|  |  |
| --- | --- |
| logo_ec_17_colors_300dpi | EUROPEAN COMMISSION  DIGIT  Connecting Europe Facility |

CEF eDelivery Conformance Testing Service

Version 1.06

SMP User Guide

© European Union, 2018

Reuse of this document is authorised provided the source is acknowledged. The Commission's reuse policy is implemented by Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents.

Document Status:

|  |
| --- |
| **Status** |
| Final |

Document Approver(s):

|  |  |
| --- | --- |
| **Name** | **Role** |
|  |  |
|  |  |
|  |  |

Document Reviewers:

|  |  |
| --- | --- |
| **Name** | **Role** |
| Maarten DANIELS | CEF eDelivery Technical Office |
|  |  |
|  |  |

Summary of Changes:

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Created by** | **Short Description of Changes** |
| V1.00 | 12/08/2016 | Maarten DANIELS | Creation of the document |
| V1.01 | 24/10/2018 | Maarten DANIELS | Added section 3.1.5. ServiceGroup Case Sensitive |
| V1.02 | 10/11/2016 | Maarten DANIELS | Added parameter DOCUMENT\_ID\_SCHEME\_CASE\_SENSITIVE to section 3.1.5 |
| V1.03 | 29/01/2018 | Maarten DANIELS | Updated description of Conformance Testing service and Connectivity Testing service in section 1 |
| V1.04 | 01/06/2018 | Maarten DANIELS | Updated references to e-SENS  Update ServiceGroup.xml sample |
| V1.05 | 27/09/2018 | Caroline AEBY | Contact information update |
| V1.06 | 10/12/2018 | Maarten DANIELS | Added domain names in addition to the IP addresses of the Test Platform endpoints |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Table of Contents

[Approach and purpose of the document 4](#_Toc525826503)

[1. Introduction 5](#_Toc525826504)

[2. Overview 6](#_Toc525826505)

[3. Connecting an SMP to the test platform 7](#_Toc525826506)

[3.1. Data requirements 7](#_Toc525826507)

[3.1.1. ServiceGroup Basic 7](#_Toc525826508)

[3.1.2. ServiceGroup Non Existing 8](#_Toc525826509)

[3.1.3. ServiceGroup Identifier 8](#_Toc525826510)

[3.1.4. ServiceGroup No Scheme 8](#_Toc525826511)

[3.1.5. ServiceGroup Case Sensitive 8](#_Toc525826512)

[3.1.6. SignedServiceMetadata Basic 9](#_Toc525826513)

[3.1.7. SignedServiceMetadata Multiple TransportProfiles 10](#_Toc525826514)

[3.1.8. Redirect Basic 10](#_Toc525826515)

[3.2. Parameter list 11](#_Toc525826516)

[3.2.1. Shared parameters 11](#_Toc525826517)

[3.2.2. SignedServiceMetadata specific parameters 12](#_Toc525826518)

[3.3. Keystores and Certificates 13](#_Toc525826519)

[4. Running tests on the test platform 14](#_Toc525826520)

[4.1. Logging in to Minder 14](#_Toc525826521)

[4.2. SMP Basic Connectivity Tests 14](#_Toc525826522)

[5. Annex 15](#_Toc525826523)

[6. Contact information 16](#_Toc525826524)

Approach and purpose of the document

The present document is the User Guide of the CEF eDelivery Conformance Testing service. Key content includes an explanation of the components of the CEF eDelivery Conformance Testing service and the actions required from the software providers connecting making use of the service.

Glossary

The key terms used in this Service Offering Description are defined in the CEF Definitions section on the CEF Digital Single Web Portal:

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/CEF+Definitions>

The key acronyms used in this Service Offering Description are defined in the CEF Glossary on the CEF Digital Single Web Portal:

<https://ec.europa.eu/cefdigital/wiki/pages/viewpage.action?spaceKey=CEFDIGITAL&title=CEF+Glossary>

Acknowledgments

This guide is based on the work of the e-SENS project and the documentation of the Minder Test Platform by Tubitak in the context of e-SENS.

Introduction

This document describes how software providers can use the Conformance Test Platform. It clarifies the different components of the platform, explains how to connect to the platform and details how to run the test cases against an implementation of a conformant CEF eDelivery component.

Note that CEF e-Delivery offers two different types of testing services:

* Conformance Testing service
* Connectivity Testing service

The goal of the CEF eDelivery Conformance Testing service is to verify that an implementation of the CEF eDelivery Access Point and SMP specifications, a software package either commercial or Open Source, conforms to the relevant CEF eDelivery specifications.

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eDelivery+Conformance+testing>

The goal of the CEF eDelivery Connectivity Testing service is to test if a newly installed AS4 Access Point, conformant with the CEF eDelivery specifications, can successfully communicate with the sample AS4 Access Point hosted by the European Commission or if a newly installed SMP server, conformant with the CEF eDelivery specifications, can respond to sample requests. If successful, these tests confirm that the relevant component is in all likelihood correctly deployed and configured.

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eDelivery+Connectivity+testing>

This document only describes the Conformance Testing service.

Overview

The Conformance Test Platform is built on the Minder testbed. This is a generic online programmable flow control engine that provides the capability of interconnecting different systems in one node and enabling architects to perform complex communication operations on those interconnected systems.

Connecting an SMP to the test platform

This section describes how to connect an SMP to the test platform.

Unlike other components such as an AS4 Access Point, the SMP does not require an adapter for establishing the connection between the system under test (SUT) and the test platform. Instead, the test platform only uses HTTP GET operations on the public interface of the SMP for querying the data to be evaluated.

Since the SMP specifications do not standardise the way that data is written (or updated or deleted) in an SMP, the test platform cannot populate the SUT with the data it expects to be returned in the standardised SMP read interface. Therefore the administrator of the SUT is asked to populate the SMP with the expected data. These data requirements are explained in the following section.

Data requirements

The following ServiceGroup and SignedServiceMetadata instances are expected to be present in the SUT before the conformance test execution starts.

The instances are parametrised (e.g. ID\_SCHEME, DOCUMENT\_ID, …) so that SMP administrators can choose the values that fit best their background or business domain.

The chosen values should then be updated in the list in section 3.2 Parameter list and sent to the CEF eDelivery team so they can configure the relevant test suites.

When choosing values for the parameters, go through the list below sequentially in the order they are listed. Once a parameter has been set in a specific section, it needs to have the same value in subsequent sections.

ServiceGroup Basic

The file below contains the details of a basic ServiceGroup response.



After completing the sample, update the following parameters in 3.2 Parameter list:

* ID\_SCHEME
* ID
* SMP\_SERVER\_URL
* DOCUMENT\_SCHEME
* DOCUMENT\_ID
* EXTENSION

ServiceGroup Non Existing

Choose a value for the parameter ID\_NONEXISTING to make sure that the combination ID\_SCHEME and ID\_NONEXISTING are not returning any results by your SMP.

Reuse the ID\_SCHEME as configured in the section 3.1.1 ServiceGroup Basic.

Update the following parameters in 3.2 Parameter list:

* ID\_NONEXISTING

ServiceGroup Identifier

Reuse the parameters from the basic ServiceGroup response, but choose a ParticipantIdentifier that contains both upper and lower case characters and a related DocumentIdentifier that contains both upper and lower case characters. Assign these values to the parameters ID\_IDENTIFIER and DOCUMENT\_ID\_IDENTIFIER.

Reuse the ID\_SCHEME and other parameters as configured in the section 3.1.1 ServiceGroup Basic.

Update the following parameters in 3.2 Parameter list:

* ID\_IDENTIFIER
* DOCUMENT\_ID\_IDENTIFIER

ServiceGroup No Scheme

Reuse the parameters from the basic ServiceGroup response, but choose a ParticipantIdentifier that is not linked to a Scheme. Assign this value to the parameter ID\_NO\_SCHEME.

Reuse the other parameters as configured in the section 3.1.1 ServiceGroup Basic, except for ID\_SCHEME since this does not exist for this case.

Update the following parameters in 3.2 Parameter list:

* ID\_ NO\_SCHEME

ServiceGroup Case Sensitive

Reuse the parameters from the ServiceGroup Identifier response, but also link the ParticipantIdentifier to an additional Participant Identifier Scheme which is defined as case sensitive. Assign this Participant Identifier Scheme value to the parameter ID\_SCHEME\_CASE\_SENSITIVE. Additionally link the DocumentIdentifier to an additional Document Identifier Scheme which is defined as case sensitive. Assign this Document Identifier Scheme value to the parameter DOCUMENT\_ID\_SCHEME\_CASE\_SENSITIVE.

Reuse the other parameters as configured in the section 3.1.3 ServiceGroup Identifier.

Update the following parameters in 3.2 Parameter list:

* ID\_SCHEME\_CASE\_SENSITIVE
* DOCUMENT\_ID\_SCHEME\_CASE\_SENSITIVE.

SignedServiceMetadata Basic

The file below contains the details of a basic SignedServiceMetadata response that should be related to the ServiceGroup that is defined in section 3.1.1 ServiceGroup.



Reuse the following parameters as configured in the section 3.1.1 ServiceGroup Basic:

* ID\_SCHEME
* ID
* DOCUMENT\_SCHEME
* DOCUMENT\_ID
* EXTENSION

After completing the sample, update the following parameters in 3.2 Parameter list:

* PROCESS\_IDENTIFIER\_TYPE
* PROCESS\_IDENTIFIER
* TRANSPORT\_PROFILE
* ENDPOINT\_REFERENCE
* REQUIRE\_BUSINESSLEVEL\_SIGNATURE
* SERVICE\_ACTIVATION\_DATE
* SERVICE\_EXPIRATION\_DATE
* CERTIFICATE
* SERVICE\_DESCRIPTION
* TECHNICAL\_CONTACT\_URL

SignedServiceMetadata Multiple TransportProfiles

Reuse the parameters from the basic SignedServiceMetadata response, but choose a ParticipantIdentifier and DocumentIdentifierfor which multiple Transport Profiles are configured. Assign these values to the parameters ID\_MULTIPLE\_ENDPOINTS and DOCUMENT\_ID\_MULTIPLE\_ENDPOINTS.

For the rest of the parameters, reuse the parameters as configured in the section 3.1.1 ServiceGroup Basic and section 3.1.6 SignedServiceMetadata Basic.

There are no restrictions on the on the details of the additional Transport Profile, as long as it is not identical to the value defined in the parameter TRANSPORT\_PROFILE.

After completing the sample, update the following parameters in 3.2 Parameter list:

* ID\_MULTIPLE\_ENDPOINTS
* DOCUMENT\_ID\_MULTIPLE\_ENDPOINTS

Redirect Basic

The file below contains the details of a basic SignedServiceMetadata Redirect response.



Reuse the following parameters as configured in the section 3.1.1 ServiceGroup Basic:

* ID\_SCHEME
* DOCUMENT\_SCHEME

After completing the sample, update the following parameters in 3.2 Parameter list:

* SMP\_SERVER\_URL\_REDIRECT
* ID\_REDIRECT
* DOCUMENT\_ID\_REDIRECT
* CERTIFICATE\_UID\_REDIRECT

Parameter list

Shared parameters

|  |  |
| --- | --- |
| PARAMETER | VALUE |
| ID\_SCHEME |  |
| ID |  |
| SMP\_SERVER\_URL |  |
| ID\_REDIRECT |  |
| ID\_MULTIPLE\_ENDPOINTS |  |
| ID\_IDENTIFIER |  |
| ID\_NONEXISTING |  |
| ID\_NO\_SCHEME |  |
| DOCUMENT\_SCHEME |  |
| DOCUMENT\_ID |  |
| DOCUMENT\_ID\_REDIRECT |  |
| DOCUMENT\_ID\_MULTIPLE\_ENDPOINTS |  |
| DOCUMENT\_ID\_IDENTIFIER |  |
| EXTENSION |  |
| ID\_SCHEME\_CASE\_SENSITIVE |  |
| DOCUMENT\_ID\_SCHEME\_CASE\_SENSITIVE |  |

SignedServiceMetadata specific parameters

|  |  |
| --- | --- |
| PARAMETER | VALUE |
| PROCESS\_IDENTIFIER\_TYPE |  |
| PROCESS\_IDENTIFIER |  |
| TRANSPORT\_PROFILE |  |
| ENDPOINT\_REFERENCE |  |
| REQUIRE\_BUSINESSLEVEL\_SIGNATURE |  |
| SERVICE\_ACTIVATION\_DATE |  |
| SERVICE\_EXPIRATION\_DATE |  |
| CERTIFICATE |  |
| SERVICE\_DESCRIPTION |  |
| TECHNICAL\_CONTACT\_URL |  |
| SMP\_SERVER\_URL\_REDIRECT |  |
| CERTIFICATE\_UID\_REDIRECT |  |

Keystores and Certificates

If you have a keystore for testing purposes containing the certificates that are used for signing the SMP responses and you can share this with the Conformance Test team so it can be re-used. Alternatively, you can request, a new keystore to be generated upon registration to the Conformance Test Service.

Running tests on the test platform

Logging in to Minder

Use a browser to navigate to the Minder Test Platform hosted by CEF eDelivery[[1]](#footnote-1) and enter the username/password combination you have received upon registration to the Conformance Test Service.

Click the "Inventory" tab and select the test group SMP Test Assertions.

If the group has been selected, all the test assertions belonging to this group are displayed.

Click the tab "Test Suites" to select the test suite that starts with the name of your software implementation.

The screen that is displayed shows all the test assertions that can be run against your instances.

Use the button "Run All Tdls" to run all test assertions in sequence or Use the button "Run Selected Tdls" to run only a specific set of test assertions in sequence.

The test platform will now ask the visibility settings of the test run.

* Public: All registered users can see the details of the test run.
* Protected: All Test Designers can see the details of the test run.
* Private: Only the owner can see the details of the test run.

The recommended setting is Protected. This will prevent that other software implementers that use the platform can see each other's test results while still allowing the Test Designers and administrators of the Test Platform to monitor the results of the tests.

The progress of the test execution can be followed in the "Job Queue" panel on the right or by selecting the "Test Monitor" tab at the top of the page.

Once a test run is finished the "Batch Job Details" are available at the bottom of the page and a test report can be generated by clicking the buttons "Report All Runs" or "Report Selected Runs".

SMP Basic Connectivity Tests

Before executing the test assertions that are relevant for passing the SMP conformance testing, it is recommended that the SMP Basic Connectivity Tests are executed. They are named TAbase1 (Basic Test for SMP – Service Group) and TAbase2 (Basic Test for SMP - Signed Service Metadata).

The SMP Basic Connectivity Tests are a group of tests to verify the connectivity to the Minder Test Platform only and to make sure that a basic ServiceGroup and SignedServiceMetadata request can be executed without issues against the system under test.

Annex

Not applicable

Contact information

|  |
| --- |
| CEF Support Team  By email: CEF-EDELIVERY-SUPPORT@ec.europa.eu  Support Service: 8am to 6pm (Normal EC working Days) |

1. <http://13.81.109.44:9000> or <https://edelconf.westeurope.cloudapp.azure.com:9001> [↑](#footnote-ref-1)