Gentran Integration Suite™

Upgrade Guide

Version 4.2 (from 4.0)

Sterling Commerce

An IBM Company

Contents

Pre-Upgrade Information

This documentation describes how to upgrade from Gentran Integration Suite release 4.0 to Gentran Integration Suite release 4.2 in a UNIX®, Microsoft® Windows, or iSeries® environment. For information about the enhancements in Gentran Integration Suite release 4.2, refer to the *Guide to What's New* document.

Checklist

Use the following checklist to track your upgrade progress. This checklist also helps you know what documentation to use at each stage of your upgrade.

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Upgrade (Chapter 2 - UNIX, 3 - Windows, or 4 -iSeries)			
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Before You Begin

Before you begin upgrading, be aware of the following prerequisite tasks and considerations. The following sections cover standard items for all upgrades, special items for particular kinds of upgrades, and process output logs.

Also, at several points in the upgrade process, you will be asked to download a file from https://support.sterlingcommerce.com. After logging in at this web page, click on the following links to reach the file: **Product Support** > **Gentran Integration Suite** > **Gentran Integration Suite Product Updates/Downloads**.

Standard Tasks and Considerations

Before you begin upgrading, be aware of all of the following prerequisite tasks and considerations:

1. You must have a new license file to use the new licensed features of your upgraded installation.

2. Read through this entire document so that you have a clear understanding of what the upgrade requires.

3. Download the following information from the Gentran Integration Suite library page http://www.sterlingcommerce.com/Documentation/GIS42/homepage.htm.

   ◆ *Gentran Integration Suite 4.2 Installation Guide*

   Caution: It is important to remember that upgrading to 4.2 involves a full installation of Gentran Integration Suite. You need to prepare for an upgrade the same way that you would prepare for an installation.

   ◆ *Gentran Integration Suite 4.2 Release Notes*

   ◆ *Gentran Integration Suite 4.2 System Requirements*. With each release, Sterling Commerce™ introduces leading edge technology to improve and enhance its software. You should review the

System Requirements documentation to confirm that your system and databases meet the requirements and to manage any necessary upgrades or changes before upgrading.

4. Archived data can only be restored from the same version and patch of Gentran Integration Suite from which it was archived. If you need to restore archived data that was archived prior to performing the upgrade, then you must have a running instance of Gentran Integration Suite that matches the version and patch from which the archive was taken.

5. Back up your database. Export your business processes, trading partners, maps, etc.

6. Review and note the adapters, business processes, and other configurations on your current version. This will help identify any need for updating transport messages, third-party adapters, or configurations to adapters, such as the File System and Command Line Adapters.

7. If you have edited a pre-defined business process, be aware that the upgrade process overwrites pre-defined business processes. Your customized business process is preserved in the system, but it is no longer the default process.

8. If you have edited any property files (.properties or .properties.in), be aware that the upgrade process overwrites these property files, unless these changes were made using the customer_overrides.properties file. Your previous property file edits might not be applicable in Gentran Integration Suite 4.2.

9. *Always* install and test your upgrade in a non-production environment before upgrading your production environment.

Special Tasks and Considerations

Before you begin upgrading, be aware of the following special tasks and considerations, depending on your type of upgrade:

✦   If you are using Oracle 8i with your current version of Gentran Integration Suite, upgrade to Oracle 9i or Oracle 10g before upgrading to Gentran Integration Suite 4.2.

✦   If you had LDAP (Lightweight Directory Access Protocol) configuration information in the security.properties file, this information will automatically be moved to the authentication_policy.properties file, which is first used in Gentran Integration Suite 4.2.

✦   Your version of Gentran Integration Suite was bundled with the JBoss™ application server and supported integration with WebLogic® and WebSphere® application servers. Gentran Integration Suite version 4.2 is installed without integration to an application server and does not require an application server for installation or at run-time.

However, Gentran Integration Suite still supports integration with JBoss, WebLogic, and WebSphere. After you upgrade to 4.2, you can restore integration with your application server if desired. To do so, use the Gentran Integration Suite EJB Adapter. For more information, refer to the documentation for the EJB Adapter.

Creating a Process Output Log

A log of process activity during the upgrade will help if troubleshooting is required. Output from `upgrade.sh` and `upgrade.cmd` is automatically logged to upgrade.log.

Use this procedure to generate a separate output log for each process you want to log.

UNIX

To create a process output log:

1. Use the `script` command to record the session and save the standard output to a file.

2. Run the `script` command to record the process, ensuring that you have created and specified the file name in which to save the process output.

    For example, to start recording output to a file named processoutput.log, at the command line, type `script processoutput.log`.

3. After the upgrade is complete, type `exit` at the command line to stop recording.

4. You can now retrieve the file containing the process output.

    The following example shows a session in UNIX after starting the script command, specifying the output to be saved to the file named listing.log, and typing exit to stop the script command from running:

```
[2]%script listing.log
    Script started, file is listing.log
    [3]%ls
    Custard.Recipe         FavoriteRecipes   Curry.Recipe
    VindalooCurry.Recipe    Jelly.Recipe
    [4]%exit
    Script done, file is listing.log
```

Windows or iSeries

In Windows or iSeries, you must redirect the standard output and standard error of each command to create a log file.

1. To redirect the standard output and standard error to create a log file, type a command similar to the following:

    `process.cmd > processoutput.log 2>&1` (Windows)

    `process.sh > processoutput.log 2>&1` (iSeries)

    where *process* is the name of the command and *processoutput* is the name of the output log.

    The log-writing process time varies, depending on the size of your database and your system hardware.

    Caution: In Windows, if you attempt to view the log while it is being written, the `upgrade.cmd` script stops running and does not create a log of the upgrade process.

2. After you complete the command, you can review the output log using any text editor (for example, Microsoft Notepad).

Verifying System and Database Compatibility

To verify system compatibility and prepare for the upgrade, perform the following tasks:

1. Review the *Gentran Integration Suite Release 4.2 System Requirements* document. Your system must meet the minimum requirements that are documented, while your database and JDBC driver versions must match the documented requirements. Complete any necessary upgrades or changes in preparation for the upgrade.

2. Collect information on any third-party libraries used for adapter configuration that were added to your current release. You must add each of these libraries to release 4.2 later in the upgrade process.

3. Locate any configuration file changes for the JDBC adapter or the Lightweight JDBC adapter in your current release. Later in the upgrade process, you will copy these changes to release 4.2.

4. Record your performance tuning configuration. You will restore these settings later in the upgrade process.

Preparing Your System for the Upgrade

Verify your system compatibility as previously described before continuing with this procedure.

1. Back up Gentran Integration Suite and your current database.

    Caution: If there are problems with your upgraded system, the only way to ensure that you can roll-back to your previous version is to back up Gentran Integration Suite and your database.

2. To avoid upgrade failures in Windows, shut down all software that performs non-system processes, including processes that:

    ◆   Scan files and directories for viruses

    ◆   Back up file systems

    ◆   Monitor software (for example, HP OpenView)

    ◆   Disable pop-up windows

After you successfully back up Gentran Integration Suite and your database, you are ready to upgrade the software. Before you begin, see the *Gentran Integration Suite 4.2 Release Notes*.

Chapter 2

UNIX Upgrade

This chapter has instructions for UNIX only. Please see Windows-specific instructions for Windows and iSeries-specific instructions for iSeries.

Always make a full backup of your Gentran Integration Suite instance prior to performing an upgrade. It is also recommended that you thoroughly test this process in a test or development environment prior to implementing in a production environment.

Upgrade Procedure (UNIX)

The following steps will lead you through a UNIX upgrade from Gentran Integration Suite version 4.0 to version 4.2. Remember that in addition to this guide, you will need the *Gentran Integration Suite 4.2 Installation Guide*. If you are upgrading a cluster, you will need the cluster installation instructions from the *Gentran Integration Suite 4.2 Installation Guide*.

> **Caution:** It is important to remember that upgrading to 4.2 involves a full installation of Gentran Integration Suite. You need to prepare for an upgrade the same way that you would prepare for an installation.

Note: If you are running a patch less than 4.0.3-5, you **MUST** patch to version 4.0.3-5 or higher before continuing the upgrade.

Note: If you do need to patch your system before continuing the upgrade, it is recommended that you fully test the patch prior to performing the upgrade.

This upgrade does not overwrite your current Gentran Integration Suite directory structure on disk. Instead, it creates a new installation of Gentran Integration Suite 4.2 that will point to and upgrade the database of your current installation of Gentran Integration Suite. This means your original instance will no longer be operational after performing the upgrade. After the upgrade, you will be starting your Gentran Integration Suite instance only from the newly created directory structure.

Note: Before the upgrade, you should always make a copy of your production database, and then perform the upgrade on the copy of the production database.

> When you copy your database, if you encounter *Data Overflow* or *Invalid Time Format* errors while copying the WORKFLOW_CONTEXT table, run this query:
>
> ```
> UPDATE WORKFLOW_CONTEXT SET ENTERQ = NULL, EXITQ = NULL where ENTERQ IS
> NOT NULL OR EXITQ IS NOT NULL
> ```

Caution: This upgrade changes the administrative password to the default password. After the upgrade, change the password back to the administrative password to minimize security risks. This is the Admin password for logging into the UI (/dashboard or /ws).

Here is a summary of some key upgrade instructions:

✦ For Oracle, DB2 and MSSQL databases, use the same database information that you used for your current installation.

✦ Ensure the database version is compatible with Gentran Integration Suite 4.2. If it is not compatible, upgrade the database in the previous version before upgrading to Gentran Integration Suite 4.2.

✦ For MySQL databases, you will be asked if this is an upgrade to a previous 4.0 version. Answer **Yes**.

1. Install Gentran Integration Suite release 4.2 using the si42.jar file as outlined in the *Gentran Integration Suite 4.2 Installation Guide*. The installation guide has information about how to access the si42.jar file.

    a. When starting the UNIX installation, you need to pass in the appropriate parameters to perform this upgrade. The parameter that needs to be passed is -nodbinit.

        `/absolutePath/bin/java -jar /absolutePath/si42.jar -nodbinit`

    b. When you are prompted for the passphrase, use the same passphrase that you did for the instance you are performing the upgrade on.

    c. Document the name of your installation directory.

    d. During the installation, select the same type of database that you are using in the instance you are doing the upgrade from. Consider the following when answering the database related questions:

        ◆ For MySQL, the installation program will ask you for the location of the previous MySQL database.

        ◆ For Oracle, the installation program will ask you whether the Oracle instance is being used for an upgrade. Answer **Yes**.

        ◆ Additionally, the installation program will ask you whether you are using BLOB data in your Oracle database.

            ◆ Determine whether your existing Gentran Integration Suite system supports BLOB data. Locate the file *previous_install_dir*/**properties**/sandbox.cfg and search for the ORACLE_USE_BLOB parameter.

            ◆ If ORACLE_USE_BLOB is included in your existing system, select BLOB. Otherwise, select Long Raw.

2. Download the latest 4.2 patch from the Support on Demand site https://support.sterlingcommerce.com.

3. Run `InstallService.sh`

    `./InstallService.sh absolutePath/si_engine_420X.jar`

4. Complete the steps outlined in *Post-Upgrade Processes* on page 18.

Windows Upgrade

This chapter has instructions for Windows only. Please see UNIX-specific instructions for UNIX and iSeries-specific instructions for iSeries.

Always make a full backup of your Gentran Integration Suite instance prior to performing an upgrade. It is also recommended that you thoroughly test this process in a test or development environment prior to implementing in a production environment.

Upgrade Procedure (Windows)

The following steps will lead you through a Windows upgrade from Gentran Integration Suite version 4.0 to version 4.2. Remember that in addition to this guide, you will need the Gentran Integration Suite *4.2 Installation Guide*. If you are upgrading a cluster, you will need the cluster installation instructions from the *Gentran Integration Suite 4.2 Installation Guide*.

Caution: It is important to remember that upgrading to 4.2 involves a full installation of Gentran Integration Suite. You need to prepare for an upgrade the same way that you would prepare for an installation.

Note: If you are running a patch less than 4.0.3-5, you **MUST** patch to version 4.0.3-5 or higher before continuing the upgrade.

Note: If you do need to patch your system before continuing the upgrade, it is recommended that you fully test the patch prior to performing the upgrade.

This upgrade does not overwrite your current Gentran Integration Suite directory structure on disk. Instead, it creates a new installation of Gentran Integration Suite 4.2 that will point to and upgrade the database of your current installation of Gentran Integration Suite. This means your original instance will no longer be operational after performing the upgrade. After the upgrade, you will be starting your Gentran Integration Suite instance only from the newly created directory structure.

Note: Before the upgrade, you should always make a copy of your production database, and then perform the upgrade on the copy of the production database.

When you copy your database, if you encounter *Data Overflow* or *Invalid Time Format* errors while copying the WORKFLOW_CONTEXT table, run this query:

```
UPDATE WORKFLOW_CONTEXT SET ENTERQ = NULL, EXITQ = NULL where ENTERQ IS
NOT NULL OR EXITQ IS NOT NULL
```

Caution: This upgrade changes the administrative password to the default password. After the upgrade, change the password back to the administrative password to minimize security risks. This is the Admin password for logging into the UI (/dashboard or /ws).

Here is a summary of some key upgrade instructions:

✦ For Oracle, DB2 and MSSQL databases, use the same database information that you used for your current installation.

✦ Ensure the database version is compatible with Gentran Integration Suite 4.2. If it is not compatible, upgrade the database in the previous version before upgrading to Gentran Integration Suite 4.2.

✦ For MySQL databases, you will be asked if this is an upgrade to a previous 4.0 version. Answer yes.

You will be asked for the previous installation directory. This previous directory must include the SI directory. For example, D:\gis42\SI\... is correct, but D:\gis42\... is not correct.

1. Install Gentran Integration Suite release 4.2 as outlined in the *Gentran Integration Suite 4.2 Installation Guide*. There will be upgrade related questions that you must answer properly to perform an upgrade.

   a. Uninstall the Windows services for the previous installation using the command `uninstallwindowsservice.cmd`.

   b. When you are prompted for the passphrase, use the same passphrase that you did for the instance you are performing the upgrade on.

   c. The first question you will get related to the upgrade will be "Is this installation going to be used to upgrade an existing pre-4.0 GIS installation?"

   d. In this section, you are following instructions for performing an upgrade. So, for the above question, answer NO.

   e. Document the name of your installation directory

      On Windows, the installation directory must be eight characters or less

   f. There will be another question related to upgrade that you must answer appropriately to continue the upgrade path. The next upgrade related question is "Is this install to upgrade version 4.0.3-5 or higher?"

      Answer YES to this question to continue with the upgrade.

   g. During the installation, select the same type of database that you are using in the instance you are doing the upgrade from. Consider the following when answering the database related questions:

      ◆ For MySQL, the installation program will ask you for the location of the previous MySQL database.

      ◆ For Oracle, the installation program will ask you whether the Oracle instance is being used for an upgrade. Answer YES.

      ◆ Additionally, the installation program will ask you whether you are using BLOB data in your Oracle database.

         ◆ Determine whether your existing Gentran Integration Suite system supports BLOB data. Locate the file *previous_install_dir*/**properties/sandbox.cfg** and search for the ORACLE_USE_BLOB parameter.

        ◆ If ORACLE_USE_BLOB is included in your existing system, select BLOB. Otherwise, select Long Raw.

2. Download the latest 4.2 patch from the Support on Demand site https://support.sterlingcommerce.com:

3. Run the command `InstallService.cmd`

    `absolutePath/si_engine_420X.jar`

4. Complete steps outlined in *Post-Upgrade Processes* on page 18.

iSeries Upgrade

This chapter has instructions for iSeries only. Please see UNIX-specific instructions for UNIX and Windows-specific instructions for Windows.

Always make a full backup of your Gentran Integration Suite instance prior to performing an upgrade. It is also recommended that you thoroughly test this process in a test or development environment prior to implementing in a production environment.

Upgrade Procedure (iSeries)

The following steps will lead you through an iSeries upgrade from Gentran Integration Suite version 4.0 to version 4.2. Remember that in addition to this guide, you will need the *Gentran Integration Suite 4.2 Installation Guide*.

> **Caution:** It is important to remember that upgrading to 4.2 involves a full installation of Gentran Integration Suite. You need to prepare for an upgrade the same way that you would prepare for an installation.

Note: If you are running a patch less than 4.0.3-5, you **MUST** patch to version 4.0.3-5 or higher before continuing the upgrade.

Note: If you do need to patch your system before continuing the upgrade, it is recommended that you fully test the patch prior to performing the upgrade.

This upgrade does not overwrite your current Gentran Integration Suite directory structure on disk. Instead, it creates a new installation of Gentran Integration Suite 4.2 that will point to and upgrade the database of your current installation of Gentran Integration Suite. This means your original instance will no longer be operational after performing the upgrade. After the upgrade, you will be starting your Gentran Integration Suite instance only from the newly created directory structure.

Caution: This upgrade changes the administrative password to the default password. After the upgrade, change the password back to the administrative password to minimize security risks. This is the Admin password for logging into the UI (/dashboard or /ws).

Copying a DB2 Database

Before the upgrade, you should always make a copy of your production database, and then perform the upgrade on the copy of the production database.

To copy (back up and restore) the DB2 database for your previous version of Gentran Integration Suite (version 4.0) for iSeries into Gentran Integration Suite 4.2, perform the following steps:

1. Ensure that no one is using the Gentran Integration Suite 4.0 or Gentran Integration Suite 4.2 database.

2. The save and restore procedure must be done by the iSeries System Security Officer (QSECOFR) or by a user with *SECADM authority.

    To create a save file to hold your Gentran Integration Suite 4.0 database, type:

    ```
    CRTSAVF FILE(QGPL/SAVE40DB)
    ```

    If the save file already exists, type in:

    ```
    CLRSAVF FILE(QGPL/SAVE40DB)
    ```

3. Save your Gentran Integration Suite 4.0 database into the new save file using the following command:

    ```
    SAVLIB LIB(GIS40DB) DEV(*SAVF) SAVF(QGPL/SAVE40DB)
    ```

    GIS40DB represents your Gentran Integration Suite 4.0 database (collection).

4. To delete your new Gentran Integration Suite 4.2 database, type:

    ```
    DLTLIB GIS42DB
    ```

    GIS42DB represents your Gentran Integration Suite 4.2 database (collection).

    Note: When you receive a message similar to the following:

    ```
    Receiver QSQJRN0001 in GIS42DB never fully saved. (I C)
    ```

    Enter **I** to fully delete the library. This message may appear multiple times. Respond with **I** for each occurrence.

5. To create the collection again that will hold your Gentran Integration Suite 4.2 database, complete the following steps:

    a. Sign on to your iSeries using the user profile that you will use to run Gentran Integration Suite.

    b. From an iSeries command line, type STRSQL to get to an interactive SQL session.

    c. Type create collection *GIS42DB*.

        GIS42DB represents your Gentran Integration Suite 4.2 database.

        The create collection command creates a collection (library), called GIS42DB, that contains a journal, journal receiver, and several logical views.

    d. Exit without saving after the create command finishes.

6. To restore your Gentran Integration Suite 4.0 database to the same collection (library name) that you just created in step 5, type:

    `RSTLIB SAVLIB(`*`GIS40DB`*`) DEV(*SAVF) SAVF(QGPL/SAVE40DB) RSTLIB(`*`GIS42DB`*`)`

    GIS40DB represents your Gentran Integration Suite 4.0 database.

    GIS42DB represents your Gentran Integration Suite 4.2 database.

    You should receive a message similar to the following message, `254 objects restored. 19 not restored to GIS42DB`.

    Note: The 19 objects that are not restored are the journal and journal receiver files. This is expected.

7. After you restore the old database library into the new database, you must un-journal all of the files and then re-journal them to the new collection journals.

Upgrading an Installation

Here is a summary of some key upgrade instructions:

1. Install Gentran Integration Suite release 4.2 as outlined in the *Gentran Integration Suite 4.2 Installation Guide*. There will be upgrade related questions that you must answer properly to perform an upgrade.

    a. For the collection name, use the collection that was created in *Copying a DB2 Database* on page 16.

    b. Answer **Yes** to the question *Upgrade from GIS 4.0?*

    c. When you are prompted for the passphrase, use the same passphrase that you did for the instance on which you are performing the upgrade.

    d. Choose the same port numbers that you did for the instance on which you are performing the upgrade.

    e. Document the name of your installation directory.

2. Download the latest 4.2 patch from the Support on Demand site https://support.sterlingcommerce.com:

3. Change the directory to *install_dir*/bin

4. Run the command `InstallService.sh`

    `absolutePath/si_engine_420X.jar`

5. Complete the steps outlined in *Post-Upgrade Processes* on page 18.

Post-Upgrade Processes

Configuring ASAPROUT (iSeries Only)

If you are using iSeries, perform the following steps to configure ASAPROUT:

1. Start Gentran Integration Suite 4.2.

2. Log into Gentran Integration Suite as a user with administrative rights.

3. From the **Administration** menu, select **Operations** > **System** > **Support Tools** > **SQL Manager**.

4. Type, or copy and paste, the following SQL command in the command box:

   ```
   drop procedure ASAPROUT
   ```

5. Click **Execute**.

6. Clear the command box.

7. Copy and paste the following SQL command in the command box, ensuring the entire command is on a single line:

```
CREATE PROCEDURE ASAPROUT ( IN generationID VARCHAR(255) )  LANGUAGE SQL P1: BEGIN
DECLARE ruleID VARCHAR(255);  DECLARE mailboxID INTEGER;  DECLARE messagePattern
VARCHAR(255);  DECLARE messageID INTEGER;  DECLARE actionType VARCHAR(255);  DECLARE
processName VARCHAR(255);  DECLARE userID VARCHAR(255);  DECLARE contractName
VARCHAR(255);  DECLARE contractID VARCHAR(255);  DECLARE at_end SMALLINT DEFAULT 0;
DECLARE not_found CONDITION FOR SQLSTATE '02000';  DECLARE actionsets CURSOR WITH
RETURN FOR  SELECT RULE_ID, MESSAGE_PATTERN, MESSAGE_ID, MAILBOX_ID, ACTION_TYPE,
PROCESS_NAME,  USER_ID, CONTRACT_NAME, CONTRACT_ID   FROM MBX_ACTIONSET WHERE
GENERATION=generationID ORDER BY RULE_ID;  DECLARE rules CURSOR WITH RETURN FOR
SELECT  R.RULE_ID, MATCH_MBX.MAILBOX_ID,UPPER(PATTERN.MSG_NAME_PAT),   'Contract' AS
ACTION_TYPE,  CONTRACT.WORKFLOW_NAME AS PROCESS_NAME, ACTION.USER_ID,
CONTRACT.OBJECT_NAME AS CONTRACT_NAME, CONTRACT.OBJECT_ID AS CONTRACT_ID  FROM
MBX_RULE R, MBX_PATTERN PATTERN, MBX_CONTRACT_ACT CONT_ACTION,  MBX_ACTION ACTION,
SCI_CONTRACT CONTRACT, MBX_MATCH_MBX MATCH_MBX  WHERE  R.RULE_ID = PATTERN.RULE_ID
AND R.RULE_ID = ACTION.RULE_ID   AND CONT_ACTION.RULE_ID = R.RULE_ID AND
MATCH_MBX.RULE_ID = R.RULE_ID  AND CONT_ACTION.CONTRACT_NAME=CONTRACT.OBJECT_NAME AND
R.EVALUATE_ASAP > 0  UNION  SELECT  R.RULE_ID,
MATCH_MBX.MAILBOX_ID,UPPER(PATTERN.MSG_NAME_PAT),   'New_Proc' AS ACTION_TYPE,
NP_ACTION.PROCESS_NAME, ACTION.USER_ID,   '' AS CONTRACT_NAME, '' AS CONTRACT_ID
FROM  MBX_RULE R, MBX_PATTERN PATTERN, MBX_NEW_PROC_ACT NP_ACTION,  MBX_ACTION
ACTION, MBX_MATCH_MBX MATCH_MBX  WHERE  R.RULE_ID = PATTERN.RULE_ID AND R.RULE_ID =
ACTION.RULE_ID  AND  MATCH_MBX.RULE_ID = R.RULE_ID  AND NP_ACTION.RULE_ID = R.RULE_ID
AND R.EVALUATE_ASAP > 0;   DECLARE CONTINUE HANDLER FOR not_found  SET at_end = 1;
```

```
OPEN rules;  asap_loop:  LOOP  SET at_end = 0;  FETCH rules INTO ruleID, mailboxID,
messagePattern, actionType, processName,userID,contractName,contractID;  IF at_end <>
0 THEN  LEAVE asap_loop;  END IF;  INSERT INTO MBX_ACTIONSET (RULE_ID,
MESSAGE_PATTERN, MESSAGE_ID, MAILBOX_ID, ACTION_TYPE, PROCESS_NAME, USER_ID,
CONTRACT_NAME, CONTRACT_ID, GENERATION )  SELECT ruleID, messagePattern,
MSG.MESSAGE_ID, mailboxID, actionType, processName, userID, contractName, contractID,
generationID  FROM MBX_NEEDS_ROUTING NEEDS_ROUTING, MBX_MESSAGE MSG,
MBX_ROUTING_GNR8N GNR8N   WHERE NEEDS_ROUTING.MESSAGE_ID= MSG.MESSAGE_ID   AND
NEEDS_ROUTING.GENERATION < GNR8N.GENERATION   AND (MSG.MAILBOX_ID=mailboxID or
mailboxID is null)  AND UPPER(MSG.MESSAGE_NAME) LIKE messagePattern ESCAPE '|';  END
LOOP asap_loop;  CLOSE rules; END P1
```

8. Click **Execute**.

Adding Third-Party Libraries

If you added third-party libraries to configure adapters for the previous release, you need to add each of the libraries again after you complete the upgrade process for release 4.2. See the documentation for each third party adapter you use.

Configuring Services and Adapters

You may need to reconfigure services and adapters after an upgrade. During an upgrade, packages for services and adapters are reprocessed to update the service configurations.

If you modified the standard configuration for a service or adapter, you may need to reconfigure or reactivate the service or adapter following an upgrade. You may also need to reconfigure adapters that used directories or scripts in the installation directory of your previous release.

Examples of services and adapters that commonly need to be reconfigured following an upgrade include:

✦ SyncEngine HTTP Server adapter

✦ Federation adapter

✦ FTP adapter

✦ System services, like the Alert service and the BP Fault Log adapter

These are just examples. Always check the configuration of your adapters following an upgrade.

The following adapters need special consideration following an upgrade:

✦ *File System Adapter and Command Line Adapters* on page 19

File System Adapter and Command Line Adapters

You must configure your File System and Command Line adapters before you remove the previous release directory. Reconfigure any File System and Command Line adapters that were configured to use directories or scripts in the installation directory for the previous Gentran Integration Suite release. Ensure that you

create new directories and save scripts outside of the release 4.2 installation directory and edit each configuration to use the appropriate directories and scripts.

Note: Creating directories and saving scripts outside of the release 4.2 installation directory makes future upgrade processes easier.

Command Line2 Adapter

There is a new version of the CLA2Client.jar file beginning with Gentran Integration Suite 4.0 SP1. If you are using the Command Line2 adapter and have located the CLA2Client.jar file anywhere other than the default location, you must replace it with the new version. For information about the default location and how to start the Command Line2 adapter, see the Command Line2 adapter information in the online Documentation site.

If you are upgrading to Gentran Integration Suite 4.2 from a version lower than 4.0.1 and are using the Command Line 2 adapter, you must update the version of the CLA2Client.jar file with the CLA2Client.jar located in the *install_dir*/**client**/**cmdline2** directory. If you installed the CLA2Client.jar file anywhere other than the default location, you must replace each copy of the file with the new version. If you only installed it in the default location, the update occurs automatically during the upgrade process.

Restoring Performance Tuning Configuration

To restore your original performance tuning configuration to the new release, Gentran Integration Suite provides the Performance Tuning Wizard. You use the wizard to re-enter the settings you saved earlier.

Note: Before completing this procedure, see *Final Upgrade Notes* on page 21.

To restore the performance tuning configuration:

1. From the Gentran Integration Suite **Administration** menu, select **Operations** > **System** > **Performance** > **Tuning**.
2. Under Edit, click **Go!**
3. Complete the Performance Tuning Wizard, using the settings you obtained from the previous release.

Starting an Upgraded Cluster (UNIX and Windows Only)

After you upgrade all nodes of a cluster, start the cluster using the following procedure:

Note: When running `startCluster.sh` or `startCluster.cmd` on the second node of a cluster, the following error appears:

   Exception in thread "main" java.lang.OutOfMemoryError

   Ignore this error. The cluster will start normally and function.

UNIX

1. Node 1

   Run the command `startCluster.sh 1 false`

2. Nodes after node 1

   a. Copy *install_dir*/bin/**FeatureSet.xml** from the node 1 to *install_dir*/bin on node 2.

   b. Run the command `startCluster.sh (node number)`

   c. After `startCluster.sh (node number)` completes successfully, go to *install_dir*/bin and run the command `run.sh`.

Windows

1. Node 1

   a. At a DOS prompt, go to the *install_dir*\bin directory.

   b. Run the command `startCluster.cmd 1`.

   c. After `startCluster.cmd 1` completes successfully, run the command `startwindowsservice.cmd`.

2. Node 2

   a. Copy `FeatureSet.xml` from node 1 to other nodes.

   b. At a DOS prompt, go to the *install_dir*\bin directory.

   c. Run the command `startCluster.cmd 2`.

   d. After `startCluster.cmd 2` completes successfully, run the command `startwindowsservice.cmd`.

   e. Follow this same procedure for other nodes. For example, Node 3 would use the command `startCluster.cmd 3`.

Final Upgrade Notes

The upgrade is complete. At this point, you should download and apply the latest maintenance update from Support on Demand before using Gentran Integration Suite.

Note: The upgrade process enables services that might have been disabled before the upgrade. If you want to disable these services again, you must disable them in Gentran Integration Suite 4.2 after the upgrade process.

After you upgrade, do not use the previous release of Gentran Integration Suite. However, you should maintain your backup copy for future reference.

For additional information, see the following sections:

✦ *Changes to Network Interface Bindings* on page 22
✦ *Advanced File Transfer Tab* on page 23
✦ *Reconfiguring Archive Settings* on page 23

✦ *Correcting Missing Manager IDs* on page 24

Changes to Network Interface Bindings

To increase the security of the Administrator Console user interface, Gentran Integration Suite version 4.2 binds only to specific network interfaces. After upgrading, if the previous URL for Gentran Integration Suite returns *Page cannot be displayed*, you can adjust property settings to correct the problem.

1. On the server where Gentran Integration Suite resides, edit the noapp.properties.in file.

2. Locate the **admin_host** parameter. The default settings are as follows:

    hostname1 is the name of primary network interface, the one given highest priority by Gentran Integration Suite.

    localhost is the name of the network interface on the server where Gentran Integration Suite resides.

    Default entries

    ```
    admin_host.1    = hostname1
    admin_host.2    = localhost
    ```

3. Correct the parameters.

    ◆ If no interface is being displayed, edit *hostname1* so that it correctly identifies the primary network interface that accesses Gentran Integration Suite.

    ◆ If an additional network interface needs to access Gentran Integration Suite, add an additional *admin_host* entry, as shown below.

    Edited entries

    ```
    admin_host.1    = hostname1
    admin_host.2    = localhost
    admin_host.3    = hostname2
    ```

4. Stop Gentran Integration Suite.

5. Run the setupfiles.sh (UNIX) or setupfiles.cmd (Windows) utility located in the *install_dir*/bin directory.

6. Restart Gentran Integration Suite to use the updated settings.

For the Dashboard user interface, Gentran Integration Suite version 4.2 provides unrestricted binding to network interfaces through the perimeter server. To restrict access to the Dashboard user interface, you can adjust property settings so that only one network interface accesses Gentran Integration Suite.

1. On the server where Gentran Integration Suite resides, edit the perimeter.properties.in file.

2. Locate the **localmode.interface** parameter. The default setting is unrestricted, as shown below.

    Unrestricted Setting (Default)

    ```
    localmode.interface=*
    ```

3. To restrict access to the Dashboard, enter the network interface that you want Gentran Integration Suite to support.

    Restricted Setting

    localmode.interface=hostname1

4. Stop Gentran Integration Suite.

5. Run the setupfiles.sh (UNIX) or setupfiles.cmd (Windows) utility located in the *install_dir*/bin directory.

6. Restart Gentran Integration Suite to use the updated settings.

Advanced File Transfer Tab

The Advanced File Transfer tab in the Dashboard interface will not be enabled by default after an upgrade installation of Gentran Integration Suite 4.2. You will need to configure the Dashboard to enable the tab.

If you have a license for Advanced File Transfer, perform the following steps to add the Advanced File Transfer tab:

1. Log in as **Admin**.

2. Click **Manage Layout**.

3. Click **Add Pane**.

4. Enter the following name:
    Advanced File Transfer

5. Click **Apply**.

6. Click the link for the new **Advanced File Transfer** tab.

7. Click **Add Portlet**.

8. Select the Add box for **Advanced File Transfer Management**.

9. Click **Apply**.

10. Select **Clear Borders and Title** from the Decoration menu.

11. Click **Apply**.

12. Click **Save and Apply**.

Reconfiguring Archive Settings

The upgrade does not automatically reconfigure the archive configuration. You must reconfigure the Backup Directory setting in Archive Manager after an upgrade.

To reconfigure your Archive settings, use the following procedure:

1. From the Administration menu, choose **Operations** > **Archive Manager**.

2. Under Configure Archive Settings, click **Go!**

3. If a message displays about the UI Lock, click **OK** to continue.

4. Click **Next**.

5. Update the Backup Directory field with the correct path information:

6. Click **Save**.

7. Confirm the settings and click **Finish**.

Correcting Missing Manager IDs

If you created a Manager ID with no corresponding User ID in your previous version of Gentran Integration Suite, the Manager ID may be missing after upgrading to Gentran Integration Suite 4.2. If this occurs, create a user in the system with a User ID that matches the missing Manager ID.

Accessing User Documentation for Gentran Integration Suite

The user documentation is available via an online documentation site on the Web. Providing the documentation in an online environment allows for frequent updates of content based on user feedback and usability.

We also understand the need for a printed copy of documentation. You can print topics of information using your Internet browser, or you can download documents in PDF format. You also have the option to request a documentation CD.

Using the Online Documentation

The documentation for Gentran Integration Suite is located on the Sterling Commerce Documentation web site. You can type a word or phrase and search the entire library for information. Or you can move through a hierarchy of contents pages to identify the topic you want. After you find the topic you want, you can read it online or print it using your browser's Print function.

To access the Documentation site, from within Gentran Integration Suite or one of its tools, select the Help

icon. (Note that the application must reside on a computer that supports Internet access and an Internet browser.)

You can also access the Documentation site by opening your Internet browser and typing the following URL: http://www.sterlingcommerce.com/Documentation/GIS42/homepage.htm

Documentation Available in PDF Format

The online documentation includes documents in PDF format that you can download. To download PDF documents, click the *Documentation in PDF Format* link from the main online documentation page.

Requesting a Documentation CD

You can request a CD that contains all the documentation found on the Documentation site. To submit a request, go to the following URL:
http://support.sterlingcommerce.com/forms/Gentran_GIS_UpgradeRequest.aspx

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