Gentran:Server® for Windows®

Distributed System Installation Guide

Version 5.1

Sterling Commerce
An IBM Company

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Table of Contents

Chapter 3   Installing a Clustered System

Chapter 4   Post-installation Tasks

Appendix A SQL Server 2000 Setup

Appendix B Oracle Setup

Appendix C Installation Troubleshooting

Contents

iv

About this Guide

Contents

Introduction

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

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

Note
The CD keys for installing the Gentran:Server Options Pack software are located on the packing list that was shipped with your Gentran:Server product.

What's in this Manual

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

This manual uses a task-oriented approach that is intended to answer any questions you may have about 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 *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 Gentran:Server.

◗   *Chapter 1, System Overview*, provides an overview of the Gentran:Server software and installation components, and explains installation terminology. This chapter also describes our system requirements and recommendations.

◗   *Chapter 2, Installing a Single or Multiple Controller System*, explains how to install Gentran:Server for the first time and implement that installation. This includes configuring your Windows operating system, installing and configuring your database management system, and installing Gentran:Server (including Gentran Standards).

◗   *Chapter 3, Installing a Clustered System*, explains how to install Gentran:Server for the first time in a clustered environment and implement that installation.

◗   *Chapter 4, Post-Installation Tasks*, describes additional tasks you must perform to complete the 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 Gentran:Server.

◗   *Appendix C, Installation Troubleshooting*, describes background information on how to troubleshoot the installation of 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 Gentran:Server proprietary terminology that is used in this manual. We recommend that you familiarize yourself with this terminology before proceeding further in this *Installation Guide*.

Client Access Components	The *Client Access Components* can be installed on any machine(s) in the Gentran:Server system. This provides the user interface to setup, maintain, and control the Gentran:Server system.

Clustering	A cluster is a set of loosely coupled, independent computer systems that behave as a single system. Client applications interact with a cluster as if it were a single high-performance, highly reliable server. System managers view a cluster as if it is a single server. In a clustered system, processing power can be increased in small incremental steps by adding another machine. To a client application, the cluster provides the illusion of a single server, or single-system image, even though it may be composed of many systems. Additional systems can be added to the cluster as needed to process more complex or an increasing number of requests from the clients. If one system in a cluster fails, its workload can be automatically dispersed among the remaining systems. This transfer is frequently transparent to the client.

Communication Controller	The *Communications Controller* regulates communication between Gentran:Server and the organizations (value-added networks (VANs) or trading partners) with whom data is exchanged. You can install the Communications Controller component on any machine in the Gentran:Server system that is capable of sending or receiving EC data via a modem or other communications device. **Note** Installing the Communications Controller component on a machine other than the primary Gentran system controller makes that machine a communications controller (secondary controller) in the system.

Database	Gentran:Server uses a *relational database* to store system data. The system data may be stored on one or multiple machines that are accessible by all machines in the Gentran:Server system via your network. This database enables multiple users to access the same data. 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 Gentran:Server data). Gentran:Server uses ODBC (Open Database Connectivity) to use databases from different vendors. **Note** See the *Getting Support Card* to determine which database management systems have been certified for use with Gentran:Server.

Fail over

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

Gentran:Server Executive

The *Gentran:Server Executive* is the service that controls execution of the communication and translation functions on a defined server. Executing the Gentran:Server Executive as a service enables Gentran:Server to run on Windows servers, even when no users are logged on to the system.

The Gentran:Server Executive is installed on the *primary Gentran system controller* in a Gentran:Server system. The Gentran:Server Executive also centrally regulates system-critical information.

Gentran Poller

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

Gentran Scheduler

The *Gentran Scheduler* is the 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 Gentran:Server Application Integration and Forms Integration subsystems.

◗ Application Integration subsystem enables you to generate import, export, and document turnaround translation objects.

◗ Forms Integration subsystem enables you to generate screen entry and print translation objects.

The Integration Components also allow you to access Gentran Standards 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 Using the Audit Notification System in the *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 Gentran:Server to use databases from different vendors.

Primary Gentran System Controller

The *primary Gentran 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.

Note
The primary Gentran system controller is not the same as a "primary domain controller"; primary domain controller is a Windows term.

Process Controller

The *Process Controller* component is the part of the 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
The process controller can be any machine in the Gentran:Server system on which the process controller component is installed.

Secondary Controller

The secondary controller may be a *process controller* or a *communications controller*, or both.

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

A communications controller regulates communication between Gentran:Server and the organizations (value-added networks (VANs) or trading partners) with whom data is exchanged.

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 Gentran:Server Executive, Gentran Scheduler, and Gentran Poller services

System Data Store

The *system data store* serves as the repository of all shared Gentran:Server data. The system data store may reside on any machine that is a file server to the machines in the Gentran:Server system.

Note
The machines where the system data store resides must be accessible by all machines in the Gentran:Server system. There is only one system data store in the Gentran:Server system, but the associated folders and files may be distributed across multiple machines, if necessary.

User Interface Client

The *user interface client* is any machine in the Gentran:Server system other than the *primary Gentran system controller* or *secondary controller(s)*. The user interface clients provide the functions that are necessary to monitor and control the system.

Getting Support

Introduction   The Sterling Commerce Gentran:Server software is supported by trained product support personnel who are available to help you with product questions or concerns.

Note
Gentran:Server Customer Support does not support non-Sterling Commerce products (such as SQL Server and Oracle), but they can assist you in configuring non-Sterling Commerce products to work with Gentran:Server.

Phone number   For assistance, please refer to your *Getting Started Guide* to determine which support phone number you should use.

Before calling support   To help us provide prompt service, we ask that you do the following:

◗ Attempt to recreate any problem that you encounter and record the exact sequence of events.

◗ When you call product support, you should be prepared to provide us with the information below.

Information	Description
Identification	Your company name, your name, telephone number and extension, and the case number (if the question refers to a previously reported issue)
System Configuration	The Gentran:Server version (and any service packs installed) and information about the primary Gentran system controller and all machines experiencing problems, including the Windows operating system version, amount of memory, available disk space, database version, Microsoft Data Access (MDAC) version, and Internet Explorer version. Also, please describe any recent changes in your hardware, software, or the configuration of your system.
System Data Store	Which machines contain folders in the system data store?
Error Messages	Record the exact wording of any error messages received and the point in the software where the error occurred, as well as any log files.
Attempted Solutions	Record any steps that you took attempting to resolve the problem and note the outcomes, including the estimated number of times the problem occurred and whether it can be reproduced.

Accessing the Sterling Commerce Support Web Site

The Sterling Commerce Customer Support website contains valuable information about getting support for Gentran:Server for Windows, including the following:

◗   scope of support services

◗   customer support policies

◗   call prioritizing

◗   customer support phone directory

◗   how to create new Support on Demand cases

◗   how to check the status of Support on Demand cases

◗   how to add information to Support on Demand cases

The Customer Support website is constantly updated and all Sterling Commerce customers have access to it. This website also contains the most recent product updates and is a valuable source of product information.

Reference
Refer to the *Getting Started Guide* for information about how to access the Customer Support website.

Documentation

The Customer Support website includes a documentation library that contains the entire Gentran:Server for Windows documentation set. You can download the product manuals in PDF format from this library at any time.

System Overview

Contents

Introduction

Before you begin	Before you begin the installation process, you need to familiarize yourself with several concepts in the 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:

◗   Gentran:Server overview

◗   Installation components

◗   System components

◗   Recommended post-installation security

Reference
See the *Getting Started Guide* to determine which versions of Windows and database management systems have been certified for use with the Gentran:Server system components.

System Overview

Installation Prerequisites

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

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

◗   On each machine on which Gentran:Server controller components are installed, you
need to log on with a login that has administrative rights on that machine.

◗   You must create folder shares to the file server on which the system data store is
installed.

◗   You must create a new database and you may need to add users to the database.

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

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

Gentran:Server Overview

Introduction

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

Process control

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

Communication system

Gentran:Server links internal business systems to each other and to the business systems used by customers and suppliers around the world. 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

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.

Gentran:Server Executive Service

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

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

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

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

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

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

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

Note
The above are required system components of a Gentran:Server system. Optionally, depending on the type of licensing you purchase, each system may also have *secondary controllers* and/or *user interface clients*, or in a clustered environment, the Gentran:Server software can reside on one to four nodes. The Gentran:Server system components can be distributed in many ways. This chapter further defines the system components of the Gentran:Server system.

Installation Components

Introduction

Installation components are functional components of Gentran:Server that you can select when you install Gentran:Server. The following are the installation components of the system:

◗ Client Access Components

◗ Process Controller

◗ Integration Components

Client Access Components

The Client Access Components provide the user interface to setup, maintain, and control the 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 *Administration Guide* for more information on using the Operators user interface.

◗ System Configuration enables you to modify system-wide configuration parameters after 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 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 Gentran:Server mailbox system.

Process Controller   A Gentran:Server Process Controller is always installed, by default, on the Primary
System Controller. The Process Controller functions are run by the 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.

The Process Controller component is automatically installed on the following system
components:

◗ primary Gentran system controller

◗ communications controller

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

The Process Controller component installs the 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
Gentran:Server Application Integration and Forms Integration subsystems.

◗ Application Integration subsystem enables you to generate import, export, and
document turnaround translation objects.

◗ Forms Integration subsystem enables you to generate screen entry and print
translation objects. When these translation objects are registered with 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 Gentran Standards for creating new
translation objects. The Gentran Standard files can be accessed from CD-ROM or
transferred to a hard drive.

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

System Components

Introduction

The Gentran:Server system consists of several logical components. Each system must have the following:

◗ primary Gentran system controller

◗ system data store

◗ database

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

Note
The Gentran:Server system components can be distributed in many ways.

Primary System Controller

There is only *one* primary Gentran system controller in each Gentran:Server system. The primary Gentran 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 Gentran:Server Executive Service, and the Gentran:Server Mailbox service are automatically installed on the primary Gentran system controller. Additionally, the following installation components may be optionally installed on the primary Gentran system controller:

◗ Client Access Components

◗ Integration Components

◗ Option Pack Add-ons

◗ RosettaNet Server

◗ Extensions

◗ Standards

Secondary Controller

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

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

A communications controller regulates communication between Gentran:Server and the organizations (value-added networks (VANs) or trading partners) with whom data is exchanged.

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

- ◗ Client Access Components
- ◗ Integration Components
- ◗ Option Pack Add-ons
- ◗ RosettaNet Server
- ◗ Extensions
- ◗ Standards

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

User Interface Client   The user interface client is part of a non-clustered environment and is one or more Windows 2000 Professional or Windows XP Professional machines in the Gentran:Server system other than the *primary Gentran system controller* or *secondary controllers*.

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

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

- ◗ Integration Components
- ◗ RosettaNet Server
- ◗ Any extensions added to the server

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

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

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

Diagram   The following diagram illustrates one method of distributing the Gentran:Server system components (this example represents an installation site with a distributed license in a non-clustered environment). This diagram includes communications controllers, which are installed via the communications gateway.

Primary Gentran System Controller

System Data Store	Database	Gentran: Server

Windows Server 2003 Enterprise Edition,
Windows Server 2003 Standard Edition,
Windows 2000 Advanced Server, or
Windows 2000 Server

Comm. Controller

Gentran:Server

Windows 2003 Enterprise Edition, Windows 2003 Standard Edition, Windows 2000 Advanced Server, or Windows 2000 Server

User Interface Client

Gentran: Server

Windows 2000 Professional, or Windows XP Professional

User Interface Client

Gentran: Server

Windows 2000 Professional, or Windows XP Professional

Process Controller

Gentran:Server

Windows 2003 Enterprise Edition, Windows 2003 Standard Edition, Windows 2000 Advanced Server, or Windows 2000 Server

Gentran:Server System

Sample System Configurations

Introduction   This section illustrates sample distributed Gentran:Server systems: a Single Controller system in a non-clustered environment, a Multiple Controller system in a non-clustered environment, and a clustered system. Each of these three systems has a different number of system components and different distribution of installation components.

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

Sample Single Controller system   The following diagram illustrates a sample Single Controller system in a non-clustered environment. This distributed system consists of one primary Gentran system controller and one or more user interface clients.

Single Controller

Primary Gentran System Controller

| System Data Store | Database | Gentran: Server |

Installed Components:
■ Process Controller (default)
■ Client Access Components
■ Integration Components

Windows 2000 Server

User Interface Client

Gentran: Server

Installed Components:
■ Client Access Components
■ Integration Components

Windows 2000 Professional,

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

Multiple Controllers

Installed Components:
- ■ Process Controller (default)
- ■ Client Access Components
- ■ Integration Components

Primary Gentran System Controller

| System Data Store | Database | Gentran: Server |

Windows 2003, Enterprise Edition

Secondary Controller 1

Gentran: Server

Windows 2003, Standard Edition

User Interface Client

Gentran: Server

Windows 2000 Professional

User Interface Client

Gentran: Server

Windows XP Professional

Secondary Controller 2

Gentran: Server

Windows 2000 Server

Installed Components:
- ■ Client Access Components
- ■ Integration Components

Installed Components:
- ■ Process Controller
- ■ Client Access Components

Installed Components:
- ■ Process Controller (default)
- ■ Client Access Components

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

Clustered System

Post-installation Security Recommendations
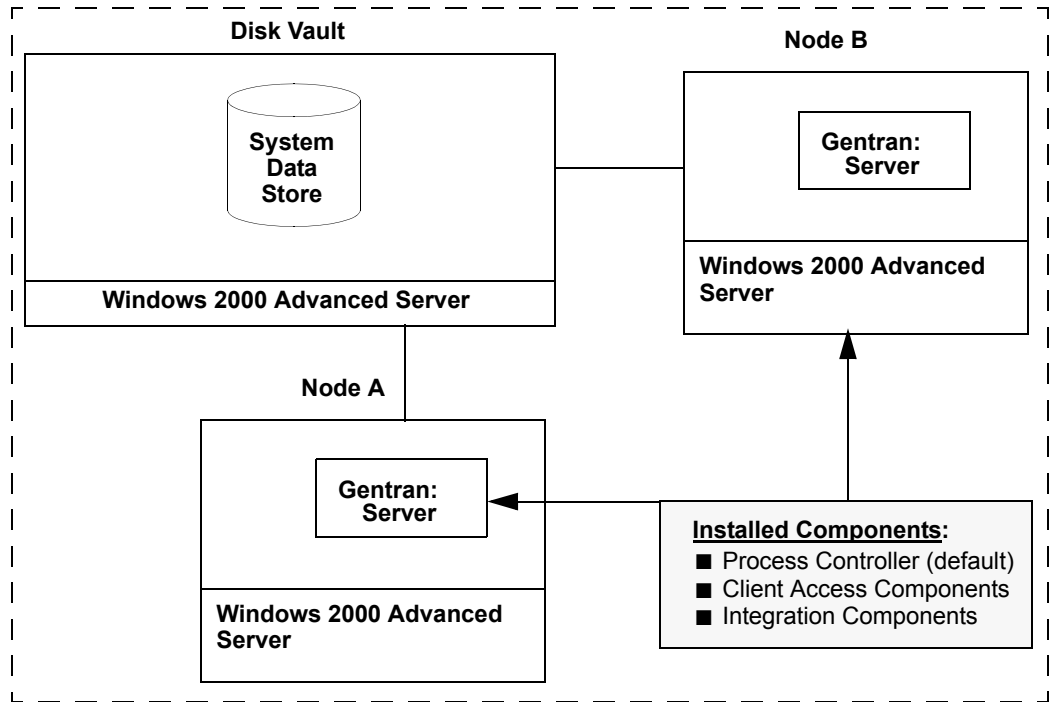
Introduction   Gentran:Server security enables you to protect your data from unauthorized access, yet still allow easy access to authorized users. Gentran:Server security enables you to use the integrated features of the Windows operating system and your database product.

This section contains our recommendations for the configuration of Gentran:Server security. You do not configure security until after you install Gentran:Server. (See Modifying Security Parameters in the *Administration Guide* for more information about setting up security in 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 Gentran:Server.

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

Recommendation
Set the security modes for 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 Windows operating system security, including encrypted passwords, password aging, and domain-wide user accounts. This mode does not prompt users to sign on to Gentran:Server if the user's ID is the same for Gentran:Server and for Windows. In this mode, when you have configured only one system, you do not have the opportunity to log in to Gentran:Server as another user unless the login fail, or the user logs out of 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.

When you have configured more than one system and are using the Integrated security mode, the Login dialog box is displayed so the user has the opportunity to select the appropriate Gentran:Server system (the User ID and Password are disabled on the Login dialog box).

Mixed   *Mixed* security mode always prompts the user with the Gentran:Server Login dialog box. The Windows user name is defaulted. If the user's Gentran:Server user ID is the same as it is for 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 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 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 Gentran:Server. The 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 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 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 Gentran:Server in *Integrated* security mode, you should set up the Gentran:Server User ID for each user to be the same as the Windows User ID for that user. If this is the case, the users are not required to log on to Gentran:Server.

Advanced Installation Considerations

Overview

Introduction	This section contains additional advanced considerations for installing Gentran:Server for Windows.

Network Configuration Requirements

Network/domain requirements

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

◗ Controllers and user interface clients in one domain

◗ Controllers and user interface clients in two domains that have a two-way trust established

◗ Primary Gentran system controller in a domain and user interface clients in a Windows workgroup in which the user interface client machines have a valid domain logon and rights to the controller

◗ Primary Gentran system controller and user interface clients in a Windows workgroup model in which all user interface client machines have a valid logon to the controller (a user ID and password that are in the local account database on the controller)

If you are using a Windows 2000 domain model, the Gentran:Server system and all necessary network resources must reside in the same domain model.

User Interface Client Permission Requirements

Gentran:Server and user interface client permission requirement

The following is a list of additional permissions requirements for user interface client machines.

◗ If you are using Gentran:Server Integrated security with SQL Server (as we recommend), the network logon for each user interface client must be granted access to SQL Server. Additionally, you must grant the client network logon the following permissions to the GentranDatabase: insert, update, select, and delete.

Reference
See your SQL Server™ documentation for questions about your SQL database.

◗ If you are using Gentran:Server Integrated security with SQL Server, the Gentran:Server logon for each user interface client must be granted access to the GentranDatabase.

Reference
See your SQL Server documentation for questions about your SQL database.

◗ For Gentran:Server systems using an Oracle database, you must use the Oracle Security Manager to grant the client network logon the following permissions to the GentranDatabase: insert, update, select, and delete.

Reference
See your Oracle® documentation for questions about your Oracle database.

◗ All Gentran:Server services that execute on the primary Gentran system controller must log on to the network with a valid user name and password, and they must be granted the following rights:

— Log on as a batch job
— Log on as a service
— Take ownership of files and other objects
— Log on locally
— Access this computer from the network

Reference
See *Configuring Windows* on page 2 - 10 for more information on setting up Windows rights.

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

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

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

Reference
See your Microsoft Windows documentation for questions about Windows.

Installing a Single or Multiple Controller System

Overview

Introduction

In this chapter   This chapter contains the information that you need to install Gentran:Server on a Single or Multiple Controller system.

Notes

◗   After installing Gentran:Server for the first time, you need to complete other implementation tasks, including starting the system, adding users, creating communication ports, and validating the installation. This information is provided in chapter 4, Post-installation Tasks.

◗   If you are installing Gentran:Server in a clustered environment, please skip to *Installing a Clustered System* on page 3 - 1 instead.

◗   If you are installing Gentran:Server for the first time, you will use *Installing Gentran:Server* on page 2 - 11. If you are upgrading from a previous version of Gentran:Server, you will use *Upgrading Gentran:Server* on page 2 - 60.

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

Prerequisites   To complete the installation of a primary Gentran system controller (or secondary controller in a multiple controller system), you must be logged on to Windows as a local administrator.

This chapter assumes that you have already installed the appropriate Windows operating system on each machine, and that you have installed either SQL or Oracle on the machine that will house the Gentran database.

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

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

Single Controller Overview

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

Sample single controller system   The following diagram illustrates a sample Single Controller system. This distributed system consists of one primary Gentran system controller with a user interface client.

Single Controller

Primary Gentran System Controller

| System Data Store | Database | Gentran: Server |

Windows 2000 Server

Installed Components:
- ■ Process Controller (default)
- ■ Client Access Components
- ■ Integration Components

User Interface Client

| Gentran: Server |

Windows 2000 Professional

Installed Components:
- ■ Client Access Components
- ■ Integration Components
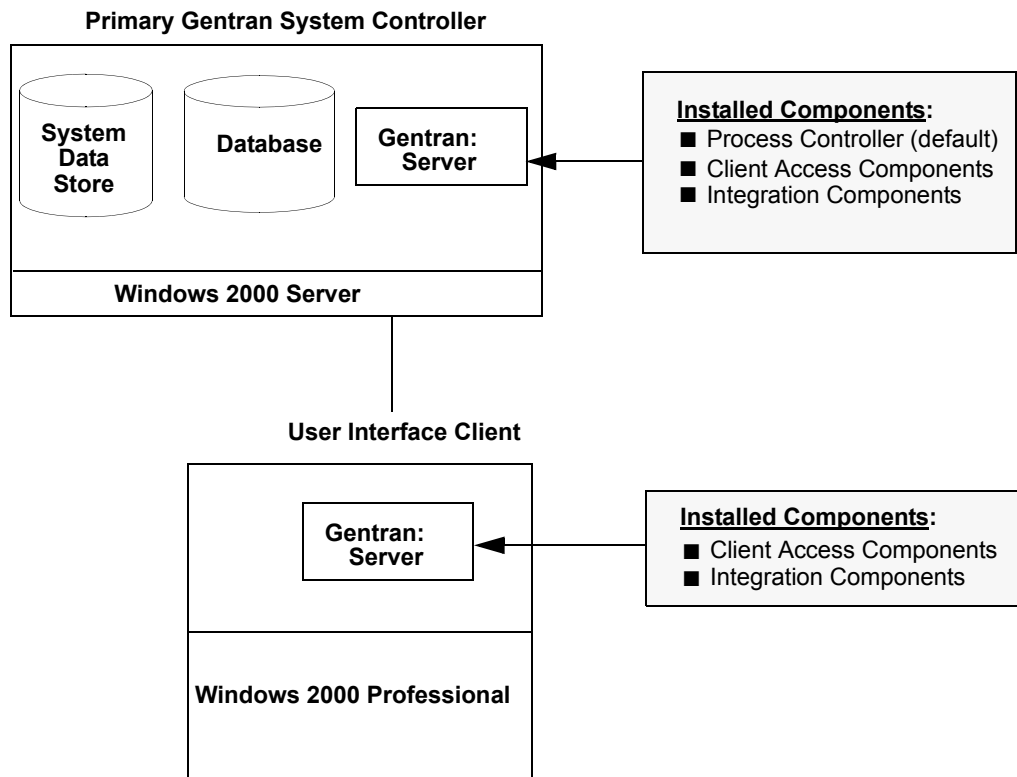
Multiple Controller Overview

Introduction

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

Sample Multiple controller system

The following diagram illustrates a sample Multiple Controller system. This distributed system consists of one primary Gentran system controller with multiple secondary controllers and user interface clients.

Multiple Controllers

Installed Components:
- ■ Process Controller (default)
- ■ Client Access Components
- ■ Integration Components

Primary Gentran System Controller

| System Data Store | Database | Gentran: Server |

Windows 2003, Enterprise Edition

Secondary Controller 1

Gentran: Server

Windows 2003, Standard Edition

User Interface Client

Gentran: Server

Windows 2000 Professional

User Interface Client

Gentran: Server

Windows XP Professional

Secondary Controller 2

Gentran: Server

Windows 2000 Server

Installed Components:
- ■ Client Access Components
- ■ Integration Components

Installed Components:
- ■ Process Controller
- ■ Client Access Components

Installed Components:
- ■ Process Controller (default)
- ■ Client Access Components
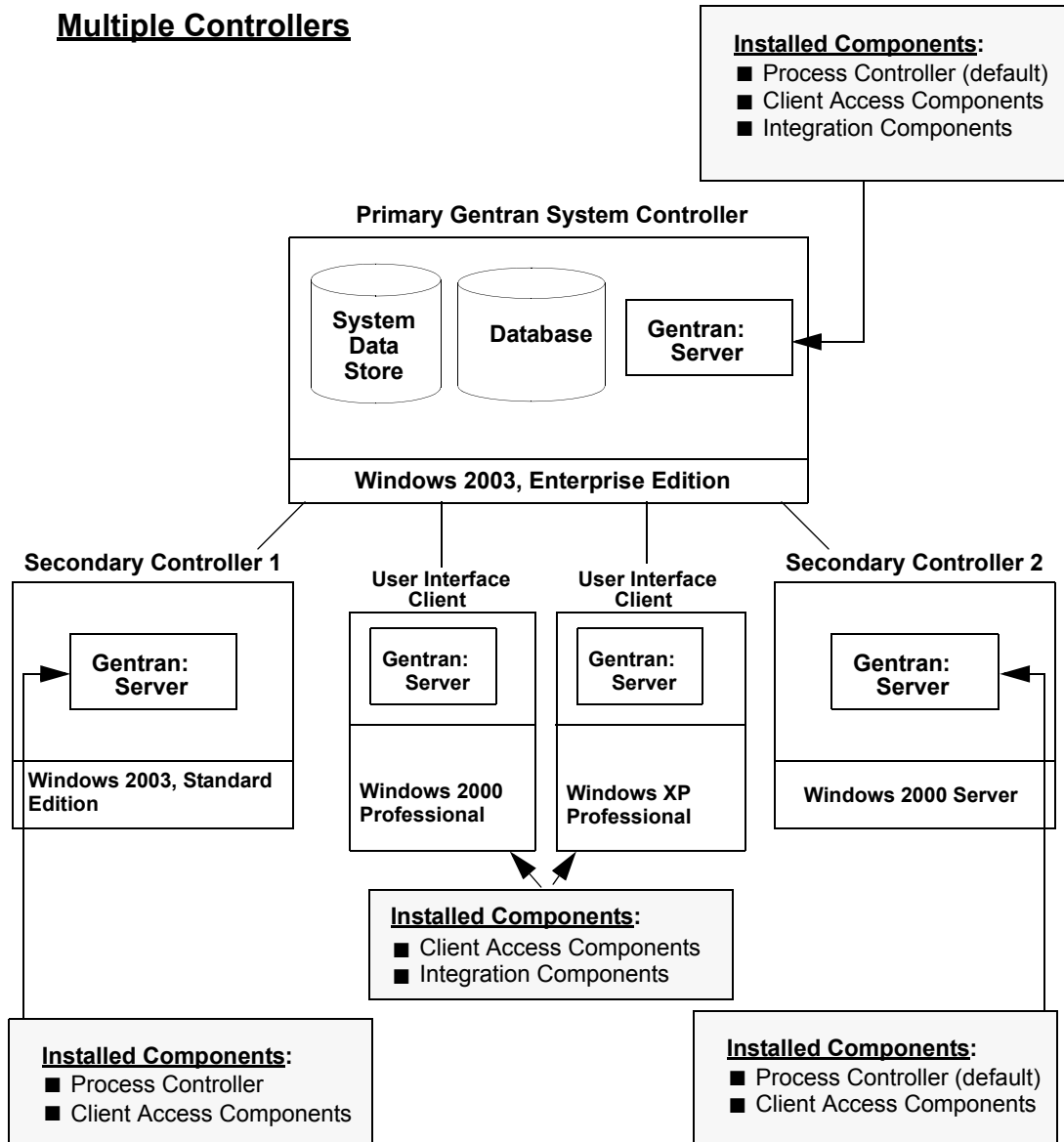
Installation Overview

Introduction   The following sections contain the prerequisite information and preliminary tasks that you need to complete prior to installing Gentran:Server on a single or multiple controller system. You should complete these pre-installation tasks prior to using the Setup program to install Gentran:Server.

To perform a new installation of Gentran:Server on the primary Gentran system controller, use the Setup program **Create a new Gentran:Server system** option to make that machine the primary Gentran system controller. Then, use the Setup program **Join an existing system** option on every additional controller and user interface client.

To perform an upgrade of your existing Gentran:Server, use the Setup program **Upgrade your existing system** option.

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

Task	Description
1	**Create/Verify Users:** On your Windows domain or workgroup, add any new users and verify existing Windows logons for Gentran:Server users.
2	**Create the Windows Global Group and Add Users:** On your domain, create a global group that contains all Gentran:Server users by adding the Windows logons for Gentran:Server users to the group.
3	**Create the Windows Local Group and Grant Access to the Global Group:** On the primary Gentran system controller and every controller in your system, create a local group that contains the global group you created.
4	**Add Windows User Rights to the Local Group:** On the primary Gentran system controller and every controller in your system, assign the local group the user rights that 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, Create, and Configure your Database:** For specific instructions, please refer to the appropriate appendix for the type of database management system you are using. *(Continued on next page)*

(Contd) Task	Description
7	**Install/Upgrade Gentran:Server:** Use the Setup program to install or upgrade Gentran:Server on the primary system controller, additional controllers, and user interface client machines.
8	**Install/Upgrade the Options Pack:** Use the Options Pack Setup program to install or upgrade any Gentran:Server options you purchased on the primary system controller, additional controllers, and user interface client machines. **Note** The product keys for installing the Gentran:Server Options Pack software are located on the packing list that was shipped with your Gentran:Server product or in the e-mail notifying you of the availability of the new version.
9	**Install Gentran Standards:** If you selected Integration Components, use the Setup program to install Gentran Standards.
10	**Start the Gentran:Server System:** Start the Gentran:Server Executive Service on the primary Gentran system controller before using Gentran:Server.
11	**Implement Security:** Specify the Gentran:Server security mode and add users to the system.
12	**Implement Communications:** Set up the modem and pools on every communications controller. **Reference** Refer to the appropriate documentation for more information.
13	**Validate Installation:** Complete the steps in chapter 4, Post-installation Tasks, to validate your installation.

New Installation Checklist

Introduction   This section contains a pre-installation checklist you must complete before installing Gentran:Server, to assist you in planning your installation. Complete this checklist for new installations on both single and multiple controller systems.

Server Checklist   Complete the following checklist to determine which system components you are installing (such as primary Gentran system controller and process controller) and how the Gentran:Server installation components are distributed on those machines.

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

Number	Question	Your installation
1	What is the name of the Windows domain in which your Gentran:Server system will reside? **Note** All the Gentran:Server system components must reside in one domain.	
2	What is the machine name of the primary Gentran system controller where Gentran:Server will be installed? **Note** The Computer Name is displayed in My Computer Properties, on the Network Identification tab.	
3	Which Gentran:Server components do you want to install on the primary Gentran system controller? **Reference** See *Installation Components* on page 1 - 6 for an explanation of the installation components. **Note** The Process Controller component is installed by default on the primary Gentran system controller.	◗ Client Access Components ◗ Integration Components *(Continued on next page)*

(Contd) Number	Question	Your installation
4	Where will the system data store reside? **Recommendations** ◗ Specify universal naming convention (UNC) pathname as \\MACHINE\SharepointFolder. ◗ We recommend that the system data store reside on the primary Gentran system controller in the default GENSRVNT folder. **Note** The system data store serves as the repository of all shared Gentran:Server data. The system data store may reside on one machine or be distributed across several machines. The machines where the system data store resides must be accessible by all machines in the Gentran:Server system because all machines in the system share data from the system data store.	\\GentranMACHINE1\ GENSRVNT

Secondary controller worksheet

Complete the following worksheet (for multiple controller systems *only)* to determine the machine name, the installation components you will install, and the target install folder for each secondary controller (process controller).

Note
The installation folder defaults to GENSRVNT. If you have more than three secondary controllers, please make a copy of this worksheet.

Secondary Controllers		
Machine Name	**Components Installed**	**Install Folder** (defaults to GENSRVNT)
	◗ Client Access Components ◗ Integration Component	
	◗ Client Access Components ◗ Integration Component	
	◗ Client Access Components ◗ Integration Component	

User interface client worksheet

Complete the following worksheet to determine the machine name, the installation components you will install, and the target install folder for each user interface client. Please note that the installation folder defaults to GENSRVNT. If you have more than four user interface clients, please make a copy of this worksheet.

User Interface Clients		
Machine Name	**Components Installed**	**Install Folder** (defaults to GENSRVNT)
	▶ Client Access Components ▶ Integration Component	
	▶ Client Access Components ▶ Integration Component	
	▶ Client Access Components ▶ Integration Component	
	▶ Client Access Components ▶ Integration Component	

Configuring Windows

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

In this section	This section outlines how to configure 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 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, refer to the Windows Online Help or contact Microsoft for assistance.

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

Task	Description
1	**Create/Verify Users:** On your domain or workgroup, add new Windows logons and verify existing Windows logons for all Gentran:Server users.
2	**Create the Windows Global Group and Add Users:** On your domain, create a global group that contains all Gentran:Server users by adding the Windows logons for Gentran:Server users to the group.
3	**Create the Windows Local Group and Grant Access to the Global Group:** On the primary Gentran system controller and every controller in your system, create a local group named **GENTRANUSERS** that contains the global group you created.
4	**Add Windows User Rights to the Local Group:** On the primary Gentran system controller and every controller in your system, assign to the local group the following user rights that Gentran:Server requires: ◗ 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 Gentran:Server

Pre-installation Checklists

Introduction   Complete the remaining questions before proceeding with the installation. This ensures that you have obtained all the information you need before beginning the installation.

Tip
We recommend that, prior to using this checklist, you make copies of it to make it easier to complete and refer to during the installation process, and so it is available for reuse.

Create new system checklist   The following is the pre-installation checklist for creating a new 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 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 Gentran:Server system? **Reference** Use this information on the System Name dialog box.	GENSYS1
3	Where will the system data store reside? **Note** Specify UNC pathname as \\MACHINE\Sharepoint\Folder. **Reference** Use this information on the Data Store Location dialog box.	\\MACHINENAME\ GENSRVNT *(Continued on next page)*

(Contd) Number	Question	Your installation
4	Which ODBC data source will the system use? **Recommendation** Give the data source the same name as your database for consistency. **Reference** Use this information on the ODBC Data Source Name dialog box.	Gentran Database
5	◗ For SQL Server, what is the name of your database? ◗ For Oracle, what is the service name or SQL*Net connect string (connection name)? **Reference** Use this information on the ODBC Server Setup dialog box when you configure your database.	Gentran Database
6	Which database user logon do you want the install program to use to access the database? **Notes** ◗ 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. **Reference** You use this on the Database Logon dialog box.	(Continued on next page)

(Contd) Number	Question	Your installation
7	Which Gentran:Server components do you want to install on this machine? **Note** The process controller component is installed by default on the primary Gentran system controller. **Reference** Use this information on the Optional Components dialog box.	◗ Client Access Components ◗ Integration Components
8	Which Windows user logon do you want the Gentran:Server Executive Service to use to log on the primary Gentran system controller? **Notes** ◗ This User ID must have access to the network resources you want to use, including all client machines. ◗ This logon must have the advanced right "log on as a batch job" assigned to it on the local machine. ◗ The domain format is DOMAIN\User. **Reference** Use this information on the Windows Logon dialog box.	Use the local administrator logon with which you are currently logged on to the machine.
9	Which database user logon do you want the Gentran:Server Executive Service to use to access the database? **Note** This database logon must have access to the Gentran:Server database tables. **Reference** Use this information on the Database Logon dialog box.	Use the local administrator logon with which you are currently logged on to the machine. *(Continued on next page)*

(Contd) Number	Question	Your installation
10	Which user do you want to be the default Gentran:Server local administrator? This allows access to Gentran:Server for the first time and start and stop services. **Recommendation** The user name should be the same as that user's Windows logon. **Reference** Use this information on the Gentran:Server System Administrator dialog box.	Use the local administrator logon with which you are currently logged on to the machine.
11	Which database user name or user group name do you want to grant access to the database tables? **Note** This user/group must be a valid ID or the installation cannot be completed. ◗ For SQL Server, the ID must be a valid Windows user or group. ◗ For Oracle, the ID must be a valid user ID. (Windows groups are not recognized by Oracle.) If the 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. **Recommendation** Perform this task during installation so you do not have to use your database management system to grant permissions after the install. **Reference** Use this information on the Database Access dialog box.	GENTRANUSERS
12	What do you want to name the program folder where the Gentran:Server icons are installed? **Reference** Use this information on the Program Folder Name dialog box.	Gentran Server

Join existing system checklist

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, and so it is available for reuse.

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

Number	Question	Your installation
1	In which folder do you want to install Gentran:Server on this machine? **Reference** Use this information on the Destination Location dialog box.	GENSRVNT
2	What is the name of the primary Gentran system controller in the system that you want to join? **Reference** Use this information on the Primary System Controller dialog box.	
3	Which ODBC data source will the system use? **Recommendation** Give the data source the same name as your database for consistency. **Reference** Use this information on the ODBC Data Source Name dialog box.	GentranDatabase
4	◗ For SQL Server, what is the name of your database? ◗ For Oracle, what is the service name or SQL*Net connect string (connection name)? **Reference** Use this information on the ODBC Server Setup dialog box when you configure your database.	GentranDatabase *(Continued on next page)*

(Contd) Number	Question	Your installation
5	Which Gentran:Server components do you want to install on this machine? **Reference** Use this information on the Optional Components dialog box.	◗ Client Access Components ◗ Process Controller (if you want this machine to be a process controller) ◗ Integration Components
6	If you are installing the Process Controller component, which Windows user logon do you want the Gentran:Server Executive Service to use to log on the primary Gentran system controller? **Notes** ◗ This User ID must have access to the network resources that you want to use, including all client machines. ◗ The domain format is DOMAIN\User. **Reference** Use this information on the Windows Logon dialog box.	Use the local administrator logon with which you are currently logged on to the machine.
7	If you are installing Process Controller components, what database user logon do you want the Gentran:Server Executive Service to use to access the database? **Notes** ◗ This database logon must have access to the Gentran:Server database tables. If you are using SQL, this logon must be an administrative logon. ◗ If you are installing on an Oracle system, you must have database administrator (DBA) privileges. **Reference** Use this information on the Database Logon dialog box.	Use the local administrator logon with which you are currently logged on to the machine.
8	What do you want to name the program folder where the Gentran:Server icons are installed? **Reference** Use this information on the Program Folder Name dialog box.	Gentran Server

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 would need to interrupt the Gentran:Server installation process to share the Gentran:Server folder after the installation program creates it. You determined the UNC pathname for the system data store in the checklist, **item 4** on page 2 - 8.

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 this 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 will reside.
2	Create a new folder named **GENSRVNT**.

Sharing the system data store folder

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

How to Install a Primary Gentran System Controller

Using the Gentran:Server Setup Program

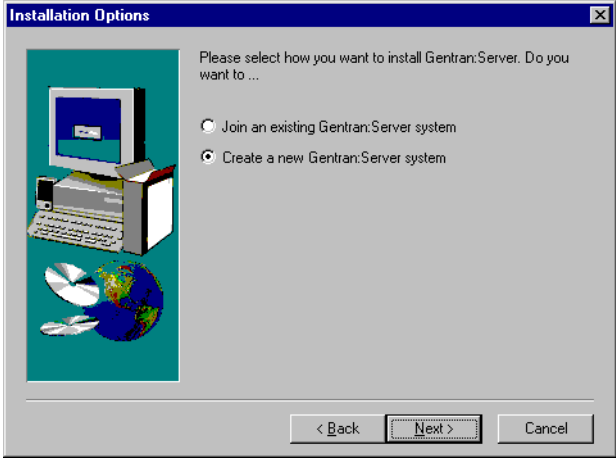The Setup program (setup.exe) allows you to install Gentran:Server.

Warning
We strongly recommend that you exit all 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 *forward* (next dialog box)	**Next**.
navigate *backward* (previous dialog box)	**Back**.

exit Setup	**Cancel**.
	
	System prompt
	Do you want to exit the Setup program now?
	
	◗ If *yes*, click **Exit Setup**.
	
	   Warning
	   If you exit the Setup program the installation will not be completed.
	
	◗ If *no*, click **Resume**.

Before you Begin

Requirement
To complete the installation of a primary Gentran system controller or secondary controller, you must be logged on to Windows as a local administrator.

Recommendation
Exit all other Windows programs before running the Setup program.
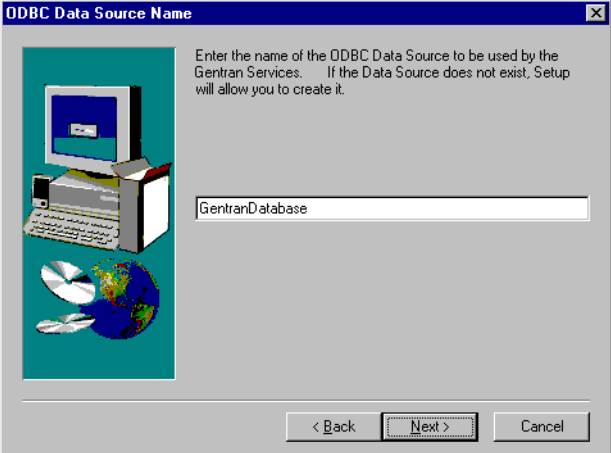
Note
If you ever need to uninstall Gentran:Server, see the *Administration Guide* for information about using the Gentran:Server Installation Setup program "Leave a system" option.

Procedure   Use this procedure to install the primary Gentran system controller for single or multiple controller distributed systems.

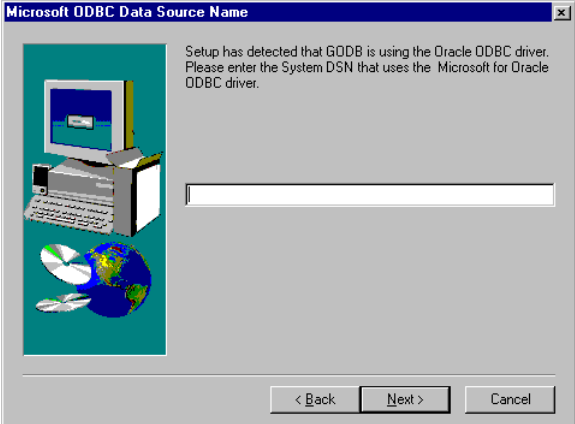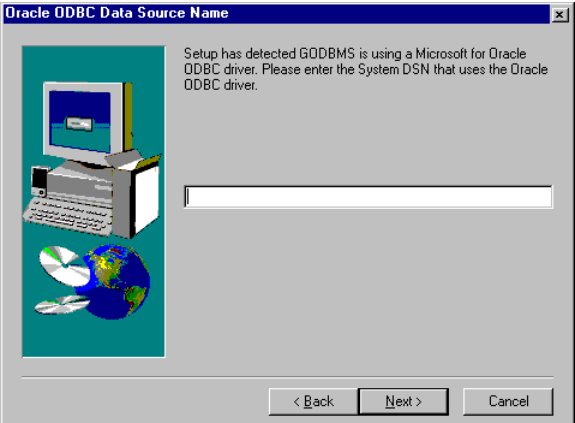| Step	Action
1	If you are installing from CD-ROM, complete the following: a. Insert the Gentran:Server for Windows 5.1installation CD into your CD-ROM drive. b. If Autorun is disabled on this machine, select **Run** from the **Start** menu and continue with **c**. Otherwise, continue with Step 3. c. Browse to your CD-ROM drive, select **Setup.exe**, and click **OK**. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.
2	If you are installing from the ESD Portal download, browse to the installation folder (created in Step 8 in the *Getting Started Guide* ESD download procedure) and run **setup.exe**. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.
3	Click **Next** to proceed with the setup. **System response** The system asks you if you want to view the ReadMe.htm file.
4	Click **Yes** to view the ReadMe file and then close it when finished. **System response** Setup looks for installed components. Since there are no Gentran:Server components installed on your machine, you are prompted with the Installation Options dialog box. *(Continued on next page)*

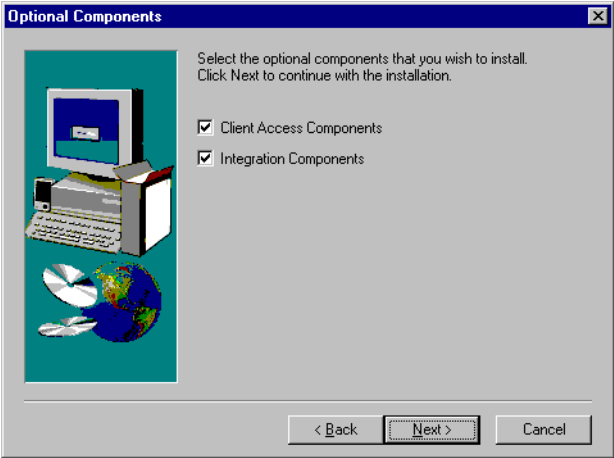| (Contd) Step	Action
5	Select **Create a new Gentran:Server system** and click **Next**. **System response** Setup prompts you to complete the New Installation checklist if you have not already done so.
6	Click **Yes** to continue the install. **System response** The system displays the Destination Location dialog box.
7	Do you want to install Gentran:Server in the default folder (GENSRVNT)? ◗ If *yes*, click **Next**. ◗ If *no*, click **Browse** to select the folder, click **OK** to exit the Browse dialog box, and then click **Next**. **Notes** ◗ You determined this information in the checklist, **item 1** on page 2 - 11. ◗ The default installation folder is C:\GENSRVNT. **System response** You already created the GENSRVNT folder, but if the installation folder did not currently exist, Setup creates it. Setup displays the System Name dialog box. *(Continued on next page)*

(Contd) Step	Action
8	Type the name of the new system and click **Next**. **Note** You determined the system name in the checklist, **item 2** on page 2 - 11. **System response** The system displays the Data Store Location dialog box. *(Continued on next page)*

(Contd) Step	Action
9	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**. **Recommendation** Use the GENSRVNT folder as the data store location. **Note** You determined the data store location in the checklist, **item 3** on page 2 - 11. **System response** Setup verifies that the specified drive or folder is shared and displays the ODBC Data Source Name dialog box.
10	Type the name of the ODBC data source that is used by Gentran:Server in this system and click **Next**. **Tip** Remember that the ODBC data source name is case-sensitive, so be sure to type your data source correctly. **Note** You determined the ODBC data source name in **item 4** on page 2 - 12. **System response** Setup looks for the ODBC DSN that you selected. ◗ If it *finds* the DSN, you are prompted to make changes to the ODBC data source configuration. Continue with Step 12. ◗ If it does *not* find the DSN, you are prompted to create one. Continue with Step 11. (Continued on next page)

(Contd) Step	Action
11	Do you want to create the OBDC DSN? ◗ If *no*, click **No** to return to the Select ODBC Data Source dialog box and select another data source (Step 10). ◗ If *yes*, click **Yes** and the system displays the ODBC Data Source Administrator dialog box. Continue with Step 12.
12	Do you want to change any ODBC DSN parameters? ◗ If *yes*, click **Yes**. **System Response** ◗ The ODBC Data Source Administrator dialog box is displayed. Continue with Step 13 to modify the data source. ◗ If *no*, click **No** and continue with Step 15.
13	Select the **System DSN** tab and click **Add**. For controllers, you must use a *system* DSN to allow the service to use the data source. **Recommendation** Use a System DSN because this enables any user on this machine and the Gentran:Server Executive Service to use this DSN. **System response** The system displays the Create New Data Source wizard.
14	From the driver list, select the ODBC driver for the database you want to use and click **Finish**. **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. **Reference** ◗ If you are using SQL, see page A-19. ◗ If you are using Oracle, see page B-11. *(Continued on next page)*

(Contd) Step	Action
15	To create the ODBC DSN using SQL Server, do the following: a. See page A-19 for information about how to configure a DSN. b. Save SQL Server Setup and continue with Step 17. **Notes** ◗ 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 Gentran:Server.

	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. (Continued on next page)

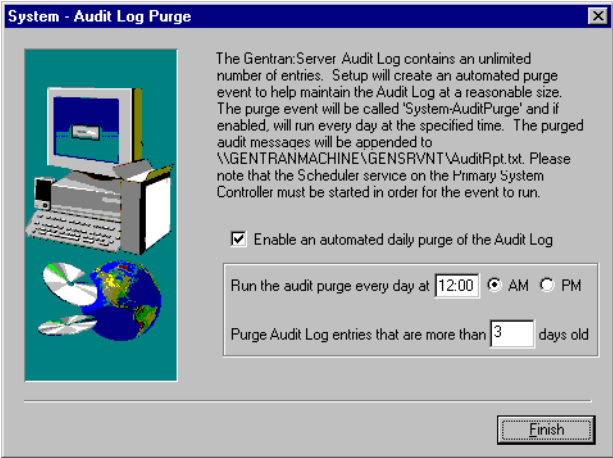| (Contd) Step	Action
16	Are you using an Oracle database? (See page B-11 for help setting up the DSNs.) ◗ If *yes* and if the DSN you entered as the ODBC Data Source is a DSN that uses an Oracle driver, then the system displays the Microsoft ODBC Data Source Name dialog box. Type the system DSN that uses the Microsoft for Oracle ODBC Driver and click **Next**. ◗ If *yes* 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. Type the system DSN that uses the Oracle ODBC Driver and click **Next**. ◗ If *no*, continue with Step 17. **System response** Setup displays the Database Logon dialog box. (Continued on next page)

(Contd) Step	Action
17	To log on to the database, complete the following: 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**. **Notes** ◗ 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 - 12. ◗ For the SQL Server User ID, you must use the SQL administrative logon with administrative rights on the Gentran:Server database. Otherwise, only the user that created the database tables can use those tables. **System response** Setup displays the Optional Components dialog box.
18	Select the components you want to install by clicking the appropriate check boxes. Click **Next**. **Notes** ◗ You determined this information in the checklist, **item 7** on page 2 - 13. ◗ We recommend that you install all components. The Process Controller components are automatically installed on the primary Gentran system controller. **System response** Setup displays the Windows Logon dialog box.

(Contd) Step	Action
19	To log on to Windows (for Gentran:Server Executive Service access), complete the following: a. In the User ID box, type the Windows user ID, preceded by *domainname\.* b. In the Password box, type the Windows password for that User ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ◗ You determined which logon is used on in the checklist, **item 8** on page 2 - 13. ◗ You need to enter a valid administrative user ID and password that the Gentran:Server Executive Service uses to access network resources. This is the Windows user account that starts the 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. **System response** Setup displays the Database Logon dialog box.
20	To log on to the database (for Gentran:Server Executive Service access), complete the following: a. In the User ID box, type the database user ID that is set up with the required access to the database. b. In the Password box, type the password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ◗ You determined this logon in the checklist, **item 9** on page 2 - 13. ◗ This logon enables the Gentran:Server Executive Service to access and manipulate information in the database tables. Gentran:Server uses this logon every time it accesses the database tables. ◗ You must enter a valid database administrative logon that is already set up with access to the Gentran:Server database tables. **System response** Setup displays the Gentran:Server System Administrator dialog box.

(Contd) Step	Action

21	To log on as the Gentran:Server System Administrator, complete the following:
	
	a. In the User ID box, type the Gentran:Server administrative User ID.
	
	    Note
	    This user must also have valid Windows and database logons.
	
	b. In the Password box, type the password for that user ID.
	
	c. Type the password again in the Confirm box to validate it.
	
	d. Click **Next**.
	
	Notes
	◗ You determined which user logon to use for the Gentran:Server local administrator in the checklist, **item 10** on page 2 - 14.
	
	◗ The Setup program creates this Gentran:Server administrative user.
	
	System response
	Setup displays the Database Access dialog box, which allows you to grant access to the Gentran:Server database tables to a user or group of users that you have already set up with your database management program.
	
	(Continued on next page)

(Contd) Step	Action
22	To grant access to the Gentran:Server database tables to the group of users you created, type **GENTRANUSERS** and click **Next**. **Notes** ◗ You determined this group in the checklist, **item 11** on page 2 - 14. ◗ This user/group must be a valid ID or the installation cannot be completed. ◗ For SQL Server, the ID must be a valid Windows user or group. ◗ For Oracle, the ID must be a valid user ID (Windows groups are not recognized by Oracle). If the 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. **System response** ◗ If you selected to install Client Access Components or Integration Components and if Setup cannot detect a Gentran:Server program folder, 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. Continue with Step 23. ◗ If you did not select to install Client Access Components and/or Integration Components, Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks if you want to proceed. Continue with Step 26.
23	Accept the default program folder name **Gentran Server** and click **Next**. **Note** You determined this information in the checklist, **item 12** on page 2 - 14. *(Continued on next page)*

(Contd) Step	Action
24	Did you select to install Integration Components? ◗ If *yes*, continue with Step 25. **System response** Setup displays a dialog box asking what default data format you want to use for new maps and new fields. ◗ If *no*, continue with Step 26. **System response** Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks if you want to proceed.
25	Do you want to use free format? ◗ 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. **Notes** ◗ When you create a new map or a new field, 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. **System response** Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks if you want to proceed. *(Continued on next page)*

(Contd) Step	Action
26	Do you want to proceed? ◗ 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 23). ◗ Click **Yes** to proceed with the installation (continue with Step 27). **System response** Setup builds the Gentran:Server database tables, creates the system data store folders, inserts default data, installs the components that you selected, adds the appropriate registry entries, installs services, builds the program group and icons (if Client Access Components or Integration Components were selected). Setup displays the Audit Log Purge dialog box.
27	Accept the default and click **Finish**. **System response** Setup asks if you want to start Gentran:Server services now. *(Continued on next page)*

(Contd) Step	Action
28	Do you want to start Gentran:Server services now? ◗ If *yes*, click **Yes**. ◗ If *no*, click **No**. You will need to restart the services manually later. **Reference** See the *Administration Guide* for more information about starting Gentran:Server services. **System response** If you previously installed and then uninstalled Gentran:Server, the system prompts you to drop and replace the old database tables. If you are using an Oracle database, the system states that you need to manually drop the old tables before installing Gentran:Server. ◗ If no errors occurred, Setup continues with Step 30. ◗ If errors occurred, Setup reports the errors. See *InstallShield Error Messages* on page C - 6 for a list of the Install Shield error messages. **Note** If the 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 these messages and grant the right to that user ID after Setup completes. Setup then determines whether any shared DLLs were locked. Continue with Step 29.
29	Are any shared DLLs locked? ◗ If *yes*, Setup asks if you want to reboot the machine now or later. Do one of the following: — 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. **Warning** Be certain that you have saved your work in any other open applications, prior to rebooting the machine. ◗ If *no*, continue with Step 30. *(Continued on next page)*

(Contd) Step	Action
30	Did you install Integration Components?
	◗ If *yes*, you are prompted to install the Gentran Standards. Click **OK** to acknowledge this message. See the appropriate Gentran:Server Standards installation card for information about installing the Gentran Standards.
	◗ If *no* and if you are installing a multiple controller system, you need to install Gentran:Server on the additional controllers in your Multiple Controller system.
	Reference See *How to Install Secondary Controllers* on page 2 - 34 to continue the installation process.
	◗ If *no* and if you are installing a single controller system, you need to install Gentran:Server on the user interface clients in your Single Controller system.
	Reference See *How to Install User Interface Clients* on page 2 - 48 to continue the installation process.
	System response Setup states that, if you need to configure e-mail notifications, you will need to configure the MAPI profile to be used. Click **OK**.
	Reference Refer to the Gentran:Server documentation specified in the message box for more information.
31	Click **OK** to exit Setup. You have now completed the Setup program to create a new primary Gentran system controller in a distributed system.
32	You are now ready to install the necessary Options Pack optional components.
	Reference See the *Options Pack Installation Card* for more information about how to install Gentran:Server optional components.

How to Install Secondary Controllers

Introduction

Requirements

◗ To complete the installation of a primary Gentran system controller or secondary controller, you must be logged on to Windows as a local administrator.

◗ You must run the Setup program on the machine on which you want to install Gentran:Server.

Use the **Join an existing Gentran:Server system** option on every secondary controller in a distributed system when you are either installing Gentran:Server for the first time or joining another system (such as test and production systems).

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

Note
If you ever need to uninstall Gentran:Server, see the *Administration Guide* for information about using the Gentran:Server Installation Setup program "Leave a system" option.
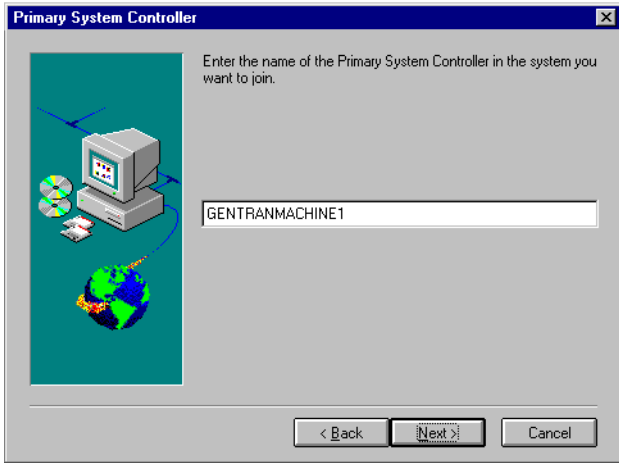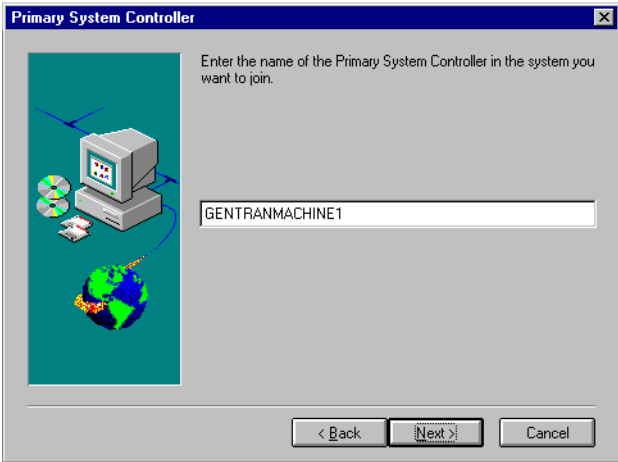
Procedure

Use this procedure to install Gentran:Server on each secondary controller in a distributed system.

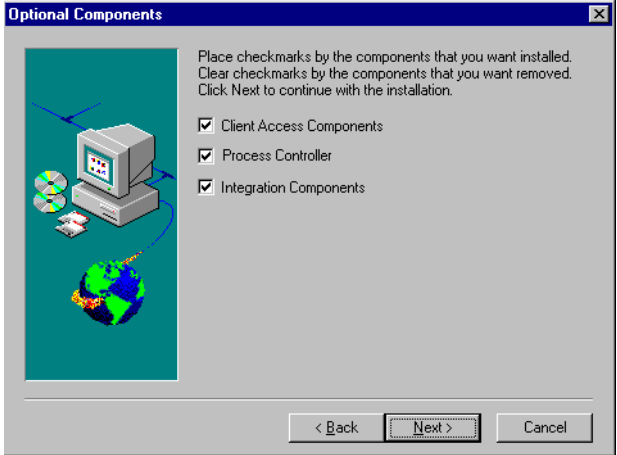| Step	Action
1	If you are installing from CD-ROM, complete the following: a. Insert the Gentran:Server for Windows 5.1 installation CD into your CD-ROM drive. b. If Autorun is disabled on this machine, select **Run** from the Start menu and continue with **c**. Otherwise, continue with Step 3. c. Browse to your **CD-ROM drive**, select **Setup.exe**, and click **OK**. **Note** If you are currently running the Gentran:Server Executive Service, the system prompts you to stop the service so installation can proceed. Click **Yes** to stop the service and proceed with the installation. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3. *(Continued on next page)*

(Contd) Step	Action
2	If you are installing from the ESD Portal download, browse to the installation folder (created in Step 8 in the *Getting Started Guide* ESD download procedure) and run **setup.exe**. **Note** If you are currently running the Gentran:Server Executive Service, the system prompts you to stop the service so installation can proceed. Click **Yes** to stop the service and proceed with the installation. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.
3	Click **Next** to proceed with the Setup. **System response** The system asks you if you want to view the ReadMe.htm file.

(Contd) Step	Action
4	Click **Yes** to view the ReadMe file and close it when finished. **System response** Setup looks for installed components. ◗ If there are no Gentran:Server components currently installed on this machine, you are prompted with the following Installation Options dialog box. ◗ If there are currently Gentran:Server components installed on your system, you are prompted with the following dialog box.
5	Make sure **Join an existing Gentran:Server system** is selected and click **Next** to proceed with the Setup. **System response** Setup prompts you to complete the appropriate checklist if you have not already done so. (Continued on next page)

(Contd) Step	Action
6	Click **Yes** to continue the install. **System response** ◗ If Gentran:Server is currently installed on this machine, Setup detects the install folder and displays the Primary Gentran System Controller dialog box (continue with Step 8). ◗ If Gentran:Server is not currently installed on this machine, the Destination Location dialog box is displayed. Continue with Step 7. (Continued on next page)

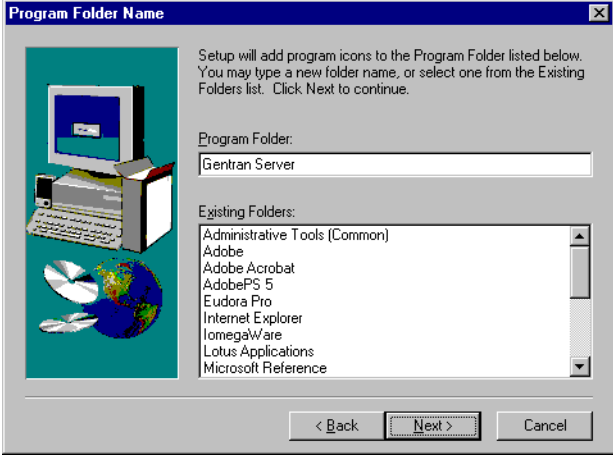| (Contd) Step	Action
7	Do you want to install Gentran:Server in the default folder (GENSRVNT)? ◗ If *yes*, click **Next**. ◗ If *no*, click **Browse** to select the folder, click **OK** to exit the Browse dialog box, and then click **Next**. **Notes** ◗ You determined this information in the checklist, **item 1** on page 2 - 15. ◗ The default installation folder is C:\GENSRVNT. **System response** You already created the GENSRVNT folder, but if the installation folder did not currently exist, Setup creates it. Setup displays the Primary Gentran System Controller dialog box.
8	Type the name of the primary Gentran system controller in the system that you want to join and click **Next**. **Note** You determined the primary Gentran system controller machine name in the checklist, **item 2** on page 2 - 15. **System response** Setup locates the system for the machine you specified as the primary Gentran system controller and displays a message asking if that system is the one you want to join. *(Continued on next page)*

(Contd) Step	Action
9	Is this the primary system controller you want to join? ◗ If *yes*, click **Yes** to proceed with the installation. ◗ If *no*, click **No** to return to the Select Primary Gentran System Controller dialog box and select another machine (Step 7). **Note** If the machine that you selected either does not exist or is not a controller, Setup informs you of that and returns to the Select Primary Gentran System Controller dialog box to select another machine (Step 7). **System response** Setup looks for the ODBC DSN that is required by the Gentran:Server system you selected. ◗ If it *finds* the DSN, you are prompted to make changes to the ODBC data source configuration. Continue with Step 11. ◗ If it does *not* find the DSN, you are prompted to create one. Continue with Step 10.
10	Do you want to create a new ODBC DSN? ◗ If *no*, click **No** to return to the Primary System Controller dialog box (Step 7). ◗ If *yes*, click **Yes** and the system displays the ODBC Data Source Administrator dialog box. Continue with Step 11.
11	Do you want to change any ODBC DSN parameters? ◗ If *yes*, click **Yes**. **System Response** ◗ The ODBC Data Source Administrator dialog box is displayed. Continue with Step 12 to modify the data source. ◗ If *no* (the DSN is set up correctly), click **No** and continue with Step 15.
12	Select the **System DSN** tab and click **Add**. For controllers, you must use a *system* DSN to allow the service to use the data source. **Recommendation** Use a System DSN because this enables any user on this machine and the Gentran:Server Executive Service to use this DSN. **System response** The system displays the Create New Data Source wizard. *(Continued on next page)*

(Contd) Step	Action
13	From the driver list, select the ODBC driver for the database you want to use and click **Finish**. **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. **Reference** ◗ If you are using SQL, see page A-19. ◗ If you are using Oracle, see page B-11.
14	To create the ODBC DSN using SQL Server, complete the following: a. See page A-19 for information about how to configure a DSN. b. Save the SQL Server Setup and continue with Step 15. **Notes** ◗ 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 Gentran:Server. ◗ If existing Gentran:Server database tables are detected, you are prompted to replace existing tables. Click **Yes** to proceed with the installation (before you do so, you should be certain that you want to replace the existing tables, which may contain data). **System response** Setup displays the Optional Components dialog box. *(Continued on next page)*

(Contd) Step	Action
15	Select the components you want to install by clicking the appropriate check boxes. Click **Next**. **Notes** ◗ You determined this information in the checklist, **item 5** on page 2 - 16. ◗ The Process Controller option is not displayed if either of the following is true: — This machine is currently a member (not a controller) in a Gentran:Server system. — You did not log on to the machine as a Windows Administrator. ◗ The Gentran:Server components that are currently installed on this machine are selected. ◗ We recommend that you install all components. The Process Controller components are automatically installed on the primary Gentran system controller. **System response** Setup asks you if you want to be HIPAA compliant. (Continued on next page)

(Contd) Step	Action

16	Do you want to be HIPAA-compliant?
	
	◗ If *yes*, click **Yes** and Setup will install the appropriate components. Continue with Step 17.
	
	    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 Gentran:Server system and store it in a secure location.
	
	◗ If *no*, click **No** and continue with Step 17.
	
	Note
	Gentran:Server for Windows 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.
	
	Reference
	See the *HIPAA and NCPDP Compliance Guide* for more information about using HIPAA with Gentran:Server.
	
	System response
	◗ If you selected to install the Process Controller component, Setup displays the Windows Logon dialog box. Continue with Step 17.
	
	◗ If you only selected Client Access Components or Integration Components, Setup proceeds with Step 19.
	
	 (Continued on next page)

(Contd) Step	Action
17	To log on to Windows (for Gentran:Server Executive Service access), complete the following. a. In the User ID box, type a Windows user ID that is setup with the required access to the network. The format is *DOMAIN\User* for a domain account and *.\User* for a non-domain account. b. In the Password box, type the Windows password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ◗ You need to enter a valid a administrative user ID and password that the Gentran:Server Executive Service uses to access network resources. This is the Windows user account that starts the 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. ◗ You determined which logon is used in the checklist, **item 6** on page 2 - 16. **System response** ◗ If you selected to install the Process Controller component, Setup displays the Database Logon dialog box. Continue with Step 18. ◗ If you only selected Client Access Components or Integration Components, continue with Step 19. (Continued on next page)

(Contd) Step	Action
18	To log on to the database (for Gentran:Server Executive Service access), complete the following. a. In the User ID field, type an ODBC user ID. **Warning** This User ID must have full access to the Gentran:Server database. b. In the Password field, type the ODBC password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ◗ You determined this logon in the checklist, **item 7** on page 2 - 16. ◗ This logon enables the Gentran:Server Executive Service to access and manipulate information in the database tables. Gentran:Server uses this logon every time it accesses the database tables. **System response** ◗ If you selected to install Client Access Component or Integration Components and if Setup cannot detect a Gentran:Server program folder, Setup 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. Continue with Step 19. ◗ If you did not select to install Client Access Components or Integration Components, Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks you if you want to proceed. Continue with Step 20. (Continued on next page)

(Contd) Step	Action
19	Accept the default program folder name **Gentran Server** and click **Next**. **Note** You determined this information in the checklist, **item 8** on page 2 - 16.
20	Did you select to install Integration Components? ◗ If *yes*, continue with Step 21 **System response** Setup displays a dialog box asking what default data format you want to use for new maps and new fields. ◗ If *no*, continue with Step 22. **System response** Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks you if you want to proceed.
21	Do you want to use a free format? ◗ 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 a format that corresponds to the lower 128 ASCII characters. **Notes** ◗ When you create a new map or a new field, 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. **System response** Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks you if you want to proceed. (Continued on next page)

(Contd) Step	Action
22	Do you want to proceed? ◗ Click **Yes** to proceed with the installation (continue with Step 23). ◗ Click **No** to return to Step 20. **System response** Setup builds the Gentran:Server database tables, copies files, 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 (if Client Access Components or Integration Components were selected). If you previously installed and then uninstalled Gentran:Server, the system prompts you to drop and replace the old database tables. If you are using an Oracle database, the system states that you need to manually drop the old tables before installing Gentran:Server. ◗ If no errors occurred, Setup continues with Step 24. ◗ If errors occurred, Setup reports the errors. See *Installation Troubleshooting*, Appendix C, for a list of the Install Shield error messages. Setup then determines whether any shared DLLs were locked. Continue with Step 23.

23	Are any shared DLLs locked?
	
	◗ If *yes*, Setup asks if you want to reboot the machine now or later. Do one of the following:
	
	    — 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.
	
	Warning
	Be certain that you have saved your work in any other open applications, prior to rebooting the machine.
	
	◗ If *no*, continue with Step 24.
	
	 (Continued on next page)

(Contd) Step	Action

24	Did you install Integration Components?
	
	◗ If *yes*, you are prompted to install the Gentran Standards. Click **OK** to acknowledge this message. See the appropriate Gentran:Server Standards installation card for information about installing the Gentran Standards.
	
	◗ If *no*, you need to install Gentran:Server on the user interface clients in your system. Continue with Step 25.
	
	    Reference
	    See *How to Install User Interface Clients* on page 2 - 48 to continue the installation process.

25	Click **OK** to exit Setup. You have now completed the Setup program to join a distributed system.
26	You are now ready to install the necessary Options Pack optional components. **Reference** See the *Options Pack Installation Card* for more information about how to install Gentran:Server optional components.

How to Install User Interface Clients

Introduction   Use the **Join an existing Gentran:Server system** option on every user interface client machine in a distributed system when you are either installing Gentran:Server for the first time or joining another system (such as test and production systems).

Requirements
◗   To complete the installation of Gentran:Server on the user interface clients, you must be logged on to Windows as a local administrator.
◗   You must run the Setup program on the machine on which you want to install Gentran:Server.

Recommendation
Exit all other Windows programs before running the Setup program.
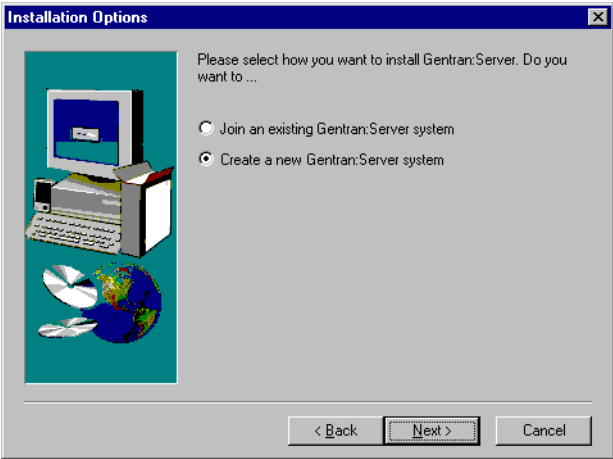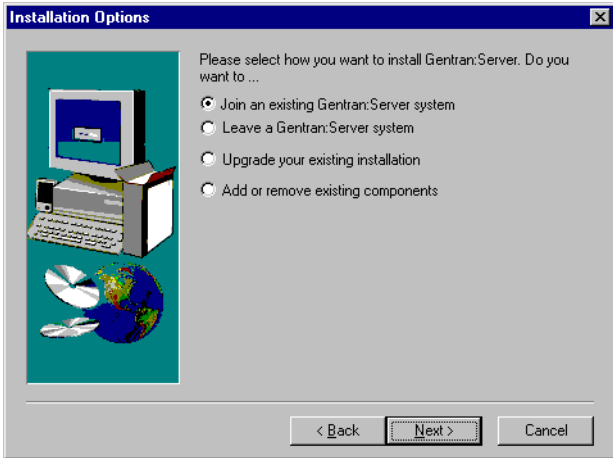
Note
If you ever need to uninstall Gentran:Server, see the *Administration Guide* for information about using the Gentran:Server Installation CD Setup program "Leave a system" option.
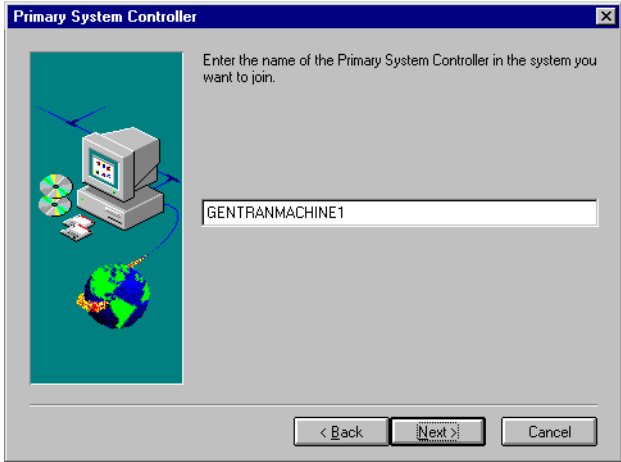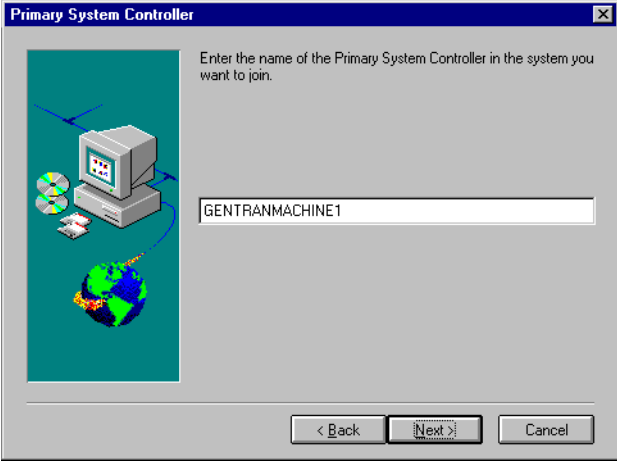
Procedure   Use this procedure to install Gentran:Server on each user interface client in a distributed system.

Step	Action
1	If you are installing from CD-ROM, complete the following: a. Insert the Gentran:Server for Windows 5.1 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 3. c. Browse to your **CD-ROM drive**, select **Setup.exe**, and click **OK**. **Note** If you are currently running the Gentran:Server Executive Service, the system prompts you to stop the service so installation can proceed. Click **Yes** to stop the service and proceed with the installation. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3. *(Continued on next page)*

(Contd) Step	Action
2	If you are installing from the ESD Portal download, browse to the installation folder (created in Step 8 in the *Getting Started Guide* ESD download procedure) and run **setup.exe**. **Note** If you are currently running the Gentran:Server Executive Service, the system prompts you to stop the service so installation can proceed. Click **Yes** to stop the service and proceed with the installation. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.
3	Click **Next** to proceed with the Setup. **System response** The system asks you if you want to view the ReadMe.htm file. (Continued on next page)

(Contd) Step	Action
4	Click **Yes** to view the ReadMe file and then close it when finished. **System response** Setup looks for installed components. ◗ If there are no Gentran:Server components currently installed on this machine, you are prompted with the following Installation Options dialog box. ◗ If there are currently Gentran:Server components installed on your system, you are prompted with the following dialog box.
5	Make sure **Join an existing Gentran:Server system** is selected and click **Next** to proceed with the Setup. **System response** Setup prompts you to complete the appropriate checklist if you have not already done so. *(Continued on next page)*

(Contd) Step	Action
6	Click **Yes** to continue the install. **System response** ❿ If Gentran:Server is currently installed on this machine, Setup detects the install folder and displays the Primary Gentran System Controller dialog box (continue with Step 8). **Primary System Controller** Enter the name of the Primary System Controller in the system you want to join. GENTRANMACHINE1 < Back Next > Cancel ❿ If Gentran:Server is not currently installed on this machine, Setup displays the Destination Location dialog box. Continue with Step 7. (Continued on next page)

(Contd) Step	Action
7	Do you want to install Gentran:Server in the default folder? ◗ If *yes*, click **Next**. ◗ If *no*, click **Browse** to select the folder, click **OK** to exit the Browse dialog box, and then click **Next**. **Notes** ◗ You determined this information in the checklist, **item 1** on page 2 - 15. ◗ The default installation folder for Windows is C:\GENSRVNT. The default installation folder for Windows XP Professional is C:\Program Files\Sterling Commerce\Gentran Server. **System response** You already created the GENSRVNT folder, but if the installation folder did not currently exist, Setup creates it. Setup displays the Primary Gentran System Controller dialog box. *(Continued on next page)*

(Contd) Step	Action

8	Type the name of the primary Gentran system controller in the system that you want to join and click **Next**.
	
	Notes
	You determined the primary Gentran system controller machine name in the checklist, **item 2** on page 2 - 15.
	
	System response
	◗ If you are installing on Windows XP Professional, Setup prompts you for the system name. Type the name of the system that you want to join and click **Next**.
	
	    Warning
	    If you are installing Gentran:Server on Windows XP Professional, the primary Gentran system controller must have the Gentran:Server Executive Service started on it.
	
	◗ Setup locates the system for the machine you specified as the primary Gentran system controller or the system that you specified (if installing on Windows XP Professional), and displays a message asking if that system is the one you want to join.

9	Is this the primary system controller you want to join? ◗ Click **Yes** to proceed with the installation. ◗ Click **No** to return to the Select Primary Gentran System Controller dialog box and select another machine (Step 7). **Note** If the machine that you selected either does not exist or is not a controller, Setup informs you of that. You are returned either to the Select Primary Gentran System Controller dialog box to select another machine or returned to the System Name dialog box to select another system if installing on a Windows XP Professional system. **System response** Setup looks for the ODBC DSN that is required by the Gentran:Server system that you selected. ◗ If it *finds* the DSN, you are prompted to make changes to the ODBC data source configuration. Continue with Step 11. ◗ If it does *not* find the DSN, you are prompted to create one. Continue with Step 10.
10	Do you want to create a new ODBC DSN? ◗ If *no*, click **No** to return to the Primary System Controller dialog box (Step 7). ◗ If *yes*, click **Yes** and the system displays the ODBC Data Source Administrator dialog box. Continue with Step 11. *(Continued on next page)*

(Contd) Step	Action
11	Do you want to change any ODBC DSN parameters? ◗ If *yes*, click **Yes**. **System Response** ◗ The ODBC Data Source Administrator dialog box is displayed. Continue with Step 12 to modify the data source. ◗ If *no* (the DSN is set up correctly), click **No** and continue with Step 15.
12	Select the **System DSN** tab and click **Add**. For controllers, you must use a *system* DSN to allow the service to use the data source. **Recommendation** Use a System DSN because this enables any user on this machine and the Gentran:Server Executive Service to use this DSN. **System response** The system displays the Create New Data Source wizard.
13	From the driver list, select the ODBC driver for the database you want to use and click **Finish**. **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. **Reference** ◗ If you are using SQL, see page A-19. ◗ If you are using Oracle, see page B-11. *(Continued on next page)*

(Contd) Step	Action
14	To create the ODBC DSN using SQL Server, complete the following. ◗ See page A-19 for information about how to configure a DSN. ◗ Save the SQL Server Setup and continue with Step 15. **Notes** ◗ 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 Gentran:Server. ◗ If existing Gentran:Server database tables are detected, you are prompted to replace existing tables. Click **Yes** to proceed with the installation (before you do so, you should be certain that you want to replace the existing tables, which may contain data). **System response** Setup displays the Optional Components dialog box. (Continued on next page)

(Contd) Step	Action

15	Select the components you want to install by clicking the appropriate check boxes. Click **Next**.
	
	Notes
	◗ You determined this information in the checklist, **item 5** on page 2 - 16.
	◗ The Process Controller option is not displayed if any of the following are true:
	    — This machine is currently a member (not a controller) in a Gentran:Server system.
	    — You are installing Gentran:Server on Windows XP Professional operating system.
	    — You did not log on to the machine as a Windows Administrator.
	◗ The Gentran:Server components that are currently installed on this machine are selected.
	◗ We recommend that you install only the Client Access Components and/or Integration Components.
	
	System response
	The system displays the Program Folder Name dialog box. This enables you to choose the program group in which you want the client/integration components installed as program icons.

16	Accept the default program folder name **Gentran Server** and click **Next**. **Note** You determined this information in the checklist, **item 8** on page 2 - 16. *(Continued on next page)*

(Contd) Step	Action
17	Did you select to install Integration Components? ◗ If *yes*, continue with Step 18. **System response** Setup displays a dialog box asking what default data format you want to use for new maps and new fields. ◗ If *no*, continue with Step 19. **System response** Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks you if you want to proceed.
18	Do you want to use a free format? ◗ 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. **Notes** ◗ When you create a new map or a new field, 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. **System response** Setup asks if you want to proceed with the installation. (Continued on next page)

(Contd) Step	Action
19	Do you want to proceed?
	◗ Click **Yes** to proceed with the installation (continue with Step 20).
	◗ Click **No** to return to Step 17.
	System response
	Setup builds the Gentran:Server database tables, copies files, 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.
	If you previously installed and then uninstalled Gentran:Server, the system prompts you to drop and replace the old database tables. If you are using an Oracle database, the system states that you need to manually drop the old tables before installing Gentran:Server.
	◗ If no errors occurred, Setup continues with Step 21.
	◗ If errors occurred, Setup reports the errors. See the *InstallShield Error Messages* on page C - 6 for a list of the Install Shield error messages.
	Setup then determines whether any shared DLLs were locked. Continue with Step 20.
20	Are any shared DLLs locked?
	◗ If *yes*, Setup asks if you want to reboot the machine now or later. Do one of the following:
	— 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.
	Warning
	Be certain that you have saved your work in any other open applications, prior to rebooting the machine.
	◗ If *no*, continue with Step 21.
	(Continued on next page)

(Contd) Step	Action
21	Did you install Integration Components? ◗ If *yes*, you are prompted to install the Gentran Standards. Click **OK** to acknowledge this message. See the appropriate Gentran:Server Standards installation card for information about installing the Gentran Standards. ◗ If *no*, you need to complete other implementation tasks, including starting the system, adding users to the system, creating communication ports, and validating the installation. Continue with Step 22 **Reference** See *Post-installation Tasks*, chapter 4, to continue with the Gentran:Server implementation process.
22	Click **OK** to exit Setup. You have now completed the Setup program to join a new system.
23	You are now ready to install the necessary Options Pack optional components. **Reference** See the *Options Pack Installation Card* for more information about how to install Gentran:Server optional components.

Upgrading Gentran:Server

How to Upgrade your Gentran:Server Installation

Introduction

Use the **Upgrade your existing installation** option on every machine in your Gentran:Server system when you receive upgrades to the Gentran:Server software. In a distributed environment, you *must* upgrade the primary Gentran system controller *first*.

Notes

◗ To complete the installation of a Distributed System, you must be logged on to Windows as a local administrator.

◗ If you ever need to uninstall Gentran:Server, see the *Administration Guide* for information about using the Gentran:Server Installation Setup program "Leave a system" option.

Gentran:Server for RosettaNet prerequisite

Warning

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

You can stop IIS by stopping the **World Wide Web Publishing Service** and the **IIS Admin Service** from the Services dialog box (select each service from the list and click **Stop**). If you are running a Windows 2000 or Windows 2003 operating system, 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 Gentran:Server for RosettaNet and are upgrading from Gentran:Server for Windows 3.x to 5.1, there are tasks you will need to perform after installing Gentran:Server for Windows 5.1 and Gentran:Server for RosettaNet 5.1, and you should allot time to complete these post-installation tasks.

Reference

See How to Upgrade Gentran:Server for RosettaNet in the *Gentran:Server for RosettaNet Installation Card* for more information about 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 accidently unplugged

◗ the network failing

◗ a power outage

Backing up your database prior to upgrade

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

Upgrading a test machine

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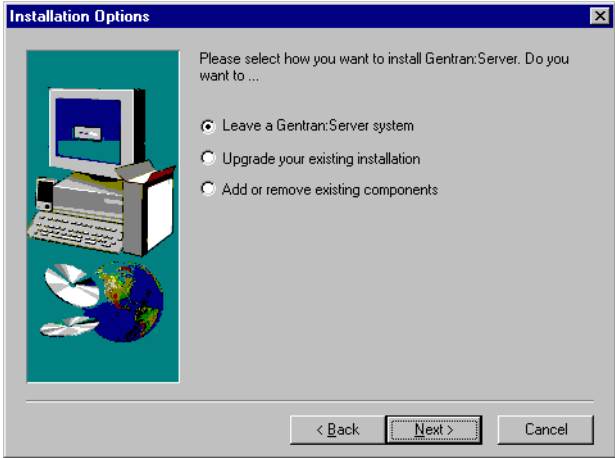
Procedure

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

Use this procedure to upgrade Gentran:Server.

Step	Action
1	If you applied any hotfixes provided by Customer Support to your Gentran:Server system, check the modified date of the hotfix against the release date of the version to which you are upgrading. If the hotfix version date is newer than the release date, you must manually remove the hotfix.
	If an upgrade file date is earlier or the same as the existing file date, that file is not copied. If the upgrade file date is later than the existing file date, the file is overlaid with the newer file.
	(Continued on next page)

(Contd) Step	Action
2	If you are installing from CD-ROM, complete the following: a. Insert the Gentran:Server for Windows 5.1 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**. **Warnings** ◗ You must run the Setup program on the machine that you want to upgrade Gentran:Server. ◗ In a distributed environment, you must upgrade the primary Gentran system controller first, and then each additional machine. ◗ If you have Gentran:Server for RosettaNet installed, see the prerequisite warning in *Gentran:Server for RosettaNet prerequisite* on page 2 - 60. **Notes** ◗ If you are currently running the Gentran:Server Executive Service, the system prompts you to stop the service so installation can proceed. Click **Yes** to stop the service and proceed with the installation. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4.

(Contd) Step	Action
3	If you are installing from the ESD Portal download, browse to the installation folder (created in Step 8 in the *Getting Started Guide* ESD download procedure) and run **setup.exe**. **Warnings** ◗ You must run the Setup program on the machine that you want to upgrade Gentran:Server. ◗ In a distributed environment, you must upgrade the primary Gentran system controller first, and then each additional machine. ◗ If you have Gentran:Server for RosettaNet installed, see the prerequisite warning in *Gentran:Server for RosettaNet prerequisite* on page 2 - 60. **Notes** ◗ If you are currently running the Gentran:Server Executive Service, the system prompts you to stop the service so installation can proceed. Click **Yes** to stop the service and proceed with the installation. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4.
4	Click **Next** to proceed with the setup. **System response** Setup asks you if you want to view the ReadMe.htm file.
5	Click **Yes** to view the file and then close it when finished. **System response** Setup continues the installation process.
6	Are you are currently running the Gentran:Server Executive, Gentran:Server Mailbox, Gentran:Server Communications service, and/or Gentran Audit Notification service? ◗ If *yes*, the system prompts you to stop the services so installation can proceed. Click **Yes** to stop each service and continue with Step 7. ◗ If *no*, continue with Step 7. **Notes** ◗ If you have the 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. (Continued on next page)

(Contd) Step	Action
7	Click **Next**. **System response** The Setup program looks for and finds installed components and does one of the following: ◗ Setup displays a dialog box stating that it detected an older version of Gentran:Server and asks if you would like to upgrade to the new version. Continue with Step 8. ◗ Setup displays the Installation Options dialog box. Continue with Step 9. **Installation Options** Please select how you want to install Gentran:Server. Do you want to ... ◉ Leave a Gentran:Server system ○ Upgrade your existing installation ○ Add or remove existing components 〈 Back Next 〉 Cancel
8	Click **Yes** to upgrade to the new version of Gentran:Server for Windows. Continue with Step 10. **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: ◗ Read the installation instructions ◗ Successfully backed up your Gentran:Server files ◗ Successfully backed up your Gentran:Server database
9	Select **Upgrade your existing installation** and click **Next** to proceed with the Setup. Continue with Step 10. **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: ◗ Read the installation instructions ◗ Successfully backed up your Gentran:Server files ◗ Successfully backed up your Gentran:Server database *(Continued on next page)*

(Contd) Step	Action
10	Do you want to proceed? ◗ If *yes*, click **Yes** to proceed with the installation. Continue with Step 11. ◗ If *no*, click **No** to return to the Installation Options dialog box to select another installation option (Step 8).
11	Are you are upgrading the primary Gentran system controller? ◗ If *yes*, specify the system name of the primary controller. Continue with Step 12. **System Response** Setup locates the system you specified and displays the Windows Logon dialog box. ◗ If *no*, continue with Step 15.
12	In this logon dialog box, you need to enter the user ID and password that the Gentran:Server Executive Service uses to access network resources. This is the Windows user account that starts the Gentran:Server Executive Service and is used for unattended processing. a. In the User ID box, type a Windows user ID that is setup with the required access to the network. The format is *domain\user* for a domain account and *.\user* for a non-domain account. b. In the Password box, type the Windows password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **System Response** Setup displays the Database Logon dialog box. (Continued on next page)

(Contd) Step	Action
13	In this logon dialog box, you need to enter the administrative database logon that Setup uses to build the database tables. 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**. **Notes** ◗ For the SQL Server user ID, you must use the SQL administrative logon with administrative rights on the Gentran:Server database. Otherwise, only the user that created the database tables can use those tables. ◗ If this Gentran:Server system is installed with Oracle, you must use the schema owner of the tables so that the schema will not change. **System response** Setup asks you if you want to be HIPAA-compliant.

14	Do you want to be HIPAA-compliant?
	
	◗ If *yes*, click **Yes** and Setup will install the appropriate components. Continue with Step 15.
	
	   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 Gentran:Server system and store it in a secure location.
	
	◗ If *no*, click **No** and continue with Step 15.
	
	Note
	Gentran:Server for Windows 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.
	
	Reference
	See the *HIPAA and NCPDP Compliance Guide* for more information about using HIPAA with Gentran:Server.
	
	(Continued on next page)

(Contd) Step	Action
15	Did you select to install Integration Components and are upgrading from a pre-5.0 Gentran:Server system to a 5.x system? ◗ If *yes*, continue with Step 16. **System Response** Setup asks what default data format you want to use for new maps and new fields. ◗ If *no*, continue with Step 17. **System response** Setup asks you if you want to proceed with the upgrade.
16	Do you want to use a free format? ◗ 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. **Notes** ◗ When you create a new map or a new field, 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. **System response** Setup asks you if you want to proceed with the upgrade. *(Continued on next page)*

(Contd) Step	Action
17	Click **Yes** to proceed with the upgrade. **System response** Setup performs the following: ◗ 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 **Note** Depending on the size of your database, the upgrade process may last anywhere from a few minutes up to a couple of hours.

18	Did any errors occur?
	
	◗ If no errors occurred, Setup informs you that the upgrade installation is complete. Continue with Step 20.
	
	◗ If errors occurred on the primary Gentran 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 19.
	
	    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.
	
	    Warning
	    You should attempt to fix the cause of the failure (for example, database crash or network down) prior to running Setup again.
	
	◗ If errors occurred on a secondary controller or user interface client, Setup reports the errors and informs you that the installation is complete. Continue with Step 20.
	
	    Reference
	    See *Installation Troubleshooting*, Appendix C, for a list of the Install Shield error messages.
	
	 (Continued on next page)

(Contd) Step	Action

19	Did Setup prompt you that any shared DLLs are locked? Do one of the following:
	
	◗ If *yes*, Setup asks you whether you want to reboot the machine now or later.
	
	    — If *yes*, select **Yes, I want to restart my computer now** and click **OK** to reboot the machine.
	
	    Warning
	    Be certain that you have saved your work in any open applications prior to rebooting the machine.
	
	    — If *no*, select **No, I will restart my computer later** and click **OK** to terminate the Setup program.
	
	◗ If *no*, continue with Step 20.
	
	System response
	Setup asks you if you want to restart the services that Setup stopped.
	
	Note
	When you upgrade Gentran:Server, any Gentran services that are not included in the core install (such as RosettaNet Service) will not start until you upgrade that service.

20	Do you want to start the services that Setup stopped now?
	
	◗ If *yes*, click **Yes**.
	
	◗ If *no*, click **No**. You will need to restart the services manually later.
	
	    Reference
	    See the *Administration Guide* for more information about starting Gentran:Server services.
	
	System response
	Setup states that if you loaded Integration Components, you will need to install the appropriate Gentran:Server standards. See the appropriate Gentran:Server Standards installation card for information about installing the Gentran Standards.
	
	Reference
	See the appropriate Gentran:Server Standards installation card for more information.

21	Click **OK**. **System response** Setup prompts you that, to configure e-mail notification, you must configure the MAPI profile to be used. **Reference** See the *MAPI Gateway Configuration Guide* for more information. *(Continued on next page)*

(Contd) Step	Action
22	Click **OK**. **System response** Setup states that if you previously installed optional components, you will need to upgrade those components. **Reference** See the *Options Pack Installation Card* for more information.
23	Click **OK**. **System response** The system warns you that if you have any Gentran:Server extensions or gateways installed on your system, you may need to upgrade those to be compliant with the latest Gentran:Server release. **Reference** See your extension installation documentation or the *Options Pack Installation Card* for more information.
24	Click **OK**. **System response** Setup states that installation is complete. **Note** If you upgraded Integration components, you are prompted to load the Gentran Standards.
25	Click **OK** to exit Setup. You have now completed the Setup program to upgrade an existing system and you are now ready to upgrade the necessary Options Pack optional components. **Reference** See the *Options Pack Installation Card* for more information about how to install Gentran:Server optional components.

Installing a Clustered System

Overview

Introduction

In this chapter   This chapter contains the information you need to install Gentran:Server on a clustered system.

Notes

◗   After installing Gentran:Server for the first time, you need to complete other implementation tasks, including starting the system, adding users, creating communication ports, and validating the installation. This information is provided in chapter 4, Post-installation Tasks.

◗   If you are installing Gentran:Server in a non-clustered environment, you must use *Installing a Single or Multiple Controller System* on page 2 - 1 instead.

◗   If you are installing Gentran:Server for the first time, you will use *Installing Gentran:Server* on page 3 - 9. If you are upgrading from a previous version of Gentran:Server, you will use *Upgrading Gentran:Server* on page 3 - 36.

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

Prerequisites   The following are prerequisites if you are installing Gentran:Server in a clustered environment:

◗   You must be logged on to Windows as a local administrator.

◗   Install Gentran:Server only on a node that currently owns the Cluster resources (necessary at installation time only).

◗   Ensure that failback is allowed and the node on which you are installing Gentran:Server is set to "Preferred Owner" in Cluster Administrator.

Reference
See your Microsoft documentation for more information about using Cluster Administrator.

This section assumes that you have already installed the appropriate operating system on each node and that you have installed either SQL or Oracle as a resident or non-resident database on a machine or machines that are accessible via the network.

Reference
See the *Getting Started Guide* for more information about which operating system and database management system versions are supported as resident or non-resident with Gentran:Server.

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

Clustered System Overview

Introduction   In a Clustered system, the Gentran:Server data store resides on the disk vault. The database is resident or non-resident (in one of the configurations documented on the *Getting Started Guide*), and Gentran:Server is installed on one or more nodes.

Sample clustered system   The following diagram illustrates a sample clustered system. This clustered system consists of one primary Gentran system controller (the disk vault) and two nodes.

Clustered System
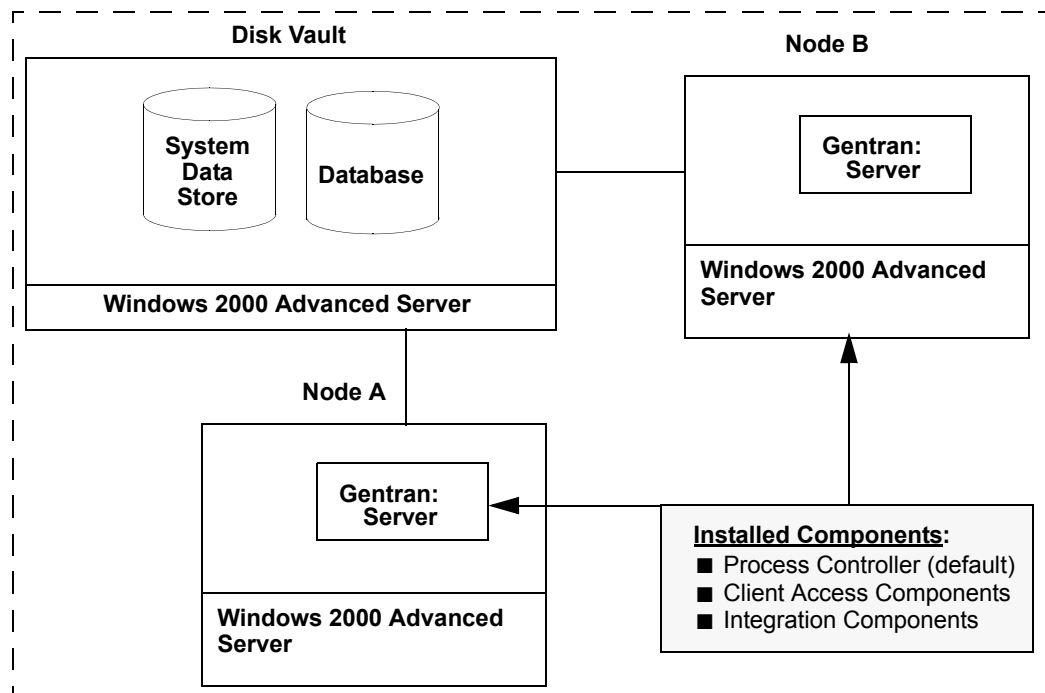
Notes on running Gentran:Server for Windows in a clustered environment

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

◗ Gentran:Server for Windows is not a cluster-aware application, which means that Gentran:Server depends on the Cluster service functionality to maintain the failover capability.

◗ Only IP-based communications can be run from the Gentran:Server for Windows Communications controllers, which includes FTP and sockets. You cannot use Gentran asynchronous or bisynchronous communications on a clustered system.

◗ Gentran:Server for Windows running under the clustered service only supports Failover; it does not support load-balancing. The only load-balancing that is possible is static load balancing outside the cluster. The primary benefit of a cluster is the ability to ensure application support in the event of a server failure.

◗ Data that is processed on the Primary Node may need to be reprocessed if the cluster fails over to a Secondary Node.

◗ Gentran:Server only uses the failover process if one or more of the Gentran cluster resources (file systems or services) fail to respond, stop, or end abnormally. High use of other Gentran:Server components that are not set up as resources is not monitored by the cluster.

Installation Overview

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

To perform a new installation of Gentran:Server on the primary Gentran system controller, use the Setup program **Create a new Gentran:Server system** option to make that machine the primary Gentran system controller. To perform an upgrade of your existing Gentran:Server, use the Setup program **Upgrade your existing system** option.

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

Task	Description
1	**Create/Verify Users:** On your clustered system, add any new users and verify existing Windows logons for Gentran:Server users.
2	**Create the Windows Global Group and Add Users:** Create a global group that contains all Gentran:Server users by adding the Windows logons for Gentran:Server users to the group.
3	**Create the Windows Local Group and Grant Access to the Global Group:** On every node in the cluster, create a local group that contains the global group you created. This group is accessible by all nodes in the cluster.
4	**Add Windows User Rights to the Local Group:** On every node in the cluster, assign the local group the user rights that Gentran:Server requires.
5	**Create Folder for System Data Store:** Create the system data store folder (GENSRVNT) on a shared drive that is part of the disk vault. (Continued on next page)

(Contd) Task	Description
6	**Set Up a Clustered Resource for the GENSRVNT Share:** Using Cluster Administrator, create a clustered resource for the GENSRVNT share (Resource Type = File Share) so it will maintain the properties of a typical shared folder. Verify that the share has a dependency on the resource that represents the physical disk drive on which you created the GENSRVNT folder. Once the resource is created, bring the File Share resource online. **Notes** Configuration of the File Share, including permissions, should be done through Cluster Administrator—do not configure the file share via Windows Explorer. Creation of the File Share resource shares the folder setup for the System Data Store in task 5, above.
7	**Install and Configure your Database and Create the GentranDatabase DSN:** For specific instructions, please refer to the appropriate appendix for the type of database management system you are using.
8	**Install/Upgrade Gentran:Server on the Primary Node:** Use the Setup program to install or upgrade Gentran:Server on the primary node in your system.
9	**Install/Upgrade the Options Pack:** Use the Options Pack Setup program to install or upgrade any Gentran:Server options you purchased on the primary node in your system. **Note** The product keys for installing the Gentran:Server Options Pack software are located on the packing list that was shipped with your Gentran:Server product or in the e-mail notifying you of the availability of the new version.
10	**Install/Upgrade Gentran:Server for RosettaNet** If you purchased Gentran:Server for RosettaNet, use the RosettaNet Setup program to install or upgrade on the primary node in your system.
11	**Install/Upgrade Other Extensions for Gentran:Server (for example, Extension for SAP R/3, Extension for Oracle):** If you purchased any Gentran:Server extensions, use the appropriate Setup program to install or upgrade on the primary node in your system.
12	**Install Gentran Standards:** If you selected Integration Components, use the Setup program to install Gentran Standards on the primary node in your system. (Continued on next page)

(Contd) Task	Description
13	**Create a New Resource for the Gentran Audit Notification Service:** Using the Cluster Administrator, create a new resource for Gentran Audit Notification, which depends on the File Share.
14	**Create a New Resource for the Gentran Mailbox Service:** Using the Cluster Administrator, create a new resource for Gentran Server Mailbox, which depends on the Audit Notification Service.
15	**Create a New Resource for the Gentran:Server Executive Service:** Using the Cluster Administrator, create a new resource for Gentran:Server Executive, which depends on the Gentran Server Mailbox Service.
16	**Create a New Resource for the Gentran Communications Service:** Using the Cluster Administrator, create a new resource for Gentran Server Communications (if installed in task 10, above), which depends on the Gentran Server Mailbox Service resource.
17	**Create a New Resource for the RosettaNet Server PIP Monitor Service:** Using the Cluster Administrator, create a new resource for RosettaNet PIP Monitor (if installed in task 11), which depends on the Gentran Audit Notification resource.
18	**Verify All Resources can be Brought Online:** Using the Cluster Administrator, bring all Gentran resources online to verify that all Gentran services can be started on the primary node of your system.
19	**Replicate the Registry on the other Node(s) in your System:** Using Cluster Administrator, move the Gentran Audit Notification service. This activity forces the replication of the registry (containing Gentran:Server entries) on the other nodes in the cluster. **Note** The move will report that the services fail and that this is not a problem because it forces the registry keys to the other nodes.
20	**Transfer Ownership of Cluster Resource to the other Node(s):** Log on to another node in the cluster and change the preferred owner to the node you are logged onto, take the Gentran Service resources offline, and move the group to the current node.
21	**Install Gentran:Server on Each Secondary Node:** Install the exact components installed on the primary node on each of the secondary nodes in your system including Gentran:Server, Option Pack components, Gentran Standards, Gentran:Server for RosettaNet, and any extensions. See the appropriate installation cards for more information. *(Continued on next page)*

(Contd) Task	Description
22	**Bring all Cluster Resources Online:** After installing Gentran:Server, bring all cluster resources online.
23	**Implement Security:** Specify the Gentran:Server security mode and add users to the system.
24	**Validate Installation:** Complete the steps in chapter 4, Post-installation Tasks, to validate your installation.

Installing Gentran:Server

Pre-installation Checklists

Introduction

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

Tip

We recommend that, prior to using this checklist, you make copies of it to make it easier to complete and refer to during the installation process, and so it is available for reuse.

Create new system checklist

The following is the pre-installation checklist for creating a new 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 Gentran:Server on the disk vault? **Reference** Use this information on the Destination Location dialog box.	X:\GENSRVNT
2	What do you want to name the new Gentran:Server system? **Reference** Use this information on the System Name dialog box.	GENSYS1
3	Where on the disk vault will the system data store reside? **Notes** ◗ Specify UNC pathname as \\CLUSTERNAME\Share. ◗ Use the cluster (virtual) name. **Reference** Use this information on the Data Store Location dialog box.	\\CLUSTERNAME\ GENSRVNT (Continued on next page)

(Contd) Number	Question	Your installation
4	Which ODBC data source name(s) will the system use? **Recommendation** Give the data source the same name as your database for consistency. **Reference** Use this information on the ODBC Data Source Name dialog box.	GentranDatabase
5	◗ For SQL Server, what is the name of your database? ◗ For Oracle, what is the service name or SQL*Net connect string (connection name)? **Reference** Use this information on the ODBC Server Setup dialog box when you configure your database.	GentranDatabase
6	Which database user logon do you want the install program to use to access the database? **Notes** ◗ 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. **Reference** Use this on the Database Logon dialog box.	

(Contd) Number	Question	Your installation
7	Which Gentran:Server components do you want to install on this cluster? **Note** The process controller component is installed by default on the primary Gentran system controller. **Reference** Use this information on the Optional Components dialog box.	◗ Client Access Components ◗ Integration Components
8	Which Windows user logon do you want the Gentran:Server Executive Service to use to log on the primary Gentran system controller? **Notes** ◗ This User ID must have access to the network resources that you want to use, including all nodes. ◗ This logon must have the advanced right "log on as a batch job" assigned to it on the local machine. ◗ The domain format is DOMAIN\User. **Reference** Use this information on the Windows Logon dialog box.	Use the local administrator logon with which you are currently logged on to the machine. **Note** All the Gentran:Server system components must reside in one domain.
9	Which database user logon do you want the Gentran:Server Executive Service to use to access the database? **Note** This database logon must have access to the Gentran:Server database tables. **Reference** Use this information on the Database Logon dialog box.	Use the local administrator logon with which you are currently logged on to the machine. (Continued on next page)

(Contd) Number	Question	Your installation
10	Which user do you want to be the default Gentran:Server local administrator? This allows access to Gentran:Server for the first time and to start and stop services. **Recommendation** The user name should be the same as that user's Windows logon. **Note** This user must also be set up in your database. You completed that task in the appendix in this manual that corresponds to your database management product. **Reference** Use this information on the Gentran:Server System Administrator dialog box.	Use the local administrator logon with which you are currently logged on to the machine.
11	Which database user name or user group name do you want to grant access to the database tables? **Note** This user/group must be a valid ID or the installation cannot be completed. ◗ For SQL Server, the ID must be a valid Windows user or group. ◗ For Oracle, the ID must be a valid user ID. (Windows groups are not recognized by Oracle). If the 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. **Recommendation** Perform this task during installation so you do not have to use your database management system to grant permissions after the install. **Reference** Use this information on the Database Access dialog box.	GENTRANUSERS *(Continued on next page)*

(Contd) Number	Question	Your installation
12	What do you want to name the program folder where the Gentran:Server icons are installed? **Reference** Use this information on the Program Folder Name dialog box.	Gentran Server

How to Install Gentran:Server on the Primary Node

Using the Gentran:Server Setup Program

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

Warning
We strongly recommend that you exit all 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 *forward* (next dialog box)	**Next**.
navigate *backward* (previous dialog box)	**Back**.

exit Setup	**Cancel**.
	
	System prompt
	Do you want to exit the Setup program now?
	
	◗ If *yes*, click **Exit Setup**.
	
	  Warning
	  If you exit the Setup program the installation will not be completed.
	
	◗ If *no*, click **Resume**.

Before you begin

Requirement
To complete the installation of a primary Gentran system controller, you must be logged on to Windows as a local administrator.

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

Note
If you ever need to uninstall Gentran:Server, see the *Administration Guide* for information about using the Gentran:Server Installation Setup program "Leave a system" option.

Procedure   Use this procedure to install the primary node for a Gentran:Server clustered system

Step	Action
1	If you are installing from CD-ROM, complete the following: a. Insert the Gentran:Server for Windows 5.1installation 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 3. c. Browse to your CD-ROM drive, select **Setup.exe**, and click **OK**. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.
2	If you are installing from the ESD Portal download, browse to the installation folder (created in Step 8 in the *Getting Started Guide* ESD download procedure) and run **setup.exe**. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 3.
3	Click **Next** to proceed with the Setup. **System response** The system asks you if you want to view the ReadMe.htm file.
4	Click **Yes** to view the ReadMe file and then close it when finished. **System response** Setup looks for installed components. Since there are no Gentran:Server components installed on your machine, you are prompted with the Installation Options dialog box. *(Continued on next page)*

(Contd) Step	Action
5	Select **Create a new Gentran:Server system** and click **Next**. **System response** Setup prompts you to complete the New Installation checklist if you have not already done so.
6	Click **Yes** to continue the install. **System response** The system displays the Destination Location dialog box.
7	To select the destination location, do the following: a. Click **Browse** to select the shared drive on the disk vault. b. Type **GENSRVNT** to install Gentran:Server in the default folder (GENSRVNT) folder. c. Click **OK** to exit the Browse dialog box and then click **Next**. **Notes** ◗ You determined this information in the checklist, **item 1** on page 3 - 9. ◗ The default installation folder for Windows is C:\GENSRVNT — change to install on the disk vault (for example, X:\GENSRVNT). **System response** You already created the GENSRVNT folder, but if the installation folder did not exist, Setup creates it. Setup displays the System Name dialog box. *(Continued on next page)*
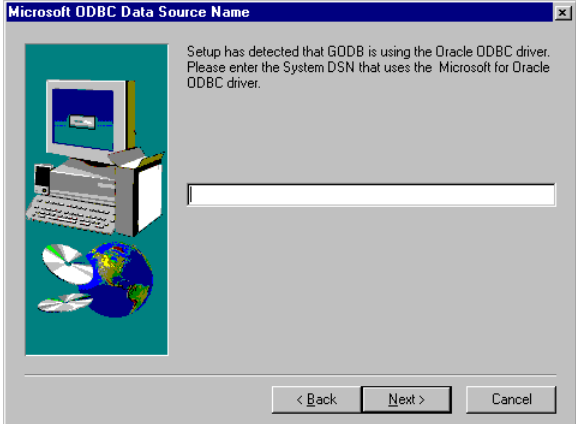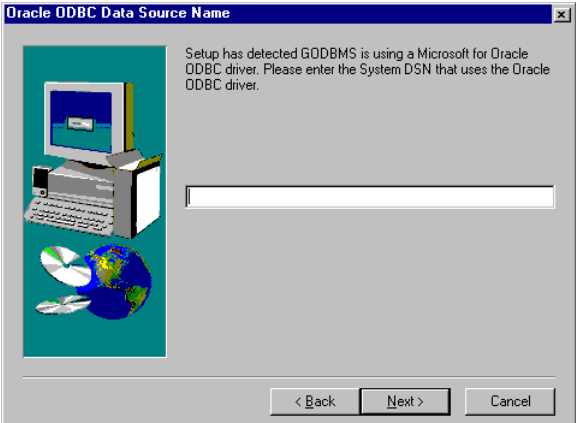
(Contd) Step	Action
8	Type the name of the new system and click **Next**. **Note** You determined the system name in the checklist, **item 2** on page 3 - 9. **System response** The system displays the Data Store Location dialog box. (Continued on next page)

(Contd) Step	Action
9	Select the data store location for this system (on the shared drive on the disk vault) by clicking on the cluster name in the list (rather than typing the location in the Path box manually, to ensure that the proper share is selected) and selecting the **GENSRVNT** folder. Click **Next**. **Recommendation** Use the GENSRVNT folder as the data store location. **Note** You determined the data store location in the checklist, **item 3** on page 3 - 9. **System response** Setup verifies that the specified drive or folder is shared and displays the ODBC Data Source Name dialog box.
10	Type the name of the ODBC data source that is used by Gentran:Server in this system and click **Next**. **Tip** Remember that the ODBC data source name is case-sensitive, so be sure to type your data source correctly. **Note** You determined the ODBC data source name in the checklist, **item 4** on page 3 - 10. **System response** Setup looks for the ODBC DSN that you selected. ◗ If it *finds* the DSN, you are prompted to make changes to the ODBC data source configuration. Continue with Step 12. ◗ If it does *not* find the DSN, you are prompted to create one. Continue with Step 11. (Continued on next page)

(Contd) Step	Action
11	Do you want to create the ODBC? ◗ If *no*, click **No** to return to the Select ODBC Data Source dialog box and select another data source (Step 10). ◗ If *yes*, click **Yes** and the system displays the ODBC Data Source Administrator dialog box. Continue with Step 12.
12	Do you want to change any ODBC DSN parameters? ◗ If *yes*, click **Yes**. **System Response** The ODBC Data Source Administrator dialog box is displayed. Continue with Step 13 to modify the data source. ◗ If *no*, click **No** and continue with Step 15.
13	Select the **System DSN** tab and click **Add**. For controllers, you must use a *system* DSN to allow the service to use the data source. **Recommendation** Use a System DSN because this enables any user on this machine and the Gentran:Server Executive Service to use this DSN. **System response** The system displays the Create New Data Source wizard.
14	From the driver list, select the ODBC driver for the database you want to use and click **Finish**. **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. **Reference** ◗ If you are using SQL, see page A-19. ◗ If you are using Oracle, see page B-11. *(Continued on next page)*

(Contd) Step	Action
15	To create the ODBC DSN using SQL Server, do the following. ◗ See page A-19 for information on how to configure a DSN. ◗ Save the SQL Server Setup and continue with Step 17. **Notes** ◗ 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 Gentran:Server.

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. *(Continued on next page)*

(Contd) Step	Action
16	Are you using an Oracle database? (See page B-11 for help setting up the DSNs.) ◗ If *yes* 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. Type the system DSN that uses the Microsoft for Oracle ODBC Driver and click **Next**. ◗ If *yes* 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. Type the system DSN that uses the Oracle ODBC Driver and click **Next**. ◗ If *no*, continue with Step 17. **System response** Setup displays the Database Logon dialog box. *(Continued on next page)*

(Contd) Step	Action
17	To log on to the database, complete the following. a. In the User ID box, type your database administrator logon. b. Type the appropriate password in the Password box. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ◗ 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 3 - 10. ◗ For the SQL Server User ID, you must use the SQL administrative logon with administrative rights on the Gentran:Server database. Otherwise, only the user that created the database tables can use those tables. **System response** If you previously installed and then uninstalled Gentran:Server, the system states that Setup has detected existing Gentran application tables in the selected ODBC data source, and if you proceed the existing tables will be replaced and any data in them will be lost. Click **Yes** to proceed (any data in these tables will be lost). Setup displays the Optional Components dialog box.
18	Select the components you want to install by clicking the appropriate check boxes. Click **Next**. **Notes** ◗ You determined this information in the checklist, **item 7** on page 3 - 11. ◗ We recommend that you install all components. The Process Controller components are automatically installed on the primary Gentran system controller. **System response** Setup displays the Windows Logon dialog box.

(Contd) Step	Action
19	To log on to Windows (for Gentran:Server Executive Service access), complete the following: a. In the User ID box, type a Windows User ID, preceded by *domainname\\.* b. In the Password box, type the Windows password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ▶ You determined which logon is used in the checklist, **item 8** on page 3 - 11. ▶ You need to enter a valid administrative user ID and password that the Gentran:Server Executive Service uses to access network resources. This is the Windows user account that starts the 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. **System response** Setup displays the Database Logon dialog box.
20	To log on to the database (for Gentran:Server Executive Service access), complete the following: a. In the User ID box, type the database User ID that is set up with the required access to the database. b. In the Password box, type the password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ▶ You determined this logon in the checklist, **item 9** on page 3 - 11. ▶ This logon enables the Gentran:Server Executive Service to access and manipulate information in the database tables. Gentran:Server uses this logon every time it accesses the database tables. ▶ You must enter a valid database administrative logon that is already set up with access to the Gentran:Server database tables. **System response** Setup displays the Gentran:Server System Administrator dialog box.

(Contd) Step	Action

21	To log on as the Gentran:Server System Administrator, complete the following:
	
	a. In the User ID box, type the Gentran:Server administrative user ID.
	
	    Note
	    This user must also have valid Windows and database logons.
	
	b. In the Password box, type the password for that user ID.
	
	c. Type the password again in the Confirm box to validate it.
	
	d. Click **Next**.
	
	Notes
	◗ You determined which user logon to use for the Gentran:Server local administrator in the checklist, **item 10** on page 3 - 12.
	
	◗ The Setup program creates this Gentran:Server administrative user.
	
	System response
	Setup displays the Database Access dialog box, which allows you to grant access to the Gentran:Server database tables to a user or group of users that you have already set up with your database management program.
	
	(Continued on next page)

(Contd) Step	Action
22	To grant access to the Gentran:Server database tables to the group of users you created, type **GENTRANUSERS** and click **Next**. **Notes** ◗ You determined this group in the checklist, **item 11** on page 3 - 12. ◗ This user/group must be a valid ID or the installation cannot be completed. ◗ For SQL Server, the ID must be a valid Windows user or group. ◗ For Oracle, the ID must be a valid user ID. (Windows groups are not recognized by Oracle.) If the 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. **System response** ◗ If you selected to install Client Access Components or Integration Components and if Setup cannot detect a Gentran:Server program folder, 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. Continue with Step 23. ◗ If you did not select to install Client Access Components and/or Integration Components, Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks if you want to proceed. Continue with Step 26.
23	Accept the default program folder name **Gentran Server** and click **Next**. **Note** You determined this information in the checklist, **item 12** on page 3 - 13.
	(Continued on next page)

(Contd) Step	Action

24	Did you select to install Integration Components?
	
	◗ If *yes*, continue with Step 25.
	
	    System Response
	    Setup displays a message asking what default data format you want to use for new maps and new fields.
	
	◗ If *no*, continue with Step 26.
	
	    System response
	    Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks if you want to proceed.

25	Do you want to use free format? ◗ 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. **Notes** ◗ When you create a new map or a new field, 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. **System response** Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks if you want to proceed. (Continued on next page)

(Contd) Step	Action
26	Do you want to proceed? ◗ Click **No** to return to the Database Access dialog box if the program folder is unknown (Step 23) or return to the Select Program Folder dialog box if the program folder is known (Step 23). ◗ Click **Yes** to proceed with the installation (continue with Step 27). **System response** Setup builds the 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 (if Client Access Components or Integration Components were selected). Setup displays the Audit Log Purge dialog box.
27	Accept the default and click **Finish**. **System response** Setup asks you if you want to start Gentran:Server services now. *(Continued on next page)*

(Contd) Step	Action

28	Do you want to start Gentran:Server services now?
	
	Click **No** because the Gentran services should be controlled from the Cluster Administrator. The services will be tested later in the installation process (Step 40).
	
	Reference
	See the *Administration Guide* for more information about starting Gentran:Server services.
	
	System response
	◗ If no errors occurred, Setup continues with Step 30.
	◗ If errors occurred, Setup reports the errors. See *InstallShield Error Messages* on page C - 6 for a list of the Install Shield error messages.
	
	    Note
	    If the 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.
	
	Setup then determines whether any shared DLLs were locked. Continue with Step 29.

29	Are any shared DLLs locked?
	
	◗ If *yes*, Setup asks if you want to reboot the machine now or later. Do one of the following:
	
	    — 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.
	
	    Warning
	    Be certain that you have saved your work in any open applications prior to rebooting the machine.
	
	    Note
	    Ensure that failback is initiated and the node on which you are installing Gentran:Server is set to "Preferred Owner" in Cluster Administrator.
	
	◗ If *no*, continue with Step 30.
	
	Reference
	See your Microsoft documentation for more information about using Cluster Administrator.
	
	 (Continued on next page)

(Contd) Step	Action
30	Did you install Integration Components? ◗ If *yes*, you are prompted to install the Gentran Standards. Click **OK** to acknowledge this message. See the appropriate Gentran:Server Standards installation card for information about installing the Gentran Standards. ◗ If *no*, continue with Step 31. **System response** Setup states that, if you need to configure e-mail notifications, you will need to configure the MAPI profile to be used. Click **OK**. **Reference** Refer to the Gentran:Server documentation specified in the message box for more information.
31	Click **OK** to exit Setup. You have completed the Setup program to create a new primary Gentran system controller in a clustered system.
32	Install the necessary Options Pack optional components and any additional Option Pack components you have purchased. **Reference** See the *Options Pack Installation Card* for more information about how to install Gentran:Server optional components.
33	Install Gentran:Server for RosettaNet, if you have purchased this software. **Reference** See the *Gentran:Server for RosettaNet Installation Card* for more information about how to install Gentran:Server for RosettaNet.
34	Install any other Gentran:Server Extensions (for example, the Extension for SAP R/3) you purchased. **Reference** See the appropriate installation card for specific instructions.
35	Using the Cluster Administrator, create a new resource for Gentran Audit Notification, which depends on the File Share. Set the Root Registry Key to **SOFTWARE\STERLING COMMERCE** and click **OK**. Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters. **Reference** See your Windows documentation for more information about using the Cluster Administrator to create a new resource. *(Continued on next page)*

(Contd) Step	Action
36	Using the Cluster Administrator, create a new resource for Gentran Server Mailbox, which depends on the Audit Notification Service. Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters. **Reference** See your Windows documentation for more information about using the Cluster Administrator to create a new resource.
37	Using the Cluster Administrator, create a new resource for Gentran:Server Executive, which depends on the Gentran Server Mailbox Service. Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters. **Reference** See your Windows documentation for more information about using the Cluster Administrator to create a new resource.
38	Using the Cluster Administrator, create a new resource, if appropriate, for the Gentran Server Communications service, which depends on the Gentran Server Mailbox resource. Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters. **Reference** See your Windows documentation for more information about using the Cluster Administrator to create a new resource.
39	If you installed Gentran:Server for RosettaNet, using the Cluster Administrator, create a new resource for RosettaNet Server PIP Monitor, which depends on the Gentran Audit Notification resource. Use **Resource Type = Generic Service** and use the **Net Start** command for the Start Parameters. **Reference** See your Windows documentation for more information about using the Cluster Administrator to create a new resource. *(Continued on next page)*

(Contd) Step	Action
40	Using the Cluster Administrator, verify that all Gentran resources can be brought online. **Reference** See your Windows documentation for more information about starting services. **Note** If the Mailbox service fails to start after the installation, the security permissions for the DCOM Gentran Audit Notification Application may need to be modified to include the user for the Gentran service account for the "Allow Access" and "Allow Launch." It is possible that due to network configurations, any change to DCOM may need to be made at the Default Security level for DCOM.
41	Using the Cluster Administrator, take the cluster resources created for all the Gentran resources offline except the File Share resource and the Gentran Audit Notification resource. Then, move the group, which contains the Gentran Audit Notification resource. This forces the replication of the registry. Repeat this process to move the group to all nodes in the cluster so the registry is replicated to each node. **Note** The move will report that the Gentran Audit Notification resource fails. This is not a problem. **Reference** See your Windows documentation for more information about using the Cluster Administrator for registry replication.
42	Log on to another node in the cluster and change the preferred owner to the node you are logged on to. Take the Gentran Service resources offline and move the group to the current node.
43	Use the Setup program to install Gentran:Server on the next node in your system. Repeat until Gentran:Server is installed on all nodes in the cluster. **Reference** See *How to Install Gentran:Server on Secondary Nodes* on page 3 - 32 for more information.

How to Install Gentran:Server on Secondary Nodes

Requirements

◗ You must be logged on to Windows as a local administrator.

◗ You must verify that the node on which you are installing Gentran:Server is the current owner of the cluster resources.

Note
If you ever need to uninstall Gentran:Server, see the *Administration Guide* for information about using the Gentran:Server Installation Setup program "Leave a system" option.

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

Procedure   Use this procedure to install Gentran:Server on each secondary node in a clustered system

Step	Action
1	Verify that the node on which you are installing Gentran:Server is the current owner of the cluster resources.
2	If you are installing from CD-ROM, complete the following: a. Insert the Gentran:Server for Windows 5.1 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**. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4.
3	If you are installing from the ESD Portal download, browse to the installation folder (created in Step 8 in the *Getting Started Guide* ESD download procedure) and run **setup.exe**. **System Response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4.
4	Click **Next** to proceed with the Setup. **System response** The system asks you if you want to view the ReadMe.htm file. (Continued on next page)

(Contd) Step	Action
5	Click **Yes** to view the ReadMe file and then close it when finished. **System response** Setup looks for installed components and displays a dialog box asking if you want to make this machine a secondary node in a clustered Gentran:Server system.
6	Click **Yes**. **Note** If you did not transfer ownership of the cluster resources (change the preferred owner to the node you are logged onto, take the Gentran Service resources offline, and move the group to the current node), Setup informs you that a connection cannot be established. **System response** Setup displays the Windows Logon dialog box.
7	To log on to Windows (for Gentran:Server Executive Service access), complete the following. a. In the User ID box, type a Windows user ID, preceded by *domainname\\.* b. In the Password box, type the password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **Notes** ◗ You need to enter a valid administrative user ID and password that the Gentran:Server Executive Service uses to access network resources. This is the Windows user account that starts the 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. ◗ You determined which logon is used in the checklist, **item 8** on page 3 - 11. **System response** Setup displays a dialog box stating that it is ready to install the Gentran:Server components you selected and asks if you want to proceed.
8	Click **Yes** to proceed with the installation. **System response** Setup checks the validity of the values obtained from the replicated registry and installs the services, building on the work already completed by Setup when you installed Gentran:Server on the primary node.

(Contd) Step	Action
9	Did you install Integration Components? ◗ If *yes*, you are prompted to install the Gentran Standards. Click **OK** to acknowledge this message. See the appropriate Gentran:Server Standards card for information about installing the Gentran Standards. ◗ If *no*, continue with Step 10. **System response** Setup states that, if you need to configure e-mail notifications, you will need to configure the MAPI profile to be used. Click **OK**. **Reference** Refer to the Gentran:Server documentation specified in the message box for more information.
10	Do you want to start Gentran:Server services now? Click **No** because the Gentran services should be controlled from the Cluster Administrator. The services will be tested later in the installation process (Step 14). **Reference** See the *Administration Guide* for more information about starting Gentran:Server services. ◗ If no errors occurred, continue with Step 12. ◗ If errors occurred, Setup reports the errors. See *InstallShield Error Messages* on page C - 6 for a list of the Install Shield error messages. **Note** If the Windows User ID you entered in Step 6 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. Setup then determines if any shared DLLs were locked. Continue with Step 11. (Continued on next page)

(Contd) Step	Action

11	Are any shared DLLs locked?
	
	◗ If *yes*, Setup asks if you want to reboot the machine now or later. Do one of the following:
	
	   — 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.
	
	Warning
	Be certain that you have saved your work in any open applications prior to rebooting the machine.
	
	Note
	Ensure that failback is initiated and the node on which you are installing Gentran:Server is set to "Preferred Owner" in Cluster Administrator.
	
	◗ If *no*, continue with Step 12.
	
	Reference
	See your Microsoft documentation for more information about using Cluster Administrator.

12	Click **OK** to exit Setup. You have completed the Setup program.
13	Install the same components on this node that you installed on the primary node in the cluster. ◗ Option Pack Options ◗ Gentran:Server for RosettaNet ◗ Gentran:Server Extensions
14	After installing Gentran:Server, bring all cluster resources online.
15	Install Gentran:Server and all components on the next node in your system. Repeat until Gentran:Server is installed on all nodes in the cluster.

Upgrading Gentran:Server

How to Upgrade your Gentran:Server Clustered Installation

Introduction   Use the **Upgrade your existing installation** option on every machine in your Gentran:Server system when you receive upgrades to the Gentran:Server software. In a clustered environment, you *must* upgrade the primary Gentran system controller *first*.

Notes
◗   To complete the installation of a clustered system, you must be logged on to Windows as a local administrator.

◗   If you ever need to uninstall Gentran:Server, see the *Administration Guide* for information about using the Gentran:Server Installation Setup program "Leave a system" option.

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

You can stop IIS by stopping the **World Wide Web Publishing Service** and the **IIS Admin Service** from the Services dialog box (select each service from the list and click **Stop**). If you are running a Windows 2000 or Windows 2003 operating system, 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 Gentran:Server for RosettaNet and are upgrading from Gentran:Server for Windows 3.x to 5.1, there are tasks you will need to perform after installing Gentran:Server for Windows 5.1 and Gentran:Server for RosettaNet 5.1, and you should allot time to complete these post-installation tasks.

Reference
See How to Upgrade Gentran:Server for RosettaNet in the *Gentran:Server for RosettaNet Installation Card* for more information about 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 accidently unplugged

◗   the network failing

◗   a power outage

Backing up your database prior to upgrade

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

Upgrading a test machine

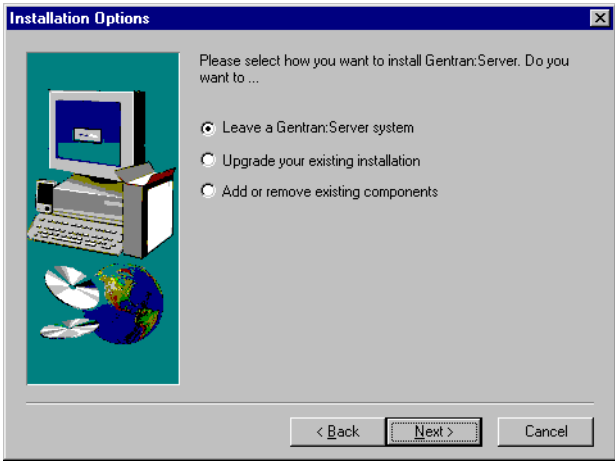Prior to upgrading Gentran:Server in your production environment, we recommend that you upgrade the system on a test machine first, then migrate to your production system.

Procedure

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

Use this procedure to upgrade Gentran:Server.

Step	Action
1	If you applied any hotfixes provided by Customer Support to your Gentran:Server system, check the modified date of the hotfix against the release date of the version to which you are upgrading. If the hotfix version date is newer than the release date, you must manually remove the hotfix. If an upgrade file date is earlier or the same as the existing file date, that file is not copied. If the upgrade file date is later than the existing file date, the file is overlaid with the newer file.
2	If you are installing from CD-ROM, complete the following: a. Insert the Gentran:Server for Windows 5.1 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**. **Warnings** ▶ You must run the Setup program on the machine that you want to upgrade Gentran:Server. ▶ In a clustered environment, you must upgrade the primary Gentran system controller first, and then upgrade each additional machine. ▶ If you have Gentran:Server for RosettaNet installed, see the prerequisite warning in *Gentran:Server for RosettaNet prerequisite* on page 3 - 36. **System response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4. *(Continued on next page)*

(Contd) Step	Action
3	If you are installing from the ESD Portal download, browse to the installation folder (created in Step 8 in the *Getting Started Guide* ESD download procedure) and run **setup.exe**. **Warnings** ‣ You must run the Setup program on the machine that you want to upgrade Gentran:Server. ‣ In a clustered environment, you must upgrade the primary Gentran system controller first, and then upgrade each additional machine. ‣ If you have Gentran:Server for RosettaNet installed, see the prerequisite warning in *Gentran:Server for RosettaNet prerequisite* on page 3 - 36. **System response** Setup begins. The system displays the Welcome dialog. The installation wizard guides you through the installation process. Continue with Step 4.
4	Click **Next**. **System response** Setup asks you if you want to view the ReadMe.htm file.
5	Click **Yes** to view the file and then close it when finished. **System response** Setup continues the installation process.
6	Are you are running the Gentran:Server Executive, Gentran:Server Mailbox, Gentran:Server Communications service, and/or Gentran Audit Notification service? ‣ If *yes*, the system prompts you to stop the services so installation can proceed. Click **Yes** to stop each service and continue with Step 7. ‣ If *no*, continue with Step 7. **Notes** ‣ If you have the 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. (Continued on next page)

(Contd) Step	Action
7	Click **Next**. **System response** The Setup program looks for and finds installed components and does one of the following: ◗ Setup displays a dialog box stating that it detected an older version of Gentran:Server and asks if you would like to upgrade to the new version. Continue with Step 8. ◗ Setup displays the Installation Options dialog box. Continue with Step 9.
8	Click **Yes** to upgrade to the new version of Gentran:Server for Windows. Continue with Step 10. **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: ◗ Read the installation instructions ◗ Successfully backed up your Gentran:Server files ◗ Successfully backed up your Gentran:Server database
9	Select **Upgrade your existing installation** and click **Next** to proceed with the Setup. Continue with Step 10. **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: ◗ Read the installation instructions ◗ Successfully backed up your Gentran:Server files ◗ Successfully backed up your Gentran:Server database *(Continued on next page)*

(Contd) Step	Action
10	Do you want to proceed? ◗ If *yes*, click **Yes** to proceed with the installation. Continue with Step 11. ◗ If *no*, click **No** to return to the Installation Options dialog box to select another installation option (Step 8).

11	Are you are upgrading the primary Gentran system controller?
	
	◗ If *yes*, specify the system name of the primary controller. Continue with Step 12.
	
	   System Response
	   Setup locates the system you specified and displays the Windows Logon dialog box.
	
	◗ If *no*, continue with Step 15.

12	In this dialog box, you need to enter the user ID and password that the Gentran:Server Executive Service uses to access network resources. This is the Windows user account that starts the Gentran:Server Executive Service and is also used for unattended processing. a. In the User ID box, type a Windows User ID that is setup with the required access to the network. The format is *DOMAIN\User* for a domain account and *.\User* for a non-domain account. b. In the Password box, type the password for that user ID. c. Type the password again in the Confirm box to validate it. d. Click **Next**. **System Response** Setup displays the Database Logon dialog box. (Continued on next page)

(Contd) Step	Action
13	In this logon dialog box, you need to enter the administrative database logon that Setup uses to build the database tables. 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**. **Notes** ◗ For the SQL Server user ID, you must use the SQL administrative logon with administrative rights on the Gentran:Server database. Otherwise, only the user that created the database tables can use those tables. ◗ If this Gentran:Server system is installed with Oracle, you must use the schema owner of the tables so the schema will not change. **System response** Setup asks you if you want to be HIPAA-compliant.

14	Do you want to be HIPAA-compliant?
	
	◗ If *yes*, click **Yes** and Setup will install the appropriate components. Continue with Step 15.
	
	   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 Gentran:Server system and store it in a secure location.
	
	◗ If *no*, click **No** and continue with Step 15.
	
	Note
	Gentran:Server for Windows 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.
	
	Reference
	See the *HIPAA and NCPDP Compliance Guide* for more information about using HIPAA with Gentran:Server.
	
	 (Continued on next page)

(Contd) Step	Action

15	Did you select to install Integration Components and are upgrading from a pre-5.0 Gentran:Server system to a 5.x system?
	
	◗ If *yes*, continue with Step 16.
	
	    System Response
	    Setup asks what default data format you want to use for new maps and new fields.
	
	◗ If *no*, continue with Step 17.
	
	    System response
	    Setup asks you if you want to proceed with the upgrade.

16	Do you want to use a free format? ◗ 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. **Notes** ◗ When you create a new map or a new field, 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. **System response** Setup asks you if you want to proceed with the upgrade.

(Contd) Step	Action
17	Click **Yes** to proceed with the upgrade. **System response** Setup performs the following: ◗ 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 **Note** Depending on the size of your database, the upgrade process may last anywhere from a few minutes up to a couple of hours.

18	Did any errors occur?
	
	 ◗ If no errors occurred, Setup informs you that the upgrade installation is complete. Continue with Step 20.
	
	 ◗ If errors occurred on the primary Gentran 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 19.
	
	     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.
	
	     Warning
	     You should attempt to fix the cause of the failure (for example, database crash or network down) prior to running Setup again.
	
	 ◗ If errors occurred on a secondary controller or user interface client, Setup reports the errors and informs you that the installation is complete. Continue with Step 20.
	
	     Reference
	     See *Installation Troubleshooting,* appendix C, for a list of the Install Shield error messages.
	
	  (Continued on next page)

(Contd) Step	Action
19	Did Setup prompt you that any shared DLLs are locked? Do one of the following: ◗ If *yes*, Setup asks you whether you want to reboot the machine now or later. — If *yes*, select **Yes, I want to restart my computer now** and click **OK** to reboot the machine. **Warning** Be certain that you have saved your work in any open applications prior to rebooting the machine. — If *no*, select **No, I will restart my computer later** and click **OK** to terminate the Setup program. ◗ If *no*, continue with Step 20. **System response** Setup asks you if you want to restart the services that Setup stopped. **Note** When you upgrade Gentran:Server, any Gentran services that are not included in the core install (such as RosettaNet Service) will not start until you upgrade that service.
20	Do you want to start the services that Setup stopped now? ◗ If *yes*, click **Yes**. ◗ If *no*, click **No**. You will need to restart the services manually later. **Reference** See the *Administration Guide* for more information about starting Gentran:Server services. **System response** Setup states that, if you loaded Integration Components, you will need to install the appropriate Gentran:Server standards, as well. **Reference** See the appropriate Gentran:Server standards installation card for more information.
21	Click **OK**. **System response** Setup states that, to configure e-mail notification, you must configure the MAPI profile to be used. **Reference** See the *MAPI Gateway Configuration Guide* for more information. (Continued on next page)

(Contd) Step	Action
22	Click **OK**. **System response** Setup states that, if you previously installed optional components, you will need to upgrade those components. **Reference** See the *Options Pack Installation Card* for more information.
23	Click **OK**. **System response** The system warns you that if you have any Gentran:Server extensions or gateways installed on your system, you may need to upgrade those to be compliant with the latest Gentran:Server release. **Reference** See your extension installation documentation or the *Options Pack Installation Card* for more information.
24	Click **OK** to exit Setup. **System response** Setup states that installation is complete. **Note** If you upgraded Integration components, you are prompted to load the Gentran Standards.
25	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. **Reference** See the *Options Pack Installation Card* for more information on how to install Gentran:Server optional components.
26	Complete the upgrade process on each node in your clustered system.

Post-installation Tasks

Contents

Introduction

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

How to Start the Gentran:Server System

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

Notes

◗   You must have Windows administration privileges and Gentran:Server administration privileges to start the system.

◗   If you have installed 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 Gentran:Server until the screen saver is activated.

Procedure   Use this procedure to start the Gentran:Server system.

Reference
See How to Start the System in the *Administration Guide* for information about stopping the system.

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

(Contd) Step	Action
3	Does the Controller box contains the name of your primary system controller? ◗ If *yes*, continue with Step 4. ◗ If *no*, 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	Click **Start** next to Gentran:Server Executive (primary system controller) to initiate the Gentran:Server Executive and start the system. **System response** The Gentran:Server system is now started and the Start buttons for Gentran Poller and Gentran Scheduler are displayed once the Gentran:Server Executive starts correctly.
5	Do you want the Gentran:Server Executive Service to start on the selected controller when the Windows system starts? ◗ If *yes*, select the Auto start check box to the right of the Gentran:Server Executive enabler. ◗ If *no*, continue with Step 6.
6	Verify that the services on which the 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 Gentran:Server Executive: ◗ Gentran Audit Notification service ◗ Gentran:Server Mailbox service ◗ Gentran:Server Communications service (if installed) **Warning** Exercise caution in changing dependencies—be certain that you are modifying the appropriate dependencies. **Reference** See System Administrator Functions in the *Administration Guide* for more information about which services the Gentran:Server Executive Service depends on. (Continued on next page)

(Contd) Step	Action
7	Do you want to start the Gentran Poller service? ◗ If *yes*, click **Start** next to Gentran Poller. ◗ If *no*, continue with Step 8. **Note** You can set the Gentran Poller to automatically start when the Gentran:Server Executive is started. You can also specify the interval at which Gentran Poller polls the system. **Reference** See How to Change Controller Settings in the *Administration Guide* for more information about automatically starting the Gentran Poller and setting a polling interval.
8	Do you want to start the Gentran Scheduler service? ◗ If *yes*, click **Start** next to Gentran Scheduler. ◗ If *no*, continue with Step 9. **Note** You can set the Gentran Scheduler to automatically start when the Gentran:Server Executive is started. You can also specify the interval at which Gentran Scheduler checks for scheduled events. **Reference** See How to Change Controller Settings in the *Administration Guide* for more information about automatically starting the Gentran Scheduler and setting a scheduling interval.
9	Do you have additional controllers in your system? ◗ If *yes*, continue with Step 10. ◗ If *no* continue with Step 13.
10	In the Controller box, type the name of the secondary controller or click **Browse** to select the name. **System response** The Choose Network Server dialog box is displayed. Select the appropriate controller and click **OK**.
11	To access the settings and start/stop controls for the chosen controller, click **Select**.
12	Complete Steps 4 through 9.
13	Click **OK** to exit the System Configuration program.

Next step   Continue with *How to Implement Security* on page 4 - 7 to continue your implementation of 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. 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 - 14.

Specifying the security mode

Use the System Configuration program to specify the security mode.

Reference

See System Configuration—System Tab in the *Administration Guide* for more information about changing the security mode

Recommendation

Set the security modes for 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 Gentran:Server users to the system.

Reference

See How to Add a New User in the *Administration Guide* for more information on creating new Gentran:Server users.

Next step

You need to configure the modem on every communications controller. Continue with *How to Implement Communications* on page 4 - 8.

How to Implement Communications

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

Reference
See Configuring Communications in the *Communications User's Guide* for more information on performing these tasks.

Next step   After you implement communications, you need to validate your Gentran:Server installation by following the instructions in *How to Validate your Gentran:Server Installation* on page 4 - 9.

How to Validate your Gentran:Server Installation

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

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

Step	Action
1	**Verify Permissions for Database Tables:** Use your database management system to verify that all of the permissions were set correctly during the Gentran:Server installation. **Reference** See your database management system documentation for specific instructions.
2	**Verify configuration settings:** a. Select the **System Configuration** program from the 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. **Reference** See How to Change Controller Settings in the *Administration Guide* for more information about modifying configuration settings.
3	**Register tutorial translation objects:** Register the following Application and Forms Integration ANSI tutorial translation objects that we provide in the TUTORIAL subfolder under the folder where Gentran:Server is installed. ◗ 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.) **Reference** See How to Register a New Translation Object in the *User's Guide* for more information. *(Continued on next page)*

(Contd) Step	Action
4	**Import tutorial partner relationship:** Import the PETZONE.PAR partner relationship that we provide in the TUTORIAL folder. **Reference** See How to Import a Partner Profile in the *User's Guide* for more information.

5	**Perform an import operation:**
	Use this procedure to perform an import operation using the Application Integration ANSI tutorial data.
	
	a. Verify (in Partner Editor) that the **PET X 3030 810 Import** translation object is selected for the Outbound Relationship.
	
	   Reference
	   See How to Create a New Outbound Relationship in the *User's Guide* for more information about selecting outbound translation objects.
	
	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.
	
	   Reference
	   See How to Define a New Import Specification in the *Administration Guide* for more information about defining import specifications. Use this procedure to define the import specification.
	
	c. Use the **Import** option in Gentran:Server to process the data file (PET_810.TXT) through the translation object.
	
	   Note
	   The data file is located in the TUTORIAL subfolder under the folder where Gentran:Server is installed.
	
	   Reference
	   See the How to Export a Document section in the *User's Guide* for more information about importing files.
	
	d. After the document is translated, it is moved to the Workspace in Gentran:Server. View the EDI data to ensure that the document was translated correctly.
	
	   Reference
	   See How to View a Document in the *User's Guide* for more information about viewing raw EDI data.
	
	(Continued on next page)

(Contd) Step	Action
6	**Perform a process file operation:** Use this procedure to perform an export operation using the Application Integration ANSI tutorial data. a. Verify (in Partner Editor) that the **PET X 3030 850 Export** translation object is selected for the Inbound Relationship. **Reference** See How to Create a New Inbound Relationship in the *User's Guide* for more information about selecting inbound translation objects. b. Use the **Process File** option in Gentran:Server to process the data file (PETTEST.INT) through the translation object. The data file is located in the TUTORIAL folder. **Reference** See How to Process Data Files in the *User's Guide* for more information about processing files.
7	**Perform an export operation:** After the document in Step 5 is translated, it is moved to InDocuments in Gentran:Server. Export the document to ensure that it was translated correctly. **Reference** See How to Export a Document in the *User's Guide* for more information about exporting files.
8	**Verify access to Document Editor:** Complete the steps in How to Create a New Document in the *User's Guide* to verify that you can access the Document Editor. **Note** You do not actually need to complete the document—you can exit the Document Editor after the document is displayed.
9	**Verify access to Process Control:** Select **Process Control** from the Gentran:Server **Tools** menu to verify that you can access Process Control.
10	**Verify access to Application Integration and EDI Standards (only if you installed Application Integration):** 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 *Application Integration User's Guide* to verify that you can access EDI standards. *(Continued on next page)*

(Contd) Step	Action
11	**Verify Access to the Notification Log:** a. Verify access to the 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 *Administration Guide* to set up notification parameters.

SQL Server 2000 Setup

Overview

Introduction

Overview

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 Gentran:Server data). This relational database enables multiple users to access the same data.

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 installation *only* when installing SQL Server for the first time.

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

◗ Create the database that contains the Gentran:Server tables. (These database tables are built during the Gentran:Server installation.)

◗ Add users to your database management system and give them permission to access the Gentran:Server database.

◗ Configure the ODBC data source name (DSN) for use with your database.

The steps that you need to perform to complete these tasks 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 *Getting Started Guide* for more information about the required software that is
                           certified for use with Gentran:Server.

SQL Server space   SQL Server 2000 requires more available hard disk space than the previous versions. The
requirement   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 about 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 local 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 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 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 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 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 Gentran:Server database to use.

How to Configure SQL Server for Use with Gentran:Server

Introduction   Prior to installing Gentran:Server, you must create the database that contains the Gentran:Server tables. These database tables are built during the 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.
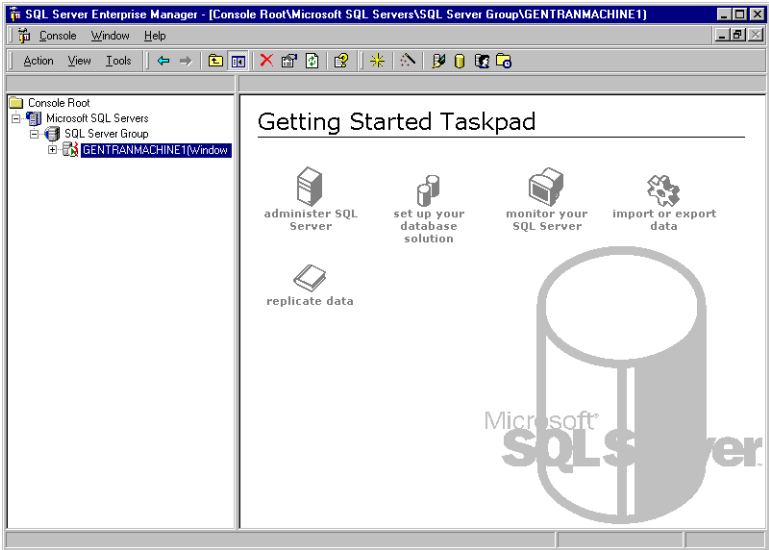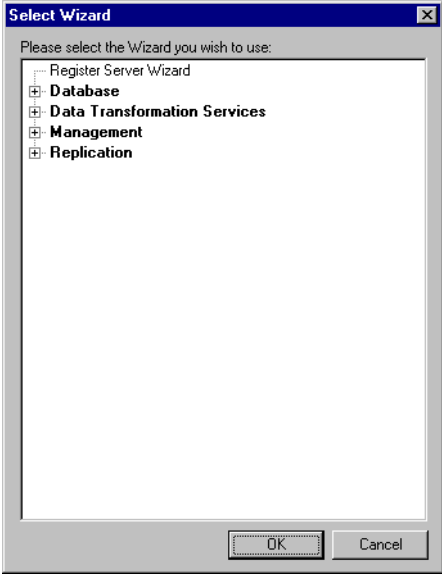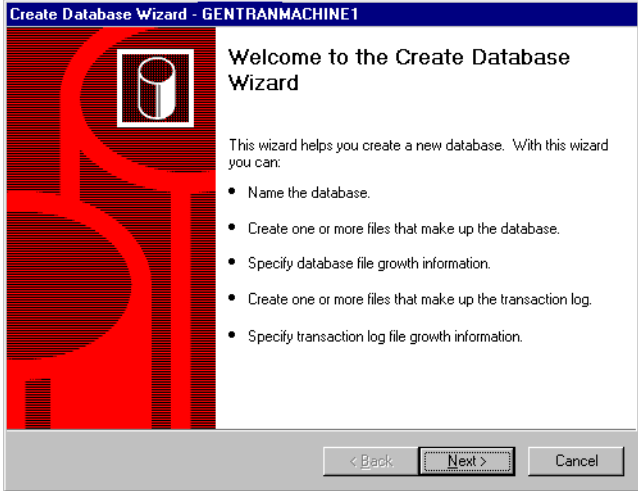
Number	Question	Your installation
1	What is the name of the database? **Recommendation** Name the database the same name as your data source for consistency.	GentranDatabase
2	What is the name of the Windows user group that needs permission to access the database? **Reference** This is the user group that you created in chapter 2 or chapter 3 of this manual.	GENTRANUSERS

Procedure Use this procedure to configure SQL Server and create your database.
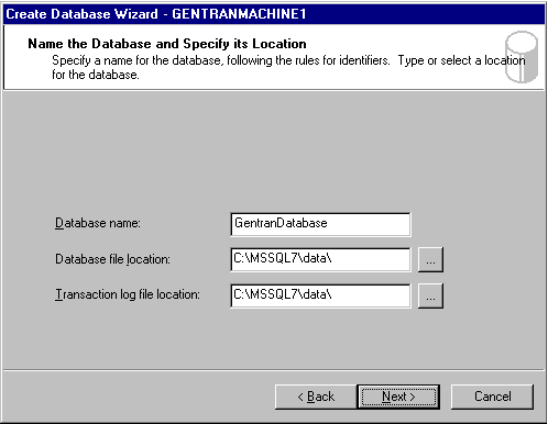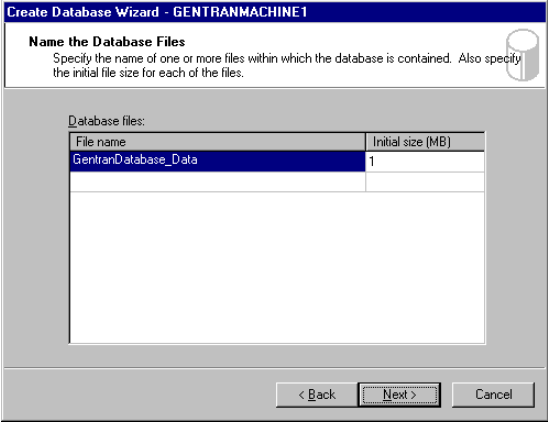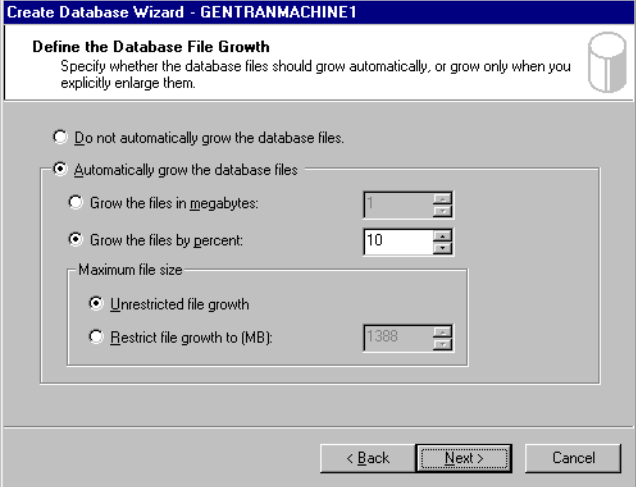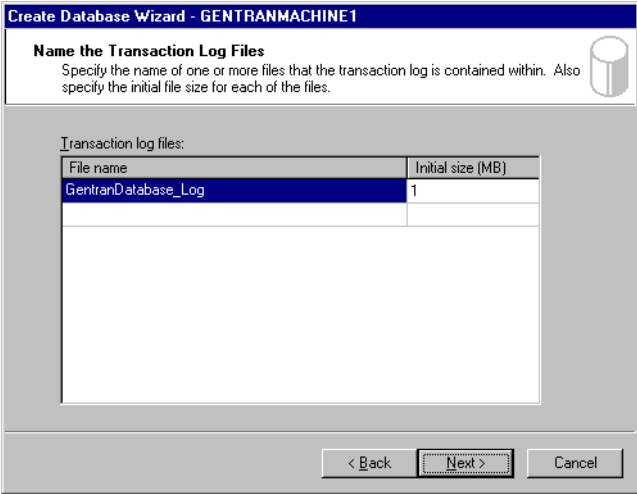
Note
The steps you need to perform are specific to the version of SQL Server. If you are using another version, the tasks will vary. This is a sample installation.

Step	Action
1	From the **Start** menu, select **Programs > Microsoft SQL Server > Enterprise Manager**. **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.
2	Expand the **SQL Server Group** node and select your machine name. *(Continued on next page)*
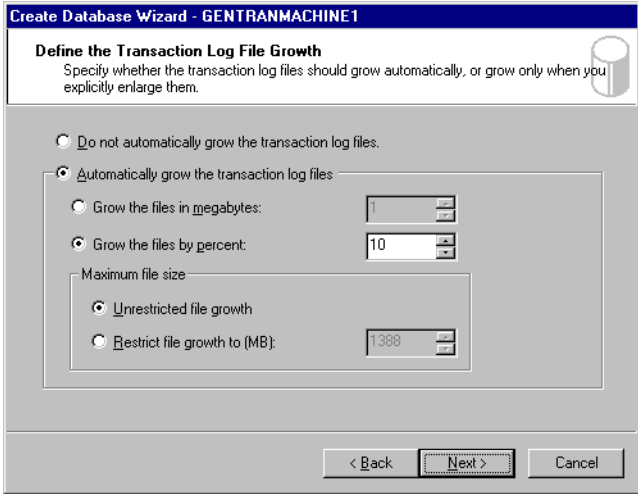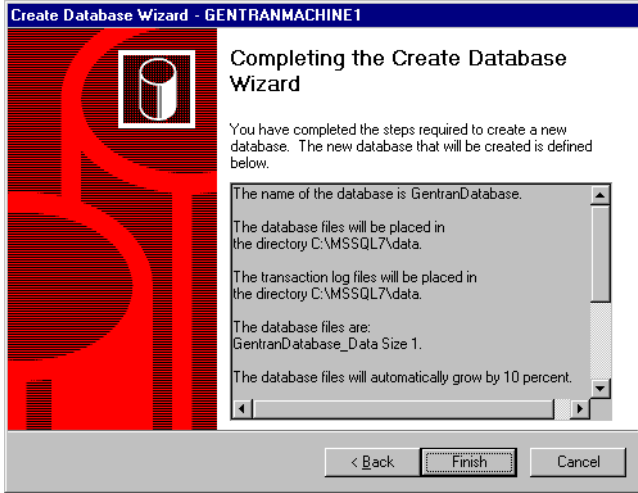
(Contd) Step	Action
3	From the **Tools** menu, select **Wizards**. **System response** The Select Wizard dialog box is displayed. ![Select Wizard dialog box] Select Wizard Please select the Wizard you wish to use: Register Server Wizard Database Data Transformation Services Management Replication OK Cancel
4	Expand the **Database** node. Select **Create Database Wizard** and click **OK**. **System response** The Create Database Wizard dialog box is displayed. ![Create Database Wizard dialog box] Create Database Wizard - GENTRANMACHINE1 Welcome to the Create Database Wizard This wizard helps you create a new database. With this wizard you can: • Name the database. • Create one or more files that make up the database. • Specify database file growth information. • Create one or more files that make up the transaction log. • Specify transaction log file growth information. < Back Next > Cancel

(Continued on next page)

(Contd) Step	Action
5	Click **Next**. **System response** The Create Database Wizard - Name the Database and Specify its Location dialog box is displayed.
6	a. In the Database name box, type **GentranDatabase** as the name of the database. **Note** Gentran:Server is case-sensitive, so be sure to type the database name in the proper case. b. If necessary, change the database location in the Location box. c. If necessary, change the transaction log file location in the Transaction log file location box. d. Click **Next**. **System response** The Create Database Wizard - Name the Database Files dialog box is displayed. *(Continued on next page)*

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

(Contd) Step	Action
9	Accept the default initial transaction log size (1 MB) and click **Next**. **System response** The Create Database Wizard - Define the Transaction Log File Growth dialog box is displayed.
10	a. Verify that **Automatically grow the transaction log files** is selected. b. In the Grow the files by percent box, accept the default of **10** percent. c. Click **Next**. **System response** The Completing the Create Database Wizard dialog box is displayed.
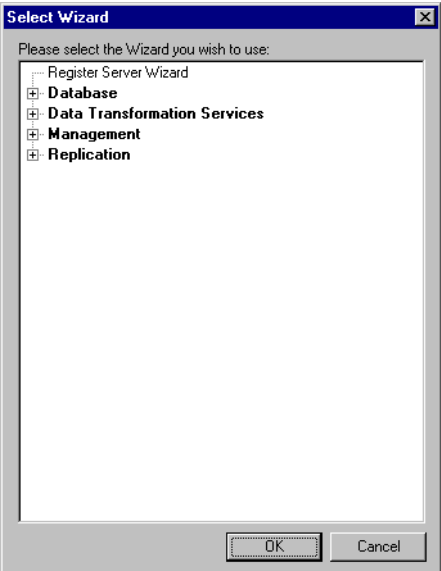
(Contd) Step	Action
11	Click **Finish** to complete the database creation. **System response** Setup displays a dialog box stating that the database was successfully created.
12	Click **OK** to acknowledge the message. **System response** Setup displays the Create Maintenance Plan dialog box.
13	Do you want to create a database maintenance plan? ◗ If *yes*, click **Yes** and refer to your SQL documentation for more information. ◗ If *no*, click **No** to return to the Enterprise Manager.

Next Step   Continue with *How to Add Users to the Database* on page A - 13.
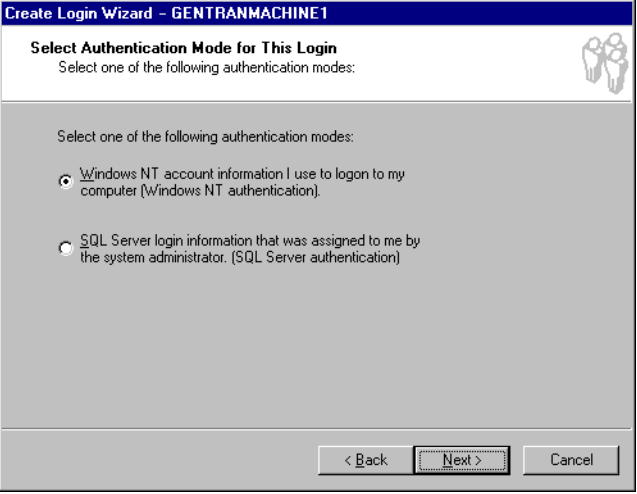
How to Add Users to the Database
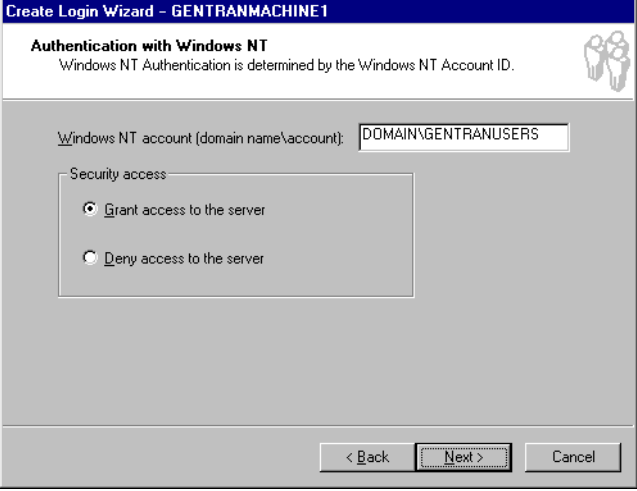
Introduction   After creating the database that contains the Gentran:Server tables, you need to add users to your database management system and give the users permission to access the Gentran:Server database.

Procedure   Use this procedure to add users in SQL Server and give them access to the database.
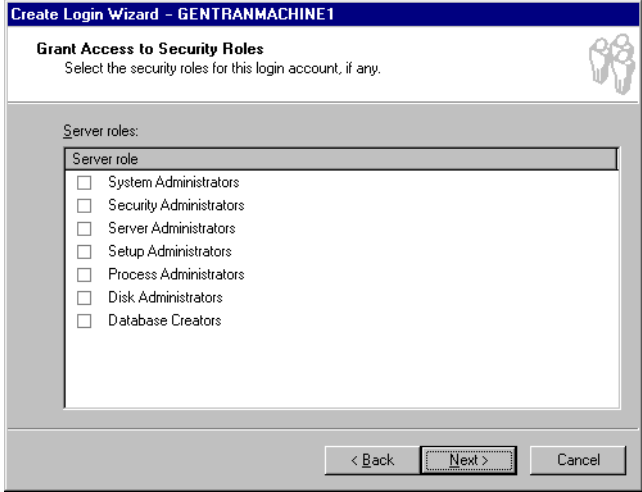
Step	Action
1	If the SQL Enterprise Manager is not running, from the **Start** menu select **Programs > Microsoft SQL Server > Enterprise Manager**. **System response** The Enterprise Manager is displayed.
2	Expand the **SQL Server Group** node and select your machine name.
3	From the **Tools** menu, select **Wizards**. **System response** The Select Wizard dialog box is displayed. (Continued on next page)
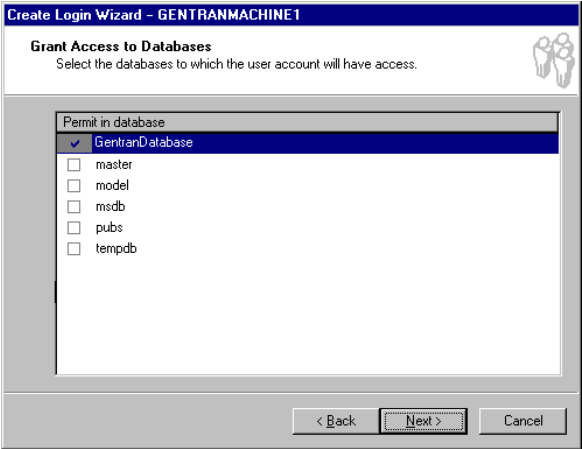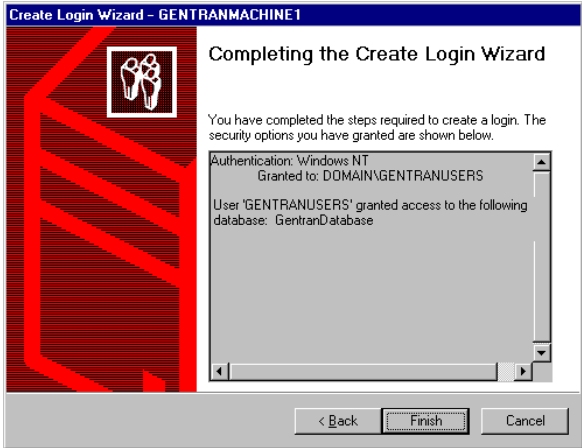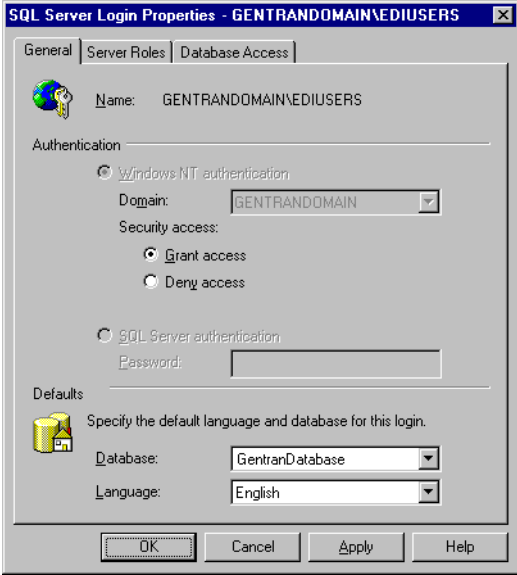
(Contd) Step	Action
4	a. Expand the **Database** node. b. Select **Create Login Wizard**. c. Click **OK**. **System response** The Create Login Wizard dialog box is displayed.
5	Click **Next**. **System response** The Create Login Wizard - Select Authentication Mode for This Login dialog box is displayed.

(Contd) Step	Action
6	Verify that **Windows account information** is selected and click **Next**. **System response** The Create Login Wizard - Authentication with Windows dialog box is displayed. (Continued on next page)

(Contd) Step	Action
7	In the Windows NT account box, type your domain or machine name, followed by a back slash (\\), followed by the Windows group of Gentran:Server users (we recommended GENTRANUSERS) and click **Next**. **Notes** ◗ This is the Windows user group that needs access to the SQL database. ◗ The format is as follows: — *DOMAIN\\GroupName* for multiple controller installations — *MACHINENAME\\GroupName* for single controller installations. **System response** The Create Login Wizard - Grant Access to Security Roles dialog box is displayed. ![Create Login Wizard – GENTRANMACHINE1. Grant Access to Security Roles. Select the security roles for this login account, if any. Server roles: Server role list with checkboxes for System Administrators, Security Administrators, Server Administrators, Setup Administrators, Process Administrators, Disk Administrators, Database Creators. Buttons: Back, Next, Cancel.]

(Contd) Step	Action
8	Do your Gentran:Server users need special privileges? ◗ If *yes*, select those privileges and click **Next**. ◗ If *no*, click **Next**. **Note** In our sample installation, the Gentran:Server users do *not* need any special privileges. **System response** The Create Login Wizard - Grant Access to Databases dialog box is displayed.
9	Verify that your Gentran:Server database (**GentranDatabase**) is selected and click **Next**. **System response** The Completing the Create Login Wizard dialog box is displayed with the security options you granted.

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

Next Step   Continue with the next section, *How to Create an ODBC DSN for Gentran:Server* on page A - 19.
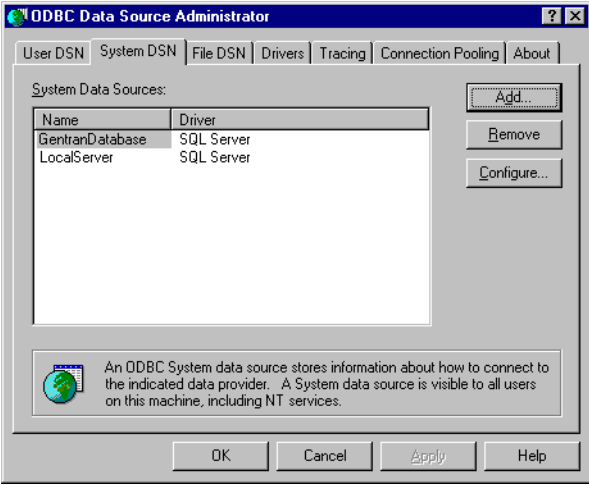
How to Create an ODBC DSN for Gentran:Server
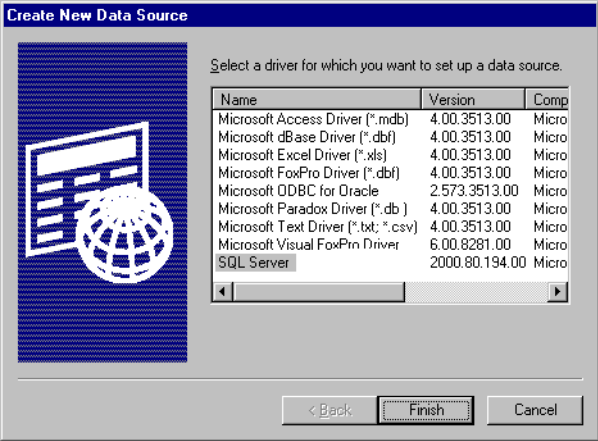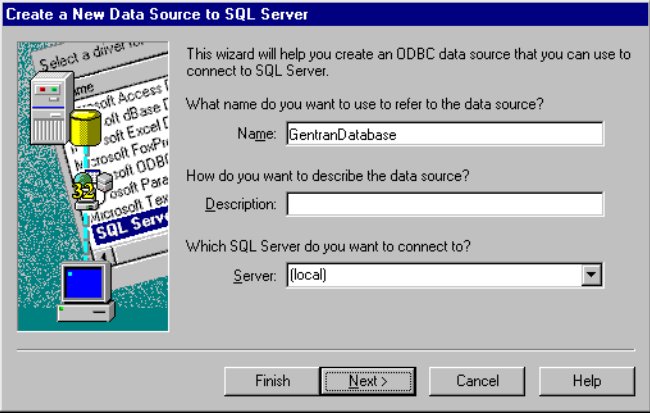
Introduction   Now you need to create the ODBC data source name for the Gentran:Server database you created.
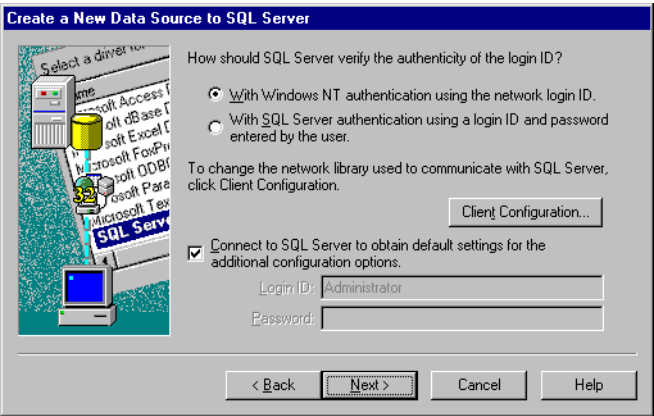
Note
You must create this DSN on each Gentran:Server machine in your system, which you can do at any time during the Gentran:Server installation process.
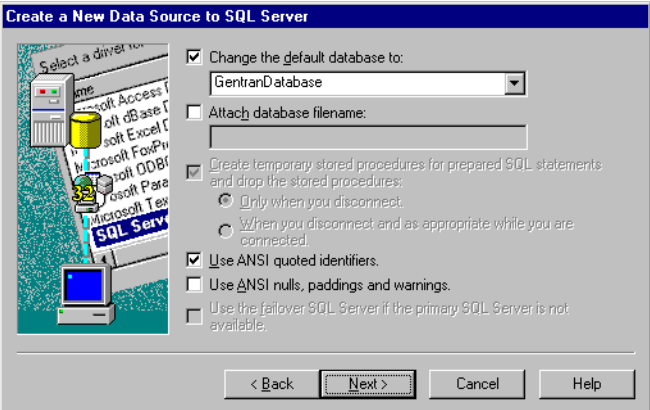
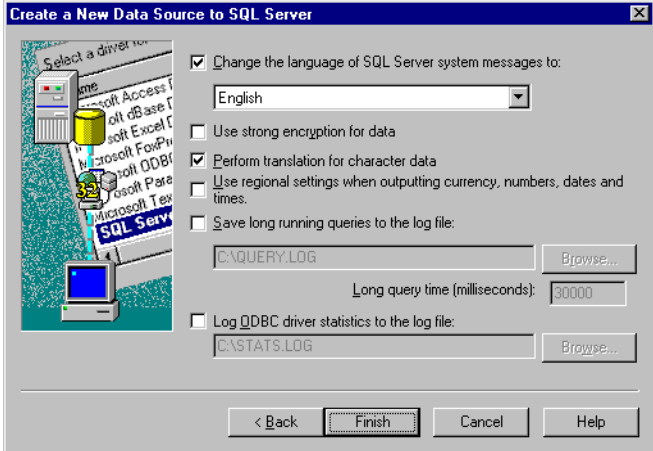**Procedure**   Use this procedure to create the ODBC DSN.

Step	Action
1	From the **Start** menu, select **Settings > Control Panel > Administrative Tools**, then double-click the **Data Sources (ODBC)** icon. **System response** The ODBC Data Source Administrator—User DSN tab is displayed.
2	Select the **System DSN** tab. **Recommendation** For controllers, you must use a *system* DSN to allow the Gentran:Server Executive Service to use the data source. We recommend that you use a System DSN for all Gentran:Server machines because it enables the Gentran:Server Executive Services and any user on the machine to use that DSN. **System response** The System DSN options are displayed. (Continued on next page)
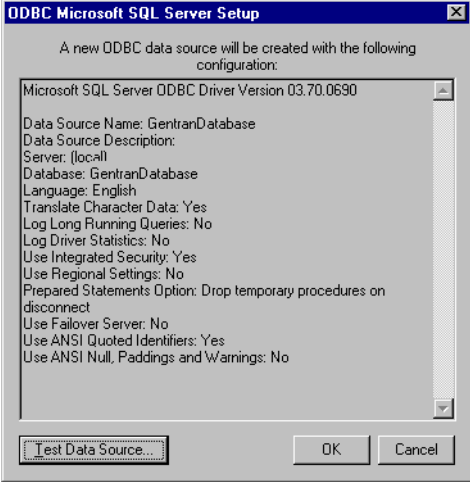
(Contd) Step	Action
3	Click **Add**. **System response** The Create New Data Source wizard is displayed.
4	From the driver list, select the **SQL Server** ODBC driver and click **Finish**. **System response** The Create a New Data Source to SQL Server dialog box (Wizard dialog box 1) is displayed. *(Continued on next page)*
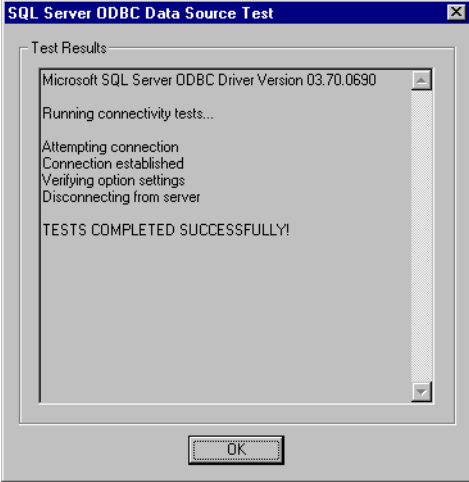
(Contd) Step	Action
5	Complete the following: ◗ In the Name box, type the name of the ODBC data source that is used by Gentran:Server in this system (GentranDatabase). ◗ From the Server list, select one of the following: — **(local)** if SQL Server is installed on that machine — the machine name where the database resides ◗ Click **Next**. **System response** The Create a New Data Source to SQL Server dialog box (Wizard dialog box 2) is displayed. (Continued on next page)

(Contd) Step	Action
6	Verify that **With Windows authentication using the network login ID** is selected and click **Next**. **Note** Selecting this option specifies that the SQL Server ODBC driver will use a trusted connection to SQL Server running on Windows. When selected, SQL Server uses integrated security to establish connections with this data source. **Recommendation** Set the security modes for Gentran:Server and your database to be the same. We recommend that you use Windows Authentication (*Integrated*) security mode, which allows you to take advantage of the Windows operating system security (including encrypted passwords, password aging, and domain-wide user accounts). This mode does not prompt users to sign on to Gentran:Server if the user's ID is the same for Gentran:Server and Windows. **System response** The Create a New Data Source to SQL Server dialog box (Wizard dialog box 3) is displayed. (Continued on next page)

(Contd) Step	Action
7	Complete the following: a. Select the **Change the default database** check box and select **GentranDatabase** from the list. b. 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. c. Click **Next**. **System response** The Create a New Data Source to SQL Server dialog box (Wizard dialog box 4) is displayed.
8	Select the **Change the language of SQL Server system messages to** check box and select **English** from the list. **Note** Even if you are using a non-English version of SQL Server, you must change the language used for Gentran SQL Server Messages to English. Specifically, English must be used for the ODBC data source name used by Gentran:Server to access GentranDatabase. **System response** All Gentran-related SQL error messages will be written to the SQL Log in English. *(Continued on next page)*

(Contd) Step	Action
9	Are you using a code page that is different that 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. ◗ If *yes*, verify that the **Perform translation for character data** check box is selected and click **Finish**. ◗ If *no* (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**. **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. **System response** The ODBC Microsoft SQL Server Setup dialog box is displayed with the configuration of the DSN for GentranDatabase. (Continued on next page)

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

CHAPTER

B

Oracle Setup

Contents

Introduction

How Gentran:Server uses databases	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 Gentran:Server data). This relational database enables multiple users to access the same data.

Gentran:Server uses ODBC (Open Database Connectivity) to use databases from different vendors, including Oracle.

Note
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.

Summary of tasks

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

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

The steps that 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 Gentran:Server.

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

Install SQL *Net on Every Machine

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

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

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

Recommendation
We recommend that you use the same Windows administrative account that the Gentran:Server Executive service uses to log on to Windows.

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

Note
The Gentran:Server database tables are created under the schema of this account.
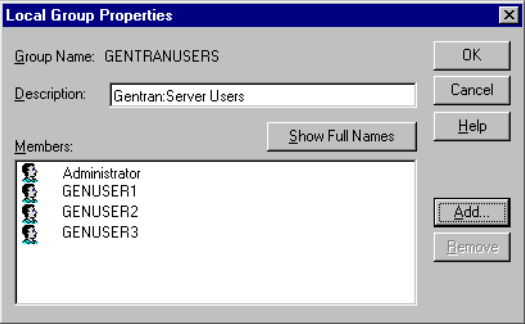
Add Gentran Users to ORACLE

Introduction   You must add each Gentran:Server user to Oracle. Oracle does not interface with Window security, so if you set up a Windows group containing all 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 Gentran:Server users that you need to add to Oracle.

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

Add Gentran:Server Executive Log On Account to Oracle

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

Recommendation
We recommend that you use the same Windows administrative account that the Gentran:Server Executive service uses to log on to Windows. We also recommend that this account is the same as your database administrator account.

After Gentran:Server is installed, this is the account that is displayed when you select the 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 Gentran:Server Executive service uses to log on to 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
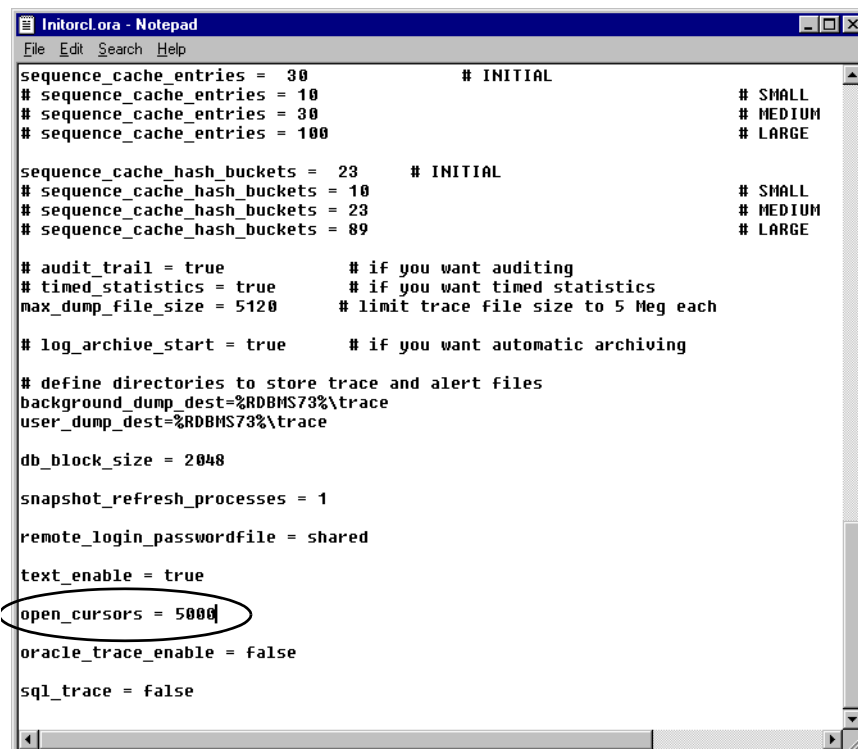Oracle 9i uses a PFILE and SPFILE for configuration purposes.

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 Gentran

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

Diagram   The Security tab of the Gentran:Server System Configuration dialog box is configured (by default) as follows:
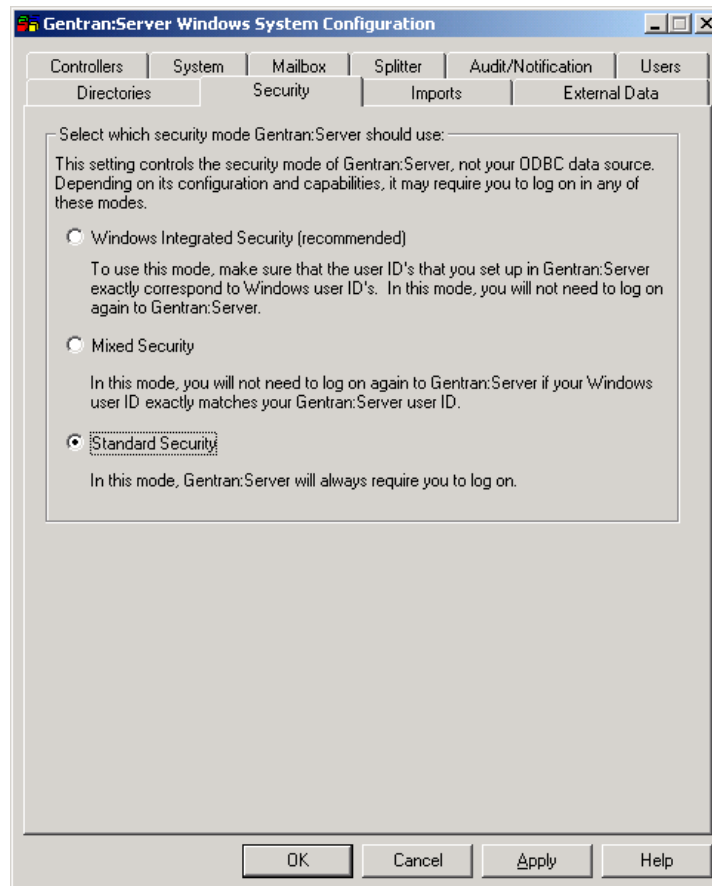
Procedure   In *Post-installation Tasks*, chapter 4 of this guide, we recommend that you set the Gentran:Server security mode to *Integrated* (security options are set on the Security tab of the System Configuration subsystem). Disregard the recommendation of using Integrated security and the *How to 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 Windows security.

Use Oracle Database ODBC drivers with Gentran:Server

Introduction There is an issue with the Oracle ODBC drivers that prevents Gentran:Server for Windows from working properly with the ODBC drivers supplied by Oracle for use with Oracle databases. Sterling Commerce 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 Gentran:Server The Oracle ODBC issue only affects the Gentran:Server Audit Notification service because this service uses this function of ODBC in its programming. No other 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 Gentran:Server is installed or upgraded, the Gentran:Server Audit Notification Service will fail to start. This prevents any other 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 listed in *Procedure to use before installing a new Gentran:Server 5.1 system* on page B - 11, 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 Gentran Audit Notification Service and the Oracle DSN is associated with Gentran:Server Mailbox, Gentran:Server Executive, and Gentran:Server Communications services.

Note
See the *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 Gentran:Server 5.1 system

Use this procedure to complete your Oracle database installation when you are installing a new Gentran:Server 5.1 system.

Step	Action
1	Create two ODBC Data Sources in Windows—one using the Microsoft ODBC for Oracle driver and the other using the Oracle ODBC driver. **Note** Make sure both are unique names and are set up as system DSNs. **Reference** See Step 12 on page 2 - 23 or see your ODBC documentation for more information about how to create data sources.
2	If it is available, use the Oracle ODBC Test tool to verify that the system has access to the database through both drivers. **Reference** See your Oracle documentation for more information about using the Oracle ODBC Test tool.
3	Begin your Gentran:Server installation. **Reference** See *How to Install a Primary Gentran System Controller* on page 2 - 18 or *How to Install Gentran:Server on the Primary Node* on page 3 - 14 for more information.
4	When the install prompts for the name of the DSN you want to use with Gentran:Server, type the DSN you created with the Microsoft ODBC for Oracle driver.
5	Finish the installation of the primary Gentran system controller and apply any necessary options from the Option Pack CD. If you want to verify your installation, continue with Steps 6 through 15. Otherwise, you have completed your Oracle database installation. **Reference** See the *Options Pack Installation Card* for more information.
6	After the installation process is complete, run the Gentran System Configuration utility by selecting (from the **Start** menu) **Programs > Gentran Server > Gentran Server Configuration**. **System response** The system displays the System Configuration dialog box. (Continued on next page)

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

(Contd) Step	Action
15	Access the Windows **Services** dialog box (from the **Control Panel**) and stop and restart your Gentran:Server services in the following order: a. Audit Notification b. Mailbox c. Executive **Reference** See your Windows documentation more information about stopping and starting services.

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

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

Step	Action
1	Create a second ODBC Data Sources in Windows using the Microsoft ODBC for Oracle driver. **Note** Make sure the name is unique and it is set up as a system DSN. **Reference** See Step 10 on page 2 - 22, Step 10 on page 3 - 18, or see your ODBC documentation for more information about how to create a data source.
2	If it is available, use the Oracle ODBC Test tool to verify that the system has access to the database through the new drivers. **Reference** See your Oracle documentation for more information about using the Oracle ODBC Test tool.
3	Begin your Gentran:Server upgrade. **Reference** See *How to Upgrade your Gentran:Server Installation* on page 2 - 60 or *How to Upgrade your Gentran:Server Clustered Installation* on page 3 - 36 for more information.
4	When the install prompts for the Database login, verify that the ID you supply is the Schema owner for the GentranDatabase tables. **Note** After the upgrade completes, it will be unable to restart your Gentran:Server services. *(Continued on next page)*

(Contd) Step	Action
5	Finish the installation of the primary Gentran system controller and apply any necessary options from the Option Pack CD-ROM. **Reference** See the *Options Pack Installation Card* for more information.
6	Open the **Windows Registry Editor**. **Reference** See your Windows documentation for more information.
7	Navigate to the following registry key: **HKEY_Local_Machine\SOFTWARE\Sterling Commerce\ Gentran\AuditNotification\5.1\Server\DSN** The version will change depending on which Gentran 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 Windows **Services** dialog box (from the **Control Panel**) and start your Gentran:Server services in the following order: a. Audit Notification b. Mailbox c. Executive d. Communications **Reference** See your Windows documentation more information about stopping and starting services. *(Continued on next page)*

(Contd) Step	Action
12	If your services still do not start, investigate the following possibilities based on the error number that Windows returns. ◗ **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 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 a Customer Support Solutions Analyst.

Reference
See the *Getting Started Guide* to obtain the support contact information.

Installation Troubleshooting

Contents

Overview

In this appendix   This appendix describes the background information about how to troubleshoot Gentran:Server installations and explains courses 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.

Gentran:Server Installation Troubleshooting

Problems and resolutions

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

Problem	Resolution
The Setup program successfully completes, but you get a database logon failure message when you attempt to log on to Gentran:Server.	You did not specify the appropriate database login during installation. Remove all installed Gentran:Server components. See How to Add or Remove Components in the *Administration Guide* for more information. Delete all Gentran:Server database tables. Verify that the Gentran:Server program group was removed. Verify (in the Registry Editor) that the **HKEY_LOCAL_MACHINE\SOFTWARE\Sterling Commerce** key was removed. 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 *Installing Gentran:Server* on page 2 - 11 or *Installing Gentran:Server* on page 3 - 9 for more information about creating a new system.
The Gentran:Server Executive Service fails to start remotely.	On the primary system controller, double-click **Services** in the **Control Panel** to access the Services dialog box. Select **Gentran:Server Executive Service** and click **Start**. If the service times out or if you receive an error message, select the **Gentran:Server Executive Service** and click **Startup** to verify that the Windows logon for the service is specified correctly. *(Continued on next page)*

(Contd) Problem	Resolution
You attempt to logon to Gentran:Server but receive an error message stating that the User Name is not found.	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. If this does not work, you need to uninstall and reinstall the system. Remove all installed Gentran:Server components. See How to Add or Remove Components in the *Administration Guide* for more information. Delete all of the Gentran:Server database tables. Verify that the Gentran:Server program group was removed. Verify (in the Registry Editor) that the **HKEY_LOCAL_MACHINE\SOFTWARE\Sterling Commerce** key was removed. Verify that you are using the default Gentran:Server local administrator logon that you specified during the installation process. 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 *Installing Gentran:Server* on page 2 - 11 or *Installing Gentran:Server* on page 3 - 9 for more information about creating a new system.
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 Gentran:Server database tables. 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.	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. 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 *not* reverse the previously executed commands, although Setup maintains a log of every scripted command that it executed. **Reference** See How to Upgrade your Gentran:Server Installation in the *Administration Guide* for more information about upgrading your system. *(Continued on next page)*

(Contd) Problem	Resolution
You run the Setup program to install Gentran:Server but receive the following errors: ◗ Record set is read only ◗ Gentran:Server system administrator account could not be created	You may be using a version of ODBC driver that is not compatible with the Gentran:Server product. **Reference** See the *Getting Started Guide* for a list of the ODBC driver versions that are supported for use with Gentran:Server.
You run the Setup program in a non-clustered environment 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 clicking **Yes** or **No**.	When Setup checked the registry on this machine, it found registry keys for Gentran:Server but no 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 Gentran:Server install will proceed. **Note** If you click **No** and Setup encounters a problem with your system, the installation routine will exit. If this occurs, contact Gentran:Server Customer Support.

InstallShield Error Messages

Introduction   While running the Setup program, if you receive an error containing 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 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.
	(Continued on next page)

(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 access privileges to drive and folder. *(Continued on next page)*

(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.