Sterling Web

Upgrade Guide

Release 9.1



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Introduction

This guide explains how to upgrade from an earlier release of IBM® Sterling Web to Sterling Web, Release 9.1.

The following table provides the upgrade paths available from the earlier releases of Sterling Web to Sterling Web, Release 9.1.

From		То		Path Followed	
Sterling Selling and Fulfillment Foundation Version	Sterling Web Version	Sterling Selling and Fulfillment Foundation Version	Sterling Web Version	Sterling Selling and Fulfillment Foundation Version	Sterling Web Version
9.0	9.0	9.1	9.1	9.0 > 9.1	9.0 > 9.1

Task List

When upgrading to Sterling Web, Release 9.1, carry out the tasks in sequence as listed in the following table:

Task	Refer to		
Perform Migration Assessment	 System Requirements Important Behavior Changes Between Release 9.0 and Release 9.1 		
Upgrade to Sterling Web, Release 9.1	 Run the Upgrade Using NFS Mounting Upgrading to IBM Sterling Selling and Fulfillment Foundation, Release 9.1 Installing IBM Sterling Web, Release 9.1 Pre-Migration Activities Upgrade to Application Add-In, Release 9.1 Factory Setup Data Migration 		
Post-Migration	 Analyzing IBM Sterling Web User Interface Upgrade Post-Migration Activities 		

System Requirements

The system requirements for upgrading to Sterling Web, Release 9.1, are the same as that for upgrading to IBM® Sterling Selling and Fulfillment Foundation, Release 9.1. For more information about the system requirements, see the *Sterling Selling and Fulfillment Foundation: Installation Guide*.

Important Behavior Changes Between Release 9.0 and Release 9.1

This topic describes the important behavior changes in Sterling Web between Release 9.0 and Release 9.1.

getCompleteOrderDetails API

In Release 9.1, the getCompleteOrderDetails API has been enhanced to include a new RepriceOrder attribute.

If the user is not a guest user, the RepriceOrder attribute is set to "Y" whenever the getCompleteOrderDetails API is called for the first time to retrieve the details of a cart. The RepriceOrder attribute is set to "Y" if either of the following conditions is met:

- The cart in context is changed.
- The user navigates to the Cart Details page from the Cart List page. This is applicable only if the cart for which the user is viewing the details is not the cart in context.

How it Affects You

None.

Migration Strategy

None.

Run the Upgrade Using NFS Mounting

It is recommended that you run the upgrade from the database server instead of the application server to avoid significant network overhead. Therefore, to avoid installing the complete Sterling Selling and Fulfillment Foundation on the database server, use NFS mounting.

To use NFS mounting:

- 1. Create a user on the database server with the user identification (UID), and group identification (GID) as the user who installed the Sterling Selling and Fulfillment Foundation on your application server. It is preferred that this user also has the same user name. For example, if the UNIX user 'Sterlite' is used for installing and running Sterling Selling and Fulfillment Foundation, Release 9.1, with a UID of 5001 and ID of 101, the user that you create on the database server must have a UID of 5001 and GID of 101, and preferably is named 'Sterlite'.
- 2. Share the <INSTALL_DIR> directory on the application server.
- 3. Mount the <INSTALL_DIR> directory with the same path on the database server. For example, if your <INSTALL_DIR> is /apps/Sterling on the application server, mount it as /apps/Sterling on the database server.
- 4. Share the <JAVA_HOME> directory that you are using for the Sterling Selling and Fulfillment Foundation from the application server as you might have multiple Java versions installed on the application server for various reasons.
- 5. Mount the <JAVA_HOME> directory with the same path on the database server. For example, if your <JAVA_HOME> is /apps/java on the application server, you must mount it as /apps/java on the database server.

Note: Ensure that you only perform NFS mount for <INSTALL_DIR> and <JAVA_HOME> directories. Do not perform NFS mount for database files. It is recommended that you do not perform NFS mount for write-intensive applications, as it drastically impacts the database performance.

6. Log in as the Sterling Selling and Fulfillment Foundation administrator on the database server.

Upgrading to IBM Sterling Selling and Fulfillment Foundation, Release 9.1

Before upgrading to Sterling Web, Release 9.1, ensure that you have upgraded to the Sterling Selling and Fulfillment Foundation, Release 9.1, and installed the latest hotfix. When you upgrade to the Sterling Selling and Fulfillment Foundation, Release 9.1, the following tasks are performed that impact Sterling Web:

- Alters the schema
- Copies the current customizations

For more information about upgrading to Sterling Selling and Fulfillment Foundation, Release 9.1, refer to the *Sterling Selling and Fulfillment Foundation: Upgrade Guide*.

Installing IBM Sterling Web, Release 9.1

Before proceeding with the upgrade, ensure that you have completed the following tasks:

- Modify the values of the following properties in the sandbox.cfg file located in the <INSTALL_DIR>/properties directory as follows:
 - REINIT_DB=false
 - LOAD_FACTORY_SETUP=false
 - NO_DBVERIFY=true
- Rerun setupfiles.sh from the <INSTALL_DIR>/bin directory.
 - If the properties are already set, skip this task.
- Install Sterling Web, Release 9.1.

For more information about installing Sterling Web, Release 9.1, see the *Sterling Selling and Fulfillment Suite: Applications Installation Guide*.

Pre-Migration Activities

Before upgrading Sterling Web, ensure that you set the following environment variables appropriately:

- JAVA HOME
- ANT_HOME
- ANT_OPTS

For more information about setting the environment variables, see the *Sterling Selling and Fulfillment Foundation: Installation Guide*.

Allocating Memory in swcmigration.properties

During the upgrade process, Sterling Web allows you to pass JVM-specific JAVA and ANT arguments in the <INSTALL_DIR>/COM/Migration/9.0/COM_Add-in/ycdmigration.properties and <INSTALL_DIR>/Migration/9.0/swc/swcmigration.properties files to avoid out-of-memory errors. You can pass the following arguments:

- mem_java_args_sun=-Xms128m -Xmx1408m -XX:MaxPermSize=512m
- mem_java_args_non_sun=-Xms128m -Xmx1408m
- mem_ant_args_sun=-Xms128m -Xmx1408m -XX:MaxPermSize=512m
- mem_ant_args_non_sun=-Xms128m -Xmx1408m

Upgrade to Application Add-In, Release 9.1

Application Add-in consists of APIs, Services, Entities, Agents, and so on, which are common to Sterling Web, Sterling Call Center, Sterling Store, and Sterling Field Sales. When upgrading to Sterling Web, Release 9.1, you must first upgrade the Application Add-in components. The following sections describe the tasks that have to be performed to upgrade the Application Add-in.

Notes:

- If you have upgraded Sterling Call Center, Sterling Store, or Sterling Field Sales, do not perform the Application Add-in upgrade since the Application Add-in upgrade will already be performed as part of the Sterling Call Center, Sterling Store, or Sterling Field Sales upgrade.
- Between the time that you run the upgrade-history-tables and the upgrade-transaction-tables tasks,
 DO NOT purge or restore any data.

History Data Migration

To migrate the history data when upgrading from Release 9.0 to Release 9.1, run the following command from the <INSTALL DIR>/COM/Migration/9.0/COM Add-in directory:

```
${ANT_HOME}/bin/ant -f ycdmigration.xml -Druntime=<INSTALL_DIR>
-Druntime.old=<INSTALL_DIR_OLD> -DapplySOM=false
-Dtarget=upgrade-history-tables migrate -logfile <logfile>
```

- The actual data migration of all history data present in the history tables is done. All new indexes required for performance are added. After migration of history data, history tables will have new columns and data.
- This command has 3 inner tasks which are performed. They are:
 - pre-history-migration
 - migrate-history-data
 - post-history-migration
- The *.done files created in the status folder for the upgrade-history-tables task are:
 - history ant migration.xml.done
 - history_ant_premigration.xml.done
 - history_ant_postmigration.xml.done

Transaction Data Migration

To migrate the transaction data from Release 9.0 to 9.1, run the following command from the <INSTALL_DIR>/COM/Migration/9.0/COM_Add-in directory:

```
${ANT_HOME}/bin/ant -f ycdmigration.xml -Druntime=<INSTALL_DIR>
-Druntime.old=<INSTALL_DIR_OLD> -DapplySOM=false
-Dtarget=upgrade-transaction-tables migrate -logfile <logfile>
```

- The actual data migration of all transaction data present in the transaction tables is done. All new indexes required for performance are added. After migration of transaction data, transaction tables will have new columns and data.
- This command has 4 inner tasks which are performed. They are:
 - pre-transaction-migration
 - migrate-transaction-data
 - post-transaction-migration
 - apply-fc-setup for COM_Add-in
- The transaction_Add-in_ant_applycomfcsetup.xml.done file is created in the status folder for the upgrade-transaction-tables task.

After the tasks are completed, search for all the *.restart files under the 9.0/COM_Add-in/database/FactorySetup/ycd directory.

For the upgrade tasks to be successfully completed, ensure that the value of the Completed attribute is set to "Y" for all the tasks.

- If the value of the Completed attribute is set to "N" for any of the tasks, do not proceed with the upgrade. Contact Sterling Selling and Fulfillment Foundation Technical Support for assistance.
 - **Note:** The transaction data migration is not performed in the activator mode. Therefore, the event handlers and pipeline conditions are not overridden.
- If you want to clear or remove all *.restart and *.done files before restarting the transaction data migration, run the following command:

```
${ANT_HOME}/bin/ant -f ycdmigration.xml -Druntime=<INSTALL_DIR>
-Druntime.old=<INSTALL_DIR_OLD> -Dtarget=clean-up-for-rerun migrate
-logfile <logfile>
```

Factory Setup Data Migration

After you upgrade to the Sterling Selling and Fulfillment Foundation, Release 9.1, and the Application Add-in, Release 9.1, you can upgrade to Sterling Web, Release 9.1.

To migrate the upgrade-transaction-tables data from Release 9.0 to Release 9.1, run the following command from the <INSTALL_DIR>/Migration/9.0/swc directory:

```
${ANT_HOME}/bin/ant -f swcmigration.xml -Druntime=<INSTALL_DIR>
-Druntime.old=<INSTALL_DIR_OLD> -Dtarget=upgrade-transaction-tables migrate
-logfile <logfile>
```

Running this command performs the following tasks:

- This command performs the apply-fc-setup and -update-si-version tasks.
- The following *.done files are created in the status folder for the upgrade-transaction-tables task:
 - transaction_ant_applyfcsetup.xml.done
 - swc_transaction_ant_applicationversion.xml.done

Note: As part of the transaction data migration, only the factory defaults are upgraded.

After the tasks are completed, search for all the *.restart files under the <INSTALL_DIR>/Migration/9.0/swc/database/FactorySetup/XMLS directory.

For the upgrade tasks to be successfully completed, ensure that the value of the Completed attribute is set to "Y" for all the tasks.

• If the value of the Completed attribute is set to "N" for any of the tasks, do not proceed with the upgrade. Contact Sterling Selling and Fulfillment Foundation Technical Support for assistance.

Note: The transaction data migration is not performed in the activator mode. Therefore, the event handlers and pipeline conditions are not overridden.

• If you want to clear or remove all *.restart and *.done files before restarting the transaction data migration, run the following command:

```
${ANT_HOME}/bin/ant -f swcmigration.xml -Druntime=<INSTALL_DIR>
-Druntime.old=<INSTALL_DIR_OLD> -Dtarget=clean-up-for-rerun migrate
-logfile <logfile>
```

Analyzing IBM Sterling Web User Interface Upgrade

Several reports, which can be used to analyze the impact of the user interface upgrade on certain Sterling Web components, are provided in the Documentation CD. The reports can be accessed from the swc_upgrade_analysis_reports.html file that is available in the Upgrade_Guide/swc/analysis directory in the Documentation CD.

Server-Side Properties Report

This report provides the changes in the swcbundle.properties file.

To view the changes in the server-side properties between Release 9.0 and Release 9.1, either use the swc_properties_diff_report.html file located in the Documentation CD under the Upgrade_Guide/swc/analysis/properties/DiffDoc directory, or click the Server-Side Properties Report hyperlink in the swc_upgrade_analysis_reports.html file.

If the changes made to the properties affect any custom screens, change your customized code.

Cascading Style Sheet Report

This report provides the changes in the properties of the cascading style sheet (CSS) class files.

To view the CSS changes between Release 9.0 and Release 9.1, either use the swc_css_diff_report.html file located in the Documentation CD under the Upgrade_Guide/swc/analysis/css/DiffDoc directory, or click the Css Report hyperlink in the swc_upgrade_analysis_reports.html file.

If the CSS changes affect any custom screens, change your customized code.

Struts Report

This report provides the changes in the struts action classes, input and output namespaces of mashups, and the results.

To view the changes in the Struts action classes between Release 9.0 and Release 9.1, either use the swc_struts_diff_report.html file located in the Documentation CD under the Upgrade_Guide/swc/analysis/struts/DiffDoc directory, or click the **Struts Report** hyperlink in the swc_upgrade_analysis_reports.html file.

If the changes made to the Struts properties affect any custom screens, change your customized code.

Mashup Report

This report provides the changes in the mashups.

To view the mashup changes between Release 9.0 and Release 9.1, either use the swc_mashups_diff_report.html file located in the Documentation CD under the

Upgrade_Guide/swc/analysis/mashups/DiffDoc directory, or click the **Mashups Report** hyperlink in the swc_upgrade_analysis_reports.html file.

If the changes made to the mashups affect any custom screens, change your customized code.

Binding Report

This report provides the changes in the bindings.

To view the binding changes between Release 9.0 and Release 9.1, either use the swc_bindings_diff_report.html file located in the Documentation CD under the Upgrade_Guide/swc/analysis/bindings/DiffDoc directory, or click the **Bindings Report** hyperlink in the swc_upgrade_analysis_reports.html file.

If the changes made to the bindings affect any custom screens, change your customized code.

web.xml Report

This report provides the changes in the web.xml file.

To view the web.xml changes between Release 9.0 and Release 9.1, use the swc_config.xmls_diff_report.html file located in the Documentation CD under the Upgrade_Guide/swc/analysis/webxml/DiffDoc directory.

If the changes made to the web.xml file affect any custom screens, change your customized code.

Post-Migration Activities

Factory setup changes made to document type specific entities must be applied to custom document types. To apply the changes, you must provide a mapping between the custom document types and the out-of-the-box document types. To provide this mapping, perform the following steps:

- 1. Rename the customdoctype.properties.sample file located in the <INSTALL DIR>/COM/Migration directory as customdoctype.properties.
- 2. To modify the customdoctype.properties file, follow the instructions provided in the sample file.
- 3. Run the following ant script from the <INSTALL DIR>/COM/Migration folder:

```
<ANT_HOME>/bin/ant -f doc_migrator.xml migrate
-Dtarget=migrate-custom-doc-types -logfile <logfile>
```

This will ensure that the custom document types are updated to reflect the modification types provided for the out-of-the-box document types.

The following tables are updated during the custom document type migration:

- YFS_Status
- YFS_Transaction
- YFS_Transaction_Pickup_Status
- YFS_Transaction_Drop_Status
- YFS Event
- YFS_Status_Modification_Type
- YFS_Status_Modification

After performing the migration, you need to configure Sterling Web according to your business requirements. After the configuration is complete, perform the following steps:

- a. You must regenerate the db classes if you have performed extensions on the database in earlier releases. In Release 9.1, if the user wants to extend the database further, the user must generate the db classes after extending the database. To generate the db classes, go to the <INSTALL_DIR>/bin directory and execute the following task:
 - deployer.cmd -t entitydeployer for Windows operating systems
 - deployer.sh -t entitydeployer for UNIX or Linux operating systems
- b. Build your EAR file. For more information about building the EAR, refer to the *Sterling Web: Deployment Guide*.

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