valid Sterling Gentran:Server partner or a cross reference to a partner.
		
		  NOTE: The partner ID created from the IDOC file is concatenated according to the designated fields from the EDI_DC record configured in the Sterling Gentran:Server Extension. This unique trading partner information is stored as parameters in the SAPPRM file.
		
		  If the concatenated trading partner cannot be found, a value of '*** Trading Partner Not Found ***' is passed to Sterling Gentran:Server for that IDOC's trading partner.
		
		• Determines the Sterling Gentran:Server application ID to process.
		
		  The DOCTYP and MESTYP fields from each EDI_DC record are verified against the IDOC Type/Application ID table created by SAP (the SAPTRN file). Each IDOC Type/Message Type combination must have a corresponding Sterling Gentran:Server Application ID in this table.
		
		• Produces an error report if the system is configured to do so.

	7	When SAPPREO completes, SAPOUT sorts the IDOC file into the appropriate application files to process (one file per Sterling Gentran:Server application ID to process), and the files are copied.
	8	SAPOUT calls SAPOUT2.

Diagram elements:

- SAPOUT — 4 ↔ — SAPARCHCL
- 5
- 6
- SAPPREO
- 7
- Application Files
- 8
- SAPOUT2
- 9 (cont'd on next page)
- Sterling Gentran: Server

Outbound Flow: Part 3

Diagram	Stage	Description
	9	SAPOUT2 initiates the Sterling Gentran:Server EDI process (Mapper, Editor).
	10	Sterling Gentran:Server creates an outbound EDI file that contains the transaction information in EDI format.
	11	Upon completion of the EDI process, the status records for each IDOC are accumulated, formatted for SAP, and transmitted back to SAP by initiating the STARTRFC process.
	12	After the status records have been sent, SAPDELCL is called to clean up the work files and the stream file that was used during the outbound process. At this point, the outbound processing session (SAPOUT) ends.
	13	The EDI file that was created can now be transmitted to the Trading Partner.

Diagram flow:

SAPOUT2 → (9) → Sterling Gentran: Server MAPPER EDITOR → (10) EDI FILE → (12) SAPDELCL → Communications (13)

Sterling Gentran: Server MAPPER EDITOR → STATUS RECORD FILE → (11) STARTRFC (SAP)

Chapter

2 Installation

Introduction

This chapter explains the steps you must complete to install the Sterling Gentran:Server Extension on your iSeries system.

In this Chapter

This chapter contains the following sections.

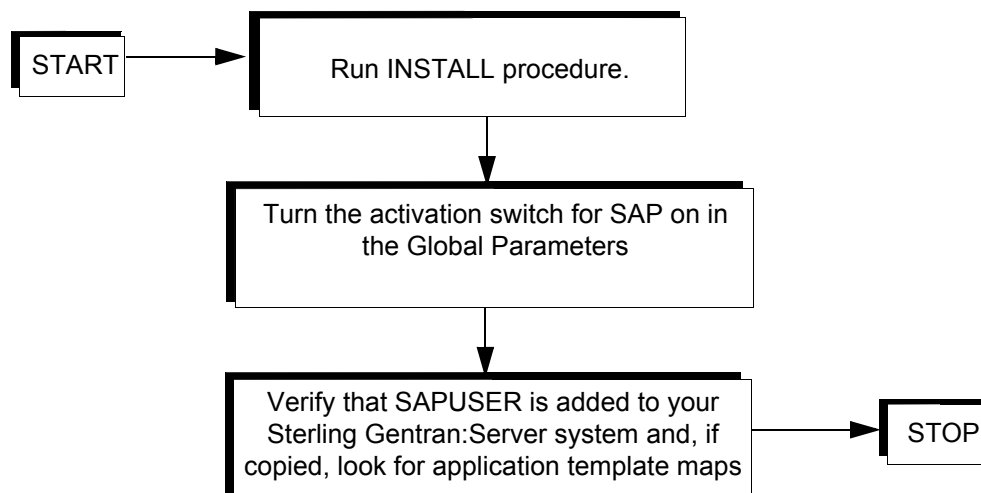| For information on...	See section...
Description of the installation process	A
Step-by-step instructions for performing the installation	B
Step-by-step instructions for verifying that installation was successful	C

Section A: Installation Process Overview

Introduction

The installation process is automated. To install the IBM® Sterling Gentran:Server® Extension for SAP, you simply type the install command. Several prompts require your response. When the installation is complete, you must activate the Sterling Gentran:Server Extension. Steps to help you verify that the Sterling Gentran:Server Extension was successfully installed also are included.

Process

This diagram illustrates the process for installing the Sterling Gentran:Server Extension.

```
  ┌─────────┐        ┌──────────────────────────────┐
  │ START   │ ─────▶ │     Run INSTALL procedure.    │
  └─────────┘        └──────────────────────────────┘
                                   │
                                   ▼
                     ┌──────────────────────────────┐
                     │ Turn the activation switch    │
                     │ for SAP on in                 │
                     │ the Global Parameters         │
                     └──────────────────────────────┘
                                   │
                                   ▼
                     ┌──────────────────────────────┐     ┌────────┐
                     │ Verify that SAPUSER is added  │ ──▶ │  STOP  │
                     │ to your Sterling Gentran:     │     └────────┘
                     │ Server system and, if copied, │
                     │ look for application template  │
                     │ maps                           │
                     └──────────────────────────────┘
```

Section B: Install the Sterling Gentran:Server Extension

Introduction

This section explains how to install the IBM® Sterling Gentran:Server® Extension for SAP.

In this Section

This section contains the following topics:

➢ Pre-installation Requirements

➢ Installation Procedure

➢ Activation Procedure

➢ Environment Setup Procedure

Pre-installation Requirements

To perform the installation, you must have:

❑ IBM® Sterling Gentran:Server® for iSeries® Release 3.6 installed and the most recent cumulative fix applied to your system

❑ The Product/fix CD-ROM or save file containing the template maps, if you want to copy them. If using a save file, the save files must be named G3X6SAPECC and G3X6SAP40.

❑ If using a CD-ROM, the device name where the CD-ROM is loaded

❑ Turn the activation switch for SAP on in the Global Parameters

❑ SAP System installed

❑ The SAP-supplied Remote Function Call (RFC) programs RFCEXEC and STARTRFC located on your system

Installation Procedure

Complete the steps in the following table to install the Sterling Gentran:Server Extension.

Step	Action
1	Sign on as QSECOFR and set your library list to include the Sterling Gentran:Server data and program libraries.

2	Run the install program by typing **SAPINST36** pressing **F4** (Prompt).
	
	System Response: The following displays.
	
	``
	                    SAP Extension Install 3.6 (SAPINST36)
	
	  Type choices, press Enter.
	
	  Create SAP User ID and JOBD? . . *YES *YES, *NO
	  Load SAP Template Maps? . . . . *YES *YES, *NO
	  Device . . . . Name, *SAVF
	  Gentran Data Library . . . . . . G3X6DTA NAME
	  Gentran Program Library . . . . G3X6PGM NAME
	  Temporary Template SAP Lib . . . G3X6SAP NAME
	  Version of IDOC structure . . . _ 4, E
	  Library for Save Files . . . . . Character value
	``

3	In the Create SAP User ID and JOBD field, leave the default value of ***YES**. **System Response**: ■ The install program creates the User ID (SAPUSER) and job description (SAPJOBD) for the Sterling Gentran:Server Extension, attaches the job description to the User ID, and gives the user (SAPUSER) authority in the Sterling Gentran:Server subsystems. ■ The Gentran Data Library and Gentran Program Library field values become required. **NOTE:** This option should only be taken upon the initial install of the SAP Extension. If this command is run subsequent times, *NO should be selected.
4	In the Load SAP Template Maps field, leave the default value of ***YES** if you want to load the maps, or type ***NO** if you do not want to load the maps. **NOTE:** We recommend that you install the maps, particularly if you are a first-time user. See the Glossary for a definition of *Application Template Maps*. **System Response** (when keeping the default ***YES**): ■ The install program copies the application template maps into the Sterling Gentran data library. ■ The Sterling Gentran Data Library and Temporary SAP Library prompts become required. Continued on the next page.

Step	Action
5	If needed for your installation, change the default values in the following fields: ■ Sterling Gentran Data Library ■ Sterling Gentran Program Library ■ Temporary Template SAP Lib ✍ **NOTE** For information about these fields, refer to the online help.
6	When copying the SAP template maps, the version of the IDOC must be provided. Identify which version of SAP is being used. ■ SAP ECC version: Enter **E**. The IDOC structures and/or maps for SAP ECC 5.0 or higher are copied. SAP Version 4.x: Enter **4**. The IDOC structures and/or maps for Version 4 are copied.

Activation Procedure

Complete the steps in the following table to activate the Sterling Gentran:Server Extension.

Step	Action
1	From GENMAIN, enter option **11** Systems Administration Menu, then select option **1** for Global parameters and proceed to the fourth panel. **System Response**: The following displays. ``` EDIX415 Global Parameters EDI 2011/01/27 FMT04 12:00:00 Sequential Check Control . . . . . N (Y/N) Sequential Error Control . . . . . N (Y/N) Compression Level. . . . . I ANSI Subelements . . . . Y (Y/N) EDI Monitor Report . . . . Y (Y/N) Validate Codes . . . . Y (Y/N) Async Communications Activation. . N LU6.2 Communications Activation. . N FTP Communications Activation. . . Y Viewpoint Activation . . . . N SAP Activation . . . . Y F1=Help F7=Back F10=Update F12=Cancel F21=Prt Global F24=More Keys ```
2	In the SAP activation field, enter a **Y** to activate SAP.

Environment Setup Procedure

Complete the steps in the following table to set up the environment for Sterling Gentran:Server Extension.

Step	Action
1	Modify the job description (SAPJOBD) and add the library name that contains the location of the SAP-supplied STARTRFC program to the initial library list.
2	Add the library name that contains the location of the SAP-supplied STARTRFC program to the initial library list of any job description or user profile that will be executing inbound processing of your EDI data into your SAP system.

Section C: Verify the Installation

Introduction

This section explains how to verify that Sterling Gentran:Server Extension installed properly.

✎ **NOTE**

Verification should be done by the QSECOFR who completed the installation.

Verification Procedure

Complete the steps in the following table to verify your installation of Sterling Gentran:Server Extension.

Step	Action
1	Type **GO GENMAINS** on the command line and press **Enter** to access the Sterling Gentran:Server Main Menu.
2	■ From the Sterling Gentran:Server Main Menu, select option **6** (Work with Environment Control). ■ On the Work with Environment Control panel, scroll down the list of users and look for SAPUSER. ✎ **NOTE** If SAPUSER is not on the list, the User ID portion of the installation was not successful. Redo the User ID and job description portion of the installation.
3	■ On the Sterling Gentran:Server Main Menu, select option **2** (Work with Application Definitions). ■ On the Work with Application Definitions panel, scroll down the list of applications and look for the application template map names. (SEE Chapter 5, "Section A: Application Template Maps", for information about the naming conventions used for application template maps.) ✎ **NOTE** If the names are not on the list, the copy portion of the installation failed. You must redo the template map portion of the installation. *Continued on the next page.*

Verification Procedure, Continued

Step	Action
4	■ On the Sterling Gentran:Server Main Menu, select option **3** (Work with Transaction Mapping).
	■ On the Work with Transaction Mapping panel, scroll down the list of maps and look for the application template map names. (SEE Chapter 5, Section A, for information about the naming conventions used for application template maps.)
	✎ **NOTE**
	If the names are not on the list, the copy portion of the installation failed. You must redo the template map portion of the installation.
5	■ Log on to your system as a user who has the capability to run inbound processing.
	■ Edit your library list using the iSeries command **EDTLIBL**.
	■ Look for the library containing the STARTRFC program.
	✎ **NOTE**
	If STARTRFC is not on the list, you must modify your job description and add the library name to the initial library list.

Chapter

3   Configure the Operating Parameters

Introduction

This chapter explains how to configure operating parameters so that the Sterling Gentran:Server Extension works properly.

In this Chapter

This chapter contains the following sections:

For information on...	See section...
Pre-configuration requirements	A
Access Sterling Gentran:Server Extension panels used in modifying parameters	B
Configure the IDOC type/Application Cross-reference table	C
Set inbound/outbound RFC parameters	D
Modify the Sterling Gentran:Server default outbound processing parameters	E
Process inbound data	F
Set SAP system parameters	G
Set SAP partner keys	H

Section A: Pre-configuration Requirements

To configure the Sterling Gentran:Server Extension, you must have a thorough knowledge of:

❑ EDI

❑ The requirements of your trading partners

❑ Your STARTRFC system control parameters

❑ Your SAP partner setup for EDI

Section B: Access Sterling Gentran:Server Extension Panels

Introduction

To modify Sterling Gentran:Server and Sterling Gentran:Server Extension parameters as needed for proper Sterling Gentran:Server Extension operation, you must navigate the SAP Extension Menu (GENSAP). This section describes the menu.

In this Section

This section contains the following topics:

- How to Access the SAP Extension Menu
- The SAP Extension Menu

How to Access the SAP Extension Menu

You can use either of two methods to access the SAP Extension Menu.

Method	Action
1	From the command line, type **GO GENSAP**.
| 2 | From the command line, type **GO GENMAINS**.<br><br>**NOTE:** GENMAINS is your Sterling Gentran:Server Main Menu when you are using the Sterling Gentran:Server Extension; it contains the SAP Extension option.<br><br>**System Response**: The following displays:<br><br>```
GENMAINS      IBM® Sterling Gentran:Server for iSeries® 3.6
                                               System:   ISDDEV01
 Select one of the following:

     1. Work with Partners
     2. Work with Application Definition
     3. Mapping Menu                         (GENMAP)
     4. Communications Menu                  (GENCOM)
     5. Work with Standards
     6. Work with Environment Control

     8. Audit Menu                           (GENAUD)
     9. Message Center Menu                  (GENMSG)
    10. Processing Menu                      (GENPRC)
    11. System Administration Menu           (GENSYS)
    12. Viewpoint Menu                       (GENVPT)
    13. File Tracking Menu                   (GENFILETRK)
    14. SAP Extension Menu                   (GENSAP)
                                                  More...
 Selection or command
 ===>  _____

 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=User Support
``` |
| 3 | On the GENMAINS panel, select option **14** (SAP Extension). |

✑ NOTE

You can designate GENMAINS as your initial menu in Sterling Gentran:Server by changing your Initial Menu value in your iSeries user profile to "GENMAINS." If you do this, GENMAINS will replace GENMAIN as your initial menu.

The Gentran/SAP Extension Menu

The Gentran/SAP Extension menu enables you to access the panels you need to configure Sterling Gentran:Server Extension operations.

The following is the Gentran/SAP Extension Menu (GENSAP):

```
 GENSAP       IBM® Sterling Gentran:Server® Extension for SAP R/3 3.6
                                                      System:   ISDDEV01
  Select one of the following:

     1. Work with IDOC Type / App. ID Cross-Ref.
     2. Work with Inbound/Outbound RFC Parm Definitions
     3. SAP Outbound Processing Parms for PRCTRNOUT
     4. SAP Process Inbound Files            (SAPIN)
     5. SAP System Default Parameters
     6. SAP Partner Cross-reference Definition

    90. Sign off



  Selection or command
  ===>


  F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel  F13=User Support
```

The following table lists the uses of the menu.

The menu enables you to access the...	So you can modify...	In file:
• Work with IDOC/Application Cross-reference panel • IDOC/Application Control panel	IDOC Type/Application ID Cross-reference table	SAPTRN
Work with Inbound/Outbound RFC Parm Definitions panel	SAP inbound/outbound RFC parameter definition	SAPPORT
SAP Outbound Processing Parameter Control panel	SAP outbound processing parameters (PRCTRNOUT parameters)	SAPOUTP
SAPIN command to process Inbound files	the values for the SAPIN inbound processing command parameters	N/A
SAP System Extension Default Parameters panels	SAP system default parameters	SAPSYS
SAP Partner Parameter Control panel	SAP partner cross-reference definition	SAPPRM

You can also sign off the iSeries from this menu.

Section C: Configure the IDOC/Application Cross-references

Introduction

In the Sterling Gentran:Server Extension, the values in the EDI_DC record DOCTYP and MESTYP fields constitute a unique IDOC type. For proper outbound processing, this IDOC type must be paired with an Application ID in the Sterling Gentran:Server system. For each IDOC type that you will process outbound using the Sterling Gentran:Server Extension, you must add an entry to the IDOC Type/Application ID Cross-reference table. (Therefore, you must perform the procedure explained in this section any time you need to add an application for SAP outbound processing.)

This section explains how to use the Work with IDOC/Application Cross-reference panel and IDOC/Application Control panel to enter the necessary information to configure the Cross-reference table.

✍ **NOTE**
If you are using an SAP version of ECC, you will be using the 4.0 version of the IDOC structure. Please use all information pertaining to version 4.0

In this Section

This section contains the following topics:

- The Work with IDOC/Application Cross-reference Panel
- The IDOC/Application Control Panel
- Configuration Procedure

The Work with IDOC/Application Cross-reference Panel

This panel enables you to add, revise, copy, delete, and view IDOC information.

How to Access

Select option **1** (Work with IDOC Type/App. ID Cross-Ref.) on the Gentran/SAP Extension Menu.

Example Panel

The following is an example of the Work with IDOC/Application Cross-reference panel (EDIX065).

```
  EDIX065            Work with IDoc/Application Cross-Reference    EDI 04/30/11
  FMT01                 pgmlib: G3X6PGM    dtalib: G3X6DTA              12:00:00

  Position to IDoc Type _____
            Msg Type _____
  Type option (and Information), press Enter.
    1=Create  2=Revise  3=Copy  4=Delete  5=View


  Opt IDoc Type                    Msg Type                    Appl ID
  ___ _____     _____
  ___ DESADV01                     DESADV                      SEMINAPPL
  ___ INVOIC01                     INVOIC                      INVOIC
  ___ ORDERS01                     ORDERS                      POFILE




                                                                     Bottom
  Parameters or command
  ===> _____
  F1=Help  F3=Exit  F4=Prompt  F5=Refresh  F12=Cancel  F15=Sort  F24=More Keys
```

The IDOC/Application Control Panel

This panel enables you to enter the Application ID name that you are pairing with the designated IDOC type.

How to Access

Select one of the options from the Work with IDOC/Application Cross-reference panel and press **Enter**. (For this example, DESADV01 has been selected.)

Example Panel

The following is an example of the IDOC/Application Control panel (EDIX066).

```
  EDIX066                   IDoc/Application Control              EDI 04/30/11
  FMT01                                                             12:00:00



   Document Type. . . . . . . . . .   DESADV01
   Message Type . . . . . . . . . .   DESADV
   Description. . . . . . . . . . .   Class Tutorial: Outb. Invoice


   Application ID . . . . . . . . .   SEMINAPPL




   F1=Help  F4=Prompt  F10=Update  F12=Cancel  F24=More Keys
```

Configuration Procedure

Complete the steps in the following table to configure IDOC type entries.

Step	Action
1	Select option **1** (Work with IDOC Type/App. ID Cross-Ref.) on the SAP Extension Menu (GENSAP) to access the Work with IDOC/Application Cross Reference panel (EDIX065).
2	Select the option you need on the Work with IDOC/Application Cross-reference panel and press **Enter** to access the IDOC/Application Control panel (EDIX066).
3	Enter your values in the fields as described in the table below.

Work with IDOC/Application Cross-reference panel field descriptions

Field Name	Description	Get the value from....
Document Type	Intermediate document (IDOC) type	SAP EDI_DC record (DOCTYP field)
Message Type	Logical message type	SAP EDI_DC record (MESTYP field)
Application ID	The application ID to be paired with the IDOC type	Sterling Gentran:Server system

Section D: Inbound/Outbound RFC Parameter Definitions

Introduction

In the SAP system, the fields SNDPOR and RVCPOR in the EDI_DC record constitute a unique SAP instance. The Sterling Gentran:Server Extension uses these two fields to determine which instance of SAP the data is sent to.

For outbound processing, these two fields are saved to send the status records back to the proper SAP instance (one installed copy of the software). For inbound processing, the data is sorted by these two fields and the IDOCs are sent to the appropriate destination.

These configuration panels allow you to set up the RFC parameters required for the STARTRFC program for each instance you have on your SAP system by using the SNDPOR and RCVPOR values.

This section explains how to use the Work with Inbound/Outbound RFC Parm Definitions panel and the Inbound/Outbound RFC Parm Control panel to enter the information required to configure the STARTRFC parameters for each instance of SAP.

> ✍ **NOTE**
> This step is required even if you only have one instance of SAP on your system.

In this Section

This section contains the following topics:

- The Work with Inbound/Outbound RFC Parm Definitions Panel
- The Inbound/Outbound RFC Parm Control Panel
- Configuration Procedure

Work with Inbound/Outbound RFC Parm Definitions Panel

This panel enables you to add, revise, copy, delete, and view RFC Parm Definition information.

How to Access

Select option **2** (Work with Inbound/Outbound RFC Parm Definitions) on the Gentran/SAP Extension menu.

Example Panel

The following is an example of the Work with Inbound/Outbound RFC Parm Definitions panel (EDIX067).

```
 EDIX067     Work with Inbound/Outbound RFC Parm Definitions     EDI 04/30/11
 FMT01               pgmlib: G3X6PGM     dtalib: G3X6DTA              12:00:00


 Position to Sender Port _____     Receiver Port _____


 Type option (and Information), press Enter.
   1=Create  2=Revise  3=Copy  4=Delete  5=View


 Opt  Sender Port   Receiver Port
 ___   _____      _____
 ___    SAP01         STERLING
 ___    SAP02         STERLING






                                                                    Bottom
 Parameters or command
 ===> _____
 F1=Help  F3=Exit  F5=Refresh  F9=Retrieve  F12=Cancel
```

✎ **NOTE**

The Sender Port represents the SNDPOR field value in the EDI_DC record. The Receiver Port represents the RCVPOR field value in the EDI_DC record. There must be a match for these fields in the EDI_DC record and this Work with panel for the data to be sent to the SAP system properly.

Inbound/Outbound RFC Parm Control Panels

These panels enable you to enter the inbound and outbound RFC parameter definitions for a specific instance of SAP.

How to Access

Select one of the options from the Work with Inbound/Outbound RFC Parm Definitions panel and press **Enter**.

Example Panel

The following is an example of the Inbound RFC Parm Definition Panel (EDIX068-FMT01).

```
 EDIX068              Inbound/Outbound RFC Parameter Control        EDI 04/30/11
 FMT01                                                                  12:00:00
             Enter INBOUND Sterling Gentran:Server Extension Parameters

  SAP Version  . . . . . . . . .  -3
  SAP System ID  . . . . . . . .  -d    SSW
  SAP System User  . . . . . . .  -u    EDI7
  SAP User Password  . . . . . .  -p    STERLING
  SAP System Client  . . . . . .  -c    040
  SAP System Language  . . . . .  -l    E
  SAP Application Server  . . . .  -h    hw1138
  SAP System Id  . . . . . . . .  -s    95
  SAP Gateway Server . . . . . .  -g    hw1139
  SAP Service  . . . . . . . . .  -x    sapgw95
  SAP EDI Port . . . . . .  -E PORT=    STERLING
  SAP Function Module  . . . . . .      EDI_DATA_INCOMING
  Pass RFC Trace Flag?  . . . . . -t    Y  (Y/N)

  Inbound Stream File for STARTRFC     /directory/for/sap/inbound


  F1=Help  F5=Refresh  F8=Next  F10=Update  F12=Cancel
```

Press **F8** or **Enter** to access the outbound RFC parameters panel.

The following is an example of the Outbound RFC Parm Definition Panel (EDIX068-FMT02).

```
EDIX068            Inbound/Outbound RFC Parameter Control       EDI 04/30/11
FMT01                                                               12:00:00
           Enter OUTBOUND Sterling Gentran:Server Extension Parameters

 SAP Version  . . . . . . . . .  -3
 SAP System ID  . . . . . . . .  -d    SSW
 SAP System User  . . . . . . .  -u    EDI7
 SAP User Password  . . . . . .  -p    STERLING
 SAP System Client  . . . . . .  -c    040
 SAP System Language  . . . . .  -l    E
 SAP Application Server  . . . .  -h    hw1138
 SAP System Id  . . . . . . . .  -s    95
 SAP Gateway Server . . . . . .  -g    hw1138
 SAP Service  . . . . . . . . .  -x    sapgw95
 SAP EDI Port . . . . . .  -E PORT=    STERLING
 SAP Function Module  . . . . . .
 Pass RFC Trace Flag?  . . . . . -t    Y   (Y/N)

 Inbound Stream File for STARTRFC     /directory/for/outbound/statusfile


 F1=Help  F5=Refresh  F8=Next  F10=Update  F12=Cancel
```

Procedure for Setting Parameters on EDIX068-FMT01

Complete the steps in the following tables to set the parameters.

STARTRFC Control Parameters (Inbound)

These parameters can be found on your SAP system.

> #### ✎ NOTE
> The values in parentheses refer to the SAP system parameters as defined in the SAP documentation.

Step	Type your value in the following field:	For Example...	Information to help you locate and enter your value:
1	SAP System ID (-d)	SSW	Use **SM51**; the second part of the field separated by underscores represents the SAP system ID.
2	SAP System User (-u)	EDI7	A special CPI-C user is not required (a user of type dialog is sufficient). You must enter the value in upper case letters.
3	SAP User Password (-p)	STERLING	You must enter the value in upper case letters.
4	SAP System Client (-c)	040	The default value is **000**. The value for this field is contained in the MANDT field of the EDI_DC control record.
5	SAP System Language (-l)	E	The default value is **E**.
6	SAP Application Server (-h)	hw1138	Use **SM51**; the first part of the field separated by underscores represents the application server. This parameter is case-sensitive.
7	SAP System Id (-s)	95	This is the two-digit system identification number. Use **SM51**; the third part of the field separated by underscores represents the system ID number.

Step	Type your value in the following field:	For Example...	Information to help you locate and enter your value:
8	SAP Gateway Server (-g)	hw1139	This parameter is case-sensitive. Follow these directions to locate the value: • Use **SE38**. • Enter the report name **rsparam**. • Choose **Execute**. • Choose **System** → **List** → **Find String**. • Enter **rdisp/sna_g**. • Position the cursor by double-clicking the first line. • Find the gateway server in this line: **rdisp/sna_gateway**. • Scroll right.
9	SAP Service (-x)	sapgw95	This parameter is case-sensitive. This is the gateway service as in /etc/services1. Follow these directions to locate the value: • Use **SE38**. • Enter the report name **rsparam**. • Choose **Execute**. • Choose **System** → **List** → **Find String**. • Enter **rdisp/sna_g**. • Position the cursor by double-clicking the first line. • Find the gateway server in this line: **rdisp_gw_service**. • Scroll right.
10	SAP EDI Port (-E PORT=)	STERLING	This is the logical name of the EDI subsystem as stipulated in the port definition. The maximum length for this field is 10 characters.

Step	Type your value in the following field:	For Example...	Information to help you locate and enter your value:
11	Pass RFC Trace Flag? (-t)	Y	Type **Y** if you want the -t parameter to be passed to STARTRFC. Type **N** if you do not want the -t parameter to be passed to STARTRFC.
12	Inbound Stream File for STARTRFC	/directory/for /sap/inbound	This value is the name of the Inbound Stream file directory for STARTRFC. You MUST type the complete directory name. Do not type the **/** following the last directory node (the Sterling Gentran:Server Extension inserts it prior to the unique file name). SAP expects all records from an inbound run to be placed into this directory. A unique file name is created during inbound execution and appended to this directory name prior to sending the information to SAP.

Procedure for Setting Parameters on EDIX068-FMT02

Complete the steps in the following table to set the parameters.

STARTRFC Control Parameters (Outbound)

✎ **NOTE**

The values in parentheses refer to the SAP system parameters as defined in the SAP documentation.

Step	Type your value in the following field:	For example...	Information to help you locate and enter your value:
1	SAP System ID (-d)	SSW	Use **SM51**; the second part of the field separated by underscores represents the SAP system ID.
2	SAP System User (-u)	EDI7	A special CPI-C user is not required (a user of type dialog is sufficient). You must enter the value in upper case letters.
3	SAP User Password (-p)	STERLING	You must enter the value in upper case letters.
4	SAP System Client (-c)	040	The default value is **000**. The value for this field is contained in the MANDT field of the EDI_DC control record.
5	SAP System Language (-l)	E	The default value is **E**.
6	SAP Application Server (-h)	hwll38	Use **SM51**; the first part of the field separated by underscores represents the application server. This parameter is case-sensitive.
7	SAP System Id (-s)	95	This is the two-digit system identification number. Use **SM51**; the third part of the field separated by underscores represents the system ID number.

Step	Type your value in the following field:	For example...	Information to help you locate and enter your value:
8	SAP Gateway Server (-g)	hwll39	This parameter is case-sensitive. Follow these directions to locate the value: • Use **SE38**. • Enter the report name **rsparam**. • Choose **Execute**. • Choose **System** → **List** → **Find String**. • Enter **rdisp/sna_g**. • Position the cursor by double-clicking the first line. • Find the gateway server in this line: **rdisp/sna_gateway**. • Scroll right.
9	SAP Service (-x)	sapgw95	This parameter is case-sensitive. This is the gateway service as in /etc/services1. Follow these directions to locate the value: • Use **SE38**. • Enter the report name **rsparam**. • Choose **Execute**. • Choose **System** → **List** → **Find String**. • Enter **rdisp/sna_g**. • Position the cursor by double-clicking the first line. • Find the gateway server in this line: **rdisp_gw_service**. • Scroll right.
10	SAP EDI Port (-E PORT=)	STERLING	This is the logical name of the EDI subsystem as stipulated in the port definition. The maximum length for this field is 10 characters.

Step	Type your value in the following field:	For example...	Information to help you locate and enter your value:
11	Pass RFC Trace Flag? (-t)	Y	Type **Y** if you want the -t parameter to be passed to STARTRFC. Type **N** if you do not want the -t parameter to be passed to STARTRFC.
12	Outbound Stream File for STARTRFC	/directory/for /outbound /status	This value is the name of the Outbound Stream file directory for STARTRFC. You MUST type the complete directory name. Do not type the '/' following the last directory node (the Sterling Gentran:Server Extension inserts it prior to the unique file name). SAP expects all status records from an outbound run to be placed in this directory. A unique file name is created during the outbound execution and appended to this directory name prior to sending the information back to SAP.

Getting Help

For details about each parameter, refer to the online help.

Section E: Modify Outbound Parameters

Introduction

Default Sterling Gentran:Server outbound processing parameters are set during installation of the Sterling Gentran:Server Extension. Your processing requirements, however, may require you to modify these parameters. This section explains how to use the SAP Outbound Processing Parameter Control panel to modify the parameters.

In this Section

This section contains the following topics:

- The SAP Outbound Processing Parameter Control Panel
- When to Modify
- Procedure
- Getting Help

The SAP Outbound Processing Parameter Control Panel

This panel enables you to:

- Process using debug mode
- Use special UCS numbering
- Execute special user exits during outbound processing
- Process VAT data
- Set process name for the message center
- Set report parameters

✎ NOTE

The parameters on this panel do not control the use of concurrent processing. SEE "Section G: Set SAP System Parameters" for information about setting parameters to control concurrent processing.

✎ NOTE

The Sterling Gentran:Server Extension does not require that you specify the Application IDs to process because these are determined by SAPPREO during processing.

How to Access

Select option **3** (SAP Outbound Processing Parms for PRCTRNOUT) on the Gentran/SAP Extension Menu.

Example Panel

This is an example of the SAP Outbound Processing Parameter Control panel (EDIX061).

```
  EDIX061        (PRCTRNOUT) SAP Outbound Processing Parameters    EDI 04/30/11
  FMT01                                                                12:00:00
            Type choices, press Enter.

   Mapper Debug Switch? . . . . . . .     *NO              *YES, *NO
   Clear Temporary Files? . . . . . .     *YES             *YES, *NO

   Use UCS Numbers For  . . . . . . .                      Character value


   Use 5/4 Numbers For  . . . . . . .                      Character value


   Use 6/3 Numbers For  . . . . . . .                      Character value


   Decimal Point. . . . . . . . . . .     _                Character value
   User Exits:
      Start. . . . . . . . . . . . .                       Character value
      End. . . . . . . . . . . . . .                       Character value
   Collect VAT Data ? . . . . . . . .     *NO              *YES, *NO

   F1=Help  F5=Refresh  F8=Next  F10=Update  F12=Cancel
```

Press **F8** to get to the next screen, as shown below:

```
  EDIX061        (PRCTRNOUT) SAP Outbound Processing Parameters    EDI 04/30/11
  FMT02                                                                12:00:00
            Type choices, press Enter.

   Process Name . . . . . . . . . . .     SAPOUT
   Editor Detail Report?  . . . . . .     *GLBPRM          *GLBPRM, *YES, *NO
   Print Parameters Report? . . . . .     *NO              *YES, *NO
   Suspend Blank Appl. Partner? . . .     *YES             *YES, *NO
   Comm Profile ID  . . . . . . . . .     *PARTNER         *PARTNER, Profile ID

   Control Record Pass Thru? . . . .      *NO              *YES, *NO

   Control/Sender's Ref. Length  . .      14               06, 14
   Batch ID . . . . . . . . . . . . .




   F1=Help  F5=Refresh  F7=Back  F10=Update  F12=Cancel
```

When to Modify

You must modify the default parameters if you need to use any of the following features to meet your processing requirements:

- Debug mode
- UCS numbering
- User exits
- Collection of VAT data
- Process name
- Reporting parameters
- Blank partner processing
- Communication profile configuration

Procedure

Complete the steps in the following table if you need to modify the default Sterling Gentran:Server outbound processing parameters.

Step	Action
1	Select option 3 (SAP Outbound Processing Parms for PRCTRNOUT) on the SAP Extension Menu (GENSAP) to access the SAP Outbound Processing Parameter Control panel (EDIX061).
2	Enter values in the following fields as needed: • Debug Switch? • Process Name • Clear Temporary Files? • Editor Detail Report? • Use UCS Numbers For • Print Parameters Report? • Use 5/4 Numbers For • Suspend Blank Appl Partner? • Use 6/3 Numbers For • Comm Profile ID • Decimal Point? • Control Record Pass Thru? • User Exits • Control Sender's Ref Length Start End • Collect VAT Data?

Getting Help

For details about each parameter, refer to the online help.

Section F: Processing Inbound

Introduction

The SAPIN command initiates the Inbound processing flow. The SAPIN command has fewer parameters than the PRCTRNIN command. It is necessary to use the SAPIN command to complete the process flow to SAP.

In this Section

This section contains the following topics:

- SAPIN Command Parameters
- When to Modify
- Procedure
- Getting Help

How to Access

Select option **4** (SAP Process Inbound Files) on the SAP Extension menu.

Example Panels

These figures illustrate the SAPIN command.

```
                    Process SAP Documents Inbound (SAPIN)

 Type choices, press Enter.

 Comm Profile ID (Editor) . . . .   *NONE          *NONE, *ALL, Comm Profile Id
              + for more values    _____
 Application ID  (Mapper) . . . .   *ALL           *NONE, *ALL, Application Id
              + for more values    _____
 Mapper Debug Report? . . . . . .   *NO            *YES, *NO
 Clear Temporary Files? . . . . .   *YES           *YES, *NO
 Acknowledgment Reports:
   Print Report?  . . . . . . . .   *NO            *YES, *NO
   Split File . . . . . . . . . .   00000          00000-00080, SLIDE
   Sub-Split File . . . . . . . .   00             00-80
 Replace Data in App. Files?  . .   *NO            *YES, *NO
 Run Interactively? . . . . . . .   *NO            *YES, *NO

                        Additional Parameters

 Process Name . . . . . . . . . .   SAPIN
                                                                      More...
 F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
 F24=More keys
```

Press **Page Down** to get to the next screen, as shown below:

```
                  Process SAP Documents Inbound (SAPIN)

 Type choices, press Enter.

 Editor Detail Report?  . . . . .    *GLBPRM       *GLBPRM, *YES, *NO
 Print Parameters Report? . . . .    *NO           *YES, *NO
 Generate Acknowledgments?  . . .    *GLBPRM       *GLBPRM, *NO
 First Segment Mandatory? . . . .    *NO           *NO, *YES
 User Exits:
   Start  . . . . . . . . . . .                    Character value
   End  . . . . . . . . . . . .                    Character value
 Collect VAT Data?  . . . . . . .    *NO           *YES, *NO
 Control/Sender's Ref. Length . .    14            06, 08, 14
 Clear Values at Section Break?      *NO           *NO, *YES
 Batch ID for Processing  . . . .

 Batch ID for Acks  . . . . . . .



                                                                  More...
  F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
  F24=More keys
```

Press **Page Down** to get to the next screen, as shown below:

```
                  Process SAP Documents Inbound (SAPIN)

 Type choices, press Enter.

 INS Acknowledgments:
   Command Set  . . . . . . . . .    0             0-2
   Split File . . . . . . . . . .    00000         00000-00080, SLIDE
   Sub-Split File . . . . . . . .    00            00-80
   Override Partner Xref Qual . .    *NO           *YES, *NO
   Qualifier Value  . . . . . . .                  Character value
 Viewpoint INS Reports:
   Command Set  . . . . . . . . .    0             0-2
   Split File . . . . . . . . . .    00000         00000-00080, SLIDE
   Sub-Split File . . . . . . . .    00            00-80




                                                                  Bottom
  F3=Exit    F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
  F24=More keys
```

When to Modify

The following table describes some of the parameters you may need to modify.

Parameter	Description/Reason to modify	Value to enter...
Comm Profile ID	This field defaults to ***NONE** (no profiles are accessed). You must change it if you need to specify a particular Comm Profile ID.	• Specify a particular Comm Profile ID • Specify multiple Comm Profile IDs • Specify ***ALL** to access all Comm Profiles.
Application ID	These fields are populated with the Sterling Gentran:Server Application IDs that were created specifically for the Sterling Gentran:Server Extension. **NOTE:** This parameter is required. At least one application ID must be entered.	The application ID that corresponds to the IDOC types you want to process
Mapper Debug Report?	This field defaults to ***NO**. You must change the value to ***YES** if you want to receive this report.	• ***YES** to generate the report • ***NO** (the default value)
Process Name	This is the value that is logged in the Message Center to identify this job.	Enter the value to identify this job in the Message Center.
Replace Data in App. Files?	This parameter defaults to ***NO** because the Sterling Gentran:Server Extension handles the clearing of application files.	***NO**
Acknowledgment Reports flag	This field defaults to ***NO**. You must change the value to ***YES** if you want to receive these reports and specify the split file where acknowledgments are routed.	• ***YES** if you want the reports • Leave the default value of ***NO**
INS Acknowledgments and Reports	These fields are preset to bypass these reports. You must modify the parameters if you want to activate the option.	The appropriate values as configured for your system
User Exits	This field configures run-level user exits.	Your user exit programs, as appropriate

Parameter	Description/Reason to modify	Value to enter...
Collect VAT Data?	This field defaults to ***NO** if Value Added Tax (VAT) reporting	• ***YES** to generate the report • ***NO** (the default value)
Control Sender's Ref. length	This parameter provides the ability to control the length of the number used for the interchange control reference in the UNB segment (EDIFACT) and for the interchange sender reference in the STC segment (TRADACOMS).	• **6** (use the last 6 digits of the reference number) • **8** (use the last 8 digits of the reference number) • **14** (use all 14 digits – the default value)

✎ **NOTE**

All of the Application IDs that are automatically created for the Sterling Gentran:Server Extension must point to the same physical file for the Sterling Gentran:Server Extension to function properly.

Procedure

Complete the steps in the following table to modify the default Sterling Gentran:Server inbound processing parameters.

Step	Action
1	Select option **4** (SAP Process Inbound Files) on the SAP Extension menu.
2	Type your values in the following fields as needed. • Comm Profile ID • Application ID • Mapper Debug Switch? • Clear Temporary Files? • Replace Data in App. Files? • Reporting parameters • Generate acknowledgments • Process name • Collect VAT Data? • Control sender's Ref. length

3	Type your values in the following fields as needed.
	
	• Acknowledgment Reports:
	    Report
	    Split File
	    Sub-Split
	• INS Acknowledgments:
	    Command Set
	    Split File
	    Sub-Split
	    Override Partner Xref Qual
	    Qualifier Value
	• Viewpoint INS Reports:
	    Command Set
	    Split File
	    Sub-Split
	• User Exits
	    Start
	    End

Getting Help

For details about each parameter, refer to the online help.

Section G: Set SAP System Parameters

Introduction

This section explains the steps you must take to set the SAP parameters for the Sterling Gentran:Server Extension. These parameters direct Sterling Gentran:Server Extension processing so that information is processed correctly in the SAP system.

You must use the SAP System Extension Default Parameters panel (EDIX064-FMT01).

In this Section

This section contains the following topics:

- The SAP System Extension Default Parameters Panels
- Procedure for Setting Parameters on EDIX064-FMT01
- Getting Help

The SAP System Extension Default Parameters Panels

This panel enables you to set or modify systems parameter information in the SAPSYS (System Parameter) file.

The values entered on this panel are used for both inbound and outbound processes, including:

- Archiving instructions
- Error report printing
- Status reporting
- Concurrent processing
- Inbound application file name

How to Access

Select option **5** (SAP System Default Parameters) from the SAP Extension Menu to access EDIX064-FMT01. After you have entered your values on this panel, press **F10** (Update).

Panel Examples

The following figure illustrates the SAP System Extension Default Parameters (EDIX064-FMT01) panel.

```
 EDIX064          SAP System Extension Default Parameters       EDI 04/30/11
 FMT01                                                              12:00:00

  Archive Inbound IDOC File? . . . .      N    (Y/N)
  Archive Inbound Library  . . . . .
  Archive Outbound IDOC File?  . . .      N    (Y/N)
  Archive Outbound Library . . . . .

  Print Outbound Error Report? . . .      Y    (Y/N)

  Enable SAP Status Activity . . . .      Y    (Y/N)

  SAP IDOC Structure Version . . . .      4
  SAP Version . . . . . . . . . . .       4.6b

  Delete SAP Outbound File? . . . .       N    (Y/N)
  Remove SAP Outbound Member Only?        Y    (Y/N)

  Inbound Concurrent Processing?. .       N    (Y/N)
  Outbound Concurrent Processing? .       N    (Y/N)
  Inbound Application File/Library        SAPINFILE  / G3X6DTA

 F1=Help  F5=Refresh  F10=Update  F12=Cancel
```

Procedure for Setting Parameters on EDIX064-FMT01

Complete the steps on the following table to set the parameters on the EDIX064-FMT01 panel:

Step	Indicate...	Using field(s)...	By typing ...
1	Whether you want to archive the inbound and outbound IDOC files, and in what library the files are to be placed	Archive Inbound IDOC File?	**Y** or **N**
		Archive Inbound Library	The name of the library **NOTE:** Library must already exist.
		Archive Outbound IDOC File?	**Y** or **N**
		Archive Outbound Library	The name of the library **NOTE:** Library must already exist.
2	Whether you want to print the Outbound Error Report This report is generated from the SAPPREO program during Sterling Gentran:Server Extension outbound processing. The report lists the following: • IDOC type (DOCTYP) and message type (MESTYP), if there is no corresponding Sterling Gentran:Server Application ID entry found in the IDOC Type/Application ID Cross-reference table • Partner ID (created from the fields specified in the SAP Partner Definition), if the program couldn't find an existing Sterling Gentran:Server Partner or Partner Cross-reference	Print Outbound Error Report?	**Y** or **N** **NOTE:** Typing Y for this parameter is the only way to print this report.
3	Whether you want to enable SAP Status Activities This field indicates to the Sterling Gentran:Server Extension whether or not to send status messages back to SAP for outgoing documents.	Enable SAP Status Activity	**Y** or **N**

Step	Indicate...	Using field(s)...	By typing ...
4	The SAP IDOC structure version under which you are operating This field identifies whether version 3 or 4 IDOC structures are being used.	SAP IDOC Structure Version	The SAP IDOC structure version **NOTE:** This is a required field and determines whether you are processing with Version 3 or Version 4 of the IDOC structure.
5	What version of SAP you are currently running This field is used in user exit SAPUSR2 to populate the DOCREL field in the EDI_DC record.	SAP Version	The SAP version name
6	Whether you are using inbound and/or outbound concurrent processing	Inbound Concurrent Processing? Outbound Concurrent Processing?	**Y** or **N** **NOTE:** If you type **Y**, the Sterling Gentran:Server Extension automatically fills in the appropriate values in the PRCTRNIN and PRCTRNOUT commands. If you type **N**, the Sterling Gentran:Server Extension uses the default values.
7	Inbound Application File/Library	SAPINFILE G3X6DTA	You must designate the file and library that your inbound applications are pointing to. **NOTE:** This is the file/library that was entered when you created your Sterling Gentran:Server application. If you are going to process multiple applications, they must all point to the file/library name that is entered here.

Getting Help

For details about each parameter, refer to the online help.

Section H: Setting SAP Partner Keys

Introduction

Each trading partner in SAP must have a corresponding unique trading partner created in Sterling Gentran:Server (for outbound processes only). SAP *partner keys* are used to link the SAP Partner to the correct trading partner in Sterling Gentran:Server. Therefore, you must designate the fields in the EDI_DC record that will be your SAP partner keys for the unique trading partner(s) you create. This section explains how to use the SAP Partner Control panel to set up the trading partners' SAP partner keys.

In this Section

This section contains the following topics:

- The SAP Partner Control Panel
- Procedure

The SAP Partner Control Panel

This panel enables you to assign the SAP partner keys that make your unique Trading Partners.

Fields to Use

Based on your SAP requirements, you must select the appropriate fields from this panel (they reflect fields in the SAP EDI_DC record) that make a unique trading partner. The following table describes the fields that apply.

SAP Partner Keys				
Field	**Description**	**Start**	**Length**	**Example**
RCVPRN	Partner number of receiver	57	10	0000001161
RCVPRT	Partner type of receiver	55	2	KU
RCVPFC	Partner function of receiver	440	2	AG
MESTYP	Logical message type	418	6	ORDRSP
MESCOD	Logical message variant	171	3	SD1
MESFCT	Logical message function	174	3	123
TEST	Test option	178	1	X

How to Access

Select option **6** (SAP Partner Cross-reference Definition) on the Gentran/SAP Extension Menu.

Example Panel

This is an example of the SAP Partner Parameter Control panel (EDIX063).

```
EDIX063                   SAP Partner Parameter Control          EDI 04/30/11
FMT01                                                                12:00:00



(RCVPRN) Partner No. of Rec. . . .     Y      Length  10 Positions

(RCVPRT) Partner Type of Rec . . .     N      Length   2 Positions

(RCVPFC) Partner Function of Rec .     N      Length   2 Positions

(MESTYP) Logical Mess. Type  . . .     N      Length   6 Positions

(MESCOD) Logical Mess. Variant . .     N      Length   3 Positions

(MESFCT) Logical Mess. Function  .     N      Length   3 Positions

(TEST)   Test Option . . . . . . .     N      Length   1 Positions




F1=Help  F5=Refresh  F10=Update  F12=Cancel
```

Procedure

Complete the steps in the following table to specify the fields you are using to create your SAP Trading Partner.

Step	Action
1	Select option **6** (SAP Partner Cross-reference Definition) on the SAP Extension Menu (GENSAP) to access the SAP Partner Parameter Control panel (EDIX063).
2	Type a **Y** next to each field you want to include to define your trading partner profile.
3	Type an **N** next to the fields you do not want to include.
4	Press **F10** to update.

Chapter

4 Configuring Trading Partner Lookups

Introduction

During outbound processing only, the Sterling Gentran:Server Extension combines the SAP partner keys that you set in Section H, "Setting SAP Partner Keys," in Chapter 3. The combination of these keys makes up your unique trading partner profile. You must enter each unique trading partner created in SAP into the Sterling Gentran:Server system. This chapter explains the procedure you must follow to create this association between your SAP trading partners and Sterling Gentran:Server.

In this Chapter

This chapter contains the following sections.

For information on...	See section...
The two methods you can use to associate your SAP trading partners with Sterling Gentran:Server	A
• Decide which method to use • Where the instructions are located in the Sterling Gentran:Server documentation	B
Examples showing trading partner lookups using both methods	C

Section A: Methods of Association

Introduction

This section describes the different ways you can associate your outbound SAP trading partners with Sterling Gentran:Server.

Reference Information

This table lists background information you may find helpful.

For more information about:	Refer to this documentation:
Partner profiles	The "Setting Up a New Partner Profile" section in the IBM® Sterling Gentran:Server® for iSeries® Release 3.6 *User Guide*, Chapter 3
Partner cross-references	The "Partner Cross References" section in the IBM® Sterling Gentran:Server® for iSeries® Release 3.6 *User Guide*, Chapter 3

Compare Methods

You can use either of the following two methods to associate your SAP trading partners with Sterling Gentran:Server:

Method	How it works
Direct Lookup	You create a Sterling Gentran:Server partner.
Cross-Reference Lookup	You make the SAP partner a cross-reference to an existing Sterling Gentran:Server partner by pointing the newly-created cross reference to a descriptive trading partner ID.

Section B: Choose a Method

Use this table to determine the method that is appropriate for your installation.

If you want to:	Use this method:	This section of the *Sterling Gentran:Server User Guide*, Chapter 3, contains instructions:
Use the values from the fields that you selected on the SAP Partner Parameter Control panel to define your Sterling Gentran:Server trading partner...	Direct Lookup	"Set Up a New Partner Profile"
If you want to create your Sterling Gentran:Server trading partner ID using an easily recognizable reference (for example, company name or DUNS number) and the Sterling Gentran:Server Partner ID does not match your SAP Partner Key values...	Cross-reference Lookup	• "Set Up a New Partner Profile" • "Partner Cross-references"

Section C: Partner Examples

Introduction

This section contains examples of trading partner associations created using both the Direct Lookup and Cross-reference Lookup methods.

✑ **NOTE** ―――――――――――――――――――――――――――――――――――――――

For more information about creating your unique trading partner in Sterling Gentran:Server, see "Section G: Set SAP Partner Keys" in Chapter 3 of this guide.

―――

Example Set 1

Assumptions

In both examples in Example Set 1, we assume that you have chosen to use these fields from the SAP EDI_DC record to create your unique trading partner. The table also lists the field values.

Field	Value
RCVPRN	0000012584
RCVPRT	KU
RCVPFC	WE

Partner Created Using Direct Lookup

To create the Partner using the Direct Lookup Method, type the required information on the Work With Partner panel as depicted in this illustration.

```
 EDIX005                     Work with Partners              EDI 04/30/11
 FMT01                  pgmlib: G3X6PGM    dtalib: G3X6DTA           12:00:00


 Position to Partner ID . . . . . .  _____  Qual ____

 Type option (and Information), press Enter.
   1=Create  2=Revise  3=Copy  4=Delete  5=View  6=Print  7=Rename  11=Groups

 Opt Partner ID                  Qual Partner Name
 1   012561     WE                ____
 __  !GENTRAN-RESERVED-PARTNER-ID-1     Global Reserved Partner
 __  AAA WAREHOUSE CO 11           01   Arnold/Allen/Atwell Warehouse
 __  BG-PARTNER                         Example of a BG Partner
 __  COFFEE                             COFFEE DIST (INB ORDER-OUT INVOIC)
```

Partner Created Using Cross-reference Lookup

To create the Partner using the Cross-reference Lookup method on the Sterling Gentran:Server system, you would have created a partner using the Work With Partners panel as was done in the Direct Lookup example, but using a different partner ID.

Then type the required information on the Partner Cross Reference panel as shown below:

```
 EDIX008                  Partner Cross Reference          EDI   04/30/11
 CTL01                                                           12:00:00

 Partner ID . . . . . . . . . . .  SAP PARTNER
 Qualifier. . . . . . . . . . . .
 Partner Name . . . . . . . . . .  SAP PARTNER

 Type option, press Enter.
   4=Delete

 Opt X-Ref                              Qual
  __   000001258KUWE_____     __
  __   _____      __
  __   _____      __
  __   _____      __
  __   _____      __
  __   _____      __
  __   _____      __
  __   _____      __

                                                              More...
 F1=Help  F4=Prompt  F5=Refresh  F10=Update  F12=Cancel  F24=More Keys
```

Example Set 2

Assumptions

In both of the examples in Example Set 2, we assume that you have chosen to use these fields from the SAP EDI_DC record to create your unique trading partner. This table also lists the field values.

Field	Value
RCVPRN	012561
RCVPRT	
RCVPFC	WE

Partner Created Using Direct Lookup

To create the partner using the Direct Lookup Method, type the required information on the Work With Partner panel as depicted in this illustration.

```
 EDIX005                      Work with Partners              EDI 04/30/11
 FMT01                   pgmlib: G3X6PGM     dtalib: G3X6DTA          12:00:00

 Position to Partner ID . . . . . . _____  Qual ____

 Type option (and Information), press Enter.
   1=Create  2=Revise  3=Copy  4=Delete  5=View  6=Print  7=Rename  11=Groups

 Opt Partner ID                Qual Partner Name
 1   012561     WE_____
 __  !GENTRAN-RESERVED-PARTNER-ID-1    Global Reserved Partner
 __  AAA WAREHOUSE CO 11           01  Arnold/Allen/Atwell Warehouse
 __  BG-PARTNER                        Example of a BG Partner
 __  COFFEE                            COFFEE DIST (INB ORDER-OUT INVOIC)
```

✎ **NOTE**

The partner values are all positional. Since the RCVPRN field is 10-bytes long, you must type 10 positions for this portion of the partner key. RCVPRT contains blanks, so you must allow two positions of blanks when you construct the Partner key.

Partner Created Using Cross-reference Lookup

To create the partner using the Cross-reference Lookup method on the Sterling Gentran:Server system, create a Partner using the Work With Partners panel as in the Direct Lookup example but with a different Partner ID.

Then type the required information on the Partner Cross Reference panel as shown below:

```
 EDIX008                   Partner Cross Reference         EDI   04/30/11
 CTL01                                                           12:00:00

 Partner ID . . . . . . . . . . . .  SAP PARTNER
 Qualifier. . . . . . . . . . . .
 Partner Name . . . . . . . . . .  SAP PARTNER

 Type option, press Enter.
   4=Delete

 Opt X-Ref                      Qual
 __  012561     WE_____  ____
 __  _____      ____
 __  _____      ____
 __  _____      ____
 __  _____      ____
 __  _____      ____
 __  _____      ____
 __  _____      ____

                                                      More...
 F1=Help  F4=Prompt  F5=Refresh  F10=Update  F12=Cancel  F24=More Keys
```

Chapter

5 Mapping Considerations

Introduction

This chapter describes the naming convention used for the application template maps provided with the Sterling Gentran:Server Extension, as well as steps you must take when you create new maps and applications to ensure proper inbound and outbound processing.

In this Chapter

This chapter contains the following sections.

For information on...	See section...
Naming convention used for the application template maps	A
Steps you must take to prepare a new application for outbound translation	B
How to put the name of the user exit into a new map for proper inbound processing	C

Section A: Application Template Maps

Introduction

The application template maps provided with the Sterling Gentran:Server Extension are designed to serve as templates to enable you to create your own maps suitable for processing.

Application Template Maps Naming Conventions

Example 1

The map names are devised using the naming conventions described in this table.

The sample map name is: ECC8105030

This map name component:	Indicates:
ECC	SAP ECC version 5.0 or higher
810	Transaction type
503	Standard version ('503' indicates version 005030)
O	Processing direction ('O' indicates outbound, 'I' indicates inbound)

Example 2 (for EDIFACT standards)

The map names are devised using the naming conventions described in this table.

The sample map name is: ECCORDO06.

This map name component:	Indicates:
ECC	SAP ECC version 5.0 or higher
ORD	Transaction type
O	Processing direction ('O' indicates outbound, 'I' indicates inbound)
06	Standard version ('06' indicates version D 06A)

Application Definition Naming Conventions

The Application ID is: ECCDESADVO

This definition component:	Indicates:
ECC	ECC version 5.o or higher
DESADV	IDOC structure
O	Processing direction ('O' indicates outbound, 'I' indicates inbound)

Section B: Outbound Mapping Preparations

Introduction

This section describes the steps you must take to ensure that the applications and maps you create will process correctly. All of the procedures in this section apply only when you are creating new applications. The required setup described here is already done for you when you use the Sterling Gentran:Server Extension-supplied application template maps rather than creating your own.

In this Section

This section contains the following topics:

- Putting the Trading Partner Control Record in the Outbound Application Definition

- Enabling a New Map to Produce Status for SAP

⌦ **NOTE**
All application definitions must be file type 'I' (Internal Physical).

Put the Trading Partner Control Record in the Outbound Application Definition

Introduction

The Sterling Gentran:Server Trading Partner Control Record holds the Partner ID determined by the Sterling Gentran:Server Extension (for processing by Sterling Gentran:Server). You must put this control record in the application definition for all outbound maps.

Procedure

Complete the steps in this table to put the control record in the application definition.

Step	Action
1	Make the **###SAPTP** record the first defined record on the panel (EDIX553) as shown in this example:

```
EDIX553                   Application Records/Files              EDI 04/30/11
CTL01                                                                12:00:00

Application ID . . . . . . . . . .  ECCDESADVO
Send or Receive. . . . . . . . . .  S
Description. . . . . . . . . . . .  SAP Out - Invoice

Position to Sequence Number. . . .  _____

Type option, press Enter.
  3=Copy  4=Delete  11=Fields  12=Re-retrieve DDS

                        Loop    Max                                 Last Update
Opt Seq Rec/File  A ID    Use M W Description                      Date    User
     5 ###SAPTP   H  ____   1   _ GENTRAN TP CONTROL RECORD        12-15-01 EDI
    10 WPEINVHDRE H  ____   1 M _ EDI Invoice Header File          12-15-01 EDI
    20 WPEINVCMTE H  ____  10 M _ EDI Invoice Header Comment fil   12-15-01 EDI
    30 WPEINVITME D  ____   1 M _ EDI Invoice Item Detail File     12-15-01 EDI
    40 WPEINVSUME H 0200    1 M _ EDI Invoice Summary File         12-15-01 EDI




                                                                       More...
F1=Help  F4=Prompt  F10=Update  F12=Cancel  F24=More Keys
```

| | • Type **GENTRAN TP**. |

Step	Action
2	On the Application Fields panel (EDIX554), add fields **10** and **20** as shown in this example: ``` EDIX554 Application Fields EDI 04/30/11 CTL01 12:00:00 Application ID. . . . . ECCDESADVO Send or Receive. . . . . S Record/File Sequence Number . . . 5 Description. . . . . GENTRAN TP CONTROL RECORD Record/File. . . . . ###SAPTP Position to Sequence Number . . . _____ Type Option, press Enter. 3=Copy 4=Delete Opt Seq Field Name Ty Start Len M Description Field Value ___ 10 TABNAME AN 1 10 M Name of table structure _____ ___ 20 PARTNER AN 11 35 M GENTRAN TP _____ More... F1=Help F4=Prompt F10=Update F12=Cancel F13=Services F24=More Keys ```
3	On the Application Partner Reference panel (EDIX559), add the name in the Application Partner Reference field, as shown in this example: ``` EDIX559 Application Partner Reference EDI 04/30/11 FMT01 12:00:00 Application ID . . . . ECCDESADVO Send or Receive. . . . . S Application Partner Reference Field Name . . . . PARTNER Qual Field Name. . . . . _____ Application Select Field Name . . . . _____ F1=Help F4=Prompt F10=Update F12=Cancel F13=Services F24=More Keys ```

For more information on defining an application, see the "Application Partner Reference (Outbound Only)" section of the IBM® Sterling Gentran:Server® for iSeries® Release 3.6 *User Guide*.

Enable a New Map to Produce Status for SAP

Introduction

The SAP system uses status records (EDI_DS) to provide you with a status of all outbound IDocs you create. SAP rejects all status records that do not contain a DOCNUM. For the Sterling Gentran:Server Extension to create status records containing the DOCNUM, you must save the SAP IDOC number to constant 40. The SAP IDOC number is located in the DOCNUM field in the EDI_DC control record of each IDOC created outbound from SAP.

Procedure

Complete the steps in the following table for each outbound map. This ensures that the appropriate status messages will be sent back to your SAP system.

Step	Action
1	Save the IDOC number in constant 40. **NOTE:** Do not use constants 41 through 45 in your maps. These are reserved for use by the Sterling Gentran:Server Extension.
2	Add user exit **STAT042** to the last summary segment in your map.

Section C: Map User Exits for Inbound Documents

Introduction

For inbound documents, four user exits are used to populate the Client Number, Document Release, Receiving Port, and Archive key in each EDI_DC record. You must put the name of the user exit into your map. This enables SAP to accept the data.

SAPUSR1 and SAPUSR3 can only be used if you have one instance of SAP. These programs read the first record in the SAPPORT file to retrieve the client member and receiver port. If you have multiple instances of SAP, there will be multiple records in the SAPPORT file and the programs cannot determine which record to pull the information from. These two fields need to be mapped using a different method.

Procedure

Select the first mandatory segment and any mandatory element in the segment. Create two extended maps (one for each user exit).

User Exit	EDI_DC Field
SAPUSR1	MANDT
SAPUSR2	DOCREL
SAPUSR3	RCVPOR
SAPUSR4	ARCKEY

Example

In the following example, the first segment on a purchase order (BEG) is used to map the required user exits.

1.   The following screen highlights the two extended maps that are created for the BEG segment. A sample Extended Inbound Mapping screen is shown in the following figures for each of the two maps.

```
EDIX506                Work with Extended Mapping              EDI  04/30/11
FMT01                  pgmlib: G3X6PGM     dtalib: G3X6DTA            12:00:00
Position to Element Map #. . . . . 100  10  For P385035I   R

Type option (and Information), press Enter.
  1=Create  2=Revise  3=Copy  4=Delete  5=View
       Seg      Ele                            A  Seg
Opt    Seq      Seq    Map Constant/Field       C  ID     Description

  __    100      10     0  F020.ACTION          H  BEG    TRANSACTION SET PURPOSE C
  __    100      20     0  F020.BSART           H  BEG    PURCHASE ORDER TYPE CO
  __    100      20     1  F010.CREDAT          H  BEG    PURCHASE ORDER TYPE CO
  __    100      20     2  F010.MANDT           H  BEG    PURCHASE ORDER TYPE CO
  __    100      20     3  F010.DOCREL          H  BEG    PURCHASE ORDER TYPE CO
  __    100      20     4  F010.RCVPOR          H  BEG    PURCHASE ORDER TYPE CO
  __    100      20     5  F010.ARCKEY          H  BEG    PURCHASE ORDER TYPE CO
  __    100      30     0  F080.BELNR           H  BEG    PURCHASE ORDER NUMBER
  __    100      40     0                       H  BEG    RELEASE NUMBER

                                                                     More...
Parameters or command
===> _____
F1=Help  F3=Exit  F12=Cancel  F15=Sort  F24=More Keys
```

2.   The next screen shows extended map 3 for the BEG segment, which maps the F010.DOCREL field to the SAPUSR2 user exit.

```
EDIX513                Extended Inbound Mapping          XXX 2008/04/30
FMT01                                                        12:00:30
Segment ID . . . . . . . . . . . .  BEG
Area Code. . . . . . . . . . . . .  H
Element Number . . . . . . . . . .   20
Segment Sequence . . . . . . . . .   100     Mapping Number . . .   2
                         Mapping of Data Element
Application Target Field . . . . . F010.MANDT
Target Field = _____
   Or          Value          Op Value          Op Value
Target Field = _____ __ _____ __ _____
   If          _____ __ _____
    And/Or     _____ __ _____
Table ID . . . . . . . . . . . . .  _____
Add to Hash Total #. . . . . . . .  __
Save in Constant # . . . . . . . .  01
Add 1 to Accumulator # . . . . . .  _
User Exit Routine. . . . . . . . .  SAPUSR1
Mandatory Code . . . . . . . . . .  M



F1=Help  F2=More/Less  F10=Update  F14=Notes  F19=Appl  F24=More Keys
```

3.   The next screen shows extended map 3 for the BEG segment, which maps the
       F010.DOCREL field to the SAPUSR2 user exit.

```
EDIX513                  Extended Inbound Mapping              XXX 2008/04/30
FMT01                                                              12:00:00
Segment ID . . . . . . . . . . . .  BEG
Area Code. . . . . . . . . . . . .  H
Element Number . . . . . . . . . .   20
Segment Sequence . . . . . . . . .   100      Mapping Number . . .   3
                         Mapping of Data Element
Application Target Field . . . . . ( F010.DOCREL )
Target Field = _____
    Or          Value         Op Value          Op Value
Target Field = _____ __ _____ __ _____
    If             _____ __ _____
    And/Or         _____ __ _____
Table ID . . . . . . . . . . . . .  _____
Add to Hash Total #. . . . . . . .  __
Save in Constant # . . . . . . . .  __
Add 1 to Accumulator # . . . . . .
User Exit Routine. . . . . . . . . ( SAPUSR2 )
Mandatory Code . . . . . . . . . .  M



F1=Help  F2=More/Less  F10=Update  F14=Notes  F19=Appl  F24=More Keys
```

4.   The next screen shows extended map 4 for the BEG segment, which maps the
       F010.RCVPOR field to the SAPUSR3 user exit.

```
EDIX513                  Extended Inbound Mapping              XXX 2008/04/30
FMT01                                                              12:00:00
Segment ID . . . . . . . . . . . .  BEG
Area Code. . . . . . . . . . . . .  H
Element Number . . . . . . . . . .   20
Segment Sequence . . . . . . . . .   100      Mapping Number . . .   4
                         Mapping of Data Element
Application Target Field . . . . . ( F010.RCVPOR )
Target Field = _____
    Or          Value         Op Value          Op Value
Target Field = _____ __ _____ __ _____
    If             _____ __ _____
    And/Or         _____ __ _____
Table ID . . . . . . . . . . . . .  _____
Add to Hash Total #. . . . . . . .  __
Save in Constant # . . . . . . . .  __
Add 1 to Accumulator # . . . . . .
User Exit Routine. . . . . . . . . ( SAPUSR3 )
Mandatory Code . . . . . . . . . .  M



F1=Help  F2=More/Less  F10=Update  F14=Notes  F19=Appl  F24=More Keys
```

5.   The next screen shows extended map 5 for the BEG segment, which maps the
        F010.ARCKEY field to the SAPUSR4 user exit.

```
EDIX513                    Extended Inbound Mapping              XXX 2008/04/30
FMT01                                                                12:00:00
Segment ID . . . . . . . . . . . .  BEG
Area Code. . . . . . . . . . . . .  H
Element Number . . . . . . . . . .   20
Segment Sequence . . . . . . . . .   100      Mapping Number . . .    5
                           Mapping of Data Element
Application Target Field . . . . .( F010.ARCKEY      )
Target Field = _____
   Or          Value          Op Value          Op Value
Target Field = _____ __ _____ __ _____
   If          _____ __ _____
    And/Or     _____ __ _____
Table ID . . . . . . . . . . . . .  _____
Add to Hash Total #. . . . . . . .  __
Save in Constant # . . . . . . . .  __
Add 1 to Accumulator # . . . . . .  __
User Exit Routine. . . . . . . . .( SAPUSR4    )
Mandatory Code . . . . . . . . . .  M



F1=Help  F2=More/Less  F10=Update  F14=Notes  F19=Appl  F24=More Keys
```

A Supported SAP Status Codes

Introduction

For each IDOC, during outbound processing the Sterling Gentran:Server Extension creates one or more of the status described in this Appendix.

SAP Status Codes Used

The following table lists the SAP status codes used by the Sterling Gentran:Server Extension during outbound processing of IDocs created by SAP.

SAP Status Description	Description Returned to SAP
04 Error within control information of EDI subsystem	Trading partner not found.
24 Control information of EDI subsystem OK	Trading partner found and translator started.
05 Error during translation	Translation errors; no EDI data created.
06 Translation OK	Translation OK; EDI data created.
07 Error during syntax check	Error during syntax check.
08 Syntax check OK	Compliance check OK.
16 Functional Acknowledgment	Functional Acknowledgement was positive.
17 Functional Acknowledgment	Functional Acknowledgement was negative.

B Program Descriptions

Introduction

This appendix lists and describes the programs that make up the Sterling Gentran:Server Extension.

In this Appendix

This appendix contains the following sections:

For information on...	See section...
Inbound Processing Programs	A
Outbound Processing Programs	B
Miscellaneous Programs	C
SAP Programs	D

Section A: Inbound Processing Programs

The following table lists the programs that make up Sterling Gentran:Server Extension inbound processing.

Program	Program Type	Description
SAPARCHCL	CLP	Archives inbound and outbound SAP IDOC files.
SAPIN	CLP	Initiates the inbound SAP process. This program submits the PRCTRNIN and calls the archive program (SAPARCHCL).
SAPIN3	CLP	Called from SAPIN, this program copies the IDOC file in preparation for the STARTRFC.
SAPIN4	CLP	Called from SAPIN3, this program initiates the STARTRFC. There is one call for each instance of SAP that occurs in the data.
SAPSORT	CBL	Adds the Receiver Port and Sender Port on the end of the file to enable sorting to send the IDocs back to the proper instance of SAP.
SAPUSR1	CBL	Populates the User Exit field with the Client number for single instance SAP users.
SAPUSR2	CBL	Populates the User Exit field with the Document Release.
SAPUSR3	CBL	Populates the User Exit field with the Receiver Port for single instance SAP users.
SAPUSR4	CBL	Populates the User Exit field with the Archive File Key.

Section B: Outbound Processing Programs

The following table lists the programs that make up Sterling Gentran:Server Extension outbound processing.

Program	Program Type	Description
SAPARCHCL	CLP	Archives inbound and outbound SAP IDOC files.
SAPDELCL	CLP	Cleans up the work files after an outbound process has run.
SAPOUT	CLP	Called from the SAP system to initiate the outbound process, this is the main driver of the outbound process.
SAPOUT2	CLP	Called from SAPOUT, this program performs the Sterling Gentran:Server portion of the outbound process.
SAPPREO	CBL	Formats data from an IDOC file to run PRCTRNOUT and determines the application and partner to process for each IDOC.
SAPRMVNULL	RPG	Pads the file pathname passed from SAP with blanks.
SAPSTATCL	CLP	Processes the inbound and outbound SAP status files that are to be sent back to SAP.
STAT002	CBL	Updates status files upon editor completion.
STAT042	CBL	Updates status files upon completion of mapping.
STATEOJO	RPG	Formats the status records that are to be passed back to SAP into IDOC format.
STSEOJO	CLP	Initiates the process to send the status records back to SAP.
STSEOJO2	CLP	Sends the status records back to SAP. There is one call to the STARTRFC program for each instance of SAP that resides in the data.
STATCOJI	RPG	Formats the functional acknowledgment status records that are posted back to SAP into IDoc format.
SAPSORT	CBL	Formats IDocs to sort by SNDPORT and RCVPOR.
SAPIN	CMD	Runs inbound data for SAP documents.
SAPINV	CLP	Validity check program for the SAPIN command.
SAPIN3	CLP	Copies and sorts inbound data to send to SAP.

SAPIN4	CLP	Sends the inbound IDocs to SAP.
SAPSTATCLI	CLP	Processes the inbound SAP data status files.

Section C: Miscellaneous Programs

The following table lists miscellaneous Sterling Gentran:Server Extension programs.

Program	Program Type	Description
GENMAINS	MENU	SAP version of the Sterling Gentran:Server main menu
GENSAP	MENU	Gentran/SAP Interface menu

Section D: SAP Programs

The following table lists SAP programs used with the Sterling Gentran:Server Extension.

Program	Description
RFCEXEC	This program is used to call and execute the CL program provided in the Port Definition.
STARTRFC	The Sterling Gentran:Server Extension passes to STARTRFC the system control parameters including the SAP System ID, Logon ID, password, client, language, application and gateway information, inbound path name, and file name. As a result of executing STARTRFC, the SAP system reads the IDocs contained in the file name passed in the control parameters mentioned above.

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Glossary

Application Template Maps

A series of Sterling Gentran:Server maps shipped with the Sterling Gentran:Server Extension. The maps are not production quality; they are provided to serve as templates to enable users to create their own maps suitable for processing.

Certification

SAP operates a certification program to ensure that products interface properly with SAP. Sterling Commerce participates in this Complementary Software Solutions certification program. In the program, there are over 16 Complementary Software certifications (for example, ALE subsystems, EDI Subsystems, Computer-aided Design) with over 100 certified software vendors.

Client

The highest level in SAP. The data of one client may not be accessed by another client. There is often a training client and a testing client, in addition to the client code that represents your group or corporate identity and under which the SAP system runs normal business.

Complementary Software Solutions

Term given by SAP to describe the third-party software vendors certification classification. Sterling Commerce is part of this classification.

DOCNUM

Field in the SAP EDI_DC record containing the number of the IDOC assigned the SAP system. During outbound processing the Sterling Gentran:Server Extension saves this number to be used later in the process to help create EDI_DS status records that are sent back to SAP.

EDI_DC

Control record within an IDOC that uniquely identifies the IDOC (for example, sender, receiver, type of message). Each IDOC must contain an EDI_DC record. In the Sterling Gentran:Server Extension, the EDI_DC record is interrogated and its contents are used to look up the Trading Partner relationship to be used for translation. Normally each EDI_DC record corresponds to a document in EDI (for example, ST segment to SE segment).

EDI_DD

Administrative section of each record/segment after the EDI_DC record. This section is 55 bytes and contains eight fields that make up the administrative part of the record. This area contains, for example, the segment name, segment number, hierarchical level, etc. The EDI_DD contains a ninth field, SDATA. The SDATA field has a max of 1000 bytes. The value in this field comes from the SAP application (such as purchase orders or order confirmation) and is used to make up an EDI document. The term "segment" (not to be confused with EDI segments) may also be used to describe this record. The following are examples of segment names in SAP: E2EDK01, E2EDKA1, and E2EDP01.

EDI_DS

Name given by SAP to the document status record that is used to monitor the state of an IDOC as it is passes through SAP and the Sterling Gentran:Server Extension on its way to your trading partner. The Sterling Gentran:Server Extension creates EDI_DS status records when IDOCs are received outbound from the SAP system. During outbound processing of IDOCs EDI_DS records are produced and passed back to SAP.

Function Module

An SAP program module that has a clearly defined interface and can be used in several programs. For example, EDI_DATA_INCOMING and EDI_STATUS_INCOMING are two function modules used in the SAP program STARTRFC.

http://www.sap.com

The SAP Internet Web site used as a news medium and presentation area for SAP products.

http://www.sterlingcommerce.com

The Sterling Commerce Internet Web site used as a news medium and presentation area for Sterling Commerce products.

IDOC (Intermediate Document)

The SAP system EDI interface and the ALE interface both use standardized intermediate documents to communicate. Therefore, IDOCs are the means by which we communicate data to and from SAP.

IDOC File

Commonly used term to describe the file created by SAP outbound or the Sterling Gentran:Server inbound. An IDOC file contains one or more IDOCs.

Instance

One installed copy of the software. In SAP, there can be multiple sets of business data attached to one "instance." There can also be multiple instances on one server.

Port

SAP term describing the type of port that will be used to access SAP. A port may also be known as the "access point" to/from SAP. For EDI, a port type of "file" normally is used.

Port Definition

SAP screen used to assign the logical port name to be used with the Sterling Gentran:Server. The Port Definition area in the SAP system is where the CL program and the associated path and file names to be used with the Sterling Gentran:Server are defined.

Receiver Port

Internal SAP definition describing logical objects within SAP helping to identify the data flow and control record release version. This contains the ID of the port/parameter set that contains the IDoc release and file locations that interface with the EDI system.

RFC Destination

SAP screen that defines the location of the C program RFCEXEC (an SAP-delivered Remote Function Call program) to the application. If the Sterling Gentran:Server is to be configured to automatically start the CL program in the Port Definition, the RFC destination must be correctly defined in SAP.

RFCEXEC

SAP-supplied Remote Function Call (RFC) program used to call and execute the CL program that is provided in the Port Definition.

SAP (Systems, Applications, Products in Data Processing) AG

Corporate Headquarters is in Walldorf, Germany. SAP AG was founded in 1972 by five ex-IBM engineers who acquired the rights to a real-time finance and material management system that they had designed for a client.

SAP Partner Keys

Term used to describes the fields in the EDI_DC record that are used to locate the Sterling Gentran:Server Partner during outbound processing from SAP.

SAP R/2

SAP system developed for mainframe architectures.

SAP R/3

SAP system developed for the multi-level client/server environment.

SAP Status Codes

Values used in the EDI_DS record that are used by SAP to help monitor the status of IDOCs. (e.g., 06 - Translation OK or 08 - Syntax check OK).

Sender Port

Internal SAP definition describing logical objects within SAP helping to identify the data flow and control record release version. For outbound documents, this would be a combination of 'SAP' and the SAP system ID.

Status Reporting

Generic term given to describe the function of providing a status back to SAP for every IDOC produced outbound from the SAP system.

STARTRFC

> SAP-supplied Remote Function Call (RFC) program executed by the Sterling Gentran:Server. STARTRFC is passed system control parameters including SAP system ID, logon ID, password, client, language, application server and gateway information, inbound path name and file name. As a result of executing STARTRFC the SAP system reads the IDOCs contained in the filename passed in the control parameters.

Sterling Gentran:Server Extension for SAP

> A comprehensive, "off-the-shelf" interface product for the receipt and transmission of electronic data interchange (EDI) transactions with SAP application software through the use of IDOCs. The Sterling Gentran:Server Extension is closely coupled with the Sterling Gentran:Server for iSeries product.

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