Sterling B2B Integrator

iSeries Environment Upgrade

Version 5.2.0 - 5.2.2

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Note

Before using this information and the product it supports, read the information in "Notices" on page 39.

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

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Contents

iSeries Upgrade (5.2.0 - 5.2.2) 1
Before You Begin the Upgrade 1
Before You Begin the iSeries Upgrade 1
Special Tasks and Considerations (iSeries) . .. 2
Prepare Your iSeries for the Upgrade 2
Upgrade impacts overview 3
Pre-Upgrade Tasks 8
Checklist for iSeries Pre-Upgrade 8
Verifying that your system meets the system requirements 10
Download the JCE Distribution File for the IBM JDK 1.6 11
Determine Port Numbers (iSeries) 11
Configure the System to View Files 12
Map a Network Drive (iSeries) 12
Specify the QCCSID (iSeries) 12
Create User Profile (iSeries) 12
License information. 13
Prepare the Database (iSeries) 13
Create SystemDefault.properties file (iSeries) .. 13
Upgrade the Software 14
Upgrade in an iSeries 14
Untar the File from the ESD Portal (iSeries). .. 14
Run the Upgrade Installation Program in iSeries 15
Post Upgrade Validation 18
Post Upgrade Validation Checklist for iSeries .. 18
Starting Sterling B2B Integrator (iSeries) 18
Accessing Sterling B2B Integrator 19
Testing a sample business process to validate the installation 19
Stopping Sterling B2B Integrator (iSeries) . .. 20
Post Upgrade Configuration 20
Post Upgrade Configuration Checklist for iSeries 20
Download Sterling B2B Integrator Tools 21
Property files configuration 21
Performing Initial Administrative Setups in Sterling B2B Integrator 21
Adding third-party libraries 22
Configuring services and adapters. 22
Configuring the JDBC adapter and Lightweight JDBC adapter. 22
Configuring the file system and Command Line2 adapters 23
Configuring the Odette FTP adapter 23
Restore Performance Tuning Configuration (iSeries). 26
Changing the network interface bindings . .. 26
Adding the Advanced File Transfer tab 27
Reconfiguring archive settings 27
Correcting missing manager IDs 28
Installation Maintenance 28
Determine If You Need to Apply a Maintenance Patch in iSeries Environment 28
DB checksum tool 30
Patch changes report 31
License modification 33
Uninstall the Software 33
Uninstalling Sterling B2B Integrator from an iSeries environment. 33
User Documentation 34
Sterling B2B Integrator user documentation. .. 34
Online documentation tips 35
Requesting a documentation CD 35
Troubleshooting Tips 35
Install/Upgrade troubleshooting tips: iSeries environment 35

Notices 39

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iSeries Upgrade (5.2.0 - 5.2.2)

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 patch 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 patch from which the archive was taken.	
5	Back up your database. Export your business processes, trading partners, maps, etc.	

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#	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 perform Sterling B2B Integrator upgrade on a hot fix directly. Apply the latest build (patch) 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 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 about how system behavior changed based on upgrading your system from 4.3 (or later) to this version. Review all of the information before you begin your upgrade.

Upgrade Impacts (Version 5.2.0 - 5.2.2)

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
CLA2	+51	+52
SWIFTNet HTTP Server	+52	+53

Note: You should check adapter configurations and the `sandbox.cfg` file for ports greater than 51 which may have changed

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

After upgrading to 5.2.0, 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.

Backups not generated during installation, upgrade, application of fix pack or interim fix

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

Some of the standard resources that are installed during installation, upgrade, fix pack, or interim fix use the import mechanism available to customers to load the standard resources into the database. By default, the standard import mechanism creates a backup of the table that contains the resource. The backup is created before import to allow for restoration to the previous state if the import must be undone. During the basic installation process this table backup is also created by default. Since the import mechanism is often used multiple times during the installation process, some of the tables are backed up multiple times. Depending on the size of the table, multiple backups add a large amount of time to the installation process. The default behavior was changed to not make the backup by default. If you want these backups, then add SKIPIMPORTBACKUP=false to `sandbox.cfg` file.

Capitalization insensitivity for header value

About this task

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

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

For example, the following searches 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 about CA certificates.

Users might add multiple copies of the same certificates to the database. Having multiple copies of the 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 are the ability to easily populate the product database with the set of authority root certificates that are 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 was added to the WebSphere MQ Suite. To accommodate this new functionality, you must configure two new parameters for the PUT service:
- wsmq_send_retryCount
- wsmq_send_retrySleepInterval

To configure the new parameters:

Procedure

1. Log in to Sterling B2B Integrator.
2. From the **Admin Console Home**, start the Graphical Process Model (GPM).
3. Log in to the GPM. You need a **User ID** and **Password**.
4. In the GPM, select **View > Stencil > Services**.
5. Select **File > New**.
6. Drag the **WebSphereMQ Suite Put Message Service** from the **All Services** pane into the center pane.
7. Double-click the **WebSphereMQ 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 following **Show Advance State** button information.

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

Optional certificate fields

About this task

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

When you are generating certificate keys, the following fields might be missing in the release from which you are upgrading, 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 is flagged as the default organization.

After you upgrade to this version, a prefix designation is used to differentiate between an AS2 organization (AS2_ORG_) and an AS2 partner (AS2_PART_). Each requires the full configuration of a trading partner to allow for a partner to trade with multiple organizations, and an organization that trades with multiple partners.

The AS2_TRADEPART_INFO and AS2_EMAIL_INFO tables were modified and the AS2_PROFILE table is newly introduced. Updates to these tables occur during the Sterling B2B Integrator 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 moved from the property files into database tables. The 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 fix pack installation.

After you complete your upgrade, run the convertWSSoaProperties script found in the installation bin folder. This script reads the settings from the property file and places them into the appropriate 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.

#	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.	

#	iSeries Installation Checklist	Your Notes
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.	
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	Create a SystemDefault.properties file. If you have multiple JDKs loaded on your system, you need to point your user profile to correct version of the JDK. Verify that your user profile points to the correct JDK.	
16	Verify that your user profile is pointing to a job queue in a subsystem.	

#	iSeries Installation Checklist	Your Notes
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).	
20	Download the JCE distribution file.	
21	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.

Verifying that your system meets the system requirements

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

The installation strictly enforces the following system requirements:

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

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

Download the JCE Distribution File for the IBM JDK 1.6

About this task

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

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

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

Procedure

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

Determine Port Numbers (iSeries)

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

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

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

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

- Select from the **iSeries Navigator Network** > **TCP/IP Configuration > Connections.**
-

  Enter `WRKTCPSTS` on an iSeries command line and select `Option 3 (Work with TCP/IP connection status)`. Press **F14** to sort the port numbers in numerical sequence.
-

Enter `NETSTAT *CNN` on an iSeries command line and press **Enter**. Press **F14** to sort the port numbers in numerical sequence.

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.

Create User Profile (iSeries)

About this task

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

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

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

License information

IBM provides the license files for each feature of Sterling B2B Integrator that you purchased with the software media. You do not have to contact IBM customer support to get the license files.

A separate license is required for each Sterling B2B Integrator feature that you purchased. During installation, you must choose the license files according to what you purchased. IBM customer support will audit your system after it is in use.

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

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.

Create SystemDefault.properties file (iSeries)

About this task

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

Procedure

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

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

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

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

   This can be done using the `WRKUSRPRF` command.

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 File from the ESD Portal (iSeries)

About this task

The following procedure describes how to untar a file from the Electronic Software Distribution (ESD) Portal on iSeries. During the upgrade, you will reference this procedure.

Procedure

1. After the file has been downloaded from ESD portal, key in `qsh` from an iSeries command line and press **Enter**.
2. Key in `set` and press 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 sitting.
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.

Run the Upgrade Installation Program in iSeries

You can upgrade Sterling B2B Integrator in an iSeries environment.

About this task

The following instructions assume that you received an installation CD for Sterling B2B Integrator. If you downloaded Sterling B2B Integrator or a Service Pack (SP) from the Electronic Software Distribution (ESD) Portal, save the SI52.tar file to your mapped network drive on the iSeries and untar the file (see Untar the File from the ESD Portal). The directory containing the untarred files is an electronic image of an installation CD. Use this directory wherever there is a reference to the installation CD in the following instructions. Ignore any instructions to place the installation CD in a drive.

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. Insert the Sterling B2B Integrator installation CD in the appropriate drive. You can use a drive on your PC or on your iSeries CD reader.
2. Depending on the drive you are using, choose one method. Be sure to record the absolute path that you use.
   - If the CD is in your PC, copy or FTP the file SI.jar from the installation CD to the absolutePath in the IFS root or QOpenSys file system.
   - If the CD is in your iSeries reader, enter the following command on the command line: `cp /qopt/SI.jar absolutePath/SI.jar`
3. Copy the file instsijar.savf from the iSeries directory on the installation CD 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 from the CD 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 4.0 as an example. Change the commands as necessary for your version of Sterling B2B Integrator.

   - Ensure that no one is using Sterling B2B Integrator 4.0 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 4.0 database, type:

     `CRTSAVF FILE(QGPL/SAVE40DB)`

     If the save file already exists, type in:

     `CLRSAVF FILE(QGPL/SAVE40DB)`
   - Save your Sterling B2B Integrator 4.0 database into the new save file using the following command:

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

     `GIS40DB` represents your Sterling B2B Integrator 4.0 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 4.0 database to the same collection (library name) that you just created in step f from above, type:

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

     `GIS40DB` represents your Sterling Gentran Integration Suite 4.0 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:
    - B2B and/or File Gateway
    - IBM Sterling Total Payments
    - AS2 Edition Module
    - Financial Services Module
    - EBICS Banking Server Module

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

    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, refer to *Install the Maintenance Patch* to install the latest patch.

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)

About this task

To start Sterling B2B Integrator in an iSeries environment:

Procedure

1. Sign onto iSeries with your Sterling B2B Integrator user profile.
2. Submit a batch job by entering the following command:

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

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

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

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

3. Wait for startup to complete. This process takes 10 - 15 minutes.

   Startup creates a spool file. When startup is finished, open the QPRINT spool file and check the end of the file for a message about how to connect to Sterling B2B Integrator. You might see something similar to the following message:

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

   Make a note of the address so you can access Sterling B2B Integrator later. It might take several minutes for Sterling B2B Integrator to be available from the web browser, even after the URL message is issued.
4. Optional: To verify that Sterling B2B Integrator starts normally and completely, view the system through WRKACTJOB. Verify that the SIMAIN job ended and there are at least five QP0ZSPWP jobs (of yours) left running in your Sterling B2B Integrator batch subsystem.
5. Prepare your browser to log in to Sterling B2B Integrator. Configure your browser so that there is direct connection between the web browser and iSeries. Do not configure the browser to use any proxy server between you and iSeries (unless it is a requirement of your network).

Accessing Sterling B2B Integrator

About this task

To log in to Sterling B2B Integrator:

Procedure

1. Open a browser window and enter the address that is displayed at the end of startup. The login page displays.
2. Enter the default user ID and password. The default login is at an administrative level. One of your first tasks as an administrator is to change the administrative password and to register other users with other levels of permission.

Testing a sample business process to validate the installation

About this task

Validate the installation by testing a sample business process:

Procedure

1. From the **Administration Menu**, select **Business Process > Manager**.
2. In the **Process Name** field, enter `Validation_Sample_BPML` and click **Go!**
3. Click **execution manager**.
4. Click **execute**.

5. Click **Go!** The `Status: Success` message displays in the upper left side of the page.

Stopping Sterling B2B Integrator (iSeries)

About this task

To stop Sterling B2B Integrator in an iSeries environment:

Procedure

1. Sign onto iSeries with your Sterling B2B Integrator user profile.
2. Enter the following commands:
```
QSH
cd /install_dir/bin
./hardstop.sh
```
   To reduce keying errors at shutdown, create a command language (CL) program similar to the following example:
```
PGM
QSH CMD('cd /install_dir/bin ; ./hardstop.sh')
ENDPGM
```
3. Wait for shutdown to complete.
   The length of this process is determined by how many temporary objects must be cleaned up and how many spool files must be created.
   To ensure that you do not restart Sterling B2B Integrator before shutdown is complete, monitor shutdown through either the ps command in Qshell or the WRKACTJOB display. Verify that the five QP0ZSPWP jobs are complete and disappear.
4. Enter `./stopDAVServer.sh` to stop the WebDAV server.

Post 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	

#	Post Upgrade Configuration Checklist for iSeries	Your Notes
12	Advanced File Transfer Tab	
13	Reconfigure Archive Settings	
14	Correct Missing Manager IDs	

Download Sterling B2B Integrator Tools

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

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

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

Property files configuration

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

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

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

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

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

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

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.

Adding third-party libraries

About this task

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

Configuring services and adapters

About this task

You might have 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 reset to their default configurations. The reset includes directory paths, which are restored to their default paths. You must reconfigure those adapters and services, which include, but are not limited to the following list:

- 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 must reconfigure or reactivate the service or adapter after an upgrade. You must reconfigure adapters that used directories or scripts in the installation directory of your previous release.

Examples of services and adapters that commonly must be reconfigured following an upgrade:

- FTP adapter
- System services such as the Alert service and the BP Fault Log adapter

The following adapters need special consideration after an upgrade:

- JDBC adapter and Lightweight JDBC adapter
- File system adapter and Command Line2 adapters
- Odette FTP adapter

Configuring the 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 were streamlined. The `poolManager.properties` file was eliminated and some of its pool properties are now included in the `jdbc.properties` file, along with some new properties. You must 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 is not affected by product updates.

Configuring the file system 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:

- If you are using the Command Line2 adapter and the CLA2Client.jar file is located 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 section *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 CLA2Client.jar file with the version 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 before 4.0 and are using the Command Line adapter, you must update the CLAClient.jar file with the version 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 you import the old service instances of CLA onto Sterling B2B Integrator, you must reconfigure the imported CLA services to reset the Remote Name and Remote Port service configuration parameters. For more information, see the documentation for the Command Line adapter and Command Line2 adapter.

Configuring the Odette FTP adapter

About this task

If you use the Odette FTP adapter and are using the Partner Profile XML file version 2.00 that is 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 might be repeated.
Physical Partner	<AuthenticationCertificate type =”Private Key”> <Subject>string</Subject> <Issuer>string</Issuer> <Serial>Bignumber_string </Subject> </AuthenticationCertificate>	Add Structure, 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 might be repeated.

Physical Partner Contract	Description	Add field and description content.	Mandatory in OFTP Partner database.
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 might 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	
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 you change the Partner Profile for version 3.00, import the Partner Profile into the new Odette FTP Partner Profile database. For more 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

About this task

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

To update the property settings:

Procedure

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

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

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

`admin_host.1 = hostname1`

`admin_host.2 = localhost`

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

   For example:

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

Adding the 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, do 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**.

Reconfiguring 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**.

Correcting missing manager IDs

About this task

If you created a manager ID with no corresponding user ID in your previous version, the Manager ID might be missing after the upgrade. If the ID is missing, create a user in the system with a user ID that matches the missing manager ID.

Installation Maintenance

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

About this task

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

Patch files are named using the following naming convention:

patch_si_<patch_*number*>.jar

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

patch_si_<patch_*number*>_patch_info.pdf

Before you install the patch, review the following items:

- Preserve your custom changes to system resources.
- The patch installation may use one or more patch property override files. These files will be named *propertyFile_patch*.properties. Do not alter these files.
- Property changes made directly in *.properties or *.properties.in files may be overwritten during the patch installation. Properties overridden using the customer_overrides.properties file are not affected. IBM recommends that you maintain property file changes using (when possible) the customer_overrides.properties file. For more information about this file, refer to the property file documentation.
- If you edited any of the cdinterop files, you must back them up before applying the patch. The cdinterop files do not have initialization (*.in) files. After applying the patch, use the backup version of the files in your patched installation. These files include the following files: cdinterop-proxy-

records.properties; cdinterop-spoe-auth.properties; cdinterop-spoe-policy.properties; and cdinterop-user-records.properties.

- Information about the patch installation is automatically logged to /*install_dir*/install/logs/InstallService.log.
- If you need to rollback a patch, see the *Patch Changes Report*.
- During patch installation, the dbVerify utility compares the list of standard indexes with those present in the database and drops the custom indexes. You should recreate the custom indexes after the patch installation is complete.

Install a Maintenance Patch (iSeries)

About this task

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

Procedure

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

   where:

   path is the fully qualified path to the maintenance patch file

   patch_number is the patch number

   If the patch attempts to modify the database schema and the modification fails, you will receive an error message about the failure. The message will provide the error message code from the database and the SQL command that failed. The failure information is also logged to the system.log file (in the /*install_dir*/install directory) and to the patch.log file.

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

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

    ```
    Deployment to application server successful
    ```

    When the $ is displayed, the patch process has completed.
11. Start Sterling B2B Integrator.

Preserve Custom Changes for System Resources

About this task

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

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

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

DB checksum tool

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

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

Perform a checksum

About this task

To run the DB Checksum tool:

Procedure

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

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

   Where:

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

   -i is the resource type integer.

   1 is WFD.

   2 is MAP.

   3 is SCHEMA.

   4 is SII.

   5 is TEMPLATE.

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

   -o is the file name to output all the messages.

   -g is the file name that lists all the ignored resources.

   -h is the help screen.

The DB Checksum tool runs the relevant checksum operation that is based on the command options that are selected and generates the output message.

Patch changes report

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

- Fix pack ID
- Fix pack changes
- Number of files deleted
- Number of JARs removed
- Number of JARs added
- Number of files added
- Number of files changed
- Number of properties added
- Number of business processes added
- Number of service instances added
- Number of service definitions added
- Number of templates added
- Number of reports added
- Number of maps added
- Number of schemas added
- Number of business rules added

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

Example: patch changes report

The following is an example of a patch changes report.

```
Summary of Changes
Patch ID: Platform_2.0
Patch Changes: 1287
Number of Files Deleted: 0
Number of JARs Removed: 2
Number of JARs Added: 0
Number of Files Added: 3
Number of Files Changed: 3
Number of Properties Added: 4
Number of BPs Added: 4
Number of Service Instances Added: 2
Number of Service Definitions Added: 3
Number of Templates Added: 0
Number of Reports Added: 0
Number of Maps Added: 3
Number of Schemas Added: 3
Number of Business Rules Added: 0
________________________________________
List of JARs Removed:
JAR Removed: /SAMPLE_INSTALL_1/jar/jaf/1_0_2/activation.jar
Time: Wed May 13 15:23:08 EDT 2009
JAR Removed: /SAMPLE_INSTALL_1/jar/commons_logging/1_0_3/commons-logging-api.jar
Time: Wed May 13 15:23:08 EDT 2009
________________________________________
List of Files Added:
File Added: /SAMPLE_INSTALL_1/bin/sql/fix_db2_schema.sql
```

```
Time: Wed May 13 15:21:30 EDT 2009
File Added: /SAMPLE_INSTALL_1/bin/sql/fix_db2iseries_schema.sql
Time: Wed May 13 15:21:30 EDT 2009
File Added: /SAMPLE_INSTALL_1/bin/errorQueueManager.sh.in
Time: Wed May 13 15:21:30 EDT 2009
________________________________________
List of Files Changed:
File Changed: /SAMPLE_INSTALL_1/properties/lang/en/Reports_en.properties
File Changed: /SAMPLE_INSTALL_1/properties/lang/es/Reports_es.properties
File Changed: /SAMPLE_INSTALL_1/properties/lang/fr/Reports_fr.properties
________________________________________
List of Properties Added:
Property Added: /SAMPLE_INSTALL_1/properties/filesToRemove.txt
Property Added: /SAMPLE_INSTALL_1/properties/filesToRemove.txt.in
Property Added: /SAMPLE_INSTALL_1/properties/csr.properties.sample
Property Added: /SAMPLE_INSTALL_1/properties/csr.properties.sample.in
________________________________________
List of BPs Added:
BP Added: Schedule_AssociateBPsToDocs.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 modification

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

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

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

AddLicenseSet command parameters

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

To use the AddLicenseSet command:

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

The AddLicenseSet command has the following parameters:

AddLicenseSet Parameters	Description
-reload	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 location: • 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 location: • UNIX: `/install_dir/install/logs/security/upgrade` • Windows: `\install_dir\install\logs\security\upgrade` • iSeries: `/install_dir/logs/security/old_licenses`

Uninstall the Software

Uninstalling Sterling B2B Integrator from an iSeries environment

About this task

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

To uninstall the software from a iSeries environment:

Procedure

1. Stop Sterling B2B Integrator and wait for shutdown to complete.
2. Sign onto iSeries with your Sterling B2B Integrator user profile.
3. In QSH, change to the directory above the installation directory.

   For example, iIf the installation directory is /(Sterling B2B Integrator), then you change to directory /.
4. Remove the installation directory, enter: `rm -rf` *`install_dir`*
5. Wait for the command prompt to return.
6. Select **F3 exit from Qshell**.
7. Enter `DLTLIB` <*collection name*>.

   For example, DLTLIB (Sterling B2B Integrator)DB.

   A message like the following is displayed: `Receiver QSQJRN0001 in` (Sterling B2B Integrator)`DB never fully saved. (I C)`. Enter `I` to one or more of these messages until the library is deleted.
8. After you remove the software from the server, you can remove Eclipse, and any tools that were downloaded to the desktop:
   - Map Editor and associated standards. Refer to the *Map Editor Guide* for information about removing the Map Editor.
   - Graphical Process Modeler. Refer to the *Graphical Process Modeler Guide* for information about removing the Graphical Process Modeler.
   - Web Template Designer. Refer to the *Web Extensions Guide* for information about removing the Web Template Designer.
   - (If licensed) MESA Developer Studio plug-ins:
     - MESA Developer Studio Software Development Kit (SDK).
     - MESA Developer Studio Skin Editor.

     Refer to the *MESA Developer Studio* guide for information about removing MESA Developer Studio.
   - (If licensed) Reporting Services, which require MESA Developer Studio if you want to use the plug-ins to create fact models and custom reports. Refer to the *MESA Developer Studio* guide for information about removing Reporting Services.

User Documentation

Sterling B2B Integrator user documentation

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

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

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

Online documentation tips

About this task

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

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

Requesting a documentation CD

About this task

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

Troubleshooting Tips

Install/Upgrade troubleshooting tips: iSeries environment

Situation	Message or Symptom	Explanation/Resolution
Installing a desktop tool or resource	Cannot download any of the following: **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 is located outside of the firewall. **Resolution** Modify the system files that contain the invalid IP address. Follow these steps: 1. Navigate to the `/install_dir/bin` directory. 2. Enter the following command followed by the external IP address: `patchJNLP.sh external_IP address` 3. Stop Sterling B2B Integrator. 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 caused by a problem with the installation, then delete `install_dir` and install the software again. 10. If the error is caused by the job queue having 1 as the maximum number of active jobs in the subsystem, then either change the subsystem that you start Sterling B2B Integrator in, or change the number of maximum active jobs.

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