Sterling File Gateway

IBM

Installation Guide

2.2.2 and higher

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Contents

Chapter 1. Before you begin

System requirements

IBM® Sterling File Gateway Version 2.2 must be installed on an existing IBM Sterling B2B Integrator Version 5.2.0 or later, system. Refer to the Sterling B2B Integrator Documentation Library for the complete set of requirements:

Sterling B2B Integrator 5.2 online library

License information

About this task

IBM provides the license files for each feature of Sterling B2B Integrator that you purchased with the software media. You will not have to contact IBM Customer Support to get the license files. A separate license is required for each Sterling B2B Integrator feature that you purchased. During installation, you must choose the license files according to what has been purchased. IBM Customer Support will audit the system once your system is in use. If after the installation is finished, you determine that you need to modify licenses files, see the *License Modification* topic in the Sterling B2B Integrator online library at Sterling B2B Integrator 5.2 online library for more information.

Obtain the latest patch files

About this task

Build updates for Sterling File Gateway are contained in Sterling B2B Integrator patch files. Patch files contain cumulative fixes and enhancements for a specific version of Sterling B2B Integrator 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 Sterling B2B Integrator must always be patched to the same build number.

To obtain the latest patch:

Procedure

1. Go to the IBM Passport Advantage site.
2. Download the most recent patch file for Sterling B2B Integrator 5.2 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:

   `si_52_build_`*build number*`.jar (for example, si_52_build_5020200.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:

```
si_52_build_build number_patch_info.pdf
(for example, si_52_build_5020200_patch_info.pdf)
```

You should periodically check the web site to verify that you have the most recent Sterling B2B Integrator 5.2 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:

`<install_dir>/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 are not overwritten. For information about property files, refer to *Using property files* in the Sterling B2B Integrator online documentation at:

Sterling B2B Integrator 5.2 online library

Back up your system

About this task

Before installing or upgrading, back up your system.

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

Install Sterling B2B Integrator

A Sterling File Gateway 2.2 installation begins with an installation of Sterling B2B Integrator 5.2.

The following instructions assume that you have already installed Sterling B2B Integrator 5.2 and are now installing Sterling File Gateway. For more information, refer to the Sterling B2B Integrator online documentation at:

Sterling B2B Integrator 5.2 online library.

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

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 Sterling B2B Integrator and the proxy adapters in IBM Sterling Secure Proxy. For more information, refer to the Sterling B2B Integrator online documentation at:

Sterling B2B Integrator 5.2 online library.

Chapter 2. Install in a Microsoft Windows environment

Install Sterling File Gateway in a single-node (non-clustered) Microsoft Windows environment

About this task

A Sterling File Gateway 2.2 installation begins with an installation of Sterling B2B Integrator 5.2.

The following instructions assume that you have already installed Sterling B2B Integrator 5.2 and are now installing Sterling File Gateway.

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.

Procedure

1. Stop Sterling B2B Integrator 5.2.
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 Sterling B2B Integrator online documentation at: Sterling B2B Integrator 5.2 online library.
4. 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).

5. 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 2.2 is contained in build number 5020200 and the file name is

      \packages\filegateway_2020200.jar

      Attention: Running **InstallService.cmd** removes any previously installed interim fix to prevent conflicts with what is being installed.

6. If you are upgrading a previous installation of Sterling File Gateway, and have customized any business processes, see *Customized Business Processes*.
7. 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.

8. If you decrypted the database password, re-encrypt the password.

Install Sterling File Gateway in a multiple-node (clustered) Microsoft Windows environment

About this task

A Sterling File Gateway 2.2 installation begins with an installation of Sterling B2B Integrator 5.2.

The following instructions assume that you have already installed Sterling B2B Integrator 5.2 in a clustered Microsoft Windows environment and are now installing Sterling File Gateway.

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.

Procedure

1. Stop Sterling B2B Integrator 5.2.
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 Sterling B2B Integrator online documentation at: Sterling B2B Integrator 5.2 online library.
4. 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).
5. 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_2020200.jar`

      Attention: Running **InstallService.cmd** removes any previously installed interim fix to prevent conflicts with what is being installed.
6. If you are upgrading a previous installation of Sterling File Gateway, see *Customized Business Processes* for information about business processes you have previously customized.
7. 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.
8. Install each subsequent node, from node 2 onwards, as normally done for all Sterling B2B Integrator 5.2 installations. For more information, refer to *Installing in a Microsoft Windows Multiple Node (Clustered) Environment* in the Sterling B2B Integrator online documentation at: Sterling B2B Integrator 5.2 online library.
9. If you decrypted the database password, re-encrypt the password.

Chapter 3. Install in a UNIX or Linux environment

Install Sterling File Gateway in a single-node (non-clustered) UNIX or Linux environment

About this task

A Sterling File Gateway 2.2 installation begins with an installation of Sterling B2B Integrator 5.2.

The following instructions assume that you have installed Sterling B2B Integrator 5.2 and are now installing Sterling File Gateway.

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.

Procedure

1. Stop Sterling B2B Integrator 5.2.
2. If your database password is encrypted, decrypt the password. For more information, refer to *Managing System Passwords* in the Sterling B2B Integrator online documentation at: Sterling B2B Integrator 5.2 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).
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, Sterling File Gateway 2.2 is contained in build number 5020200 and the file name is:

   filegateway_2020200.jar

   Attention: Running **InstallService.sh** removes any previously installed interim fix to prevent conflicts with what is being installed.
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. If you decrypted the database password, re-encrypt the password.

Install Sterling File Gateway in a multiple-node (clustered) UNIX or Linux environment

About this task

A Sterling File Gateway installation begins with an installation of Sterling B2B Integrator 5.2.

The following instructions assume that you have installed Sterling B2B Integrator 5.2 in a clustered UNIX or Linux environment and are now installing Sterling File Gateway.

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.

Procedure

1. Stop Sterling B2B Integrator 5.2.
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 Sterling B2B Integrator online documentation at: Sterling B2B Integrator 5.2 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, Sterling File Gateway 2.2 is contained in build number 5020200 and the file name is filegateway_2020200.jar

   Attention: Running **InstallService.sh** removes any previously installed interim fix to prevent conflicts with what is being installed.
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 Sterling B2B Integrator 5.2 installations. For more information, refer to *Installing in a UNIX or LINUX Multiple Node (Clustered) Environment* in the Sterling B2B Integrator online documentation at: Sterling B2B Integrator 5.2 online library.
8. If you decrypted the database password, re-encrypt the password.

Chapter 4. Install in an iSeries environment

Install Sterling File Gateway in an iSeries environment

About this task

A Sterling File Gateway 2.2 installation begins with an installation of Sterling B2B Integrator 5.2.

The following instructions assume that you have installed Sterling B2B Integrator 5.2 and are now installing Sterling File Gateway.

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.

Procedure

1. Sign on with your Sterling B2B Integrator user profile and enter into QSH (QShell mode).
2. In QSH, change to the install_dir/bin directory where *install_dir* is your Sterling B2B Integrator 5.2 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, Sterling File Gateway 2.2 is contained in build number 5020200 and the file name is filegateway_2020200.jar

   Attention: Running **InstallService.sh** removes any previously installed interim fix to prevent conflicts with what is being installed.
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.

Chapter 5. 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 system business process, you will need to manually update the business process to reflect your modifications and set it as the default version.

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

About this task

For optimal performance, some values in the IBM DB2® registry may need to be adjusted.

Procedure

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 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. 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. 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. Recommended value: ON
DB2_SKIPDELETED	Recommended	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. 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. 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. Recommended value: ON

Variable	Mandatory or Recommended	Recommended Value
DB2_SKIPINSERTED	Recommended	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. Recommended value: ON

2. For additional information regarding IBM DB2 registry variable settings, see *Recommended Settings for IBM DB2 Registry Variables* in the *Sterling B2B Integrator 5.2 online library*.

Start Sterling File Gateway in a Microsoft Windows environment

About this task

To start Sterling File Gateway in a Microsoft Windows environment:

Procedure

1. Double-click the Sterling B2B Integrator at 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 an error message, refer to the *Troubleshooting: Microsoft Windows Environment* section at: Sterling B2B Integrator 5.2 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

About this task

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

Procedure

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 final startup processes run, concluding with the following message:

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

Start Sterling File Gateway in an iSeries environment

About this task

To start Sterling File Gateway in an iSeries environment:

Procedure

1. Sign onto iSeries with your Sterling B2B Integrator 5.2 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, Sterling File Gateway 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 Sterling File Gateway. 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 Sterling B2B Integrator 5.2 resides on your system.

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

   Note: It may take several minutes for Sterling File Gateway to be available from the Web browser, even after the above URL message has been issued.
5. Prepare your browser to log in to Sterling File Gateway. 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

About this task

To log in to Sterling File Gateway the first time:

Procedure

1. Ensure thatSterling 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 forSterling 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.
   CAUTION:
   For system security, change the password for fg_sysadmin immediately.

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