

IBM Sterling Gentrans:Server for Microsoft Windows

Single Workstation Installation Guide

Version 5.3



Copyright

This edition applies to the 5.3 Version of IBM® Sterling Gentran:Server® for Microsoft Windows and to all subsequent releases and modifications until otherwise indicated in new editions.

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

Licensed Materials - Property of IBM

IBM® Sterling Gentran:Server® for Microsoft Windows

© Copyright IBM Corp. 1996, 2011. All Rights Reserved.

US Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Table of Contents

Preface	About this Guide	
	• Introduction	iv
	• What's in this Manual	v
	• Key Terms Used in This Manual	vi
	• Getting Support	ix
Chapter 1	System Overview	
	• Introduction	1-2
	• Installation Prerequisites	1-3
	• Sterling Gentran:Server Overview	1-4
	• Installation Components	1-6
	• System Components	1-8
	• Post-installation Security Recommendations	1-9
Chapter 2	Installing a Single Workstation System	
	Overview	2-2
	• Introduction	2-2
	• Single Workstation Overview	2-3
	• The Installation Process	2-4
	• New Installation Checklist	2-6
	• Configuring Microsoft Windows	2-7
	Installing Sterling Gentran:Server	2-8
	• Pre-installation Checklists	2-8
	• How to Create and Share the System Data Store Folder	2-13
	• How to Install a Single Workstation System	2-14
	Upgrading Sterling Gentran:Server	2-30
	• How to Upgrade your Sterling Gentran:Server Installation	2-30
Chapter 3	Post-Installation Tasks	
	• Introduction	3-2
	• How to Start the Sterling Gentran:Server System	3-3
	• How to Implement Security	3-7
	• How to Implement Communications	3-8

- How to Validate your Sterling Gentran:Server Installation 3-9

Appendix A SQL Server 2000 Setup

- **Overview** **A-2**
 - Introduction A-2
 - Pre-installation Requirements A-3
 - How to Back up your Database A-4
- **Using SQL Server with Sterling Gentran:Server** **A-5**
 - Overview A-5
 - How to Configure SQL Server for Use with Sterling Gentran:Server A-6
 - How to Add Users to the Database A-13
 - How to Create an ODBC DSN for Sterling Gentran:Server A-18

Appendix B Oracle Setup

- Introduction B-2
- Install SQL *Net B-3
- Define New Tablespace for Database Tables B-4
- Create New DB Administrator Account B-5
- Add Sterling Gentran Users to Oracle B-6
- Add Sterling Gentran:Server Executive Log On Account to Oracle B-7
- Change the Default Number of Open Cursors B-8
- Use Standard Security Mode with Sterling Gentran:Server B-9
- Use Oracle Database ODBC drivers with Sterling Gentran:Server B-10

Appendix C Installation Troubleshooting

- Overview C-2
- Sterling Gentran:Server Installation Troubleshooting C-3
- InstallShield Error Messages C-6

Notices

About this Guide

Contents

- Introductioniv
 - What's in this Manualv
 - Key Terms Used in This Manualvi
 - Getting Supportix
-

Introduction

Welcome Welcome to IBM® Sterling Gentran:Server® for Microsoft Windows, the IBM Electronic Commerce (EC) software for the Microsoft Windows operating system.

Sterling Gentran:Server provides the easy-to-use tools you need to electronically exchange data with your trading partners, including:

- data translation
- process control
- communications system

We believe that you will find this software and the supporting materials easy to use and directly beneficial to your business.

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

What's in this Manual

Introduction

This manual provides pre-installation and installation instructions for Sterling Gentran:Server (Single Workstation System). It includes our recommendations on how to configure your system for the easiest installation and operation of Sterling Gentran:Server.

This manual uses a task-oriented approach that is intended to answer any questions you may have about Sterling Gentran:Server installation with step-by-step instructions.

Intended audience

This manual is intended for local administrators responsible for the following:

- installing and implementing EC
- installing and implementing your database product

Prerequisite knowledge

This manual assumes that you are familiar with using a PC, Microsoft Windows Server functions, and database administration.

Description of contents

The *IBM® Sterling Gentran:Server® for Microsoft Windows Single Workstation Installation Guide* is organized into the following chapters:

- *About this Guide* explains the content, organization, and conventions in this guide. This chapter also defines the key terms used in this manual and explains how to get support for Sterling Gentran:Server.
- *Chapter 1, System Overview*, provides an overview of the Sterling Gentran:Server software and installation components and explains installation terminology. This chapter also describes our system requirements and recommendations.
- *Chapter 2, Installing a Single Workstation System*, explains how to install Sterling Gentran:Server for the first time and implement that installation. This includes configuring your Microsoft Windows operating system, installing and configuring your database management system, and installing Sterling Gentran:Server.
- *Chapter 3, Post-Installation Tasks*, describes additional tasks you must perform to complete the Sterling Gentran:Server installation. This includes starting the system, implementing security, and validating your installation.
- *Appendix A, SQL Server 2000 Setup*, outlines the tasks necessary to install and configure a new SQL Server 2000 installation.
- *Appendix B, Oracle Setup*, outlines our recommendations for setting up Oracle for use with Sterling Gentran:Server.

Note:

Support for Oracle databases does not include support for the Oracle Exadata platform.

- *Appendix C, Installation Troubleshooting*, provides background information on how to troubleshoot the installation of Sterling Gentran:Server and explains the course of action that you should follow to resolve some common installation failures. This chapter also includes InstallShield® error messages.
-

Key Terms Used in This Manual

Introduction	This section defines the Sterling Gentran:Server proprietary terminology that is used in this manual. We recommend that you familiarize yourself with this terminology before proceeding further in this <i>IBM® Sterling Gentran:Server® for Microsoft Windows Single Workstation Installation Guide</i> .
Client Access Components	The <i>Client Access Components</i> provide the user interface to setup, maintain, and control the Sterling Gentran:Server system.
Communication Controller	<p>The <i>Communications Controller</i> regulates communication between Sterling Gentran:Server and the organizations (value-added networks (VANs) or trading partners) with whom data is exchanged.</p> <p>Notes</p> <ul style="list-style-type: none">• To be a communications controller, your machine must be capable of sending and receiving files via a modem or other communications device.• In a Single Workstation system, all three controllers (communications controller, process controller, and the Sterling Gentran:Server Primary System Controller) all reside on the same machine.
Database	<p>Sterling Gentran:Server uses a <i>relational database</i> on your machine to store system data. This database enables multiple users to access the same data. The database tables contain indicators which 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). Sterling Gentran:Server uses ODBC™ (Open Database Connectivity) to use databases from different vendors.</p> <p>Note</p> <p>See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Getting Support Guide</i> to determine which database management systems have been certified for use with Sterling Gentran:Server.</p>
Sterling Gentran:Server Executive	The <i>Sterling Gentran:Server Executive</i> is the service that controls execution of the communication and translation functions on a defined server. The Sterling Gentran:Server Executive is installed on the <i>primary system controller</i> (your single workstation machine) in a Sterling Gentran:Server system. The Sterling Gentran:Server Executive also centrally regulates system-critical information.
Sterling Gentran:Server Poller	The <i>Sterling Gentran:Server Poller</i> is the Sterling Gentran:Server Executive component that polls at set intervals for the existence of specified files.

**Sterling
Gentran:Server
Scheduler**

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

**Integration
Components**

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

- The Application Integration subsystem enables you to generate import, export, and document turnaround translation objects.
- The Forms Integration subsystem enables you to generate screen entry and print translation objects.

The Integration Components also allow you to access IBM® Sterling Gentran Standards Database for EDI for creating new translation objects.

Notification

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

Reference

See the “Using the Audit Notification System” chapter in the *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for more information about using the Operators user interface.

Notes

- Only process control events that are set up as “notification” type events in Process Control can be selected as tasks to execute if the predefined event occurs.
- If you specify a task that is suspended in Process Control, the task will not be executed when the predefined event occurs.

ODBC

ODBC (Open Database Connectivity) is used by Sterling Gentran:Server to use databases from different vendors.

**Primary System
Controller**

The *primary system controller* is your Single Workstation in the Sterling Gentran:Server system. The primary system controller maintains status information for the entire system, controls the management and dispatching of processing requests within the system, and controls all other system components.

Notes

- The primary system controller is not the same as a “primary domain controller,” which is a Microsoft Windows term.

- In a Single Workstation system, all three controllers (communications controller, process controller, and the primary system controller) all reside on the same machine.

Process Controller

The *Process Controller* component is the part of the Sterling Gentran:Server software that regulates the management and dispatching of processing requests within the system. The process controller allows the system translation load to be distributed for fast and efficient throughput.

Note

In a Single Workstation system, all three controllers (communications controller, process controller, and the primary system controller) reside on the same machine.

System Configuration

The *System Configuration* program enables you to modify system-wide configuration parameters, including the following:

- system data store folders
- security mode
- client notification parameters
- audit parameters
- controller settings
- interval for overdue acknowledgement checking
- interval for acknowledgement generation
- interval for acknowledgement reconciliation
- interval for automatic file concatenation
- ODBC data source used by the system
- import specifications
- splitter entries
- user parameters and logons
- stopping and starting the Sterling Gentran:Server Executive, Scheduler, and Poller services

System Data Store

The *system data store* serves as the repository of all shared Sterling Gentran:Server data. The system data store resides on your Single Workstation. There is only one system data store in the Sterling Gentran:Server system.

Getting Support

How To Get Help

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

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

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

System Overview

Contents

- Introduction 1 - 2
 - Installation Prerequisites 1 - 3
 - Sterling Gentran:Server Overview 1 - 4
 - Installation Components 1 - 6
 - System Components 1 - 8
 - Post-installation Security Recommendations 1 - 9
-

Introduction

Before you begin

Before you begin the installation process, you need to familiarize yourself with several concepts in the Sterling Gentran:Server system configuration and installation process.

This manual is designed to help you understand the order of configuration and installation tasks, the resources you need, and the information that you need to obtain.

Recommendation

Read each of the sections in this manual and complete the worksheets.

In this chapter

This chapter includes the following topics:

- Sterling Gentran:Server overview
- Installation components
- System components
- Recommended post-installation security

References

- See the *IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide* to determine which versions of Microsoft Windows and database management systems have been certified for use with the Sterling Gentran:Server system components.
 - See the database appendices in this manual for installation requirements and recommendations for the database you are using.
-

Installation Prerequisites

Introduction

Installing the Sterling Gentran:Server software also 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.

Necessary personnel

Prior to 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 and database administrator take part in the installation for the following reasons:

- On your Single Workstation, you need to log on with a Microsoft Windows login that has administrative rights on that machine.
- You must create folder shares to the folder in which the system data store is installed.
- You must create a new database and you may need to add users to the database.

Your local administrator is typically the only person that has the authority to complete the above.

Warning

It is very important that your local administrator be involved in the configuration and installation of Sterling Gentran:Server.

Sterling Gentran:Server Overview

Introduction

Sterling Gentran:Server 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

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 application, rather than a cumbersome add-on. Sterling Gentran:Server is an intelligent, high-volume messaging system that links business systems and provides opportunities to link existing business processes and the World Wide Web.

Communication system

Sterling Gentran:Server links internal business systems to each other and to the business systems used by 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 a day, seven days a 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 via 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 Sterling Gentran:Server Executive enables Sterling Gentran:Server to run on Microsoft Windows servers even when no users are logged on to the system.

Poller

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

Scheduler

The *Scheduler* is the Sterling Gentran:Server Executive 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. Your Single Workstation must run on one of the following Microsoft Windows versions:

- Microsoft Windows 2000 Server
- Microsoft Windows 2003 Enterprise Edition
- Microsoft Windows 2003 Standard Edition
- Microsoft Windows 2000 Professional

Sterling Gentran:Server is deployed in this environment through a combination of a *database*, *system data store*, and *primary system controller*. These system components are installed on your Single Workstation.

Installation Components

Introduction

Installation components are functional components of Sterling Gentran:Server that you can select when you install Sterling Gentran:Server on your Single Workstation. The following are the installation components:

- Client Access Components
 - Process Controller (this component is installed automatically on your Single Workstation)
 - Integration Components
-

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 Electronic Commerce (EC) 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

Reference

See the “Using the Audit Notification System” chapter in the *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for more information on using the Operators user interface.

- 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.
-

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 Sterling Gentran:Server Executive Service (RPCSRV.EXE), which must be started to execute most of the functions available from the EC Manager as well as any unattended session events that you have configured.

Note

The Process Controller component is automatically installed on your Single Workstation. 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.

Integration Components

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

- The Application Integration subsystem enables you to generate import, export, and document turnaround translation objects.
- The 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 Standards Database for EDI for creating new translation objects. The Sterling Gentran:Server Standard files can be accessed from CD-ROM or transferred to a computer hard drive.

System Components

Introduction

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 Sterling Gentran:Server Executive Service, and the Sterling Gentran:Server 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

Recommendation

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 ODBC to use databases from different vendors. The relational database is installed on your Single Workstation.

Post-installation Security Recommendations

Introduction

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 section contains our recommendations for the configuration of Sterling Gentran:Server security. You do not configure security until after you install Sterling Gentran:Server. (See *Modifying Security Parameters in the IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for more information about setting up security in Sterling Gentran:Server.) However, if you use our recommendations to determine how you are configuring security, you can ensure that your users are able to easily access Sterling Gentran:Server.

Security modes

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

Recommendation

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.

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 the user to easily log in as himself/herself, but also allows 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 defaulted 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.
-

Installing a Single Workstation System

Contents	Overview.....	2 - 2
	w Introduction.....	2 - 2
	w Single Workstation Overview.....	2 - 3
	w The Installation Process.....	2 - 4
	w New Installation Checklist.....	2 - 6
	w Configuring Microsoft Windows.....	2 - 7
	Installing Sterling Gentran:Server.....	2 - 8
	w Pre-installation Checklists.....	2 - 8
	w How to Create and Share the System Data Store Folder.....	2 - 13
	w How to Install a Single Workstation System.....	2 - 14
	Upgrading Sterling Gentran:Server.....	2 - 30
	w How to Upgrade your Sterling Gentran:Server Installation.....	2 - 30

Overview

Introduction

In this chapter

This chapter contains the information you need to install Sterling Gentran:Server on a Single Workstation system (one machine).

Notes

- After installing Sterling Gentran:Server for the first time, you need to complete other implementation tasks, including starting the system, adding users to the system, creating communication ports, and validating the installation. This information is provided in chapter 3, Post-installation Tasks.
- If you are installing Sterling Gentran:Server for the first time, you will use *Installing Sterling Gentran:Server* on page 2 - 8. If you are upgrading from a previous version of Sterling Gentran:Server, you will use *Upgrading Sterling Gentran:Server* on page 2 - 30.

Recommendation

Complete the pre-installation tasks prior to using the Setup program to install Sterling Gentran:Server.

Prerequisites

This chapter assumes that you have already installed the appropriate Microsoft Windows operating system on your machine, as well as either SQL Server or Oracle.

Note:

Support for Oracle databases does not include support for the Oracle Exadata platform.

Reference

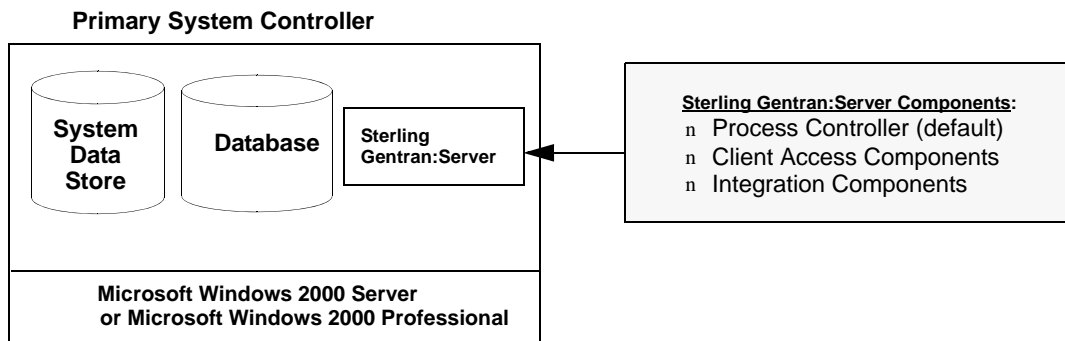
See the *IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide* for more information about which operating system and database management system versions are supported with Sterling Gentran:Server.

This installation also assumes that you have a basic understanding of Microsoft Windows and SQL Server/Oracle terminology and functionality and that you have access to a database administrator (DBA).

Single Workstation Overview

Introduction A Single Workstation system consists of one machine. In this system, all Sterling Gentran:Server installation components you need are installed on one machine.

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



The Installation Process

Introduction

The following sections contain the prerequisite information and preliminary tasks that you need to complete prior to installing Sterling Gentran:Server on your single workstation. You should complete these pre-installation tasks prior to using the Setup program to install Sterling Gentran:Server.

To install Sterling Gentran:Server on this machine, you need to use the Setup program with either the **Create a new Gentran:Server system** option or the **Upgrade your existing installation** option to make that machine the primary Sterling Gentran system controller.

Process

The following table lists the tasks you need to complete to install Sterling Gentran:Server on a Single Workstation system. This table is included as a high-level overview of the installation sequence.

Task	Description
1	Create/Verify Users: On your single workstation, add any new users and verify existing Microsoft Windows logons for Sterling Gentran:Server users.
2	Create the Microsoft Windows Global Group and Add Users: On your single workstation, 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: On your single workstation, create a local group that contains the global group you created.
4	Add Microsoft Windows User Rights to the Local Group: On your single workstation, assign the local group the user rights that Sterling Gentran:Server requires.
5	Create/Share Folder for System Data Store: Create the system data store folder and share it for the group of users you created.
6	Install and Configure your Database: For specific instructions, please refer to the appropriate appendix for the type of database management system you are using.
7	Install/Upgrade Sterling Gentran:Server: Use the Setup program to install or upgrade Sterling Gentran:Server on your single workstation.

(Contd) Task	Description
8	<p>Install/Upgrade the Options Pack: On your single workstation, use the Options Pack Setup program to install or upgrade any Sterling Gentran:Server options you purchased.</p>
9	<p>Install IBM® Sterling Gentran Standards Database for EDI: If you selected Integration Components, use the Setup program to install IBM® Sterling Gentran Standards Database for EDI.</p>
10	<p>Start the Sterling Gentran:Server System: Start the Sterling Gentran:Server Executive Service on your machine before using Sterling Gentran:Server.</p>
11	<p>Implement Security: Specify the Sterling Gentran:Server security mode and add users to the system.</p>
12	<p>Implement Communications: Set up the modem and pools on your machine.</p> <p>Reference Refer to the appropriate documentation for more information.</p>
13	<p>Validate Installation: Complete the steps in chapter 3, Post-installation Tasks, to validate your installation.</p>

New Installation Checklist

Introduction

This section contains a pre-installation checklist that you must complete before installing Sterling Gentran:Server, to assist you in planning your installation.

Server Checklist

Complete the following checklist to determine which system components you are installing and where the Sterling Gentran:Server installation components are distributed on your machine.

Notes

Make copies of the following worksheet for future use. Our recommendations are listed in the **Your installation** column.

Number	Question	Your installation
1	<p>What is the name of the machine on which Sterling Gentran:Server is installed?</p> <p>Notes The Computer Name is displayed in My Computer Properties on the Network Identification tab.</p>	
2	<p>Where will the system data store reside?</p> <p>Recommendation Specify universal naming convention (UNC) pathname as \\MACHINE\SharepointFolder.</p> <p>Note The system data store serves as the repository of all shared Sterling Gentran:Server data. For a Single Workstation, the system data store resides on your machine. We recommend that you use the default GENSRVNT folder.</p>	\\GENTRANMACHINE1 \GENSRVNT

Configuring Microsoft Windows

Introduction To complete this section, you must be logged on to Microsoft Windows as a local administrator.

In this section This section outlines how to configure Microsoft Windows (including creating global and local groups, adding the appropriate user rights, and allowing all users the appropriate access to the system data store and the database) for use with Sterling Gentran:Server. These tasks need to be completed in the sequence indicated.

Reference

If you have specific questions about how to perform the tasks listed in this section, please refer to the Microsoft Windows Online Help or contact Microsoft for assistance.

Process The following table lists the tasks that you need to complete to configure Microsoft Windows for use with Sterling Gentran:Server.

Task	Description
1	Create/Verify Users: On your single workstation, add new Microsoft Windows logons and verify existing Microsoft Windows logons for all Sterling Gentran:Server users.
2	Create the Microsoft Windows Global Group and Add Users: On your single workstation, 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: On your single workstation, create a local group named GENTRANUSERS that contains the global group you created.
4	Add Microsoft Windows User Rights to the Local Group: On your single workstation, assign to the local group the following user rights that Sterling Gentran:Server requires: <ul style="list-style-type: none"> • Load and unload device drivers • Log on as a batch job • Log on as a service • Log on locally • Take ownership of files or other objects

Installing Sterling Gentran:Server

Pre-installation Checklists

Introduction

Complete the remaining questions 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.

Create new system checklist

The following is the pre-installation checklist for creating a new Sterling Gentran:Server system.

Note

Our recommendations are listed in the **Your installation** column.

Number	Question	Your installation
1	In which folder do you want to install Sterling Gentran:Server on this machine? Reference Use this information on the Destination Location dialog box.	C:\GENSRVNT
2	What do you want to name the new Sterling Gentran:Server system? Reference Use this information on the System Name dialog box.	GENSYS1
3	Where will the system data store reside? Notes <ul style="list-style-type: none"> • Specify UNC pathname as \\MACHINE\Sharepoint\Folder. • In this Single Workstation system, the data store must reside on this machine. Reference Use this information on the Data Store Location dialog box.	\\MACHINENAME\GENSRVNT

(Contd) Number	Question	Your installation
4	<p>Which ODBC data source will the system use?</p> <p>Recommendation Give the data source the same name as your database for consistency.</p> <p>References Use this information on the ODBC Data Source Name dialog box.</p>	GentranDatabase
5	<ul style="list-style-type: none"> • For SQL Server, what is the name of your database? • For Oracle, what is the service name or SQL*Net connect string (connection name)? <p>Reference Use this information on the ODBC Server Setup dialog box when you configure your database.</p>	GentranDatabase
6	<p>What database user logon do you want the install program to use to access the database?</p> <p>Notes</p> <ul style="list-style-type: none"> • This logon must have administrative rights to the database. • 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. <p>Reference Use this on the Database Logon dialog box.</p>	
7	<p>Which Sterling Gentran:Server components do you want to install on this machine?</p> <p>Reference Use this information on the Optional Components dialog box.</p>	<ul style="list-style-type: none"> • Client Access Components • Integration Components

(Contd) Number	Question	Your installation
8	<p>Which Microsoft Windows user logon do you want the Sterling Gentran:Server Executive Service to use to log on the primary system controller?</p> <p>Notes</p> <ul style="list-style-type: none"> • This logon must have the advanced right “log on as a batch job” assigned to it on the local machine. • The non-domain format is .\User. <p>Reference Use this information on the Microsoft Microsoft Windows Logon dialog box.</p>	Use the local administrator logon with which you are currently logged on to the machine.
9	<p>What database user logon do you want the Sterling Gentran:Server Executive Service to use to access the database?</p> <p>Note This database logon must have access to the Sterling Gentran:Server database tables.</p> <p>Reference Use this information on the Database Logon dialog box.</p>	Use the local administrator logon with which you are currently logged on to the machine.
10	<p>Which user do you want to be the default Sterling Gentran:Server local administrator?</p> <p>This allows access to Sterling Gentran:Server for the first time and start and stop services.</p> <p>Note This user must also be set up in your database.</p> <p>Reference Use this information on the Sterling Gentran:Server System Administrator dialog box.</p>	Use the local administrator logon with which you are currently logged on to Microsoft Windows.

(Contd) Number	Question	Your installation
11	<p>Which database user name or user group name do you want to grant access to the database tables?</p> <p>Note This user/group must be a valid ID or the installation cannot be completed.</p> <ul style="list-style-type: none"> • 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.) <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> <p>Recommendation Perform this task during installation so you do not have to use your database management system to grant permissions after the install.</p> <p>Reference Use this information on the Database Access dialog box.</p>	GENTRANUSERS
12	<p>What do you want to name the program folder where the Sterling Gentran:Server icons are installed?</p> <p>Reference Use this information on the Program Folder Name dialog box.</p>	Sterling Gentran Server

**IBM® Sterling
Gentran Standards
Database for EDI
checklist**

If you are installing Integration Components, you need to install IBM® Sterling Gentran Standards Database for EDI after installing Sterling Gentran:Server. The following is the pre-installation checklist for installing IBM® 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 IBM® Sterling Gentran Standards Database for EDI from CD-ROM, install the standards on the hard drive of a machine, or map an ODBC data source to an existing database?</p> <p>References</p> <ul style="list-style-type: none"> • See the IBM® Sterling Gentran Standards Database for EDI installation card for information about the amount of free disk space required for installation. • Use this information on the Install Standards dialog box. 	
2	<p>Where will the standards file (STANDARD.MDB) reside?</p> <p>Reference</p> <p>Use this information on the Standards Destination dialog box.</p>	<p>c:\GENSRVNT\ standards</p> <p>or</p> <p>accessing from IBM® Sterling Gentran Standards Database for EDI CD-ROM</p>
3	<p>What do you want to name the ODBC data source that the IBM® Sterling Gentran Standards Database for EDI uses?</p> <p>Note</p> <p>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 Sterling GentranDatabase, you must not use that name for the IBM® Sterling Gentran Standards Database for EDI install.</p> <p>Reference</p> <p>Use this information on the Standards Database dialog box.</p>	<p>IBM® Sterling Gentran Standards Database for EDI</p>

How to Create and Share the System Data Store Folder

Creating 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. You need to complete these tasks now because otherwise you need to interrupt the Sterling Gentran:Server installation process to share the Sterling Gentran:Server folder after the installation program creates it. You determined the UNC pathname for the system data store in the checklist, **item 2** on page 2 - 6.

Note

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

Sharing the system data store folder

You also need to share the folder where the system data store resides (GENSRVNT) for the GENTRANUSERS group. You need to give the group “Full Control” permission to access the drive/folder. This gives the users in the GENTRANUSERS 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.

Creating the system data store folder

Use the following procedure to create the folder for the system data store.

Step	Action
1	Navigate to and select the drive on which the system data store resides.
2	Create a new folder named GENSRVNT .

Sharing the system data store folder

Consult your Microsoft Windows documentation for information about how to share the GENSRVNT folder.

How to Install a Single Workstation System

Using the Sterling Gentran:Server Setup Program

The Setup program (setup.exe) allows you to install Sterling Gentran:Server.

Warning

We strongly recommend that you exit all Microsoft Windows programs before running the Setup program.

Navigation

The following table contains general information about navigating in the Setup program.

IF you want to...	THEN click...
navigate <i>forward</i> (next dialog box)	Next.
navigate <i>backward</i> (previous dialog box)	Back.
<i>exit</i> Setup	<p>Cancel.</p> <p>System prompt Do you want to exit the Setup program now?</p> <ul style="list-style-type: none"> If <i>yes</i>, click Exit Setup. <p>Warning If you exit the Setup program, the installation will not be completed.</p> <ul style="list-style-type: none"> If <i>no</i>, click Resume.

Before you Begin

Requirement

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

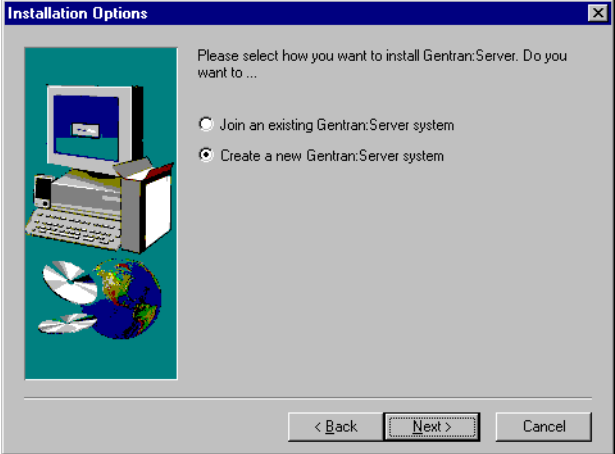
Recommendation

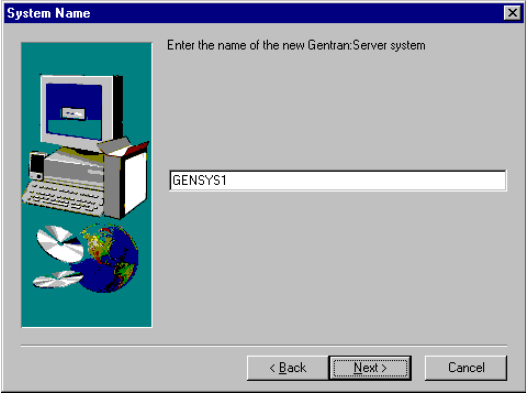
Exit all other Microsoft Windows programs before running the Setup program.

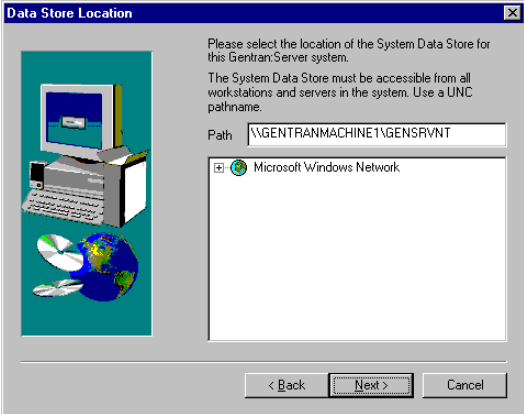
Note

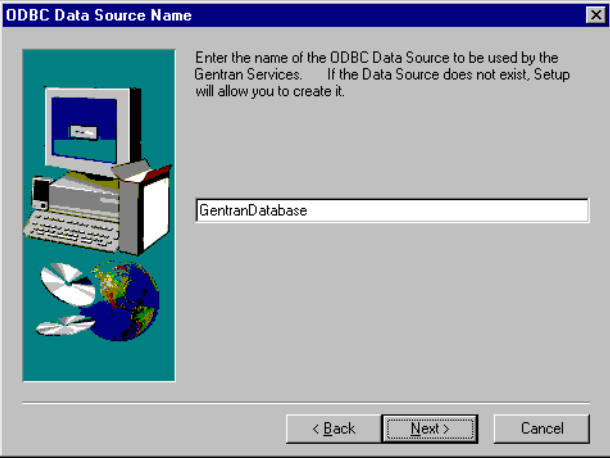
If you ever need to uninstall Sterling Gentran:Server, see the *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for information about using the Sterling Gentran:Server Installation Setup program “Leave a system” option.

Procedure Use the following procedure to install Sterling Gentran:Server on a single workstation.

Step	Action
1	<p>If you are installing from CD-ROM, complete the following:</p> <ol style="list-style-type: none"> Insert the Sterling Gentran:Server 5.3 Installation CD into your CD-ROM drive. If Autorun is disabled on this machine, select Run from the Start menu and continue with c. Otherwise, continue with Step 3. Browse to your CD-ROM drive, select Setup.exe, and click OK. <p>System Response Setup begins. The system displays the welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.</p>
2	<p>If you are installing from the Internet, browse to the installation folder (created in Step 8 in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide</i> Internet download procedure) and run setup.exe.</p> <p>System Response Setup begins. The system displays the welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.</p>
3	<p>Click Next to proceed with the Setup.</p> <p>System response The system asks you if you want to view the ReadMe.htm file.</p>
4	<p>Click Yes to view the ReadMe file and then close it when finished.</p> <p>System response Setup looks for installed components. Since there are no Sterling Gentran:Server components installed on your machine, Setup displays the Installation Options dialog box.</p> 

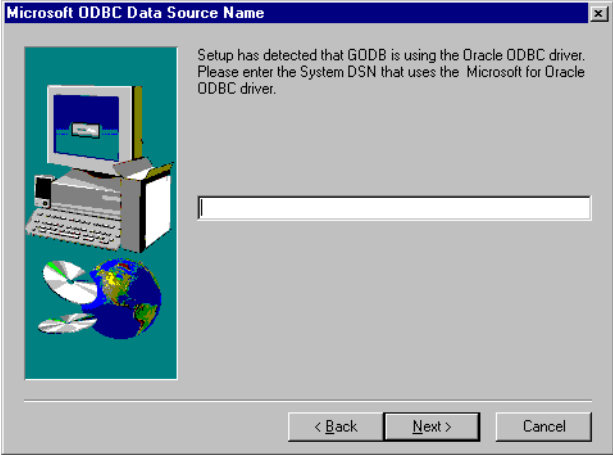
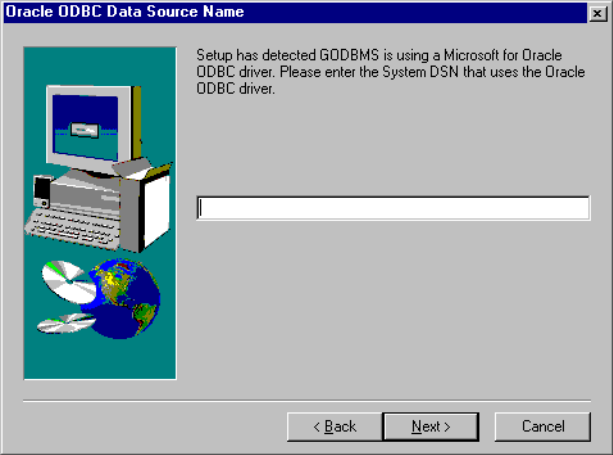
(Contd) Step	Action
5	<p>Select Create a new Gentran:Server system and click Next.</p> <p>System response Setup prompts you to complete the New Installation checklist if you have not already done so.</p>
6	<p>Click Yes to continue the install.</p> <p>System response The system displays the Destination Location dialog box.</p>
7	<p>Do you want to install Sterling Gentran:Server in the default folder (GENSRVNT)?</p> <ul style="list-style-type: none"> • If <i>yes</i>, click Next. • If <i>no</i>, click Browse to select the folder, click OK to exit the Browse dialog box, and then click Next. <p>Notes</p> <ul style="list-style-type: none"> • You determined this information in the checklist, item 1 on page 2 - 8. • The default installation folder is C:\GENSRVNT. <p>System response You already created the GENSRVNT folder, but if the installation folder does not exist, Setup creates it. Setup displays the System Name dialog box.</p> 

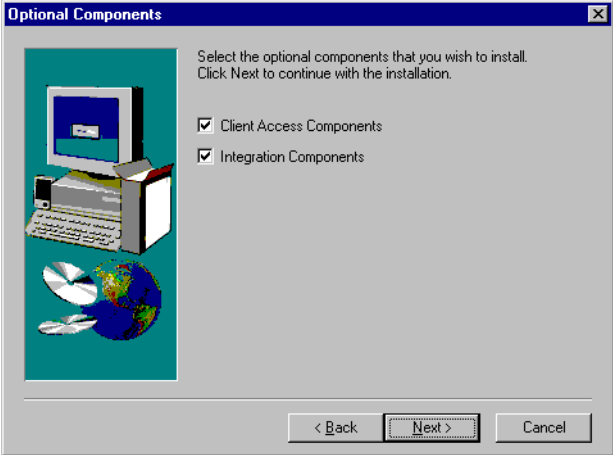
(Contd) Step	Action
8	<p>Type the name of the new system and click Next.</p> <p>Note You determined the system name in the checklist, item 2 on page 2 - 8.</p> <p>System response The system displays the Data Store Location dialog box.</p> 

(Contd) Step	Action
9	<p>Select the data store location for this system by clicking it in the list (rather than typing the location in the Path box manually, to ensure that the proper share is selected). Click Next.</p> <p>Recommendation Use the GENSRVNT folder as the data store location.</p> <p>Note You determined the data store location in the checklist, item 3 on page 2 - 8.</p> <p>System response Setup verifies that the specified drive or folder is shared and displays the ODBC Data Source Name dialog box.</p> 
10	<p>Type the name of the ODBC data source that is used by Sterling Gentran:Server in this system and click Next.</p> <p>Tip Remember that the ODBC data source name is case-sensitive, so be sure to type your data source correctly.</p> <p>Note You determined the ODBC data source name in the checklist, item 4 on page 2 - 9.</p> <p>System response Setup looks for the ODBC DSN that you selected.</p> <ul style="list-style-type: none"> • If it <i>finds</i> the DSN, you are prompted to make changes to the ODBC data source configuration. Continue with Step 12. • If it does <i>not</i> find the DSN, you are prompted to create one. Continue with Step 11.


(Contd) Step	Action
11	<p>Do you want to create the ODBC DSN?</p> <ul style="list-style-type: none"> • If <i>no</i>, click No to return to the Select ODBC Data Source dialog box and select another data source (Step 10). • If <i>yes</i>, click Yes and the system displays the ODBC Data Source Administrator dialog box. Continue with Step 12.
12	<p>Do you want to change any ODBC DSN parameters?</p> <ul style="list-style-type: none"> • If <i>yes</i>, click Yes. <p>System Response The ODBC Data Source Administrator dialog box is displayed. Continue with Step 13 13 to modify the data source.</p> <ul style="list-style-type: none"> • If <i>no</i>, click No and continue with Step 15.
13	<p>Select the System DSN tab and click Add. For controllers, you must use a <i>system</i> DSN to allow the service to use the data source.</p> <p>Recommendation Use a System DSN because this enables any user on this machine and the Sterling Gentran:Server Executive Service to use this DSN.</p> <p>System response The system displays the Create New Data Source wizard.</p>
14	<p>From the driver list, select the ODBC driver for the database you want to use and click Finish.</p> <p>System response Setup displays an ODBC data source server setup dialog box, depending on which database manager (and which version of that database manager) you are using. For example, when you are using SQL Server, the system displays the ODBC SQL Server dialog box.</p> <p>Reference</p> <ul style="list-style-type: none"> • If you are using SQL, see Appendix A. • If you are using Oracle, see Appendix B.

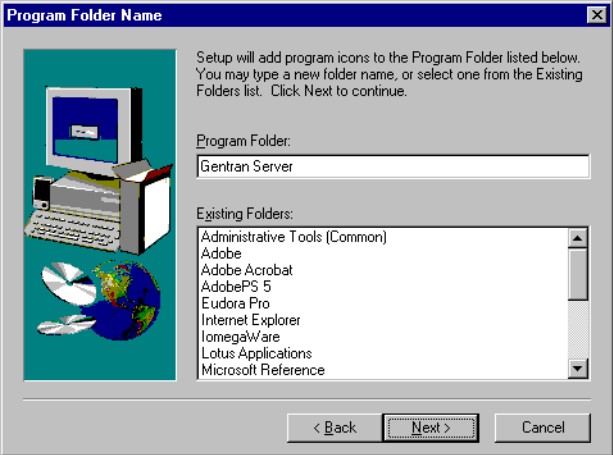
(Contd) Step	Action
15	<p>To create the ODBC DSN using SQL Server, do the following.</p> <ol style="list-style-type: none"> a. See Appendix A for information about how to configure a DSN. b. Save the SQL Server Setup and continue with Step 17. <p>Notes</p> <ul style="list-style-type: none"> • If you are using a database other than SQL Server, you must still select the machine name where you want the database to reside and enter the database name. • If the dialog box displays an option to Use ANSI Quoted Identifiers, you must select this option (turn it on) or the database will not work with Sterling Gentran:Server. <p>System response Setup displays the Database Logon dialog box.</p>
Use this table to determine your next step.	
IF you are using...	THEN continue with...
the SQL Server ODBC DSN or if Setup does not find the specified DSN,	Step 17.
a DSN configured to use an Oracle driver,	Step 16.
a DSN configured to use a Microsoft for Oracle driver,	Step 16.

(Contd) Step	Action
16	<p>Are you using an Oracle database? (See Appendix B for help setting up the DSNs.)</p> <ul style="list-style-type: none"> If <i>yes</i> and if the DSN you entered as the ODBC Data Source is a DSN that uses an Oracle driver, then the system displays the Microsoft ODBC Data Source Name dialog box.  <p>Type the system DSN that uses the Microsoft for Oracle ODBC Driver and click Next.</p> <ul style="list-style-type: none"> If <i>yes</i> and if the DSN you entered as the ODBC Data Source is a DSN that uses a Microsoft driver, then the system displays the Oracle ODBC Data Source Name dialog box.  <p>Type the system DSN that uses the Oracle ODBC Driver and click Next.</p> <ul style="list-style-type: none"> If <i>no</i>, continue with Step 17. <p>System response Setup displays the Database Logon dialog box.</p>

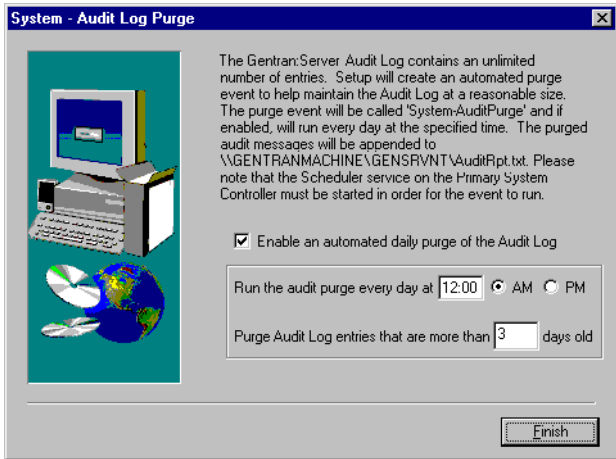
(Contd) Step	Action
17	<p>To log on to the database, complete the following:</p> <ol style="list-style-type: none"> In the User ID box, type your database administrator logon. Type the password in the Password box. Type the password again in the Confirm box to validate it. Click Next. <p>Notes</p> <ul style="list-style-type: none"> This is the administrative database logon that Setup uses to build the database tables. You determined the database logon in the checklist, item 6 on page 2 - 9. 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. <p>System response Setup displays the Optional Components dialog box.</p> 
18	<p>Select the components you want to install by clicking the appropriate check boxes. Click Next.</p> <p>Notes</p> <ul style="list-style-type: none"> You determined this information in the checklist, item 7 on page 2 - 9. We recommend that you install all components. The Process Controller components are automatically installed on the primary system controller. <p>System response Setup displays the Microsoft Windows Logon dialog box.</p>

(Contd) Step	Action
19	<p>To log on to Microsoft Windows (for Sterling Gentran:Server Executive Service access), complete the following.</p> <ol style="list-style-type: none"> In the User ID box, type a Microsoft Windows user ID that is set up with the required access to the network. The format is <i>DOMAIN\User</i> for a domain account and <i>.\User</i> for a non-domain account. In the Password box, type the Microsoft Windows password for that user ID. Type the password again in the Confirm box to validate it. Click Next. <p>Notes</p> <ul style="list-style-type: none"> You determined which logon is used in the checklist, item 8 on page 2 - 10. You need to enter a valid administrative user ID and password that the Sterling Gentran:Server Executive Service uses to access network resources. This is the Microsoft Windows user account that starts the Sterling Gentran:Server Executive Service and is also used for unattended processing. This user ID must have the advanced right “log on as a batch job” assigned to it on the local machine. <p>System response Setup displays the Database Logon dialog box.</p>
20	<p>To log on to the database (for Sterling Gentran:Server Executive Service access), complete the following.</p> <ol style="list-style-type: none"> In the User ID box, type the database User ID that is set up with the required access to the database. In the Password box, type the Password for that user ID. Type the password again in the Confirm box to validate it. Click Next. <p>Notes</p> <ul style="list-style-type: none"> You determined this logon in the checklist, item 9 on page 2 - 10. You must enter a valid database administrative logon that is already set up with access to the Sterling Gentran:Server database tables. This logon enables the Sterling Gentran:Server Executive Service to access and manipulate information in the database tables. Sterling Gentran:Server uses this logon every time it accesses the database tables. <p>System response Setup displays the Sterling Gentran:Server System Administrator dialog box.</p>

(Contd) Step	Action
21	<p>To log on as the Sterling Gentran:Server System Administrator, complete the following:</p> <ol style="list-style-type: none"> In the User ID box, type the Sterling Gentran:Server administrative User ID. <p>Note This user must also have valid Microsoft Windows and database logons.</p> <ol style="list-style-type: none"> In the Password box, type the Password for that user ID. Type the password again in the Confirm box to validate it. Click Next. <p>Notes</p> <ul style="list-style-type: none"> You determined which user logon to use for the Sterling Gentran:Server local administrator in the checklist, item 10 on page 2 - 10. The Setup program creates this Sterling Gentran:Server administrative user. <p>System response 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.</p> 

(Contd) Step	Action
22	<p>To grant access to the Sterling Gentran:Server database tables to the group of users you created, type GENTRANUSERS and click Next.</p> <p>Notes</p> <ul style="list-style-type: none"> • You determined this group in the checklist, item 11 on page 2 - 11. • This user/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.) <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> <p>System response</p> <p>The system displays the Program Folder Name dialog box so you can choose the program group in which you want the client/integration components installed as program icons.</p> 
23	<p>Accept the default program folder name Gentran Server and click Next.</p> <p>Note</p> <p>You determined this information in the checklist, item 12 on page 2 - 11.</p>

(Contd) Step	Action
24	<p>Did you select to install Integration Components?</p> <ul style="list-style-type: none"> If <i>yes</i>, continue with Step 25. <p>System response Setup displays a dialog box asking what default data format you want to use for new maps and new fields.</p> <ul style="list-style-type: none"> If <i>no</i>, continue with Step 26. <p>System response Setup displays a dialog box stating that it is ready to install the Sterling Gentran:Server components you selected and asks you if you want to proceed.</p>
25	<p>Do you want to use free format?</p> <ul style="list-style-type: none"> Click Yes if you want to use a free format (containing all ASCII characters—lower 128 and upper 128). Click No if you want to use a format that corresponds to the lower 128 ASCII characters. <p>Notes</p> <ul style="list-style-type: none"> 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. <p>System response Setup displays a dialog box stating that it is ready to install the Sterling Gentran:Server components you selected and asks if you want to proceed.</p>

(Contd) Step	Action
26	<p>Do you want to proceed?</p> <ul style="list-style-type: none"> • Click No to return to the Database Access dialog box if the program folder is unknown (Step 22) or return to the Select Program Folder dialog box if the program folder is known (Step 21). • Click Yes to proceed with the installation (continue with Step 27). <p>System response 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, and builds the program group and icons.</p> <p>Setup displays the Audit Log Purge dialog box.</p> 
27	<p>Accept the default and click Finish.</p> <p>System response Setup asks you if you want to start Sterling Gentran:Server services now.</p>

(Contd) Step	Action
28	<p>Do you want to start Gentran:Server services now?</p> <ul style="list-style-type: none"> • If <i>yes</i>, click Yes. • If <i>no</i>, click No. You will need to restart the services manually later. <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about starting Sterling Gentran:Server services.</p> <p>System response 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.</p> <ul style="list-style-type: none"> • If no errors occurred, Setup continues with Step 30. • If errors occurred, Setup reports the errors. See Appendix C for a list of the Install Shield error messages. <p>Note If the Microsoft Windows user ID you entered in Step 19 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.</p> <p>Setup then determines whether any shared DLLs were locked. Continue with Step 29.</p>
29	<p>Are any shared DLLs locked?</p> <ul style="list-style-type: none"> • If <i>yes</i>, Setup asks if you want to reboot the machine now or later. Do one of the following: <ul style="list-style-type: none"> — Select No, I will restart my computer later and click OK to terminate the Setup program. — Select Yes, I want to restart my computer now and click OK to reboot the machine. <p>Warning Be certain that you have saved your work in any other open applications before rebooting the machine.</p> <ul style="list-style-type: none"> • If <i>no</i>, continue with Step 30.

(Contd) Step	Action
30	<p>Did you install Integration Components?</p> <ul style="list-style-type: none"> • If <i>yes</i>, you are prompted to install the IBM® Sterling Gentran Standards Database for EDI. Click OK to acknowledge this message. See the appropriate <i>IBM® Sterling Gentran Standards Database for EDI Installation Card</i> for information about installing the IBM® Sterling Gentran Standards Database for EDI. • Standards. • If <i>no</i>, continue with Step 31. <p>System response Setup prompts you that if you need to configure e-mail notifications, you will need to configure the MAPI profile to be used. Click OK.</p> <p>Reference Refer to the Sterling Gentran:Server documentation specified in the message box for more information.</p>
31	<p>Click OK to exit Setup. You have completed the Setup program to create a new Sterling Gentran:Server single workstation system.</p>
32	<p>You are ready to install the necessary Options Pack optional components.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Options Pack Installation Card</i> for more information on how to install Sterling Gentran:Server optional components.</p>

Upgrading Sterling Gentran:Server

How to Upgrade your Sterling Gentran:Server Installation

Introduction

Use the **Upgrade your existing installation** option on your Sterling Gentran:Server machine when you receive upgrades to the Sterling Gentran:Server software.

Notes

- To complete the installation of a Single Workstation system, you must be logged on to Microsoft Windows as a local administrator.
- If you ever need to uninstall Sterling Gentran:Server, see the *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for information about using the Sterling Gentran:Server Installation Setup program “Leave a system” option.

Sterling Gentran:Server for RosettaNet prerequisite

Warning

The 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 release will fail if IIS is running during installation. 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 the **Stop** button). You can access the Internet Services dialog box from your **Start** menu by selecting **Settings > Control Panel > Administrative Tools**, and then selecting **Internet Services Manager**.

Note

Be aware that if you use Sterling Gentran:Server for RosettaNet and are upgrading from Sterling Gentran:Server 3.x to 5.3, there are tasks you will need to perform after installing Sterling Gentran:Server 5.3 and Sterling Gentran:Server for RosettaNet 5.3, and you should allot time to complete these post-installation tasks.

Reference

See How to Upgrade Sterling Gentran:Server for RosettaNet in the *IBM® Sterling Gentran:Server® for RosettaNet Installation Card* for more information on these post-installation tasks.

Troubleshooting a failed installation

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 recovers from:

- the database server crashing or being accidentally unplugged
- the network failing
- a power outage

Backing up your database prior to upgrade

Prior to upgrading Sterling Gentran:Server, we recommend that you perform a synchronous backup of your entire Sterling Gentran:Server system, including the database, data store, and your Microsoft Windows registry. After performing the backup, you should verify its integrity.

Upgrading a test machine

Prior to upgrading Sterling Gentran:Server in your production environment, we recommend that you upgrade the system on a test machine first, then migrate to your production system.

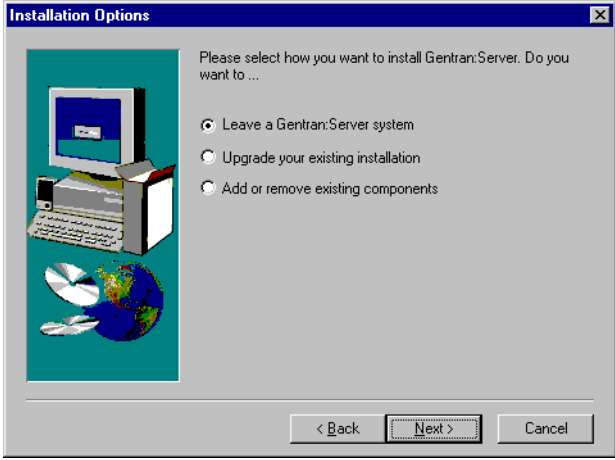
Procedure**Recommendation**

Exit all other Microsoft Windows programs before running the Setup program.

Use the following procedure to upgrade Sterling Gentran:Server.

Step	Action
1	<p>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.</p> <p>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.</p>
2	<p>If you are installing from CD-ROM, complete the following:</p> <ol style="list-style-type: none"> a. Insert the Sterling Gentran:Server 5.3 Installation CD into your CD-ROM drive. b. If Autorun is disabled on this machine, select Run from the Start menu and continue with c. Otherwise, continue with Step 4. c. Browse to your CD-ROM drive, select Setup.exe, and click OK. <p>Warning If you have Sterling Gentran:Server for RosettaNet installed, see the prerequisite warning in <i>Sterling Gentran:Server for RosettaNet prerequisite</i> on page 2 - 30.</p> <p>System response Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4.</p>

(Contd) Step	Action
3	<p>If you are installing from the Internet download, browse to the installation folder (created in Step 8 in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide</i> Internet download procedure) and run setup.exe.</p> <p>Warning If you have Sterling Gentran:Server for RosettaNet installed, see the prerequisite warning in <i>Sterling Gentran:Server for RosettaNet prerequisite</i> on page 2 - 30.</p> <p>System Response Setup begins. The system displays the welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4.</p>
4	<p>Click Next.</p> <p>System response Setup asks you if you want to view the ReadMe.htm file.</p>
5	<p>Click Yes to view the file and then close it when finished.</p> <p>System response Setup continues the installation process.</p>
6	<p>Are you are currently running the Sterling Gentran:Server Executive, Sterling Gentran:Server Mailbox, Sterling Gentran:Server Communications service, and/or Sterling Gentran:Server Audit Notification service?</p> <ul style="list-style-type: none"> • If <i>yes</i>, the system prompts you to stop the services so installation can proceed. Click Yes to stop each service and continue with Step 7. • If <i>no</i>, continue with Step 8. <p>Notes</p> <ul style="list-style-type: none"> • If you have the Sterling Gentran:Server for RosettaNet installed, Setup may also 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. • If you choose not to stop the necessary services, the Setup program will prompt you to exit the installation procedure.

(Contd) Step	Action
7	<p>Click Next.</p> <p>System response Setup looks for and finds installed components and does one of the following:</p> <ul style="list-style-type: none"> • Setup displays a dialog box stating that it detected an older version of Sterling Gentran:Server and asks if you would like to upgrade to the new version. Continue with Step 8. • Setup displays the following dialog box. Continue with Step 9. 
8	<p>Click Yes to upgrade to the new version of Sterling Gentran:Server. Continue with Step 10.</p> <p>System response Setup displays a dialog box stating that it is ready to upgrade your current installation and asks if you have performed the following tasks:</p> <ul style="list-style-type: none"> • Read the installation instructions • Successfully backed up your Sterling Gentran:Server files • Successfully backed up your Sterling Gentran:Server database
9	<p>Select Upgrade your existing installation and click Next. Continue with Step 10</p> <p>System response Setup displays a dialog box stating that it is ready to upgrade your current installation and asks if you have performed the following tasks:</p> <ul style="list-style-type: none"> • Read the installation instructions • Successfully backed up your Sterling Gentran:Server files • Successfully backed up your Sterling Gentran:Server database

(Contd) Step	Action
10	<p>Do you want to proceed?</p> <ul style="list-style-type: none"> • If <i>yes</i>, click Yes to proceed with the installation. Continue with Step 11. • If <i>no</i>, click No to return to the Installation Options dialog box to select another installation option (Step 8).
11	<p>In this logon dialog box, you need to enter the user ID and password that the Sterling Gentran:Server Executive Service uses to access network resources. This is the Microsoft Windows user account that starts the Sterling Gentran:Server Executive Service and is used for unattended processing.</p> <ol style="list-style-type: none"> a. In the User ID box, type a Microsoft Windows user ID that is set up with the required access to the network. The format is <i>DOMAIN\User</i> for a domain account and <i>.\User</i> for a non-domain account. b. In the Password box, type the Microsoft Windows Password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click Next. <p>System response Setup displays the Database Logon dialog box.</p>
12	<p>In this logon dialog box, you need to enter the administrative database logon that Setup uses to build the database tables.</p> <ol style="list-style-type: none"> a. In the User ID box, type the database administrator logon. b. Type the password in the Password box. c. Type the password again in the Confirm box to validate it. d. Click Next. <p>Notes</p> <ul style="list-style-type: none"> • 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. • If this Sterling Gentran:Server system is installed with Oracle, you must use the schema owner of the tables so that the schema will not change. <p>System response Setup asks if you want to be HIPAA-compliant.</p>

(Contd) Step	Action
13	<p>Do you want to be HIPAA-compliant?</p> <ul style="list-style-type: none"> If <i>yes</i>, click Yes and Setup will install the appropriate components. Continue with Step 14. <p>Note 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.</p> <ul style="list-style-type: none"> If <i>no</i>, click No and continue with Step 14. <p>Note 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.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows HIPAA and NCPDP Compliance Guide</i> for more information about using HIPAA with Sterling Gentran:Server.</p>
14	<p>Did you select to install Integration Components and are upgrading from a pre-5.0 Sterling Gentran:Server system to a 5.x system?</p> <ul style="list-style-type: none"> If <i>yes</i>, continue with Step 15 <p>System response Setup asks what default data format you want to use for new maps and fields.</p> <ul style="list-style-type: none"> If <i>no</i>, continue with Step 16. <p>System response Setup asks you if you want to proceed with the upgrade.</p>

(Contd) Step	Action
15	<p>Do you want to use free format?</p> <ul style="list-style-type: none"> • Click Yes if you want to use a free format (containing all ASCII characters—lower 128 and upper 128). • Click No if you want to use a format that corresponds to the lower 128 ASCII characters. <p>Notes</p> <ul style="list-style-type: none"> • 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. <p>System response Setup asks you if you want to proceed with the upgrade.</p>
16	<p>Click Yes to proceed with the upgrade.</p> <p>System response Setup performs the following:</p> <ul style="list-style-type: none"> • Upgrades the components that you previously installed on this machine • 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 <p>Note Depending on the size of your database, the upgrade process may last anywhere from a few minutes to a couple of hours.</p>

(Contd) Step	Action
17	<p>Did any errors occur?</p> <ul style="list-style-type: none"> If no errors occurred, Setup informs you that the upgrade installation is complete. Continue with Step 19. If errors occurred on the primary system controller, Setup (when you execute it again) prompts you to execute automatic recovery to attempt to recover the database. Click Yes when you are prompted to execute automatic recovery. Continue with Step 18. <p>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.</p> <p>Warning You should attempt to fix the cause of the failure (such as database crash or network down) before running Setup again.</p> <p>Reference See Appendix C for a list of the Install Shield error messages.</p>
18	<p>Are any shared DLLs locked?</p> <ul style="list-style-type: none"> If <i>yes</i>, Setup asks if you want to reboot the machine now or later. Do one of the following: <ul style="list-style-type: none"> Select No, I will restart my computer later and click OK to terminate the Setup program. Select Yes, I want to restart my computer now and click OK to reboot the machine. If <i>no</i>, continue with Step 19. <p>Warning Be certain that you have saved your work in any other open applications before rebooting the machine.</p> <p>System response Setup asks you if you want to restart the services Setup stopped.</p> <p>Note When you upgrade Sterling Gentran:Server, any Sterling Gentran:Server services that are not included in the core install (for example, the RosettaNet Service) will not start until you upgrade that service.</p>

(Contd) Step	Action
19	<p>Do you want to start the services that Setup stopped now?</p> <ul style="list-style-type: none"> • If <i>yes</i>, click Yes. • If <i>no</i>, click No. You will need to restart the services manually later. <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information on starting Sterling Gentran:Server services.</p> <p>System response Setup prompts that if you loaded Integration Components, you will need to install the appropriate IBM® Sterling Gentran Standards Database for EDI.</p> <p>Reference See the appropriate IBM® Sterling Gentran Standards Database for EDI Installation card for more information.</p>
20	<p>Click OK.</p> <p>System response Setup prompts you that, to configure e-mail notification, you must configure the MAPI profile to be used.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows MAPI Gateway Configuration Guide</i> for more information.</p>
21	<p>Click OK.</p> <p>System response Setup prompts you that if you previously installed optional components, you will need to upgrade those components.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Options Pack Installation Card</i> for more information.</p>
22	<p>Click OK.</p> <p>System response 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.</p> <p>Reference See your extension installation documentation or the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Options Pack Installation Card</i> for more information.</p>

(Contd) Step	Action
23	<p>Click OK to exit Setup.</p> <p>System response Setup prompts you that installation is complete.</p> <p>Note If you upgraded Integration components, you are prompted to load the IBM® Sterling Gentran Standards Database for EDI.</p>
24	<p>Click OK to exit Setup. You have completed the Setup program to upgrade an existing system and you are ready to upgrade the necessary Options Pack optional components.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Options Pack Installation Card</i> for more information on how to install Sterling Gentran:Server optional components.</p>

Post-Installation Tasks

Contents

- Introduction 3 - 2
 - How to Start the Sterling Gentran:Server System 3 - 3
 - How to Implement Security 3 - 7
 - How to Implement Communications 3 - 8
 - How to Validate your Sterling Gentran:Server Installation 3 - 9
-

Introduction

In this chapter

This chapter contains information about the tasks you need to perform after installing Sterling Gentran:Server for the first time.

How to Start the Sterling Gentran:Server System

Introduction If you have not already started Sterling Gentran:Server after installing the system for the first time, you need to do so now.

Notes

- You must have Microsoft 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 the Sterling Gentran:Server until the screen saver is activated.

Procedure Use the following procedure to start the Sterling Gentran:Server system.

Reference

See How to Stop the System in the *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for information about stopping the system.

Step	Action
1	<p>On your machine, start the System Configuration Program.</p> <p>System response Setup displays a dialog box stating that the system is down.</p> <p>Note Depending on which security mode you use, if you are not currently executing Sterling Gentran:Server, the Login dialog box may be displayed when you start a Sterling Gentran:Server program (such as Notify Client or System Configuration).</p>
2	<p>Click OK to acknowledge the message.</p> <p>System response The System Configuration dialog box (Controllers tab) is displayed.</p> <p>Note On the Controllers tab, you can set the Sterling Gentran:Server Executive to automatically start when Microsoft Windows is booted.</p> <p>Reference See How to Change Controller Settings in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about automatically starting the Sterling Gentran:Server Executive.</p>

(Contd) Step	Action
3	<p>Does the Controller box contain the name of your primary system controller?</p> <ul style="list-style-type: none"> • If <i>yes</i>, continue with Step 4. • If <i>no</i>, type the name of the controller in the Controller box and click Select to access the settings and start/stop controls for the chosen controller.
4	<p>Click Start next to Sterling Gentran:Server Executive (primary system controller) to initiate the Sterling Gentran:Server Executive and start the system.</p> <p>System response The Sterling Gentran:Server system is now started and the Start buttons for Poller and Scheduler are displayed once the Sterling Gentran:Server Executive starts correctly.</p>
5	<p>Do you want the Sterling Gentran:Server Executive Service to start on the selected controller when the Microsoft Windows system starts?</p> <ul style="list-style-type: none"> • If <i>yes</i>, select the Auto start check box to the right of the Sterling Gentran:Server Executive enabler. • If <i>no</i>, continue with Step 6.
6	<p>Verify that the services on which the Sterling Gentran:Server Executive Service is dependent are ordered correctly. Click Dependencies and select the following services/load-ordering groups that must be started prior to initiating the Sterling Gentran:Server Executive:</p> <ul style="list-style-type: none"> • Sterling Gentran Audit Notification service • Sterling Gentran:Server Mailbox service • Sterling Gentran:Server Communications service (if installed) <p>Warning Exercise caution in changing dependencies—be certain that you are modifying the appropriate ones.</p> <p>Reference See System Administrator Functions in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about which services the Sterling Gentran:Server Executive Service depends on.</p>

(Contd) Step	Action
7	<p>Do you want to start the Poller service?</p> <ul style="list-style-type: none"> • If <i>yes</i>, click Start next to Poller. • If <i>no</i>, continue with Step 8. <p>Note You can set the Poller to automatically start when the Sterling Gentran:Server Executive is started. You can also specify the interval at which Poller polls the system.</p> <p>Reference See How to Change Controller Settings in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about automatically starting the Poller and setting a polling interval.</p>
8	<p>Do you want to start the Scheduler service?</p> <ul style="list-style-type: none"> • If <i>yes</i>, click Start next to Scheduler. • If <i>no</i>, continue with Step 9. <p>Note You can set the Scheduler to automatically start when the Sterling Gentran:Server Executive is started. You can also specify the interval at which Scheduler checks for scheduled events.</p> <p>Reference See How to Change Controller Settings in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about automatically starting the Scheduler and setting a scheduling interval.</p>
9	<p>Do you have additional controllers in your system?</p> <ul style="list-style-type: none"> • If <i>yes</i>, repeat Steps 7 and 8. • If <i>no</i>, continue with Step 10.
10	<p>In the Controller box, type the name of the secondary controller or click Browse to select the name.</p> <p>System response The Choose Network Server dialog box is displayed. Select the appropriate controller and click OK.</p>
11	<p>To access the settings and start/stop controls for the chosen controller, click Select.</p>
12	<p>Repeat Steps 4 through 6.</p>
13	<p>Click OK to exit the System Configuration program.</p>

Next step Continue with *How to Implement Security* on page 3 - 7 to continue your implementation of Sterling Gentran:Server.

How to Implement Security

Introduction

System security is an important ongoing step in controlling who can log on to your system and which functions they can access. Security ensures the integrity of your data by limiting who can make changes to specific areas of the system. Sterling Gentran:Server supports three security modes: Integrated, Mixed, and Standard.

Reference

You decided which security mode you would use in *Post-installation Security Recommendations* on page 1 - 13.

Specifying the security mode

Use the System Configuration program to specify the security mode.

Reference

See System Configuration—Security Tab in the *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for more information about changing the security mode

Recommendation

Set the security modes for Sterling Gentran:Server and your database to be the same. We recommend that you use *Integrated* security mode for SQL Server. You must use *Standard* security mode for Oracle.

Setting up users

Now you need to add Sterling Gentran:Server users to the system.

Reference

See How to Add a New User in the *IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide* for more information about creating new Sterling Gentran:Server users.

Next step

You need to configure the modem on the communications controller. Continue with *How to Implement Communications* on page 3 - 8.

How to Implement Communications

Introduction You need to configure the modem on your machine. You also need to set up a pool.

Reference

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

Next step After you implement communications, you need to validate your Sterling Gentran:Server installation by following the instructions in *How to Validate your Sterling Gentran:Server Installation* on page 3 - 9.

How to Validate your Sterling Gentran:Server Installation

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

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

Step	Action
1	<p>Verify Permissions for Database Tables: Use your database management system to verify that all of the permissions were set correctly during the Sterling Gentran:Server installation.</p> <p>Reference See your database management system documentation for specific instructions.</p>
2	<p>Verify configuration settings:</p> <ol style="list-style-type: none"> a. Select the System Configuration program from the Sterling Gentran:Server program group. The System Configuration dialog box is displayed. b. Select each tab and verify that the settings are correct for your installation. <p>Reference See How to Change Controller Settings in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about modifying configuration settings.</p>
3	<p>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.</p> <ul style="list-style-type: none"> • PET_850.TPL (This is an export translation object.) • PET_810.TPL (This is an import translation object.) • HEADER.TPL (This is a system import translation object.) • PET_810S.TPL (This is a screen entry translation object.) • PET_850P.TPL (This is a print translation object.) <p>Reference See How to Register a New Translation Object in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information.</p>

(Contd) Step	Action
4	<p>Import tutorial partner relationship: Import the PETZONE.PAR partner relationship that we provide in the TUTORIAL folder.</p> <p>Reference See the How to Import a Partner Profile section in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information.</p>
5	<p>Perform an import operation: Use this procedure to perform an import operation using the Application Integration ANSI tutorial data.</p> <ol style="list-style-type: none"> a. Verify (in Partner Editor) that the PET X 3030 810 Import translation object is selected for the Outbound Relationship. <p>Reference See How to Create a New Outbound Relationship in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information about selecting outbound translation objects.</p> b. Define the import specification on the Import tab in the System Configuration program to indicate which system import translation object is used to begin translation during the import process. <p>Reference See How to Define a New Import Specification in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about defining import specifications. Use this procedure to define the import specification.</p> c. Start the System Configuration program. d. Click the Imports tab. e. In the File Path box, type *.txt. f. From the Translation Object list, select System Import HDR. This is the system import translation object that you registered. g. Click OK to exit the System Configuration program and save the import specification. h. Use the Import option in Sterling Gentran:Server to process the data file (PET_810.TXT) through the translation object. <p>Note The data file is located in the TUTORIAL subfolder under the folder where Sterling Gentran:Server is installed.</p> <p>Reference See How to Import a Document in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information about importing files.</p>

(Contd) Step	Action
5 (contd)	<p>i. After the document is translated, it is moved to Workspace in Sterling Gentran:Server. View the EDI data to ensure that the document was translated correctly.</p> <p>Reference See How to View a Document in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information about viewing raw EDI data.</p>
6	<p>Perform a process file operation: Use this procedure to perform an export operation using the Application Integration ANSI tutorial data.</p> <p>a. Verify (in Partner Editor) that the PET X 3030 850 Export translation object is selected for the Inbound Relationship.</p> <p>Reference See How to Create a New Inbound Relationship in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information about selecting inbound translation objects.</p> <p>b. 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.</p> <p>Reference See How to Process Data Files in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information about processing files.</p>
7	<p>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.</p> <p>Reference See How to Export a Document in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> for more information about exporting files.</p>
8	<p>Verify access to Document Editor: Complete the steps in How to Create a New Document in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows User Guide</i> to verify that you can access the Document Editor.</p> <p>Note You do not actually need to complete the document—you can exit the Document Editor after it is displayed.</p>
9	<p>Verify access to Process Control: Select Process Control from the Sterling Gentran:Server Tools menu to verify that you can access Process Control.</p>

(Contd) Step	Action
10	<p>Verify access to Application Integration and IBM® Sterling Gentran Standards Database for EDI (only if you installed Application Integration):</p> <ol style="list-style-type: none"> a. If you installed Integration Components, click the Application Integration icon on the Main Toolbar to verify that you can access the Application Integration subsystem. b. Complete the steps in How to Create a New Map in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Application Integration User Guide</i> to verify that you can access IBM® Sterling Gentran Standards Database for EDI.
11	<p>Verify Access to the Notification Log:</p> <ol style="list-style-type: none"> a. Verify access to the Sterling Gentran Notification Log component from the Start menu by selecting Programs > Gentran Server > Gentran Notification Log. b. Complete the steps in How to Modify Notification Properties in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> to set up notification parameters.

SQL Server 2000 Setup

Contents	Overview.....	A - 2
	• Introduction.....	A - 2
	• Pre-installation Requirements.....	A - 3
	• How to Back up your Database.....	A - 4
	Using SQL Server with Sterling Gentran:Server.....	A - 5
	• Overview.....	A - 5
	• How to Configure SQL Server for Use with Sterling Gentran:Server ..	A - 6
	• How to Add Users to the Database.....	A - 13
	• How to Create an ODBC DSN for Sterling Gentran:Server.....	A - 18

Overview

Introduction

Overview 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 (Open Database Connectivity) to use databases from different vendors, including SQL Server.

Note

ODBC and Microsoft Data Access Components (MDAC) are installed when you install SQL Server.

Summary of tasks

Note

This appendix outlines the tasks necessary to configure an SQL Server *only* when you are installing the SQL Server for the first time.

Prior to installing Sterling Gentran:Server, you must complete the following tasks:

1. Create the database that contains the Sterling Gentran:Server tables. (These database tables are built during the Sterling Gentran:Server installation.)
2. Add users to your database management system and give them permission to access the Sterling Gentran:Server database.
3. Configure the ODBC data source name (DSN) for use with your database.

The steps that you need to perform are specific to the database management system you are using.

In this appendix

This appendix outlines how to complete these tasks using the SQL Server database management, including the following topics:

- Recommended options for SQL Server
 - Pre-installation requirements
 - Backing up your database
 - Configuring SQL Server
-

Pre-installation Requirements

Reference See the *IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide* for more information about the required software that is certified for use with Sterling Gentran:Server.

SQL Server space requirement SQL Server 2000 requires more available hard disk space than the previous versions. The SQL Server Setup installation program allows you specify where to install the SQL Server program and data files. However, the Setup program also installs files in the system directory, and you cannot change the system file location.

Reference See the SQL installation documentation for more information on hard disk space requirements.

How to Back up your Database

Overview We recommend that you back up your SQL Server database periodically. We also recommend that you perform the database maintenance endorsed by Microsoft.

Reference

Any issues relating to backing up or restoring your SQL database, and any questions on the use of any Microsoft maintenance utility, should be referred to Microsoft. Microsoft product information, support, and additional resources are available at the following website:

www.microsoft.com/SQL/

Backup considerations

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 (for example, tape or disk)?
 - 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 system administrator is unavailable, does anyone else have the requisite knowledge and access to the proper passwords to perform the backup and restore procedures?
-

Using SQL Server with Sterling Gentran:Server

Overview

In this section This section walks you through a sample installation and configuration of SQL Server, including adding users and giving those users access to the database, and creating an ODBC DSN for use with the Sterling Gentran:Server database.

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

Note

This table is a high-level overview of the task sequence.

Stage	Description
1	Installing SQL Server for use with Sterling Gentran:Server: If you have not already installed SQL Server, use the SQL Server documentation to do so. Reference Refer your technical questions about installing SQL Server to Microsoft Tech Support.
2	Configuring SQL Server for use with Sterling Gentran:Server: Configure SQL Server and create your database.
3	Adding Users to the Database: Give the GENTRANUSERS group access to the database.
4	Creating the ODBC DSN: Create an ODBC DSN for the Sterling Gentran:Server database to use.

How to Configure SQL Server for Use with Sterling Gentran:Server

Introduction

Prior to 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

- The procedures in this section are executed with wizards within the SQL Enterprise Manager. 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.

Database configuration table

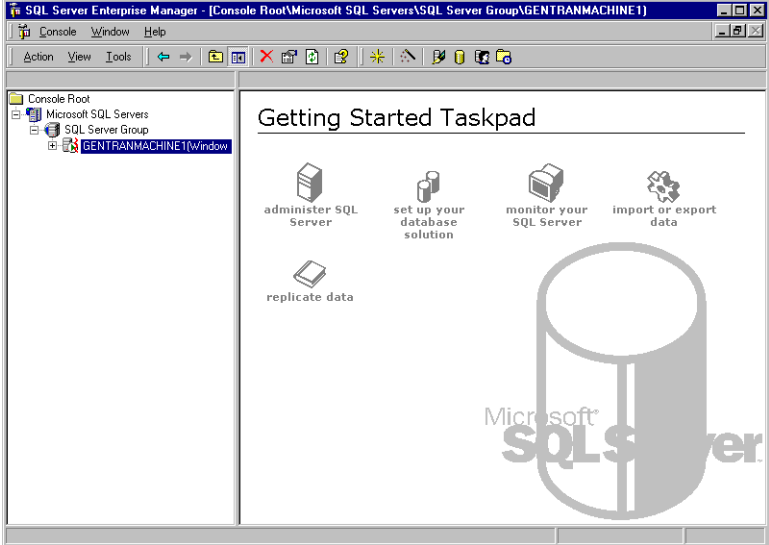
Review the following table prior to creating your database. The defaults are listed in the **Your installation** column.

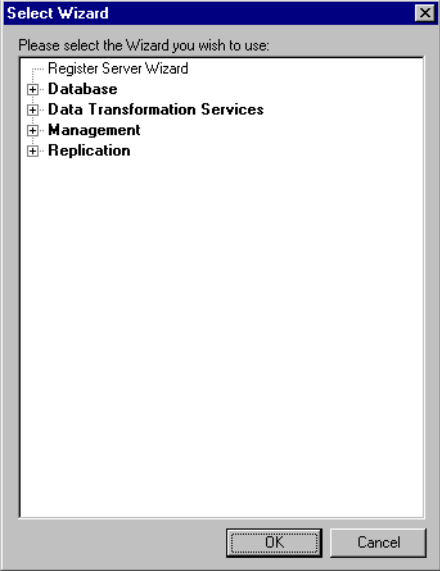
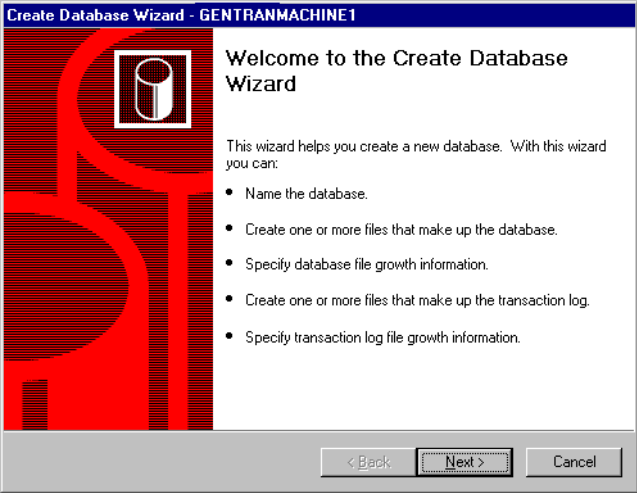
Number	Question	Your installation
1	What is the name of the database? Recommendation Name the database the same as your data source for consistency.	GentranDatabase
2	What is the name of the Microsoft Windows user group that needs permission to access the database? Reference This is the user group that you created in chapter 2 of this manual.	GENTRANUSERS

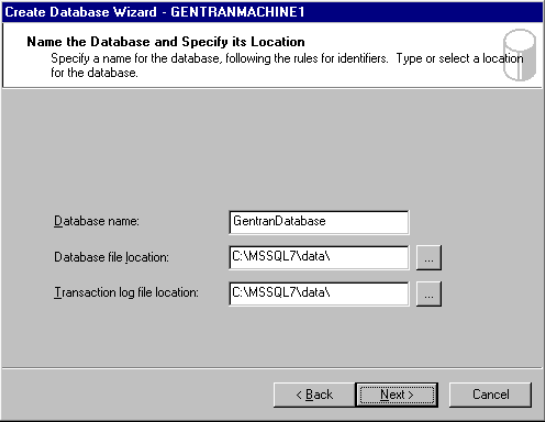
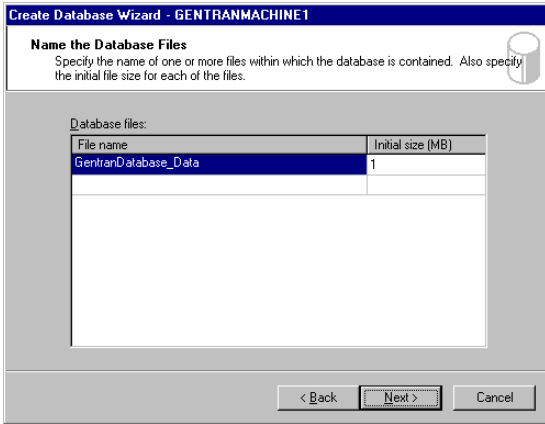
Procedure Use this procedure to configure SQL Server and create your database.

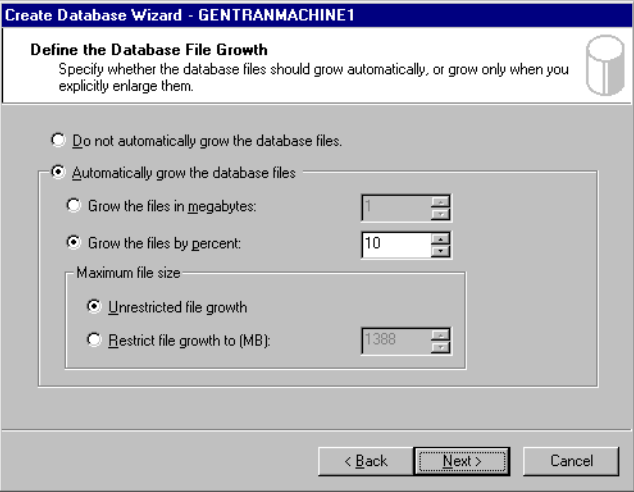
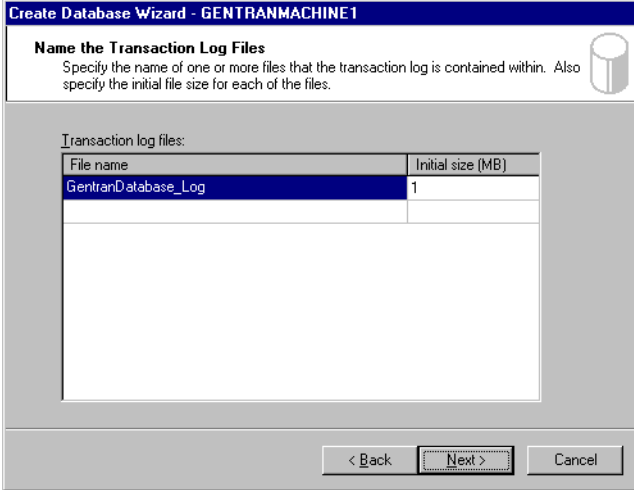
Note

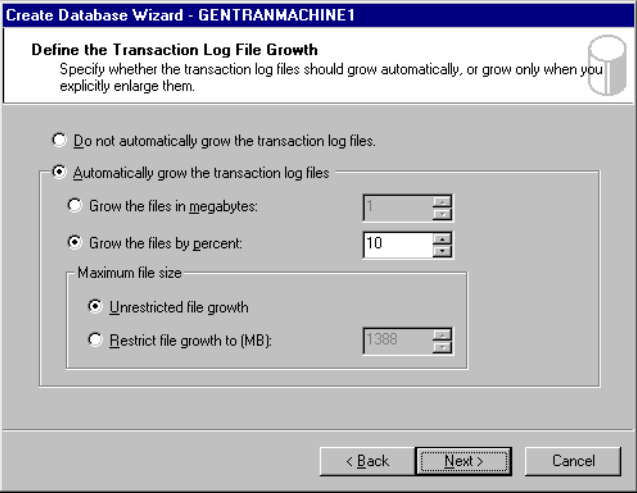
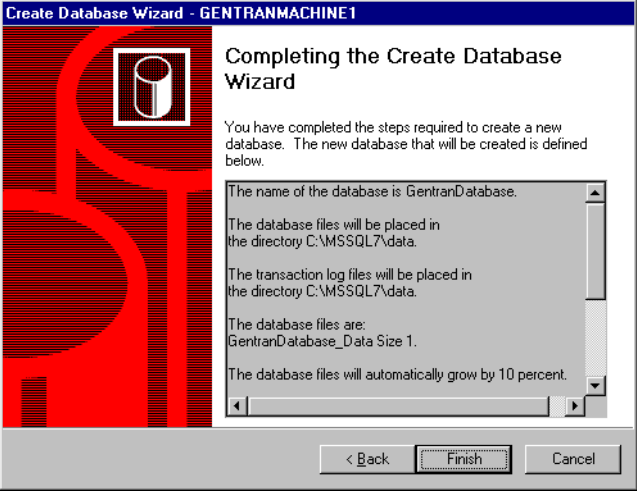
The steps you need to perform are specific to the version of SQL Server. If you are using another version, the tasks will vary. This is a sample installation.

Step	Action
1	<p>From the Start menu, select Programs/Microsoft SQL Server/Enterprise Manager.</p> <p>System response The first time you execute the SQL Server Enterprise Manager, you are prompted to register the SQL server. Subsequent access displays the Enterprise Manager.</p> 
2	Expand the SQL Server Group node and select your machine name.

(Contd) Step	Action
3	<p>From the Tools menu, select Wizards.</p> <p>System response The Select Wizard dialog box is displayed.</p> 
4	<p>Expand the Database node. Select Create Database Wizard and click OK.</p> <p>System response The Create Database Wizard dialog box is displayed.</p> 

(Contd) Step	Action
5	<p>Click Next.</p> <p>System response The Create Database Wizard - Name the Database and Specify its Location dialog box is displayed.</p> 
6	<ol style="list-style-type: none"> In the Database name box, type GentranDatabase as the name of the database. <p>Note Sterling Gentran:Server is case-sensitive, so be sure to type the database name in the proper case.</p> <ol style="list-style-type: none"> If necessary, change the database location in the Location box. If necessary, change the transaction log file location in the Transaction log file location box. Click Next. <p>System response The Create Database Wizard - Name the Database Files dialog box is displayed.</p> 

(Contd) Step	Action
7	<p>Accept the default initial database size (1 MB) and click Next.</p> <p>System response The Create Database Wizard - Define the Database File Growth dialog box is displayed.</p> 
8	<p>a. Verify that Automatically grow the database files is selected.</p> <p>b. In the Grow the files by percent box, accept the default of 10 percent.</p> <p>c. Click Next.</p> <p>System response The Create Database Wizard - Name the Transaction Log Files dialog box is displayed.</p> 

(Contd) Step	Action
9	<p>Accept the default initial transaction log size (1 MB) and click Next.</p> <p>System response The Create Database Wizard - Define the Transaction Log File Growth dialog box is displayed.</p> 
10	<p>a. Verify that the Automatically grow the transaction log files option is selected.</p> <p>b. In the Grow the files by percent box, accept the default of 10 percent.</p> <p>c. Click Next.</p> <p>System response The Completing the Create Database Wizard dialog box is displayed.</p> 

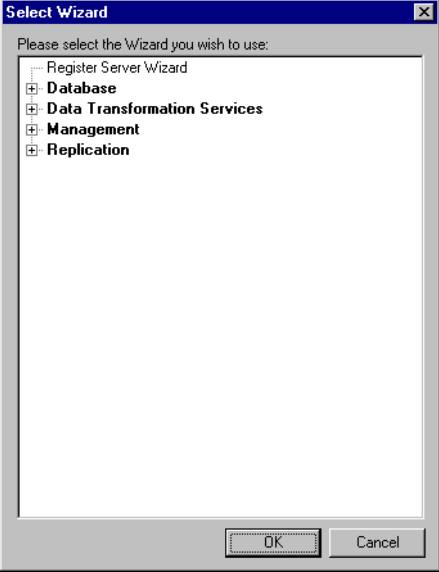
(Contd) Step	Action
11	Click Finish to complete the database creation. System response Setup displays a dialog box stating that the database was successfully created.
12	Click OK to acknowledge the message. System response Setup displays the Create Maintenance Plan dialog box.
13	Do you want to create a database maintenance plan? <ul style="list-style-type: none">• If <i>yes</i>, click Yes and refer to your SQL documentation for more information.• If <i>no</i>, click No to return to the Enterprise Manager.


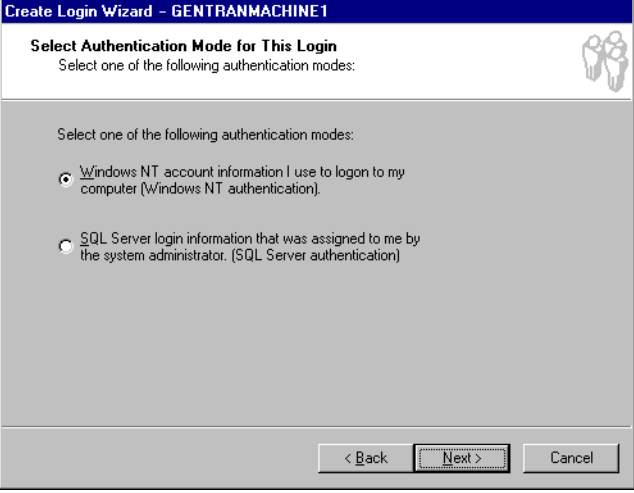
Next StepContinue with *How to Add Users to the Database* on page A - 13.

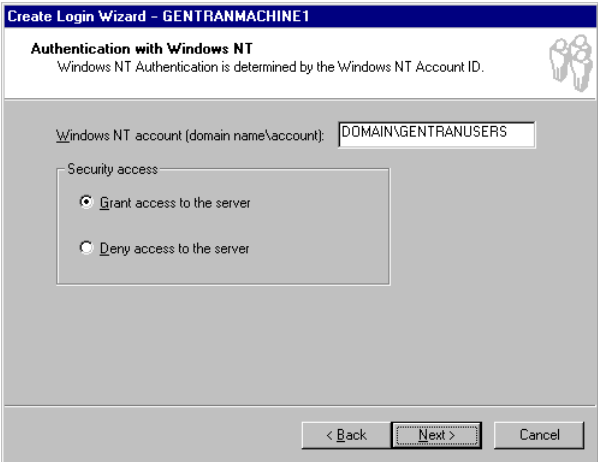
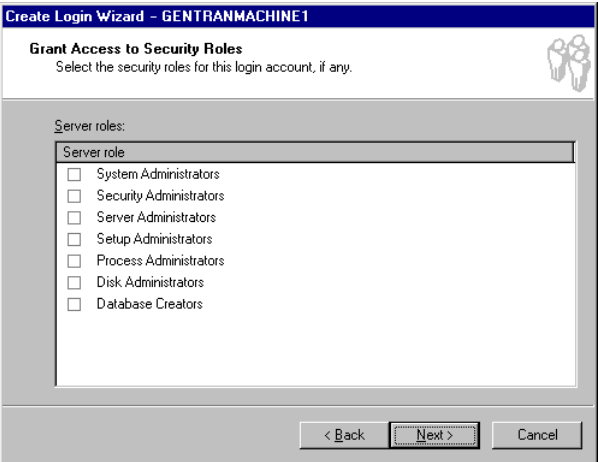
How to Add Users to the Database

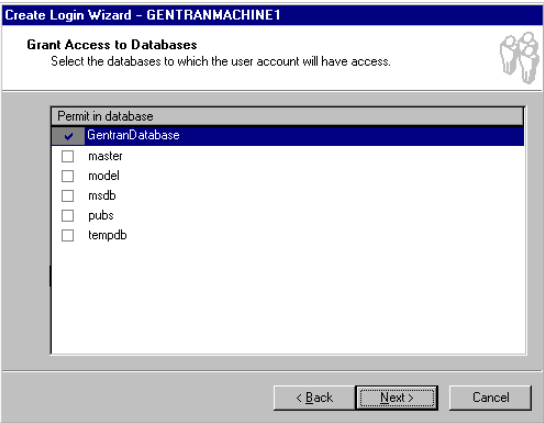
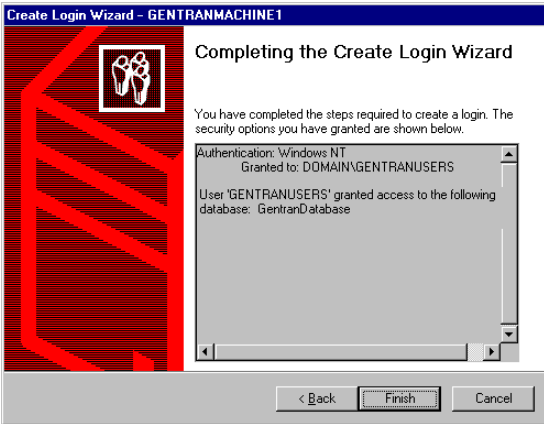
Introduction After creating the database that contains the Sterling Gentran:Server tables, you need to add users to your database management system and give the users permission to access the Sterling Gentran:Server database.

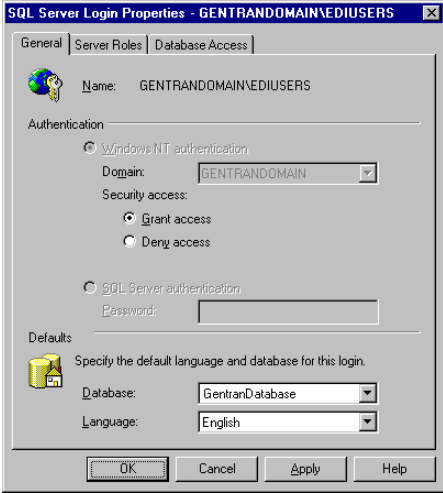
Procedure Use this procedure to add users in SQL Server and give them access to the database.

Step	Action
1	<p>If the SQL Enterprise Manager is not running, from the Start menu select Programs > Microsoft SQL Server > Enterprise Manager.</p> <p>System response The Enterprise Manager is displayed.</p>
2	<p>Expand the SQL Server Group node and select your machine name.</p>
3	<p>From the Tools menu, select Wizards.</p> <p>System response The Select Wizard dialog box is displayed.</p> 

(Contd) Step	Action
4	<p>a. Expand the Database node. b. Select Create Login Wizard. c. Click OK.</p> <p>System response The Create Login Wizard dialog box is displayed.</p> 
5	<p>Click Next.</p> <p>System response The Create Login Wizard - Select Authentication Mode for This Login dialog box is displayed.</p> 

(Contd) Step	Action
6	<p>Verify that Microsoft Windows NT account information is selected and click Next.</p> <p>System response The Create Login Wizard - Authentication with Microsoft Windows dialog box is displayed.</p> 
7	<p>In the Microsoft Windows NT account box, type your machine name, followed by a back slash (\), followed by the Microsoft Windows group of Sterling Gentran:Server users (we recommended GENTRANUSERS) and click Next. (The format is <i>MACHINENAME\GroupName.</i>)</p> <p>Note This is the Microsoft Windows user group that needs access to the SQL database.</p> <p>System response The Create Login Wizard - Grant Access to Security Roles dialog box is displayed.</p> 

(Contd) Step	Action
8	<p>Do your Sterling Gentran:Server users need special privileges?</p> <ul style="list-style-type: none"> • If <i>yes</i>, select those privileges and click Next. • If <i>no</i>, click Next. <p>Note In our sample installation, the Sterling Gentran:Server users do <i>not</i> need any special privileges.</p> <p>System response The Create Login Wizard - Grant Access to Databases dialog box is displayed.</p> 
9	<p>Verify that your Sterling Gentran:Server database (GentranDatabase) is selected and click Next.</p> <p>System response The Completing the Create Login Wizard dialog box is displayed with the security options you granted.</p> 

(Contd) Step	Action
10	<p>Click Finish to end the wizard.</p> <p>System response Setup displays a dialog box stating that the login was successfully created.</p>
11	<p>Click OK to acknowledge the message.</p> <p>System response Setup returns you to the Enterprise Manager.</p> <p>Note Now you need to select GentranDatabase as the default database for the GENTRANUSERS group you just added.</p>
12	<p>In the Enterprise Manager, expand the Security node and select Logins.</p>
13	<p>In the right Enterprise Manager pane, right-click the GENTRANUSERS group and select Properties.</p> <p>System response The SQL Server Login Properties dialog box is displayed.</p> 
14	<p>From the Database list, select GentranDatabase and click OK.</p> <p>System response Setup saves GentranDatabase as the default database for the GENTRANUSERS group and returns you to Enterprise Manager.</p>

Next Step

Continue with the next section, *How to Create an ODBC DSN for Sterling Gentran:Server* on page A - 18.

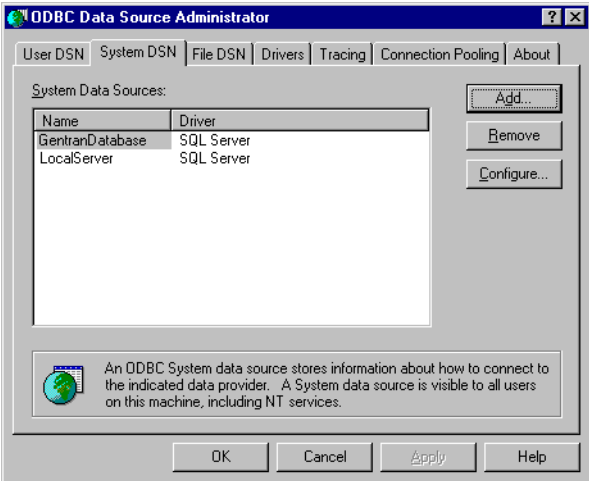
How to Create an ODBC DSN for Sterling Gentran:Server

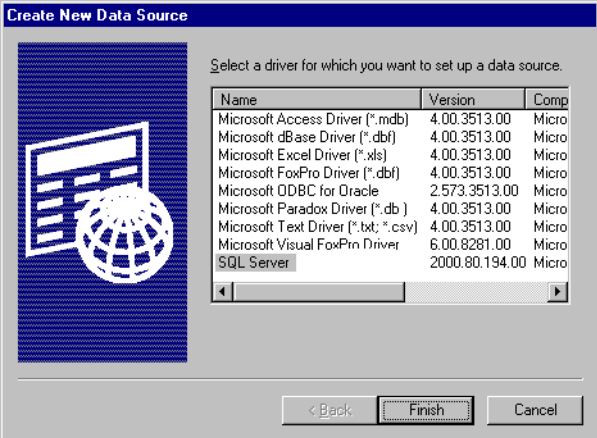
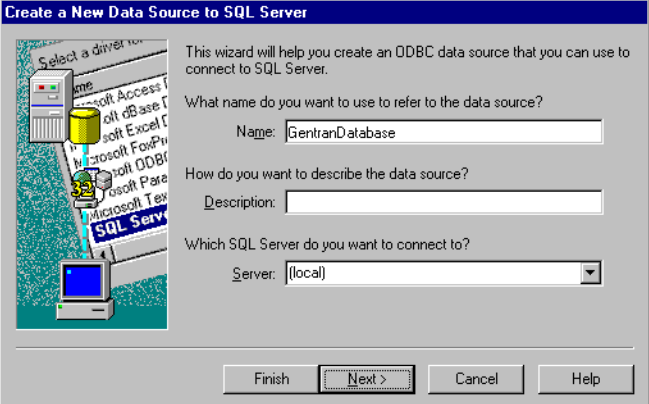
Introduction Now you need to create the ODBC data source name for the Sterling Gentran:Server database you created.

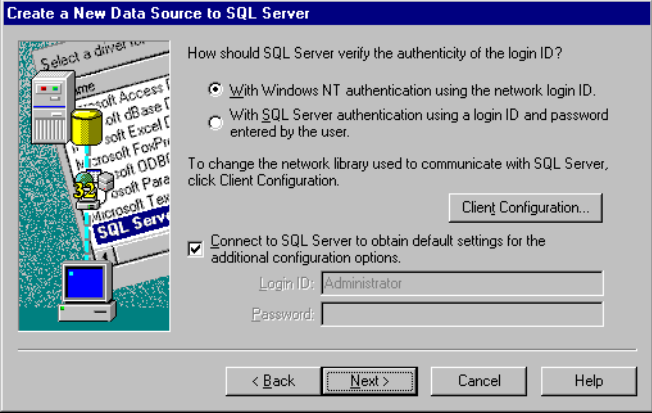
Note

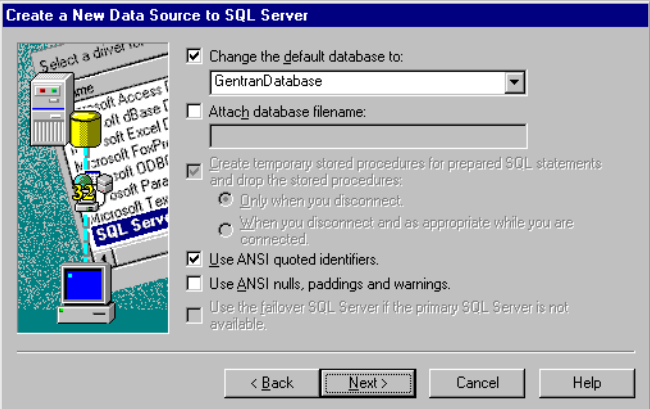
You must create this DSN on each Sterling Gentran:Server machine in your system, which you can do at any time during the Sterling Gentran:Server installation process.

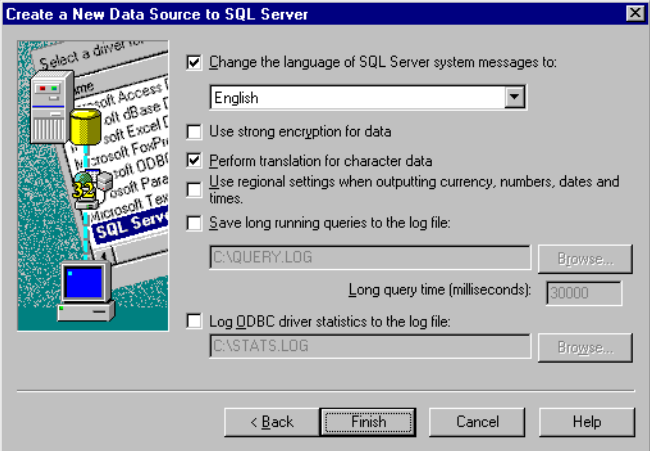
Procedure Use this procedure to create the ODBC DSN.

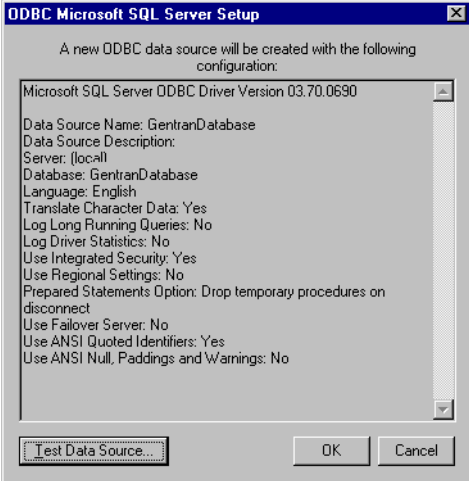
Step	Action
1	<p>From the Start menu, select Settings > Control Panel > Administrative Tools and then double-click Data Sources (ODBC).</p> <p>System response The ODBC Data Source Administrator—User DSN tab is displayed.</p>
2	<p>Select the System DSN tab.</p> <p>Recommendation For controllers, you must use a <i>system</i> DSN to allow the Sterling Gentran:Server 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 Sterling Gentran:Server Executive Services and any user on the machine to use that DSN.</p> <p>System response The System DSN options are displayed.</p> 

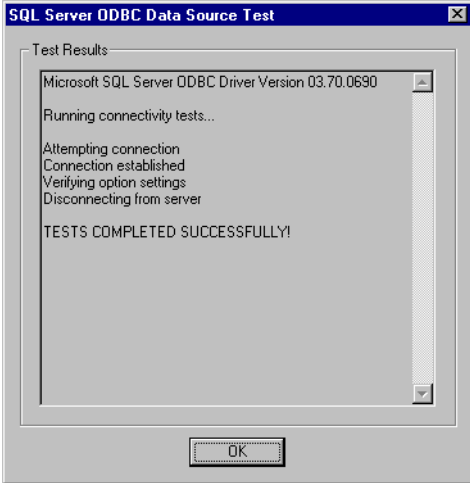
(Contd) Step	Action
<p>3</p>	<p>Click Add.</p> <p>System response The Create New Data Source wizard is displayed.</p> 
<p>4</p>	<p>From the driver list, select the SQL Server ODBC driver and click Finish.</p> <p>System response The Create a New Data Source to SQL Server dialog box (Wizard dialog box 1) is displayed.</p> 

(Contd) Step	Action
5	<p>Complete the following:</p> <ol style="list-style-type: none"> In the Name box, type the name of the ODBC data source that is used by Sterling Gentran:Server in this system (GentranDatabase). From the Server list, select one of the following: <ul style="list-style-type: none"> (local) if SQL Server is installed on that machine the machine name where the database resides Click Next. <p>System response The Create a New Data Source to SQL Server dialog box (Wizard dialog box 2) is displayed.</p> 

(Contd) Step	Action
6	<p>Verify that the With Windows authentication using the network login ID option is selected. Click Next.</p> <p>Note 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.</p> <p>Recommendation Set the security modes for Sterling Gentran:Server and your database to be the same. We recommend that you use Microsoft Windows Authentication (<i>Integrated</i>) 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). 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 Microsoft Windows.</p> <p>System response The Create a New Data Source to SQL Server dialog box (Wizard dialog box 3) is displayed.</p> 

(Contd) Step	Action
7	<p>Complete the following:</p> <ol style="list-style-type: none"> Select the Change the default database check box and select GentranDatabase from the list. Deselect the Use ANSI nulls, paddings and warnings check box to specify that SQL Server should not enforce ANSI rules regarding NULL comparisons, warning messages, and automatic trimming of trailing blanks and zeroes. Click Next. <p>System response The Create a New Data Source to SQL Server dialog box (Wizard dialog box 4) is displayed.</p> 
8	<p>Select the Change the language of SQL Server system messages to check box and select English from the list.</p> <p>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.</p> <p>System response All Sterling Gentran:Server-related SQL error messages will be written to the SQL Log in English.</p>

(Contd) Step	Action
9	<p>Are you using a code page that is different from the SQL Server default of ISO-8559? 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.</p> <ul style="list-style-type: none"> • If <i>yes</i>, verify that the Perform translation for character data check box is selected and click Finish. • If <i>no</i> (you installed SQL as a “Typical” installation or accepted the default code page in a Custom installation), deselect the Perform translation for character data check box and click Finish. <p>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.</p> <p>System response The ODBC Microsoft SQL Server Setup dialog box is displayed with the configuration of the DSN for GentranDatabase.</p> 

(Contd) Step	Action
10	<p>Click Test Data Source to test the DSN configuration.</p> <p>System response Setup displays the following dialog box if the DSN tests correctly.</p> 
11	Click OK to acknowledge the message.
12	Click OK to exit the ODBC Administrator.
13	<p>You are now ready to install Sterling Gentran:Server.</p> <p>Reference See <i>Installing Sterling Gentran:Server</i> on page 2 - 8 for more information.</p>

Oracle Setup

Contents

- Introduction B - 2
 - Install SQL *Net B - 3
 - Define New Tablespace for Database Tables B - 4
 - Create New DB Administrator Account B - 5
 - Add Sterling Gentran Users to Oracle. B - 6
 - Add Sterling Gentran:Server Executive Log On Account to Oracle . . . B - 7
 - Change the Default Number of Open Cursors B - 8
 - Use Standard Security Mode with Sterling Gentran:Server B - 9
 - Use Oracle Database ODBC drivers with Sterling Gentran:Server . . . B - 10
-

Introduction

How Sterling Gentran:Server uses databases

Sterling Gentran:Server uses a relational database to store tracking, audit, process control, transaction 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 (Open Database Connectivity) to use databases from different vendors, including Oracle.

Notes

- 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.
- Support for Oracle databases does not include support for the Oracle Exadata platform.

Summary of tasks

Prior to installing Sterling Gentran:Server, you must be familiar with Oracle and must set up Oracle for use with Sterling Gentran:Server.

Additionally, your Oracle database administrator (DBA) must either create a new instance (database) for Sterling Gentran:Server or set up new table space for Sterling Gentran:Server in an existing instance.

The steps you need to perform to complete these tasks are specific to the database management system you are using.

In this appendix

This appendix outlines our recommendations for setting up Oracle for use with Sterling Gentran:Server.

Reference

See your Oracle documentation for specific instructions about how to perform these tasks.

Install SQL *Net

Introduction

Prior to installing Sterling Gentran:Server, SQL *Net must be installed and configured on your 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.

Note

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.”

Define New Tablespace for Database Tables

Introduction

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.

Create New DB Administrator Account

Introduction

Prior to 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.

Recommendation

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.

Note

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

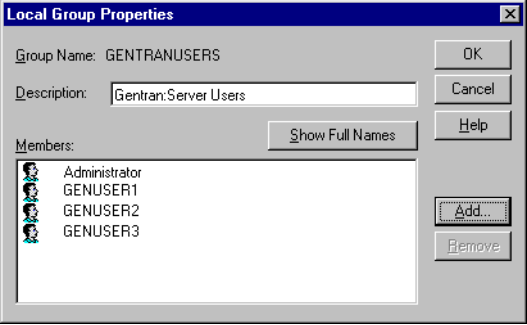
Add Sterling Gentran Users to Oracle

Introduction You must add each Sterling Gentran:Server user to Oracle. 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.

The roles (rights) that you must grant to these users are the following:

- Select
- Insert
- Delete
- Update

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

Step	Action
1	<p>From the Start menu, select Programs > Administrative Tools > User Manager.</p> <p>System response The User Manager is displayed.</p>
2	<p>Double-click the GENTRANUSERS group in the bottom frame of the User Manager window.</p> <p>System response The Local Group Properties dialog box is displayed.</p>  <p>Note The users displayed in the Members list box are the users you need to add to Oracle.</p>

Add Sterling Gentran:Server Executive Log On Account to Oracle

Introduction

You must grant DBA rights (roles) to one user so that the Sterling Gentran:Server Executive service can log on. You must add this account to Oracle.

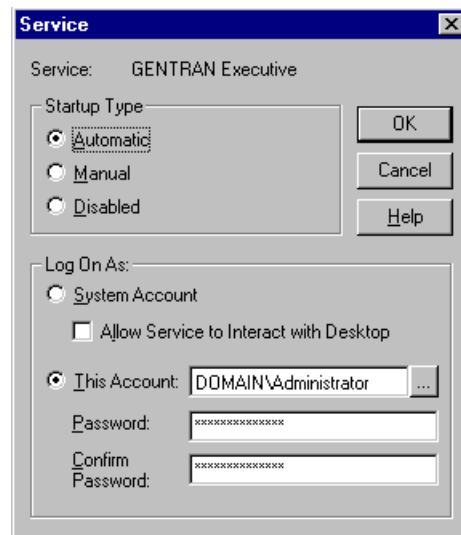
Recommendation

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. 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 Sterling Gentran:Server Executive service on the Services dialog box and click Startup (to display the Services dialog box, select Programs > Control Panel > Services from the Start menu).

Diagram

The following is an example of the Service dialog box, which displays the account that the Sterling Gentran:Server Executive service uses to log on to Microsoft Windows.



Change the Default Number of Open Cursors

Introduction 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 production electronic commerce (EC), 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.

Note

Oracle 9i uses a PFILE and SPFILE for configuration purposes.

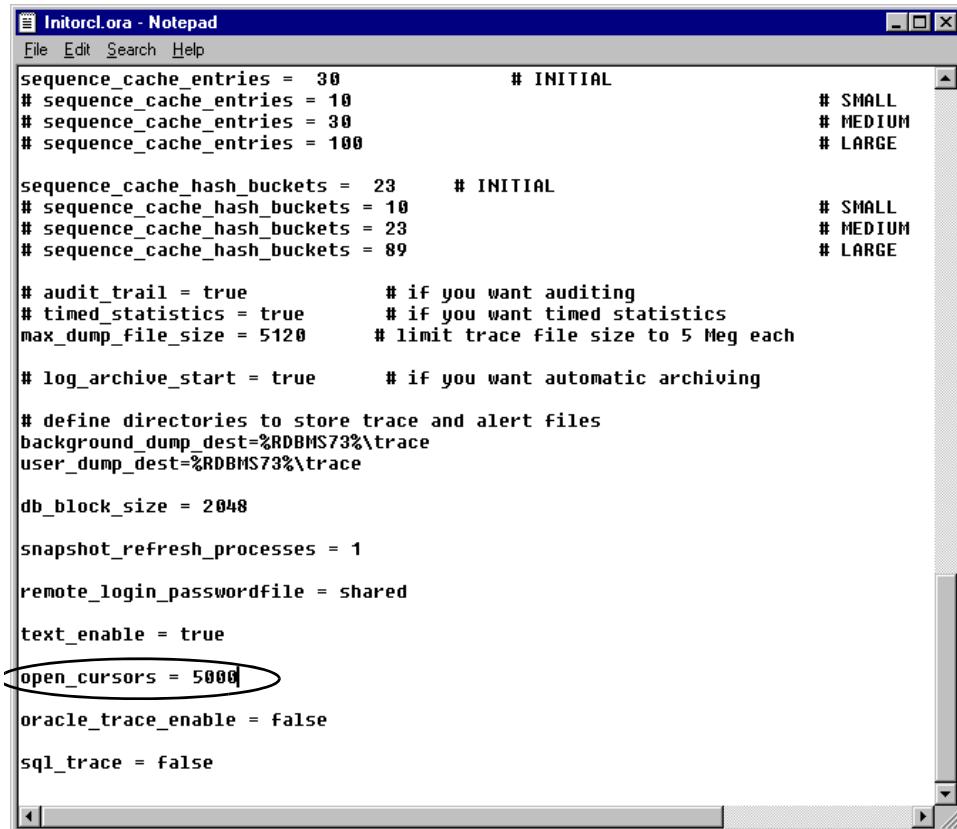
Procedure To change the number of open cursors, add the following line anywhere in the Startup file:

```
open_cursors = 5000
```

Note

For Oracle 9i, you must add this line into the PFILE.

Example The following illustrates how to change the default number of open cursors.



```

Initorcl.ora - Notepad
File Edit Search Help
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

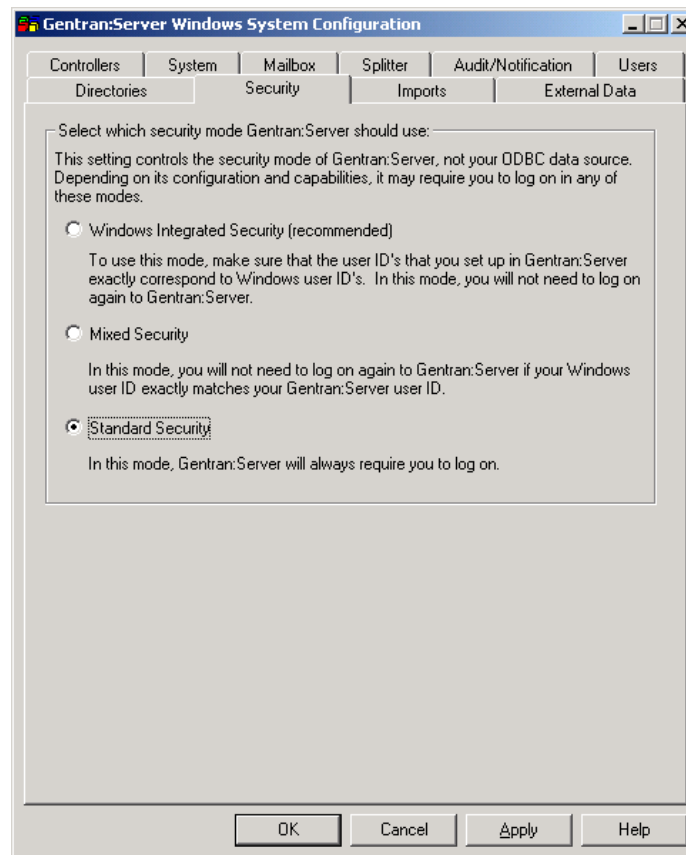
text_enable = true
open_cursors = 5000
oracle_trace_enable = false

sql_trace = false
```

Use Standard Security Mode with Sterling Gentran:Server

Introduction For Oracle users, we recommend that you accept the default Sterling Gentran:Server security mode, which is *Standard*. Standard security mode always requires the user to log on to Sterling Gentran:Server. The Microsoft Windows user name is defaulted on the Logon dialog box.

Diagram The Security tab of the Sterling Gentran:Server System Configuration dialog box is configured (by default) as follows:



Procedure In Post-installation Tasks, chapter 3 of this guide, we recommend that you set the Sterling Gentran:Server security mode to *Integrated* (security options are set on the Security tab of the System Configuration subsystem). Disregard the recommendation of using Integrated security and the How to Implement Security section in that chapter.

Warning

We strongly recommend that you do *not* use Integrated (or Mixed) security with Oracle, because Oracle security does not interface by default with Microsoft Windows security.

Use Oracle Database ODBC drivers with Sterling Gentran:Server

Introduction

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.

Effect in Sterling Gentran:Server

The Oracle ODBC issue only affects the Sterling Gentran:Server Audit Notification service because this service uses this function of ODBC in its programming. No other Sterling Gentran:Server services use this function, and thus they are not affected by this issue.

Warning

If the ODBC driver is not installed and configured before Sterling Gentran:Server is installed or upgraded, the Sterling Gentran:Server Audit Notification Service will fail to start. And, 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” resolution. After following the directions in either *Procedure to use before installing a new Sterling Gentran:Server 5.3 system* on page B - 11 or *Procedure to use before upgrading a Sterling Gentran:Server version 3.x system* on page B - 13, 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 Sterling Gentran:Server Audit Notification Service and the Oracle DSN is associated with Sterling Gentran:Server Mailbox, Sterling Gentran:Server Executive, and Sterling Gentran:Server Communications services.

Note

See the *IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide* for the supported version information for both the Microsoft Data Access Components (MDAC) and the Oracle ODBC driver. The Microsoft ODBC for Oracle driver is installed when you install MDAC.

**Procedure to use
before installing a
new Sterling
Gentran:Server
5.3 system**

Use this procedure to complete your Oracle database installation when you are installing a new Sterling Gentran:Server 5.3 system.

Step	Action
1	<p>Create two ODBC Data Sources in Microsoft Windows—one using the Microsoft ODBC for Oracle driver and the other using the Oracle ODBC driver.</p> <p>Note Make sure both are unique names and are set up as system DSNs.</p> <p>Reference See Step 10 on page 2 - 18 or see your ODBC documentation for more information about how to create data sources.</p>
2	<p>If it is available, use the Oracle ODBC Test tool to verify that the system has access to the database through both drivers.</p> <p>Reference See your Oracle documentation for more information about using the Oracle ODBC Test tool.</p>
3	<p>Begin your Sterling Gentran:Server installation.</p> <p>Reference See <i>How to Install a Single Workstation System</i> on page 2 - 14 for more information.</p>
4	<p>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.</p>
5	<p>Finish the installation of the primary system controller and apply any necessary options from the Option Pack CD.</p> <p>If you want to verify your installation, continue with Steps 6 through 15. Otherwise, you have completed your Oracle database installation.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Options Pack Installation Card</i> for more information.</p>
6	<p>After the installation process is complete, run the Sterling Gentran System Configuration utility by selecting (from the Start menu) Programs > Gentran Server > Gentran Server Configuration.</p> <p>System response The system displays the System Configuration dialog box.</p>

(Contd) Step	Action
7	<p>Select the System tab and select the DSN that uses the Oracle ODBC driver from the ODBC Data Source list.</p> <p>Reference See <i>How to Change the ODBC Data Source in the IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information.</p>
8	<p>Select the Audit/Notification tab and click Server.</p> <p>System response The system displays the Sterling Gentran Audit/Notification Server Properties dialog box, which enables you to configure database and notification server options.</p>
9	<p>Verify that the ODBC Data Source setting for Audit/Notification (in the ODBC Data Source list) indicates the DSN that uses the Microsoft ODBC driver. Change this setting, if necessary.</p>
10	<p>Click OK to exit the System Configuration utility.</p>
11	<p>Run the Sterling Gentran Mailbox Server Manager by selecting (from the Start menu) Programs > Gentran Server > Gentran Server Mailbox.</p> <p>System response The system displays the Mailbox Server Manager.</p>
12	<p>Register your Mailbox Server.</p> <p>Note The Mailbox Server is the Microsoft Windows machine name of the Sterling Gentran:Server system.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Communications User Guide</i> for more information.</p>
13	<p>Right-click on the server name in the display and select Properties.</p> <p>System response The system displays the Server Properties dialog box.</p>
14	<p>On the Database tab, change the ODBC Data Source setting (in the ODBC Data Source list) to the DSN that uses the Oracle ODBC driver, and click OK to save the change.</p>

(Contd) Step	Action
15	<p>Access the Microsoft Windows Services dialog box (from the Control Panel) and stop and restart your Sterling Gentran:Server services in the following order:</p> <ol style="list-style-type: none"> a. Audit Notification b. Mailbox c. Executive <p>Reference See your Microsoft Windows documentation for more information about stopping and starting services.</p>

**Procedure to use
before upgrading a
Sterling
Gentran:Server
version 3.x system**

Use this procedure on your *primary system controller only* to complete your Oracle database installation when you are upgrading your Sterling Gentran:Server system from version 3.x *only*.

Step	Action
1	<p>Create a second ODBC Data Sources in Microsoft Windows using the Microsoft ODBC for Oracle driver.</p> <p>Note Make sure the name is unique and it is set up as a system DSN.</p> <p>Reference See Step 10 on page 2 - 18 or see your ODBC documentation for more information about how to create a data source.</p>
2	<p>If it is available, use the Oracle ODBC Test tool to verify that the system has access to the database through the new drivers.</p> <p>Reference See your Oracle documentation for more information about using the Oracle ODBC Test tool.</p>
3	<p>Begin your Sterling Gentran:Server upgrade.</p> <p>Reference See <i>How to Upgrade your Sterling Gentran:Server Installation</i> on page 2 - 30 for more information.</p>
4	<p>When the install prompts for the Database login, verify that the ID you supply is the Schema owner for the GentranDatabase tables.</p> <p>Note After the upgrade completes, it will be unable to restart your Sterling Gentran:Server services.</p>

(Contd) Step	Action
5	Finish the installation of the primary system controller and apply any necessary options from the Option Pack CD-ROM. Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Options Pack Installation Card</i> for more information.
6	Open the Microsoft Windows Registry Editor . Reference See your Microsoft Windows documentation for more information.
7	Navigate to the following registry key: HKEY_Local_Machine\SOFTWARE\Sterling Commerce\Gentran\AuditNotification\5.3\Server\DSN The version will change depending on which Sterling Gentran:Server version you are installing.
8	Change the DSN value from the Oracle DSN supplied with your machine to the new DSN you created using the Microsoft driver. Click OK .
9	Close the Registry Editor.
10	Reboot your machine.
11	Access the Microsoft Windows Services dialog box (from the Control Panel) and start your Sterling Gentran:Server services in the following order: a. Audit Notification b. Mailbox c. Executive d. Communications Reference See your Microsoft Windows documentation more information about stopping and starting services.

(Contd) Step	Action
12	<p>If your services still do not start, investigate the following possibilities based on the error number that Microsoft Windows returns.</p> <ul style="list-style-type: none"> • 2140 error: The probable cause is that the system is having trouble (in the database) completing the transactions necessary to start the service. Check the permissions for the Oracle ID in the database and the integrity of the database tables. • 2186 error: Generally this error suggests a security problem. Retype the ID and password for the services. • 1068 error: The services were not started in the correct order. The Sterling Gentran:Server Executive service depends on the Mailbox service, the Mailbox service depends on the Audit Notification service, and the Audit Notification service depends on the database service. Restart the services in the order list in the previous step.

Obtaining Microsoft ODBC drivers

The Microsoft ODBC driver can be obtained from the Microsoft web site at <http://www.microsoft.com/data> as part of the latest MDAC software.

Contact information

If you need further assistance or clarification of any of the above information, please contact Sterling Gentran:Server Customer Support.

Reference

See the *IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide* to obtain the support contact information.

Installation Troubleshooting

Contents

- Overview C - 2
 - Sterling Gentran:Server Installation Troubleshooting C - 3
 - InstallShield Error Messages. C - 6
-

Overview

In this appendix

This appendix describes background information about how to troubleshoot Sterling Gentran:Server installations and explains course of action you should follow to resolve common installation problems.

This appendix also contains a list of common InstallShield error messages and some suggestions on locating the source of the errors.

Sterling Gentran:Server Installation Troubleshooting

Problems and resolutions

The following table contains some common Sterling Gentran:Server installation problems and the steps you should take to resolve them.

Problem	Resolution
<p>The Setup program successfully completes, but you get a database logon failure message when you attempt to log on to Sterling Gentran:Server.</p>	<p>You did not specify the appropriate database login during installation.</p> <p>Remove all installed Sterling Gentran:Server components. See <i>How to Add or Remove Components</i> in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information.</p> <p>Delete all of the Sterling Gentran:Server database tables. 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.</p> <p>Run Setup again and use the Create a new Gentran:Server system option, making sure that you provide the correct administrative database logon that has access to create database tables and grant permissions to those tables. See <i>Installing Sterling Gentran:Server</i> on page 2 - 8 for more information about creating a new system.</p>
<p>The Sterling Gentran:Server Executive Service fails to start remotely.</p>	<p>On the primary system controller, double-click Services in the Control Panel to access the Services dialog box. Select the Sterling Gentran:Server Executive Service and click Start.</p> <p>If the service times out or if you receive an error message, select the Sterling Gentran:Server Executive Service and click Startup to verify that the Microsoft Windows logon for the service is specified correctly.</p>

(Contd) Problem	Resolution
<p>You attempt to logon to Sterling Gentran:Server but receive an error message stating that the User Name is not found.</p>	<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. Remove all installed Sterling Gentran:Server components. See How to Add or Remove Components in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information.</p> <p>Delete all of the Sterling Gentran:Server database tables. Verify that the Sterling Gentran:Server program group was removed.</p> <p>Verify (in the Registry Editor) that the HKEY_LOCAL_MACHINE\SOFTWARE\ Sterling Commerce key was removed.</p> <p>Verify that you are using the default Sterling Gentran:Server local administrator logon that you specified during the installation process.</p> <p>If it still does not work, run Setup again and use the Create a new Gentran:Server system option, making sure that you provide the correct administrative database logon that has access to create database tables and grant permissions to those tables. See <i>Installing Sterling Gentran:Server</i> on page 2 - 8 for more information about creating a new system.</p>

(Contd) 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. Prior to executing the automatic recovery process, switch to your database management system and create the user or group of users that you originally specified.</p> <p>Then, run Setup again to upgrade the system. The automatic recovery will determine the point at which the install process failed and will resume installation from that point. It does <i>not</i> reverse the previously executed commands, although Setup maintains a log of every scripted command that it executed.</p> <p>Reference See How to Upgrade Sterling Gentran:Server in the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Administration Guide</i> for more information about upgrading your system.</p>
<p>You run the Setup program to install Sterling Gentran:Server but receive the following errors:</p> <ul style="list-style-type: none"> • Record set is read only • Gentran:Server system administrator account could not be created 	<p>You may be using a version of ODBC driver that is not compatible with the Sterling Gentran:Server product.</p> <p>Reference See the <i>IBM® Sterling Gentran:Server® for Microsoft Windows Getting Started Guide</i> for a list of the ODBC driver versions that are supported for use with Sterling Gentran:Server.</p>
<p>You run the Setup program and are prompted with the question “Do you want to make this machine a secondary node in a clustered Gentran:Server system?” (with the choice of Yes or No).</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 No and the Sterling Gentran:Server install will proceed.</p> <p>Note If you click No and Setup encounters a problem with your system, the installation routine will exit. If this occurs, contact Sterling Gentran:Server Customer Support.</p>

InstallShield Error Messages

Introduction

While running the Setup program, if you receive an error that contains a return code, the error is an InstallShield error.

This section describes common InstallShield error messages. If you still have questions about an InstallShield error message, please contact Sterling Gentran:Server Customer Support.

Return code value table

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.

Note

These messages were obtained from InstallShield. They may not be the most current version.

Return code value	Error message
-1	Unknown error.
-2	Unable to open input file.
-3	Unable to open output file. Suggested resolution Check the content of the target folder, file existence in target folder, and access privileges to target folder.
-4	Unable to write to file. Suggested resolution Check integrity of source and target disk. Make sure you selected the correct source disk.
-5	Input file not compressed with InstallShield Compressor. Suggested resolution Make sure that input is a compressed library created by the InstallShield Data Compression Program or an InstallShield function.
-6	Memory allocation error. Suggested resolution Internal error occurred. Reboot your system and try again.
-7	Header information of compressed file is incorrect. Suggested resolution Make sure file is compressed and not corrupted.

(Contd) Return code value	Error message
-8	Cannot decompress more than one compressed library. Suggested resolution Make sure that the input for decompression is not a wildcard.
-9	Source and target folders conflict. Suggested resolution 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). Suggested resolution 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). Suggested resolution 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. Suggested resolution Make sure that the output is a compressed library.
-21	File is compressed with an older compressor version. Suggested resolution 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. Suggested resolution Check the content of the target folder and the access privileges to the drive and folder.

(Contd) Return code value	Error message
-28	Query information error.
-29	Error occurred while defining a FileSet.
-30	File is split. Suggested resolution 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. Suggested resolution Clear disk space on target drive.
-39	File cannot be found in the packaging list.
-40	Compress library backup failure. Suggested resolution 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. Suggested resolution Target file is read-only and cannot be overwritten.
-47	Internal memory error.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing

IBM Corporation

North Castle Drive

Armonk, NY 10504-1785

U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual

Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing

Legal and Intellectual Property Law

IBM Japan Ltd.

1623-14, Shimotsuruma, Yamato-shi

Kanagawa 242-8502 Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licenseses of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation

J46A/G4

555 Bailey Avenue

San Jose, CA__95141-1003

U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems.

Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information is for planning purposes only. The information herein is subject to change before the products described become available. This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© IBM 2011. Portions of this code are derived from IBM Corp. Sample Programs.
© Copyright IBM Corp. 2011.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "[Copyright and trademark information](http://www.ibm.com/legal/copytrade.shtml)" at www.ibm.com/legal/copytrade.shtml.

Adobe, the Adobe logo, PostScript, and the PostScript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

IT Infrastructure Library is a registered trademark of the Central Computer and Telecommunications Agency which is now part of the Office of Government Commerce.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

ITIL is a registered trademark, and a registered community trademark of the Office of Government Commerce, and is registered in the U.S. Patent and Trademark Office.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Cell Broadband Engine is a trademark of Sony Computer Entertainment, Inc. in the United States, other countries, or both and is used under license therefrom.

Linear Tape-Open, LTO, the LTO Logo, Ultrium and the Ultrium Logo are trademarks of HP, IBM Corp. and Quantum in the U.S. and other countries.

Connect Control Center®, Connect:Direct®, Connect:Enterprise, Gentran®, Gentran:Basic®, Gentran:Control®, Gentran:Director®, Gentran:Plus®, Gentran:Realtime®, Gentran:Server®, Gentran:Viewpoint®, Sterling Commerce™, Sterling Information Broker®, and Sterling Integrator® are trademarks or registered trademarks of Sterling Commerce, Inc., an IBM Company.

Other company, product, and service names may be trademarks or service marks of others.
