
Setup Checklist – Windows Preinstallation

This document contains information to assist you when planning to install Gentran Integration Suite in a Windows environment.

Key Terms

The following terms and definitions will assist you in understanding the concepts of installing Gentran Integration Suite in a Windows environment discussed in this document:

- ◆ Java 2 Software Development Kit (JDK) – Software development kit (SDK) for producing Java programs. Produced by Sun Microsystems, Inc., the JDK includes JavaBeans component architecture and support for JDBC.

Note: The Gentran Integration Suite *System Requirements* include information about upgrading your JDK for the changes enacted in 2007 for Daylight Savings Time.

- ◆ Gentran Integration Suite License File – Contains a license that is associated with your specific operating system and the IP address of your system. The license provides access, for a year, to the Gentran Integration Suite packages your company selected.
- ◆ The Java Cryptography Extension (JCE) is a set of Java packages from Sun Microsystems, Inc. that provides a framework and implementations for encryption, key generation and key agreement, and Message Authentication Code (MAC) algorithms.
- ◆ Rollback Segment – Enables you to undo (rollback) DML (data manipulation language) transactions that were made against a database. In Oracle version 9i or later, you also can perform this task with Undo tablespaces.

Checklist for Windows Preinstallation

The preinstallation checklist for the Windows environment identifies the prerequisite tasks you must complete before installing Gentran Integration Suite.

Note: When creating a name, such as an account name, permissions name, profile name, or database name, follow these conventions:

- ◆ Use any valid alphanumeric characters and -, :, \$, &, or _.
- ◆ Do not use spaces or apostrophes.

You may want to make a copy of the following checklist and use it to record the information you collect for installing Gentran Integration Suite:

Step	Description	Your Notes
1	Verify that your system meets the hardware and software requirements specified for this release. See <i>Checking System Requirements</i> on page 3.	

Step	Description	Your Notes
2	Verify that your system has the patches required by Java™ for the Windows environment. See the vendor's Java Web site for more information.	
3	For systems with multiple IP addresses, verify that the IP address on which Gentran Integration Suite resides is accessible by any client computer that is running a browser interface. Caution: If you do not verify the IP addresses, your system may not operate properly after installing Gentran Integration Suite.	
4	Verify that all client computers are using Microsoft Internet Explorer 5.x or later.	
5	If you are using a non-English environment, confirm that you are using the appropriate character set.	
6	Determine and record information about the JDK. See <i>Installing the Java 2 Software Development Kit</i> on page 3. <ul style="list-style-type: none"> ◆ Version of the JDK ◆ Absolute path to the JDK files and patches. The path name can not include spaces. 	
7	Obtain the JCE distribution file and record the absolute path to the zipped file. See <i>Downloading the JCE Distribution File</i> on page 4.	
8	Determine and record the initial port number to be used by Gentran Integration Suite. See <i>Determining Port Numbers</i> on page 4.	
9	If you are using a SQL Server database or an Oracle database, determine and record information about your database server. Be aware that this information is case sensitive. See <i>Creating and Configuring the Database Server</i> on page 4. <ul style="list-style-type: none"> ◆ Database vendor ◆ Database user name and associated password ◆ Database (catalog) name ◆ Database host name ◆ Database host port number ◆ Absolute path and file name for the JDBC driver ◆ Version of the JDBC driver 	

Step	Description	Your Notes
10	Determine and record information to set up default system alerts from Gentran Integration Suite: <ul style="list-style-type: none"> ◆ The Administrative e-mail address to which system alert messages are sent. ◆ The SMTP Server IP address used for sending alert messages. 	
11	Determine and record the directory in which you plan to install Gentran Integration Suite. <ul style="list-style-type: none"> ◆ The installation directory must not exist because the installation process creates it. ◆ The installation directory must have adequate free disk space. ◆ The name of the directory can not include spaces and must be less than 30 characters long. 	
12	Determine and record the passphrase you want to use for the Gentran Integration Suite system. During installation, you must enter the passphrase twice.	
13	Obtain the license file and record the absolute path and file name to the license file. Be sure that the path name and the file name do not contain any spaces. See <i>Obtaining a License File</i> on page 8.	

Checking System Requirements

Before you begin, verify that your system meets the hardware and software requirements specified for this release. The hardware requirements listed are the minimum required to run Gentran Integration Suite. Your system requirements will exceed these if you are running other applications on the same machine as Gentran Integration Suite. For current information, see the *System Requirements* posted on the Gentran Integration Suite Documentation Library:

<http://www.sterlingcommerce.com/Documentation/GIS42/homepage.htm>

Note: Version 4.2 of Gentran Integration Suite does not require an application server for installation or at run-time. However, Gentran Integration Suite supports integration with JBoss™ and WebLogic®.

You can also integrate with WebSphere®, JBoss, or WebLogic after installing version 4.2 by using the Gentran Integration Suite EJB Adapter.

Installing the Java 2 Software Development Kit

You must install the Java 2 Software Development Kit (JDK) and the patches specific to your system. To determine which JDK version and patches you need, see the Gentran Integration Suite *System Requirements*. After you install the JDK, record the absolute path to its location on your system. You must supply the absolute path when you install Gentran Integration Suite.

Caution: In Windows, the directory name where the JDK resides cannot include a space.

Note: The *System Requirements* include information about upgrading your JDK for the changes enacted in 2007 for Daylight Savings Time.

Downloading the JCE Distribution File

The Java Cryptography Extension (JCE) is a set of Java packages from Sun Microsystems, Inc. that provides a framework and implementations for encryption, key generation and key agreement, and Message Authentication Code (MAC) algorithms.

To obtain this file:

1. Open your browser and navigate to <http://java.sun.com/products/jce/index-14.html>.
2. At the bottom of the page, locate the section *Downloading the "Unlimited Strength" Jurisdiction Policy Files* and click **Download JCE Unlimited Strength Jurisdiction Policy Files**.
3. Download the zipped JCE 1.4.2 distribution file to your system. Once the file resides on your system, note the exact directory and file name for this zipped file.

Determining Port Numbers

During installation, you are prompted to specify the initial port number for Gentran Integration Suite. For other ports, you can accept the default port number suggested by the installation program, or you can specify a different port number. To specify a port number, follow these guidelines:

- ◆ Gentran Integration Suite requires a range of 100 consecutive open ports between 1025 and 65535.
- ◆ The initial port number represents the beginning port number in the range.
- ◆ The port range starts with the initial port number and ends with the number that equals the initial port number plus 100. All ports in this range must be available for Gentran Integration Suite. For example, if you specify 10100, then you need to make sure that 10100 through 10199 are not used by any other applications on your system.

Creating and Configuring the Database Server

You must install, create, and configure a database so that each Gentran Integration Suite instance has a dedicated schema and login for the database.

Caution: If you are reinstalling Gentran Integration Suite, be aware that data in your existing database will be deleted. To prevent this, either back up the existing database or save it under a different name.

After creating and configuring your database, recycle the database. Then stop and restart Gentran Integration Suite to apply the changes.

In a Windows environment, Gentran Integration Suite supports the following databases.

- ◆ MySQL™ (See *Using a MySQL Database Server* on page 5)
- ◆ Microsoft SQL Server™ Enterprise (See *Using a Microsoft SQL Server Database Server* on page 5)
- ◆ Oracle® 9i or 10g (See *Using an Oracle Database Server* on page 6)

See *System Requirements* for supported version information.

Using a MySQL Database Server

You can use a MySQL database server with Gentran Integration Suite. See *System Requirements* for version information. This database is bundled with Gentran Integration Suite. Choosing this database during the installation procedure creates and configures it for you. MySQL is installed locally on the same server as Gentran Integration Suite and cannot be installed on a separate server.

If you have a pre-3.1 version of Gentran Integration Suite installed, only one instance of Gentran Integration Suite that uses MySQL as the bundled database can be installed on a particular server. For example, you cannot install Gentran Integration Suite 4.2 and Gentran Integration Suite 3.0 on the same server.

Using a Microsoft SQL Server Database Server

You can use a Microsoft SQL Server database with Gentran Integration Suite. See *System Requirements* for supported version information. To use an MS SQL Server database, follow this process:

- ◆ Create the database. Refer to your vendor's documentation for information about creating the database, including creating a schema repository, login, and tablespace. Be sure to install the correct version and patch.
- ◆ Configure the database by completing the following tasks:
 - ◆ *Setting Database Parameters in SQL Server* on page 5
 - ◆ *Granting Permissions in SQL Server* on page 5
 - ◆ *Installing the JDBC Driver in SQL Server* on page 5

Setting Database Parameters in SQL Server

Gentran Integration Suite requires the following parameter settings in your SQL Server database:

Parameter	Value
Collation Setting	SQL_latin1_generalCP850_bin
Sort order	Binary
Security authentication	SQL Server and Windows
Torn Page Detection	Off
Parallelism	Use x processors (do not use all available processors)

Granting Permissions in SQL Server

In SQL Server, you must grant DBO (Database Owner) permission to the Gentran Integration Suite user.

Installing the JDBC Driver in SQL Server

Gentran Integration Suite requires the correct Microsoft SQL Server driver. See *System Requirements* for supported version information. The supported version of the JDBC driver builds the correct Gentran Integration Suite directory structure.

Go to <http://www.microsoft.com/downloads> to download this driver, any appropriate patches, and the following jar files. Be sure to place all the jar files in the same directory.

- ◆ msbase.jar
- ◆ mssqlserver.jar
- ◆ msutil.jar files

After you obtain the JDBC driver file and jar files, record the absolute path to their location on your system. You must supply this absolute path when you install Gentran Integration Suite.

Using an Oracle Database Server

You can use an Oracle 9i or 10g database with Gentran Integration Suite. See *System Requirements* for supported version information. Gentran Integration Suite supports Oracle 10g in a single node database environment.

Note: Oracle 10g RAC is not supported by Gentran Integration Suite 4.2.

To use an Oracle 9i or 10g database, follow this process:

- ◆ Create the database. Refer to your vendor’s documentation for information about creating the database, including creating a schema repository, login, and tablespace. Be sure to install the correct version and patches.
- ◆ Configure the database by completing the following tasks:
 - ◆ *Setting Database Parameters in Oracle* on page 6
 - ◆ *Rolling Back or Undoing Changes in Oracle* on page 7
 - ◆ *Granting Permissions in Oracle* on page 7
 - ◆ *Installing the JDBC Driver in Oracle* on page 8

Setting Database Parameters in Oracle

Gentran Integration Suite requires the following parameter settings in your Oracle database:

Parameter	Value
Number of open cursors	greater than or equal to 2000
Database block buffers	greater than or equal to 19200 Note: Sterling Commerce recommends that this be set to 0 if SGA memory equals greater than 0.
System Global Area (SGA) memory (10g only)	greater than 0 Note: Sterling Commerce recommends that the database block buffers be set to 0 if SGA memory equals greater than 0.
Shared pool size	greater than or equal to 90000000
Large pool size	greater than or equal to 614400
Java pool size	greater than or equal to 20971520

Parameter	Value
Number of processes	greater than or equal to 500
Log buffer	greater than or equal to 163840
Database block size	greater than or equal to 8192
Sort area size	greater than or equal to 65536
Sort area retained size	greater than or equal to 65536
Max extends	Unlimited
Character set	utf8 Select the utf8 character set based on the version of Oracle you are using and whether the version is 32-or 64-bit. If you using an existing Oracle database with Gentran Integration Suite, the database must be configured with the utf8 character set. If the database is not configured with the utf8 character set, you must reinstall the database and select the utf8 character set.

Rolling Back or Undoing Changes in Oracle

You can roll back or undo changes in Oracle using one of the following methods:

- ◆ (Oracle versions earlier than 9i) Gentran Integration Suite recommends that you configure a rollback segment for every four concurrent users. Each rollback segment must be extendable to 25MB. The value of the initial segment and the next segment can vary between 256 KB (with 5MB for optimal) and 10 MB (with 20 optimal). Note that these ranges will vary based on the size of your Gentran Integration Suite database and the number of business rules it contains.
- ◆ (Oracle versions 9i or later) These versions support AUTO UNDO management. It is recommended that you use this option. This will avoid any manual monitoring of UNDO segments.

If a server is upgraded from Oracle 8i, set the UNDO_MANAGEMENT=AUTO parameter in init<SID>.ora. Your database administrator needs to figure out the UNDO_RETENTION setting. Make sure that the file system which has the UNDOTBS1 tablespace has enough space to AUTOGROW.

Granting Permissions in Oracle

Grant the following permissions to the Gentran Integration Suite user:

```
GRANT "CONNECT" TO <USER>
GRANT SELECT_CATALOG_ROLE TO <USER>
ALTER USER <USER>DEFAULT ROLE "CONNECT",
        SELECT_CATALOG_ROLE
GRANT CREATE PROCEDURE TO <USER>
GRANT CREATE TRIGGER TO <USER>
GRANT CREATE TYPE TO <USER>
GRANT EXECUTE ANY PROCEDURE TO <USER>
GRANT EXECUTE ANY TYPE TO <USER>
GRANT SELECT ANY TABLE TO <USER>
GRANT SELECT ANY DICTIONARY TO <USER>
```

For Oracle 10g 10.2.x, also grant the following permission:

```
GRANT "RESOURCE" TO <USER>;
ALTER USER <USER> DEFAULT ROLE "CONNECT", "RESOURCE", SELECT_CATALOG_ROLE;
```

Note: If you are using Oracle AQ for Oracle 9i or Oracle 10g, then grant the AQ_ADMINISTRATOR_ROLE permission.

Installing the JDBC Driver in Oracle

Gentran Integration Suite requires the appropriate JDBC driver for Oracle 9i and Oracle 10g databases. These drivers are thin client, 100% Pure Java™ JDBC drivers. See *System Requirements* for supported version information.

The supported versions of the JDBC driver build the correct Gentran Integration Suite directory structure.

After you obtain the correct JDBC driver file, record the absolute path to its location on your system. You must supply this absolute path when you install Gentran Integration Suite.

Obtaining a License File

After your company signed the sales contract with Sterling Commerce, Sterling Commerce created a license file containing information about your company, your system, and the packages (components), such as services, maps, and adapters, your company selected to use.

The license file contains a license that is associated with your specific operating system and the IP address of your system. The license provides access, for a year, to the Gentran Integration Suite packages your company selected and is independent of your maintenance fee. Because the license is independent of your maintenance fee, the schedule for renewing your license and license file may be different than the maintenance fee schedule.

You must download the license file before you can install Gentran Integration Suite. Follow these steps:

1. Point your Web browser to <http://www.productupdates.stercomm.com>.
2. Review the Welcome to Sterling Commerce Product Update page and click **Next**.
3. Review the Authenticate page and click **Next**.
4. Type the License File Key, which is case-sensitive, and click **Next**. If the system displays the Retrieve Registration dialog box and you are upgrading, you may retrieve your registration information by entering your previous License File Key. If you are not upgrading, then click **Next**.
5. Verify the registration information and click **Next**.
6. On the Server Details page, update the fields and click **Next**.

If the operating system, application server, or database server version is not listed in the respective lists, type the version in the respective **Description of Other**.

The IP address listed in the license file must be the same IP address you use when installing Gentran Integration Suite. Otherwise, your system may not operate properly after installation.

7. Verify the list of packages and the type of license selected for each package and click **Next**. If the list of packages selected or the type of license selected is *not* correct, then contact Customer Support to correct the information.

8. Scroll to the bottom of the Review and Download Package License File page and click **Finish and Download**.
9. Click **Save** in the **File Download** dialog box.
10. Accept the default location for the license file or navigate to the location where you will store the license file. Note the absolute path of the file location on the Preinstallation Checklist. You will need the absolute path to install Gentran Integration Suite.
11. Click **Save**.
12. Close your Web browser.