Sterling Integrator

4.3 (or higher) to 5.1 Upgrade Impacts Information

Version 5.1

4.3 (or higher) to 5.1 Upgrade Impacts Information

Version 5.1

Contents

Chapter 1. Upgrade Impacts

Upgrade Impacts Overview

This documentation provides information on how system behavior has changed based on upgrading your system from 4.3 (or later) to 5.1. You need to review all of the information before you begin your upgrade.

Backups Are Not Generated During Install, Upgrade, Patch or Hotfix

Before you begin an upgrade to Sterling Integrator 5.1, review the following backup information.

In Sterling Integrator 5.1, some of the standard resources installed during install, upgrade, patch, or hotfixes 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 sandbox.cfg file.

Capitalization Insensitivity for Header Value
About this task

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 to Sterling Integrator 5.1, you need to review CA certificates upgrade information.

Users may 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 is the ability to easily populate the product database with the set of authority root certificates distributed with the JVM.

Perimeter Server Installation
About this task

Silent install is the **now** the default installation mode. If you want to complete the Perimeter Server installation using an interactive mode, you need to use the following command:

```
java -jar ps_4400.jar -interactive
```

Retry Logic Added to WebSphereMQ Suite Adapter PUT Service
About this task

Retry logic has been added to the WebSphereMQ 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 the application.
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 **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 to Sterling Integrator 5.1, review the following Show Advance State button information.

In Sterling Integrator 5.1, 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 check box on the search screen to display it.

Some Certificate Fields Are Optional

About this task

When generating certificate keys, the following fields were mandatory in the previous release, but now are optional entries:

- alt.name.dns
- alt.name.IP

Support for Multiple AS2 Organizations

Before you begin an upgrade to Sterling Integrator 5.1, review the following schema information.

Sterling Integrator 5.1 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 5.1, 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 to Sterling Integrator 5.1, review the following web services information.

In Sterling Integrator 5.1, 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 patch installation.

After you have completed your upgrade to Sterling Integrator 5.1, 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.

Windows 2003 Does Not Start with Silent Install
About this task

If you used the silent install method for your upgrade, you must manually run the InstallWindowsService.cmd file to register the service.

MySQL Upgrade Impacts

The MySQL database is no longer bundled with Sterling Integrator software. Therefore, you will need to install and configure an external version of the MySQL database prior to upgrading to the new version of Sterling Integrator.

Upgrade MySQL Checklist (External MySQL)

This checklist assumes you are upgrading from a previous version of Gentran Integration Suite or Sterling Integrator directly to Sterling Integrator 5.1 and you are knowledgeable on the MySQL database.

If you need additional MySQL database information, see the documentation provided by the vendor at http://dev.mysql.com/doc/refman/5.0/en/.

If you are moving from a version of MySQL earlier than MySQL 5.0, you will need to export the data from the earlier version to the MySQL 5.0 version using the following procedure. Your existing Gentran Integration Suite instance will no longer function if you upgrade your existing database without making a copy. After this procedure, you will have two databases:

- A database that you will use in your upgraded version of Sterling Integrator (Sterling Integrator 5.1).
- A database that you can use in your old version of Sterling Integrator.

Task	Which database	MySQL Upgrade Checklist	Your Notes
1	New external database	Install an external MySQL database. Refer to MySQL documentation for information about installing the database. Be sure to install the correct version and patches. See System Requirements for supported version information.	
2	New external database	Update the MySQL Parameters.	
3	New external database	Create the database. For example, you can run the following command to create the database: `CREATE DATABASE database_name` Refer to MySQL documentation for information about creating the database.	
4	New external database	Create a user account and grant permissions.	
5	New external database	Install the JDBC Driver for MySQL.	

Task	Which database	MySQL Upgrade Checklist	Your Notes
6	Previous database	Rename the SCHEMAS table to XMLSCHEMAS to avoid reserved word collision: • Only required when moving from MySQL version earlier than 5.0 • Use the following command: `Alter table SCHEMAS rename to XMLSCHEMAS`	
7	Previous database	Perform a MySQL database export. As part of the export, you will have a backup copy of the database.	
8	Previous database	If you renamed the SCHEMAS table in task 6, you need to rename the SCHEMAS table, so that your older version of Sterling Integrator will be operational. Use the following command: `Alter table XMLSCHEMAS rename to SCHEMAS`	
9	New external database	Import the exported data for MYSQL into the new external database.	

Update the MySQL Parameters

Sterling Integrator requires the following parameter settings in your MySQL database.

The parameter values recommended are minimum values. You can increase the values based on your requirements or if the database server is used by more than one instance of Sterling Integrator.

It is recommended to configure a data file for auto extension (innodb_data_file_path = ibdata1:400M:autoextend).

Parameter	Value
max_connections	500
max_allowed_packet	100M
default-table-type	INNODB
wait_timeout	31536000
max_write_lock_count	500000
transaction-isolation	READ-COMMITTED
character-set-server	utf8
binlog_format	mixed
table_open_cache	512
key_buffer_size	384M
sort_buffer	512K
connect_timeout	15
innodb_data_file_path	ibdata1:400M:autoextend

Parameter	Value
innodb_data_home_dir	/*install_dir*/mysql/var/
innodb_log_group_home_dir	/*install_dir*/mysql/var/
innodb_flush_log_at_trx_commit	1
innodb_mirrored_log_groups	1
innodb_log_files_in_group	3
innodb_file_io_threads	4
innodb_lock_wait_timeout	600
innodb_log_file_size	5M
innodb_log_buffer_size	8M
innodb_buffer_pool_size	128M
innodb_additional_mem_pool_size	32M

Review the innodb_buffer_pool_size and the innodf_additional_mem_pool_size in the /*install_dir*/install/mysql/data my.cnf. If the values from the previous Sterling Integrator tuning.properties are larger than what is in your new my.ini file, you need to adjust them accordingly.

Create User Account and Grant MySQL Database User Privileges
About this task

You must grant all privileges on the MySQL database to the Sterling Integrator administrative user. The following example creates and grants all privileges to the user in the MySQL database:

```
GRANT ALL PRIVILEGES ON database_name.*
TO user@localhost IDENTIFIED BY 'password'
WITH GRANT OPTION
```

Where:

- database_name - refers to the name of the database created.
- user - refers to the database user account that will be used by Sterling Integrator.
- password - refers to the password associated with the database user account.

Once you have granted all the privileges, you will need to FLUSH the privileges to complete the setup. For example, run this command from the SQL prompt:

```
FLUSH PRIVILEGES;
```

Install the JDBC Drivers for MySQL
About this task

The Sterling Integrator requires appropriate JDBC driver for MySQL database. These drivers are platform independent and architecture independent drivers. See System Requirements for supported version information.

After obtaining the correct JDBC driver, record the absolute path to its location on your system. You must supply this absolute path when installing the Sterling Integrator.

Perform a MySQL Database Export

About this task

The full backup can be performed using the mysqldump utility. The details on the usage of this MySQL utility can be found in the MySQL reference documentation. Since there are many options that are provided with this utility, the following are the minimum recommendations:

- Specifying the db_name on the mysqlcommand will prevent the subsequent import from creating a new database. You should specify the db_name of the Sterling Integrator Database.
- --extended-insert: Use multiple-row INSERT syntax that include several VALUES lists. This results in a smaller dump file and speeds up inserts when the file is reloaded.
- --quick: This option is useful for dumping large tables. It forces mysqldump to retrieve rows for a table from the server a row at a time rather than retrieving the entire row set and buffering it in memory before writing it out.
- --disable-keys: This makes the dump file faster because the indexes are created after all rows are inserted.

To export the database:

Procedure

1. Perform a backup of the database. For example, enter:

   ```
   myysqldump —u <internal_mysql_username> -p<password>
   <db_name> --host=<internal_mysql_host> --port=<internal_mysql_port>
   > <dump_file_name>
   ```

2. Make a copy the resultant dump file (.dmp) file from the file system on the source server file system to the file system on the MySQL destination server.

   If the MySQL database was created as part of a Sterling Integrator installation, you can determine the port number by reviewing the MYSQL_PORT entry in the sandbox.cfg that is in the Sterling Integrator install directory.

Import the Data to the New Version of MySQL Database

About this task

Before you begin:
- Make sure the new version of the MySQL database is not in use.
- Know the name of the new database.

To import the exported data:

Procedure

Enter:

```
mysql -u <external_mysql_username> -p<password>
<db_name> --host=<external_mysql_host> --port=<external_mysql_port>
< <dump_file_name>
```

Where database_name is the name of the new database created in task 3 of the checklist.

Chapter 2. Upgrade Impact on MySQL

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