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Data Quality Management Directory Expiration Blueprint User's Guide

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1 Introduction

1.1 Documentation set for SAP Data Services content objects

You should become familiar with all of the pieces of documentation that relate to the SAP Data Services blueprints and other content objects.

Document	What this document provides
<i>Content Objects Summary</i>	Lists all of the available blueprints and other content objects and the jobs and other objects that they contain.
<i>Content Objects What's New</i>	Highlights the new and enhanced blueprints and other content objects available for this release.
<i>Data Quality Management Custom Functions User's Guide</i>	Contains instructions for downloading and importing custom functions.
<i>Data Quality Management Match Blueprints User's Guide</i>	Contains a list of available Data Quality Management match blueprints and instructions for downloading, configuring, and running them.
<i>Data Quality Management Directory Expiration Blueprint User's Guide</i>	Contains instructions for downloading and using a blueprint that contains a job with a script that, when configured properly, can send you email notifications for address directories that are nearing their expiration date.
<i>Data Quality Management Microservices Blueprints User's Guide</i>	Contains a list of available Data Quality Management microservices blueprints and instructions for downloading, configuring, and running them.
<i>Data Quality Management Product Blueprints User's Guide</i>	Contains a list of available Data Quality Management product blueprints and instructions for downloading, configuring, and running them.
<i>Data Quality Management Regional Blueprints User's Guide</i>	Contains a list of available Data Quality Management regional blueprints and instructions for downloading, configuring, and running them.

1.2 SAP information resources

A global network of SAP technology experts provides customer support, education, and consulting to ensure maximum information management benefit to your business.

Useful addresses at a glance:

Address	Content
Customer Support, Consulting, and Education services https://support.sap.com/	Information about SAP support programs, as well as links to technical articles, downloads, and online forums. Consulting services can provide you with information about how SAP can help maximize your information management investment. Education services can provide information about training options and modules. From traditional classroom learning to targeted e-learning seminars, SAP can offer a training package to suit your learning needs and preferred learning style.
Product documentation http://help.sap.com/bods/	SAP product documentation.
Product Availability Matrix (PAM) https://apps.support.sap.com/sap/support/pam	Get information about supported platforms for SAP Data Services. Use the search function to search for Data Services. Click the link for the version of Data Services you are searching for.
SAP Data Services Community http://scn.sap.com/community/data-services	Get online and timely information about SAP Data Services, including forums, tips and tricks, additional downloads, samples, and much more. All content is to and from the community, so feel free to join in and contact us if you have a submission.
Blueprints https://wiki.scn.sap.com/wiki/display/EIM/SAP+Data+Services+Blueprints	Blueprints for you to download and modify to fit your needs. Each blueprint contains the necessary SAP Data Services project, jobs, data flows, file formats, sample data, template tables, and custom functions to run the data flows in your environment with only a few modifications.

1.3 Introduction to SAP Data Services 4.2 content objects

Welcome to SAP Data Services 4.2 version 14.2.0 Content Objects.

Data Services overview

SAP Data Services delivers a single enterprise-class solution for data integration, data quality, and data profiling that allows you to integrate, transform, improve, and deliver trusted data to critical business processes. It provides one development UI, metadata repository, data connectivity layer, run-time environment, and management console—enabling IT organizations to lower total cost of ownership and accelerate time to value. With SAP Data Services, IT organizations can maximize operational efficiency with a single solution to improve data quality and gain access to heterogeneous sources and applications.

Data Services Content Objects overview

We've identified a number of common scenarios that you are likely to perform with SAP Data Services. For each scenario, we've included a blueprint that is already set up to solve the business problem in that scenario. Each

blueprint contains the necessary project, jobs, data flows, file formats, sample data, template tables, and custom functions to run the data flows in your environment with only a few modifications.

You can download the blueprint packages from the SAP Community Wiki. On the website, we periodically post new and updated blueprints, custom functions, best practices, whitepapers, and other content. You can refer to this site frequently for updated content and use the forums to provide us with any questions or requests you may have.

Instructions for downloading and installing the content objects are also located on the SAP Community Wiki.

2 Directory Expiration blueprint overview

Some address directories have expiration dates. When you run a job with the Global Address Cleanse or the USA Regulatory Address Cleanse transform in certification mode, and a directory is going to expire soon, Data Services adds warnings to log files alerting you that a directory is going to expire in x number of days.

This blueprint package contains a job that includes a script that follows a data flow. The script reads the logs looking for directory expiration messages, and if it finds one, it sends an email notification.

i Note

The Global Address Cleanse transforms in this job are configured to cleanse Australia addresses in certification mode. The script, however, is not specific to Australia.

The script does not have to be edited if you change it to follow a Global Address Cleanse transform that is configured for other countries or if you change it to follow a USA Regulatory Address Cleanse transform. For more information, see [Before running the job \[page 10\]](#).

! Restriction

During directory expiration run-time, the script creates and calls a PowerShell script on Windows platforms (for example, 'powershell c:\temp\parse_urac.ps1 > c:\temp\psout.txt'). This PowerShell script might not work properly on Windows Server 2008, which Data Services no longer supports.

3 Downloading Blueprint Packages

3.1 Blueprint versions

The following table shows the version of the Data Quality Management blueprints that can be used for SAP Data Services. The blueprint version is displayed on the SAP Data Services Blueprints page of the SAP Community Wiki.

SAP Data Services version	Blueprint version	Blueprints available
4.2	4.2	Data Quality Management
4.1.1	4.1.1	Data Quality Management
4.1	4.1	Data Quality Management
XI 4.0	XI 4.0	Data Quality
XI 3.2	XI 3.2	Data Quality
XI 3.1	XI 3.0	Data Quality
XI 3.0	XI 3.0	Data Quality

3.2 Downloading and setting up blueprints

These are the general steps for downloading and setting up Data Quality Management blueprint packages for SAP Data Services.

1. To access the SAP Community Network website, go to <https://www.sdn.sap.com/irj/boc/blueprints> in your web browser.
2. Log into your account using your username and password, or create a new account.
3. Review the list of available blueprint packages and other content objects and their descriptions to decide which to download.
4. Select the blueprint package that you want to download. A new page opens.
5. Select *View Document*.
6. Save the `.zip` file to the `Tutorial Files` folder in your installed SAP Data Services path. By default, this folder is installed to `\Program Files\SAP BusinessObjects\Data Services\Tutorial Files` for 32-bit Windows and `\Program Files (x86)\SAP BusinessObjects\Data Services\Tutorial Files` for 64-bit Windows.
If you are running on UNIX, the `Tutorial Files` folder exists only on the Windows client workstation, and you should download the `.zip` file there.
7. In the `Tutorial Files` folder in Windows Explorer, right-click the `.zip` file and select to extract the compressed (zipped) folders to the `Tutorial Files` folder. For example, if you use WinZip for file compression, right-click the `.zip` file and select **WinZip > Extract to here**.

Extracting creates subfolders and places the files in the appropriate location. The `.atl` file is saved to the `Data Quality Mgmt Samples` folder, and the sample data files are saved to the `Data Quality Mgmt Samples\SMTP` folder.

8. In the Designer, import the `dqm_blueprints_smtp.atl` file. In the Passphrase window, enter `dqm_blueprints_smtp` and click *Import*. Click *OK* to close the warning window. Importing the file adds a project called `DataQualityMgmtBlueprintsSMTP`. The project contains a job called `DqmBlueprintSMTP_DirectoryExpire`, and the job contains a data flow called `DqmBlueprintSMTP_DirectoryExpire`.

The import also adds two file formats whose names begin with `DqmSmtpIn` and `DqmSmtpOut` for the sample input and output data.

9. If you are running on UNIX, copy the input files to the job server machine and create the same folder structure that is on the Windows client workstation.
10. If you imported the blueprint `.atl` files using Data Services Designer on 32-bit Windows and use a job server on 64-bit Windows, then you must copy the blueprint files to the Data Services installation of the job server machine.

4 Configuration

4.1 Add sender and recipient email information

You must be an Administrator to add sender and recipient email information.

1. To add sender or “From” email information, do the following:
 - a. Open the SAP Data Services Server Manager, which you can find in your list of applications.
 - b. On the *Miscellaneous* tab, enter your organization’s SMTP server name and a valid email address from your organization to *SMTP settings for smtp_to function*.



- a. Click *Apply* and *Close* or *Close and Restart*.
2. To provide the recipient or “To” email information, do the following:
 - a. In the Data Services Designer, open the DqmBlueprintSMTP_DirectoryExpire job.
 - b. Open the script named smtp_script.
 - c. For the \$G_MAIL_RECEIVER variable (on the first line), enter a valid email address from your organization. This email address will receive the directory expiration notifications. If you want an email to be sent to multiple recipients, you may enter multiple email addresses, separated by a semicolon.

For example, completing the first row as follows will send an email to only John.

```
$G_MAIL_RECEIVER = 'john@abc.com';  
$G_ERRORFILENAME = get_error_filename();  
  
print('Checking DQM directories expiring info:');
```

Completing the first row as follows will send an email to both John and Jane.

```
$G_MAIL_RECEIVER = 'john@abc.com;jane@abc.com';
$G_ERRORFILENAME = get_error_filename();

print('Checking DQM directories expiring info:');
```

4.2 Before running the job

Before you run your job, you must complete the following tasks:

1. Copy the address reference file for the certification country that has an expiration period.
2. Set accurate values in the substitution parameter configuration Configuration1:
 - `$$RefFilesAddressCleanse`—Enter the path location where you copied the address cleanse reference files.
3. This job is configured to cleanse addresses in Australia, using the Australia reference file in certification mode.
 - If you have a license for the Australia reference file, then you can run the job with a version of the Australia reference data that is within 30 days of expiring and the script will send the notification email.
 - If you have a license for a different country whose reference data expires, do one of the following:
 - If your expire country is Canada or another country processed by the global engine, edit the Global Address Cleanse transform configured for that country.
 - If your expire country is United States, replace the Global Address Cleanse transform with a USA Regulatory Address Cleanse transform.
 - You can also copy the script from this job and paste it into one of your current jobs following the data flow. The script simply looks for directory expiration messages and is independent of country or data model.

If you want to copy the script and paste it into one of your current jobs, you must first add local variables and global variables to your job.

To do this, open the job in the Data Services Designer and go to **Tools > Variables**. Add the following local and global variables:



Variables and Parameters		
Context: DqmBlueprintSMTP_DirectoryExpire		
Name	Data type	Value
Variables		
SL_TEMPSTR	varchar(4000)	
SL_TEMPSTR2	varchar(4000)	
SL_INDEX1	int	
SL_INDEX2	int	
SL_INDEX3	int	
SL_TEMPSTR_REPLACE	varchar(4000)	
Global Variables (Job Conte...)		
\$G_ERRMSG	varchar(4000)	
\$G_INDEX	int	0
\$G_TEMPSTR	varchar(4000)	
\$G_INDEX2	int	0
\$G_MAILMSG	varchar(4000)	
\$G_ERRORFILENAME	varchar(4000)	
\$G_CMD	varchar(4000)	
\$G_MAIL_RECEIVER	varchar(4000)	
\$G_INDEX3	int	0
\$G_URACTYPE	varchar(4000)	
\$G_OS	varchar(4)	

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