

IBM Sterling Gentran:Server for Windows



# Installation Guide

*Version 5.3.1*



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**Note**

Before using this information and the product it supports, read the information in "Notices" on page 65.

This edition applies to the 5.3.1 version of IBM Sterling Gentrans:Server for Microsoft Windows and to all subsequent releases and modifications until otherwise indicated in new editions.

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## Chapter 1. System Overview

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### About Sterling Gentran:Server

IBM® Sterling Gentran:Server® for Microsoft Windows is a combined data translation, process control, and communications system that operates in the Microsoft Windows environment. This product is primarily designed for the translation and communication of EDI and other similar types of data.

#### Process control system

Through the process control system, you can integrate Sterling Gentran:Server with a variety of business applications in a manner that makes it a complementary extension of the business application.

#### Communication system

Sterling Gentran:Server links internal business systems to each other and to the business systems used by your customers and suppliers around the world. Sterling Gentran:Server routes application-to-application messages over direct lines and value-added networks (VANs) to completely automate the transactions you exchange with customers and suppliers. Translation occurs automatically, twenty-four hours per day, seven days per week, according to predefined schedules or events. This enables you to streamline your business operations.

#### Unattended mode

Sterling Gentran:Server also operates in an unattended mode. When errors occur, or when human intervention is necessary, designated people are notified through pagers or system messages. Audit trails and message tracking enable you to know precisely where a message is in the process, at any time.

#### Sterling Gentran:Server Executive Service

Sterling Gentran:Server uses the Sterling Gentran:Server Executive Service, which controls the execution of communication and translation functions. The Executive Service enables Sterling Gentran:Server to run on Microsoft Windows servers even when no users are logged on to the system.

The Sterling Gentran:Server Poller is the Executive Service component that polls at set intervals for the existence of specified files.

The Sterling Gentran:Server Scheduler is the Executive Service component that checks all timed events at set intervals for scheduled events.

#### Microsoft Windows environment

Sterling Gentran:Server was specifically designed to take full advantage of the Microsoft Windows environment. Sterling Gentran:Server is deployed in this environment through a combination of a database, system data store, and primary system controller.

For a Single Workstation system, these system components are installed on your one machine. This workstation must run on one of the following Microsoft Windows versions:

- Microsoft Windows Server 2003 Enterprise Edition, Standard Edition, R2 Edition (32-bit)
- Microsoft Windows Server 2008 Enterprise Edition, Standard Edition, R1 Edition (32-bit, 64-bit), R2 Edition (64-bit)
- Microsoft Windows XP (32-bit)
- Microsoft Windows 7 (32-bit, 64-bit)

## **Distributed systems**

Optionally, depending on the type of licensing you purchase, each system may also have secondary controllers and user interface clients. In a clustered environment, the Sterling Gentran:Server software can reside on one to four nodes. The Sterling Gentran:Server system components can be distributed in many ways.

A cluster is a set of loosely coupled, independent computer systems that behave as a single system. Client applications interact with a cluster as if it were a single high-performance, highly reliable server. System managers view a cluster as if it is a single server. In a clustered system, processing power can be increased in small incremental steps by adding another machine. To a client application, the cluster provides the illusion of a single server, or single-system image, even though it may be composed of many systems.

Additional systems can be added to the cluster as needed to process more complex or an increasing number of requests from clients. If one machine in a cluster fails, its workload can be automatically dispersed among the remaining machine. This transfer is frequently transparent to the client.

Failover addresses error recovery, data back-outs, transaction commits, and rollbacks that may be helpful in the event of a disaster such as a power failure. Normally redundant systems provide insurance against the loss of data and provide continuous "up-time," but data commits, rollbacks, and proper error handling may be needed.

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## **Installation Components**

Installation components are functional components of Sterling Gentran:Server that you can select to install during the installation process.

The following are the installation components of the system:

- Process Controller
- Client Access Components
- Integration Components

### **Process Controller**

A Sterling Gentran:Server Process Controller is always installed, by default, on the Primary System Controller. The Process Controller functions are run by the Executive Service (RPCSRV.EXE), which must be started to execute most of the functions available from the EDI Manager as well as any unattended session events that you have configured.



In a single workstation system, the Process Controller component is automatically installed on your workstation.

In a distributed system, the Process Controller component is automatically installed on the following system components:

- primary Sterling Gentran:Server system controller
- communications controller

Optionally, in a non-clustered environment, you can install the Process Controller component on any machines in the Sterling Gentran:Server system. Installing the Process Controller component on a machine makes that machine a process controller (secondary controller) in the system.

The Process Controller component installs the Sterling Gentran:Server Executive Service on each process controller. This service must be started on the process controller for the system to successfully execute unattended processing.

## **Client Access Components**

The Client Access Components provide the user interface to setup, maintain, and control the Sterling Gentran:Server system, including the following:

- The EDI Manager (data management component) serves as a high-level navigation tool, as well as a document management tool. It contains windows, browsers, and dialog boxes to view and maintain document, interchange, audit, reporting, process control, communications, and translation object information.
- Partner Editor allows you to define, edit, and delete all partner information for your company and for all of your trading partners.
- Document Editor is a data entry tool that allows you to create, modify, and view documents.
- The Notification subsystem enables you to notify users (who are specified as operators) when a predefined event occurs. You can specify notification parameters that prompt the system to generate any combination of the following:
  - a message box alert to user interface clients running the Notification program
  - an e-mail message
  - a message to a digital pager when a specified audit message is written to the Audit Log
  - a process control task to be executed when a specified audit message occurs
- System Configuration enables you to modify system-wide configuration parameters after Sterling Gentran:Server is installed. You can modify system data store folders; define or redefine the security mode; add, change, or delete system import specifications; change splitter options; define client notification parameters; add, change, or delete users; stop and start Sterling Gentran:Server services on the controllers in your system and change controller settings for every controller in your system; and change the system ODBC data source and audit settings.
- Mailbox Server Manager allows you to manage your Sterling Gentran:Server mailbox system.

## Integration Components

The Integration Components are optional components that provide the user interface to the Sterling Gentran:Server Application Integration and Forms Integration subsystems.

- Application Integration subsystem enables you to generate import, export, and document turnaround translation objects.
- Forms Integration subsystem enables you to generate screen entry and print translation objects. When these translation objects are registered with Sterling Gentran:Server and selected as part of a trading relationship, they allow you to facilitate the keying and printing of documents that you receive inbound or send outbound.

The Integration Components also allow you to access IBM Sterling Gentran<sup>®</sup> Standards for creating new translation objects. The Sterling Gentran Standard files can be accessed from the DVD or transferred to a hard drive.

**Note:** The Integration Components can be installed on any machine in the Sterling Gentran:Server system.

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## System Components

### System Components in a Single Workstation Environment

The Sterling Gentran:Server system consists of several logical components.

Each system must have the following:

- primary system controller
- system data store
- database

#### Primary System Controller

There is only one primary system controller in each Sterling Gentran:Server system. The primary system controller maintains status information for the entire system, controls the management and dispatching of server processing requests within the system, and controls all other system components.

The process controller components of the system, the Executive Service, and the Mailbox Service are automatically installed on the primary system controller. Additionally, the following installation components may be optionally installed on the primary system controller (your single workstation):

- Client Access Components
- Integration Components

We recommend that you install both components on your single workstation system.

#### System Data Store

There is only one system data store in each Sterling Gentran:Server system. The system data store serves as the repository of all shared Sterling Gentran:Server data.

## Database

Sterling Gentran:Server uses a relational database to store tracking, audit, process control, translation object, and partner information in tables. The database tables contain indicators that point to the actual data, which is located in the system data store.

The system data store is the repository of all shared Sterling Gentran:Server data. This relational database enables multiple users to access the same data. Sterling Gentran:Server uses Open Database Connections (ODBC) to use databases from different vendors. The relational database is installed on your single workstation.

## System Components in a Distributed System

The Sterling Gentran:Server system consists of several logical components.

Each system must have the following:

- primary system controller
- system data store
- database

Optionally, in a non-clustered environment, each system may also have secondary controllers and user interface clients.

### Primary System Controller

There is only one primary system controller in each Sterling Gentran:Server system. The primary system controller maintains status information for the entire system, controls the management and dispatching of server processing requests within the system, and controls all other system components.

The process controller components of the system, the Executive Service, and the Mailbox Service are automatically installed on the primary system controller. Additionally, the following installation components may be optionally installed on the Sterling Gentran:Server primary system controller:

- Client Access Components
- Integration Components
- Optional Components
- Sterling Gentran:Server for RosettaNet
- Extension for SAP
- Sterling Gentran Standards

### Secondary Controller

The secondary controller is a process controller or a communications controller, or both.

A process controller regulates the management and dispatching of server processing requests within the system to allow the system translation load and other processing functions to be distributed for fast and efficient throughput.

A communications controller regulates communication between Sterling Gentran:Server and the VANs or trading partners with whom data is exchanged.

## Process Controller

A process controller is one or more machines in the Sterling Gentran:Server system (other than the primary system controller) that have the process controller components installed. Additionally, the following installation components may be optionally installed on the process controllers:

- Client Access Components
- Integration Components
- Optional Components
- Sterling Gentran:Server for RosettaNet
- Extension for SAP
- Sterling Gentran Standards

**Note:** The Executive Service is installed on the process controller and must be started prior to starting the Scheduler Service and Poller Service. The Executive Service must be started for users to access the process controller system component.

## User Interface Client

The user interface client is part of a non-clustered environment and comprises one or more Microsoft Windows machines in the Sterling Gentran:Server system other than the primary system controller or secondary controllers.

The user interface clients provide the functions that are necessary to monitor and control the system in a non-clustered environment.

The following installation components may be optionally installed on the user interface clients:

- Integration Components
- Sterling Gentran:Server for RosettaNet
- Extension for SAP

## System Data Store

There is only one system data store in each Sterling Gentran:Server system. The system data store serves as the repository of all shared Sterling Gentran:Server data.

In a clustered system, the data store resides on the disk vault. In a non-clustered system, the system data store may reside on one machine or be distributed across several machines. The machines where the system data store resides must be accessible by all machines in the Sterling Gentran:Server system, because all machines in the system share data from the system data store. The associated folders and files in the system data store (such as all registered translation objects or all translation report files) may be distributed across multiple machines, if necessary.

## Database

Sterling Gentran:Server uses a relational database to store tracking, audit, process control, translation object, and partner information in tables. The database tables contain indicators that point to the actual data, which is located in the system data store. The system data store is the repository of all shared Sterling Gentran:Server

data. This relational database enables multiple users to access the same data. Sterling Gentran:Server uses ODBC to use databases from different vendors.

## Network Configuration Requirements

The Sterling Gentran:Server product is supported in the following network configurations:

- Controllers and user interface clients in one domain
- Controllers and user interface clients in two domains that have a two-way trust established
- Primary Sterling Gentran:Server system controller in a domain and user interface clients in a Microsoft Windows workgroup in which the user interface client machines have a valid domain logon and rights to the controller
- Primary Sterling Gentran:Server system controller and user interface clients in a Microsoft Windows workgroup model in which all user interface client machines have a valid logon to the controller (a user ID and password that are in the local account database on the controller)

## Notes on running Sterling Gentran:Server in a clustered environment

The following contains additional information about running Sterling Gentran:Server in a clustered environment:

- Sterling Gentran:Server is not a cluster-aware application, which means that Sterling Gentran:Server depends on the Cluster service functionality to maintain the failover capability.
- Only IP-based communications can be run from the Sterling Gentran:Server Communications controllers, which includes FTP and sockets. You cannot use Sterling Gentran:Server asynchronous or bisynchronous communications in a clustered system.
- Sterling Gentran:Server running under the clustered service only supports failover; it does not support load-balancing. The only load-balancing that is possible is static load balancing outside the cluster. The primary benefit of a cluster is the ability to ensure application support in the event of a server failure.
- Data that is processed on the Primary Node may need to be reprocessed if the cluster fails over to a Secondary Node.
- Sterling Gentran:Server only uses the failover process if one or more of the Sterling Gentran:Server cluster resources (file systems or services) fail to respond, stop, or end abnormally. High use of other Sterling Gentran:Server components that are not set up as resources is not monitored by the cluster.

## Sample System Configurations

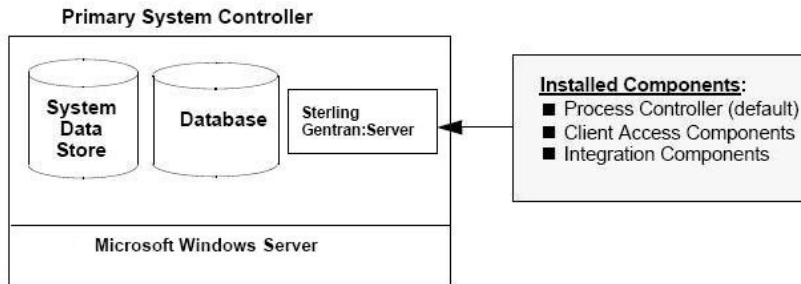
This topic illustrates sample distributed Sterling Gentran:Server systems. Each of these systems has a different number of system components and different distribution of installation components.

The following illustrations are intended to demonstrate the flexibility of Sterling Gentran:Server for systems from the simple to the complex. In all of these examples, you still have the flexibility to further expand the system by adding additional servers to the system and distributing Sterling Gentran:Server installation components.

## Single Workstation Environment

In a single workstation system, all of the Sterling Gentran:Server installation components that you need are installed on one machine.

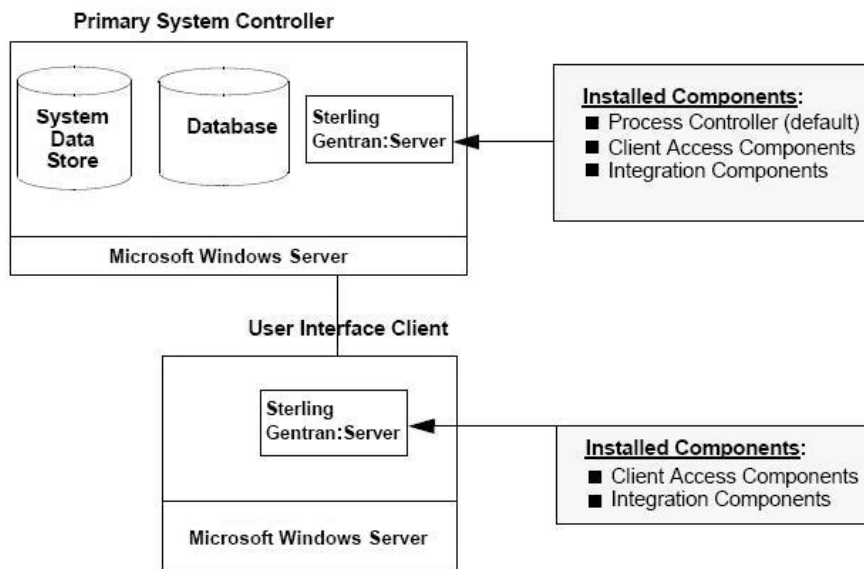
The following diagram illustrates a sample Single Workstation system, consisting of one machine, which contains all Sterling Gentran:Server installation components.



## Single Controller System

In a single controller system, Sterling Gentran:Server is distributed across one primary Sterling Gentran:Server system controller with one or more user interface clients.

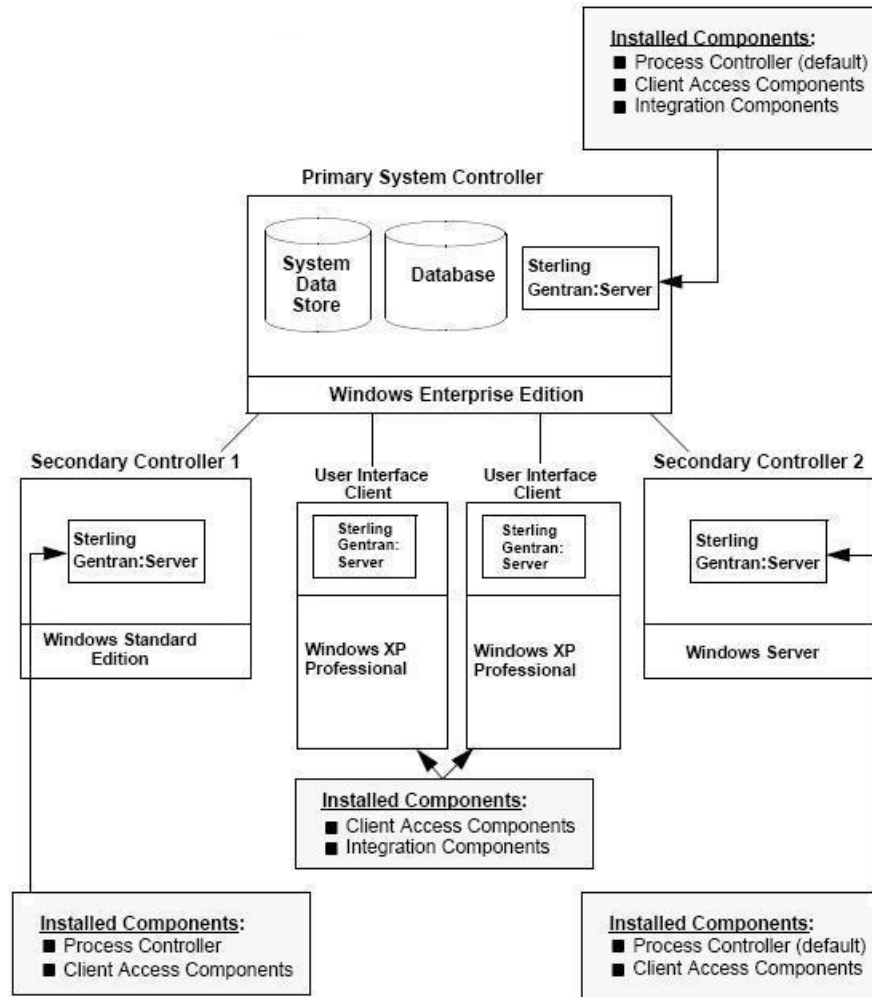
The following diagram illustrates a sample single controller system in a non-clustered environment. This distributed system consists of one primary system controller and one user interface client.



## Multiple Controller System

In a multiple controller system, Sterling Gentran:Server is distributed across one primary system controller with one or more secondary controllers and one or more user interface clients.

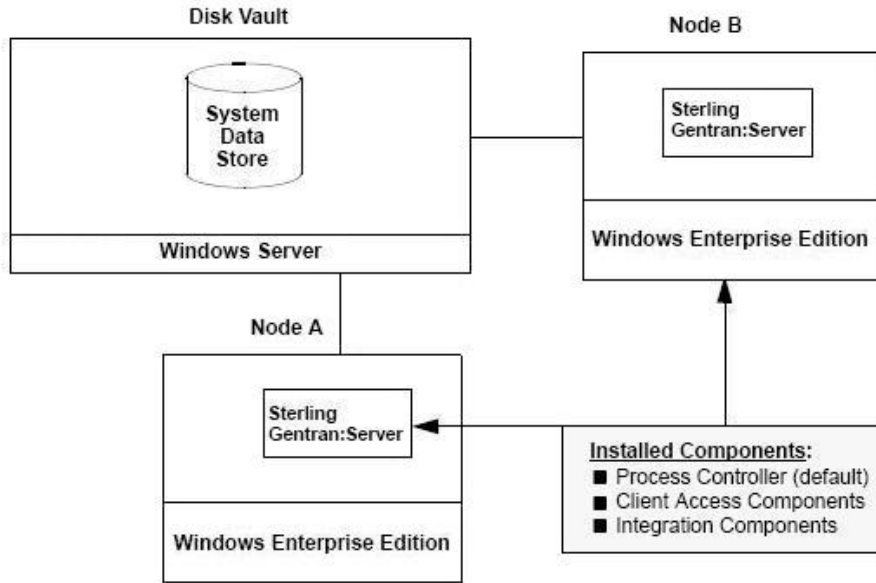
The following diagram illustrates a sample multiple controller system in a non-clustered environment. This distributed system consists of one primary Sterling Gentran:Server system controller with two secondary controllers and two user interface clients.



## Clustered System

In a clustered system, the Sterling Gentran:Server data store resides on the disk vault. The database is resident or non-resident and Sterling Gentran:Server is installed on one or more nodes.

The following diagram illustrates a sample clustered system. This clustered system consists of one primary Sterling Gentran:Server system controller (the disk vault) and two nodes. The database is not included in this sample because it can be located anywhere that is accessible from the network.





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## Chapter 2. Installation Overview

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### Installation Prerequisites

Installing the IBM Sterling Gentran:Server for Microsoft Windows software involves configuration of Microsoft Windows and your database product. It is important to analyze all of the tasks you need to perform before undertaking the installation of Sterling Gentran:Server.

Before configuring your system and installing Sterling Gentran:Server, you need to make sure that the appropriate people are available. We strongly recommend that your system administrator and database administrator take part in the installation for the following reasons:

- For a distributed system: On each machine on which Sterling Gentran:Server controller components are installed, you need a login that has administrative rights on that machine.
- For a single workstation: You need a login that has administrative rights on that machine.
- You must create folder shares to the file server on which the system data store is installed.
- You must create a new database.
- You may need to add users to the database.

Your local administrators are typically the only people that have the authority to complete the above.

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### Installation Process

#### The Installation Process for Non-clustered Systems

The following sections contain the prerequisite information and preliminary tasks that you need to complete before installing Sterling Gentran:Server in your non-clustered system (single workstation, single controller system, or multiple controller system). You should review these topics and complete any pre-installation tasks before using the setup program to install Sterling Gentran:Server.

The following table describes the tasks you need to complete to install Sterling Gentran:Server in your system. This is a high-level overview.

*Table 1. Installation for non-clustered systems*

Task Order	Task Name	Task Description
1	Create and verify users.	Add any users and verify existing Microsoft Windows logons for Sterling Gentran:Server users.
2	Create the Microsoft Windows global group and add users.	Create a global group that contains all Sterling Gentran:Server users by adding the Microsoft Windows logons for Sterling Gentran:Server users to the group.
3	Create the Microsoft Windows local group and grant access to the global group.	Create a local group named GENTRANUSERS that contains the global group you created.

Table 1. Installation for non-clustered systems (continued)

Task Order	Task Name	Task Description
4	Change the local security setting. You may need to change the local security setting to ensure that services restart after installation. To do this, add Microsoft Windows user rights to the local group.	Assign to the local group the user rights that Sterling Gentran:Server requires: <ul style="list-style-type: none"> <li>• Load and unload device drivers</li> <li>• Log on as a batch job</li> <li>• Log on as a service</li> <li>• Log on locally</li> <li>• Take ownership of files or other objects</li> </ul> See "Changing the Local Security Setting" on page 21
6	Create and share a folder for system data store.	Create the system data store folder and share it for the group of users you created.
7	Install and configure your database.	Refer to "About Database Setup" on page 22 for setting up either the SQL or Oracle database management system.
8	Install or upgrade Sterling Gentran:Server.	Use the setup program to install or upgrade Sterling Gentran:Server in your system. See one of the following: <ul style="list-style-type: none"> <li>• "Installing Sterling Gentran:Server" on page 33</li> <li>• "About Upgrading Sterling Gentran:Server" on page 43</li> </ul>
9	Install or upgrade options and extensions.	Install or upgrade any Sterling Gentran:Server options you purchased. See the following topics: <ol style="list-style-type: none"> <li>1. "Installing the Option Pack" on page 38</li> <li>2. "Installing RosettaNet" on page 40</li> <li>3. "Installing the Extension for SAP" on page 42</li> </ol>
10	Install IBM Sterling Gentran Standards Database for EDI.	If you selected Integration Components, use the setup program to install the Sterling Gentran:Server Standards Database for EDI. See the instructions provided with that DVD.
11	Start the Sterling Gentran:Server system.	Start the Executive Service on the primary system controller before using Sterling Gentran:Server. See "Starting the System" on page 49.
12	Implement security.	Specify the Sterling Gentran:Server security mode and add users to the system. See "About Security" on page 50.
13	Implement communications.	Set up the modem and pools in your system. See "Communications" on page 53.
14	Install software patches.	Install any service packs or patches.
15	Validate Installation.	Complete the post-installation tasks to validate your installation. See "Installation Validation Process" on page 56.

## The Installation Process for Clustered Systems

The following sections contain the prerequisite information and preliminary tasks that you need to complete prior to installing Sterling Gentran:Server in your clustered system. You should review these topics and complete any pre-installation tasks before using the setup program to install Sterling Gentran:Server.

The following table describes the tasks you need to complete to install Sterling Gentran:Server in your system. This is a high-level overview.

Table 2. Installation for clustered systems

Task Order	Task Name	Task Description
1	Create/verify users.	Add any users and verify existing Microsoft Windows logons for Sterling Gentran:Server users.
2	Create the Microsoft Windows global group and add users.	Create a global group that contains all Sterling Gentran:Server users by adding the Microsoft Windows logons for Sterling Gentran:Server users to the group.
3	Create the Microsoft Windows local group and grant access to the global group.	Create a local group named GENTRANUSERS that contains the global group you created.
4	Change the local security setting. You may need to change the local security setting to ensure that services restart after installation. To do this, add Microsoft Windows user rights to the local group.	Assign to the local group the user rights that Sterling Gentran:Server requires: <ul style="list-style-type: none"> <li>• Load and unload device drivers</li> <li>• Log on as a batch job</li> <li>• Log on as a service</li> <li>• Log on locally</li> <li>• Take ownership of files or other objects</li> </ul> See "Changing the Local Security Setting" on page 21.
6	Create and share a folder for system data store.	Create the system data store folder and share it for the group of users you created.
7	Set up a clustered resource for the GENSRVNT share.	Using Cluster Administrator, create a clustered resource for the GENSRVNT share (set the Resource Type to File Share) so it will maintain the properties of a typical shared folder. Verify that the share has a dependency on the resource that represents the physical disk drive on which you created the GENSRVNT folder. Once the resource is created, bring the file share resource online. <b>Note:</b> Configuration of the file share, including permissions, should be done through Cluster Administrator; do not configure the file share using Microsoft Windows Explorer. Creation of the File Share resource shares the folder setup for the system data store in the previous task.
8	Install and configure your database and create the GentranDatabase DSN.	Refer to "About Database Setup" on page 22 for setting up either the SQL or Oracle database management system.
9	Install or upgrade Sterling Gentran:Server on the primary node.	Use the setup program to install or upgrade Sterling Gentran:Server on the primary node in your system. See one of the following: <ul style="list-style-type: none"> <li>• "Installing Sterling Gentran:Server" on page 33</li> <li>• "About Upgrading Sterling Gentran:Server" on page 43</li> </ul>
10	Install or upgrade options and extensions on the primary node in your system.	Install or upgrade any Sterling Gentran:Server options you purchased on the primary node in your system. See the following topics: <ol style="list-style-type: none"> <li>1. "Installing the Option Pack" on page 38</li> <li>2. "Installing RosettaNet" on page 40</li> <li>3. "Installing the Extension for SAP" on page 42</li> </ol>
11	Install IBM Sterling Gentran Standards Database for EDI.	If you selected Integration Components, use the setup program to install Sterling Gentran:Server Standards Database for EDI on the primary node in your system. See "Starting the System" on page 49.

Table 2. Installation for clustered systems (continued)

Task Order	Task Name	Task Description
12	Create new resources.	Using the Cluster Administrator, create the following resources: <ol style="list-style-type: none"> <li>1. Audit Notification Service, which depends on the file share</li> <li>2. Mailbox Service, which depends on the Audit Notification Service</li> <li>3. Executive Service, which depends on the Mailbox Service</li> <li>4. Communications Service (if you installed the option pack in task 10), which depends on the Mailbox Service</li> <li>5. RosettaNet PIP Monitor Service (if you installed RosettaNet in task 10), which depends on the Audit Notification Service</li> </ol> See "Setting up a Clustered Resource" on page 22.
13	Verify that all resources can be brought online.	Using the Cluster Administrator, bring all Sterling Gentran:Server resources online to verify that all Sterling Gentran:Server services can be started on the primary node of your system.
14	Replicate the registry on the other node(s) in your system.	Using Cluster Administrator, move the Audit Notification service. This activity forces the replication of the registry (containing Sterling Gentran:Server entries) on the other nodes in the cluster. <b>Note:</b> The move will report that the services fail and that this is not a problem because it forces the registry keys to the other nodes.
15	Transfer ownership of the cluster resource to the other node(s) in your system.	Log on to another node in the cluster and change the preferred owner to the node you are logged onto, take the Sterling Gentran:Server service resources offline, and move the group to the current node.
16	Install Sterling Gentran:Server on each secondary node.	Install the exact components installed on the primary node on each of the secondary nodes in your system. (See tasks 9, 10, and 11).
17	Bring all cluster resources online.	After installing Sterling Gentran:Server, bring all cluster resources online.
18	Implement security.	Specify the Sterling Gentran:Server security mode and add users to the system. See "About Security" on page 50.
19	Implement communications.	Set up the modem and pools in your system. See "Communications" on page 53.
20	Install software patches.	Install any service packs or patches.
21	Validate Installation.	Complete the post-installation tasks to validate your installation. See "Installation Validation Process" on page 56.

## Installation Checklists

### New Installation Checklist for Single Workstations

Complete the questions in this topic before proceeding with the installation. This ensures that you have obtained all of the information you need before beginning the installation.

**Tip:** We recommend that, prior to using this checklist, you make copies of it to make it easier to complete and refer to during the installation process.

The following is the pre-installation checklist for creating a new Sterling Gentran:Server system. Our recommendations are listed in the Your installation column.

Number	Question	Your installation
1	In which folder will you install Sterling Gentran:Server on this machine?	C:\GENSRVNT
2	What will you name the new Sterling Gentran:Server system?	GENSYS1
3	Where will the system data store reside? <b>Notes:</b> <ul style="list-style-type: none"> <li>Specify UNC pathname as \MACHINE\SharepointFolder.</li> <li>The data store must reside on the single workstation.</li> </ul>	\MACHINENAME\GENSRVNT
4	Which ODBC data source will the system use? <b>Tip:</b> Give the data source the same name as your database for consistency.	GentranDatabase
5	<ul style="list-style-type: none"> <li>For SQL Server, what is the name of your database?</li> <li>For Oracle, what is the service name or SQL*Net connect string (connection name)?</li> </ul>	GentranDatabase
6	What database user logon will the install program use to access the database? <b>Notes:</b> <ul style="list-style-type: none"> <li>This logon must have administrative rights to the database.</li> <li>If you are installing on an Oracle system, you must have database administrator (DBA) privileges. This is necessary when tables are built so they are created with the appropriate access rights that enable someone other than the database creator to access the tables.</li> </ul>	
7	Which Sterling Gentran:Server components will you install on this machine?	<ul style="list-style-type: none"> <li>Client Access Components</li> <li>Integration Components</li> </ul>
8	Which Microsoft Windows user logon will the Executive Service use to log on to the primary system controller?  The non-domain format is .\User. <b>Note:</b> This logon must have the advanced right "log on as a batch job" assigned to it on the local machine.	Use the local administrator logon with which you are currently logged on to the machine.
9	What database user logon will the Executive Service use to access the database? <b>Note:</b> This database logon must have access to the Sterling Gentran:Server database tables.	Use the local administrator logon with which you are currently logged on to the machine.
10	Which user will be the default Sterling Gentran:Server local administrator?  This allows access to Sterling Gentran:Server for the first time to start and stop services.  This user must also be set up in your database.	Use the local administrator logon with which you are currently logged on to Microsoft Windows.

Number	Question	Your installation
11	<p>Which database user name or user group name will you grant access to the database tables?</p> <p><b>Note:</b> This user or group must be a valid ID or the installation cannot be completed:</p> <ul style="list-style-type: none"> <li>• For SQL Server, the ID must be a valid Microsoft Windows user or group.</li> <li>• For Oracle, the ID must be a valid user ID. (Microsoft Windows groups are not recognized by Oracle.)</li> </ul> <p><b>Tip:</b> Perform this task during installation so you do not have to use your database management system to grant permissions after the install.</p> <p>If the installation fails while building the database tables, restart the install and leave this entry blank. You will be able to set up other users after the installation is complete by using the DBA ID.</p>	GENTRANUSERS
12	What will you name the program folder where the Sterling Gentran:Server icons are installed?	Gentran Server

## New Installation Checklist for Non-clustered Systems

Complete the questions in this topic before proceeding with the installation. This ensures that you have obtained all of the information you need before beginning the installation.

**Tip:** We recommend that, prior to using this checklist, you make copies of it to make it easier to complete and refer to during the installation process.

The following is the pre-installation checklist for creating a new Sterling Gentran:Server system. Our recommendations are listed in the Your installation column.

Number	Question	Your installation
1	<p>Are installing a server or are you connecting a client?</p> <p>For the primary controller, you are installing the server. For clients and secondary controllers, you are connecting a client.</p>	
2	<p>In which folder will you install Sterling Gentran:Server?</p> <p>Choose the same directory as the data store folder.</p> <p>If the data store is remote, create a local directory called GENSRVNT.</p>	C:\GENSRVNT
3	What will you name the new Sterling Gentran:Server system?	GENSYS1

Number	Question	Your installation
4	<p>Where will the system data store reside?</p> <p>The system data store serves as the repository of all shared Sterling Gentran:Server data. The system data store may reside on one machine or be distributed across several machines. The machines where the system data store resides must be accessible by all machines in the Sterling Gentran:Server system because all machines in the system share data from the system data store. We recommend that the system data store reside on the primary system controller in the default GENSRVNT.</p> <p>Specify universal naming convention (UNC) pathname as \\MACHINE\SharepointFolder.</p>	\\MACHINENAME\GENSRVNT
5	<p>Which ODBC data source will the system use?</p> <p><b>Tip:</b> Give the data source the same name as your database for consistency.</p>	GentranDatabase
6	<ul style="list-style-type: none"> <li>• For SQL Server, what is the name of your database?</li> <li>• For Oracle, what is the service name or SQL*Net connect string (connection name)?</li> </ul>	GentranDatabase
7	<p>What database user logon will the install program use to access the database?</p> <p>To create the tables properly, the database administrator account must be specified. This account must have Database Administrator rights on the database.</p>	
8	<p>Which Sterling Gentran:Server components will you install on this machine?</p>	<ul style="list-style-type: none"> <li>• Client Access Components</li> <li>• Integration Components</li> </ul>
9	<p>Which user will be the default Sterling Gentran:Server local administrator?</p> <p>This allows access to Sterling Gentran:Server for the first time to start and stop services.</p> <p>This user must also be set up in your database.</p>	<p>Use the local administrator logon with which you are currently logged on to Microsoft Windows.</p> <ul style="list-style-type: none"> <li>• For non-domain accounts, enter .\username.</li> <li>• For domain accounts, enter domain\username.</li> </ul>
10	<p>What database user logon will the Executive Service use to access the database?</p> <p><b>Note:</b> This database logon must have access to the Sterling Gentran:Server database tables.</p>	<p>Use the local administrator logon with which you are currently logged on to the machine.</p>
11	<p>What is the Sterling Gentran:Server user ID?</p> <p>This should be the same account in task 10.</p>	GenAdmin

## New Installation Checklist for Clustered Systems

Complete the questions in this topic before proceeding with the installation. This ensures that you have obtained all the information you need before beginning the installation.

**Tip:** We recommend that, prior to using this checklist, you make copies of it to make it easier to complete and refer to during the installation process.

The following is the pre-installation checklist for creating a new Sterling Gentran:Server system. Our recommendations are listed in the Your installation column.

Number	Question	Your installation
1	In which folder will you install Sterling Gentran:Server on the disk vault?	X:\GENSRVNT
2	What will you name the new Sterling Gentran:Server system?	GENSYS1
3	Where on the disk vault will the system data store reside? <b>Notes:</b> <ul style="list-style-type: none"> <li>Specify UNC pathname as \\CLUSTERNAME\Share.</li> <li>Use the cluster (virtual) name.</li> </ul>	\\CLUSTERNAME\GENSRVNT
4	Which ODBC data source name(s) will the system use? <b>Tip:</b> Use the same name for the data source and your database for consistency.	GentranDatabase
5	<ul style="list-style-type: none"> <li>For SQL Server, what is the name of your database?</li> <li>For Oracle, what is the service name or SQL*Net connect string (connection name)?</li> </ul>	GentranDatabase
6	Which database user logon will the install program use to access the database? <b>Notes:</b> <ul style="list-style-type: none"> <li>This logon must have administrative rights to the database.</li> <li>If you are installing on an Oracle system, you must have database administrator (DBA) privileges. This is necessary when tables are built so they are created with the appropriate access rights that enable someone other than the database creator to access the tables.</li> </ul>	
7	Which Sterling Gentran:Server components will you install on this cluster? <b>Note:</b> The process controller component is installed by default on the primary Sterling Gentran:Server system controller.	<ul style="list-style-type: none"> <li>Client Access Components</li> <li>Integration Components</li> </ul>
8	Which Microsoft Windows user logon will the Executive Service use to log on the primary system controller?  The domain format is DOMAIN\User. <b>Notes:</b> <ul style="list-style-type: none"> <li>This User ID must have access to the network resources that you want to use, including all nodes.</li> <li>This logon must have the advanced right "log on as a batch job" assigned to it on the local machine.</li> </ul>	Use the local administrator logon with which you are currently logged on to the machine. <b>Note:</b> All Sterling Gentran:Server system components must reside in one domain.
9	Which database user logon will the Executive Service use to access the database? <b>Note:</b> This database logon must have access to the Sterling Gentran:Server database tables.	Use the local administrator logon with which you are currently logged on to the machine.
10	Which user will be the default Sterling Gentran:Server local administrator?  This allows access to Sterling Gentran:Server for the first time and to start and stop services. <b>Note:</b> <ul style="list-style-type: none"> <li>The user name should be the same as that user's Microsoft Windows logon.</li> <li>This user must also be set up in your database.</li> </ul>	Use the local administrator logon with which you are currently logged on to the machine.



Number	Question	Your installation
11	<p>Which database user name or user group name will you grant access to the database tables?</p> <p><b>Note:</b> This user or group must be a valid ID or the installation cannot be completed:</p> <ul style="list-style-type: none"> <li>• For SQL Server, the ID must be a valid Microsoft Windows user or group.</li> <li>• For Oracle, the ID must be a valid user ID. (Microsoft Windows groups are not recognized by Oracle).</li> </ul> <p><b>Tip:</b> Perform this task during installation so you do not have to use your database management system to grant permissions after the install.</p> <p>If the Sterling Gentran:Server installation fails while building the database tables, restart the install and leave this entry blank. You will be able to set up other users after the installation is complete by using the DBA ID.</p>	GENTRANUSERS
12	What will you name the program folder where the Sterling Gentran:Server icons are installed?	GentranServer

## Installation Checklist for the Standards Database

If you are installing Integration Components, you need to install Sterling Gentran Standards Database for EDI after installing Sterling Gentran:Server.

**Tip:** We recommend that, prior to using this checklist, you make copies of it to make it easier to complete and refer to during the installation process.

The following is the pre-installation checklist for installing Sterling Gentran Standards Database for EDI. Our recommendations are listed in the Your installation column.

Number	Question	Your installation
1	<p>Do you want to access the Sterling Gentran Standards Database for EDI from DVD, install the standards on the hard drive of a machine, or map an ODBC data source to an existing database?</p> <p>See the Sterling Gentran Standards Database for EDI installation documentation for information about the amount of free disk space required for installation.</p>	
2	Where will the standards file (STANDARD.MDB) reside?	<p>c:\GENSRVNT\standards</p> <p>or</p> <p>accessing from Sterling Gentran Standards Database for EDI DVD</p>
3	<p>What will you name the ODBC data source that the Sterling Gentran Standards Database for EDI uses?</p> <p><b>Note:</b> This ODBC data source is new and must not use the same name as the Sterling Gentran:Server data source (for example, if you named your Sterling Gentran:Server data source Gentran Database, you must not use that name for the Sterling Gentran Standards install.</p>	Gentran Standards Database



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## Chapter 3. Pre-installation Tasks

---

### Changing the Local Security Setting

Before installing Sterling Gentran:Server for Microsoft Windows, you may need to change the local security setting. Otherwise, services may not restart after the installation is complete.

#### About this task

Use this procedure to change the local security setting:

#### Procedure

1. From the **Start** menu, select **Settings > Control Panel**.
2. Double-click **Administrative Tools**.
3. Double-click **Local Security Policy**.
4. Double-click **User Right Assignments**.
5. Double-click **Act as part of the operating system**.
6. Click **Add User or Group**.
7. Enter a user ID in **Object names to select**.
8. Click **Apply**.
9. Click **OK**.
10. Click **OK** on the Local Security Setting screen.
11. Repeat steps 4 - 8 for the following User Right Assignments:
  - Log on as a service
  - Take ownership of files and other objects
  - Allow log on locally
  - Access this computer from a network

**Note:** Depending on your operating system, you may see a Confirm Setting Change message. Click **OK**.

- Log on as batch job (if you are planning to run unattended sessions)

---

### Creating and Sharing the System Data Store Folder

You need to create the folder where the system data store resides on your machine and share it for the GENTRANUSERS group.

#### Before you begin

Determine the UNC pathname for the system data store.

**Note:** We recommend that you use the default GENSRVNT folder for the location where the system data store resides.

You need to give the GENTRANUSERS group "Full Control" permission to access the drive and folder. This gives the users in the group permission to fully manipulate files (read, write, create, delete) and allows them to set permissions above the file level (for example, folders).

**Note:** For security reasons, you may not want users to have access to the entire drive of the machine on which the system data store resides. In this case, just share the folder.

### About this task

Use this procedure to create and share the folder for the system data store.

#### Procedure

1. Navigate to and select the drive on which the system data store will reside.
2. Create a new folder named **GENSRVNT**.
3. Right-click the **GENSRVNT** folder and select **Properties**.
4. Click the **Sharing** tab.
5. Click **Share**.
6. On the list of names, click **Share**.

**Note:** If needed, you can add users here.

7. Click **Done**.
8. Click **Close**.

---

## Setting up a Clustered Resource

This task applies only to clustered systems.

### About this task

Complete the following steps to set up a clustered resource for the GENSRVNT share.

#### Procedure

1. Use Cluster Administrator to create a clustered resource for the GENSRVNT share (set Resource Type to File Share) so it will maintain the properties of a typical shared folder.
2. Verify that the share has a dependency on the resource that represents the physical disk drive on which you created the GENSRVNT folder.
3. Once the resource is created, bring the file share resource online.

---

## Database Setup

### About Database Setup

Sterling Gentran:Server uses a relational database to store tracking, audit, process control, translation object, and partner information in tables.

The database tables contain indicators that point to the actual data, which is located in the system data store (the system data store is the repository of all shared Sterling Gentran:Server data). This relational database enables multiple users to access the same data.

Sterling Gentran:Server uses ODBC to use databases from different vendors, including SQL Server.

#### Notes:

- ODBC and Microsoft Data Access Components (MDAC) are installed when you install SQL Server.
- The default Oracle ODBC drivers are installed when you install Oracle. If you need to use drivers other than the default drivers, you must install them separately.
- You need to use 32-bit ODBC drivers and the 32-bit ODBC Data Source Administrator tool in a 64-bit operating system when creating or editing the Sterling Gentran:Server data source.
- Support for Oracle databases does not include support for the Oracle Exadata platform.

The following topics outline the tasks necessary to setup SQL and Oracle databases to work Sterling Gentran:Server. The steps that you need to perform to complete these tasks are specific to the database management system you are using. See your SQL or Oracle documentation for specific instructions on how to perform these tasks.

## Database Backup Considerations

We recommend that you back up your database periodically. Any issues relating to backing up or restoring your database should be referred to Microsoft or Oracle. Microsoft and Oracle product information, support, and additional resources are available on their websites.

You should consider the following questions before creating your backup strategy:

- How often should backups be performed?
- Which data should be backed up (for example, full database or transaction log)?
- To what medium will the backup be written?
- Will the backups be performed online (while users are working) or would it be prudent to schedule them after hours?
- Will the backups be performed manually or using an automatic scheduling facility?
- If the backups are performed on an automatically scheduled basis, how can you verify that a backup occurred without errors?
- How long will you save a backup before you reuse the storage medium?
- If necessary, how long will it take you to restore the system using the last backup?
- Do you have a procedure by which you can ensure that previous system backups are still intact and can be reapplied if necessary?
- Where will you store backups?
- Do the necessary people have access to the storage facility?
- Who is responsible for overseeing the backup process and ensuring that it is performed correctly?
- If the local administrator is unavailable, does anyone else have the requisite knowledge and access to the proper passwords to perform the backup and restore procedures?

## SQL Server Setup

### SQL Database Creation Process

The following table lists the tasks that you need to complete to install SQL Server and configure your database.

Stage	Description
1	If you have not already installed SQL Server, use the SQL Server documentation to do so. If you have any technical questions about installing SQL Server, contact Microsoft Tech Support.
2	Configure SQL Server for use with Sterling Gentran:Server and create your database.
3	Give the GENTRANUSERS group access to the database.

## Configuring SQL Server for Use with Sterling Gentran:Server Before you begin

Before installing Sterling Gentran:Server, you must create the database that contains the Sterling Gentran:Server tables. These database tables are built during the Sterling Gentran:Server installation.

### Notes:

- This procedure uses wizards within SQL Management Studio. If you are an experienced SQL user, you may decide to configure SQL directly.
- The SQL server configuration is flexible and provides numerous options. We recommend that you research the configuration capabilities of SQL to determine which settings are optimal for your installation, based on the volume of data you expect.
- The steps you need to perform are specific to the version of SQL server. If you are using another version, the tasks may vary.

### About this task

Use this procedure to configure SQL server and create your database.

### Procedure

1. From the **Start** menu, select **Programs > SQL Management Studio**.  
The first time you execute the SQL Server Enterprise Manager, you are prompted to register the SQL server.
2. Select **Microsoft SQL Server**.
3. Select your server name and expand.
4. Right-click on **Databases** and select **new database**.
5. Type GentranDatabase as the name of the database.

**Note:** Sterling Gentran:Server is case-sensitive, so be sure to type the database name in the proper case.

6. Click **OK**.

### Adding Users and Setting Permissions for the SQL Database

After creating the database that contains the Sterling Gentran:Server tables, you need to add users to your database management system and give the users permission to access the Sterling Gentran:Server database.

### About this task

Use this procedure to add users in SQL server and give them access to the database.

## Procedure

1. From the **Start** menu, select **Programs > SQL Management Studio**.  
The first time you execute the SQL Server Enterprise Manager, you are prompted to register the SQL server.
2. Select **Microsoft SQL Server**.
3. Select your server name and expand.
4. Select **Security**.
5. Right-click on **Logins** and select **New**. Enter the username.
6. To set permissions, double-click the user account and do one of the following:
  - If you are using SQL Authentication, enter the user name.
  - If you are using Windows Authentication, select **Windows Authentication** and select either **domain** or **local**.
7. Change the default database to **GentranDatabase**.
8. On the left side, select **Server Roles**. On the right side, select **public** and **sysadmin**.
9. On the left side, select **User Mapping**.
10. On the right side, select **GentranDatabase**.
11. Under Database Roles, select **public** and **db\_owner**.
12. Click **OK**.

## Creating an ODBC DSN for Sterling Gentran:Server

The ODBC DSN will be created during the installation process, so you do not normally need to use this procedure. This topic should only be used if you decide to manually create the ODBC data source name for the Sterling Gentran:Server database you created.

### About this task

**Note:** You need to use 32-bit ODBC drivers and 32-bit ODBC Data Source Administrator tool in a 64-bit operating system when creating or editing the Sterling Gentran:Server data source.

Use this procedure only if you want to manually create the ODBC DSN.

## Procedure

1. From the **Start** menu, select **Settings > Control Panel > Administrative Tools**, then double-click **Data Sources (ODBC)**.  
The ODBC Data Source Administrator dialog box User DSN tab is displayed.
2. Select the **System DSN** tab.

**Note:** For controllers, you must use a system DSN to allow the Executive Service to use the data source. We recommend that you use a System DSN for all Sterling Gentran:Server machines because it enables the Executive Service and any user on the machine to use that DSN.

The System DSN options are displayed.

3. Click **Add**.  
The Create New Data Source wizard is displayed.
4. From the driver list, select the **SQL Server ODBC** driver and click **Finish**.
5. Do the following:

- a. Type the name of the ODBC data source that is used by Sterling Gentran:Server in this system (GentranDatabase).
  - b. From the Server list, select one of the following:
    - **(local)** if SQL Server is installed on that machine
    - the machine name where the database resides
  - c. Click **Next**.
6. Verify that **With Windows authentication using the network login ID** is selected and click **Next**.

**Notes:**

- Selecting this option specifies that the SQL Server ODBC driver will use a trusted connection to SQL Server running on Microsoft Windows. When selected, SQL Server uses integrated security to establish connections with this data source.
  - Set the security modes for Sterling Gentran:Server and your database to be the same.
7. Do the following:
- a. Select **Change the default database**.
  - b. Select **GentranDatabase**.
  - c. Deselect **Use ANSI nulls, paddings and warnings** to specify that SQL Server should not enforce ANSI rules regarding null comparisons, warning messages, and automatic trimming of trailing blanks and zeroes.
  - d. Click **Next**.
8. Select **Change the language of SQL Server system messages to** and select **English**.

**Note:** Even if you are using a non-English version of SQL Server, you must change the language used for Sterling Gentran:Server SQL Server Messages to English. Specifically, English must be used for the ODBC data source name used by Sterling Gentran:Server to access GentranDatabase.

All Sterling Gentran:Server-related SQL error messages will be written to the SQL log in English.

9. If you using a code page that is different than the SQL Server default of ISO-8559, verify that **Perform translation for character data** is selected and click **Finish**.

This would happen if you performed a Custom SQL installation and selected an 850 code page for North America or 437 for the United States.

If you installed SQL as a typical installation or accepted the default code page in a custom installation, deselect **Perform translation for character data** and click **Finish**.

**Note:** If a client machine is using an ANSI code page that is different from the one used by SQL Server, ANSI character strings may be misinterpreted.

The ODBC Microsoft SQL Server Setup dialog box is displayed with the configuration of the DSN for GentranDatabase.

10. Click **Test Data Source** to test the DSN configuration.
11. Click **OK** to acknowledge the message.
12. Click **OK** to exit the ODBC Administrator.



## Oracle Setup

### About SQL \*Net

Before installing Sterling Gentran:Server, SQL \*Net must be installed and configured on that machine. This software enables the machine to interface with Oracle.

The name of the alias (SQL \*Net Connect String) is determined by your Oracle DBA. There are no naming restrictions.

#### Notes:

- The alias name is referenced in the ODBC Setup. You should record this name for later use. Other versions of Oracle also refer to SQL \*Net as a "Net Service."
- Support for Oracle databases does not include support for the Oracle Exadata platform.
- In a 64-bit OS, you need to apply Oracle Data Access Components (ODAC) with 32-bit ODBC drivers. Copy the files `TNSNames.ora` and `SQLNet.ora` from `C:\app\<user>\product\11.2.0\<home>\Network\Admin` to `C:\app\<user>\product\11.2.0\client_1\Network\Admin`. (ODAC 11.2 Release 4 and Oracle Developer Tools for Visual Studio full install.)

### About Oracle Users DB Administrator Account

Before installing Sterling Gentran:Server, we recommend that you set up a new database administrator (DBA) account to be used to create the database tables when installing Sterling Gentran:Server.

We recommend that you use the same Microsoft Windows administrative account that the Sterling Gentran:Server Executive Service uses to log on to Microsoft Windows.

When creating the new DBA logon, assign the new tablespace you created for the Sterling Gentran:Server database tables to be the default for this account.

The Sterling Gentran:Server database tables are created under the schema of this account.

### Executive Log On Account to Oracle

You must grant DBA rights (roles) to one user so the Executive Service can log on. You must add this account to Oracle.

We recommend that you use the same Microsoft Windows administrative account that the Executive Service uses to log on to Microsoft Windows. We also recommend that this account is the same as your database administrator account. After Sterling Gentran:Server is installed, this is the account that is displayed when you select the Executive Service on the Services dialog box and click Startup.

### Adding Users to the Oracle Database

You must add each Sterling Gentran:Server user to the Oracle database. Oracle does not interface with Microsoft Windows security, so if you set up a Microsoft Windows group containing all Sterling Gentran:Server users, Oracle does not recognize the group.

## About this task

Use this procedure to verify the Sterling Gentran:Server users that you need to add to Oracle.

### Procedure

1. From the **Start** menu, select **Programs > Administrative Tools > User Manager**.  
The User Manager is displayed.
2. Double-click the **GENTRANUSERS** group in the bottom frame of the User Manager window.  
The Local Group Properties dialog box is displayed.

**Note:** The users displayed in the Members list box are the users you need to add to Oracle.

3. Grant these users the following roles (rights):
  - Select
  - Insert
  - Delete
  - Update
4. Click **Finish**.

### Default Number of Open Cursors

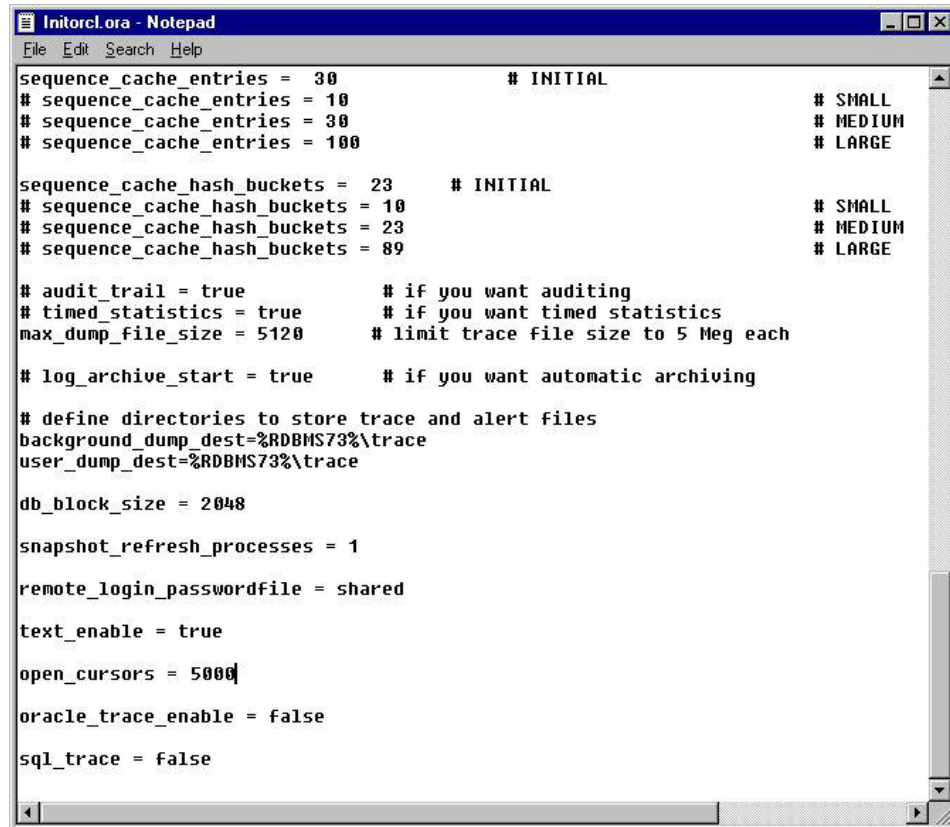
The default number of open cursors allowed in Oracle is 50 (this number may vary depending on which version of Oracle you are using). To run in production, an average company may need this number set to 5000 or greater.

You need to change the number of open cursors in the Oracle Startup file, which is typically located in ORACLE\ORADATA. The name of the Startup file is "init\*\*\*\*.ora", where "\*\*\*\*" is the name of the instance.

To change the number of open cursors, add the following line anywhere in the Startup file:

```
open_cursors = 5000
```

**Note:** The following illustrates how to change the default number of open cursors. See the third line from the bottom.



```
sequence_cache_entries = 30          # INITIAL
# sequence_cache_entries = 10        # SMALL
# sequence_cache_entries = 30        # MEDIUM
# sequence_cache_entries = 100       # LARGE

sequence_cache_hash_buckets = 23     # INITIAL
# sequence_cache_hash_buckets = 10   # SMALL
# sequence_cache_hash_buckets = 23   # MEDIUM
# sequence_cache_hash_buckets = 89   # LARGE

# audit_trail = true                 # if you want auditing
# timed_statistics = true            # if you want timed statistics
max_dump_file_size = 5120           # limit trace file size to 5 Meg each

# log_archive_start = true          # if you want automatic archiving

# define directories to store trace and alert files
background_dump_dest=%RDBMS73%\trace
user_dump_dest=%RDBMS73%\trace

db_block_size = 2048

snapshot_refresh_processes = 1

remote_login_passwordfile = shared

text_enable = true

open_cursors = 5000

oracle_trace_enable = false

sql_trace = false
```

## Issue with Oracle Database ODBC Drivers

There is an issue with the Oracle ODBC drivers that prevents Sterling Gentran:Server from working properly with the ODBC drivers supplied by Oracle for use with Oracle databases.

IBM has contacted Oracle and it is a known issue in their ODBC drivers that causes the ADO RecordCount property to always return a value of -1. The Oracle BUG number for checking on the status of fixes for this issue is 11962102.600.

**Note:** The Microsoft ODBC driver can be obtained from the Microsoft web site as part of the latest MDAC software.

## Effect in Sterling Gentran:Server

The Oracle ODBC issue only affects the Audit Notification Service because this is this only service that uses this function of ODBC.

**Note:** If the ODBC driver is not installed and configured before Sterling Gentran:Server is installed or upgraded, the Audit Notification Service will fail to start. This prevents any other Sterling Gentran:Server services from starting. Additionally, failure to install or upgrade the ODBC driver may result in database corruption.

## Resolution

Until Oracle resolves this issue, you must use two ODBC Data Sources as a work-around. After following the directions listed in "Configuring the Oracle Database for Use with Sterling Gentran:Server" on page 30, your system will use

two Data Source Names (DSNs): one DSN using the Microsoft ODBC for Oracle driver and the other using the ODBC driver supplied by Oracle. The Microsoft DSN is associated with the Audit Notification Service and the Oracle DSN is associated with the Mailbox Service, Executive Service, and Communications Service.

## **Configuring the Oracle Database for Use with Sterling Gentran:Server**

### **About this task**

We suggest that you define a new tablespace in Oracle where the Sterling Gentran:Server database tables can be created. This ensures that the database tables are not created in the system tablespace.

**Note:** Make sure to specify that the NLS\_LANG parameter is set to American and the NLS\_Territory parameter is set to America so the audit log will work correctly.

Use this procedure to complete your Oracle database installation when you are installing a new Sterling Gentran:Server system.

### **Procedure**

1. Create two ODBC Data Sources in Microsoft Windows: one using the Microsoft ODBC for Oracle driver and the other using the Oracle ODBC driver.

**Note:** Make sure both are unique names and are set up as system DSNs.

2. If it is available, use the Oracle ODBC Test tool to verify that the system has access to the database through both drivers. See your Oracle documentation for more information about using the Oracle ODBC Test tool.
3. Begin your Sterling Gentran:Server installation.
4. When the install prompts for the name of the DSN you want to use with Sterling Gentran:Server, type the DSN you created with the Microsoft ODBC for Oracle driver.

The install will then prompt for the name of the DSN created with the Oracle ODBC driver.

5. Enter the DSN name for the Oracle ODBC driver.
6. Finish the installation of the primary Sterling Gentran:Server system controller and apply any necessary options.

If you want to verify your installation, continue with the next step. Otherwise, you have completed your Oracle database installation.

7. After the installation process is complete, run the Sterling Gentran:Server System Configuration utility by selecting from the Start menu **Programs > Gentran Server > Gentran Server Configuration**.

The system displays the System Configuration dialog box.

8. Select the **System** tab and verify that the DSN indicated uses the Oracle ODBC driver from the ODBC Data Source list.

9. Select the **Audit/Notification** tab and click **Server**.

The system displays the Audit/Notification Server Properties dialog box, which enables you to configure database and notification server options.

10. Verify that ODBC Data Source setting for Audit/Notification (in the ODBC Data Source list) indicates the DSN that uses the Microsoft ODBC driver. Change the setting if necessary.

11. Click **OK** to exit the System Configuration utility.
12. Run the Mailbox Server Manager by selecting from the Start menu **Programs > Gentran Server > Gentran Server Mailbox**.  
The system displays the Mailbox Server Manager.
13. Register your Mailbox Server.  
See the *IBM Sterling Gentran:Server for Microsoft Windows Communications User Guide* for more information.  
  
**Note:** The Mailbox Server is the Microsoft Windows machine name of the Sterling Gentran:Server system.
14. Right-click on the server name in the display and select **Properties**.  
The system displays the Server Properties dialog box.
15. On the **Database** tab, verify that the ODBC Data Source setting indicates the DSN that uses the Oracle ODBC driver.
16. If you have made any changes to the DSN selections, you need to restart the Sterling Gentran:Server services. From the Control Panel, access the Windows Services dialog box and stop and restart your Sterling Gentran:Server services in the following order:
  - a. Audit Notification Service
  - b. Mailbox Service
  - c. Executive ServiceSee your Microsoft Windows documentation more information about stopping and starting services.

---

## Installing Visual C++ Redistributable

### About this task

Complete these steps to install Visual C++ 2005 Redistributable and Visual C++ 2008 Redistributable.

### Procedure

1. Navigate to GSW\Support\Redist\VC2005 and double-click on **vcredist\_x86.exe**.  
The Visual C++ 2005 Redistributable installer begins.
2. Click **Yes**.
3. Click **Next**.
4. Select that you agree and click **Install**.  
You may see a dialog about Network Threat Protection. Click **Yes/OK**.
5. Click **Finish**.
6. Navigate to GSW\Support\Redist\VC2008 and double-click on **vcredist\_x86.exe**.  
The Visual C++ 2008 Redistributable installer begins.
7. Click **Yes**.
8. Click **Next**.
9. Select that you agree and click **Install**.  
You may see a dialog about Network Threat Protection. Click **Yes/OK**.
10. Click **Finish**.  
The installation is complete.

---

## Firewalls

You need to open the firewall on a server if you are installing client systems to join the server.

When doing a client install, the server that you are trying to join to must have some openings in its firewall to allow the client to access the server. This is especially true in newer operating systems (for example, Windows Server 2008 R2) that ship with the firewall blocking nearly everything by default.

- For SQL server, open TCP port 1433.
- For RPC, open port 135 TCP/UDP and ports 1024-65535 TCP.

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## Chapter 4. Installation Tasks

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### Installing Sterling Gentran:Server

The Autorun program (autorun.exe) allows you to install Sterling Gentran:Server.

#### Before you begin

- Read the Release Notes.
- You must be logged on to Microsoft Windows as a local administrator.
- We recommend that you exit all other Microsoft Windows programs before running the setup program.
- Either download the executable file from Passport Advantage® or use the DVD to access the autorun.exe file. The system displays a splash screen. The installation wizard will guide you through the installation process.

#### About this task

**Important:** This is to install a new system only. If you are upgrading, please follow the instructions in “About Upgrading Sterling Gentran:Server” on page 43.

This procedure can be used to install Sterling Gentran:Server on a primary system controller, a secondary system controller, and a user interface client. However, there are screens where different options must be selected depending on where you are doing the installation. Please read them carefully.

#### Procedure

1. On the splash screen, select IBM Sterling Gentran:Server for Microsoft Windows.
2. On the Welcome screen, click **Next**.
3. Do one of the following:
  - If you are installing the primary controller, select **Create a new Gentran:Server system** and click **Next**.
  - If you are installing a secondary controller or user interface client, select **Join an existing Gentran:Server system**.
4. Click **Yes** to continue the install.  
The system displays the Destination Location dialog box.
5. Select the installation folder (the default folder is c:\GENSRVNT) and click **Next**.  
You already created the GENSRVNT folder, but if the installation folder did not currently exist, setup creates it. Setup displays the System Name dialog box.
6. Type the name of the new system and click **Next**.  
The system displays the Data Store Location dialog box.
7. Type the data store location (for example, \\server name\GENSRVNT) and click **Next**.

**Note:** For clustered systems, this is the shared drive on the disk vault.

Setup verifies that the specified drive or folder is shared and displays the ODBC Data Source Name dialog box.

8. Type GentranDatabase as the name of the ODBC data source and click **Next**.

**Note:** The ODBC data source name is case-sensitive.

Setup looks for the ODBC DSN. If it does not find the DSN, you are prompted to create one. Continue with Step 13. Otherwise, continue with Step 9.

9. To create the ODBC DSN, click **Yes**.

The system displays the ODBC Data Source Administrator dialog box.

10. Select the database type.
11. Type the name of the server where the database resides and click **Next**.
12. Type the name of the database (GentranDatabase).
13. Select the database authentication type.

**Note:** We recommend that you select Windows Authentication.

14. To change any ODBC DSN parameters, click **Yes** and go to “Creating an ODBC DSN for Sterling Gentran:Server” on page 25. Otherwise, click **No** and continue with Step 15.

Setup displays the Database Logon dialog box.

15. Enter the logon for the database (for Executive Service access) using the database administrator login ID and password. Click **Next**.

**Note:** For the SQL Server User ID, you must use the SQL administrative logon with administrative rights on the Sterling Gentran:Server database. Otherwise, only the user that created the database tables can use those tables. Setup displays the Optional Components dialog box.

16. Select the components you want to install and click **Next**.

**Note:** We recommend that you install all components. The Process Controller components are automatically installed on the primary system controller.

17. If you want to be HIPAA-compliant, click **Yes** and setup will install the appropriate components.

**Notes:**

- Sterling Gentran:Server optionally supports your compliance with the Health Insurance Portability and Accountability Act (HIPAA, Public Law 104-191). This act requires any organization that exchanges transactions for health care to follow national implementation guidelines enacted to improve the privacy and security of patient records, simplify and standardize electronic communication across the entire health care industry, and reduce administrative costs. See the *IBM Sterling Gentran:Server for Microsoft Windows HIPAA and NCPDP Compliance Guide* for more information about using HIPAA with Sterling Gentran:Server.
- If you choose to be HIPAA compliant, you must make a note of the user ID and password that you use to access this Sterling Gentran:Server system and store it in a secure location.

If you selected to install the Process Controller component, setup displays the Microsoft Windows Logon dialog box. Continue with the next step. If you only selected Client Access Components or Integration Components, continue with step 20.

18. Enter the logon for Microsoft Windows (for Executive Service access), using the Windows user ID and password. Click **Next**.

**Notes:** The login format is DOMAIN\User for a domain account and .\User for a non-domain account.



- You need to enter a valid administrative user ID and password that the Executive Service uses to access network resources. This is the Microsoft Windows user account that starts the Executive Service and is also used for unattended processing.
- This user ID must have the advanced right "log on as a batch job" assigned on the local machine.

Setup displays the Database Logon dialog box.

19. Enter the logon for the database (for Executive Service access) using the database user ID and password. Click **Next**.

**Notes:**

- You must enter a valid database administrative logon that is already set up with access to the Sterling Gentran:Server database tables.
- This login enables the Executive Service to access and manipulate information in the database tables. Sterling Gentran:Server uses this logon every time it accesses the database tables.

Setup displays the Database Logon dialog box.

20. Log in as the Sterling Gentran:Server System Administrator. Click **Next**.

**Notes:**

- This user ID must also have valid Microsoft Windows and database logons.
  - The setup program creates this Sterling Gentran:Server administrative user.
- Setup displays the Audit Log Purge dialog box.

21. We recommend that you enable this process and select a time. Click **Next**.

Setup displays the Database Access dialog box, which allows you to grant access to the Sterling Gentran:Server database tables to a user or group of users that you have already set up with your database management program.

22. Accept the default program folder name **Gentran Server** and click **Next**.

Setup displays a dialog about setting the data format for new maps and fields.

23. To use free format (containing all ASCII characters—lower 128 and upper 128), click **Yes**. Otherwise, to use a format that corresponds to the lower 128 ASCII characters, click **No**.

**Notes:**

- When you create a new map or a new field, Sterling Gentran:Server assigns a default format to the string fields. This format serves as the basis for character validation. If your preference for default formats corresponds to ASCII characters only (most U.S. users), you will not require this free format option. If your default format is to include languages using character sets beyond ASCII characters, you should choose free format (0x01 – 0xFF).
- This selection is permanent and, once you choose this default configuration setting, you are unable to change it.

Setup asks if you want to proceed.

24. Click **Yes**.

Setup builds the Sterling Gentran:Server database tables, creates the system data store folders, inserts default data, installs the components that you selected, adds the appropriate registry entries, installs services, builds the program group and icons (if Client Access Components or Integration Components were selected).

25. Click **Finish**.

**Important:** For clustered services, continue with “Setting up Clustered Services” where you will finish your installation.

26. If you do not want to start Sterling Gentran:Server services now, click **No**. You will need to restart the services manually later. Otherwise, click **Yes**.

If you previously installed and then uninstalled Sterling Gentran:Server, the system prompts you to drop and replace the old database tables. If you are using an Oracle database, the system prompts that you need to manually drop the old tables before installing Sterling Gentran:Server.

- If no errors occurred, setup continues with Step 29.
- If errors occurred, setup reports the errors. See the “InstallShield Error Messages” on page 60.

**Note:** If the Microsoft Windows user ID you entered in Step 18 does not have the "Log on as a batch job" right assigned to it on the local machine, the system informs you that you will need to grant that right for the specified background services to run. Click **OK** to acknowledge the message and grant the right to that user ID after setup completes.

27. If you installed Integration Components, you are prompted to install the Sterling Gentran Standards. Click **OK** to acknowledge this message. See the Sterling Gentran Standards Database for EDI installation information.

Then system prompts you that if you need to configure e-mail notifications, you will need to configure the MAPI profile to be used.

28. Click **OK**.
29. Click **OK** to exit setup. You have completed the setup program to create a new Sterling Gentran:Server single workstation system.

## What to do next

- For a single workstations and single controller systems, your Sterling Gentran:Server installation is complete. Continue with the post-installation tasks.
- For multiple controller systems, you have completed setup of your primary system controller. You need to install the option pack. Run autorun.exe again and select Option Pack on the splash screen. After that, you need to install Sterling Gentran:Server on your secondary controllers. Use this procedure with the following exceptions:

- In step 2, make sure to select **Join an existing Gentran:Server system**.
- In step 5, type the name of the primary system controller and click **Next**.
- In step 15, the list of components includes Process Control. For secondary controllers, make sure to select this option. For user interface clients, do *not* select this option.
- In step 17, log in to the database using the ODBC user ID.

After installing Sterling Gentran:Server on your secondary controllers, you can install your user interface clients. Use this procedure with the following exceptions:

- In step 2, make sure to select **Join an existing Gentran:Server system**.
- In step 5, type the name of the primary system controller and click **Next**.

---

## Setting up Clustered Services

### About this task

Use this procedure to complete the installation on the primary node for clustered systems.

## Procedure

1. When asked if you want to start Sterling Gentran:Server services now, click **No**. The Sterling Gentran:Server services should be controlled from the Cluster Administrator. The services will be tested later.
  - If no errors occurred, continue with Step 3.
  - If errors occurred, setup reports the errors. See InstallShield Error Messages for a list of the Install Shield error messages.

If the Microsoft Windows user ID you entered earlier does not have the "Log on as a batch job" right assigned to it on the local machine, the system informs you that you will need to grant that right for the specified background services to run. Click **OK** to acknowledge the message and grant the right to that user ID after setup completes.
2. If you installed Integration Components, you are prompted to install the Sterling Gentran Standards. Click **OK** to acknowledge this message. Otherwise, continue with Step 3.

The system prompts that if you need to configure e-mail notifications, you will need to configure the MAPI profile to be used. Click **OK**.
3. Click **OK** to exit setup. You have completed the steps to create a new primary Sterling Gentran:Server system controller in a clustered system. See your Microsoft Windows documentation for more information about using the Cluster Administrator.
4. Install any additional components on this node:
  - "Installing the Option Pack" on page 38
  - "Installing RosettaNet" on page 40
  - "Installing the Extension for SAP" on page 42
5. Using the Cluster Administrator, create new resources for the following:
  - a. Audit Notification Service, which depends on the File Share  
Set the Root Registry Key to **SOFTWARE\STERLING COMMERCE** and click **OK**. Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters.  
  
**Note:** In a 64-bit operating system, the Root Registry Key should be **SOFTWARE\Wow6432Node\Sterling Commerce**.
  - b. Mailbox Service, which depends on the Audit Notification Service  
Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters.
  - c. Executive Service, which depends on the Mailbox Service  
Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters.
  - d. Communications Service, which depends on the Mailbox Service (if you installed the option pack in Step 4)  
Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters.
  - e. RosettaNet Server PIP Monitor, which depends on the Audit Notification Service (if you installed Sterling Gentran:Server for RosettaNet in Step 4)  
Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters.
6. Using the Cluster Administrator, verify that all Sterling Gentran:Server resources can be brought online.

**Note:** If the Mailbox Service fails to start after the installation, you may need to change the security permissions for the DCOM Audit Notification Service for the user of the Sterling Gentran:Server service account ("Allow Access" and "Allow Launch"). It is possible that due to network configurations, any change to DCOM may need to be made at the Default Security level for DCOM.

7. Using the Cluster Administrator, take the cluster resources created for all the Sterling Gentran:Server resources offline except the File Share resource and the Audit Notification Service.

Then, move the group, which contains the Audit Notification Service. This forces the replication of the registry. Repeat this process to move the group to all nodes in the cluster so the registry is replicated to each node.

**Note:** The move will report that the Audit Notification Service fails. This is not a problem.

8. Log on to another node in the cluster and change the preferred owner to the node you are logged on to. Take the Sterling Gentran:Server services offline and move the group to the current node.
9. Use the setup program to install Sterling Gentran:Server on the next node in your system. Repeat until Sterling Gentran:Server is installed on all nodes in the cluster.

---

## Install Options and Extensions

### Installing the Option Pack

#### Before you begin

- If you are installing a gateway, verify that you have successfully installed and configured any associated messaging software.
- For a clustered environment:
  - You must be logged on to Microsoft Windows as a domain administrator.
  - IP-based communications are the only communications supported with Sterling Gentran:Server on a clustered system.
  - Install the option pack only on the node that owns the Cluster resources.
  - Ensure that failback is allowed and the node on which you are installing Sterling Gentran:Server is set to "Preferred Owner" in Cluster Administrator. For more information on using Cluster Administrator, see your Microsoft documentation.
  - You must have already installed the Microsoft Windows 2003 (or later) operating system on each node and that you have installed either SQL Server or Oracle on a machine or machines that are accessible using the network.
- If your Sterling Gentran:Server environment includes a controller and one or more remote clients, we recommend that you complete this installation procedure on the primary system controller first, followed by each client. If you are running Sterling Gentran:Server in a clustered environment, you need to install the option pack on each node in your clustered system.
- If you are running Sterling Gentran:Server in a clustered environment and you are prompted during the option pack install that setup has detected existing database tables and asks if you want to overwrite the existing tables, click No to inform setup that you want to work with the existing tables.
- To install the XML option, you must have previously installed the Integration Components. When you install the XML option, the tutorial folder includes the XML tutorial files.

- The Advanced Data Distribution option can only be installed on your primary system controller.
- We recommend that you install the HTTP Message Forwarder on a machine inside your DMZ. Installing this component on a machine in your Sterling Gentran:Server system is not recommended.

## About this task

Complete the following steps to install the option pack on your system.

## Procedure

1. On the installation splash screen, select the option pack.
2. Select the components that you want to install. Click **Next**.  
The system displays the Optional Component dialog box.
3. If you chose to install the Communications Gateway, select whether you want to make this machine a communications controller.

If you did not chose to install the Communications Gateway, a dialog box is displayed stating that setup is ready to install components.

- If the system displays the logon dialog box, continue with next step.
- If the system displays the Communications Controller dialog box (with the systems to which your client machine is connected), select the system in which you want this machine to be a communications controller and continue with next step.

**Note:** You are only prompted with the Communications Controller dialog box if you are installing the Communications Gateway on a machine that runs as a user interface client in multiple Sterling Gentran:Server systems.

4. In the logon dialog box, enter the requested Microsoft Windows domain account information.
5. Click **Yes** to begin installation.
  - Installation begins.
  - If you chose to install the HTTP gateway on a machine that previously had the HTTP gateway installed on it, setup asks if you want to overwrite the existing HTTP gateway database tables. If you click **Yes**, setup overwrites the current tables and you will lose all your settings and data. If you click **No**, setup does not overwrite the existing tables.
  - If you installed the HTTP gateway, setup displays the Database Access dialog box to allow you to grant access to the Sterling Gentran:Server database tables to a user or group of users that you have already set up with your database management program. To grant access to the Sterling Gentran:Server database tables to the group of users you created, type EDIUSERS and click **Next**.

**Note:** This user or group must be a valid ID or the installation cannot be completed. For SQL Server, the ID must be a valid Microsoft Windows user or group. For Oracle, the ID must be a valid user ID (Microsoft Windows groups are not recognized by Oracle).

- If you chose to install the HTTP Message Forwarder, setup displays the HTTP Message Forwarder dialog box to enable you to select where the HTTP Message Forwarder will be installed. Navigate to the location and click **Next**.

- When the components that you selected are installed, the system asks you if you want to restart the services that setup stopped and displays a dialog box that indicates installation is complete. Click **Yes** if you want to restart services or **No** if you will restart the services manually.

**Note:** The Mailbox Service may not start if you have not upgraded one of the Sterling Gentran:Server extensions to ensure its version complies with the newest release of the core product. If this service fails to start, the system will inform you with a warning message. Click **OK**.

6. Click **OK** at each of the information prompts to complete the installation process and exit setup.
7. If the Mailbox Service failed to start, execute it manually from your Microsoft Windows Services dialog box. For more information on how to start services, see the documentation for your Microsoft Windows operating system.
8. If you are running Sterling Gentran:Server in a non-clustered environment, install the option pack on each additional machine in your system - secondary controllers first, followed by each client. If you are running Sterling Gentran:Server in a clustered environment, you need to install the option pack on each node in your clustered system.
9. Verify that the services on which the Executive Service is dependent are ordered correctly. The following services must be started before initiating the Executive Service:
  - a. Audit Notification Service
  - b. Mailbox Service
  - c. Communications Service (if installed)
10. If you are installing the Communications Gateway, use the Cluster Administrator on the primary node to create a new resource for Sterling Gentran:Server Communications, which depends on the Mailbox Service. For more information on creating cluster resources, see your Microsoft documentation.
11. Using the Cluster Administrator on the primary node, move the Audit Notification Service. This activity forces the replication of the registry (containing Sterling Gentran:Server entries) on the other nodes in the cluster.

**Note:** The move will report that the services fail and this is not a problem because it still forces the registry keys to the other nodes.

## Installing RosettaNet

### Before you begin

- Verify that you have successfully installed the Sterling Gentran:Server XML option and the HTTP Gateway option.
- You must have Microsoft Internet Explorer and IIS installed on each machine before installing Sterling Gentran:Server for RosettaNet.
- Determine which database user logon you want the install program to use to access the Sterling Gentran:Server database.

#### Notes:

- This logon must have administrative rights to the database. You must use the database owner logon that was used to create the GentranDatabase.
- This logon is used to build the Sterling Gentran:Server for RosettaNet database tables.

- Install Sterling Gentran:Server for RosettaNet only on the node that owns the cluster resources.
- Ensure that failback is allowed and the node on which you are installing Sterling Gentran:Server is set to "Preferred Owner" in Cluster Administrator.
- If you use Sterling Gentran:Server for RosettaNet in a distributed environment, you should complete this installation procedure on the primary system controller first, followed by any secondary controllers, and then each user interface client machine.

## About this task

Complete the following steps to install Sterling Gentran:Server for RosettaNet on your system.

## Procedure

1. On the installation splash screen, select Sterling Gentran:Server for RosettaNet.
2. If setup determines that there are Sterling Gentran:Server and/or IIS services running, click **Yes** to stop each currently executing service.

Setup looks for installed components. If you have ever installed Sterling Gentran:Server for RosettaNet components, you are prompted that the install has detected existing database tables that will be dropped.

3. Do one of the following:
  - Click **Yes** if you have backed up your data and you want setup to overwrite the database tables.
  - Click **No** if you do not wish to overwrite your existing tables. Setup will exit.

Setup displays the Microsoft Windows Logon dialog box.

4. Type a Microsoft Windows user ID - preceded by either `.\` (single workstation) or `domain\` (distributed environment) - and password. Click **Next**.  
Setup displays the Application Database Access dialog box, which allows you to grant access to the Sterling Gentran:Server for RosettaNet database tables to a user or group of users that you have already set up with your database management program.
5. To grant access to the Sterling Gentran:Server for RosettaNet database tables to a group of users, type the name of the group (such as GENTRANUSERS) and click **Next**.

**Note:** If you do not enter a user or group of users, you are prompted that you may need to manually grant users access to the Sterling Gentran:Server for RosettaNet database tables.

For a new install: Setup prompts you that it is now ready to install the Sterling Gentran:Server for RosettaNet and asks you if you want to proceed. Continue with step 7.

For an upgrade: Setup displays the Program Folder Name dialog box.

6. Accept the default program folder name and click **Next**.  
Setup displays a message stating that it is now ready to install the Sterling Gentran:Server for RosettaNet and asks if you want to proceed.

7. Click **Yes** to begin installation.  
Setup creates the Sterling Gentran:Server for RosettaNet database tables in GentranDatabase, registers system translation objects, installs the user exit and

implements it in the registry, loads other registry settings, and installs the Sterling Gentran:Server for RosettaNet programs in your GENSrvnt\Bin folder.

After installation is complete, the system starts the RosettaNet service and asks you if you want to restart the services that it stopped (Sterling Gentran:Server services, IIS services, or both).

- Click **Yes** if you want to restart services.
- Click **No** if you will restart the services manually.

For an upgrade: If setup detects a GENSrvnt\RosettaNet folder that contains 4.x sample data, maps, and tutorial data, you are prompted to delete it. If you click **Yes**, any data you have created in that folder will also be deleted. If you click **No**, setup does not delete that folder.

Setup indicates installation is complete.

8. Click **OK**.
9. For a new install, do the following:
  - a. If you are installing in a clustered environment, use the Cluster Administrator on the primary node to create a new resource RosettaNet Server PIP Monitor, which depends on the Mailbox Service. Continue with b.
  - b. See Microsoft documentation for creating cluster resources.  
Otherwise, install the Options Pack on the other machines in your system.
- b. Using the Cluster Administrator on the primary node, move the Audit Notification service. This activity forces the replication of the registry (containing Sterling Gentran:Server entries) on the other nodes in the cluster.

**Note:** The move will report that the services fail and this is not a problem because it still forces the registry keys to the other nodes

10. For an upgrade, do the following:
  - a. Create an outbound HTTP gateway mailbox for each URL to which you will send PIPs. See "Creating a RosettaNet Partner Definition" in the *IBM Sterling Gentran:Server for Microsoft Windows for RosettaNet User Guide* for more information.
  - b. Associate a trading partner relationship with each mailbox you just created. See "Creating the RosettaNet Mailbox for Each Outbound Trading Partner" in the *IBM Sterling Gentran:Server for Microsoft Windows for RosettaNet User Guide* for more information.
  - c. If you created a Process Control event that uses the old Process Control PIP Monitor, you must remove the Process Control event after the upgrade. See the section on Process Control in the *IBM Sterling Gentran:Server for Microsoft Windows for RosettaNet User Guide* for more information.

## Installing the Extension for SAP

### Before you begin

- You must already have SAP installed.
- Identify the name of the database and ODBC data source that you created for your Sterling Gentran:Server system. The Extension for SAP installation program automatically creates tables within this database during the install process.
- Identify the ODBC user ID and password that you want the Extension for SAP to use to log on to the database. This logon must have administrative rights to the database. You must use the database owner logon that was used to create the GentranDatabase.



- Identify the database user or group for which you want to grant access to the tables.
- Perform this task on the primary system controller.
- We recommend that you grant access to the users in your EDI group.

### About this task

Complete the following steps to install the extension for SAP on your Sterling Gentran:Server system.

### Procedure

1. On the installation splash screen, select the extension for SAP.  
If this is a new install, setup displays the Database Logon dialog box. Continue with step 4.  
If this is an upgrade, setup displays the Select Components dialog box. Continue with the next step.
2. Verify that **Install/Replace the existing SAP Extension** is selected and click **Next**.
3. Click **Next**.  
Setup displays the Database Logon dialog box.
4. Type the user ID and password that are used to log on to the extension for SAP database and click **Next**.  
Setup displays either the ODBC Data Source Name dialog box (continue with step 5) or the Database Access dialog box (continue with step 6).  
  
**Note:** When you install the extension for SAP on your primary system controller, the installation program can automatically obtain the ODBC data source information it needs from your Sterling Gentran:Server registry. Therefore, it can skip the ODBC Data Source Name dialog.
5. Type the name of the ODBC data source and click **Next**.  
Setup displays the Database Access dialog box.
6. Type the name of the security group for which you want to grant access rights to the database table for the extension and click **Next**.  
Setup asks you if you want to install the SAP sample maps.
7. Click **Yes** to install the sample maps.  
Setup installs the maps and restarts the Executive Service (if this service was executing prior to installation). Setup then informs you that installation is complete.
8. Click **OK** to complete setup.

---

## Upgrade Tasks

### About Upgrading Sterling Gentran:Server

Use the upgrade option on every machine in your Sterling Gentran:Server system when you receive upgrades to the Sterling Gentran:Server software.

In a distributed environment, you must upgrade the primary Sterling Gentran:Server system controller first.

**Notes:**

- To complete the installation of a Single Workstation system, you must be logged on to Windows as a local administrator.
- To complete the installation of a Distributed System, you must be logged on to Windows as a domain administrator.

## **Sterling Gentran:Server for RosettaNet Prerequisite**

Sterling Gentran:Server for RosettaNet depends on the Microsoft Internet Information Service (IIS) for HTTP-related communications. Since the use of IIS requires the Sterling Gentran:Server dynamic libraries to be open, the installation of the Sterling Gentran:Server will fail if IIS is running at installation time. Therefore, we recommend that you stop the IIS service before installing Sterling Gentran:Server.

You can stop IIS by stopping the World Wide Web Publishing Service and the IIS Admin Service from the Services dialog box (select each service from the list and click Stop). You can access the Internet Services dialog box from your Start menu by selecting Programs > Administrative Tools, and then selecting Internet Services Manager.

**Note:** Be aware that if you use Sterling Gentran:Server for RosettaNet and are upgrading to Sterling Gentran:Server 5.3.1, there are tasks you will need to perform after installing Sterling Gentran:Server 5.3.1 and Sterling Gentran:Server for RosettaNet 5.3.1, and you should allot time to complete these post installation tasks.

## **Automatic recovery in case of failure**

Setup maintains a log of every scripted command that it executed. Automatic recovery determines the point at which the install process failed and attempts to resume installation from that point. It does not reverse the previously executed commands. The following are examples of the type of errors that this automatic process can recover from:

- The database server crashed or was accidentally unplugged.
- The network failed.
- A power outage occurred.

## **Upgrading Sterling Gentran:Server**

Use the upgrade option on every server in your Sterling Gentran:Server system when you receive upgrades to the Sterling Gentran:Server software.

### **Before you begin**

- Read the Release Notes.
- You must be logged on to Microsoft Windows as a local administrator.
- We recommend that you exit all other Microsoft Windows programs before running the setup program.
- Either download the executable file from Passport Advantage or use the DVD to access the autorun.exe file. The system displays a splash screen. The installation wizard will guide you through the installation process.
- We recommend that before upgrading your Sterling Gentran:Server system in your production environment you upgrade the system on a test server first, then migrate to your production system.

- We recommend that you perform a synchronous backup of your entire Sterling Gentran:Server system, including the database, data store, and your Windows registry. After performing the backup, you should verify its integrity.
- Exit all other Windows programs before running the setup program.
- You must run the setup program on the server on which you want to upgrade Sterling Gentran:Server.
- In a distributed environment, you must upgrade the primary Sterling Gentran:Server system controller first, then each additional server.
- In a clustered environment, you must upgrade the primary Sterling Gentran:Server system controller first, and then upgrade each additional server.
- If you have Sterling Gentran:Server for RosettaNet installed, see “About Upgrading Sterling Gentran:Server” on page 43.
- If you applied any hotfixes provided by Customer Support to your Sterling Gentran:Server system, check the modified date of the hotfix against the release date of the version to which you are upgrading. If the hotfix version date is newer than the release date, you must manually remove the hotfix.  
If an upgrade file date is earlier or the same as the existing file date, that file is not copied. If the upgrade file date is later than the existing file date, the file is overlaid with the newer file.
- Support for Oracle databases does not include support for the Oracle Exadata platform.

## About this task

To upgrade Sterling Gentran:Server, complete the following steps.

### Procedure

1. On the splash screen, click IBM Sterling Gentran:Server for Microsoft Windows.
2. If you are running any of the Sterling Gentran:Server services, the system prompts you to stop the services so installation can proceed. Click **Yes** to stop each service.

If you select **No** for any of the services, setup will prompt you to exit.

**Note:** If you have the Sterling Gentran:Server for RosettaNet, the HTTP Gateway, or the HTTP Message Forwarder installed, setup may prompt you to allow it to stop the World Wide Web Publishing service, Simple Mail Transport Protocol (SMTP) service, FTP Publishing service, and IIS Admin service.

3. Click **Next**.

The setup program looks for installed components. Since there are Sterling Gentran:Server components installed on this server, one of the following happens:

- You are prompted that an older version of Sterling Gentran:Server is installed and asks if you would like to upgrade to the new version.
  - The Installation Options dialog box is displayed.
4. Do one of the following:
    - If you were prompted that an older software version was detected, click **Yes**.
    - If you were prompted with the Installation Options dialog box, select **Upgrade your existing installation** and click **Next**.

Setup indicates that it is ready to upgrade your current installation and asks if you have read the instructions and backed up your files and database.

5. If you want to proceed, click **Yes** and continue with the next step.  
If you are not upgrading the primary Sterling Gentran:Server system controller, go to Step 10. If you are upgrading the primary Sterling Gentran:Server system controller, setup locates the system you specified and displays the logon dialog box.
6. Log in to Windows using the Windows administrative user ID and password that the Executive Service uses to access network resources.  
The format is DOMAIN\User for a domain account and .\User for a non-domain account.  
The Database Logon dialog box is displayed because setup needs to update the database tables.
7. Log in to the database using your database administrator user ID and password and click **Next**. This is the administrative database login that setup uses to build the database tables.

**Notes:**

- For a SQL server user ID, you must use a SQL administrative logon with administrative rights on the Sterling Gentran:Server database. Otherwise, only the user that created the database tables can use those tables.
- If you are using Oracle, you must use the schema owner of the tables so that the schema will not change.

If you are upgrading from a Sterling Gentran:Server version prior to 5.0, setup asks if you want to be HIPAA compliant. If this does not apply, continue with Step 9.

8. If you want to be HIPAA-compliant, click **Yes** and setup will install the appropriate components.  
See the *IBM Sterling Gentran:Server for Microsoft Windows HIPAA and NDCPC Compliance Guide* for more information.  
If you are installing Integration Components and are upgrading from a pre-5.0 Sterling Gentran:Server system to a 5.x system, the system asks you what default data format you want to use for new maps and new fields.
9. Click **Yes** if you want to use a free format or **No** if you want to a format that corresponds to ASCII characters.

**Notes:**

- When you create a new map or a new field, Sterling Gentran:Server assigns a default format to the string fields. This format serves as the basis for character validation. If your preference for default formats corresponds to ASCII characters only (most U.S. users), you will not require this free format option. If your default format is to include languages using character sets beyond ASCII characters, you should choose free format (0x01 – 0x0FF).
  - This selection is permanent and, once you choose this default configuration setting, you are unable to change it.
10. Click **Yes** to proceed with the upgrade.  
Setup performs the following:
    - Upgrades the components that you previously installed on this server.
    - Upgrades communication scripts.
    - Upgrades system translation objects.
    - Adds registry entries (if necessary).

- Adds or updates database tables (if necessary).
- Builds the program group and icons (if necessary).
- Validates the date and version of the existing files against the date of the upgrade files.

**Note:** Depending on the size of your database, the upgrade process may last anywhere from a few minutes up to a couple of hours.

The setup program then determines if there were any errors:

- If errors occurred on the primary system controller, when you rerun setup you are prompted to execute automatic recovery to attempt to recover the database. Click **Yes** when you are prompted to execute automatic recovery.

**Note:** If you do not want to run automatic recovery, click **No** when you are prompted. You should then delete the `gupgrade.log` file from the root folder of your C: drive.

**Important:** You should attempt to fix the cause of the failure (such as a database crash or network failure) before running setup again.

- If errors occurred on a secondary controller or user interface client, setup reports the errors and informs you that the installation is complete. See the “InstallShield Error Messages” on page 60.
- If no errors occurred, setup informs you that the upgrade installation is complete.

**Note:** You may get a message that shared DLLs are locked with a prompt to reboot. If you did not get this message, continue with step 12.

11. If you want to reboot your server now, select **Yes, I want to restart my computer now** and click **OK** to reboot the server.

If not, select **No, I will restart my computer later** and click **OK** to terminate the setup program.

**Note:** Be certain that you have saved your work in any other open applications prior to rebooting the server.

Setup asks if you want to restart the services that setup stopped. Any services that are not included in the core install will not start until you upgrade that optional component.

12. If you want to start the services that setup stopped, click **Yes**.

Otherwise, click **No**. You will need to restart the services manually later.

Setup prompts you that if you loaded Integration Components, you will also need to install the appropriate Sterling Gentran Standards from the Standards DVD.

13. Click **OK**.

Setup prompts you that to configure E-mail notification, you must configure the MAPI profile to be used. See the *IBM Sterling Gentran:Server for Microsoft Windows MAPI Gateway Configuration Guide* for more information.

14. Click **OK**.

Setup prompts you that if you previously installed optional components, you will need to upgrade those components.

15. Click **OK**.

The system warns you that if you have any Sterling Gentran:Server extensions or gateways installed on your system, you may need to upgrade those to be compliant with the latest Sterling Gentran:Server release.

16. Click **OK** to exit setup.

The installation is complete. If you upgraded Integration components, you are prompted to load the Sterling Gentran Standards.

## **What to do next**

For clustered systems, complete the upgrade procedure for each node in the system.

You have completed the setup program to upgrade an existing system and are ready to upgrade the optional components. See the following:

- “Installing the Option Pack” on page 38
- “Installing RosettaNet” on page 40
- “Installing the Extension for SAP” on page 42

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## Chapter 5. Post-installation Tasks

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### Starting the System

You can start the Sterling Gentran:Server system from any user interface client or controller that has the System Configuration program installed on it.

#### Before you begin

- You must have Windows administration privileges and Sterling Gentran:Server administration privileges to start the system.
- If you have installed Sterling Gentran:Server to be HIPAA-compliant and if you do not have a password-secured screen saver activated on your desktop, you will not be able to log on to Sterling Gentran:Server until the screen saver is activated.

#### About this task

##### Notes:

- Depending on which security mode you use, if you are not currently executing Sterling Gentran:Server, the Logon dialog box may display when you start a Sterling Gentran:Server program (such as System Configuration).
- On the Controllers tab, you can set the Executive Service to automatically start when Windows is booted.

To start the Sterling Gentran:Server system, complete the following steps.

#### Procedure

1. From the **Start** menu of any machine on which the System Configuration program is installed, select **Programs > Gentran Server > Gentran Server Configuration**.  
The system displays a dialog box stating that the system is down.
2. Click **OK** to acknowledge the message.  
The system displays the System Configuration dialog box.
3. Make sure that the Controller box contains the name of your primary system controller and click **Select** to access the settings and start and stop controls for the chosen controller.
4. Click **Start** to initiate the Executive Service and start the system.  
The system starts. After the Executive Service starts, the Start buttons for the Poller Service and the Scheduler Service display.
5. If you want the Executive Service to start on the selected controller when the Windows operating system starts, select **Auto start** next to the Executive Service enabler.
6. Verify that the services on which the Executive Service is dependent are ordered correctly. Click **Dependencies** and select the following services that must be started before initiating the Executive Service:
  - a. Audit Notification Service
  - b. Mailbox Service
  - c. Communications Service (if installed)
7. To start the Poller Service, click **Start** to the right of the Poller.

**Note:** You can set the Poller Service to automatically start when the Executive Service is started. You can also specify the interval at which Poller Service polls the system.

8. To start the Scheduler Service, click **Start** to the right of the Scheduler.

**Note:** You can set the Scheduler Service to automatically start when the Executive Service is started. You can also specify the interval at which Scheduler Service checks for scheduled events.

If you have additional controllers in your system, continue with the next step. Otherwise, continue with Step 11.

9. In the Controller box, type the name of the secondary controller or click **Browse** and navigate to the controller.

The system displays the Choose Network Server dialog box. Select the appropriate controller and click **OK**.

10. To access the settings and start and stop controls for the chosen controller, click **Select**.
11. Click **OK** to exit the System Configuration program.

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## Security

### Security Overview

Security is an important consideration when configuring your Sterling Gentran:Server system. Sterling Gentran:Server provides security configuration features and requires specific Windows security permissions to run properly.

The security configuration information is provided in the Sterling Gentran:Server documentation, including the following topics:

- In the *IBM Sterling Gentran:Server for Microsoft Windows Installation Guide*, see the following chapters:
  - Installation Overview
  - Pre-installation Tasks
  - Post-installation Tasks, specifically the Security section
- In the *IBM Sterling Gentran:Server for Microsoft Windows Administration Guide*, in the System Administrator Functions chapter, see following topics:
  - System Configuration Users Tab
  - System Configuration Security Tab
- In the *IBM Sterling Gentran:Server for Microsoft Windows User Guide*, in the Getting Started chapter, see the topic on Changing your Password.
- If you are using RosettaNet, see the following chapters in the *IBM Sterling Gentran:Server for Microsoft Windows RosettaNet User Guide*:
  - Sterling Gentran:Server for RosettaNet Overview, the RosettaNet Management Console
  - Using the Security Profile Manager and Communication Tasks

You can also search for the term "security" on the Sterling Gentran:Server Information Center.

### About Security

Sterling Gentran:Server security enables you to protect your data from unauthorized access yet still allow easy access to authorized users. Sterling



Gentran:Server security enables you to use the integrated features of the Microsoft Windows operating system and your database product.

This topic contains our recommendations for the configuration of Sterling Gentran:Server security. After defining the security mode, you then need to add users to the Sterling Gentran:Server system. See “Adding a User” on page 52 for instructions.

## Security modes

The three security modes that are supported by Sterling Gentran:Server are Integrated, Mixed, and Standard.

**Note:** Set the security modes for Sterling Gentran:Server and your database to be the same. We recommend that you use Integrated security mode unless you are using an Oracle database. For Oracle databases, you must use Standard security mode.

### Integrated

Integrated security mode (recommended) allows you to take advantage of the Microsoft Windows operating system security, including encrypted passwords, password aging, and domain-wide user accounts. This mode does not prompt users to sign on to Sterling Gentran:Server if the user’s ID is the same for Sterling Gentran:Server and for Microsoft Windows. In this mode, when you have configured only one system, you do not have the opportunity to log in to Sterling Gentran:Server as another user unless the login fails or the user logs out of Microsoft Windows and another user is logged in. If a login failure occurs, the system displays the Login dialog box to ensure access to the system.

For distributed systems, when you have configured more than one system and are using the Integrated security mode, the Login dialog box is displayed so the user has the opportunity to select the appropriate Sterling Gentran:Server system. The user ID and password are disabled on the Login dialog box.

### Mixed

Mixed security mode always prompts the user with the Sterling Gentran:Server Login dialog box. The Microsoft Windows user name is defaulted. If the user’s Sterling Gentran:Server user ID is the same as it is for Microsoft Windows, the user can click **OK** on the Login dialog box. In this case, the password is not validated and the user is logged in to Sterling Gentran:Server. If the user changes the default user name, the system prompts the user for a password that is validated before logging in to Sterling Gentran:Server. This enables users to easily log in with their own user IDs, as well as it allows them the capability to log in as another user.

### Standard

Standard security mode always requires the user to log in to Sterling Gentran:Server. The Microsoft Windows user name is automatically inserted on the Login dialog box.

## Recommended security

The following are our security configuration recommendations:

- Set the security modes (Integrated, Mixed, or Standard) for Sterling Gentran:Server and your database to be the same so your database does not require you to log on separately.
- For SQL Server, use Integrated security mode, which allows you to take advantage of the Microsoft Windows operating system security, including encrypted passwords, password aging, and domain-wide user accounts.
- For Oracle, you must use Standard security mode.
- If you are running Sterling Gentran:Server in Integrated security mode, you should set up the Sterling Gentran:Server User ID for each user to be the same as the Microsoft Windows User ID for that user. If this is the case, the users are not required to log on to Sterling Gentran:Server.

## Defining the Security Mode

The Security tab on the System Configuration dialog box enables you to define the security mode for your system.

### About this task

To define the security mode for Sterling Gentran:Server, complete the following steps.

### Procedure

1. From the **Start** menu, select **Programs > Gentran Server > Gentran Server Configuration**.
2. Select the **Security** tab.
3. Select the option that corresponds to your system's needs and uses.
4. Click **OK** to save your changes and exit the System Configuration program.

## Adding a User

A new user can be set up only by a user with System Administration privileges. Otherwise, you need to get the security administrator within your organization to complete the setup.

### About this task

To add a user, complete the following steps.

### Procedure

1. From the **Start** menu, select **Programs > Gentran Server > Gentran Server Configuration**.
2. Select the **Users** tab.
3. On the Users tab, click **New**.
4. In the User ID box, type a unique logon identifier for this user.
5. In the User Name box, type the name of this user.
6. In the Password box, type the user's password.

**Note:** Passwords can be up to 126 characters long.

7. In the Verify Password box, type the user's password again.
8. From the Security Matrix section, select the areas of the system that the user needs to access.
9. Click **OK** to exit the Security Access dialog box.

10. Click **OK** to exit the System Configuration program.

## User Interface Client Permission Requirements

This topic describes the additional permissions required for user interface clients.

- If you are using Sterling Gentran:Server Integrated security with SQL Server (as we recommend), the network logon for each user interface client must be granted access to SQL Server. Additionally, you must grant the client network logon the following permissions to GentranDatabase:
  - insert
  - update
  - select
  - delete
- If you are using Sterling Gentran:Server Integrated security with SQL Server, the Sterling Gentran:Server logon for each user interface client must be granted access to GentranDatabase.
- For Sterling Gentran:Server systems using an Oracle database, you must use the Oracle Security Manager to grant the client network logon the following permissions to GentranDatabase: insert, update, select, and delete.
- All Sterling Gentran:Server services that execute on the primary system controller must log on to the network with a valid user name and password, and they must be granted the following rights:
  - Log on as a batch job
  - Log on as a service
  - Take ownership of files and other objects
  - Allow log on locally
  - Access this computer from the network

**Note:** Depending on your operating system, you may see a Confirm Setting Change message. Click **OK**.

**Note:** Sterling Gentran:Server services may not use the "System account" to log on to the network.

- For Notification to execute properly, the Executive Service on the primary system controller must log on to the network with a user name and password that has the right to connect to all Sterling Gentran:Server user interface client machines on the network. When using MAPI to send e-mail, the ID must be able to authenticate to MS Exchange without user intervention.

**Note:** This right is granted on each user interface client machine through the Microsoft Windows User Manager.

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## Communications

In a non-clustered or single workstation system, you need to configure the modem on every communications controller. You also need to set up a pool. For a clustered system, contact your local administrator to validate cluster communications.

See *Configuring Communications in the IBM Sterling Gentran:Server for Microsoft Windows Communications User Guide* for more information on performing these tasks.

If you installed the option pack, you will also need to set up your gateway. See the appropriate gateway configuration guide for instructions.

## Specifying Components for the Mailbox Server Manager

After you have installed the optional components, you need to specify which optional components are loaded in Mailbox Server Manager. You can specify either that no gateways are loaded or that only the gateways you specify will be loaded in Mailbox Server Manager.

### Before you begin

You must have installed the optional components before completing this task.

### About this task

Complete the following steps to specify components for the Mailbox Server Manager.

### Procedure

1. Start the Mailbox Server Manager.
2. Right-click the **Mailbox Server** and select **Properties**.  
The system displays the Mailbox Server properties dialog box.
3. Click the **Startup** tab.
4. To load gateways on this machine, select **Load only these gateways** and ensure that each gateway you want to be loaded is selected. Clear the checkmarks for any gateways that you do not want to be loaded.  
Otherwise, select **Do not load gateways**.
5. Click **OK** to save your changes.

---

## Adding and Removing Components in an Installation

Use the "Add or remove existing components" option from a machine when you want to install or remove Sterling Gentran:Server components from a machine (for example, removing Client Access Components or adding a Process Controller to a machine).

### Before you begin

Exit all other Windows programs before running the setup program.

### About this task

To add or remove system components from your existing installation, complete the following steps.

### Procedure

1. Insert the Sterling Gentran:Server DVD in the drive from which you want to run the setup program. This must be the machine that you want to install, change the installation, or uninstall Sterling Gentran:Server.
2. If Autorun is disabled on this machine, select **Run** from the **Start** menu and continue with the next step. Otherwise, continue with step 4.
3. Type *drive*:\GSW\setup.exe and click **OK** (where *drive* is the drive letter associated with your DVD drive).

Setup prepares the wizard that guides you through the install program (this may take several seconds) and displays the Welcome dialog box.

4. Click **Next**.
5. If you are currently running any of the Sterling Gentran:Server services, the system prompts you to stop the services so installation can proceed. Click **Yes** to stop each service.

**Note:** If you have the Sterling Gentran:Server for RosettaNet, the HTTP Gateway, or the HTTP Message Forwarder installed, setup may prompt you to allow it to stop the World Wide Web Publishing service, Simple Mail Transport Protocol (SMTP) service, FTP Publishing service, and/or IIS Admin service. Click **Yes** to stop each service.

6. Select any additional components you want to install and click **Next**.

**Note:** If you want to remove previously installed components, deselect those check box(es).

Setup prompts you to confirm the add or remove operation.

7. To continue the add or remove operation, click **Yes**. If you are not adding controller components to a machine that is not currently a controller, continue with Step 11. If you are adding controller components to a machine that is not currently a controller, continue with the next step.

If you do not want to add or remove components, click **No** to return to the Optional Components dialog box and reselect which components to add or remove (previous step).

Setup locates the system you specified and displays a logon dialog box.

8. Enter the Windows administrative User ID and Password that the Executive Service uses to access network resources. This is the Windows user account that starts the Executive Service and is also used for unattended processing. The Database Logon dialog box is displayed. This enables the Executive Service to access and manipulate information on the process controller.
9. Enter the database user ID and password.

You must enter a valid database administrative logon that is already set up with access to the Sterling Gentran:Server database tables. Sterling Gentran:Server uses this logon every time it accesses the database tables. This User ID must have full access to the Sterling Gentran:Server database. We recommend that you set it to be the same as an existing Sterling Gentran:Server user. If you are adding Client Access and/or Integration Components but setup cannot detect a program folder, setup displays the Program Folder Name dialog box.

10. Select the program group in which you want the client or integration components installed as program icons and click **Next** to use the default **Gentran Server** program folder name. If you want to install Integration Components and are upgrading from a pre-5.0 Sterling Gentran:Server system to a 5.x system, the system asks you what default data format you want to use for new maps and new fields.
11. Click **Yes** if you want to use a free format or **No** if you want to a format that corresponds to ASCII characters.

**Notes:**

- When you create a new map or a new field, Sterling Gentran:Server assigns a default format to the string fields. This format serves as the basis for character validation. If your preference for default formats corresponds to ASCII characters only (most U.S. users), you will not require this free

format option. If your default format is to include languages using character sets beyond ASCII characters, you should choose free format (0x01 – 0x0FF).

- This selection is permanent and, once you choose this default configuration setting, you are unable to change it.

Setup prompts you that it is ready to install or remove the components you specified.

12. If you do not want to continue with the add or remove operation, click **No** to return to one of the following:
  - Step 9 if you chose to add controller components to a machine that is not currently a controller
  - Step 11 if you chose to add Client Access Components or Integration Components and setup cannot detect a program folder.
13. If you want to continue with the add or remove operation, click **Yes**.  
If you chose to remove all Sterling Gentran:Server components from this machine, setup performs a full uninstall.  
If you are adding components, setup installs the components that you selected, adds the appropriate registry entries, installs Sterling Gentran:Server services (if Process Controller was selected), and builds the program group and icons (if Client Access Components or Integration Components was selected).
14. If any errors are displayed, see “InstallShield Error Messages” on page 60.
15. If any shared DLLs are locked, setup asks you whether you want to reboot the machine now or later. Do one of the following:
  - Select **Yes, I want to restart my computer now** and click **OK** to reboot the machine.
  - Select **No, I will restart my computer later** and click **OK** to terminate the setup program.

**Important:** Be certain that you have saved your work in any other open applications before rebooting the machine.

16. If you want to start the services that setup stopped, click **Yes**.  
Otherwise, click **No**. You will need to restart the services manually later.
17. Click **OK** to exit setup. You have completed the setup program to add or remove components in an existing system.

**Note:** If you added Integration components, you are prompted to load the Sterling Gentran:Server Standards.

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## Installation Validation Process

After you install Sterling Gentran:Server, you need to validate the installation to ensure that the system is set up correctly.

**Note:** See the *IBM Sterling Gentran:Server for Microsoft Windows User Guide* and the Application Integration tutorials for additional details.

The following table lists the sequential steps you should take to validate your Sterling Gentran:Server installation.

Task Order	Task Name	Task Description
1	Verify permissions for database tables.	Use your database management system to verify that all of the permissions were set correctly during the installation. See your database management system documentation for specific instructions.
2	Verify configuration settings.	Open the System Configuration dialog box and verify that the settings on each tab are correct for your installation.
3	Register tutorial translation objects.	Register the following Application and Forms Integration ANSI tutorial translation objects that we provide in the TUTORIAL subfolder under the folder where Sterling Gentran:Server is installed. <ul style="list-style-type: none"> <li>• PET_850.TPL (This is an export translation object.)</li> <li>• PET_810.TPL (This is an import translation object.)</li> <li>• HEADER.TPL (This is a system import translation object.)</li> <li>• PET_810S.TPL (This is a screen entry translation object.)</li> <li>• PET_850P.TPL (This is a print translation object.)</li> </ul>
4	Import tutorial partner relationship.	Import the PETZONE.PAR partner relationship that we provide in the TUTORIAL folder.
5	Perform an import operation using the Application Integration ANSI tutorial data.	<ol style="list-style-type: none"> <li>1. In Partner Editor, verify that the PET X 3030 810 Import translation object is selected for the Outbound Relationship.</li> <li>2. On the System Configuration Import tab, define the import specification to indicate which system import translation object is used to begin translation during the import process.</li> <li>3. Use the Import option in Sterling Gentran:Server to process the data file (PET_810.TXT) through the translation object.</li> <li>4. The data file is located in the TUTORIAL subfolder under the folder where Sterling Gentran:Server is installed.</li> <li>5. After the document is translated, it is moved to the Workspace in Sterling Gentran:Server. View the EDI data to ensure that the document was translated correctly.</li> </ol>
6	Perform a process file operation using the Application Integration ANSI tutorial data.	<ol style="list-style-type: none"> <li>1. Verify (in Partner Editor) that the PET X 3030 850 Export translation object is selected for the Inbound Relationship.</li> <li>2. Use the Process File option in Sterling Gentran:Server to process the data file (PETTEST.INT) through the translation object. The data file is located in the TUTORIAL folder.</li> </ol>
7	Perform an export operation.	After the document in Step 5 is translated, it is moved to InDocuments in Sterling Gentran:Server. Export the document to ensure that it was translated correctly.
8	Verify access to Document Editor.	Complete the steps in Creating a Document in the <i>IBM Sterling Gentran:Server for Microsoft Windows User Guide</i> to verify that you can access the Document Editor. <b>Note:</b> You do not actually need to complete the document; you can exit the Document Editor after the document is displayed.
9	Verify access to Process Control.	Select <b>Tools &gt; Process Control</b> to verify that you can access it.
10	Verify access to Application Integration and EDI Standards (only if you installed the Application Integration subsystem).	<ol style="list-style-type: none"> <li>1. If you installed Integration Components, click the Application Integration icon on the Main Toolbar to verify that you can access the Application Integration subsystem.</li> <li>2. Complete the steps in Creating a Map in the <i>IBM Sterling Gentran:Server for Microsoft Windows Application Integration User Guide</i> to verify that you can access the EDI standards.</li> </ol>

Task Order	Task Name	Task Description
11	Verify access to the Notification Log.	<ol style="list-style-type: none"> <li>1. Verify access to the Sterling Gentran:Server Notification Log component from the Start menu by selecting <b>Programs &gt; Gentran Server &gt; Gentran Notification Log</b>.</li> <li>2. Complete the steps in Modifying Notification Properties in the <i>IBM Sterling Gentran:Server for Microsoft Windows Administration Guide</i> to set up notification parameters.</li> </ol>



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## Chapter 6. Installation Troubleshooting

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### Sterling Gentran:Server Installation Troubleshooting

This topic describes common Sterling Gentran:Server installation problems and the steps you should take to resolve them.

For information about uninstalling Sterling Gentran:Server or removing components, see the *IBM Sterling Gentran:Server for Microsoft Windows Administration Guide*.

Problem	Resolution
The setup program successfully completes, but you get a database logon failure message when you attempt to log on to Sterling Gentran:Server.	<p>You did not specify the appropriate database login during installation.</p> <ol style="list-style-type: none"><li>1. Remove all installed Sterling Gentran:Server components.</li><li>2. Delete all Sterling Gentran:Server database tables.</li><li>3. Verify that the Sterling Gentran:Server program group was removed. Verify (in the Registry Editor) that the HKEY_LOCAL_MACHINE\SOFTWARE\ Sterling Commerce key was removed. <b>Note:</b> In a 64-bit operating system, the key is HKEY_LOCAL_MACHINE\ SOFTWARE\Wow6432Node\Sterling Commerce.</li><li>4. Run setup again and use the <b>Create a new Gentran:Server system</b> option, making sure that you provide the correct administrative database logon that has access to create database tables and grant permissions to those tables.</li></ol> <p>For more information about creating a new system, see the installation topic appropriate for your system.</p>
The Executive Service fails to start remotely.	<ol style="list-style-type: none"><li>1. On the primary system controller, go to the Control Panel and double-click <b>Services</b>.</li><li>2. Select <b>Gentran:Server Executive Service</b> and click <b>Start</b>.</li><li>3. If the service times out or if you receive an error message, select the <b>Gentran:Server Executive Service</b> and click <b>Startup</b> to verify that the Microsoft Windows logon for the service is specified correctly.</li></ol>
You attempt to logon to Sterling Gentran:Server but receive an error message stating that the User Name is not found.	<p>You may be using an improper case for the user name (for example, "aaron" instead of "Aaron"). Attempt to log on again using upper- or lower-case letters for the user name.</p> <p>If this does not work, you need to uninstall and reinstall the system.</p> <ol style="list-style-type: none"><li>1. Remove all installed Sterling Gentran:Server components.</li><li>2. Delete all of the Sterling Gentran:Server database tables.</li><li>3. Verify that the Sterling Gentran:Server program group was removed.</li><li>4. Verify (in the Registry Editor) that the HKEY_LOCAL_MACHINE\SOFTWARE\ Sterling Commerce key was removed. <b>Note:</b> In a 64-bit operating system, the key is HKEY_LOCAL_MACHINE\ SOFTWARE\Wow6432Node\Sterling Commerce.</li><li>5. Verify that you are using the default Sterling Gentran:Server local administrator logon that you specified during the installation process.</li><li>6. If it still does not work, run setup again and use the <b>Create a new Gentran:Server system</b> option, making sure that you provide the correct administrative database logon that has access to create database tables and grant permissions to those tables.</li></ol>

Problem	Resolution
<p>You run the setup program to upgrade your installation on the primary system controller. Setup determines that it needs to update the database tables, so it prompts you to specify a user or group of users that are granted access to the Sterling Gentran:Server database tables.</p> <p>During the upgrade process, setup informs you that the "User [groupname] doesn't exist" and prompts you to execute automatic recovery to attempt to recover the database.</p>	<p>You specified a user or group of users that does not exist.</p> <ol style="list-style-type: none"> <li>1. Before executing the automatic recovery process, switch to your database management system.</li> <li>2. Create the user or group of users that you originally specified.</li> <li>3. Run setup again to upgrade the system.</li> </ol> <p>The automatic recovery will determine the point at which the install process failed and will resume installation from that point. It does not reverse the previously executed commands, although setup maintains a log of every scripted command that it executed.</p>
<p>You run the setup program to install Sterling Gentran:Server but receive the following errors:</p> <ul style="list-style-type: none"> <li>• Record set is read only</li> <li>• Sterling Gentran:Server system administrator account could not be created</li> </ul>	<p>You may be using a version of ODBC driver that is not compatible with the Sterling Gentran:Server product.</p>
<p>You run the setup program in a non-clustered environment and are prompted "Do you want to make this machine a secondary node in a clustered Sterling Gentran:Server system?".</p>	<p>When setup checked the registry on this machine, it found registry keys for Sterling Gentran:Server but no Sterling Gentran:Server services (which would be the case if you were installing the system on a secondary node in a clustered environment). In a non-clustered environment, click <b>No</b> and the Sterling Gentran:Server install will proceed.</p> <p><b>Note:</b> If you click <b>No</b> and setup encounters a problem with your system, the installation routine will exit. If this occurs, contact Customer Support.</p>

## InstallShield Error Messages

During installation, if you receive an error containing a return code, the error is an InstallShield error.

**Note:**

- If you have questions about an InstallShield error message, please contact Customer Support.
- These messages were obtained from InstallShield. They may not be the most current version.

The following table contains the InstallShield return codes, listed by return code value. This table describes the corresponding error message and, when possible, a suggested reason the error occurred.

Return code value	Error message	Resolution
-1	Unknown error.	
-2	Unable to open input file.	

<b>Return code value</b>	<b>Error message</b>	<b>Resolution</b>
-3	Unable to open output file.	Check the following: <ul style="list-style-type: none"> <li>• content of the target folder</li> <li>• file existence in target folder</li> <li>• access privileges to the target folder</li> </ul>
-4	Unable to write to file.	Check integrity of source and target disk. Make sure you selected the correct source disk.
-5	Input file not compressed with InstallShield Compressor.	Make sure that input is a compressed library created by the InstallShield Data Compression Program or an InstallShield function.
-6	Memory allocation error.	Internal error occurred. Reboot your system and try again.
-7	Header information of compressed file is incorrect.	Make sure file is compressed and not corrupted.
-8	Cannot decompress more than one compressed library.	Make sure that the input for decompression is not a wildcard.
-9	Source and target folders conflict.	Make sure that the target folder is not the same as the source folder.
-14	Specified input file is a wild card (not allowed in some APIs).	Make sure that the input is a specific file, not a wildcard.
-15	Specified output file is a wild card (not allowed in some APIs).	Make sure that the output is a specific file, not a wildcard.
-16	Library compacting error.	
-17	Internal pointer error.	
-18	File size error.	
-19	Linked list error.	
-20	Output file not compressed with InstallShield Compressor.	Make sure that the output is a compressed library.
-21	File is compressed with an older compressor version.	Use a compatible InstallShield compressor.
-22	An error occurred in the has table.	
-24	Folder information is incorrect.	
-25	Incorrect switch (options) used.	
-26	Incorrect data information.	
-27	Unable to create folder.	Check the content of the target folder and access privileges to drive and folder.
-28	Query information error.	
-29	Error occurred while defining a FileSet.	
-30	File is split.	Use the original compressed library.
-32	Unable to launch an internal process.	
-33	Internal error.	
-34	Internal error.	
-36	Private object error.	
-37	File transfer process aborted.	
-38	Not enough disk space on target drive.	Clear disk space on target drive.

<b>Return code value</b>	<b>Error message</b>	<b>Resolution</b>
-39	File cannot be found in the packaging list.	
-40	Compress library backup failure.	Clear disk space on target drive.
-41	Specified file is not a compressed library.	
-42	File is not in the compressed library.	
-46	Target file is read-only.	Target file is read-only and cannot be overwritten.
-47	Internal memory error.	

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## Chapter 7. Uninstalling Sterling Gentran:Server

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### About the Uninstall Process

If you remove the last system component on a server, setup performs a full uninstall. The uninstall process removes program files, services, registry entries, and the program group. The uninstall process leaves some subfolders (such as Maps, Forms, and TransObj folders) and the system data store intact, in case you still have data there.

**Note:** If you no longer want a server to be a part of a system (for example, if you want to uninstall a test system), you should use the "Leave the system" option.

If you need to rename one of the servers in your Sterling Gentran:Server system, you should perform a complete uninstall of Sterling Gentran:Server prior to changing the server name. Then, reinstall your Sterling Gentran:Server system.

If the machine is a member of more than one system and you leave one of the systems, the machine is still a member of the other systems. However, if the machine is only a member of one system and you leave that system, you have the option to completely uninstall Sterling Gentran:Server.

### System Data Store Folders

If you remove all components on the primary Sterling Gentran:Server system controller, setup does not remove the system data store folders.

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## Uninstalling a Sterling Gentran:Server System

### Before you begin

- Read the Release Notes.
- You must be logged on to Microsoft Windows as a local administrator.
- We recommend that you exit all other Microsoft Windows programs before running the setup program.
- Either download the executable file from Passport Advantage or use the DVD to access the autorun.exe file. The system displays a splash screen. The installation wizard will guide you through the process to uninstall Sterling Gentran:Server.

### Important:

- You must run the setup program on the server on which you want to leave a Sterling Gentran:Server system.
- Do not leave the Sterling Gentran:Server system on the primary system controller unless you have already removed the components from all other servers in the system.

### About this task

**Important:** Do *not* leave the Sterling Gentran:Server system on the primary Sterling Gentran:Server system controller unless you have already removed the Sterling Gentran:Server components from all other servers in the system.

**Note:** Use the **Add or remove existing components** option if you just want to remove system components from the server. Remove all system components from a server to completely uninstall Sterling Gentran:Server.

To uninstall Sterling Gentran:Server, complete the following steps

## Procedure

1. On the splash screen, select IBM Sterling Gentran:Server for Microsoft Windows.
2. If you are running any of the Sterling Gentran:Server services, the system prompts you to stop the services so installation can proceed. Click **Yes** to stop each service.

If you select **No** for any of the services, setup will prompt you to exit.

**Note:** If you have the Sterling Gentran:Server for RosettaNet, the HTTP Gateway, or the HTTP Message Forwarder installed, setup may prompt you to allow it to stop the World Wide Web Publishing service, Simple Mail Transport Protocol (SMTP) service, FTP Publishing service, and/or IIS Admin service.

3. Click **Next**.

The setup program looks for installed components. Since there are Sterling Gentran:Server components installed on this server, you are prompted to leave a Sterling Gentran:Server system, upgrade your existing installation, and add or remove existing components.

4. Make sure **Leave a Gentran system** is selected and click **Next**.

The System Name dialog box is displayed.

5. Verify the name of the system that you want to leave and click **Next**.

The following happens:

- Setup determines whether this server is really in the system you specified, and if it is, proceeds with the next step.
- If this server is not in the system that you selected, a message is displayed. The System Name dialog box is redisplayed and you are prompted to select another system.
- Setup removes the registry entries for the system you selected.
- If this server is a controller in the selected system, setup uninstalls the Process Controller (removes those files, registry entries, and services).
- If this server does not belong to any other Sterling Gentran:Server systems, setup offers to remove all components.

6. If you want to completely uninstall Sterling Gentran:Server, click **Yes**.

Setup completely uninstalls Sterling Gentran:Server. The uninstall process removes Sterling Gentran:Server program files, services, registry entries, and the program group. It leaves some subfolders (such as Maps, Forms, and TransObj folders) and the system data store intact, in case you still have data there.

**Note:** If you use the Leave the Sterling Gentran:Server system option on the primary system controller, setup does not remove the system data store folders.

7. If any errors occur, see the Troubleshooting section.

8. Click **OK** to exit setup.

You have completed the setup program to uninstall an existing system.

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