SAS® IT Service Level Management 2.1: Migration Documentation
Chapter 1 △ Migration Documentation

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Introduction

This document provides information that facilitates the migration from SAS IT Service Level Management 1.0 or 1.2 to SAS IT Service Level Management 2.1. If you are installing SAS IT Service Level Management 2.1 and have no previous releases, it is not necessary to read this document.

Enhanced Functionality

Among other enhancements, SAS IT Service Level Management 2.1 provides the following new or changed functionality that affects your migration and future processing:

- Reporting: The report job that was available in previous versions of SAS IT Service Level Management has been replaced by functionality that can be found in the new report workspace in the SAS IT Service Level Management client.

  It is no longer necessary to create report jobs outside of the client.
Range Sets: SAS IT Service Level Management 2.1 provides significant enhancements to the range set functionality. They include the following:

- In SAS IT Service Level Management 1.0/1.2, ranges contained the definitions for the associated colors and labels. In SAS IT Service Level Management 2.1, ranges are associated with range descriptions that define the color and the label for the range. They can be applied to individual ranges as well as globally across all range sets. Range descriptions provide a way to centralize your choices for the labels and colors that will appear in the reports.
- Range sets no longer permit a gap in range values. All values between the upper and lower limits of a range set will be properly assigned to a range.

Note: For more detailed information about the new range set functionality, see the Range Sets and Range Descriptions topics in “Building the Catalog,” Chapter 7 of the SAS IT Service Level Management User’s Guide. You can also refer to the Ranges, Range Sets, and Range Descriptions topics of the Help for SAS IT Service Level Management 2.1.

How to Migrate to SAS IT Service Level Management 2.1

To migrate from SAS IT Service Level Management 1.0/1.2 to SAS IT Service Level Management 2.1, perform these steps:

1. Install SAS IT Service Level Management Server 2.1 on SAS 9.1.3 (Service Pack 3) as well as SAS IT Service Level Management Client 2.1.
   
   For more details, see the appropriate installation instructions.

2. If the location of SAS IT Service Level Management 2.1 was customized on installation, the location of the server software in the environment properties must be changed to reflect that changed location. To do this, update the Path to Software field in the Environment Properties window.

3. Back up all current environment databases and contract databases prior to performing any migrations.

   Note: Backups are required because upgrades cannot be reversed whether they are done interactively or in batch mode.

How Migration Affects Your Processing

Migrating from SAS IT Service Level Management 1.0/1.2 to SAS IT Service Level Management 2.1 affects how you use the software. See the following sections cited below for more information.

- “Reports” on page 2
- “ETL Jobs” on page 3
- “Environment Databases” on page 3
- “Contract Databases” on page 4
- “Ranges” on page 5

Reports

Migrating from SAS IT Service Level Management 1.0/1.2 to SAS IT Service Level Management 2.1 has changed the reporting functionality. The report jobs that were
created under earlier versions of SAS IT Service Level Management will no longer function. All existing report jobs must be recreated using the options offered in the client.

Note: The first run of a report job will take longer than the usual amount of time to complete because it is creating a report for every date contained in the contract database. For this reason, we strongly recommend that you run this job in batch mode.

For more information about this, see the SAS IT Service Level Management 2.1: User’s Guide, or see the About the Reports Workspace topic of the Help for SAS IT Service Level Management 2.1.

ETL Jobs

If the location of the server software changed when SAS IT Service Level Management was upgraded from 1.0/1.2 to 2.1, then the existing ETL jobs will no longer function. To correct this situation, you can do one of the following:

- Generate new ETL jobs for each contract using the SAS IT Service Level Management 2.1 client.
- Modify SLMPATH= parameter in the SAS IT Service Level Management 1.0/1.2 jobs to specify the new location of the server software.

Environment Databases

The changes to SAS IT Service Level Management 2.1 require an upgrade to any existing environment database that was created from an earlier version. After you have installed SAS IT Service Level Management 2.1, you must upgrade the environment database either interactively or in batch mode.

Upgrading Your Environment Database Interactively

When the SAS IT Service Level Management administrative client is used to activate an environment database, a check is always performed to determine if the environment database requires upgrading. If the environment database requires upgrading, this message displays:

Click Yes to perform the upgrade and load the client interface.
Click No to refuse to upgrade your environment database. In addition, the client interface does not load and the user is returned to the initial logon screen.
Upgrading Your Environment Database in Batch Mode

To upgrade the environment database in batch mode, run either of the following macros:

- `%CPSLMENV`
- `%CPSLMETL` (see the sample code in the “Upgrading Your Contract Database in Batch Mode” on page 4 topic of this document.)

*Note:* In batch mode, the environment database is upgraded without prompting. For example, the following code automatically upgrades the environment database, if needed.

```plaintext
%CPSLMENV(
   ACTION=START,
   ENVIRONMENTDBPATH=c:\myenvironments\edb1,
   _RC=cpenrc);
%PUT CPSLMENV return code is &cpenrc;
```

Contract Databases

The changes to SAS IT Service Level Management 2.1 require an upgrade to all contract databases. (For each active contract that is defined in your SAS IT Service Level Management environment, there is an associated contract database. A contract database also exists for an inactive contract if ETL was previously run on that contract.)

All contract databases must be converted from SAS IT Service Level Management 1.0/1.2 format to SAS IT Service Level Management 2.1 format. These upgrades occur when the synchronization process is run, either interactively or in batch mode.

Upgrading Your Contract Database Interactively

When the administrative client runs Synchronize or ETL, a check is performed to determine if the contract database needs to be upgraded so that it can work with the SAS IT Service Level Management server software that is specified in the environment connection properties. If the contract database requires upgrading, this message displays:

![Upgrade Contract Database](image)

Click Yes to perform the upgrade and run the requested Synchronize or ETL. Click No to refuse to upgrade your contract database. The requested Synchronize or ETL task does not run.

Upgrading Your Contract Database in Batch Mode

To upgrade the contract database (without prompting), run the `%CPSLMETL` macro with ACTION=SYNC or ACTION=ETL. For example, the following code runs the
ranges
validation, synchronization, and etl tasks for a contract with the abc corporation.
the contract database will be upgraded automatically (if needed) when this code is run.

\$CPSTMETL(  
  action=etl  
  ,environmentdbpath=c:\myenvironment\envdb  
  ,contract=abc corporation  
  ,_rc=cpetrc )
\$put cpmetl (abc corporation contract etl) return code is &cpetrc;

ranges
the changes to sas it service level management 2.1 require the migration of range set information. the range sets that were created in sas it service level management 1.0/1.2 will be converted to the range sets and range descriptions needed by sas it service level management 2.1.
all existing range sets will be migrated automatically and existing information will be retained. during the migration, the color and label for a range are separated into a new range description object which is described below.

range description names
during migration, new range descriptions will automatically be defined for each previously existing range. the name for each of these range descriptions will be based on a combination of the previously defined range descriptor (see sample range migrations 1-3 below) and the sas it service level management 1.0/1.2 hexadecimal value for that color. (because each range description name must be unique, it was necessary to append the hexadecimal value for the old color to the range descriptor of that color.)

the new range descriptions that are created for a given range are assigned the new corresponding color names and colors based on migrated range set information. (see the table of colors in “range description colors” on page 14 for comparison.) if a range in an existing (1.0/1.2) range set was not specified with a color or label, the migrated range description name will default to “undefined.”

the following examples show how range sets that contain three distinct types of ranges will be migrated. the types of ranges are as follows:

- “sample range migration 1” on page 6: a user-defined range with the color and range descriptor defined.
- “sample range migration 2” on page 9: a user-defined range with no color and range descriptor defined.
- “sample range migration 3” on page 12: a system-defined range (high, low, or missing).
Sample Range Migration 1

A user-defined range with the color and range descriptor defined
The following example shows a user-defined range with a color and range descriptor specified that was created in SAS IT Service Level Management 1.2 and that has been migrated to SAS IT Service Level Management 2.1.

The following range was created in SAS IT Service Level Management 1.2. This range has been assigned a range color of green, and a range descriptor of Excellent as shown below.

![Edit Range](image)

When this range is migrated to SAS IT Service Level Management 2.1, a range description will be created based on the information that was previously defined. The range description name will be the previously defined range descriptor appended with the SAS IT Service Level Management 1.2 hexadecimal value of the color for that range. Since the range descriptor is Excellent and the hex value for green is CCFFCC, the migrated range description name is ExcellentCCFFCC.
The migrated range description properties are shown below.

Note: If the **Label in reports** field is blank, the range description name will be used as the label in reports. (You can use the GUI to rename the range description.)
This range description is associated with the migrated range in the migrated range set as shown.
Sample Range Migration 2

A user-defined range with NO color and range descriptor defined
The following example shows a user-defined range that was created in SAS IT Service Level Management 1.2 and that has been migrated to SAS IT Service Level Management 2.1. When this range was created, no color or range descriptor was specified.

- The following range was created in SAS IT Service Level Management 1.2.

This range was not assigned a range color or range descriptor, as shown below.
Since the range color and range descriptor were previously undefined, the migrated range description will be Undefined when this range is migrated to SAS IT Service Level Management 2.1. The migrated range description properties are shown below.

**Note:** This range description should be removed and an appropriate range description should be assigned to all ranges that are associated with this range description. (You can use the GUI to assign a new range description to ranges with Undefined range descriptions.)
This range description is associated with the migrated range in the migrated range set as shown.
Sample Range Migration 3

A system-defined range (High, Low, or Missing)

The following example shows a system-defined range that was created in SAS IT Service Level Management 1.2 and that has been migrated to SAS IT Service Level Management 2.1. The system-defined ranges are High, Low, and Missing, and each of these ranges will be migrated as shown in this example.

- The following system-defined range High was associated with a range set that was created in SAS IT Service Level Management 1.2.

When this range is migrated to SAS IT Service Level Management 2.1, a range description will be created based on the information that was previously defined. The range description name will be the previously defined range descriptor appended with the SAS IT Service Level Management 1.2 hexadecimal value of the color for that range. Since the range descriptor is High and the hex value for blue is CCFFFF, the migrated range description name is HighCCFFFF. The migrated range description properties are shown below.
Note: If the Label in reports field is blank, the range description name will be used as the label in reports. (You can use the GUI to rename the range description.)

- This range description is associated with the migrated range in the migrated range set as shown.
Range Description Colors

Some of the colors that were available for use in text reports in SAS IT Service Level Management 1.0/1.2 have been changed in SAS IT Service Level Management 2.1.

Colors that were modified will now be a slightly different shade, and they will have a different name. Any existing definitions that specified a color that has been changed will automatically be updated to the corresponding SAS IT Service Level Management 2.1 color.

The following table shows these updates.

<table>
<thead>
<tr>
<th>Old Color Title</th>
<th>Old Color Hexadecimal Value</th>
<th>Old Color Swatch</th>
<th>New Color Title</th>
<th>New Color Hexadecimal Value</th>
<th>New Color Swatch</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>FF EE FF</td>
<td>same</td>
<td>White</td>
<td>FF EE FF</td>
<td>same</td>
</tr>
<tr>
<td>Green</td>
<td>CC FF CC</td>
<td>Honeydew</td>
<td>Green</td>
<td>C0 FD C8</td>
<td>same</td>
</tr>
<tr>
<td>Red</td>
<td>FF CC CC</td>
<td>Misty Rose</td>
<td>Red</td>
<td>FF EE B0</td>
<td>Pale Yellow</td>
</tr>
<tr>
<td>Yellow</td>
<td>FF EE B0</td>
<td>same</td>
<td>Yellow</td>
<td>FF EE FF</td>
<td>same</td>
</tr>
<tr>
<td>Purple</td>
<td>CC CC CC FF</td>
<td>Pale Purple</td>
<td>Purple</td>
<td>FF FF FF</td>
<td>samed</td>
</tr>
<tr>
<td>Aquamarine</td>
<td>99 FF CC</td>
<td>Pale Green</td>
<td>Blue</td>
<td>9B FF B0</td>
<td>samed</td>
</tr>
<tr>
<td>Orange</td>
<td>FF CC 99</td>
<td>Peach Puff</td>
<td>Orange</td>
<td>FF DA B9</td>
<td>samed</td>
</tr>
<tr>
<td>Sky Blue</td>
<td>99 CC FF</td>
<td>same</td>
<td>Sky Blue</td>
<td>87 CE EE</td>
<td>samed</td>
</tr>
<tr>
<td>Plum</td>
<td>FF CC FF</td>
<td>samed</td>
<td>Plum</td>
<td>samed</td>
<td>samed</td>
</tr>
<tr>
<td>Cyan</td>
<td>99 CC CC</td>
<td>Powder Blue</td>
<td>Cyan</td>
<td>80 EE EE</td>
<td>samed</td>
</tr>
<tr>
<td>Chiffon</td>
<td>FF EE CC</td>
<td>Light Yellow</td>
<td>Chiffon</td>
<td>80 EE EE</td>
<td>samed</td>
</tr>
<tr>
<td>Blue</td>
<td>CC FF FF</td>
<td>Alice Blue</td>
<td>Blue</td>
<td>samed</td>
<td>samed</td>
</tr>
<tr>
<td>Gray</td>
<td>CC CC CC</td>
<td>Light Gray</td>
<td>Gray</td>
<td>D3 D3 D3</td>
<td>samed</td>
</tr>
<tr>
<td>Olive</td>
<td>CC CC 88</td>
<td>Khaki</td>
<td>Olive</td>
<td>samed</td>
<td>samed</td>
</tr>
</tbody>
</table>

Note: In this table, columns with Old in the title refer to values from SAS IT Service Level Management 1.0/1.2 and columns with New in the title refer to values from SAS IT Service Level Management 2.1.

Range Gaps and Overlaps

In previous versions of SAS IT Service Level Management, range sets were allowed to have gaps between ranges and ranges were allowed to overlap. The client will now detect gaps between ranges and overlapping ranges in any range set when it is opened in a dialog window. These errors must be corrected before the window can be closed.

The following cases are examples of a gap between ranges and an overlap of ranges that may exist in a previously defined range set. When the gap and overlap are corrected and the range set is valid, the Range Set dialog box can be closed and the changes are saved. If the validations fail, an error message is displayed.

Example of a gap between ranges:

If the ranges A and B shown below existed in a previously defined range set, they must be corrected in order to be used in SAS IT Service Level Management 2.1. A gap will be detected between these ranges, and one or both of the ranges must be updated when the range set dialog window is opened. In the following example, the gap is between 99.9 and 99.99:

Range A: 70 < X < 99.9
Range B: 99.99 <= X <= 100
Example of overlapping ranges:

If the ranges C and D shown below existed in a previously defined range set, they must be corrected in order to be used in SAS IT Service Level Management 2.1. The overlapping of the ranges will be detected, and one or both of the ranges must be updated before the range set dialog window can be closed. In the following example, the values from 93 to 95 overlap because they exist in both ranges:

Range C: $90 \leq X \leq 100$
Range D: $93 \leq X \leq 95$

The detection of gaps between ranges and overlap of ranges is an additional validation that is now performed in the SAS IT Service Level Management 2.1 client.
Your Turn

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