OOTS Projectathon – Candidate test scenarios

Draft version for discussion in OOTS sub-groups

V0.8 – 27/02/2023

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# Candidate Projectathon test scenarios

Abbreviations:

|  |  |
| --- | --- |
| Abbreviation | Meaning |
| CS | Common Service |
| DS | Data Service |
| DSD | Data Services Directory |
| EB | Evidence Broker |
| EDM | [Exchange Data Model](https://ec.europa.eu/digital-building-blocks/wikis/display/TDD/4.1+-+Introduction+to+Exchange+Data+Model+and+Protocol+-+Q4+2022) |
| ER | Evidence Requester |
| EP | Evidence Provider |
| OOTS | Once Only Technical System |
| RegRep | [OASIS RegRep V4 Query Protocol](https://docs.oasis-open.org/regrep/regrep-core/v4.0/os/regrep-core-rs-v4.0-os.html#__RefHeading__32245_422331532) |

Summary of scenarios (not including maintenance scenarios), main test case variations are highlighted

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Parameter | Values | | | | | | | | | |
| Test ID | TC01 | TC02 | TC03 | TC04 | TC05 | TC06 | TC07 | TC08 | TC09 | TC10 |
| Data subject | Natural person | Natural person | Natural person | Natural person | Natural person | Natural person | Natural person | Natural person | Natural person | Natural person |
| Nr of evidences returned | 1 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 1 |
| Type of evidences returned | PDF | N/A | N/A | N/A | PDF | PDF | PDF | N/A | N/A | XML |
| Common Service lookups | EB  DSD | EB  DSD | EB  DSD | EB  DSD | EB  DSD, including a DSD conversation | EB  DSD | EB  DSD | EB  DSD | EB  DSD | EB  DSD |
| Preview included | NO | NO | NO | NO | NO | YES | YES – at 2 diff. EPs | YES – rejection by user | YES - timeout | YES - transformation |
| Reauthentication at EP side | NO | NO | NO | NO | NO | YES | YES – at 2 diff. EPs | YES | YES | YES |
| Dynamic test data | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO |
| Kind of response | Successful | Failure - Error | Failure - Error | Failure - Error | Successful | Successful | Successful | Failure - Error | Failure - Error | Successful |
| Complexity | Basic | Basic | Basic | Basic | **Moderate** | **Moderate** | **Advanced** | **Moderate** | **Moderate** | **Advanced** |

## 

## Scenarios without preview

### TC01: Basic evidence request without preview

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 1 |  |
| Type of evidences returned | PDF |  |
| Common Service lookups | EB  DSD |  |
| Preview included | NO |  |
| Reauthentication at EP side | NO |  |
| Dynamic test data | NO |  |
| Complexity | Basic |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from the Evidence Provider. The user is a Natural Person.

No preview or reauthentication is performed.

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata.

The **actual evidence exchange completes successfully** and the **Procedure Portal can use the evidence in the procedure**.

### TC02: Basic evidence request without evidence match

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 0 |  |
| Type of evidences returned | N/A |  |
| Common Service lookups | EB  DSD |  |
| Preview included | NO |  |
| Reauthentication at EP side | NO |  |
| Dynamic test data | NO |  |
| Complexity | Basic |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from the Evidence Provider. The user is a Natural Person.

No preview or reauthentication is performed.

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence that would be expected to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata.

However, **the actual evidence exchange fails** **because there is an issue at DS side** resulting in no matching evidence to be returned. Instead, **a response with an empty registry object list** is returned immediately to the Procedure Portal.

### TC03: Evidence request error flow due to Base Registry error

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 0 |  |
| Type of evidences returned | N/A |  |
| Common Service lookups | EB  DSD |  |
| Preview included | NO |  |
| Reauthentication at EP side | NO |  |
| Dynamic test data | NO |  |
| Complexity | Basic |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from the Evidence Provider. The user is a Natural Person.

No preview or reauthentication is performed.

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence that would be expected to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata.

However, **the actual evidence exchange fails because the Base Registry is down at DS side** resulting in no matching evidence to be returned. Instead **a TimeoutException (in case the error was identified as a timeout) or QueryException (as catch-all error for errors occurring at server side) response** is returned immediately to the Procedure Portal.

### TC04: Evidence request error flow due to Access Point error

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 0 |  |
| Type of evidences returned | N/A |  |
| Common Service lookups | EB  DSD |  |
| Preview included | NO |  |
| Reauthentication at EP side | NO |  |
| Dynamic test data | NO |  |
| Complexity | Basic |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from the Evidence Provider. The user is a Natural Person.

No preview or reauthentication is performed.

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence that would be expected to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata.

However, the **actual evidence exchange fails because the Access Point base is down at DS side**. Firstly, this **results in the Access Point at Procedure Portal side to retry sending the evidence request according to the eDelivery retry policy**. After this retry period times out, **the Access Point at Procedure Portal side generates an eDelivery error (from C2 to C1) to be sent to the Procedure Portal**.

### TC04\_b

A variation to this test case is that the eDelivery AP at EP side is brought back up and running during the retry period.

This would result in a successful flow according to the results of TC01.

### TC05: Evidence request, with an additional DSD conversation, without preview

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 1 |  |
| Type of evidences returned | PDF |  |
| Common Service lookups | EB  DSD, including a DSD conversation |  |
| Preview included | NO |  |
| Reauthentication at EP side | NO |  |
| Dynamic test data | NO |  |
| Complexity | **Moderate** |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from the Evidence Provider. The user is a Natural Person.

However, **the Common Service lookup to the DSD does not immediately result in a match, because additional User Provided Attributes are needed to select the proper Evidence Provider**. This means that the first DSD request will result in a message that **an additional attribute** (pre-defined and pre-configured) **is needed**. As a result, the Procedure Portal asks the user to provide the additional attribute after which a new DSD lookup is made, which results in the correct Evidence Provider to be used.

No preview or reauthentication is performed.

The **EB lookup** (not the DSD lookup in this case) **can optionally be omitted if the data is hardcoded or cached at Procedure Portal side**. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD, **additional attribute to be requested**) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence **to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata**.

The **actual evidence exchange completes successfully and the Procedure Portal can use the evidence in the procedure**.

## Scenarios with preview

### TC06: Basic evidence request with preview and reauthentication

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 1 |  |
| Type of evidences returned | PDF |  |
| Common Service lookups | EB  DSD |  |
| Preview included | YES |  |
| Reauthentication at EP side | YES |  |
| Dynamic test data | NO |  |
| Complexity | **Moderate** |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from the Evidence Provider. The user is a Natural Person.

**Preview and reauthentication are performed at EP side.**

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata.

**As preview and reauthentication are needed at EP side, the first evidence request by the ER results in the EP returning a RegRep response containing a preview link.**

**The ER can already in parallel with the user redirection resubmit its second evidence request to the EP**. However, **the EP will not fulfill this evidence request until the user has accessed the Preview Space, reauthenticated and requested to see the evidence to preview**.

**The ER redirects the user to the preview space at EP side.** There **the user reauthenticates successfully, previews the PDF evidence, rendered on the screen and confirms that this evidence can be exchanged**. In this test case, the reauthentication happens based on the same preconfigured identity data at EP side.

**The EP is notified of the decision of the user that the evidence is to be used and then successfully returns its evidence response (containing the actual selected evidence) to the ER**.

The actual evidence exchange **completes successfully** and the Procedure Portal can use the evidence in the procedure.

### TC06\_b

A **variation** to this test case is that **the identity information is dynamic**.

This means that the reauthentication at EP side happens based on a different source of user attributes than the ones preconfigured at ER side. As a result, the EP performs a custom reauthentication during preview and needs to perform an identity matching based on the two sets of attributes. In this variation, **the reauthentication and identity matching are successful and therefore the test case can be completed successfully like the base variant**.

### TC07: Evidence request with preview and reauthentication at two different Evidence Providers

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 2 |  |
| Type of evidences returned | PDF |  |
| Common Service lookups | EB  DSD |  |
| Preview included | YES | At two different Evidence Providers |
| Reauthentication at EP side | YES | At two different Evidence Providers |
| Dynamic test data | NO |  |
| Complexity | **Advanced** |  |

In this test case, the ER needs **two different evidences** as input to the procedure. In this test case, **the two different evidences come from 2 different EPs**.

For each evidence, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from each separate EP. The user is a Natural Person.

**Preview and reauthentication is performed at EP side.**

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at all sides based on the test configuration package to be provided.

The actual evidences to be exchanged are predefined PDF messages with pre-agreed OOTS EDM metadata.

**The evidence request redirects for the 2 different evidences are done in sequence for each separate evidence**.

As preview and reauthentication are needed at both EP sides, both separate first evidence requests for the two evidences by the ER result in the EPs separately returning a RegRep response containing a preview link.

**The ER can already in parallel with the user redirections resubmit its second evidence requests to the EP that responded with a preview link**. However, **the EPs will not fulfill these evidence request until the user has accessed the relevant Preview Space, reauthenticated and requested to see the evidence to preview**.

The ER chooses (e.g. depending on the order of the two responses with preview link or any other criterion of choice) to redirect **the user to the preview space at first EP side**. There **the user reauthenticates successfully, previews the PDF evidence, rendered on the screen and confirms that this evidence can be exchanged**. In this test case, the reauthentication happens based on the same preconfigured identity data at EP side.

**The first EP is notified of the decision of the user that the evidence is to be used and then successfully returns its evidence response (containing the actual selected evidence) to the ER**.

The ER chooses (e.g. depending on the order of the two responses with preview link or any other criterion of choice) to redirect **the user to the preview space at second EP side**. There **the user reauthenticates successfully, previews the PDF evidence, rendered on the screen and confirms that this evidence can be exchanged**. In this test case, the reauthentication happens based on the same preconfigured identity data at EP side.

**The second EP is notified of the decision of the user that the evidence is to be used and then successfully returns its evidence response (containing the actual selected evidence) to the ER**.

**Both of** **the actual evidence exchange completed successfully** and **optionally**, the ER can display the collection of the two evidences to the user and ask a final confirmation before they **can both be transferred to the procedure.**

### TC07\_b

A **variation** to this test case is that **the identity information is dynamic**.

This means that the reauthentication at both EP sides happens based on a different source of user attributes than the ones preconfigured at ER side. As a result, the EPs perform a custom reauthentication during preview and needs to perform an identity matching based on the two sets of attributes. **In this variation, the reauthentication and identity matching is successful and therefore the test case can be completed successfully like the base variant.**

### TC08: Evidence request with preview rejection by user and reauthentication

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 0 |  |
| Type of evidences returned | N/A |  |
| Common Service lookups | EB  DSD |  |
| Preview included | YES | Rejection by user |
| Reauthentication at EP side | YES |  |
| Dynamic test data | NO |  |
| Complexity | **Moderate** |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in **1 PDF evidence to be retrieved from the Evidence Provider**. The user is a Natural Person.

Preview and reauthentication is performed at EP side.

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata.

As preview and reauthentication are needed at EP side, the first evidence request by the ER results in the EP returning a RegRep response containing a preview link.

**The ER can already in parallel with the user redirection resubmit its second evidence request to the EP**. However, **the EP will not fulfill this evidence request until the user has accessed the Preview Space, reauthenticated and requested to see the evidence to preview**.

The ER redirects the user to the preview space at EP side. There the user reauthenticates successfully, previews the PDF evidence, rendered on the screen and **rejects that this evidence can be exchanged**. In this test case, the reauthentication happens based on the same preconfigured identity data at EP side.

**The EP is notified of the decision of the user that the evidence is NOT to be used and then returns its evidence response with an empty registry object list to the ER**.

### TC08\_b

A **variation** to this test case is that the **identity information is dynamic**.

This means that the reauthentication at both EP sides happens based on a different source of user attributes than the ones preconfigured at ER side. As a result, the EPs perform a custom reauthentication during preview and needs to perform an identity matching based on the two sets of attributes. **In this variation, the reauthentication and identity matching is successful and therefore the test case can be completed successfully like the base variant.**

### TC09: Evidence request with preview error (closure or timeout) and reauthentication

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 0 |  |
| Type of evidences returned | N/A |  |
| Common Service lookups | EB  DSD |  |
| Preview included | YES | Preview window closure by user or preview window timeout due to user inactivity |
| Reauthentication at EP side | YES |  |
| Dynamic test data | NO |  |
| Complexity | **Moderate** |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, resulting in 1 PDF evidence to be retrieved from the Evidence Provider. The user is a Natural Person.

Preview and reauthentication is performed at EP side.

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence to be exchanged is a predefined PDF message with pre-agreed OOTS EDM metadata.

As preview and reauthentication are needed at EP side, the first evidence request by the ER results in the EP returning a RegRep response containing a preview link.

**The ER can already in parallel with the user redirection resubmit its second evidence request to the EP**. However, **the EP will not fulfill this evidence request until the user has accessed the Preview Space, reauthenticated and requested to see the evidence to preview**.

The ER redirects the user to the preview space at EP side. There the user reauthenticates successfully, previews the PDF evidence, **rendered on the screen but closes the preview window (or stays idle, resulting in a timeout) without stating whether the evidence can be used.** In this test case, the reauthentication happens based on the same preconfigured identity data at EP side.

**The EP is notified of the closed preview area (or of the preview timeout) and therefore decides that the evidence is NOT to be used and then returns a QueryResponseError response with a TimeoutExceptionType to the ER**.

### TC10: Evidence request with preview (including human readable transformation) and reauthentication

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Data subject | Natural person |  |
| Nr of evidences returned | 1 |  |
| Type of evidences returned | XML |  |
| Common Service lookups | EB  DSD |  |
| Preview included | YES | Including human readable transformation (e.g. XSLT based) |
| Reauthentication at EP side | YES |  |
| Dynamic test data | NO |  |
| Complexity | **Advanced** |  |

In this test case, the Procedure Portal performs the relevant Common Service lookups, **resulting in 1 structured evidence (XML based, preconfigured and provided beforehand)** to be retrieved from the Evidence Provider. The user is a Natural Person.

Preview and reauthentication is performed at EP side.

The Common Service lookups can optionally be omitted if the data is hardcoded or cached at Procedure Portal side. In this case, this omission must be documented and explained in the test report.

All supporting data (identity data, evidence related data in EB, EP data in DSD) is preconfigured at both sides based on the test configuration package to be provided.

The actual evidence to be exchanged is **a predefined structured evidence (XML based**) with pre-agreed OOTS EDM metadata.

As preview and reauthentication are needed at EP side, the first evidence request by the ER results in the EP returning a RegRep response containing a preview link.

**The ER can already in parallel with the user redirection resubmit its second evidence request to the EP**. However, **the EP will not fulfill this evidence request until the user has accessed the Preview Space, reauthenticated and requested to see the evidence to preview**.

The ER redirects the user to the preview space at EP side. There the user reauthenticates successfully, **previews the XML evidence**, **rendered on the screen after applying a human readable transformation (e.g. XSLT based, preconfigured and provided beforehand)** and confirms that this evidence can be exchanged. In this test case, the reauthentication happens based on the same preconfigured identity data at EP side.

**The EP is notified of the decision of the user that the evidence is to be used and then successfully returns its evidence response (containing the actual selected evidence) to the ER**.

The actual evidence exchange **completes successfully** and the Procedure Portal can use the evidence in the procedure.

### TC10\_b

A **variation** to this test case is that the identity information is dynamic.

This means that the reauthentication at EP side happens based on a different source of user attributes than the ones preconfigured at ER side. As a result, the EP performs a custom reauthentication during preview and needs to perform an identity matching based on the two sets of attributes. In this variation, **the reauthentication and identity matching is successful and therefore the test case can be completed successfully like the base variant**.

## Maintenance flows

### TC11: DSD maintenance GUI

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Common Service lookups | DSD |  |
| Common Server instance | EC instance |  |
| Common Server update mechanism | GUI |  |
| Dynamic test data | YES | Preconfigured data set will be modified |
| Complexity | Basic |  |

In this test case, the ER performs a DSD lookup, resulting in evidence provider data for the EP which is preconfigured and provided beforehand.

Then **the EP changes its data in the DSD**, making use of the Common Services GUI.

Afterwards, (outside of the CS lookup caching window) the **ER performs an identical DSD lookup, resulting in the updated evidence provider data for the EP**.

### TC12: DSD maintenance LCM

|  |  |  |
| --- | --- | --- |
| Parameter | Value | Comment |
| Common Service lookups | DSD |  |
| Common Server instance | EC instance |  |
| Common Server update mechanism | LCM interface | LCM xml message needs to submitted to the eDelivery AS4 instance of the EC Common Server |
| Dynamic test data | YES | Preconfigured data set will be modified |
| Complexity | Advanced |  |

In this test case, the ER performs a DSD lookup, resulting in evidence provider data for the EP which is preconfigured and provided beforehand.

Then **the EP changes its data in the DSD, making use of the Common Services LCM interface**.

Afterwards, (outside of the CS lookup caching window) the **ER performs an identical DSD lookup, resulting in the updated evidence provider data for the EP**.