

Sterling Business Intelligence



Localization Guide

Version 9.1.0.5

Sterling Business Intelligence



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Note

Before using this information and the product it supports, read the information in "Notices" on page 15.

This edition applies to version 9.1 of IBM Sterling Business Intelligence and to all subsequent releases and modifications until otherwise indicated in new editions.

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Chapter 1. Localization of IBM Sterling Business Intelligence: An Overview

The IBM® Sterling Business Intelligence solution can be used by users from different locales to generate dashboards and reports. Localization of Sterling Business Intelligence is the process of adapting Sterling Business Intelligence for a particular country or region. Localization enables Sterling Business Intelligence to support the character set of a user's locale, and display numbers, literals, and report data that is appropriate to the locale.

Localization of Sterling Business Intelligence includes the following tasks:

- “Localize the IBM Sterling Business Intelligence Dashboard Literals” on page 5
- Chapter 4, “Localize IBM Sterling Business Intelligence Report Literals,” on page 7
- Chapter 5, “Localize IBM Sterling Business Intelligence Reports and Dashboard Data,” on page 9
- Chapter 6, “Localizing the Factory Setup Data,” on page 11

Intended Audience

This manual is intended to provide a general localization procedure for users who are responsible for localizing the Sterling Business Intelligence solution.

Chapter 2. Localizing Resource Bundles

The user interface components in Sterling Business Intelligence use resource bundles that contain all the static literals displayed throughout the application. After you perform the translation into multiple languages ensure that you create a folder corresponding to each of the locales and the corresponding bundle files. The folder name must be in the format <language>_<locale>. For example, if a locale has been created for Japan in Japanese language, a folder named ja_JP must be created. In addition, literals used in the customized screens have their own resource bundles and must also be considered during the localization process.

A resource bundle is a file that consists of the resource bundle keys and the corresponding values. Each field in the user interface has a resource bundle key associated with it. The values pertaining to these resource bundle keys are translated as part of localization. To display the translated literal pertaining to a field in the user interface, the localized value of the key associated with the field is fetched from the bundle file.

Sterling Business Intelligence supports the following resource bundles:

- **Menu:** The menu resource bundle file enables the localization of menu entries by fetching the values from the `sbibundle.properties` file located in the `Files\resources` folder.
- **Screen Literals and Messages:** The `bundle-index.properties` file is used to localize the following:
 - Error and warning messages displayed on the user interface.
 - Descriptions pertaining to labels, panels, and headings in the user interface.
 - Dynamic data within a literal. For example, the user interface may have to display a literal that informs a user that an input value cannot exceed a certain number of characters, and that the number of characters is dynamic. In this case, if the maximum character length for a description is set at 428 characters, 428 is the value of the parameter. The corresponding bundle entry is defined as `"b_MaxCharLengthExceeded":"The value cannot exceed {0} characters"`.

For more information about understanding the localizable components and data, refer to the *Sterling Selling and Fulfillment Foundation: Localization Guide*.

Localize Client-Side Literals

About this task

To localize the client-side literals, you must run the JavaScript bundle collector utility by performing the following steps:

Procedure

1. If you are localizing Sterling Business Intelligence, you must generate the `bundle-index.properties` file. Therefore, run the following script from the `<INSTALL_DIR>/bin` folder to extract the client-side literals in the `bundle-index.properties` file:

```
ant -f jsUtil.xml bundle.index -DsourceDir=<INSTALL_DIR>/repository/
eardata/sbi/war -DindexDir=<INSTALL_DIR>/repository/eardata/sbi/
localization_index
```

where `-DindexDir` is the output directory.

A new folder, `localization_index`, containing the following files is created:

- `opts`
- `context-index`
- `bundle-index.properties`

2. Send the `bundle-index.properties` file for translation.
3. After localization, save the localized `bundle-index.properties` file as `bundle-index_<language_code>_<locale>.properties` based on the locale in the `<INSTALL_DIR>/repository/eardata/sbi/localization_index` folder.

For example, if you want to localize the application for France in French language, save the localized `bundle-index.properties` as `bundle-index_fr_FR.properties`.

Note: If you have not localized the Web UI Framework client-side literals already, you must localize the Web UI Framework client-side literals by running the JavaScript bundle collector utility. For more information about running the bundle collector utility to localize platform files, refer to *Sterling Selling and Fulfillment Foundation: Localizing the Web UI Framework* .

4. Perform the postlocalization tasks on the client side. For more information about the postlocalization tasks, refer to the topic Chapter 7, “Postlocalization Tasks,” on page 13.

Localize Server-Side Literals

About this task

To localize the server-side literals, perform the following steps:

Procedure

1. Send the `sbibundle.properties` file located in the `<INSTALL_DIR>/resources` folder for translation.
2. Save the localized `sbibundle.properties` file as `sbibundle_<language>_<locale>.properties` based on the locale in the `<INSTALL_DIR>/resources` folder. For example, if you localize the application for France in French language, save the localized `sbibundle.properties` file as `sbibundle_fr_FR.properties`.
3. Perform the postlocalization tasks on the server side. For more information about the postlocalization tasks, refer to the topic Chapter 7, “Postlocalization Tasks,” on page 13.

Note: It is recommended that when you localize the literals, you keep the length of the literals short in order to avoid them getting truncated.

Chapter 3. Localizing IBM Sterling Business Intelligence Dashboard Literals

The dashboards in Sterling Business Intelligence use a common resource bundle that contains the literals displayed on the screens. You can localize the dashboard headers, column titles, field names, chart titles, and chart legends.

The resource bundles of Sterling Business Intelligence are located in the <BI_COGNOS8_HOME>/resources/sbianalyticsbundle.properties file. Cognos 8 Business Intelligence Content is installed in the <BI_COGNOS8_HOME> folder.

Note: IBM always releases all the resource bundles in the sbianalyticsbundle.properties file with the localized versions of Sterling Business Intelligence. Incremental updates for the sbianalyticsbundle.properties file are not provided. When localizing the Sterling Business Intelligence dashboards, it is your responsibility or that of your localizing company to compare and validate the differences between the resource bundles.

Localize the IBM Sterling Business Intelligence Dashboard Literals

About this task

To localize the resource bundles, perform the following tasks:

Procedure

1. Open the <BI_COGNOS8_HOME>/resources/sbianalyticsbundle.properties file from the <BI_COGNOS8_HOME>/resources folder and save it as <BI_COGNOS8_HOME>/resources/sbianalyticsbundle_<language>_<locale>.properties.
2. Each resource bundle contains a <key>=<value> pair, where key is the resource key, and value is the literal displayed for the corresponding locale. Replace <value> with the translated value.
3. Save the modified file. If the file is in UTF-8 format, convert it to ASCII by running the **native2ascii** command as follows:

```
native2ascii -encoding UTF-8 <source file> <target file>
```

The file should be returned in the following format:

```
<filename>_<2 letter code for language as given by ISO 639>_<2 letter code for territory as given by ISO 3166>.<file extension>
```

For example, sbianalyticsbundle.properties should be returned as sbianalyticsbundle_fr_FR.properties.

Note: Files localized in Latin1 languages do not require this conversion.

What to do next

To localize the dashboard literals, perform the following tasks:

1. Ensure that the environment variables BI_RT and BI_COGNOS8_HOME are set, For example in UNIX,

```
export BI_RT = <BI_COGNOS8_HOME>
export BI_COGNOS8_HOME = <BI_COGNOS8_HOME>
```

Note: The <BI_COGNOS8_HOME> directory is the root directory where the Cognos 8 Business Intelligence Content is installed.

2. Copy the following jar files to <BI_COGNOS8_HOME>/lib folder from <COGNOS_HOME>/ap/webapps/p2pd/WEB-INF/lib folder.
 - axis.jar
 - axisCrnpClient.jar
 - CAM_AAA.jar
 - CAM_AAA_CustomIF.jar
 - commons-discovery.jar
 - commons-logging-1.0.4.jar
 - dom4j.jar
 - jaxrpc.jar
 - saaj.jar
 - soap.jar
 - xalan.jar
 - xercesImpl.jar
 - xml-apis.jar
3. Ensure that you have disabled the Cognos 8 Business Intelligence authentication.
4. To localize the dashboard literals in the <BI_COGNOS8_HOME> folder, execute the following command from the <BI_COGNOS8_HOME>/bin folder:

```
ant -f sbilocalizer.xml import
```

Note:

- If you have installed Sterling Business Intelligence Content for Cognos® 8 Business Intelligence and Sterling Business Intelligence on two different machines, you must modify the following line of the XML by replacing **localhost** with the IP address of the machine on which Sterling Business Intelligence Content for Cognos 8 Business Intelligence has been installed before you execute the command:

```
<property name="cognosurl" value="http://localhost:<port>/p2pd/servlet/dispatch"/>
```

- The sbilocalizer.xml file can be executed in the following modes:

```
ant -f sbilocalizer.xml validate, to validate the dashboard literals in the sbianalyticsbundle_<language>_<locale>.properties file.
```

```
ant -f sbilocalizer.xml extract, to export the dashboard literals.
```

Note: The sbilocalizer.xml command reads all the bundles in the <BI_COGNOS8_HOME>/resources folder. It then adds the literal translations for each locale into the dashboard definitions present in the <BI_COGNOS8_HOME>/reports folder. The modified dashboard definitions are copied into the <BI_COGNOS8_HOME>/localizedreports folder, and added into the content repository. When the dashboards are generated again, the literals are displayed according to the user's locale.

5. Ensure that you enable the Cognos 8 Business Intelligence authentication.

Chapter 4. Localize IBM Sterling Business Intelligence Report Literals

You can localize the Sterling Business Intelligence report labels and report titles by exporting and importing language translation files using the IBM Cognos Adaptive Warehouse and IBM Cognos Adaptive Analytics applications.

Localize Report Literals using IBM Cognos Adaptive Warehouse

About this task

To localize the report literals, perform the following tasks:

Procedure

1. Launch the IBM Cognos Adaptive Warehouse application and click on the **Target** tab to open the Target view.
2. From **Project** menu, navigate to **Languages > Define Languages**. The Define Languages window is displayed.
3. From the Available Languages list, select each language that you want to add and click the arrow button to move it to the **Project languages** box and click **OK**.
4. From the **Project** menu, navigate to **Languages > Export Translation File**. The Export Translation File window is displayed.
5. Select each language that you want to export, and click the arrow button to move them into the Languages to be exported box.
6. Enter the location of the folder from where the <AC_INSTALL_DIR>\resources\sbiawbundle_<languagecode>_<localecode>.txt translation file must be exported.
7. Open the sbiawbundle_<languagecode>_<localecode>.txt file and modify the contents of the file to match your locale and save the file using the **File > Save** option.
8. From the **Project** menu, navigate to **Languages > Import Translation File**. The Import Translation File window is displayed.
9. From the Project Languages list, select the required project language.
10. Select the <AC_INSTALL_DIR>\resources\sbiawbundle_<languagecode>_<localecode>.txt file that must be imported. Sterling Business Intelligence Analytics Content is installed in the<AC_INSTALL_DIR> folder.
11. Click **OK**.
12. Click **Save**.
13. In the **Target** tab, in the Project Viewer pane, click on Packages > Sterling Data Source.
14. In Properties window click on **Language**, Languages window is displayed.
15. In the Languages window, select the language that you want to add from the Available Languages list and click the arrow button to move it to the Project languages box. Click **OK**.
16. Click **Save**.

17. Publish the Sterling Data Source Package. For more information about publishing Sterling Data Source Package, refer to the *Sterling Business Intelligence: Installation Guide*.

Localize Report Literals using IBM Cognos Adaptive Analytics

About this task

To localize the report literals, perform the following tasks:

Procedure

1. Launch the IBM Cognos Adaptive Analytics application and open the project that you want to localize.
2. From **Project** menu, navigate to **Languages > Define Languages**. The Define Languages window is displayed.
3. From the Available Languages list, select each language that you want to add and click the arrow button to move it to the **Project languages** box and click **OK**.
4. From the **Project** menu, navigate to **Languages > Export Translation File**. The Export Translation File window is displayed.
5. Select each language that you want to export, and click the arrow button to move them into the Languages to be exported box.
6. Enter the location of the folder from where the <AC_INSTALL_DIR>\resources\sbiaabundle_<languagecode>_<localecode>.txt translation file must be exported.
7. Open the sbiaabundle_<languagecode>_<localecode>.txt file and modify the contents of the file to match your locale and save the file using the **File > Save** option.
8. From the **Project** menu, navigate to **Languages > Import Translation File**. The Import Translation File window is displayed.
9. From the Project Languages list, select the required project language.
10. Select the <AC_INSTALL_DIR>\resources\sbiaabundle_<languagecode>_<localecode>.txt file that must be imported. Sterling Business Intelligence Analytics Content is installed in the <AC_INSTALL_DIR> folder.
11. Click **OK**.
12. Click **Save**.
13. From the **Actions** menu, select **Generate Deployment Archive**. The Save As window is displayed
14. In the **File name** box, enter a name for the archive.
15. Click **Save**. The Validate Object dialog box is displayed.
16. Click **Close**. The deployment archive is created. You can now publish your reports in IBM Cognos Connection. For more information about publishing your reports in IBM Cognos Connection, refer to the *IBM Cognos 8 Analytic Applications Adaptive Analytics User Guide*.

Chapter 5. Localize IBM Sterling Business Intelligence Reports and Dashboard Data

You can localize the data in the Sterling Business Intelligence reports and dashboards using the IBM Cognos Adaptive Warehouse application. All the data present in a dashboard that describing an entity, for example, Category Description, Region Description, Buyer Description and so on, are localized in the data warehouse database. The data warehouse database contains localized data from the YFS_LOCALIZED_STRINGS table, which is transformed and added as additional columns.

Before you begin

Note: Before you start the data localization process, the database factory default values must be localized. For more information about localization for multilingual installation, refer to the *Sterling Selling and Fulfillment Foundation: Localization Guide*.

About this task

To localize the data in the Sterling Business Intelligence reports and dashboards, perform the following tasks:

Procedure

1. Launch the IBM Cognos Adaptive Warehouse application. By default, the application opens in the Warehouse view.
2. From the **Actions** menu, select **Edit Data languages**.
The Specify Project Languages pop-up window is displayed.
3. Click **Add**.
4. Enter the New Languages and Language code.
5. Click **OK**.
6. Click **Synchronize Target Metadata**.
7. Click **Save** and perform the load management.

For more information about performing load management, refer to the *Cognos 8 Analytic Applications Adaptive Warehouse User Guide*.

Chapter 6. Localizing the Factory Setup Data

Besides storing your transactional data, the database also stores configuration data, such as error codes. This means that the database may need to store values in a language-specific format. If these database literals are not localized, screen literals are displayed inconsistently, with some being displayed in the localized language and others being displayed in English.

The `sbifcliterals2translate.properties` file contains all the Sterling Business Intelligence factory setup literals that need to be localized.

To localize the factory setup data, perform the following tasks:

1. Open the `sbifcliterals2translate.properties` file located in `Files/installed_data/smcfs/components/complete_installation/factorysetup/XMLS` in the localization kit, and enter the corresponding literals for the required locale after the corresponding delimiter.
2. Rename the `sbifcliterals2translate.properties` file as `en_US_sbifcliterals2translate.properties_<language>_<locale>.properties`

For example, in the case of French customers, `sbifcliterals2translate.properties` should be renamed as `en_US_sbifcliterals2translate.properties_fr_FR.properties`, where `fr` indicates the language, that is French, and `FR` indicates the country or region, France.

3. Copy the `en_US_sbifcliterals2translate.properties_<language>_<locale>.properties` file to the `<INSTALL_DIR>/installed_data/smcfs/components/complete_installation/factorysetup/XMLS` folder. `<INSTALL_DIR>` is the directory where the Sterling Selling and Fulfillment Foundation is installed.
4. Run the following command from the `<INSTALL_DIR>/bin` folder:

- For Windows:

```
sci_ant.cmd -f localizedstringreconciler.xml import
-Dsrc=<INSTALL_DIR>\installed_data\smcfs\components\
complete_installation\factorysetup\XMLS
-Dbasename=sbifcliterals2translate
```

- For UNIX or Linux:

```
sci_ant.sh -f localizedstringreconciler.xml import
-Dsrc=<INSTALL_DIR>/installed_data/smcfs/components/
complete_installation/factorysetup/XMLS
-Dbasename=sbifcliterals2translate
```

Chapter 7. Postlocalization Tasks

The localized resource bundles are not automatically used by Sterling Business Intelligence. To ensure that the localized bundles are used by Sterling Business Intelligence, you must re-create the Sterling Selling and Fulfillment Foundation Enterprise ARchive (EAR) package.

The following sections describe the postlocalization activities on the server side and the client side.

Postlocalization Tasks for Server Side Literals

About this task

After you have localized the server-side bundles, perform the following steps:

Procedure

1. Create the resource JAR using the following command from the <INSTALL_DIR>/bin folder:
For Windows:
`deployer.cmd -t resourcejar`
For Linux/UNIX:
`deployer.sh -t resourcejar`
2. Re-create the `smcfs.ear` file. This file is the Sterling Selling and Fulfillment Foundation EAR package.
For more information about creating the EAR file, refer to the *Sterling Selling and Fulfillment Foundation: Installation Guide*.

Postlocalization Tasks for Client Side Literals

About this task

After you have localized the client-side bundles, perform the following steps:

Procedure

1. Navigate to the <INSTALL_DIR>/bin folder:
2. To generate localized JavaScript source files from the localized `bundle-index.properties` file, run the following command:

Note: Ensure that the directory <INSTALL_DIR> is set as an environment variable.

```
ant -f jsUtil.xml bundle.map -DsourceDir=<INSTALL_DIR>/repository/  
eardata/sbi/war -DindexDir=<INSTALL_DIR>/repository/eardata/sbi/  
localization_index -DindexFile=<INSTALL_DIR>/repository/eardata/sbi/  
localization_index/bundle-index_<language>_<locale>.properties  
-DwebContentDepth=0
```

where `-DindexDir` is the output directory.

For example, if you have localized for the French locale, and the localization directory is <INSTALL_DIR>/repository/eardata/sbi/localization_index, and the localized bundle-index file is bundle-index_fr_FR.properties, run the following command:

```
ant -f jsUtil.xml bundle.map -Dsrcdir=<INSTALL_DIR>/repository/
eardata/sbi/war -Dindexdir=<INSTALL_DIR>/repository/eardata/sbi/
localization_index -Dindexfile=<INSTALL_DIR>/repository/eardata/sbi/
localization_index/bundle-index_fr_FR.properties -Dwebcontentdepth=0
```

where -Dindexdir is the output directory.

3. To generate minified JavaScript source files from the localized bundle-index.properties file, run the following command:

```
ant -f jsUtil.xml minify-js -DsrcDir=<INSTALL_DIR>/repository/eardata/
sbi/war -DdestDir=<INSTALL_DIR>/repository/eardata/sbi/war -Dminify=true
-DcreateIndividualFile=false -DjsbDir=<INSTALL_DIR>/repository/eardata/
sbi/war/builder/sbi
```

4. Re-create the smcfs.ear file. This file is the IBM Sterling Selling and Fulfillment Foundation EAR package.

For more information about creating the EAR file, refer to the *Sterling Selling and Fulfillment Foundation: Installation Guide*.

Note: After localizing the application, you may want to verify that the application has been localized. However, because resource bundles are cached in a Web browser, it is recommended that you clear the Web cache before verifying the localization.

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Printed in USA