

Sterling B2B Integrator



iSeries Environment Installation

Version 5.2.0 - 5.2.2

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Version 5.2.0 - 5.2.2

Note

Before using this information and the product it supports, read the information in "Notices" on page 27.

Copyright

This edition applies to Version 5 Release 2 of Sterling B2B Integrator and to all subsequent releases and modifications until otherwise indicated in new editions.

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iSeries Installation (5.2.0 - 5.2.2)

You may follow different installation and upgrade scenarios when you install and upgrade Sterling B2B Integrator in an iSeries environment.

Installation Scenarios for Version 5.2.1 and 5.2.2

It is important to review the following installation scenarios:

Scenario	Instructions
Version 5.2.0 is installed as the base release and it needs to be patched to the 5.2.1 level.	Use the <i>Install Version 5.2.1 or 5.2.2 as a Patch</i> instructions provided in <i>Install the Software</i> .
Version 5.2.1 is being installed as the base release.	You will need to review this document and use the installation instructions in <i>Install the Software</i> .
Version 5.2.1 is installed as the base release and it needs to be patched to the 5.2.2 level.	Use the <i>Install Version 5.2.1 or 5.2.2 as a Patch</i> instructions provided in <i>Install the Software</i> .
Version 5.2.2 is being installed as the base release.	You will need to review this document and use the installation instructions in <i>Install the Software</i> .

Prerequisite Knowledge for Installation in an iSeries Environment

Before you begin the installation, you should be knowledgeable on the following topics:

- Application servers
- Database administration
- *System Requirements* for this release of Sterling B2B Integrator.

Intended Audience

This document is intended for use by:

- System Administrators
- Installation Engineers
- Database Administrators.

Assumptions for this Guide

The procedures in this guide are accurate as of the publication date and are specific to this version of the document.

Install the Software

Installation Checklist for iSeries Environment

Use this checklist to install Sterling B2B Integrator in an iSeries environment.

The checklist contains:

- Brief descriptions for tasks (detailed procedures are provided after the checklist)

- Information you need to gather to complete the installation

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

- The first character must be alphabetic
- The remaining characters may be alphanumeric, but it's best to avoid special characters
- Do not use spaces or apostrophes.

You may want to make a copy of the following checklist and use it to record the information you collect.

#	iSeries Installation Checklist	Your Notes
1	Review your IBM® contract to determine what software you have licensed. You need to know this <i>License Information</i> so that you can select the correct components/features to install.	
2	Use the system requirements to verify that your system hardware and software meet the requirements specified for this release.	
3	For systems with multiple IP addresses, verify that the IP address on which Sterling B2B Integrator resides is accessible by any client computer that is running a browser interface. Caution: If you do not verify the IP address, your system may not operate properly after installing Sterling B2B Integrator. A good test is to ping the IP address from your iSeries command line.	
4	If you are using a non-English environment, confirm that you are using the appropriate character set.	
5	Configure the system to view Sterling B2B Integrator files using Windows Explorer.	
6	Map a network drive to your working directory.	
7	Specify the QCCSID (Coded Character Set) for this installation.	
8	Record the collection name for the database.	
9	Record the system passphrase.	
10	Record the administrative email address. This address is where system alerts messages are sent.	
11	Record the SMTP Server IP address. This address is where alert messages are sent.	
12	Record the Initial Port Number.	
13	Record the Hostname (catalog name) on which you plan to install the software.	

#	iSeries Installation Checklist	Your Notes
14	Determine the Host IP address for Sterling B2B Integrator. This is required even if you only have one IP address for your system.	
15	Create the Sterling B2B Integrator user profile and the associated password. Be sure to record the user password so you can enter it during installation.	
16	Create a SystemDefault.properties file. If you have multiple JDKs loaded on your system, you need to point your user profile to correct version of the JDK. Verify that your user profile points to the correct JDK.	
17	Verify that your user profile is pointing to a job queue in a subsystem.	
18	Record the path to the Sterling B2B Integrator jar file. The jar file can reside in any directory on your system. During installation, you use this directory, but this is not the final directory where Sterling B2B Integrator resides.	
19	Record the Directory Name where you plan to install the software. The Sterling B2B Integrator installation directory must be a new directory and cannot already exist. A large subdirectory tree will be created under this directory. During installation, this directory is referred to as <i>install_dir</i> .	
20	Record the path to the Core License file (Core_License.xml).	
21	Download the JCE distribution file.	
22	Install the Sterling B2B Integrator software.	

The Sterling B2B Integrator installation program will automatically set the umask to 002 during the installation. However, iSeries system administrators should consider placing an appropriate umask command such as `umask 002` in their global or user login script because the default of 000 could allow many IFS files to be world-writable. Consult the IBM iSeries Information Center for more information on umask and customizing your Qshell environment.

License information

IBM provides the license files for each feature of Sterling B2B Integrator that you purchased with the software media. You do 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 you purchased. IBM customer support will audit your system after it is in use.

For more information about modifying licenses files, see the topic on License Modification.

Verifying that your system meets the system requirements

Before you begin the installation, verify that your system meets the hardware and software requirements that are specified for this release. The hardware requirements that are listed in the *System Requirements* are the minimum that is required. Your system requirements exceed the minimum if you are running other applications on the same system as Sterling B2B Integrator.

The installation strictly enforces the following system requirements:

- Operating system version must match requirement exactly.
- The minimum fix pack level for the operating system is enforced, but you can apply higher fix pack levels.
- JDK version must match requirement exactly.
- The disk space is a minimum for the installation. The system must be separately sized to handle whatever load is going to be put on the system.
- Database version must match exactly.
- JDBC driver version supports exact matches and wildcard matches.

If any of these requirements are not met, the installation fails. If the installation fails, review the installation log for a list of non-compliant items.

Configure View Files (iSeries)

In the iSeries environment, you must configure your system to view Sterling B2B Integrator files using Windows Explorer.

About this task

Use the NetServer component of IBM i to set up file shares that are accessible through Windows networking. You must set up a file share to a working directory in your iSeries Integrated File System (IFS).

Map Network Drive (iSeries)

About this task

In the iSeries environment, you must map a network drive to the working directory for Sterling B2B Integrator.

For more information, refer to the documentation on the IBM Web site.

Specify the QCCSID (iSeries)

About this task

In the iSeries environment, you must specify the QCCSID (Coded Character Set) for Sterling B2B Integrator. Refer to the IBM National Language Support Guide for valid coded character sets. It is recommended that you use the coded character set 037 for US English system.

To specify the QCCSID:

Procedure

1. From an iSeries command line, enter `DSPSYSVAL SYSVAL(QCCSID)`.
2. Determine if the QCCSID set to 65535.
3. If the QCCSID value is set to 65535, then complete one of the following:
 - Change the CCSID to a specific coded character set.
Enter `CHGSYSVAL SYSVAL(QCCSID) VALUE(xxx)`, where xxx represents your coded character set and then IPL your iSeries.
 - Keep the QCCSID at 65535 and specify a specific CCSID other than 65535 when you create your Sterling B2B Integrator user profile.
4. If the QCCSID value is NOT set to 65535, continue with next item in the *iSeries Installation Checklist*.

DB2 Database Configuration (iSeries)

In an iSeries environment, Sterling B2B Integrator uses the DB2 database that is included in IBM i.

The installation process creates a new collection for Sterling B2B Integrator.

Before you install the Sterling B2B Integrator software, you must determine and record the collection name and the catalog name:

- The **collection name** is the name of the collection (or library) that contains the database, journal, and journal receiver for your Sterling B2B Integrator system. This collection must not already exist. Example: `Slxxdb`, where xx represents the version you are installing.
- The **catalog name** is the database name of your iSeries system, as defined by the `WRKRDBDIRE` command. Generally, this value is the name of your system.

All database files are required to be journaled when being used by the translator in Sterling B2B Integrator. If your application files are not currently journaled, and you plan to access these files through Sterling B2B Integrator, refer to the IBM manuals for instructions on journaling physical files.

Sizing

Database sizing is designed to give you estimates of the database growth and to assist in planning the disk requirements.

Capacity Planning

There are many factors to consider when estimating the amount of disk space that will be required for Sterling B2B Integrator. As a result, trying to consider all growth factors is impractical because the user may not know the answers to many questions that are required to do a detailed forecast. Over the years the cost of disks has dramatically decreased, and the capacity and speed of disks has increased. The method of how information system managers order disk capacity has also changed from purchasing disk arrays that are dedicated to a particular database server and project to the concept of SANS.

Sterling B2B Integrator provides a methodology to estimate your initial disk requirements. Consider the confidence that you have in your data estimates when making the final purchase decision and adjust accordingly. After the initial purchase and production deployment, disk growth should be tracked for future purchase forecasts.

Tracking and Estimating Future Disk Requirements

You should track your actual database storage usage and the number of database records regularly. Correlating these two metrics enables you to plan your future disk requirements. Moreover, determining the average amount of space used for each order line or shipment line enables you to accurately predict your future growth requirements.

Determine Port Numbers (iSeries)

During installation, you are prompted to specify the initial port number. To specify an initial port number, follow these guidelines:

- A range of 200 consecutive open ports with the range of 10000 - 65535 are required for this installation.
- The initial port number represents the beginning port number in the range.
- Make sure that port numbers in the port range are not used by any other applications on your system.

After your installation, refer to the `/install_dir/install/properties/sandbox.cfg` file for all of the port assignments.

In an iSeries environment, you can also view the port numbers currently in use on your system with one of these methods:

- Select from the **iSeries Navigator Network > TCP/IP Configuration > Connections**.
- Enter WRKTCPSTS on an iSeries command line and select Option 3 (Work with TCP/IP connection status). Press **F14** to sort the port numbers in numerical sequence.
- Enter NETSTAT *CNN on an iSeries command line and press **Enter**. Press **F14** to sort the port numbers in numerical sequence.

Create User Profile (iSeries)

About this task

In the iSeries environment, you must create a user profile for accessing the Sterling B2B Integrator databases. You use this user profile when you submit the installation command.

If your system value QCCSID is set to 65535, then set the CCSID parameter to a specific coded character set other than 65535 on the CRTUSRPRF command. See the IBM National Language Support Guide for valid coded character sets. See your operating system documentation for more information about creating user profiles.

The job description assigned to the user profile must have a job queue defined that allows at least ten active jobs. If the maximum number of active jobs is less than ten, Sterling B2B Integrator will not install correctly. This also applies to starting Sterling B2B Integrator after installation.

Create SystemDefault.properties file (iSeries)

About this task

To create a SystemDefault.properties file in an iSeries environment:

Procedure

1. Log on with the Sterling B2B Integrator user profile.
2. Create a home directory for the Application user profile. From an iSeries command line, enter MKDIR/home/appuser. Where appuser represents the Sterling B2B Integrator user profile.
3. Enter EDTF and press F4.
4. Enter /home/appuser/SystemDefault.properties and press **Enter**. An edit session is displayed.
5. On the first line, enter java.version=1.6

Note: Make sure that there is NOT a space in the first position of this line java.version=1.6. The **j** needs to start in the very first position. If there is a space, it will not recognize the proper JDK and the install will fail.

If this installation is for...	then...
a non-English environment, primarily a double-byte system such as a Japanese environment,	continue to Step 6 and make another entry to the SystemDefault.properties file.
an English environment, primarily a single-byte system,	continue to Step 7 to save and close the SystemDefault.properties file.

6. (Optional) On the second line, enter file.encoding=ISO8859_1
7. Press F2.
8. Press F3.
9. Verify that the Sterling B2B Integrator user profile's home directory is pointing to /home/appuser.
This can be done using the WRKUSRPRF command.

Verify User Profile Job Queue Requirements (iSeries)

A user profile must point to a job queue in a subsystem that meets certain requirements.

About this task

Verify that your user profile is pointing to a job queue in a subsystem that meets the following requirements:

- The subsystem has at least 4 GB (8 GB recommended) of dedicated memory in a private (non-shared) pool.
- The **Max Active** (maximum number of threads) parameter is set to at least 2000. This information can be viewed on the WRKSYSSTS screen and is broken down by subsystem. If you do not know which system pool your subsystem is defined to, press F14.
- The maximum jobs in the subsystem are set to *NOMAX.
- The **Max Active** parameter that is defined in the Job Queue is set to *NOMAX.

Download the JCE Distribution File for the IBM JDK 1.6

About this task

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

If you are installing the software outside of the United States, check to see if you can get the JCE unlimited strength jurisdiction policy files. The unlimited strength jurisdiction policy files can only be exported to countries to which the United States permits the export of higher-level encryption.

To obtain the .zip file for the IBM JDK 1.6:

Procedure

1. Open your browser and navigate to <https://www14.software.ibm.com/webapp/iwm/web/preLogin.do?source=jcesdk>.
2. Enter your IBM ID and password. If you do not have an IBM ID, follow the IBM registration instructions.
3. Click **Sign in**.
4. Select the **Unrestricted JCE Policy files for SDK for all newer versions** and click **Continue**.
5. Review your personal information and the license agreement.
6. Select the **I agree** check box and click **I confirm** to continue.
7. Click **Download now**.
8. Save the unrestricted.zip file to your system.
9. Record the directory and the .zip file name. You will need this information during the installation process.

Determine IP Address (iSeries)

About this task

To determine the IP address of your iSeries:

Procedure

1. Enter `WKRTCPSTS *IFC`.
2. Record the IP address to use for Sterling B2B Integrator installation.

What to do next

If this view brings up multiple IP addresses, another way to check your IP address is to ping your catalog name from an iSeries command line. This will display the resolved IP address for your system.

Translator Requirements (iSeries)

All database files are required to be journaled when being used by the translator in Sterling B2B Integrator. If your application files are not currently journaled, and you plan to access these files through Sterling B2B Integrator, refer to the IBM manuals for instructions on journaling physical files.

Untar a file from ESD Portal on iSeries

About this task

Before you install the Sterling B2B Integrator product that was downloaded from ESD Portal, you must perform the following steps to untar the jar file:

Procedure

1. After the file has been downloaded from ESD portal, key in **qsh** from an iSeries command line and press **enter**.
2. Key in **set** and press **enter**.
3. This will list variables on the screen. You are looking for **QIBM_CCSID**. It will look like **QIBM_CCSID=0**. Record the value of this parameter.
4. Key in **export QIBM_CCSID=819** and press **enter**.
5. **cd** to the directory where the tar file is sitting.
6. Key in **set** to verify that the **QIBM_CCSID** is set to 819.
7. Key in **tar -xvf name.of.tarfile.tar** and press **enter**.
8. After it has performed the untar, the **CCSID** needs to be set back to the original value.
9. Key in **export QIBM_CCSID=0** and press **enter**, where the 0 represents the value in step 3.
10. Key in **set** and press **enter** to verify the **QIBM_CCSID** is set to what it was in step 3.
11. You need to verify that the untar was successful. At this point you will still be in the directory where the **SI.jar** was untarred. Key in **jar -tf SI.jar** and press **enter**. If you get file names to scroll up on the screen, the untar worked. If you get the **\$** prompt back with no additional information, then the untar was not successful and you will have to untar again.

What to do next

You are now ready to continue with the install.

Install Sterling B2B Integrator (iSeries)

You can install Sterling B2B Integrator in an iSeries environment.

About this task

CAUTION:

Sterling B2B Integrator should be installed behind a company firewall for security purposes. See the Security topics in the Sterling B2B Integrator documentation library for more information on secure deployment options.

Before you begin:

- You should have completed the *iSeries Installation Checklist*.
- These instructions assume that you received an installation CD for Sterling B2B Integrator. If you downloaded Sterling B2B Integrator or a Service Pack (SP) from the Electronic Software Distribution (ESD) Portal, uncompress the downloaded file to an empty directory. The directory containing the uncompressed files is an electronic image of an installation CD. Use this directory wherever there is a reference to the installation CD in the following instructions. Ignore any instructions to place the installation CD in a drive.

Note: To untar the files, use the *Untar a File from ESD Portal on iSeries* task.

To install the software, refer to your installation checklist and follow these steps:

Procedure

1. Insert the Sterling B2B Integrator installation CD in the appropriate drive. You can use a drive on your PC or on your iSeries CD reader.
2. Depending on the drive you are using, choose one method:
 - If the CD is in your PC, copy or FTP the file Sterling B2B Integrator.jar from the installation CD to the absolutePath in the IFS root or QOpenSys file system.
 - If the CD is in your iSeries reader, enter the following command: `cp /qopt/Sterling Integrator.jar absolutePath/Sterling Integrator.jar`
 - Record the absolute path.
3. Copy the instsijar.savf file from the iSeries directory on the installation CD to the mapped network drive.
4. Determine if there a save file called INSTSIJAR in QGPL on your iSeries.
 - If Yes, clear the save file by entering `CLRSVAF FILE(QGPL/INSTSIJAR)`.
 - If No, enter `CRTSAVF FILE(QGPL/INSTSIJAR)` to create a save file on your iSeries.
5. Copy the instsijar.savf file that you copied from the CD to the save file created in QGPL. Enter:

```
CPYFRMSTMF
FROMSTMF('/directory/filename of the savf/') TOMBR('/QSYS.LIB/QGPL
.LIB/INSTSIJAR.FILE') MBROPT(*REPLACE)
CVTDTA(*NONE)
```
6. Enter the following command to restore the installation objects:

```
RSTLIB SAVLIB(INSTSIJAR) DEV(*SAVF) SAVF(QGPL/INSTSIJAR) MBROPT(*ALL) ALWOBJDIF(*ALL)
```
7. Log in to your iSeries using the user profile you created during preinstallation.
8. Enter `ADDLIB LIB(INSTSIJAR)` from an iSeries command line to add the installation programs to your library list.
9. Enter `INSTSIJAR` and press **F4** to prompt the command. The system displays the list of configuration parameters needed to install Sterling B2B Integrator.
10. Refer to the installation checklist and enter the following configuration parameters.
 - Collection Name
 - Upgrade from prior GIS version (default is No, as this is a new installation)
 - System Passphrase (enter and verify)
 - Administrative e-mail address
 - IP Address for SMTP Server
 - TCP/IP Port Number
 - Catalog Name
 - Host IP Address
 - Sterling B2B Integrator User Profile
 - Sterling B2B Integrator User Password
 - Full Path to Sterling B2B Integrator jar file
11. Press **Page Down** and enter these parameters:
 - Full path to Sterling B2B Integrator install directory

- Full path to core license file
 - Full path to the JCE distribution file
12. Select License/Features, enter YES to select:
- B2B and/or File Gateway
 - IBM Sterling Total Payments
 - AS2 Edition Module
 - Financial Services Module
 - EBICS Banking Server Module

Note: Select only the licenses/features that have been defined by your IBM contract. If you are unsure which to select, the installation can proceed without making a selection and will complete successfully. Start up and operation of the software, however, requires one of the licenses to be selected. See *License Modification* to apply licenses post-install.

13. Verify the parameters and press **Enter**.

The install runs in batch mode. The installation process takes between two and three hours to complete. The installation time depends upon the size of your iSeries. Monitor the installation process to verify that no JAVA exception errors are generated.

To monitor the progress of the install, use the WRKLNK command display function to view the log file (gisinstall.log). This file resides in the same directory where you placed the installation jar file. In addition to the job you submitted, various BCI jobs, command shells, and JVMs appear and disappear in your batch subsystem. This processing is normal.

Install Version 5.2.1 or 5.2.2 as a Patch

About this task

Use this procedure to patch your 5.2.x iSeries system to version 5.2.1 or 5.2.2:

Procedure

1. Download the patch from the installation media.
2. Stop the system.
3. Perform a full backup of the installation directory, including all subdirectories.
4. Perform a backup of the database.
5. If you edited any property files, ensure that the associated properties.in files have the most current changes. Property files will be overwritten with the contents of the associated properties.in files during the patch installation.
6. Sign on with your user profile and enter into QSH (QShell mode).
7. In QSH, navigate to the /install_dir/bin directory. Enter: `cd /install_dir/bin`
8. Enter: `./InstallService.sh <path>/patch_si_<patch_number>.jar`

where:

`<path>` is the fully qualified path to maintenance patch file

`<patch_number>` is the patch number

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 (in the /install_dir/install directory) and to the patch.log file.

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

9. Press **Enter** to continue.

Information about the patch is displayed. After the patch has been applied, the following message is displayed:

```
Deployment to application server successful
```

When the \$ is displayed, the patch process had completed.

10. Start the system.

Validate the Installation

Checklist for validating the installation

As part of the installation, you must run the following tests to ensure that the software installation was successful.

Complete the following tasks:

#	Validate Installation Checklist	Your Notes
1	Start Sterling B2B Integrator.	
2	Access Sterling B2B Integrator.	
3	Validate the installation.	
4	Stop Sterling B2B Integrator.	

Starting Sterling B2B Integrator (iSeries)

About this task

To start Sterling B2B Integrator in an iSeries environment:

Procedure

1. Sign onto iSeries with your Sterling B2B Integrator 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)
```

The job queue to which you submit the command must allow at least 10 active jobs. If the maximum number of active jobs is less than 10, Sterling B2B Integrator does not start 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. This process takes 10 - 15 minutes.

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 B2B Integrator. You might see something similar to the following message:

*Open your Web browser to <http://host:port/dashboard>, where *host:port* is the IP address and port number where Sterling B2B Integrator is located on your system.*

Make a note of the address so you can access Sterling B2B Integrator later. It might take several minutes for Sterling B2B Integrator to be available from the web browser, even after the URL message is issued.

4. Optional: To verify that Sterling B2B Integrator starts normally and completely, view the system through WRKACTJOB. Verify that the SIMAIN job ended and there are at least five QP0ZSPWP jobs (of yours) left running in your Sterling B2B Integrator batch subsystem.
5. Prepare your browser to log in to Sterling B2B Integrator. 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).

Accessing Sterling B2B Integrator

About this task

To log in to Sterling B2B Integrator:

Procedure

1. Open a browser window and enter the address that is displayed at the end of startup. The login page displays.
2. Enter the default user ID and 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.

Testing a sample business process to validate the installation

About this task

Validate the installation by testing a sample business process:

Procedure

1. From the **Administration Menu**, select **Business Process > Manager**.
2. In the **Process Name** field, enter `Validation_Sample_BPML` and click **Go!**
3. Click **execution manager**.
4. Click **execute**.
5. Click **Go!** The **Status: Success** message displays in the upper left side of the page.

Stopping Sterling B2B Integrator (iSeries)

About this task

To stop Sterling B2B Integrator in an iSeries environment:

Procedure

1. Sign onto iSeries with your Sterling B2B Integrator user profile.
2. Enter the following commands:

```
QSH
cd /install_dir/bin
./hardstop.sh
```

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

```
PGM
QSH CMD('cd /install_dir/bin ; ./hardstop.sh')
ENDPGM
```

3. Wait for shutdown to complete.

The length of this process is determined by how many temporary objects must be cleaned up and how many spool files must be created.

To ensure that you do not restart Sterling B2B Integrator before shutdown is complete, monitor shutdown through either the ps command in Qshell or the WRKACTJOB display. Verify that the five QP0ZSPWP jobs are complete and disappear.

4. Enter ./stopDAVServer.sh to stop the WebDAV server.

Post Installation Configuration

Post Installation Configuration Checklist in an iSeries Environment

After you install Sterling B2B Integrator you need to complete some post installation configuration. Complete the items listed in the post installation configuration checklist:

#	Post Installation Configuration Checklist	Your Notes
1	For security purposes, change all default user ID passwords immediately after installation is completed. See the Update My Account Information task in the documentation library.	
2	Download Sterling B2B Integrator Tools.	
3	Determine if you need to modify any Property Files.	
4	Change the Network Interface Bindings.	

Download Sterling B2B Integrator Tools

Sterling B2B Integrator includes tools that run on a desktop or personal computer. After you install Sterling B2B Integrator, you can install the following tools:

- Map Editor and associated standards
- Graphical Process Modeler (GPM)
- Web Template Designer
- (If licensed) MESA Developer Studio plug-ins, including, MESA Developer Studio Software Development Kit (SDK) and MESA Developer Studio Skin Editor
- (If licensed) Reporting Services, which requires MESA Developer Studio if you want to use the plug-ins to create fact models and custom reports.

Conflicting IP addresses can cause problems when you download a desktop tool.

Property files configuration

Property files contain properties that control the operation of Sterling B2B Integrator. For example, the REINIT_DB property, in the sandbox.cfg file, controls whether a database is initialized when you install Sterling B2B Integrator.

By modifying the values of these properties, you can customize Sterling B2B Integrator to suit your business and technical needs. Most property files are in the `/install_dir/install/properties` directory.

After you install Sterling B2B Integrator, most property files and scripts do not need any further configuration for basic operation. However, if you must customize any specific operations, such as setting a different logging level, you must edit (or in some cases, create) certain property or .xml files.

Before you change any property files, refer to the *Working with Property Files* documentation for general information about how to work with Property Files.

Areas where you might make specific property files changes after an installation include:

- LDAP user authentication
- Prevention of cross-site script vulnerabilities
- Logging configuration
- Process-specific property file settings

Changing the network interface bindings

About this task

To increase the security of the Administrator Console user interface, Sterling B2B Integrator binds only to specific network interfaces. After installation, if the URL returns the error message **Page cannot be displayed**, you can adjust the property settings to correct the problem.

To update the property settings:

Procedure

1. On the server where Sterling B2B Integrator is located, edit the `noapp.properties_platform_ifcresources_ext.in` file.
2. Locate the **admin_host** parameter.

Where *hostname1* is the name of the primary network interface, the one given highest priority by Sterling B2B Integrator.

Where *localhost* is the name of the network interface on the server where Sterling B2B Integrator is located.

```
admin_host.1 = hostname1
admin_host.2 = localhost
```
3. If no interface is being displayed, edit *hostname1* so that it correctly identifies the primary network interface that accesses Sterling B2B Integrator.
4. If an extra network interface must access Sterling B2B Integrator, add an **admin_host** entry.

For example:

 - `admin_host.1 = hostname1`
 - `admin_host.2 = localhost`
 - `admin_host.3 = hostname2`
5. Stop Sterling B2B Integrator.
6. Navigate to `/install_dir/install/bin`.
7. Enter `setupfiles.sh`.

System Maintenance

Determine If You Need to Apply a Maintenance Patch in iSeries Environment

About this task

Patches contain cumulative fixes for a specific version of Sterling B2B Integrator. Patch files are available on the Support Center website. Because each patch contains the fixes from previous patches, you only need to install the most recent patch.

Patch files are named using the following naming convention:

```
patch_si_<patch_number>.jar
```

Information about a patch is located in a PDF file with a similar name. The PDF file is named:

```
patch_si_<patch_number>_patch_info.pdf
```

Before you install the patch, review the following items:

- Preserve your custom changes to system resources.
- 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 changes made directly in *.properties or *.properties.in files may be overwritten during the patch installation. Properties overridden using the customer_overrides.properties file are not affected. IBM recommends that you maintain property file changes using (when possible) the customer_overrides.properties file. For more information about this file, refer to the property file documentation.
- If you edited any of the cdinterop files, you must back them up before applying the patch. The cdinterop files do not have initialization (*.in) files. After applying the patch, use the backup version of the files in your patched installation. These files include the following files: cdinterop-proxy-records.properties; cdinterop-spoe-auth.properties; cdinterop-spoe-policy.properties; and cdinterop-user-records.properties.
- Information about the patch installation is automatically logged to */install_dir/install/logs/InstallService.log*.
- If you need to rollback a patch, see the *Patch Changes Report*.
- During patch installation, the dbVerify utility compares the list of standard indexes with those present in the database and drops the custom indexes. You should recreate the custom indexes after the patch installation is complete.

Install a Maintenance Patch (iSeries)

About this task

To install the latest patch for Sterling B2B Integrator in an iSeries environment:

Procedure

1. Navigate to the Support Center web site.

2. Download the most recent patch file for your version of Sterling B2B Integrator and record the absolute path to the downloaded file. Do not rename the file. If you use FTP, you must use Binary mode.
3. Stop Sterling B2B Integrator.
4. Perform a full backup of the Sterling B2B Integrator installation directory, including all subdirectories.
5. Perform a backup of the database.
6. If you edited any property files, ensure that the associated properties.in files have the most current changes. Property files will be overwritten with the contents of the associated properties.in files during the patch installation.
7. Sign on with your Sterling B2B Integrator user profile and enter into QSH (QShell mode).
8. In QSH, navigate to the /install_dir/bin directory where <install_dir> is Sterling B2B Integrator installation. Enter: `cd /install_dir/bin`
9. Enter: `./InstallService.sh <path>/patch_si_<patch_number>.jar`

where:

<path> is the fully qualified path to maintenance patch file

<patch_number> is the patch number

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 (in the /install_dir/install directory) and to the patch.log file.

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

10. Press **Enter** to continue.
Information about the patch is displayed. After the patch has been applied, the following message is displayed:
Deployment to application server successful

When the \$ is displayed, the patch process had completed.

11. Start Sterling B2B Integrator.

Preserve Custom Changes for System Resources

About this task

You can preserve your custom changes to system resources (like workflow definitions and maps) when you update your system. During updates, the system can identify when you make a custom change versus when the system makes a change through an upgrade or patch.

When a patch, installation or upgrade is performed, a baseline record of system resources is created. This baseline is not affected by any subsequent customer changes. When another patch is installed, the resources in this baseline are compared to the resources in the existing system. If a baseline and existing resource are not the same, it means that the existing resource was customized and is not overwritten by the patch.

During an update, the baseline is updated with new system resource information, but not with custom changes to resources.

DB checksum tool

A checksum is a simple redundancy check used to detect errors in data. In Sterling B2B Integrator, a verification process is used to compare the checksum between the existing default resource and the resource that was added after application of a fix pack or upgrade. The DB checksum tool generates a granular report of the changes in the system that could not be set as defaults.

The DB checksum tool generates the difference in resource checksum between the default resource and the latest system resource from the database.

Perform a Checksum About this task

To run the DB Checksum tool:

Procedure

1. Navigate to `/install_dir/install/bin`.
2. Enter:

```
./db_checksum_tool.sh [-d] [-i [1 | 2 | 3 | 4 | 5]] [-r [wfd | map | schema | sii | template]] [-o <output file>] [-g]
```

Where:

`-d` is the mode to dump the difference of resource checksum between the default resource and latest system resource.

`-i` is the resource type integer (optional).

1 is WFD.

2 is MAP.

3 is SCHEMA.

4 is SII.

5 is TEMPLATE.

`-r` is the resource name (optional). For example, `wfd`, `map`, `schema`, `sii`, or `template`.

`-o` is the file name to output all the messages (optional).

`-g` is the file name that lists all the ignored resources (optional).

`-h` is the help screen.

The DB Checksum tool performs the relevant checksum operation based on the command options and generates the output message.

Patch changes report

The patch changes report is used to obtain information if you must roll back a fix pack. The patch changes report can be found in the installation directory `patch_reports` folder. The report contains the following fix pack information:

- Fix pack ID
- Fix pack changes
- Number of files deleted
- Number of JARs removed
- Number of JARs added
- Number of files added
- Number of files changed
- Number of properties added

- Number of business processes added
- Number of service instances added
- Number of service definitions added
- Number of templates added
- Number of reports added
- Number of maps added
- Number of schemas added
- Number of business rules added

For example, the installation directory patch_reports folder contains the file Patch_Report.html. When you open this html file, you can view the patch information.

Example: patch changes report

The following is an example of a patch changes report.

Summary of Changes

Patch ID: Platform_2.0

Patch Changes: 1287

Number of Files Deleted: 0

Number of JARs Removed: 2

Number of JARs Added: 0

Number of Files Added: 3

Number of Files Changed: 3

Number of Properties Added: 4

Number of BPs Added: 4

Number of Service Instances Added: 2

Number of Service Definitions Added: 3

Number of Templates Added: 0

Number of Reports Added: 0

Number of Maps Added: 3

Number of Schemas Added: 3

Number of Business Rules Added: 0

List of JARs Removed:

JAR Removed: /SAMPLE_INSTALL_1/jar/jaf/1_0_2/activation.jar

Time: Wed May 13 15:23:08 EDT 2009

JAR Removed: /SAMPLE_INSTALL_1/jar/commons_logging/1_0_3/commons-logging-api.jar

Time: Wed May 13 15:23:08 EDT 2009

List of Files Added:

File Added: /SAMPLE_INSTALL_1/bin/sql/fix_db2_schema.sql

Time: Wed May 13 15:21:30 EDT 2009

File Added: /SAMPLE_INSTALL_1/bin/sql/fix_db2iseries_schema.sql

Time: Wed May 13 15:21:30 EDT 2009

File Added: /SAMPLE_INSTALL_1/bin/errorQueueManager.sh.in

Time: Wed May 13 15:21:30 EDT 2009

List of Files Changed:

File Changed: /SAMPLE_INSTALL_1/properties/lang/en/Reports_en.properties

File Changed: /SAMPLE_INSTALL_1/properties/lang/es/Reports_es.properties

File Changed: /SAMPLE_INSTALL_1/properties/lang/fr/Reports_fr.properties

List of Properties Added:

Property Added: /SAMPLE_INSTALL_1/properties/filesToRemove.txt

Property Added: /SAMPLE_INSTALL_1/properties/filesToRemove.txt.in

Property Added: /SAMPLE_INSTALL_1/properties/csr.properties.sample

Property Added: /SAMPLE_INSTALL_1/properties/csr.properties.sample.in

List of BPs Added:

BP Added: Schedule_AssociateBPsToDocs.bpm1 version: 4

Time: Wed May 13 15:23:07 EDT 2009

BP Added: Recovery.bpm1 version: 17

Time: Wed May 13 15:23:07 EDT 2009
BP Added: Schedule_AutoTerminateService.bpm1 version: 10
Time: Wed May 13 15:23:07 EDT 2009
BP Added: Schedule_DBMonitorService.bpm1 version: 1
Time: Wed May 13 15:23:08 EDT 2009

List of Service Instances Added:
Service Instance Added: RetentionProcessor version: 2
Time: Wed May 13 15:23:28 EDT 2009
Service Instance Added: MESAHttpServerAdapter version: 1
Time: Wed May 13 15:25:11 EDT 2009

List of Service Definitions Added:
Service Definition Added: LockServiceType
Time: Wed May 13 15:22:58 EDT 2009
Service Definition Added: XAPIServiceType
Time: Wed May 13 15:22:59 EDT 2009
Service Definition Added: CleanLockServiceType
Time: Wed May 13 15:22:59 EDT 2009

List of Templates Added:
Template Added: Normalize
Time: Wed May 13 15:23:26 EDT 2009
Template Added: Derive
Time: Wed May 13 15:23:26 EDT 2009

List of Maps Added:
Map Added: IBMPutResponseToXML
Time: Wed May 13 15:24:05 EDT 2009
Map Added: http_headers
Time: Wed May 13 15:24:36 EDT 2009
Map Added: OracleHttpHeaders
Time: Wed May 13 15:24:51 EDT 2009

List of Schemas Added:
Schema Added: E5_V20_Acknowledge_Result.dtd from file: E5_V20_Acknowledge_Result
Time: Wed May 13 15:24:36 EDT 2009
Schema Added: E5_V20_Acknowledge_Submit.dtd from file: E5_V20_Acknowledge_Submit
Time: Wed May 13 15:24:36 EDT 2009
Schema Added: E5_V20_APIs_Result.dtd from file: E5_V20_APIs_Result
Time: Wed May 13 15:24:36 EDT 2009

License modification

If after the installation is finished, you must modify the software licenses you loaded, you can do that by using the AddLicenseSet command. The AddLicenseSet command is in the bin directory of your UNIX or Windows installation. After the initial installation, the license files are at:

- UNIX: */install_dir/install/properties/licensefiles*
- Windows: *\install_dir\install\properties\licensefiles*
- iSeries: */install_dir/properties/licensefiles*

You can add licenses or review the license list from the UI. Go to the **Administration Menu > System > B2B Console > Operations > System > Licenses**.

AddLicenseSet command parameters

The AddLicenseSet command can modify a single license file or the entire license file directory.

To use the AddLicenseSet command:

- Navigate to the bin directory
- Include the absolute path to the license file directory or to a license file

The AddLicenseSet command has the following parameters:

AddLicenseSet Parameters	Description
-reload	<p>Use this parameter to reload the license files.</p> <p>This parameter deletes all of the license files from the database before the new files are loaded. The old license files are saved to the following location:</p> <ul style="list-style-type: none"> • UNIX: /install_dir/install/logs/security/old_licenses • Windows: \install_dir\install\logs\security\old_licenses • iSeries: /install_dir/logs/security/old_licenses
-upgrade	<p>Use this parameter during an upgrade only.</p> <p>This parameter deletes all of the old license files from the database and installs the new license files. The old license files are saved to the following location:</p> <ul style="list-style-type: none"> • UNIX: /install_dir/install/logs/security/upgrade • Windows: \install_dir\install\logs\security\upgrade • iSeries: /install_dir/logs/security/old_licenses

Uninstall the Software

Uninstalling Sterling B2B Integrator from an iSeries environment

About this task

When you uninstall Sterling B2B Integrator, the software is automatically removed from the server.

To uninstall the software from a iSeries environment:

Procedure

1. Stop Sterling B2B Integrator and wait for shutdown to complete.
2. Sign onto iSeries with your Sterling B2B Integrator user profile.
3. In QSH, change to the directory above the installation directory.
For example, if the installation directory is /(Sterling B2B Integrator), then you change to directory /.
4. Remove the installation directory, enter: `rm -rf install_dir`
5. Wait for the command prompt to return.
6. Select **F3 exit from Qshell**.
7. Enter `DLTLIB <collection name>`.

For example, `DLTLIB (Sterling B2B Integrator)DB`.

A message like the following is displayed: Receiver QSQJRN0001 in (Sterling B2B Integrator)DB never fully saved. (I C). Enter I to one or more of these messages until the library is deleted.


8. After you remove the software from the server, you can remove Eclipse, and any tools that were downloaded to the desktop:
 - Map Editor and associated standards. Refer to the *Map Editor Guide* for information about removing the Map Editor.
 - Graphical Process Modeler. Refer to the *Graphical Process Modeler Guide* for information about removing the Graphical Process Modeler.
 - Web Template Designer. Refer to the *Web Extensions Guide* for information about removing the Web Template Designer.
 - (If licensed) MESA Developer Studio plug-ins:
 - MESA Developer Studio Software Development Kit (SDK).
 - MESA Developer Studio Skin Editor.Refer to the *MESA Developer Studio* guide for information about removing MESA Developer Studio.
 - (If licensed) Reporting Services, which require MESA Developer Studio if you want to use the plug-ins to create fact models and custom reports. Refer to the *MESA Developer Studio* guide for information about removing Reporting Services.

User Documentation

Sterling B2B Integrator user documentation

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

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

To access the documentation site from within Sterling B2B Integrator or one of its tools, select the **Help**  icon. For the link to the documentation site to work, the system must support internet access and an internet browser.

Online documentation tips

About this task

After you are in the documentation library, you can do the following things:

- Enter a word or phrase and search the entire library for information.
- Move through a hierarchy of contents pages to identify the topic you want to read or print.
- Print topics by using your browser's Print function.
- Download entire documents in PDF format.

Requesting a documentation CD

About this task

You can request a CD that contains all the documentation found on the documentation site. To submit a request, open a support case.

Troubleshooting Tips

Install/Upgrade troubleshooting tips: iSeries environment

Situation	Message or Symptom	Explanation/Resolution
Installing a desktop tool or resource	<p>Cannot download any of the following:</p> <p>Note: MESA Developer Studio and Reporting Services are optional features that are purchased separately from Sterling B2B Integrator. These features each require a separate license in addition to your license for Sterling B2B Integrator.</p> <ul style="list-style-type: none">• Map Editor and associated standards• Graphical Process Modeler• Web Template Designer• (If licensed) MESA Developer Studio plug-ins (Software Development Kit (SDK), Skin Editor)• (If licensed) Reporting Services, which require MESA Developer Studio if you want to use the plug-ins to create fact models and custom reports.	<p>Explanation</p> <p>When you install Sterling B2B Integrator, system files are created that contain an internal IP address. If you install Sterling B2B Integrator behind a firewall, and your firewall is configured to accept an external IP address from a client computer, you might not be able to download the desktop tools and resources. The firewall rejects the IP address from a client that is located outside of the firewall.</p> <p>Resolution</p> <p>Modify the system files that contain the invalid IP address. Follow these steps:</p> <ol style="list-style-type: none">1. Navigate to the /install_dir/bin directory.2. Enter the following command followed by the external IP address: patchJNLP.sh external_IP address3. Stop Sterling B2B Integrator.4. Restart Sterling B2B Integrator.
Accessing	<p>Attempts to access the URL for Sterling B2B Integrator display the message: Page cannot be displayed.</p>	<p>Resolution</p> <p>Change the Network Interface Bindings.</p>

Situation	Message or Symptom	Explanation/Resolution
Stopping	Ending jobs from Sterling B2B Integrator when a hardstop is not successful.	<p>Explanation</p> <p>There was a problem during the installation process or the subsystem was not defined correctly.</p> <p>Resolution</p> <ol style="list-style-type: none"> 1. Enter WRKACTJOB and locate the job that did not end successfully. 2. Press F11 twice to obtain the job number that you want to end. 3. Press F3 to end the WRKACTJOB panel. 4. Enter QSH to enter Qshell mode. 5. Enter ps and press Enter. 6. Locate the pid number that corresponds to job number from the WRKACTJOB panel. 7. Enter kill -kill <pid number> kill -kill <pid number>. 8. Review the installation log to determine the error and resolution. 9. If the error is caused by a problem with the installation, then delete install_dir and install the software again. 10. If the error is caused by the job queue having 1 as the maximum number of active jobs in the subsystem, then either change the subsystem that you start Sterling B2B Integrator in, or change the number of maximum active jobs.

Situation	Message or Symptom	Explanation/Resolution
e-Invoice Upgrade: Oracle Add Constraint Error	<p>When you upgrade Sterling e-Invoicing and are using an Oracle database, the upgrade might fail with the error message name is already used by an existing object. This failure occurs because the default behavior for the drop constraint command was changed in Oracle 10. The index that is used to support the constraint is now only removed if the index was generated by the "create constraint" command. The indexes for Sterling e-Invoicing are always generated from constraints during an installation. If you receive this error during a Sterling e-Invoicing upgrade, it is because of how the database was restored, the version of Oracle you are using, and because the Oracle imp command exported the indexes and constraints separately. There is no way to determine when the imp command will not add a create index command to the export file if it was generated by a constraint – but if it does add the command, the database restore process loses the association of the constraint and its underlying index. The database script that runs during a Sterling e-Invoicing upgrade runs two steps: 1. First, it drops the unique constraint so the next step can redefine it using extra columns. However, the drop constraint command does not remove the underlying index if the association with its index was lost. 2. The next command that redefines this constraint requires a different index definition, but in this scenario the name of the index the constraint wants to use exists, which causes the name is already used by an existing object error.</p>	<p>Resolution</p> <p>If you receive this error message, the solution for this problem is to drop the index and rerun the Sterling e-Invoicing upgrade. The drop index command that you should use isdrop index UNQ_EINV_CANON</p>

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