Sterling B2B Integrator

IBM

iSeries Environment Upgrade

Version 5.2.3 - 5.2.5

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IBM

Contents

iSeries Upgrade (V5.2.3 - 5.2.5)

You can upgrade the IBM® Sterling B2B Integrator software in an iSeries environment.

These instructions include the pre-upgrade and post-upgrade processes. They also include information for using the DB2 database with Sterling B2B Integrator.

It is important to remember that upgrading involves a full installation of Sterling B2B Integrator. You need to prepare for an upgrade the same way that you would prepare for an installation.

This upgrade does not overwrite your current Sterling B2B Integrator directory structure on disk. Instead, it creates a new installation of Sterling B2B Integrator and uses a copy of your original instance's database to upgrade to the new version. After the upgrade, both instances will be operational.

For new installations, use the *Sterling B2B Integrator iSeries Installation Guide*.

Before You Begin the Upgrade

Before You Begin the iSeries Upgrade

Before you begin the upgrade, review the following checklist.

#	Before You Begin Checklist	Your Notes
1	You must have a new license file to use the new licensed features of your upgraded installation.	
2	Read through this entire document so that you have a clear understanding of what the upgrade requires.	
3	Download the following documents from the online Documentation Library: • Release notes • System Requirements - With each release, IBM introduces leading edge technology to improve and enhance its software. Review the System Requirements to confirm that your system and databases meet the requirements, and also to manage any necessary upgrades or changes before upgrading.	
4	Archive and purge any unneeded data before upgrading. Archived data can only be restored from the same version and fix pack of Sterling B2B Integrator from which it was archived. If you need to restore archived data that was archived prior to performing the upgrade, then you must have a running instance of Sterling B2B Integrator that matches the version and fix pack from which the archive was taken.	
5	Back up your database. Export your business processes, trading partners, maps, etc.	

#	Before You Begin Checklist	Your Notes
6	Review and note the adapters, business processes, and other configurations in your current version. This will help identify any need for updating transport messages, third-party adapters, or configurations to adapters, such as the File System and Command Line Adapters.	
7	If you have edited a pre-defined business process, be aware that the upgrade process overwrites pre-defined business processes. Your customized business process is preserved in the system, but it is no longer the default process.	
8	If you have edited any property files (.properties or .properties.in), be aware that the upgrade process overwrites these property files, unless these changes were made using the customer_overrides.properties file. Your previous property file edits might not be applicable in this release.	
9	If you edited any of the following cdinterop files, you must back them up before upgrading. The cdinterop files do not have initialization (*.in) files. After the upgrade, use the backup version of the files in your upgraded installation. • cdinterop-proxy-records.properties • cdinterop-spoe-auth.properties • cdinterop-spoe-policy.properties • cdinterop-user-records.properties	
10	You should not upgrade Sterling B2B Integrator on an interim fix. Apply the latest fix pack prior to upgrading Sterling B2B Integrator.	
11	Always install and test your upgrade in a non-production environment before upgrading your production environment.	

Special Tasks and Considerations (iSeries)

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

- If you have LDAP (Lightweight Directory Access Protocol) configuration information in the security.properties file, this information will automatically be moved to the authentication_policy.properties file.
- If your version of Sterling B2B Integrator is integrated with the JBoss™, WebLogic®, or WebSphere® application server,

  Sterling B2B Integrator can be installed without integration to an application server and does not require an application server for installation or at runtime. (However, Sterling B2B Integrator still supports integration with JBoss, WebLogic, and WebSphere.) After you upgrade, you can restore integration with your application server if desired. To do so, use the Sterling B2B Integrator EJB Adapter. For more information, refer to the documentation for the *EJB Adapter*.

Prepare Your iSeries for the Upgrade

To run Sterling B2B Integrator 5.2.5 on iSeries, you must have a V7R1 or V7R2 iSeries operating system with JDK 1.7 installed.

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

1. Review the Sterling B2B Integrator *System Requirements* document. Your system must meet the minimum requirements that are documented, while your database and JDBC driver versions must match the documented requirements. Complete any necessary upgrades or changes in preparation for the upgrade.

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

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

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

5. Back up Sterling B2B Integrator and your current database

Caution: If there are problems with your upgraded system, the only way to ensure that you can roll back to your previous version is to back up Sterling B2B Integrator and your database.

After you successfully back up Sterling B2B Integrator and your database, you are ready to upgrade the software. Before you begin, see the *Release Notes*.

Upgrade Impacts Overview

This documentation provides information on how system behavior has changed based on upgrading your system from 4.3 (or later) to this version. You need to review all of the information before you begin your upgrade.

Upgrade Impacts (Version 5.2.0 - 5.2.3)

Before you begin an upgrade, you should review and understand any impacts of the upgrade.

Features/Services Not Supported

The following features/services are no longer supported:
- Channels portlet
- Federated Systems
- Community Management (AFT Communities are still available)
- Sterling Community Management (SCM) Integration
- Archive Commandline Service
- Sync Engine Data Clean Manager Service
- Sync Engine Task Manager Service

If you need more information, please contact your IBM sales representative.

Memory Requirement Change

Sterling B2B Integrator now requires at least 4 GB (8 GB recommended) of dedicated memory in a private (non-shared) pool.

Port Allocation Changes in 5.2.0

If you are upgrading to 5.2.0, and have configured the CLA2 or the SWIFTNet HTTP Server Adapter, the remote port numbers have changed for 5.2.0. The port numbers are as follows:

Table 1. Remote Port Numbers

Adapter Name	Version 5.2.0 Base Port	Version 5.2.1 Base Port	Version 5.2.2 Base Port	Version 5.2.3 Base Port
CLA2	+51	+52	+53	+54
SWIFTNet HTTP Server	+52	+53	+54	+55

For Version 4.3 and Version 5.0, the remote port numbers are the same as the 5.2.1 release.

After upgrading to 5.2.X, you need to change any references to the old remote port numbers. For example, if you have any business processes that use the CLA2 adapter, you will need to update the remote ports in the business process.

Database Table Sizes

While upgrading if you encounter any database table size issues, you may have to manually adjust the database tables and restart the upgrade process. An upgrade using the production database in a test environment can be used to help you determine what tables need to be manually adjusted.

Resource Tags

If you are using resource tags in your current version, you should check all of your existing resource tags before you start the upgrade process. The resource tags you should check are:
- Adapter Policies
- Agreements
- Sterling Connect:Direct® Netmaps
- Proxy Servers
- Security Tokens
- SSH Resources
- SWIFTNet Copy Service Profiles
- SWIFTNet Service Profiles

You can check the resource tags by running the following SQL query from the SQL Manager page (**Operations > Support Tools)**:

```
SELECT * FROM TAG_RESOURCE_ASSOC WHERE TYPE=41 OR TYPE=42 OR TYPE=43 OR TYPE=44 OR
                                TYPE=45 OR TYPE=52 OR TYPE=53
```

The TAG_NAME column in the SQL results will contain the names of any resource tags that need to be edited or deleted.

If any of the resource tags contain tagged resources using the types listed, remove those resources from the resource tags or delete the resource tags that contain these resource types.

Silent Installation Parameters

The following parameters are new or have an updated definition:

What has changed	parameter	Definition
Parameter definition has changed	LICENSE_FILE_PATH	(Required) Full path to Core_License.xml.
New parameter	LICENSE_FILE_# (where # is a number between 1 and 99)	(Required) This is required for each license you install. You must add an entry for each license file to the silent install file. The LICENSE_FILE numbering (#) does not need to be sequential. For example: LICENSE_FILE_1= SI_SFG_License.xml LICENSE_FILE_2= Fin_Serv_License.xml LICENSE_FILE_3= SI_SFG_FIPS_License.xml LICENSE_FILE_4= AS2_License_.xml LICENSE_FILE_5= EBICS_License_.xml

Channels and Community Management Tabs (Optional)

The Dashboard PSML files are not updated during an upgrade. The PSML file impacts any custom tabs you may have configured, such as Channels or Operator. The Channels and Community Management tabs appear in your browser but are no longer operational.

To remove the Channels and Community Management tabs:

Warning: The psmlRestore command gets the 5200 psml file which resets ALL of the custom tabs from the previous release.
1. Navigate to the installation directory.
2. Navigate to the bin directory.
3. Enter this command: `./psmlRestore.sh admin`

Custom BI Fact Models Need to be Upgraded

Scripts named recreateBITablePKs.cmd.in (Windows) and recreateBITablePKs.sh.in (UNIX) are now provided which allow you to upgrade any custom BI fact models tied to a separate BI repository.

BI fact models need to be upgraded to continue to work with the Entity Framework, which replaced Hibernate usage in the BI framework in version 5.2.0.

Upgrade impacts (Version 5.2.5)
Upgrading to Sterling B2B Integrator 5.2.5 has unique impacts.

Only JDK 7 is supported as of V5.2.5

For more information see:
- ../../v5.2/com.ibm.help.sys_rqmts.doc/SI_SysRqmts_52.ditamap#T182826
- "Updating your JDK on iSeries" on page 44

JDK 7 does not support the TLS_RSA_WITH_3DES_EDE_CBC_MD5 cipher

If you are using JDK 7 with Sterling B2B Integrator V5.2.5, and you want to use a cipher to secure the Sterling B2B Integrator dashboard, you must set one of the following values in the **dashboardCipherSuite** parameter in the security.properties_platform_asi_ext.in property file or in customer_overrides:
- *JDK* (includes all strong ciphers except the one not supported by JDK 7)
- *Weak*

Do not use *Strong* or *All* with JDK 7 or Sterling B2B Integrator will not start.

Reconciliation of HIPAA Level 5 code lists

When you upgrade to Sterling B2B Integrator V5.2.5, customized HIPAA Level 5 code lists from the previous version are preserved in the system where they were entered, but they are not the default code lists after the upgrade. After the upgrade, you must manually make any customized code lists the default code lists.

For example, you customized the ICD9 or HCPCSCPT code list in the previous version of Sterling B2B Integrator. After the upgrade to version 5.2.5, you must replace the default ICD9 or HCPCSCPT code list with the customized ICD9 or HCPCSCPT code list.

Properties file change to prevent timeout during start (V5.1.0.4 to 5.2.5 upgrade)

Before you start Sterling B2B Integrator after you upgrade the application from V5.1.0.4 to 5.2.5, you must change the values of the following properties in the centralops.properties file to 600. This action prevents the start command from timing out before Sterling B2B Integrator starts. The centralops.properties file is in the properties subdirectory of the installation directory.
- **OpsServer.commandTimeout**
- **PassPhrase.urlTimeout**

jGroups upgrade in V5.2.5 prevents Sterling B2B Integrator from starting for some customers

jGroups is upgraded with V5.2.5. Some of the properties defined in jgroups_cluster.properties have changed. If you modified these files or added custom changes for them to customer_overrides.properties, the upgrade changes are not applied and Sterling B2B Integrator will not start.

This issue is fixed in V5.2.5, Interim Fix 1, where all necessary properties files are changed for you. You can also disable this fix if desired. See APAR IT06654 for more information.

Note: The original and modified properties are output to the noapp.log file. This allows you to see how your properties were modified. Search the log using the value "Initializing jgroups_cluster.property_string" to see the new and changed values for the two affected startup properties. The jgroups_cluster.lock.protocolStack property is also modified with this fix, but is only written to the log when it is used, not at startup.

If you want to manually fix your installation without applying V5.2.5, Interim Fix 1, complete the following steps:

1. Delete the following options (if they exist) from customer_overrides.properties for the jgroups.cluster property file. These occur in the jgroups_cluster.property_sting, jgroups_cluster.distributed_property_string, and jgroups_cluster.lock.protocolStack files:

   - gc_lag
   - up_thread
   - down_thread
   - join_retry_timeout
   - max_xmit_size
   - shun

2. Remove the protocol parameter **VIEW_SYNC** and all of its attributes.

3. In the jgroups_cluster.property_string, replace 'start_port' with 'bind_port'.

4. In the jgroups_cluster.distributed_property_string and jgroups_cluster.lock.protocolStack properties, add the following items:

   - In distribution_property_string the attribute **thread_pool_rejection_policty=run** should be added to the protocol 'TCP'. For example,

     `TCP(bind_port=22261`**`;thread_pool_rejection_policy=run`**`)`

   - In lock.protocolStack: the protocol and attribute **CENTAL_LOCK(num_backups=2)** should be added to the end of the property. For example,

     `lock.protocolStack=UDP(bind_addr=&HOST_ADDR;;bind_port=`
     `&MULTICAST_NODE_PORT3;;mcast_addr=239.255.166.17;<other`

     `protocol parameters here>pbcast.GMS(join_timeout=5000;print_local_`

     `addr=true)`**`:CENTRAL_LOCK(num_backups=2)`**

Backups Are Not Generated During Install, Upgrade, or When Applying a Fix Pack or Interim Fix

Before you begin an upgrade, review the following backup information.

Some of the standard resources installed during install or upgrade use the import mechanism available to customers to load the standard resources into the database. The standard import mechanism by default creates a backup of the table containing the resource prior to importing to provide the ability to restore to the previous state if later it was decided that the import should not have been performed. This table backup was also being performed by default during the basic installation processes. And, since the import mechanism was sometimes used multiple times during the installation processes, some of the tables were backed up several times. Depending on the size of the table, this could add a very large amount of time to the installation process. Since it is recommended that a backup is completed prior to beginning any of these installation processes, the default behavior has changed to not perform the backup by default. If you would like backups to be performed, then `SKIPIMPORTBACKUP=false` should be added to the **sandbox.cfg** file.

Capitalization Insensitivity for Header Value
About this task

Before you begin an upgrade, review the following AS3 information.

For AS3, when searching for a header value in a multipart/report, you do not need to consider whether the header value contains any capitalization. The search has been enhanced to be capitalization insensitive.

For example, the following searches will result in a match:
- Multipart/Report
- Multipart/report
- multipart/Report
- multipart/report

The search would not find the following as a match:
- MulTiPart/RePorT

CA Certificates Impacts
Before you upgrade, review the following information on CA certificates.

Users may add multiple copies of the same certificates to the database. Having multiple copies of same certificate in the database is not, in principle, a problem for the system except for the minor amount of wasted storage. Each copy has a different object ID in the database and is a separate database object.

The specific changes in this release is the ability to easily populate the product database with the set of authority root certificates distributed with the JVM.

Retry Logic Added to WebSphere MQ Suite Adapter PUT Service
About this task

Before you begin an upgrade, review the following WebSphere MQ Suite Adapter PUT Service information.

Retry logic has been added to the WebSphere MQ Suite. To accommodate this new functionality, you need to configure two new parameters for the PUT service:
- wsmq_send_retryCount
- wsmq_send_retrySleepInterval

To configure the new parameters:

Procedure
1. Log into Sterling B2B Integrator.
2. From the **Admin Console Home**, you need to start the Graphical Process Model (GPM).
3. Log into the GPM. You will need a **User ID** and **Password**.
4. In the GPM, select **View > Stencil > Services**.
5. Select **File > New**.
6. Drag the **WebSphere MQ Suite Put Message Service** from the **All Services** pane into the center pane.
7. Double click the **WebSphere MQ Suite Put Message Service**.

8. Select the configuration from the **Config** dropdown.
9. Enter the number of retries in to the **wsmq_send_retryCount** value.
10. Enter the sleep interval in seconds in to the **wsmq_send_retrySleepInterval** value.
11. Save the changes to the service configuration.
12. Exit from the GPM.

Services and Adapters - Show Advance State Button

Before you begin an upgrade, review the folllowing Show Advance State button information.

The Show Advanced State check box has been removed from the Services Configuration search screen. Instead, the default has been changed to always show the advanced state without needing to check a checkbox on the search screen to display it.

Some Certificate Fields Are Optional
About this task

Before you begin an upgrade, review the following certificate field information.

When generating certificate keys, the following fields may have been missing in the release you are upgrading from, but the entries are now optional:
- alt.name.dns
- alt.name.IP

Support for Multiple AS2 Organizations

Before you begin an upgrade, review the following AS2 schema information.

Sterling B2B Integrator now supports multiple sponsoring organizations and multiple partners for AS2. During upgrade, the single organization will be flagged as the default organization.

Once you have upgraded to this version, a prefix designation is used to differentiate between an AS2 organization (AS2_ORG_) and an AS2 partner (AS2_PART_). Each of these will require the full configuration of a trading partner to allow for a partner to trade with multiple organizations as well as an organization that trades with multiple partners.

The AS2_TRADEPART_INFO and AS2_EMAIL_INFO tables have been modified and the AS2_PROFILE table is newly introduced. Updates to these tables will occur during the SI in-place upgrade process in the following manner:
- Identify the default organization and populates the AS2_PROFILE table with organization information. A default organization is an AS2 organization profile named "profile_ORGANIZATION" present in the system before upgrade.
- Identify partner records and populates the AS2_PROFILE table with partner information.
- Populate the new columns of table AS2_TRADEPART_INFO with the default organization information.
- Populate the new PROFILE_ID column in the AS2_EMAIL_INFO table with the profile id of the AS2 organization profile present in the system.

Web Services

Before you begin an upgrade, review the following Web Services information.

Many of the Web Services configuration settings that were generated from the WebServices Provider Configuration UI have moved from the property files into database tables. This change was made to allow a single location of these settings in cluster environments and to ensure that these settings would not be reset during a fix pack installation.

After you have completed your upgrade, you should run the convertWSSoaProperties script found in the installation bin folder. This script reads the settings from the property file and places them into the proper database tables. You can then review the results in the WebServices Provider Configuration UI.

Pre-Upgrade Tasks

Checklist for iSeries Pre-Upgrade

Use this checklist to upgrade 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.

Step	iSeries Installation Checklist	Your Notes
1	Use the system requirements to verify that your system hardware and software meet the requirements specified for this release.	
2	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.	
3	If you are using a non-English environment, confirm that you are using the appropriate character set.	
4	Configure the system to view Sterling B2B Integrator files using Windows Explorer.	
5	Map a network drive to your working directory.	
6	Specify the QCCSID (Coded Character Set) for this installation.	
7	Record the collection name for the database.	
8	Record the system passphrase.	

Step	iSeries Installation Checklist	Your Notes
9	Record the administrative email address. This address is where system alerts messages are sent.	
10	Record the SMTP Server IP address. This address is where alert messages are sent.	
11	Record the Initial Port Number.	
12	Record the Hostname (catalog name) on which you plan to install the software.	
13	Determine the Host IP address for Sterling B2B Integrator. This is required even if you only have one IP address for your system.	
14	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.	
15	Set the JDK for your User Profile. Create a file in the /home directory for your user profile. • If using the Classic JDK 1.6, you will create a `SystemDefault.properties` file. (Sterling B2B Integrator 5.2.3.0 - 5.2.4.1 only) • If using the J9 JDK 1.6, you will create a `.profile` file. • If using the J9 JDK 1.7, you will create a `.profile` file. (Requires Sterling B2B Integrator 5.2.4.2 or higher) Verify that your user profile points to the correct JDK.	
16	Verify that your user profile is pointing to a job queue in a subsystem.	
17	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.	
18	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 *install_dir*.	
19	Record the path to the Core License file (`Core_License.xml`).	

Step	iSeries Installation Checklist	Your Notes
20	Download the JCE distribution file.	
21	Identify the JDK that will be used for Sterling B2B Integrator. (Sterling B2B Integrator 5.2.4.0 - 5.2.4.2)	
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. Please consult the IBM iSeries Information Center for more information on umask and customizing your Qshell environment.

Verification of 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 requirements. Your system requirements exceed these requirements if you are running other applications on the same machine as Sterling B2B Integrator.

The installation strictly enforces the following system requirements:
- Operating system version must match requirement exactly.
- The minimum patch level for the operating system is enforced, but you can apply higher patch 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 noncompliant items.

Downloading the JCE distribution file

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.

About this task

If you are installing Sterling B2B Integrator 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 be exported only to countries to which the United States permits the export of higher-level encryption.

Procedure

To obtain the JCE distribution file:

1. Browse to the Unrestricted SDK JCE policy files website.
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 **Files for Java 5.0 SR16, Java 6 SR13, Java 6 SR5 (J9 VM2.6), Java 7 SR4, and all later releases** check box 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 `unrestrictedpolicyfiles.zip` file to your system.
9. Record the directory and the `.zip` file name. You need this information during the installation process.

Determination of port numbers (iSeries)

During installation, you are prompted to specify the initial port number.

Use the following port number guidelines:

- A range of 200 consecutive open ports between 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 by using 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.

Configure the System to View Files

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

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 a Network Drive (iSeries)

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) under which Sterling B2B Integrator will run. Follow these steps:

Procedure
1. From an iSeries command line, enter `DSPSYSVAL SYSVAL(QCCSID)`.
2. Is the QCCSID set to 65535? If Yes, then complete one of the following tasks:
   - Change the CCSID to a specific coded character set.

     Enter `CHGSYSVAL SYSVAL(QCCSID) VALUE(xxx)`, where xxx represents your coded character set.

     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.

   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 a US English system If No, continue with the next preinstallation or pre-upgrade task.

Creating a user profile (iSeries)

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

About this task

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. For more information about creating user profiles, see the operating system documentation .

The job description that is assigned to the user profile must have a job queue defined that allows at least 10 active jobs. If the maximum number of active jobs is less than 10, Sterling B2B Integrator does not install correctly. This guideline also applies to starting Sterling B2B Integrator after the installation.

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 audits the system as soon as your system is in use.

After the installation finishes, if you determine that you need to modify licenses files, see "License modifications" on page 42.

Prepare the Database (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, 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.
- 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.

Setting the JDK for your user profile (5.2.3 - 5.2.4.2)

To set the JDK for your user profile, you must create a file to point to the correct JDK.

- If you are using the Classic JDK 1.6, create a `SystemDefault.properties` file. (Sterling B2B Integrator version 5.2.3 - 5.2.4.1)
- If you are using the J9 JDK 1.6, create a `.profile` file. (Sterling B2B Integrator version 5.2.3 - 5.2.4.2)
- If you are using the J9 JDK 1.7, create a `.profile` file. (Sterling B2B Integrator version 5.2.4.2)

Creating a SystemDefault.properties file

A `SystemDefault.properties` file includes a pointer to the Classic JDK 1.6 that you can use in Sterling B2B Integrator version 5.2.3 - 5.2.4.1.

Procedure

To create a `SystemDefault.properties` file in an iSeries environment for Sterling B2B Integrator 5.2.3 - 5.2.4.1:

1. Log on with the Sterling B2B Integrator user profile.
2. Create a home directory for the Sterling B2B Integrator 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, type `java.version=1.6`.

   Important: Make sure that there is not a space in the first position of the line `java.version=1.6`. The *j* needs to be written in the first position. If there is a space, the system does not recognize the proper JDK and the installation fails.
6. Perform one of the following steps, according to your environment:

- In a non-English-language environment (primarily a double-byte system such as a Japanese environment), type `file.encoding=ISO8859_1` on the second line. Then, save and close the `SystemDefault.properties` file.
- In an English environment (primarily a single-byte system), save and close the `SystemDefault.properties` file.

7. Press F2.
8. Press F3.
9. Enter the `WRKUSRPRF` command to verify that the Sterling B2B Integrator user profile home directory is pointing to the /home/*appuser* directory.

Creating a .profile File (5.2.3 - 5.2.4.2)

A `.profile` file includes a pointer to the J9 JDK 1.6 or J9 JDK 1.7 directory that you can use in Sterling B2B Integrator.

Procedure

To create a `.profile` file in an iSeries environment:

1. Log on with the Sterling B2B Integrator user profile.
2. Create a home directory for the Sterling B2B Integrator user profile. From an iSeries command line, enter `MKDIR /home/`*appuser*, where *appuser* represents the Sterling B2B Integrator user profile.
3. Type `EDTF` and press F4.
4. Type /home/*appuser*/`.profile` and press Enter. An edit session is displayed.
5. On the first line, type one of the following commands:
   - (If you are using J9 JDK 1.6) `export JAVA_HOME=/QOpenSys/QIBM/ProdData/JavaVM/jdk60/64bit` (Sterling B2B Integrator 5.2.3 - 5.2.4.2)
   - (If you are using J9 JDK 1.7) `export JAVA_HOME=/QOpenSys/QIBM/ProdData/JavaVM/jdk70/64bit` (Sterling B2B Integrator 5.2.4.2 or higher)

   Important: Make sure that there is not a space in the first position of this line. If there is a space, the system does not recognize the proper JDK and the installation might fail.
6. Press F2.
7. Press F3.
8. Enter `WRKUSRPRF` to verify that the Sterling B2B Integrator user profile home directory is pointing to the /home/*appuser* directory.
9. Verify that the user id is pointing to the correct JDK:
   a. From an iSeries command line, type `qsh` to enter Qsh mode.
   b. Type `java –version`.
   c. Press Enter.

   Verify that the information listed reflects the JDK that you are using.

Setting the JDK for your user profile (5.2.5)

To set the JDK for your user profile, you must create a `.profile` file in the /home directory for the user.

Sterling B2B Integrator 5.2.5 on iSeries requires the J9 JDK 1.7. Create the `.profile` file to set the JDK to J9 JDK 1.7.

Creating a .profile File (5.2.5)

A `.profile` file includes a pointer to the J9 JDK 1.7 directory that you can use in Sterling B2B Integrator.

Procedure

To create a `.profile` file in an iSeries environment:

1. Log on with the Sterling B2B Integrator user profile.
2. Create a home directory for the Sterling B2B Integrator user profile. From an iSeries command line, enter `MKDIR /home/appuser`, where *appuser* represents the Sterling B2B Integrator user profile.
3. Type `EDTF` and press F4.
4. Type `/home/appuser/.profile` and press Enter. An edit session is displayed.
5. On the first line, type the following command:

   `export JAVA_HOME=/QOpenSys/QIBM/ProdData/JavaVM/jdk70/64bit`

   Important: Make sure that there is not a space in the first position of this line. If there is a space, the system does not recognize the proper JDK and the installation might fail.
6. Press F2.
7. Press F3.
8. Enter `WRKUSRPRF` to verify that the Sterling B2B Integrator user profile home directory is pointing to the `/home/appuser` directory.
9. Verify that the user id is pointing to the correct JDK:

   a. From an iSeries command line, type `qsh` to enter Qsh mode.

   b. Type `java –version`.

   c. Press Enter.

   Verify that the information listed reflects the JDK that you are using.

Upgrade the Software

Upgrade in an iSeries

To upgrade Sterling B2B Integrator, follow the steps in the *Run the Upgrade Installation Program in iSeries* topic. These steps include special instructions for upgrading. Before running the upgrade program, refer to the *Before You Begin the Upgrade* section. After running the upgrade program, refer to the *Post Upgrade Validation* and *Post Upgrade Configuration* sections. 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.

When running the installation program (see *Run the Upgrade Installation Program in iSeries*), enter the following information exactly the same as your existing installation:

- Collection name – The name of your copied database
- IP address
- Passphrase

This upgrade changes the administrative password to the default password. After the upgrade, change the password back to the administrative password to

minimize security risks. This is the Admin password for logging into the UI (/dashboard or /ws). You also need to change all other default passwords.

Untar the Sterling B2B Integrator Jar File

About this task

The following procedure describes how to untar the Sterling B2B Integrator jar file. During the upgrade, you will reference this procedure.

Procedure

1. After the Sterling B2B Integrator jar file has been downloaded, key in `qsh` from an iSeries command line and press **Enter**.
2. Key in `set` and press the **Enter** key.

   This will list variables on the screen. Look for the QIBM_CCSID variable. It will look like QIBM_CCSID=0. Write down what it is set to.
3. Key in `export QIBM_CCSID=819` and press **Enter**.
4. Navigate to the directory where the tar file is located.
5. Key in `set` to verify that the QIBM_CCSID is set to 819.
6. Key in `tar -xvf name.of.tarfile.tar` and press **Enter**.
7. After it has performed the untar, you need to set the CCSID back.
8. Key in `export QIBM_CCSID=0` and press **Enter**, where the 0 represents the value in step 2.
9. Key in `set` and press **Enter** to verify that QIBM_CCSID is set to what it was in step 2.
10. 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 to. 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. You are now ready to continue with the install.

Upgrading in an iSeries environment (5.2.3 - 5.2.4.2)

You can upgrade Sterling B2B Integrator in an iSeries environment.

About this task

These instructions assume that you have downloaded Sterling B2B Integrator or a Service Pack (SP) and uncompressed the downloaded file to an empty directory. Use this directory wherever there is a reference to the installation source directory in the following instructions.

Note: To uncompress the files, see *Untar the Sterling B2B Integrator File*.

To upgrade Sterling B2B Integrator in an iSeries environment, you run an installation program. Refer to the information you recorded in the checklist and follow the steps below.

Before your upgrade installation, shut down your base installation. This will free up the port number that you used in your base installation.

Procedure

1. Go to the installation source directory.

2. Depending on the location of the installation source directory, choose one method. Be sure to record the absolute path that you use.

   - If the installation source directory is on your PC, copy or FTP the file SI_<*build_number*>.jar from that directory to the *absolutePath* in the IFS root or QOpenSys file system.

   - If the installation source directory is in iSeries, enter the following command on the command line: `cp /qopt/SI_<build_number>.jar absolutePath/SI_<build_number>.jar`

3. Copy the file `instsijar.savf` from the iSeries directory to the mapped network drive. Steps 4 through 6 will download the installation programs required for the upgrade.

4. Answer the question Is there a save file called INSTSIJAR in QGPL on your iSeries?

   - If YES, clear the save file by entering `CLRSAVF 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 in step 3 to the save file created in QGPL by entering: `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. Copy (back up and restore) the DB2 database for your previous version of Sterling B2B Integrator for iSeries into this version of Sterling B2B Integrator, using the following steps.

   The following procedure uses Sterling B2B Integrator 5.0 as an example. Change the commands as necessary for your version of Sterling B2B Integrator.

   - Ensure that no one is using Sterling B2B Integrator 5.0 or this version of the Sterling B2B Integrator database.

   - The save and restore procedure must be done by the iSeries System Security Officer (QSECOFR) or by a user with *SECADM authority. To create a save file to hold your Sterling B2B Integrator 5.0 database, type:

     `CRTSAVF FILE(QGPL/SAVE50DB)`

     If the save file already exists, type in:

     `CLRSAVF FILE(QGPL/SAVE50DB)`

   - Save your Sterling B2B Integrator 5.0 database into the new save file using the following command:

     `SAVLIB LIB(SI50DB) DEV(*SAVF) SAVF(QGPL/SAVE50DB)`

     SI50DB represents your Sterling B2B Integrator 5.0 database (collection).

   - Create the collection again that will hold this version of the Sterling B2B Integrator database, by first signing on to your iSeries using the user profile that you will use to run Sterling B2B Integrator.

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

   - Type `create collection SIxxDB`.

     SIxx1DB represents this version of the Sterling B2B Integrator database.

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

- After the create command finishes, exit your SQL interactive session without saving.
- To restore your Sterling B2B Integrator 5.0 database to the same collection (library name) that you just created in step f from above, type:

  `RSTLIB SAVLIB(SI50DB) DEV(*SAVF) SAVF(QGPL/SAVE50DB) RSTLIB(SIxxDB)`

  `SI50DB` represents your Sterling Integrator 5.0 database.

  `SIxxDB` represents this version of the Sterling B2B Integrator database.

  You should receive a message similar to the following message, ### objects restored. 20 not restored to SIxxDB.

  Note: The 20 objects that are not restored are the journal and journal receiver files. This is expected.

9. Enter `ADDLIBLE LIB(INSTSIJAR)` from an iSeries command line to add the installation programs to your library list.
10. Journaling needs to be set up appropriately on the newly copied database. To accomplish this, enter `FIXJRNS` and press **F4**. You will be prompted for old collection and new collection information, as follows:
    - If the old collection exists on the same iSeries machine as the new collection, when the restore took place, the newly restored files were journaled to the old collection. By running this command, it will un-journal the files from the old collection and journal them to the new collection.
    - If the old collection exists on a different iSeries machine and it was transferred and restored onto the iSeries box where you will be performing the upgrade, none of the files were journaled. This command will journal the files to the new collection. When running this command, enter *NONE for the Old Collection parameter and enter the new collection in the New Collection parameter.

    Based on the information above, fill in the appropriate answer for the Old Collection parameter. Key in the collection name for the new Sterling B2B Integrator system and press **Enter**. This will run interactively and correctly journal all of your physical files that have just been restored into your newly created collection that will be used in your upgrade process.
11. Enter `INSTSIJAR` and press **F4** to prompt the command. The system displays the list of configuration parameters needed to install Sterling B2B Integrator.
12. For each configuration parameter listed, enter the value you want to use. Refer to your notes in the preinstallation checklist.
    - Collection Name - This collection name must be the newly created collection to which you restored your old database in step 8.
    - Upgrade from the prior Sterling B2B Integrator version (*YES or *NO) - Answer *YES to this parameter to upgrade your previous version of Sterling B2B Integrator to this version of Sterling B2B Integrator. When you answer *YES to this prompt, it will convert your older copied database to this version of the database structure.
    - Sterling B2B Integrator System Passphrase - Enter this information exactly the same as in your existing installation.
    - Verify Sterling B2B Integrator System Passphrase.

- Administrative e-mail address - It is recommended that you not change the Administrative e-mail address during an upgrade. If you change this address, you will have to update adapters, business processes and other items that include this information.
- IP Address for SMTP Server - Enter this information exactly the same as in your existing installation.
- 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

13. Press **Page Down** for the remaining parameters:
    - Sterling B2B Integrator install directory. Be sure to enter a complete path name.
    - Full license path name. Be sure to enter a complete path and file name.
    - JCE distribution file. Be sure to enter a complete path and file name.
    - (Sterling B2B Integrator 5.2.4.0 or higher)
      Enter the JDK that you will be using:
      - Enter 1 if you will be using J9 JDK 1.6 (IBM i V6R1 or V7R1)
      - Enter 2 if you will be using J9 JDK 1.7 (IBM i V7R1 only)

14. Select License/Features, enter YES to select:
    - Sterling B2B Integrator, Sterling File Gateway, or both
    - 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.

    Note: Sterling File Gateway requires additional installation steps. See the *Sterling File Gateway Installation Guide* for more information

15. Verify the parameters you entered and press **Enter**.

    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.

    The install runs in batch mode. 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 SI.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.

16. After performing the upgrade, see "Installing a fix pack or interim fix" on page 37 to install the latest fix pack.

Upgrading in an iSeries environment (5.2.5)

You can upgrade Sterling B2B Integrator in an iSeries environment.

Before you begin

If you are using the EBICS Banking Server application with Sterling B2B Integrator 5.2.5, the data encryption for storage within the installation location is not supported.

About this task

These instructions assume that you have downloaded Sterling B2B Integrator or a Service Pack (SP) and uncompressed the downloaded file to an empty directory. Use this directory wherever there is a reference to the installation source directory in the following instructions.

Note: To uncompress the files, see *Untar the Sterling B2B Integrator File*.

To upgrade Sterling B2B Integrator in an iSeries environment, you run an installation program. Refer to the information you recorded in the checklist and follow the steps below.

Before your upgrade installation, shut down your base installation. This will free up the port number that you used in your base installation.

Procedure

1. Go to the installation source directory.
2. Depending on the location of the installation source directory, choose one method. Be sure to record the absolute path that you use.
   - If the installation source directory is on your PC, copy or FTP the file SI_*<build_number>*.jar from that directory to the *absolutePath* in the IFS root or QOpenSys file system.
   - If the installation source directory is in iSeries, enter the following command on the command line: cp /qopt/SI_<build_number>.jar absolutePath/SI_<build_number>.jar
3. Copy the file instsijar.savf from the iSeries directory to the mapped network drive. Steps 4 through 6 will download the installation programs required for the upgrade.
4. Answer the question Is there a save file called INSTSIJAR in QGPL on your iSeries?
   - If YES, clear the save file by entering CLRSAVF 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 in step 3 to the save file created in QGPL by entering: 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. Copy (back up and restore) the DB2 database for your previous version of Sterling B2B Integrator for iSeries into this version of Sterling B2B Integrator, using the following steps.

   The following procedure uses Sterling B2B Integrator 5.0 as an example. Change the commands as necessary for your version of Sterling B2B Integrator.

   - Ensure that no one is using Sterling B2B Integrator 5.0 or this version of the Sterling B2B Integrator database.
   - The save and restore procedure must be done by the iSeries System Security Officer (QSECOFR) or by a user with *SECADM authority. To create a save file to hold your Sterling B2B Integrator 5.0 database, type:

     `CRTSAVF FILE(QGPL/SAVE50DB)`

     If the save file already exists, type in:

     `CLRSAVF FILE(QGPL/SAVE50DB)`

   - Save your Sterling B2B Integrator 5.0 database into the new save file using the following command:

     `SAVLIB LIB(SI50DB) DEV(*SAVF) SAVF(QGPL/SAVE50DB)`

     SI50DB represents your Sterling B2B Integrator 5.0 database (collection).

   - Create the collection again that will hold this version of the Sterling B2B Integrator database, by first signing on to your iSeries using the user profile that you will use to run Sterling B2B Integrator.
   - From an iSeries command line, type STRSQL to get to an interactive SQL session.
   - Type `create collection SIxxDB`.

     SIxx1DB represents this version of the Sterling B2B Integrator database.

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

   - After the create command finishes, exit your SQL interactive session without saving.
   - To restore your Sterling B2B Integrator 5.0 database to the same collection (library name) that you just created in step f from above, type:

     `RSTLIB SAVLIB(SI50DB) DEV(*SAVF) SAVF(QGPL/SAVE50DB) RSTLIB(SIxxDB)`

     SI50DB represents your Sterling Integrator 5.0 database.

     SIxxDB represents this version of the Sterling B2B Integrator database.

     You should receive a message similar to the following message, `### objects restored. 20 not restored to SIxxDB.`

   Note: The 20 objects that are not restored are the journal and journal receiver files. This is expected.

9. Enter `ADDLIBLE LIB(INSTSIJAR)` from an iSeries command line to add the installation programs to your library list.

10. Journaling needs to be set up appropriately on the newly copied database. To accomplish this, enter `FIXJRNS` and press **F4**. You will be prompted for old collection and new collection information, as follows:

    - If the old collection exists on the same iSeries machine as the new collection, when the restore took place, the newly restored files were journaled to the old collection. By running this command, it will un-journal the files from the old collection and journal them to the new collection.
    - If the old collection exists on a different iSeries machine and it was transferred and restored onto the iSeries box where you will be performing

the upgrade, none of the files were journaled. This command will journal the files to the new collection. When running this command, enter *NONE for the Old Collection parameter and enter the new collection in the New Collection parameter.

Based on the information above, fill in the appropriate answer for the Old Collection parameter. Key in the collection name for the new Sterling B2B Integrator system and press **Enter**. This will run interactively and correctly journal all of your physical files that have just been restored into your newly created collection that will be used in your upgrade process.

11. Enter INSTSIJAR and press **F4** to prompt the command. The system displays the list of configuration parameters needed to install Sterling B2B Integrator.

12. For each configuration parameter listed, enter the value you want to use. Refer to your notes in the preinstallation checklist.
   - Collection Name - This collection name must be the newly created collection to which you restored your old database in step 8.
   - Upgrade from the prior Sterling B2B Integrator version (*YES or *NO) - Answer *YES to this parameter to upgrade your previous version of Sterling B2B Integrator to this version of Sterling B2B Integrator. When you answer *YES to this prompt, it will convert your older copied database to this version of the database structure.
   - Sterling B2B Integrator System Passphrase - Enter this information exactly the same as in your existing installation.
   - Verify Sterling B2B Integrator System Passphrase.
   - Administrative e-mail address - It is recommended that you not change the Administrative e-mail address during an upgrade. If you change this address, you will have to update adapters, business processes and other items that include this information.
   - IP Address for SMTP Server - Enter this information exactly the same as in your existing installation.
   - 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

13. Press **Page Down** for the remaining parameters:
   - Sterling B2B Integrator install directory. Be sure to enter a complete path name.
   - Full license path name. Be sure to enter a complete path and file name.
   - JCE distribution file. Be sure to enter a complete path and file name.

14. Select License/Features, enter YES to select:
   - Sterling B2B Integrator, Sterling File Gateway, or both
   - NIST 800-131a Compliance Mode (choose ***OFF**, ***TRANSITION** or ***STRICT**)
   - FIPS Module
   - 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.

Note: Sterling File Gateway requires additional installation steps. See the *Sterling File Gateway Installation Guide* for more information

15. Verify the parameters you entered and press **Enter**.

   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.

   The install runs in batch mode. 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 SI.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.

16. After performing the upgrade, see "Installing Sterling B2B Integrator version 5.2.5 on iSeries as a fix pack" on page 38 to install the latest fix pack.

17. After the Sterling B2B Integrator 5.2.5.0 upgrade is complete, install Sterling B2B Integrator 5.2.5.0 interim fix 3 (5020500_3). See "Installing a fix pack or interim fix" on page 37 for instructions. This interim fix (`si_52_build_5020500_interimfix_3.jar`) is included in the Sterling B2B Integrator 5.2.5 installation media released in April 2015, but is not automatically installed. It must be installed separately. In this case, use the included `si_52_build_5020500_interimfix_3.jar` file rather than downloading from Fix Central.

18. (Optional, but recommended) Check IBM Fix Central to see if further fix packs or interim fixes are available. If so, download and install as needed. See "Installing a fix pack or interim fix" on page 37 for instructions.

Post Upgrade Validation

Post Upgrade Validation Checklist for iSeries

#	Post Upgrade Validation Checklist for iSeries	Your Notes
1	Start Sterling B2B Integrator (iSeries).	
2	Access Sterling B2B Integrator.	
3	Validate the Installation.	
4	Stop Sterling B2B Integrator (iSeries).	

Starting Sterling B2B Integrator (iSeries) (5.2.3 - 5.2.4.2)

The startup of Sterling B2B Integrator after installation requires several steps.

Procedure

To start Sterling B2B Integrator in an iSeries environment:

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 the startup to complete. This process takes 10 - 15 minutes.

   Startup creates a spool file. When the 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. For example, you might see the following type of message:

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

   where *host:port* is the IP address and port number where Sterling B2B Integrator exists 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 displayed.

4. Optional: To verify that Sterling B2B Integrator started normally and completely, view the system by using the WRKACTJOB command.

   (Sterling B2B Integrator 5.2.3.0 - 5.2.4.1) 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.

   (Sterling B2B Integrator 5.2.4.2) Verify that the SIMAIN job ended and there are at least four 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).

Starting Sterling B2B Integrator (iSeries) (5.2.5)

The startup of Sterling B2B Integrator after installation requires several steps.

Before you begin

If you are starting Sterling B2B Integrator after upgrading the application from version 5.1.0.4 to 5.2.5, change the values of the following properties in the centralops.properties file to 600. This action prevents the start command from timing out before Sterling B2B Integrator starts. The centralops.properties file is in the *install_dir*/install/properties directory.

- **OpsServer.commandTimeout**
- **PassPhrase.urlTimeout**

Procedure

To start Sterling B2B Integrator in an iSeries environment:

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 the startup to complete. This process takes 10 - 15 minutes.

   Startup creates a spool file. When the 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. For example, you might see the following type of message:

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

   where *host:port* is the IP address and port number where Sterling B2B Integrator exists 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 displayed.

4. Optional: To verify that Sterling B2B Integrator started normally and completely, view the system by using the WRKACTJOB command.

   Verify that the SIMAIN job ended and there are at least four 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

You can access Sterling B2B Integrator through a web browser.

Procedure

1. Open a browser window and enter the address that is displayed at the end of the start.
2. On the login page, 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.

Validating the installation with a sample business process

You can validate the installation by testing a sample business process.

Procedure

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

Stopping Sterling B2B Integrator (iSeries)

Stopping Sterling B2B Integrator on iSeries requires several steps.

Procedure

To stop Sterling B2B Integrator in an iSeries environment:

1. Sign on to 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 the `./stopDAVServer.sh` command to stop the WebDAV server.

Post Upgrade Configuration

Post Upgrade Configuration Checklist for iSeries

#	Post Upgrade Configuration Checklist for iSeries	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	Configure Property Files	
4	Perform Initial Administrative Setups in Sterling B2B Integrator	
5	Add Third-Party Libraries	
6	Configure Services and Adapters	
7	JDBC Adapter and Lightweight JDBC Adapter	
8	File System Adapter and Command Line2 Adapters	
9	Odette FTP Adapter	
10	Restore Performance Tuning Configuration	
11	Change the Network Interface Bindings	
12	Advanced File Transfer Tab	
13	Reconfigure Archive Settings	
14	Correct Missing Manager IDs	

Download of the Sterling B2B Integrator tools

After you install Sterling B2B Integrator, you can install tools like the Map Editor and the Graphical Process Modeler (GPM).

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 require MESA Developer Studio if you want to use the plug-ins to create fact models and custom reports

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

Properties files configuration in an iSeries environment

Properties 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 properties files are in the `install_dir/install/properties` directory.

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

Before you change any property files, see the properties file documentation for general information about how to edit properties files.

You might need to make specific properties files changes after an installation in the following areas:
- LDAP user authentication
- Prevention of cross-site script vulnerabilities
- Logging configuration
- Process-specific property file settings

Performing Initial Administrative Setups in Sterling B2B Integrator

If you are installing Sterling B2B Integrator for the first time, you need to perform some initial administrative setups before users can use the application. For example, the system administrator for Sterling B2B Integrator must register users,

grant permissions, and run several performance reports so that benchmarks are established for tuning the system in the future.

Add Third-Party Libraries
About this task

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

Configure Services and Adapters
About this task

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

After an upgrade, the configurations of default adapters and services are re-set to their default configurations. This includes directory paths, which are restored to their default paths. You need to reconfigure those adapters and services, which include, but are not limited to:
* All default FTP adapters
* All default SFTP adapters
* Connect:Enterprise UNIX Server Adapter
* OdetteFTP Adapter
* SAP Suite Adapter
* SWIFTNet Client Service
* SWIFTNet Server Adapter

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

Examples of services and adapters that commonly need to be reconfigured following an upgrade include:
* FTP adapter
* System services such as the Alert service and the BP Fault Log adapter

The following adapters need special consideration following an upgrade:
* JDBC Adapter and Lightweight JDBC Adapter
* File System Adapter and Command Line2 Adapters
* Odette FTP Adapter

Configure JDBC Adapter and Lightweight JDBC Adapter
About this task

Storage locations of the database pool properties that allow the JDBC adapter and the Lightweight JDBC adapter to communicate with your external database have been streamlined. The poolManager.properties file has been eliminated and some of its pool properties are now included in the jdbc.properties file, along with some

new properties. You will need to manually update your existing jdbc_customer.properties.in file to add some new database pool properties. If you do not have a jdbc_customer.properties.in file, create one since customer.properties are not affected by product updates.

Configure File System Adapter and Command Line2 Adapters

About this task

You must configure your File System and Command Line2 adapters before you remove the previous release directory. Reconfigure any File System and Command Line2 adapters that were configured to use directories or scripts in the installation directory for the previous release. Ensure that you create new directories and save scripts outside of the current installation directory and edit each configuration to use the appropriate directories and scripts.

Consider the following:
- If you are using the Command Line2 adapter and have located the CLA2Client.jar file anywhere other than the default location, you must replace it with the new version. For information about the default location and how to start the Command Line2 adapter, see the *Command Line2 adapter*.
- If you are upgrading to this version of Sterling B2B Integrator from a version lower than 4.0.1 and are using the Command Line2 adapter, you must update the version of the CLA2Client.jar file with the CLA2Client.jar located in the */install_dir*/install/client/cmdline2 UNIX directory or in the *install_dir*\install\client\cmdline2 for Windows. If you installed the CLA2Client.jar file anywhere other than the default location, you must replace each copy of the file with the new version. If you only installed it in the default location, the update occurs automatically during the upgrade process.
- If you are upgrading to this version of Sterling B2B Integrator from a version prior to 4.0 and are using the Command Line adapter, you must update the version of the CLAClient.jar file with the CLA2Client.jar located in the */install_dir*/install/client/cmdline2 UNIX directory or in the *install_dir*\install\client\cmdline2 for Windows. If you installed the CLAClient.jar file anywhere other than the default location, you must replace each copy of the file with the new version. If you only installed it in the default location, the update occurs automatically during the upgrade process.

The CLA instances are now pointing to the CLA2 Service definition. After importing old service instances of CLA onto Sterling B2B Integrator, you need to reconfigure the imported CLA services to re-set the Remote Name and Remote Port service configuration parameters. For more information, refer to the documentation for the Command Line Adapter and Command Line2 Adapter.

Configure Odette FTP Adapter

About this task

If you use the Odette FTP Adapter and are using the Partner Profile XML file version 2.00 used in Sterling Gentran Integration Suite 4.3, you must modify it to match the new Partner Profile version 3.00. To modify the XML file, refer to the following table:

Section	Name of Structure or Field	Action	Comment

Partner Profiles	`<GeneralParameters>`
	
	 `<PartnerProfileVersion>3.00`
	
	 `</PartnerProfileVersion>`
	
	 `</GeneralParameters>`
		Use correct version label of the Partner Profile.	New Version label: 3.00

Physical Partner	Description	Add field and description content	Mandatory in OFTP Partner database
Physical Partner	SubMailbox	Add field, if used.	Optional

Physical Partner	`<AuthenticationCertificate`
	
	 `type ="..."> `
	
	 `<Subject>string</Subject>`
	
	 `<Issuer>string</Issuer>`
	
	 `<Serial> Bignumber_string`
	
	 `</Subject>`
	
	 `</AuthenticationCertificate>`
		Add Structure, if used.	OFTP 2.0: Mandatory for security only. Structure may be repeated.

Physical Partner	`<AuthenticationCertificate`
	
	 `type ="Private Key">`
	
	 `<Subject>string</Subject>`
	
	 `<Issuer>string</Issuer>`
	
	 `<Serial>Bignumber_string`
	
	 `</Subject>`
	
	 `</AuthenticationCertificate>`
		Add Stucture, if used.	OFTP 2.0: Mandatory for security only.

Physical Partner/ CAPI	DWindowSize	Delete field	
Physical Partner/ IP	IPFilter		Uses IPv4 or IPv6 addresses.
Physical Partner IP	SSL	Add field, if used.	OFTP 2.0: Mandatory for security only.
Physical Partner IP	CipherStrength	Add field, if used.	OFTP 2.0: Mandatory for security only.

Physical Partner IP	`<SSLCertificate`
	
	 `type ="..."> `
	
	 `<Subject>string</Subject>`
	
	 `<Issuer>string</Issuer>`
	
	 `<Serial> Bignumber_string`
	
	 `</Subject>`
	
	 `</SSLCertificate>`
		Add structure, if used.	OFTP 2.0: Mandatory for security, only. Structure may be repeated.

Physical Partner Contract	Description	Add field and description content.	Mandatory in OFTP Partner database.

Section	Name of Structure or Field	Action	Comment
Physical Partner Contract	MultipleLoginSessions		Now used.
Physical Partner Contract	DuplicateFilePeriod	Rename DuplicateFileProcessingTestings To DuplicateFilePeriod	
Physical Partner Contract	SessionLogLevel	Add fields.	Optional
Physical Partner Contract	GroupNameList	Add fields, if used.	Optional
Physical Partner Contract	SecureAuthentication	Add fields.	OFTP 2.0: Mandatory
Physical Partner Contract	\<TimeScheduleTable\> ... \<TimeScheduleTable\>	Delete structure and create schedules in the Scheduler.	Initiator Business Process and Business Process user fields are still used.
Physical Partner Contract	OdetteFTPAPILevel	Rename OdetteAPILevel to OdetteFTPAPILevel	
Logical Partner	Description	Add field and description content.	Mandatory in OFTP Partner database.
Logical Partner	\<FileServiceCertificate type ="..."\> \<Subject\>string\</Subject\> \<Issuer\>string\</Issuer\> \<Serial\>string\</Subject\> \</FileServiceCertificate\>	Add structure, if used.	OFTP 2.0: Mandatory for security, only. Structure may be repeated.
Logical Partner Contract	Description	Add field and description content.	Mandatory in OFTP Partner database.
Logical Partner Contract	FileTransmissionRetries	Rename FileTransmitRetries to FileTransmissionRetries	
Logical Partner Contract	SignedEERPRequest	Add field, if used.	
Logical Partner Contract	EERP/NERPSignatureCheck	Add field, if used.	
Logical Partner Contract	File Signing	Add field, if used.	
Logical Partner Contract	File Encryption	Add field, if used.	
Logical Partner Contract	CipherSuite	Add field, if used.	
Logical Partner Contract	File Compression	Add field, if used.	
Logical Partner Contract	CharEncoding	Add field, if used.	
Logical Partner Contract	Receive VitualFilenamePattern	Add field, if used.	
Logical Partner Contract	EERPTimeout	Rename WaitForEERP to EERPTimeout	

Section	Name of Structure or Field	Action	Comment
Logical Partner Contract	FileScheduleTimeout	Add field, if used.	
Logical Partner Contract	InboundBusinessProcess	Add field, if used.	Optional
Logical Partner Contract	InboundBusinessProcessUser	Add field, if used.	Optional, if no Inbound business process is specified.

After changing the Partner Profile for version 3.00, import the Partner Profile into the new Odette FTP Partner Profile database. For additional information, see Odette FTP Partner Profile.

Restore Performance Tuning Configuration (iSeries)

About this task

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

To restore the performance tuning configuration:

Procedure

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

Changing the network interface bindings

To increase the security of the Administrator Console user interface, Sterling B2B Integrator binds only to specific network interfaces.

About this task

After installing, if the URL returns the error message `Page cannot be displayed`, you can adjust the property settings to correct the problem.

Procedure

To change the network interface bindings:

1. On the server where Sterling B2B Integrator resides, edit the `noapp.properties_platform_ifcresources_ext.in` file.
2. Locate the **admin_host** parameter:
   - Where *hostname1* is the name of primary network interface, which is 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 resides.
   `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 additional network interface needs to access Sterling B2B Integrator, add an additional `admin_host` entry. For example:
   * `admin_host.1 = hostname1`
   * `admin_host.2 = localhost`
   * `admin_host.3 = hostname2`

5. Stop Sterling B2B Integrator.

6. Open the *install_dir*/install/bin directory.

7. Enter the `setupfiles.sh` command.

8. Restart Sterling B2B Integrator.

Add Advanced File Transfer Tab
About this task

The Advanced File Transfer tab will not be enabled by default after an upgrade. If you have a license for Advanced File Transfer, perform the following steps to add the Advanced File Transfer tab:

Procedure
1. Log in as **Admin**.
2. Click **Manage Layout**.
3. Click **Add Pane**.
4. Enter the following name: `Advanced File Transfer`
5. Click **Apply**.
6. Click the **customize** icon for the new **Advanced File Transfer** tab.
7. Click **Add Portlet**.
8. Select the Add box for **Advanced File Transfer Management**.
9. Click **Apply**.
10. Select **Clear Borders and Title** from the Decoration menu.
11. Click **Save and Apply**.

Reconfigure Archive Settings
About this task

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

To reconfigure your Archive settings, use the following procedure:

Procedure
1. From the **Administration Menu**, select **Operations** > **Archive Manager**.
2. Next to **Configure Archive Settings**, click **Go!**
3. If a message displays about the UI Lock, click **OK** to continue.
4. Click **Next**.
5. Update the Backup Directory field with the correct path information:

6. Click **Save**.
7. Confirm the settings and click **Finish**.

Correct Missing Manager IDs
About this task

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

Installation Maintenance

Determining the need for a fix pack in an iSeries environment

Fix packs contain cumulative fixes for a specific version of Sterling B2B Integrator.

About this task

Fix packs are available on the Support Center website. Because each fix pack contains the fixes from previous fix packs, you need to install only the most recent fix pack.

Information about a fix pack is in a PDF file with a similar name to the fix pack, and is available for download with the fix pack JAR file.

Before you install the fix pack, review the following items:
* Preserve your custom changes to system resources.
* The fix pack installation might use one or more fix pack property override files. Do not alter these files.
* Property changes made directly in `.properties` or `.properties.in` files might be overwritten during the fix pack installation. Properties that are overridden by the `customer_overrides.properties` file are not affected. IBM recommends that you maintain property file changes by using (when possible) the `customer_overrides.properties` file. For more information, see the documentation for using the `customer_overrides.properties` file.
* If you edited any of the `cdinterop` files, you must back them up before you apply the fix pack. The `cdinterop` files do not have initialization (`.in`) files. After you apply the fix pack, use the backup version of the files in your upgraded installation. These files include the following files:
  - `cdinterop-proxy-records.properties`
  - `cdinterop-spoe-auth.properties`
  - `cdinterop-spoe-policy.properties`
  - `cdinterop-user-records.properties`
* Information about the upgraded installation is automatically logged to the `/install_dir/install/logs/InstallService.log` file.
* If you need to roll back a fix pack, see "Fix Pack Changes Report" on page 40.
* During fix pack installation, the **dbVerify** utility compares the list of standard indexes with the indexes that are present in the database and drops the custom indexes. Recreate the custom indexes after the fix pack installation is complete.

Installing a fix pack or interim fix

When available, you should install fix packs or interim fixes for Sterling B2B Integrator in iSeries to keep your system current.

Procedure

To install the latest fix pack or interim fix for Sterling B2B Integrator in an iSeries environment:

1. Open the IBM Fix Central website.
2. Download the most recent fix pack or interim fix 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. Log in to the server where Sterling B2B Integrator is installed with the user ID and password that was used for the installation.
4. Stop Sterling B2B Integrator.
5. Perform a full backup of the Sterling B2B Integrator installation directory, including all subdirectories.
6. Perform a backup of the database.
7. If you edited any property files, ensure that the associated `.properties.in` files have the most current changes. Property files are overwritten with the contents of the associated `.properties.in` files during the installation.
8. Sign on with your Sterling B2B Integrator user profile and enter into the QSH (Qshell) mode.
9. In QSH, navigate to the `/install_dir/bin` directory where `install_dir` is the Sterling B2B Integrator installation directory.
10. Enter:

    `./InstallService.sh <path>/<file_name>`

    Where:

    > `<path>` is the fully qualified path to the fix pack or interim fix file

    > `<file_name>` is the name of the fix pack or interim fix file

    If the fix pack or interim fix attempts to modify the database schema and the modification fails, you receive an error message about the failure. The message provides 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 `fix pack.log` file.

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

11. Press **Enter** to continue.

    Information about the fix pack or interim fix is displayed. After the fix pack or interim fix is applied, the following message is displayed:

    `Deployment to application server successful`

    When the **$** is displayed, the process completes.

12. (Sterling B2B Integrator 5.2.4.2 only)

    If you are currently running the IBM i V5R4 operating system, you must now either upgrade your operating system, or move your Sterling B2B Integrator instance to a different iSeries machine that uses an IBM i V6R1 or V7R1 operating system. Then, upgrade your JDK to J9 JDK 1.6 or J9 JDK 1.7, whichever is appropriate.

If you are currently running the IBM i V6R1 operating system, you need to upgrade your JDK version from the Classic JDK 1.6 to the J9 JDK 1.6. S

For more information, see "Updating your JDK on iSeries" on page 44.

13. Start Sterling B2B Integrator.

Installing Sterling B2B Integrator version 5.2.5 on iSeries as a fix pack

You can install Sterling B2B Integrator version 5.2.5 as a fix pack.

Before you begin

To run Sterling B2B Integrator 5.2.5 on iSeries, you must have a V7R1 or V7R2 iSeries operating system with JDK 1.7 installed. Before you apply the fix pack, you might need to take one of following actions:

- If you are running the Classic JDK, you must move your instance of Sterling B2B Integrator to a V7R1 or V7R2 iSeries operating system.

    Then, update to JDK 1.7 with the **UPDATEJDK** command. See "Updating your JDK on iSeries" on page 44.

- If you are running the J9 JDK 1.6 version on a V6R1 iSeries operating system, you must move your instance of Sterling B2B Integrator to a V7R1 or V7R2 iSeries operating system.

    Then, update to JDK 1.7 with the **UPDATEJDK** command. See "Updating your JDK on iSeries" on page 44.

- If you are running the J9 JDK 1.6 version on a V71 iSeries operating system, you must update to JDK 1.7 with the **UPDATEJDK** command. See "Updating your JDK on iSeries" on page 44.

About this task

You must run this installation in interactive mode.

Procedure

1. Download the fix pack 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 are overwritten with the contents of the associated `.properties.in` files during the fix pack installation.
6. Sign on with your user profile and enter QSH (Qshell mode).
7. In QSH, open the `/install_dir/bin` directory and enter the following command:

    `cd /install_dir/bin`
8. Enter the following command:

    `./InstallService.sh` *path*`/patch_SI_`*fix pack_number*`.jar`

    where:

    path is the fully qualified directory where the fix pack jar resides

    fix pack_number is the fix pack number

    If the fix pack attempts to modify the database schema and the modification fails, you receive an error message about the failure. The message provides the

error message code from the database and the SQL command that failed. The failure information is also logged to the `system.log` and `InstallService.log` files in the */install_dir*/install/logs directory.

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 fix pack is displayed. After the fix pack is applied, the following message is displayed:

```
Deployment to application server successful
```

When the **$** is displayed, the fix pack process completes.

10. Start the system.

Preserving custom changes for system resources

When you update Sterling B2B Integrator, you can preserve your custom changes to system resources like workflow definitions and maps.

About this task

During updates, the system can identify when you make a custom change to Sterling B2B Integrator versus a change through an upgrade or fix pack.

When a fix pack, 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 fix pack 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, that means that the existing resource was customized and was not overwritten by the fix pack.

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 compares the checksum between the existing default resource and the resource that was added after applying a fix pack or upgrading. The DB Checksum tool, a resource difference tool generates a granular report of the changes in the system that was not permitted to 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.

Performing a checksum

Use a command to run the DB Checksum tool.

Procedure

To run the DB Checksum tool:

1. Open the */install_dir*/install/bin directory.
2. Enter the following command:

```
./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 that is based on the command options and generates the output message.

Fix Pack Changes Report

The Fix Pack Changes Report is used to obtain information if you need to roll back a fix pack.

The fix pack report can be found in the installation directory `fix pack_reports` folder. The report contains the following fix pack information:

- Fix pack ID
- Fix pack changes
- Number of files deleted
- Number of JAR files removed
- Number of JAR files 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 `fix pack_reports` folder contains the `fix pack_Report.html` file. When you open this file, you can view the fix pack information.

Example: Fix Pack Changes Report

The Fix Pack Changes Report includes both summary and detailed report information.

The following is an example of a Fix Pack Changes Report:

```
Summary of Changes
Fix Pack ID: Platform_2.0
Fix Pack 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.bpml version: 4
Time: Wed May 13 15:23:07 EDT 2009
BP Added: Recovery.bpml version: 17
Time: Wed May 13 15:23:07 EDT 2009
BP Added: Schedule_AutoTerminateService.bpml version: 10
Time: Wed May 13 15:23:07 EDT 2009
BP Added: Schedule_DBMonitorService.bpml 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 modifications

After the installation finishes, you can modify the software licenses that you loaded with 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 in the following directories:

- 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. On the Administration Menu, click **System** > **B2B Console** > **Operations** > **System** > **Licenses**.

AddLicenseSet Command Parameters

Use the **AddLicenseSet** command to modify a single license file or the entire license file directory.

To use the **AddLicenseSet** command, you must do the following:

- Open 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 Parameter	Description
-reload	Use this parameter to reload the license files.
	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 locations:
	• UNIX - /*install_dir*/install/logs/security/ old_licenses
	• Windows - *install_dir*\install\logs\security\ old_licenses
	• iSeries - /*install_dir*/logs/security/old_licenses
-upgrade	Use this parameter during an upgrade only.
	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 locations:
	• UNIX - /*install_dir*/install/logs/security/upgrade
	• Windows -*install_dir*\install\logs\security\upgrade
	• iSeries -/*install_dir*/logs/security/old_licenses

The **AddLicenseSet** command will check if Sterling B2B Integrator is running. If it is running, the commond will call the Ops server to refresh the license from the database. If you have any problems with your licenses after running the **AddLicenseSet** command, stop and restart Sterling B2B Integrator.

License Modification: Examples
There are several different ways you can use the **AddLicenseSet** command to modify your licenses.

UNIX Examples

From the *install_dir*/bin directory:

Scenario	Command usage (UNIX example)
Reload a single license file	./AddLicenseSet.sh /*install_dir*/install/properties/ licensefiles/SI_SFG_License.xml -reload
Reload all of the license files in the directory	./AddLicenseSet.sh /*install_dir*/install/properties/ licensefiles/ -reload
Upgrade a single license file	./AddLicenseSet.sh /*install_dir*/install/properties/ licensefiles/SI_SFG_License.xml -upgrade
Upgrade all of the license files in the directory	./AddLicenseSet.sh /*install_dir*/install/properties/ licensefiles/ -upgrade

Windows Examples

From the *install_dir*\bin directory:

Scenario	Command usage (Windows example)
Reload a single license file	AddLicenseSet.cmd*install_dir*\install\properties\ licensefiles\SI_SFG_License.xml -reload
Reload all of the license files in the directory	AddLicenseSet.cmd*install_dir*\install\properties\ licensefiles\ -reload

Scenario	Command usage (Windows example)
Upgrade a single license file	AddLicenseSet.cmd*install_dir*\install\properties\ licensefiles\SI_SFG_License.xml -upgrade
Upgrade all of the license files in the directory	AddLicenseSet.cmd*install_dir*\install\properties\ licensefiles\ -upgrade

Updating your JDK on iSeries

Sometimes you need to update the JDK used by Sterling B2B Integrator.

If you are using Sterling B2B Integrator 5.2.4.2 or higher, you can update your JDK from the classic JDK 1.6 to J9 JDK 1.6 or to J9 JDK 1.7.

To update from the classic JDK 1.6 to J9 JDK 1.6 or from J9 JDK 1.6 to J9 JDK 1.7, begin by stopping Sterling B2B Integrator.

To stop Sterling B2B Integrator on iSeries, in QSH, run the command: **./hardstop.sh**.

Then perform the following steps as needed:
1. "Preparing the user profile for the new JDK"
2. "Downloading the JDK Update Files" on page 45
3. "Running the Update JDK Program" on page 45

Preparing the user profile for the new JDK

The Sterling B2B Integrator user profile must be set up to point to the correct JDK.

About this task

Perform the following steps if you are going from the Classic JDK 1.6 to the J9 JDK 1.6 or to J9 JDK 1.7. This will point your Sterling B2B Integrator user profile to the appropriate JDK:

Procedure
1. Log on to the Sterling B2B Integrator user profile.
2. Create a home directory for the Sterling B2B Integrator user profile.
   a. From an iSeries command line, enter: MKDIR /home/*appuser*, where *appuser* represents theSterling B2B Integrator user profile.

      If the home directory for your Sterling B2B Integrator user profile already exists, ignore this step.
   b. Enter EDTF and press **F4**.
   c. Enter /home/*appuser*/.profile and press **Enter**. An edit session is displayed.
   d. If you are converting to J9 JDK 1.6, enter the following on the first line:
      export JAVA_HOME=/QOpenSys/QIBM/ProdData/JavaVM/jdk60/64bit
   e. If you are converting to J9 JDK 1.7, enter the following on the first line:
      export JAVA_HOME=/QOpenSys/QIBM/ProdData/JavaVM/jdk70/64bit
   f. Press **F2**, then **F3** to save and exit.
3. Log off and then log back on.

Results

The Sterling B2B Integrator user profile should now be pointing to the correct JDK. To verify, perform the following steps:

1. At the iSeries command line, key in `qsh` and press **Enter**.
2. Key in `java –version` to verify that it displays the correct JDK version.

Downloading the JDK Update Files

You will need to download some files to update your Sterling B2B Integrator JDK on iSeries.

About this task

(Requires Sterling B2B Integrator 5.2.4.2 or higher.) To download the upgrade files necessary for upgrading your Sterling B2B integrator JDK:

Procedure

1. Is there a saved file named UPDJDKSAVF in QGPL on your iSeries?
   - **Yes** - Enter `CLRSAVF FILE(QGPL/UPDJDKSAVF)` to clear the save file from your iSeries.
   - **No** - Enter `CRTSAVF FILE(QGPL/UPDJDKSAVF)` to create a save file on your iSeries.
2. Copy the UPDJDKSAVF file from *Sterling B2B Integrator Installation Directory*/bin/updjdksavf to the save file created in QGPL by entering: CPYFRMSTMF FROMSTMF(`Sterling B2B Integrator Installation Directory`/bin/updjdksavf') TOMBR('/QSYS.LIB/QGPL.LIB/ UPDJDKSAVF.FILE') MBROPT(*REPLACE) CVTDTA(*NONE)
3. To restore the upgrade objects, enter: RSTLIB SAVLIB(UPDATEJDK) DEV(*SAVF) SAVF(QGPL/UPDJDKSAVF)
4. To add the installation programs to your library list, enter: ADDLIBLE LIB(UPDATEJDK)

Running the Update JDK Program

Run the Update JDK program to update your Sterling B2B Integrator JDK on iSeries.

About this task

To run the Update JDK program in iSeries:

Procedure

1. Key in `UPDATEJDK` from an iSeries command line and press **F4**.
2. For the SI Installation Directory parameter, enter your Sterling B2B Integrator installation directory.
3. For the JDK switching from parameter:, enter:
   - 1 - If you are currently using the Classic JDK 1.6
   - 2 - If you are currently using the J9 JDK 1.6
4. For the New JDK parameter:, enter:
   - 1 - If you are upgrading to the J9 JDK 1.6
   - 2 - If you are upgrading to the J9 JDK 1.7
5. Press **Enter**

6. From an iSeries command line, enter `qsh` to enter into the qshell mode.
7. Change to your Sterling B2B Integrator *installdir*/bin directory.
8. Enter `./setupfiles.sh`. This changes the preliminary files to the new JDK.
9. Key in `./deployer.sh` and press **Enter**. This will change the remaining property files and point Sterling B2B Integrator to the new JDK location.

Results

Your JDK is now updated and you are ready to start Sterling B2B Integrator.

Moving Sterling B2B Integrator to another iSeries

You can move Sterling B2B Integrator from one iSeries to another.

About this task

To move Sterling B2B Integrator to a different iSeries:

Procedure

1. On the old iSeries, perform the following steps:
   a. Ensure that Sterling B2B Integrator has been stopped.
   b. Create a save file to hold the database using the following command: `CRTSAVF `*mylib*`/SIDBASE`
   c. Create a save file to hold the install directory using the following command: `CRTSAVF `*mylib*`/INSTALLDIR`
   d. Save the database with the following command: `SAVLIB LIB(`*dbname*`) DEV(*SAVF) SAVF(`*mylib*`/SIDBASE)`, replacing *dbname* with the collection name of the production Sterling B2B Integrator instance.
   e. Save the install directory using the following command: `SAV DEV('/QSYS.LIB/`*mylib*`.LIB/INSTALLDIR.FILE') OBJ(('/`*installdir*`'))`, replacing installdir with the installation directory of production Sterling B2B Integrator instance.
2. On the new iSeries, create a Sterling B2B Integrator user profile that matches the user profile from your old iSeries. Set up the correct JDK for this new profile.
3. On the new iSeries, sign on with your Sterling B2B Integrator user id and password. Then perform the following steps:
   a. Create a save file to hold the database using the following command: `CRTSAVF `*mylib*`/SIDBASE`
   b. Create a save file to hold the install directory using the following command: `CRTSAVF `*mylib*`/INSTALLDIR`
   c. Create a collection for the new database.
      1) Key in `STRSQL` and press **Enter**.
      2) On the interactive sql line, key in `CREATE COLLECTION `*newcoll* , replacing *newcoll* with the name of the collection from your old Sterling B2B Integrator database collection.
      3) Press **Enter**.
      4) Once created, press **F3** and select option **1** to exit.
   d. FTP the two save files from the old iSeries to the new iSeries box to the target box For example:
      - `Get `*mylib*`/SIDBASE `*mylib*`/SIDBASE`

- Get *mylib*/INSTALLDIR *mylib*/INSTALLDIR
 e. Restore the database into the new collection with the following command:
    RSTLIB SAVLIB(*dbname*) DEV(*SAVF) SAVF(*mylib*/SIDBASE) RSTLIB(*newcoll*)
 f. Restore the production Sterling B2B Integrator instance into a new location
    with the following command: RST DEV('/QSYS.LIB/*mylib*.lib/
    INSTALLDIR.FILE') OBJ(('/*installdir*')) replacing *installdir* with the
    installation directory where the production instance of Sterling B2B
    Integrator resided on the old iSeries.
 g. Once the installation directory has been restored, update the following in
    the *installdir*/properties/sandbox.cfg file, if applicable.
    - IP address
    - Host name
    - User ID and Password
 h. If you are not updating the jdk at this point, from QSH:
    1) Change to your Sterling B2B Integrator *installdir*/bin directory.
    2) Key in ./setupfiles.sh

Results

This completes the process of moving your Sterling B2B Integrator instance.

Setting up a new iSeries for Sterling B2B Integrator

You may set up Sterling B2B Integrator on a new iSeries.

About this task

To set up Sterling B2B Integrator on a new iSeries:

Procedure

1. Setting up the domain is very important. From an iSeries command line, key in:
   GO CFGTCP You will then need to set up three different option screens.
2. Option 1 - Work with TCP/IP interfaces. On this screen, you need to have the
   IP address for the box as well as a loopback entry. Here is an example screen:

```
Work with TCP/IP Interfaces          System:   NOGO
Type options, press Enter.
  1=Add   2=Change   4=Remove   5=Display 9=Start   10=End
    Internet        Subnet          Line            Line
Opt Address         Mask            Description     Type
    xx.xx.xxx.xx    xxx.xxx.xxx.x   ETHLINE01       *ELAN
    xxx.x.x.x       xxx.x.x.x       *LOOPBACK       *NONE
```

3. Option 10 - Work with TCP/IP Host Table Entries You also need to set up your
   IP address and loop back entry here. This is where you put in the host name.
   Here is a sample of an iSeries box with the name of NOGO. You may also have
   a few extra entries for other boxes as well.

```
Work with TCP/IP Host Table Entries   System:   NOGO
Type options, press Enter.
  1=Add   2=Change   4=Remove   5=Display  7=Rename
    Internet        Host
Opt Address         Name
    xx.xx.xxx.xxx   hostname.xxx.mysite.com
                         hostname
```

```
              xx.xx.xxx.xx     OTHERBOX5
              xx.xx.xxx.xxx    hostname-old
              xxx.x.x.x        LOOPBACK
                                  LOCALHOST
```

4. The last one to set up is option 12 - Change TCP/IP Domain. Here you identify the host name and the domain name. Here is an example of this screen:

```
                    Change TCP/IP Domain (CHGTCPDMN)
Type choices, press Enter.
 Host name  . . . . . . . . . .   'hostname'
 Domain name  . . . . . . . . .   'domain.MYSITE.COM'
 Domain search list . . . . . . .  'domain.mysite.com workstn-qa.local
                                    sci.localdomain.mysite.com'
 Host name search priority  . . .  *LOCAL  *REMOTE, *LOCAL, *SAME
 Domain name server:
   Internet address . . . . . . .  'xxx.xx.xxx.xx'
```

This screen has caused issues in the past with the Domain name server (Internet address). If the DNS server is old and doesn't recognize IPv6, then having IP addresses in this field can cause serious issues and your Sterling B2B Integrator instance will not start up. If this occurs, remove the IP addresses from the domain name server internet address field.

Uninstall the Software

Uninstalling Sterling B2B Integrator from an iSeries Environment

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

Procedure

To uninstall the software from an iSeries environment:

1. Stop Sterling B2B Integrator and wait for the 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 /product/SI_Install, then change to the /product directory.
4. Remove the installation directory by entering the following command:

   rm -rf *install_dir*
5. Wait for the command line to return.
6. Select **F3 exit from Qshell**.
7. Enter DLTLIB <*collection name*>. For example, DLTLIB (Sterling B2B Integrator)DB. The following kind of messages are displayed:

   Receiver QSQJRN0001 in (Sterling B2B Integrator)DB never fully saved. (I C).
8. Enter I to one or more of these messages until the library is deleted.
9. After you remove the software from the server, you can remove Eclipse and any tools that were downloaded to the desktop, including the following tools:
   - 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, including the following tools:
  - 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 from an 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.

If you need a printed copy of the documentation, you can print topics of information through your Internet browser, or you can download documents in PDF format, after you add it to a collection on IBM Knowledge Center.

To access the documentation site from within Sterling B2B Integrator or one of its tools, select the help icon. The system must reside on a computer that supports Internet access and an Internet browser.

Improving your access to online documentation

You can improve your access to online documentation by using several methods.

About this task

After you access the IBM Knowledge Center, you can perform the following tasks:
- 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.
- Add documents to your collection and download them in PDF format.

Request 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

Installation and upgrade troubleshooting tips: iSeries environment

If you have trouble while installing or upgrading Sterling B2B Integrator on iSeries, different troubleshooting techniques are available.

Situation	Message or Symptom	Explanation/Resolution
Installing a desktop tool or resource	Cannot download any of the following tools: **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. • 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	**Explanation** 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 exists outside of the firewall. **Resolution** Modify the system files that contain the invalid IP address: 1. Open the */install_dir*/bin directory. 2. Stop Sterling B2B Integrator. 3. Enter the following command followed by the external IP address: `patchJNLP.sh external_IP address` 4. Restart Sterling B2B Integrator.
Accessing	Attempts to access the URL for Sterling B2B Integrator display the message: Page cannot be displayed.	**Resolution** Change the Network Interface Bindings.

Situation	Message or Symptom	Explanation/Resolution
Stopping	Ending jobs from Sterling B2B Integrator when a hardstop is not successful.	**Explanation** There was a problem during the installation process or the subsystem was not defined correctly. **Resolution** 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 due to a problem with the installation, then delete the installation directory and install the software again. 10. If the error is due to 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	When you upgrade Sterling e-Invoicing and are using an Oracle database, the upgrade fails with the error message `name is already used by an existing object`. This error occurs because the default behavior for the **drop constraint** command changed in Oracle 10. The index that is used to support the constraint is 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 does 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. The script drops the unique constraint so the next step can redefine it using additional 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 error `name is already used by an existing object`.	**Resolution** 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 is: `drop index UNQ_EINV_CANON`

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