

Sterling File Gateway

Installation Guide

1.1



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Before You Begin

System Requirements

Sterling File Gateway Version 1.1 must be installed on an existing Gentran Integration Suite Version 4.3, Build 4313 or later, system. Refer to the Gentran Integration Suite Documentation Library for the complete set of requirements:

[Gentran Integration Suite online library](#)

Obtain a License File

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

When you installed Gentran Integration Suite, the license file you used may have included Sterling File Gateway and you do not need to take any additional steps. If you purchased Sterling File Gateway separately, you may need to perform the following steps:

- 1.
2. From the Administration menu, select **Operations > System > Licenses**.
3. Next to **List All Licenses**, click **Go!**
4. Click **Self-Service Licensing Site**.
5. Click **Next**.
6. Click **Next**.
7. Type your CD-Key in the CD-Key field **Select Review and Download Package License File** listed on the left side of the page.
8. Click **Finish and Download** at the bottom of the page.
9. Click **Save** in the **File Download** dialog box.
10. Accept the default location for the license file or navigate to the location where the license file is stored.

Note: You recorded the path to the license file on the Preinstallation Task and Installation Information Worksheet during installation. Verify that the path is still the same, as this may have changed during installation.

11. Close the Self-Service Licensing site to return to the License page.
12. Click **Return**.
13. Next to **Update License**, click **Go!**
14. In the **License Key File** field, type the location of the license file, or click **Browse** to browse to the file and click **Next**.
15. Click **Finish**.

Obtain the Latest Patch Files

Build updates for Sterling File Gateway are contained in Gentran Integration Suite patch files. Patch files contain cumulative fixes and enhancements for a specific version of Gentran Integration Suite and Sterling File Gateway. Because each build contains the fixes and enhancements from previous builds, you only need to install the most recent patch file.

Sterling File Gateway and Gentran Integration Suite must always be patched to the same build number.

To obtain the latest patch:

1. Go to IBM Customer Center at <https://cn.sterlingcommerce.com/login.jsp>.
2. Select **Support Center > Product Support > Sterling File Gateway > Product Updates & Downloads > Gentran Integration Suite Product Updates & Downloads**.
3. Download the most recent patch file for Gentran Integration Suite and record the absolute path to the downloaded file. If you use FTP, use Binary mode. Do not rename the file. Download the file to your local machine (for example, to your installation bin directory), not to a network drive. Use the full path to your local machine when you install the patch.

To help you determine which patch to use, the files are named using the following naming convention:

`gis_43_build_build number.jar` (for example, `gis_43_build_4322.jar`)

Information about a patch is located in a PDF file with a similar name. The naming convention for PDF files containing information about a particular patch is:

`gis_43_build_build number_patch_info.pdf` (for example, `gis_43_build_4322_patch_info.pdf`)

You should periodically check the web site to verify that you have the most recent Gentran Integration Suite patch.

Note: The patch installation may use one or more patch property override files. These files will be named `propertyFile_patch.properties`. Do not alter these files.

Property Files Updates

Do not edit property files. Make all changes to properties in the `customer_overrides.properties` file. Property files will be overwritten with the contents of the associated `properties.in` files during the patch installation.

Property overrides contained in the `customer_overrides.properties` file are not affected and will not be overwritten. For information about property files, refer to *Using property files* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Back Up Your System

Before installing or upgrading, back up your system.

1. Back up your database.
2. If upgrading, perform a complete backup of the Sterling File Gateway installation directory, including all subdirectories.

Perimeter Servers with Sterling File Gateway

Using a perimeter server with Sterling File Gateway is optional.

A perimeter server is a software tool for communications management that is installed in a DMZ. The perimeter server manages the communications flow between outer layers of your network and TCP-based transport adapters. A perimeter server can solve problems with network congestion, security, and scalability, especially in high-volume, Internet-gateway environments. A perimeter server works with perimeter clients, such as the protocol adapters in Gentran Integration Suite and the proxy adapters in Sterling Secure Proxy. For more information, refer to the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Install in a Non-Clustered Microsoft Windows Environment

Install Sterling File Gateway in a Non-Clustered Microsoft Windows Environment

A Sterling File Gateway installation begins with an installation of Gentran Integration Suite, known as the B2B Console within Sterling File Gateway.

The following instructions assume that you have already installed Gentran Integration Suite and are now installing Sterling File Gateway. For more information, refer to *Installing in a Microsoft Windows Single-Node (Non-Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Note: During the installation, various messages are displayed, including some warning messages. These warning messages require no action on your part and are included so that helpful data is recorded in the `install_dir\logs\InstallService.log` file.

1. Stop Gentran Integration Suite.
2. Close all command prompt windows.
3. Install the Sterling File Gateway license file:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\AddLicenseSet.cmd absolutePath\LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

4. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:
[Gentran Integration Suite online library](#)
5. Close all command prompt windows.

Caution: Performing the next steps will upgrade your installation to Sterling File Gateway and completely disable existing functionality of Advanced File Transfer (AFT).

6. Install the Sterling File Gateway jar file:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\InstallService.cmd install_dir\packages\filegateway_version  
number_build number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is filegateway_1_1_4322.jar.

7. If you are upgrading a previous installation of Sterling File Gateway, and have customized any business processes, see *Customized Business Processes*.
8. If you are upgrading from AFT, additional steps are required to migrate your AFT configuration data to Sterling File Gateway.

For instructions on running the following script:

```
install_dir\tp_import\aft2fg.cmd
```

refer to the *Install and Set Up* instructions in the Sterling File Gateway online help.

9. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

10. Start Sterling File Gateway using the following command:

```
install_dir\bin\startWindowsService.cmd
```

Note: This method is only required the first time Sterling File Gateway is started after installing a patch. It verifies that Gentran Integration Suite and Sterling File Gateway are patched to the same build number. After the first time, Sterling File Gateway can be started by any other means, including the Gentran Integration Suite icon.

Install Build Patches for a Non-Clustered Microsoft Windows Environment

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

To install build patches prior to 4324:

1. Stop Gentran Integration Suite.

2. Install the latest patch for Gentran Integration Suite in a non-clustered Microsoft Windows environment. For more information, refer to *Installing the Current Maintenance Patch in Microsoft Windows* in the Gentran Integration Suite online documentation at [Gentran Integration Suite online library](#)
3. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at: [Gentran Integration Suite online library](#)
4. If necessary, install the updated Sterling File Gateway License file:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\AddLicenseSet.cmd absolutePath\LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

5. Close all command prompt windows.
6. Install the Sterling File Gateway jar file:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\InstallService.cmd install_dir\packages\filegateway_version  
number_build number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is filegateway_1_1_4322.jar.

7. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at: [Gentran Integration Suite online library](#)
8. Restart Sterling File Gateway using the following command:

```
install_dir\bin\startWindowsService.cmd
```

Note: This method is only required the first time Sterling File Gateway is started after installing a patch. It verifies that Gentran Integration Suite and Sterling File Gateway are patched to the same build number. After the first time, Sterling File Gateway can be started by any other means, including the Gentran Integration Suite icon.

9. If you are using a perimeter server in a DMZ, refer to *Installing Patches in a Perimeter Server Microsoft Windows Environment* in the Gentran Integration Suite online documentation at: [Gentran Integration Suite online library](#)

Install in a Clustered Microsoft Windows Environment

Install Sterling File Gateway in a Clustered Microsoft Windows Environment

A Sterling File Gateway installation begins with an installation of Gentran Integration Suite, known as the B2B Console within Sterling File Gateway.

The following instructions assume that you have already installed Gentran Integration Suite in a clustered Microsoft Windows environment and are now installing Sterling File Gateway. For more information, refer to *Installing in a Microsoft Windows Multiple-Node (Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Note: During the installation, various messages are displayed, including some warning messages. These warning messages require no action on your part and are included so that helpful data is recorded in the `install_dir\logs\InstallService.log` file.

1. Stop Gentran Integration Suite.
2. Close all command prompt windows.
3. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

4. Install the Sterling File Gateway License file using the following steps:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\AddLicenseSet.cmd absolutePath\LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

5. Close all command prompt windows.

Caution: Performing the next steps will upgrade your installation to Sterling File Gateway and completely disable existing functionality of Advanced File Transfer (AFT).

6. Install the Sterling File Gateway jar file:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\InstallService.cmd ..\packages\filegateway_2_0_5002.jar
```

7. If you are upgrading a previous installation of Sterling File Gateway, see *Customized Business Processes* for information about business processes you have previously customized.
8. If you are upgrading from AFT, additional steps are required to migrate your AFT configuration data to Sterling File Gateway.

For instructions on running the following script:

```
install_dir\tp_import\aft2fg.cmd
```

refer to the *Install and Set Up* instructions in the Sterling File Gateway online help.

9. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

10. Start Sterling File Gateway using the following command:

```
install_dir\bin\startWindowsService.cmd
```

Note: This method is only required the first time Sterling File Gateway is started after installing a patch. It verifies that Gentran Integration Suite and Sterling File Gateway are patched to the same build number. After the first time, Sterling File Gateway can be started by any other means, including the Gentran Integration Suite icon.

11. Starting from node 2, start the installation as normally done for all Gentran Integration Suite installations. For more information, refer to *Installing in a Microsoft Windows Multiple-Node (Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Install Build Patches in a Clustered Microsoft Windows Environment

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

All nodes in a cluster must be patched to the same build level. You should stop all nodes in the cluster before installing a patch and then install the patch on each node.

It is possible, in some cases, to apply patches to nodes while others are still processing. However, a patch containing any of the following requires the entire cluster to be down:

- Critical cluster functionality

- Engine-related changes
- Changes to the database

Only attempt to apply patches while part of the cluster is running with the advice of IBM Customer Support.

Apply a Patch in a Clustered Environment Stopping the Whole Cluster (Preferred Method)

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

To install the current build patches prior to 4324 for a clustered Microsoft Windows environment, stopping all nodes on the cluster:

1. Verify that the database server is up and ready to accept connections.
2. Stop all nodes of the cluster.
3. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at: [Gentran Integration Suite online library](#)
4. Close all command prompt windows.
5. On each node, install the patch:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\InstallService.cmd patch_dir\patchFileName
```

For example, if you download a Gentran Integration Suite patch file named gis_43_build_4322.jar and save it in a directory named d:\apps\GIS\patches, run the following command from the install_dir\bin directory:

```
InstallService.cmd d:\apps\GIS\patches\gis_43_build_4322.jar
```

Apply the patch to node 1 first, and then to the subsequent nodes: node 2, node 3, and so forth.

For node 1, set REINIT_DB=true in *install_dir\properties\sandbox.cfg*.

For subsequent nodes, set REINIT_DB=false, which prevents repeating database updates on every node's patch installation. Select the nodbinit option during the patch installation to automatically set this value.

Information about the patch installation is automatically logged to *install_dir\logs\InstallService.log*.

If the patch attempts to modify the database schema and the modification fails, you will receive an error message about the failure. The message will provide the error message code from the database and the SQL command that failed. The failure information is also logged to the system.log file and to the patch.log file. If you cannot determine whether the failure can be safely ignored, contact IBM Customer Support for assistance. Choose one of the following options when prompted:

- Continue—If you determine that the failure can be safely ignored, continue with the patch installation.

- Stop—Stop the patch installation. You should always contact IBM Customer Support for assistance before choosing this option.
- Retry—Choose this option to retry the failed command.

6. Close all command prompt windows.

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

7. Install the updated Sterling File Gateway license file:

- a) Open a command prompt window.
- b) Run the following command:

```
install_dir\bin\AddLicenseSet.cmd absolutePath\LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

8. Close all command prompt windows.

9. Install the Sterling File Gateway jar file:

- a) Open a command prompt window.
- b) Run the following command:

```
install_dir\bin\InstallService.cmd install_dir\packages\filegateway_version  
number_build number.jar
```

For example, Sterling File Gateway 1.1 is contained in build number 4322 and the file name is filegateway_1_1_4322.jar.

10. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

11. For each node, run the startCluster.cmd *nodeNumber* command to reconfigure the cluster environment after installing the patch.

For more information about using the startCluster.cmd command, refer to *Installing in a Microsoft Windows Multiple-Node (Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

12. Restart Sterling File Gateway using the following command:

```
install_dir\bin\startWindowsService.cmd
```

Note: This method is only required the first time Sterling File Gateway is started after installing a patch. It verifies that Gentran Integration Suite and Sterling File Gateway are patched to the same build number. After the first time, Sterling File Gateway can be started by any other means, including the Gentran Integration Suite icon.

If you are using a perimeter server in a DMZ, refer to *Installing a Perimeter Server in a More Secure Network in a Microsoft Windows Environment* in the Gentran Integration Suite online documentation at:

Apply a Patch in a Clustered Environment Stopping One Node at a Time

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

To install the current build patches prior to 4324, for a patch where you can stop the cluster one node at a time, use the following procedure:

Note: Apply the patch to node 1 first, and then to the subsequent nodes: node 2, node 3 (node *nodeNumber*), and so forth.

1. Verify that the database server is up and ready to accept connections.
2. Shut down node *nodeNumber* using the `hardstop.cmd` command.
Wait until the perimeter server of the node is completely down before installing the patch.
3. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:
[Gentran Integration Suite online library](#)
4. Close all command prompt windows.
5. Install the patch using the following command:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\InstallService.cmd patch_dir\patchFileName
```

For example, if you download a Gentran Integration Suite patch file named `gis_43_build_4322.jar` and save it in a directory named `d:\apps\GIS\patches`, run the following command from the `install_dir\bin` directory:

```
InstallService.cmd d:\apps\GIS\patches\gis_43_build_4322.jar
```

For node 1, `REINIT_DB=true` in `sandbox.cfg`. For subsequent nodes, `REINIT_DB=false`, which prevents database updates from repeating on each node's patch installation. This is automatically set during the patch installation for all nodes except node 1 if the installation is done using the `nodbinit` option.

Information about the patch installation is automatically logged to the `install_dir\logs\InstallService.log` file.

If the patch attempts to modify the database schema and the modification fails, you will receive an error message about the failure. The message will provide the error message code from the database and the SQL command that failed. The failure information is also logged to the `system.log` file and to the `patch.log` file. If you cannot determine whether the failure can be safely ignored, contact IBM Customer Support for assistance. Choose one of the following options when prompted:

- **Continue**—If you determine that the failure can be safely ignored, continue with the patch installation.
- **Stop**—Stop the patch installation. You should always contact IBM Customer Support for assistance before choosing this option.
- **Retry**—Choose this option to retry the failed command.

6. Close all command prompt windows.
7. Install the updated Sterling File Gateway license file:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\AddLicenseSet.cmd absolutePath\LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

8. Close all command prompt windows.
9. Install the Sterling File Gateway jar file:
 - a) Open a command prompt window.
 - b) Run the following command:

```
install_dir\bin\InstallService.cmd install_dir\packages\filegateway_version  
number_build number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is filegateway_1_1_4322.jar

10. Run the startCluster.cmd *nodeNumber* command to reconfigure the cluster environment after installing the patch.

For more information about using the startCluster.cmd command, refer to *Installing in a Microsoft Windows Multiple-Node (Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

11. Open the *install_dir\properties\sandbox.cfg* file in a text editor. Perform the following steps:
 - a) If REINIT_DB=true, back up the sandbox.cfg file and change to REINIT_DB=false.
 - b) Save and close the sandbox.cfg file.

This prevents database updates from being repeated for each node.

12. Repeat this procedure for each subsequent node.
13. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

14. Restart Sterling File Gateway using the following command:

```
install_dir\bin\startWindowsService.cmd
```

Note: This method is only required the first time Sterling File Gateway is started after installing a patch. It verifies that Gentran Integration Suite and Sterling File Gateway are patched to the same build number. After the first time, Sterling File Gateway can be started by any other means, including the Gentran Integration Suite icon.

If you are using a perimeter server in a DMZ, refer to *Installing a Perimeter Server in a More Secure Network in a Microsoft Windows Environment* in the Gentran Integration Suite online documentation at:

Gentran Integration Suite online library

Install in a Non-Clustered UNIX or Linux Environment

Install Sterling File Gateway in a Non-Clustered UNIX or Linux Environment

A Sterling File Gateway installation begins with an installation of Gentran Integration Suite, known as the B2B Console within Sterling File Gateway.

The following instructions assume that you have installed Gentran Integration Suite and are now installing Sterling File Gateway. For more information, refer to *Installing in a UNIX or LINUX Single Node (Non-Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Note: During the installation, various messages are displayed, including some warning messages. These warning messages require no action on your part and are included so that helpful data is recorded in the *install_dir/logs/InstallService.log* file.

1. Stop Gentran Integration Suite.
2. Change to the *install_dir/bin* directory and run the following command:

```
AddLicenseSet.sh absolutePath/LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

Caution: Performing the next steps will upgrade your installation to Sterling File Gateway and completely disable existing functionality of Advanced File Transfer (AFT).

3. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

4. Change to the *install_dir/bin* directory and run the following command:

```
InstallService.sh install_dir/packages/filegateway_version number_build number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is *filegateway_1_1_4322.jar*.

5. If you are upgrading a previous installation of Sterling File Gateway, and have customized any business processes, see *Customized Business Processes*.
6. If you are upgrading from AFT, additional steps are required to migrate your AFT configuration data to Sterling File Gateway.

For instructions on running the following script:

```
install_dir/tp_import/aft2fg.sh
```

refer to the *Install and Set Up* instructions in the Sterling File Gateway online help.

7. Change to the *install_dir/bin* directory.
8. Start Sterling File Gateway by running the `run.sh` command.
For more information about starting Sterling File Gateway, refer to *Start Sterling File Gateway in a UNIX or Linux Environment*.

9. Enter the passphrase.

The final startup processes run, concluding with the following message:

Depending on system load, it may take several minutes for the UI to be ready.

10. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Install Build Patches in a Non-Clustered UNIX or Linux Environment

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

Note: During the installation, various messages are displayed, including some warning messages. These warning messages require no action on your part and are included so that helpful data is recorded in the *install_dir/logs/InstallService.log* file.

To install a build patch prior to 4324:

1. Stop Gentran Integration Suite.
2. Change to the *install_dir/bin* directory and run the following command:

```
AddLicenseSet.sh absolutePath/LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

3. Change to the *install_dir/bin* directory and run the following command:

```
InstallService.sh install_dir/packages/filegateway_version_number_build  
number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is `filegateway_1_1_4322.jar`

4. If you are upgrading a previous installation of Sterling File Gateway, and have customized any business processes, see *Customized Business Processes*.
5. If you are upgrading from AFT, additional steps are required to migrate your AFT configuration data to Sterling File Gateway.

For instructions on running the following script:

```
install_dir/tp_import/aft2fg.sh
```

refer to the *Install and Set Up* instructions in the Sterling File Gateway online help.

6. Change to the *install_dir/bin* directory.
7. Start Sterling File Gateway by running the `run.sh` command.
For more information about starting Sterling File Gateway, refer to *Start Sterling File Gateway in a UNIX or Linux Environment*.
8. Enter the passphrase.
The final startup processes run, concluding with the following message:
Depending on system load, it may take several minutes for the UI to be ready.
9. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:
[Gentran Integration Suite online library](#)
10. If you are using a perimeter server in a DMZ, refer to *Installing Patches in a Perimeter Server UNIX or Linux Environment* in the Gentran Integration Suite online documentation at:
[Gentran Integration Suite online library](#)

Install in a Clustered UNIX or Linux Environment

Install Sterling File Gateway in a Clustered UNIX or Linux Environment

A Sterling File Gateway installation begins with an installation of Gentran Integration Suite, known as the B2B Console within Sterling File Gateway.

The following instructions assume that you have installed Gentran Integration Suite in a clustered UNIX or Linux environment and are now installing Sterling File Gateway. For more information, refer to *Installing in a UNIX or LINUX Multiple Node (Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Note: During the installation, various messages are displayed, including some warning messages. These warning messages require no action on your part and are included so that helpful data is recorded in the *install_dir/logs/InstallService.log* file.

1. Stop Gentran Integration Suite.
2. Change to the *install_dir/bin* directory and run the following command:

```
AddLicenseSet.sh absolutePath/LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

3. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Caution: Performing the next steps will upgrade your installation to Sterling File Gateway and completely disable existing functionality of Advanced File Transfer (AFT).

4. Change to the *install_dir/bin* directory and run the following command:

```
InstallService.sh install_dir/packages/filegateway_version number_build  
number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is filegateway_1_1_4322.jar

5. If you are upgrading a previous installation of Sterling File Gateway, and have customized any business processes, see *Customized Business Processes*.
6. If you are upgrading from AFT, additional steps are required to migrate your AFT configuration data to Sterling File Gateway.

For instructions on running the following script:

```
install_dir/tp_import/aft2fg.sh
```

refer to the *Install and Set Up* instructions in the Sterling File Gateway online help.

7. Install each subsequent node, from node 2 onwards, as normally done for all Gentran Integration Suite installations.

For more information, refer to *Installing in a UNIX or LINUX Multiple Node (Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

8. If you decrypted the database password, re-encrypt the password. For more information, refer to *Managing System Passwords* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Install Build Patches in a Clustered UNIX or Linux Environment

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

All nodes in a cluster must be patched to the same build level. You should stop all nodes in the cluster before installing a patch and then install the patch on each node.

It is possible, in some cases, to apply patches to nodes while others are still processing. However, a patch containing any of the following requires the entire cluster to be down:

- Critical cluster functionality
- Engine-related changes
- Changes to the database

Only attempt to apply patches while part of the cluster is running with the advice of IBM Customer Support.

Apply a Patch in a Clustered Environment Stopping the Whole Cluster (Preferred Method)

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

For a critical patch prior to 4324, stopping all nodes on the cluster:

1. Verify that the database server is up and ready to accept connections.
2. Stop the whole cluster.
3. Is the database password encrypted? If Yes, decrypt the password. For more information, see the “Decrypting Database Passwords” section in *Setting Up the Database (UNIX or Linux)*.
4. Install the patch on each node by running the following command from the *install_dir/bin* directory:

```
InstallService.sh patch_dir/patchFileName.jar
```

For example, if you download a Gentran Integration Suite patch file named *gis_43_build_4322.jar* and save it in a directory named *apps/GIS/patches*, run the following command from the *install_dir/bin* directory:

```
InstallService.sh apps/GIS/patches/gis_43_build_4322.jar
```

Apply the patch to *node1* first, and then to the subsequent nodes: *node2*, *node3*, etc.

For node 1, set *REINIT_DB=true* in *install_dir/properties/sandbox.cfg*.

For subsequent nodes, set *REINIT_DB=false*, which prevents repeating database updates on every node's patch installation. Select the *-cluster* option during the patch installation to automatically set this value.

Information about the patch installation is automatically logged to *install_dir/logs/InstallService.log*.

If the patch attempts to modify the database schema and the modification fails, you will receive an error message about the failure. The message will provide the error message code from the database and the SQL command that failed. The failure information is also logged to the *system.log* file and to the *patch.log* file. If you cannot determine whether the failure can be safely ignored, contact IBM Customer Support for assistance. Choose one of the following options when prompted:

- Continue—If you determine that the failure can be safely ignored, continue with the patch installation.
- Stop—Stop the patch installation. You should always contact IBM Customer Support for assistance before choosing this option.
- Retry—Choose this option to retry the failed command.

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

5. If installing an updated license file, change to the *install_dir/bin* directory and run the following command:

```
AddLicenseSet.sh absolutePath/LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

6. Change to the *install_dir/bin* directory and run the following command:

```
InstallService.sh install_dir/packages/filegateway_version number_build number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is *filegateway_1_1_4322.jar*

7. Configure each node as a cluster node by running *startCluster.sh nodeNumber*.
8. If you decrypted the database password, re-encrypt the password. For more information, see the “Encrypting Database Passwords” section in *Setting Up the Database (UNIX or Linux)*.
9. Restart the whole cluster.

10. If you are using a perimeter server in a DMZ, refer to *Installing a Perimeter Server in a More Secure Network in a UNIX or Linux Environment* in the Gentran Integration Suite documentation at: [Gentran Integration Suite online library](#)

Apply a Patch in a Clustered Environment Stopping One Node at a Time

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

Only attempt to apply patches while part of the cluster is running with the advice of IBM Customer Support. For a patch prior to 4324 where you can stop the cluster one node at a time, apply the patch to node 1 first, and then to the subsequent nodes: node 2, node 3 (node *nodeNumber*), and so forth:

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

1. Verify that the database server is up and ready to accept connections.
2. Shut down the node using the `install_dir/bin/hardstop.sh` command.
3. Wait three minutes.
4. Is the database password encrypted? If Yes, decrypt the password. For more information, see the “Decrypting Database Passwords” section in the *Setting Up the Database (UNIX or Linux)* chapter.
5. Change to the directory where Sterling File Gateway is installed and install the patch using the following commands:
 - a) `cd install_dir/bin`
 - b) `InstallService.sh patch_dir/patchFileName.jar`

For example, if you download a Gentran Integration Suite patch file named `gis_43_build_4322.jar` and save it in a directory named `apps/GIS/patches`, run the following command from the `install_dir/bin` directory:

```
InstallService.sh apps/GIS/patches/gis_43_build_4322.jar
```

Apply the patch to node1 first, and then to the subsequent nodes: node2, node3, etc.

For node 1, set `REINIT_DB=true` in `install_dir/properties/sandbox.cfg`.

For subsequent nodes, set `REINIT_DB=false`, which prevents repeating database updates on every node's patch installation. Select the `-cluster` option during the patch installation to automatically set this value.

Information about the patch installation is automatically logged to `install_dir/logs/InstallService.log`.

If the patch attempts to modify the database schema and the modification fails, you will receive an error message about the failure. The message will provide the error message code from the database and the SQL command that failed. The failure information is also logged to the `system.log` file and to the `patch.log` file. If you cannot determine whether the failure can be safely ignored, contact IBM Customer Support for assistance. Choose one of the following options when prompted:

- Continue—If you determine that the failure can be safely ignored, continue with the patch installation.
- Stop—Stop the patch installation. You should always contact IBM Customer Support for assistance before choosing this option.
- Retry—Choose this option to retry the failed command.

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

6. Change to the *install_dir/bin* directory and run the following command:

```
AddLicenseSet.sh absolutePath/LicenseFile
```

where *absolutePath* is the path to the Sterling File Gateway license file and *LicenseFile* is the file name of the Sterling File Gateway license file.

7. Change to the *install_dir/bin* directory and run the following command:

```
InstallService.sh install_dir/packages/filegateway_version number_build number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is *filegateway_1_1_4322.jar*.

8. Run the `startCluster.sh nodeNumber` command to reconfigure the cluster environment after installing the patch.
9. Repeat steps 1 through 8 for each subsequent node.
10. If you decrypted the database password, re-encrypt the password. For more information, see the “Encrypting Database Passwords” section in the *Setting Up the Database (UNIX or Linux)* chapter.
11. Restart Sterling File Gateway on each node.

Install in an iSeries Environment

Install Sterling File Gateway in an iSeries Environment

A Sterling File Gateway installation begins with an installation of Gentran Integration Suite, known as the B2B Console within Sterling File Gateway.

The following instructions assume that you have installed Gentran Integration Suite and are now installing Sterling File Gateway. For more information, refer to *Installing in an iSeries Single Node (Non-Clustered) Environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

Note: During the installation, various messages are displayed, including some warning messages. These warning messages require no action on your part and are included so that helpful data is recorded in the `install_dir/logs/InstallService.log` file.

1. Sign on with your Gentran Integration Suite user profile and enter into QSH (QShell mode).
2. In QSH, change to the `install_dir/bin` directory where `install_dir` is your Gentran Integration Suite installation directory.

Example: `cd /install_dir /bin` and press **Enter**.

3. Run the following command:

```
AddLicenseSet.sh absolutePath/LicenseFile
```

where `absolutePath` is the path to the Sterling File Gateway license file and `LicenseFile` is the file name of the Sterling File Gateway license file.

Caution: Performing the next steps will upgrade your installation to Sterling File Gateway and completely disable existing functionality of Advanced File Transfer (AFT).

4. Run the following command to install Sterling File Gateway:

```
/InstallService.sh install_dir/packages/filegateway_version number_build number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is `filegateway_1_1_4322.jar`

5. If you are upgrading a previous installation of Sterling File Gateway, see *Customized Business Processes* for information about business processes you have previously customized.
6. If you are upgrading from AFT, additional steps are required to migrate your AFT configuration data to Sterling File Gateway.

For instructions on running the following script:

```
install_dir/tp_import/aft2fg.sh
```

refer to the *Install and Set Up* instructions in the Sterling File Gateway online help.

Install Build Patches in an iSeries Environment

Build updates for Sterling File Gateway are contained in Gentran Integration Suite patch files. Patch files contain cumulative fixes and enhancements for a specific version of Gentran Integration Suite, and Sterling File Gateway. Because each build contains the fixes and enhancements from previous builds, you only need to install the most recent patch file.

With Gentran Integration Suite 4.3, Build 4324 and later, when you apply a build to Gentran Integration Suite, the installation script detects if Sterling File Gateway is installed. If Sterling File Gateway is present, the installation script automatically installs the Sterling File Gateway build.

Note: Do not skip any of the following steps. The Sterling File Gateway and Gentran Integration Suite versions must always be patched to the same build number.

To install a build patch prior to 4324:

1. Install the latest patch for Gentran Integration Suite in an iSeries environment. For more information, refer to *Installing the Current Maintenance Patch for an iSeries environment* in the Gentran Integration Suite online documentation at:

[Gentran Integration Suite online library](#)

2. If installing an updated license file, change to the `install_dir/bin` directory and run the following command:

```
AddLicenseSet.sh absolutePath/LicenseFile
```

where `absolutePath` is the path to the Sterling File Gateway license file and `LicenseFile` is the file name of the Sterling File Gateway license file.

3. Change to the `install_dir/bin` directory and run the following command:

```
InstallService.sh install_dir/packages/filegateway_version_number_build  
number.jar
```

For example, a version of Sterling File Gateway 1.1 is contained in build number 4322 and the file name is `filegateway_1_1_4322.jar`

If you are using a perimeter server in a DMZ, refer to *Installing Patches in a Perimeter Server iSeries Environment* in the Gentran Integration Suite documentation at:

[Gentran Integration Suite online library](#)

After You Install

Customized Business Processes

Upgrading to a new build may install new versions of Sterling File Gateway system business processes. If you have modified the previous version of a system business process, the new version will be installed but will not be set as the default version. Your modified version will continue to be the default version. During the build installation, the output will produce a message on the screen and in the `installService.log` similar to the following:

```
Adding New system flow: FileGatewayMailboxRoute.bpml BPML has not been set as default version.
```

To use the new version of the business process, you will need to manually update the new system business process to reflect your modifications and set it as the default version.

With Build 4322_generic_hotfix_2 or later, Sterling File Gateway performs a version check on system business processes to verify that the latest version is being run. If the version check fails, all routes are marked as “Failed”. For a failed route, click on the row to view details. An error message of:

```
FG-0458 A newer version of Business Process xxx is installed, but is not the default chosen version.
```

This is a reminder to perform the changes and reset the default business process.

There is also a log entry when this occurs.

Adjust IBM DB2 Settings

1. If you are using an IBM DB2 database, consider changing your registry values.

The following table describes the DB2 registry values that are either recommended or are critical for IBM DB2 for LUW (Linux, UNIX, and Microsoft Windows) performance with Sterling File Gateway:

Variable	Mandatory or Recommended	Recommended Value
DB2_EVALUNCOMMITTED	Recommended	Enabling this variable can reduce the amount of unnecessary lock contention from Read Share and Next Key Share.

Variable	Mandatory or Recommended	Recommended Value
		<p>By default, UDB requests share locks on the index or record before verifying if the record satisfies the query predicate. Queries that scan a set of records in tables with high frequency of inserts or updates can unnecessarily block records that do not belong to its result set.</p> <p>When you set DB2_EVALUNCOMMITTED to ON, UDB performs an uncommitted read on the record to perform the predicate verification. If the record satisfies the predicate, UDB requests a share lock on that record.</p> <p>Recommended value: ON</p>
DB2_SKIPDELETED	Recommended	<p>Allows index-range queries or table-scan queries to skip records that are in an uncommitted delete state. This reduces the amount of lock contention from Read Share and Next Key Share locks from range queries in tables with a high frequency of deletes.</p> <p>When enabled, DB2_SKIPDELETED allows, where possible, table or index access scans to defer or avoid row locking until a data record is known to satisfy predicate evaluation. This allows predicate evaluation to occur on uncommitted data.</p> <p>This variable is applicable only to statements using either Cursor Stability or Read Stability isolation levels. For index scans, the index must be a type-2 index. Deleted rows are skipped unconditionally on table scan access while deleted keys are not skipped for type-2 index scans unless DB2_SKIPDELETED is also set.</p> <p>Recommended value: ON</p>
DB2_SKIPINSERTED	Recommended	<p>Allows SELECTs with Cursor Stability or Read Stability isolation levels to skip uncommitted inserted rows. This reduces record lock contention on tables with heavy insert rates.</p> <p>Recommended value: ON</p>

- For additional information regarding IBM D2 registry variable settings, see [Recommended Settings for IBM DB2 Registry Variables](#) .

Start Sterling File Gateway in a Microsoft Windows Environment

To start Sterling File Gateway in a Microsoft Windows environment:

1. Double-click the Gentran Integration Suite at the port yourPort icon on your Microsoft Windows desktop. Sterling File Gateway starts running.

Note: It may take several minutes for Sterling File Gateway components to initialize and start up.

2. If Sterling File Gateway does not start or if you receive a message about an invalid or corrupt license file, go to the *Troubleshooting: Microsoft Windows Environment* section at:

[Gentran Integration Suite online library](#)

3. When startup is finished, a message similar to the following is displayed:

```
Open your Web browser to http://host:port/filegateway
```

where *host:port* is the host and port number where Sterling File Gateway resides on your system.

4. Make a note of the URL address so you can access Sterling File Gateway later.

Start Sterling File Gateway in a UNIX or Linux Environment

To start Sterling File Gateway in a UNIX or Linux environment:

1. Change the directory to *install_dir/bin*.
2. Enter `run.sh`.
3. Enter the passphrase that you supplied during installation.

When startup is complete, a message like the following is displayed:

Open your Web browser to http://host:port/filegateway, where host:port is the host and port number where Sterling File Gateway resides on your system.

Make a note of the URL address so you can access Sterling File Gateway later.

The system returns you to a UNIX prompt.

Start Sterling File Gateway in an iSeries Environment

To start Sterling File Gateway in an iSeries environment:

1. Sign onto iSeries with your Gentran Integration Suite user profile.
2. Submit a batch job by entering the following command:

```
SBMJOB CMD(QSH CMD('umask 002 ; cd install_dir/bin ; ./run.sh')) JOB(SIMAIN)
```

Note: The job queue to which you submit the command must allow at least eight active jobs. If the maximum number of active jobs is less than eight, Gentran Integration Suite will not start up completely.

To reduce keying errors at startup, create a command language (CL) program similar to the following example:

```
PGM
SBMJOB CMD(QSH CMD('umask 002 ; cd install_dir/bin ; ./run.sh')) +
JOB(SIMAIN)
ENDPGM
```

3. Wait for startup to complete, a process that may take several minutes depending on server load and other factors.
4. Startup creates a spool file. When startup is finished, open the QPRINT spool file and check the end of the file for a message about how to connect to Gentran Integration Suite. For example, you may see a message like the following:

```
Open your Web browser to http://host:port/filegateway
```

where *host:port* is the host and port number where Gentran Integration Suite resides on your system.

Make a note of the address so you can access Gentran Integration Suite later.

Note: It may take several minutes for Gentran Integration Suite to be available from the Web browser, even after the above URL message has been issued.

5. (Optional) To verify that Gentran Integration Suite has started normally and completely, view the system through WRKACTJOB and verify that only three QPOZSPWP jobs (of yours) are left running in your Gentran Integration Suite batch subsystem.
6. Prepare your browser to log in to Gentran Integration Suite. Configure your browser so that there is direct connection between the Web browser and iSeries. Do not configure the browser to use any proxy server between you and iSeries (unless it is a requirement of your network).

Access Sterling File Gateway

To log in to Sterling File Gateway the first time:

1. Ensure that Sterling File Gateway is started and running.
2. Open a browser window and enter the URL displayed at the end of startup.
3. The login page for Sterling File Gateway displays.
4. Type the default user ID (`fg_sysadmin`) and password (`password`). The default login is at an administrative level. One of your first tasks as an administrator is to change the administrative password and to register other users with other levels of permission.

Note: For system security, change the password for `fg_sysadmin` immediately.
