Once-Only Technical System Projectathon

Participant playbook V3.00

Annex 2: how to do pre-tests in Gazelle

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Document history

Version	Date	Change editors	Changes
1.01	21/03/2023	Marie-Laure Watrinet (EC, DIGIT, EXT)	Creation of Annex 2 as independent annex of the playbook
2.00	22/05/2023	Marie-Laure Watrinet (EC, DIGIT, EXT)	Update of Annex 2 for June Projectathon
3.00	04/08/2023	Marie-Laure Watrinet (EC, DIGIT, EXT)	Update of Annex 2 for October Projectathon

Annex 2: Gazelle pre-Projectathon Tests Manual

Pre-requisites

Registration has been completed and SUTs have been accepted.

Overview

What you need to do during Pre-projectathon phase:

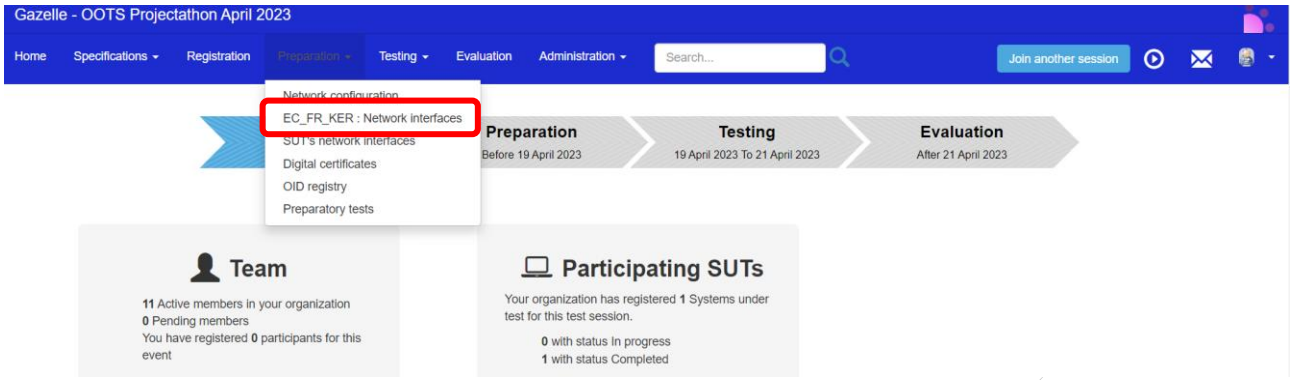
1. Share your SUT network in Gazelle
    a) Declare your SUT hostname and IP address
    b) Validate and approve SUT Network Interface list generated by Gazelle
2. Upload and share your public AS4 certificate and C3 and C4 identifiers in Gazelle
3. Perform preparatory tests
4. Perform connectivity tests

1 Share your network in Gazelle

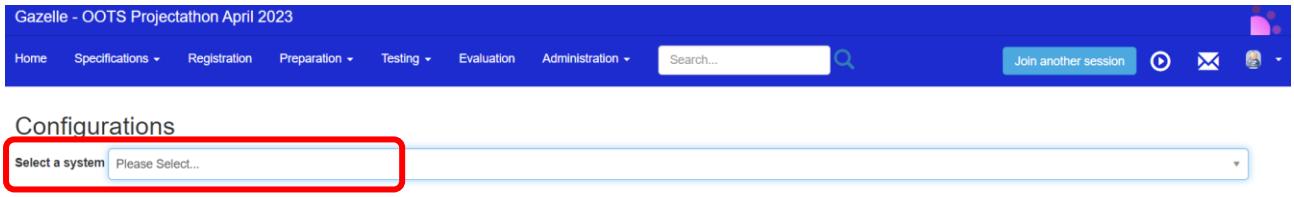
During the Projectathon, you will be asked to test against other systems under test. It implies knowing the endpoints where to send data. Thus, Gazelle offers a feature to share the connectivity details (IP address, port, URL) of the webservices your system exposes.
The technical team has generated default configurations for your endpoints based on your systems' registration. Your task is to update those default entries so they reflect the actual configuration of your system under test.
By default, one host is generated for each system you have registered. You have the ability to change which host is used for each single entry in the list of configuration. It means that you can have several systems using the same host. You can also create additional hosts if needed.

1.1 Declare your hosts

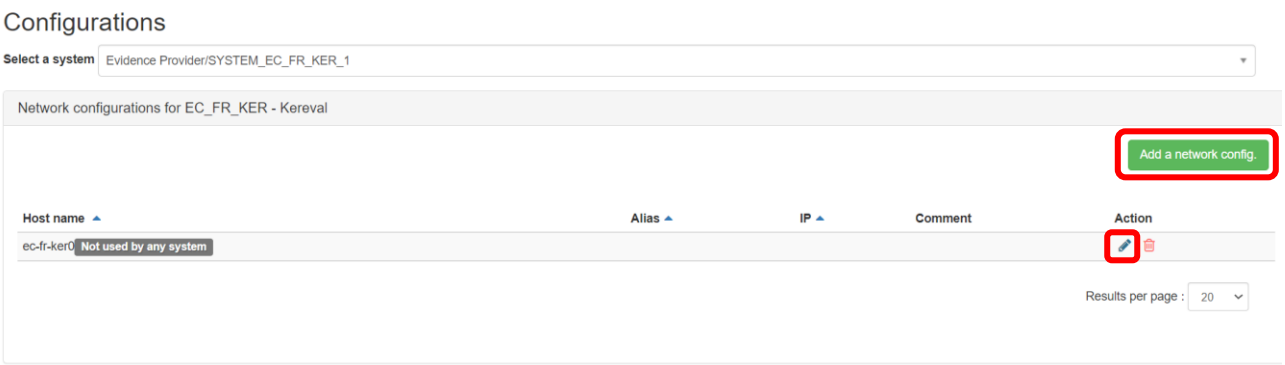
1. Go to the Menu “Preparation > *Your Org*: Network Interface”



2. In the dropdown, choose a SUT



3. In the “Network configuration for *Your org*” section, you will need to declare all the hosts your systems are using. This information is needed for other participants to configure their firewall and accept incoming requests.
    - If your SUT acts as a server, Gazelle automatically generates a default host entry for your SUT. You can modify the default values by clicking on the Edit button.
    - If your SUT acts as a client and there is no default host being generated by Gazelle, you should add the host by clicking on the “Add a network config.” Button.

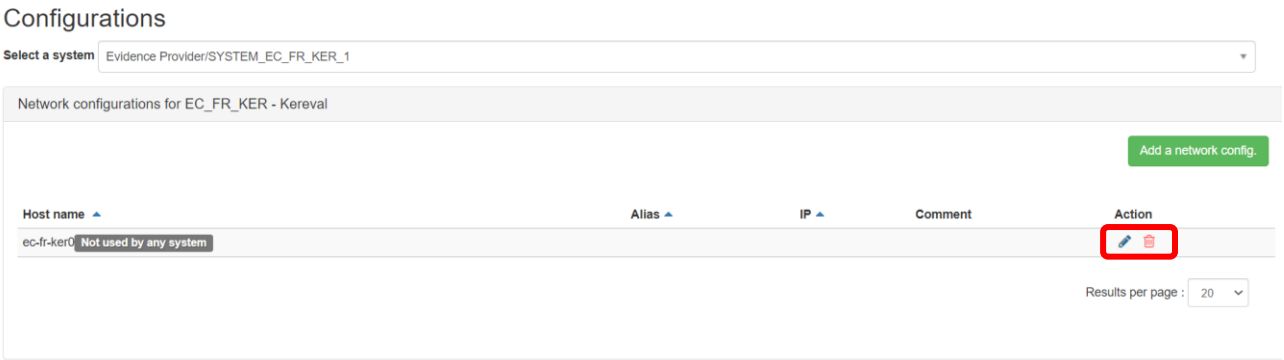


4. Fill up at least:
    a. the “host name” with the FQDN of your system
    b. the “IP Address” fields with the public IP address of your system

5. and save.

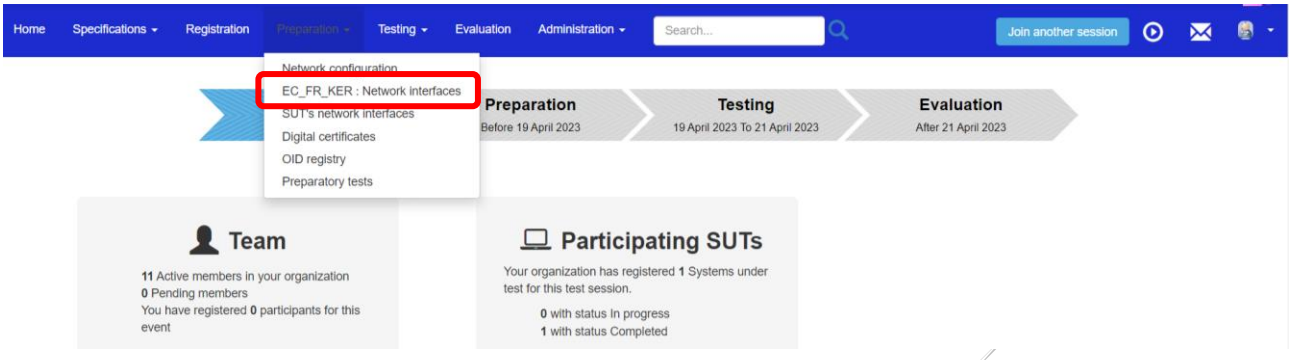
6. You can add as many hosts as you need.

7. You can edit or delete the hosts configurations you created, with the Edit or Delete icons.

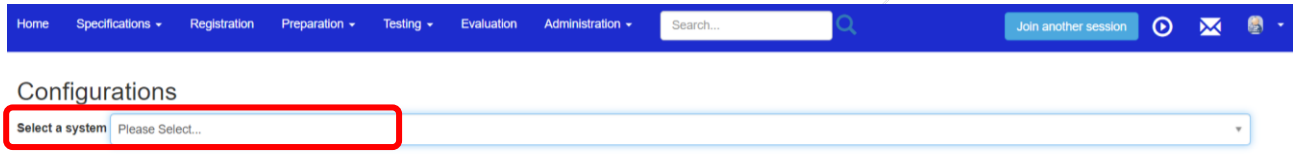


1.2 Validate and approve your systems network configuration

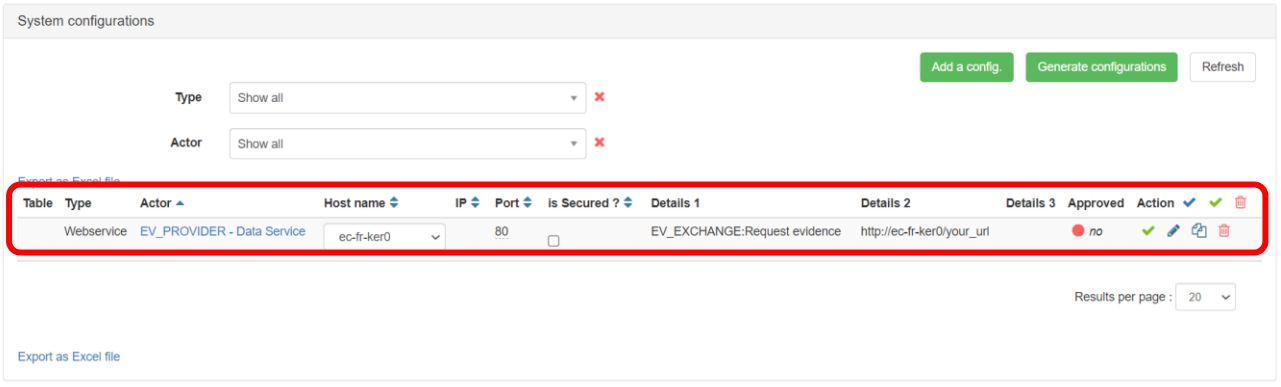
1. Go to the Menu “Preparation > *Your Org*: Network Interface”



2. In the dropdown, select one SUT



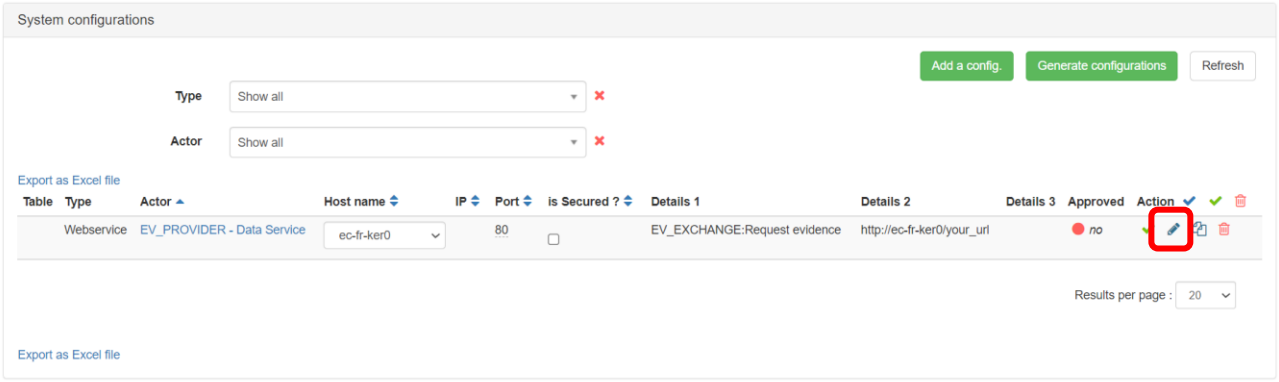
3. In the “System configuration” section, if your system provides services, you will see that Gazelle has generated default configurations for your system. In the following steps, you will edit and approve these configurations. If your system only acts as a client, Gazelle has not generated any configuration for your SUT, you can skip this section for this SUT.



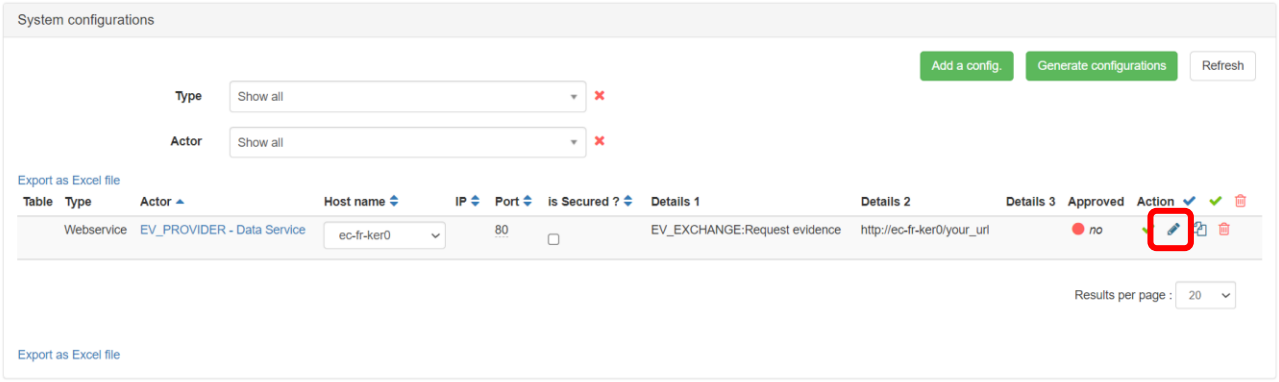
4. Click on the “edit” icon to edit the values:
    a. Select the right host
    b. Edit the port used

c. Indicate if the communication is secured or not secured.

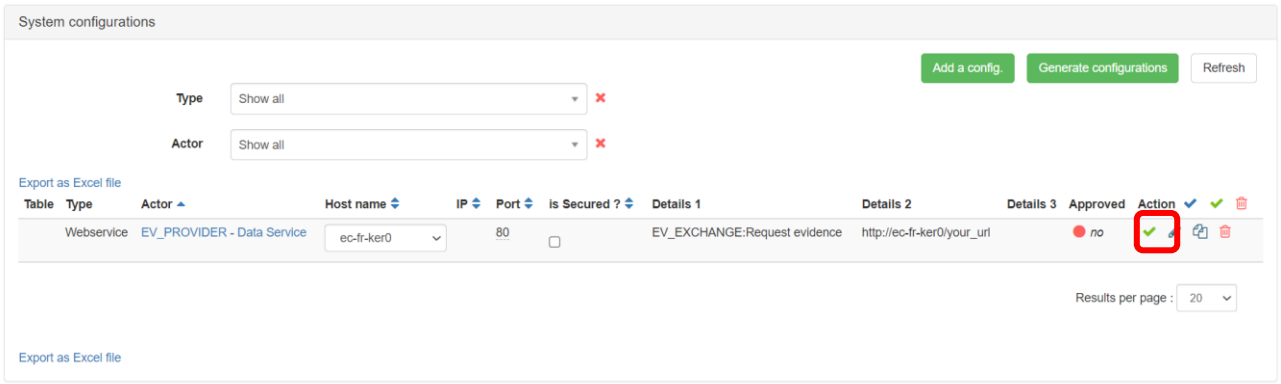
d. For web services, edit the URL



5. Once the SUT network interfaces configuration is ready, you can validate it by clicking on the "Approved" button. This will inform others that your configuration has been validated and they can use it.



6. If you use secure and unsecure ports, you can duplicate the row by clicking on the button:



7. Your test partners will use this information to perform the connectivity test and peer-to-peer tests with your SUT during the event.
8. Repeat the steps for all your SUTs

2 Share your certificates

2.1 Share your AS4 public certificate and C3, C4 identifiers

- Before exchanging AS4 messages with your test partners, you need to exchange with your test partners:

  a) The AS4 public certificates

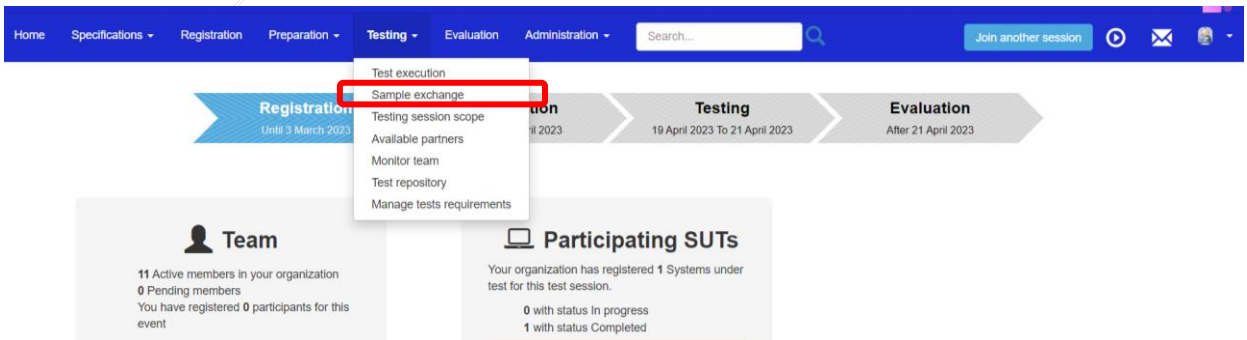
  b) The C3 and C4 identifiers

  To facilitate the exchange of the certificates and identifiers between the participants, all the participants are required to upload/share their SUTs AS4 public certificates and identifiers in Gazelle. Then the participants can download the AS4 public certificates and identifiers of their test partners from Gazelle and configure their SUTs accordingly before exchanging AS4 messages with their test partners during the event.

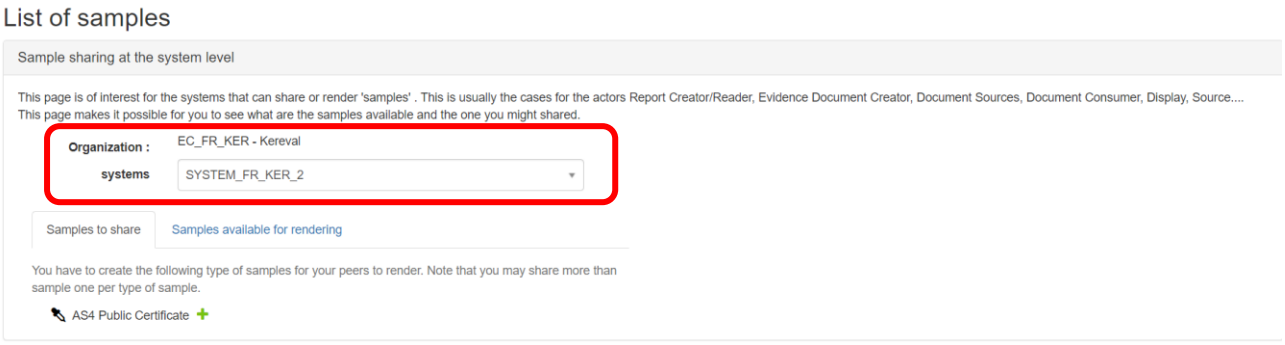
2.1.1 Upload your AS4 public certificate and share your C3, C4 identifiers

1. Compress your AS4 public certificate in zip format.

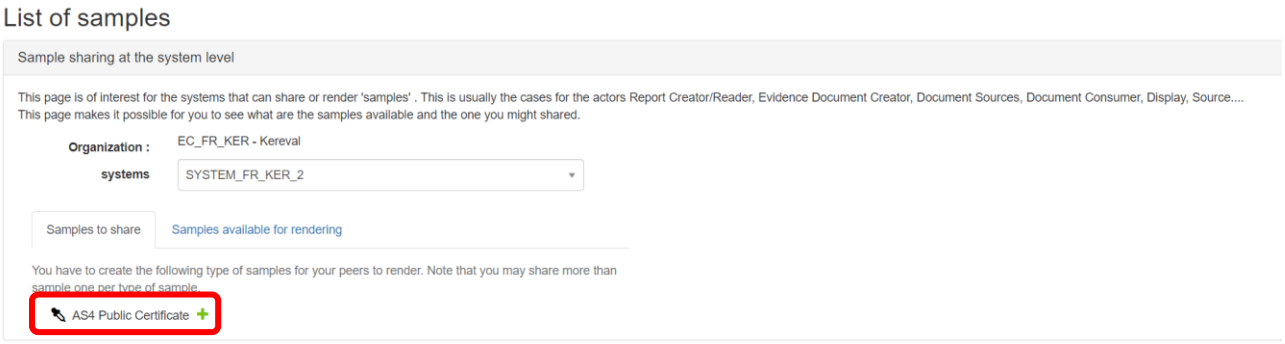
2. Go to the menu “Testing” > “Sample exchange”



3. In the dropdown list, select your System Keyword.

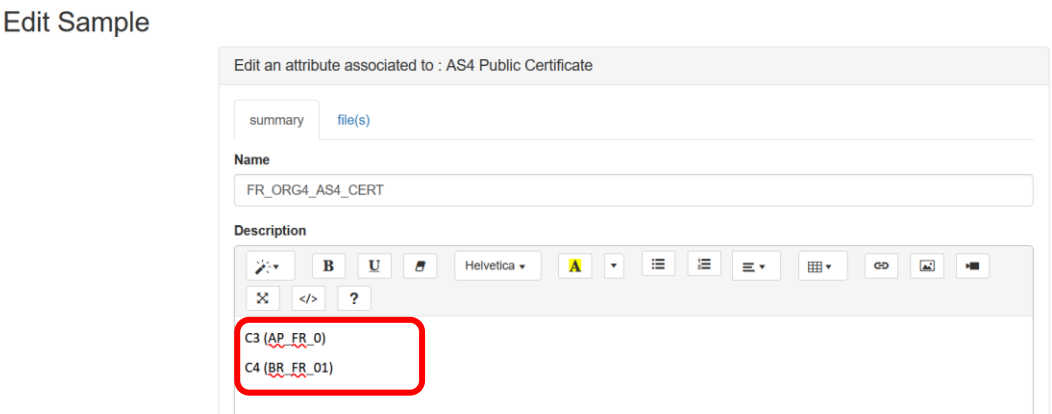


4. In the tab “Samples to share”, you can click on the “+” sign to add your certificate.

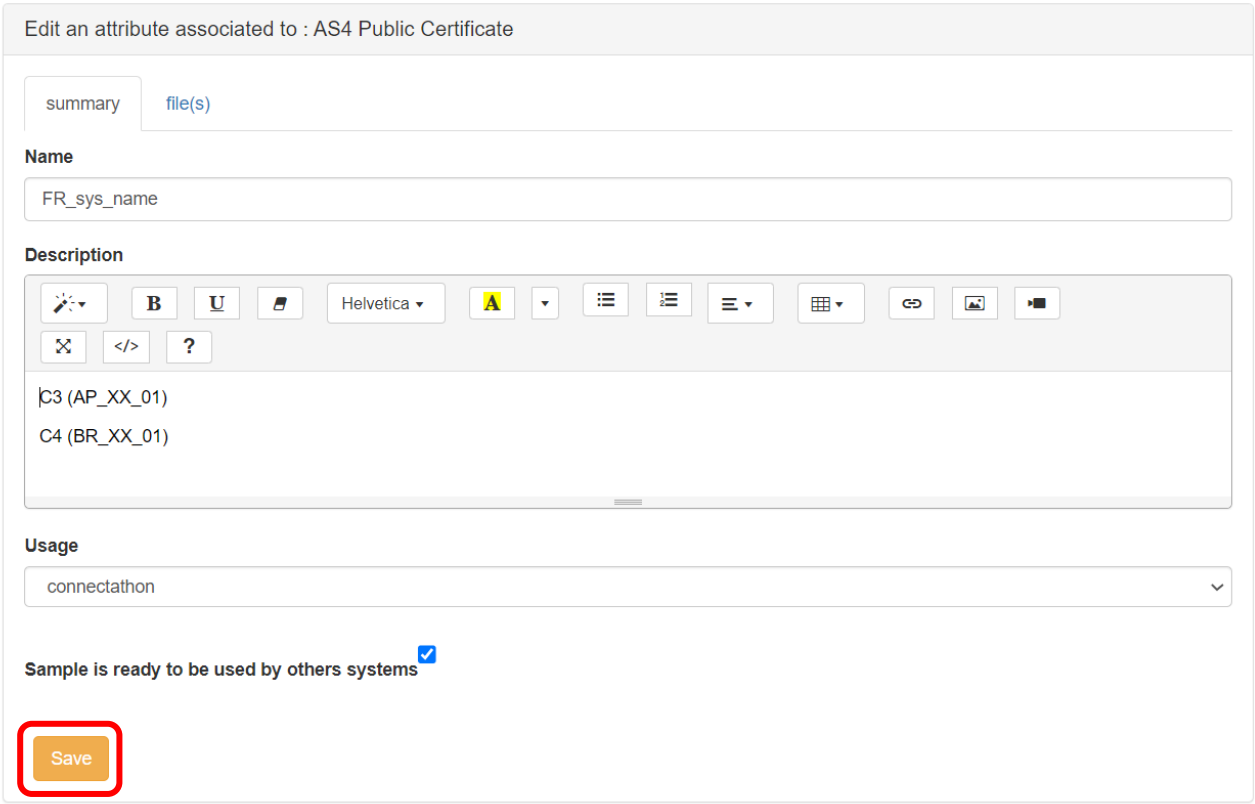


5. Indicate the name of your system and click the “Confirm” button.

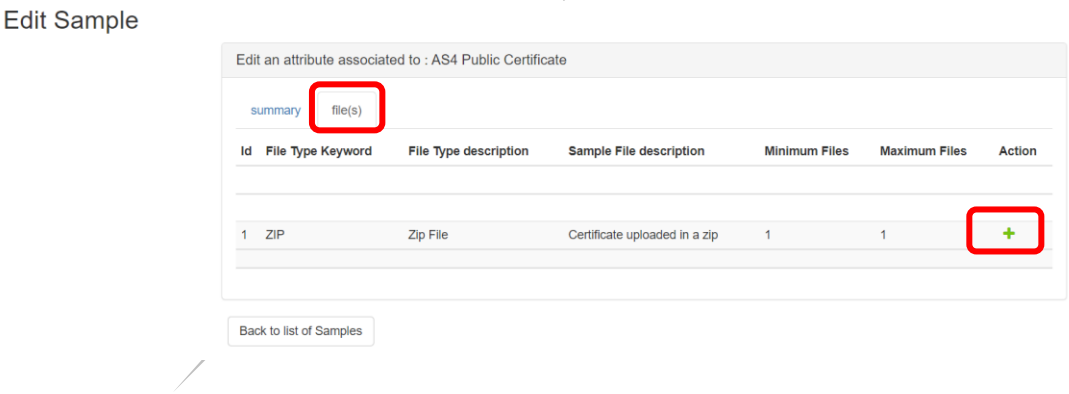
6. In the description, indicate the C3 and C4 identifiers for AS4 messaging (XX is the country code):
   a) C3 (AP_XX_01)
   b) C4 (BR_XX_01).



7. Click on the save button below



8. In the “file(s)” tab, upload your Public AS4 Certificate (in zip format) by clicking on the “+” sign.

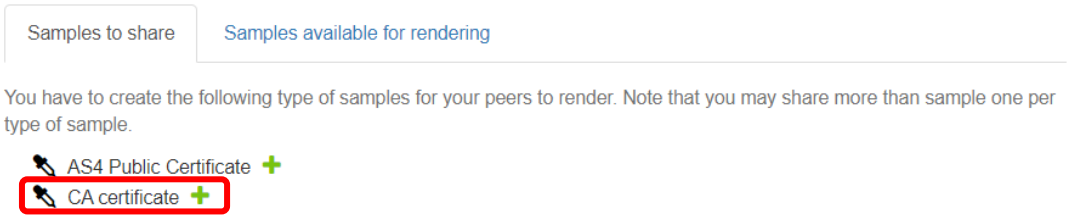


9. Once you have successfully declared your AS4 configuration, you can go back to the list of samples.

10. Repeat the steps in this section for all your SUTs.

2.2 Upload your CA certificate

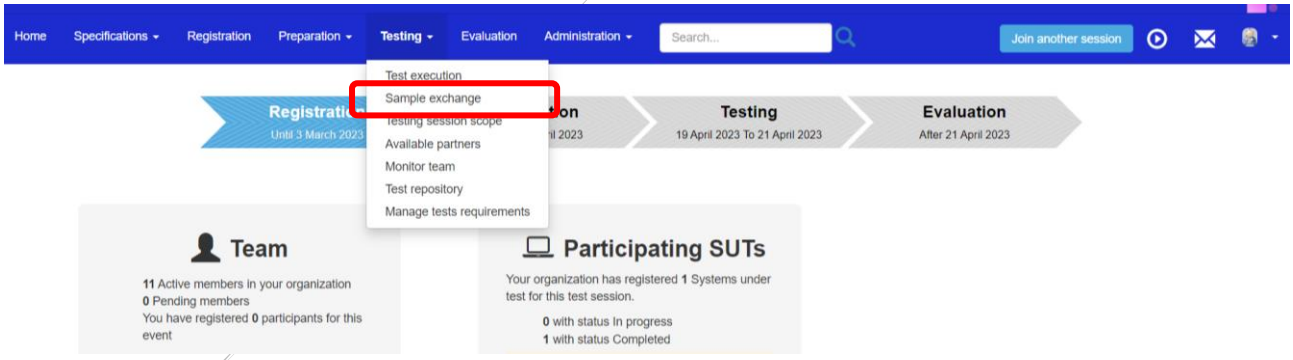
If you are not using a known Certificate Authority, you need to upload your CA certificate to Gazelle.
Follow the steps in 2.0.1 Upload your AS4 public certificate and share your C3, C4 identifiers (skip step 4), select CA certificate in the "Sample to share" tab.



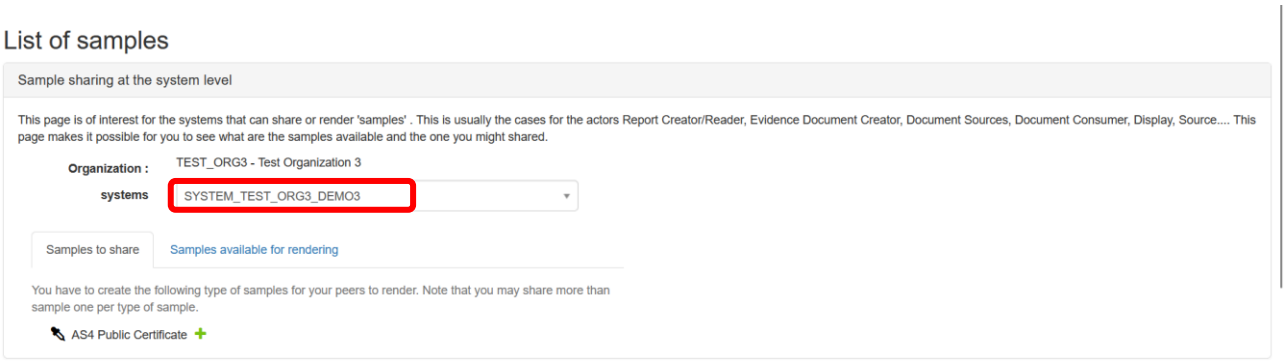
2.3 Download your test partner's AS4 public certificate and C3 and C4 identifiers

- These steps will be performed during the connectivity test.

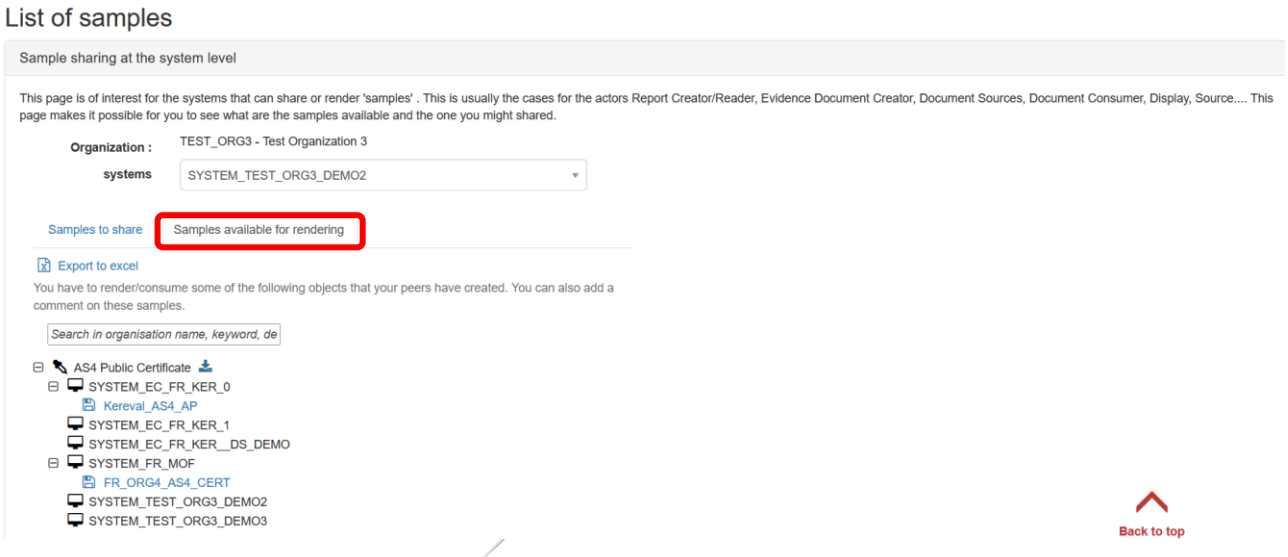
1. Go to the menu "Testing" > "Sample exchange"



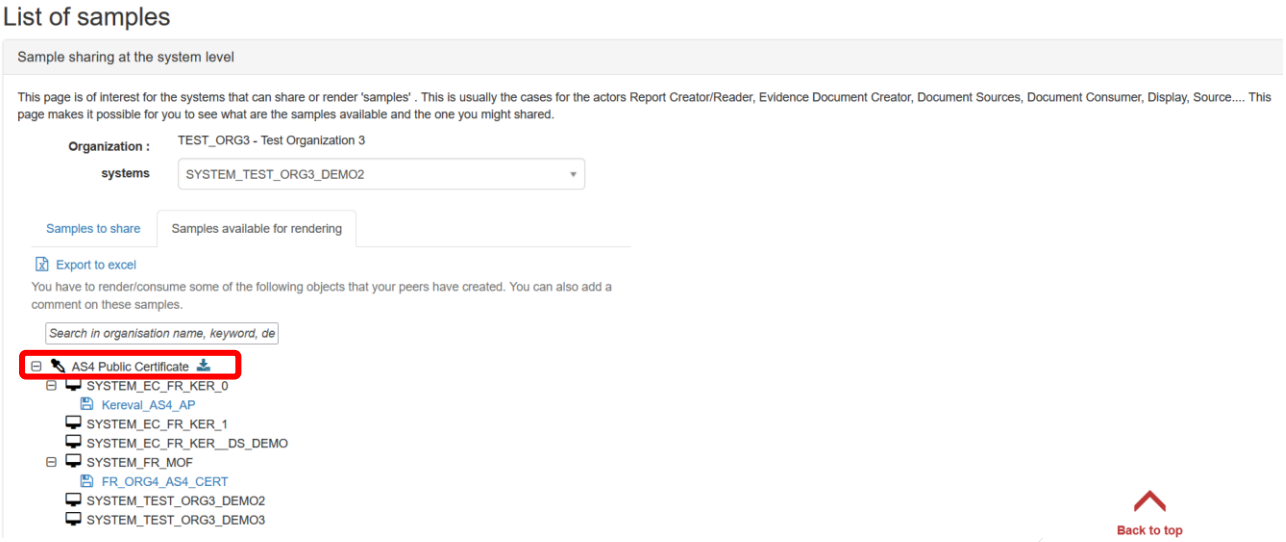
2. Select your system which need to exchange the AS4 public certificate for example Evidence Requester and Evidence Provider.



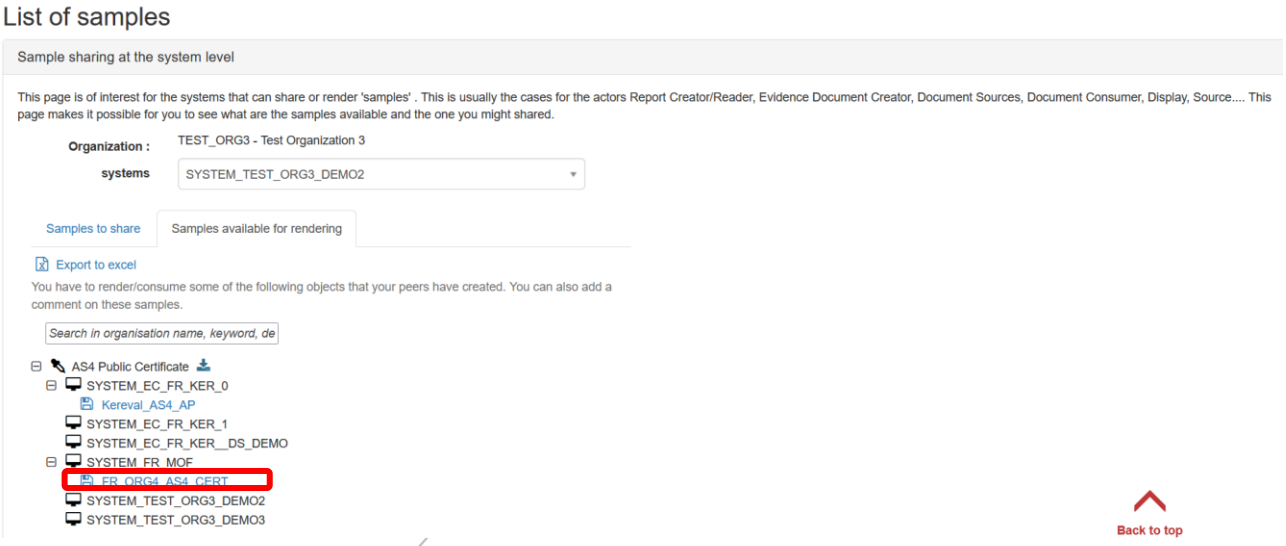
3. Click on “Sample available for rendering” tab, you will see all the AS4 public certificate shared by the participants.



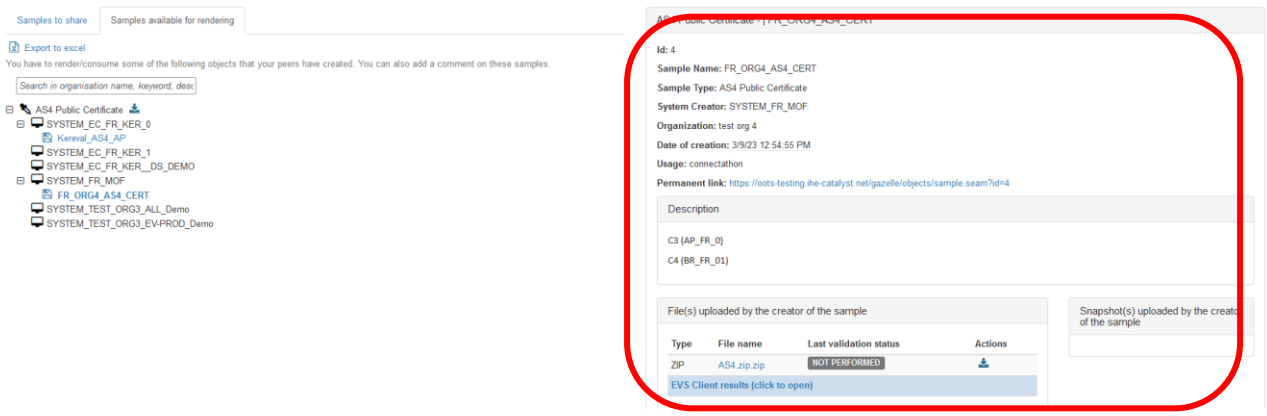
4. You can download
   a) all of the shared certificates by clicking on the icon. Or,



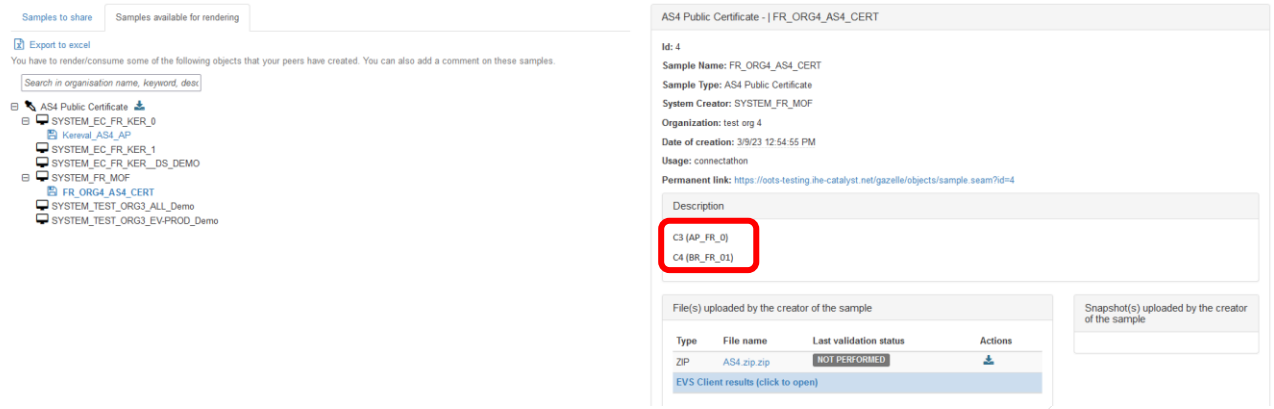
b) select certificate you are interested in by clicking on the icon.



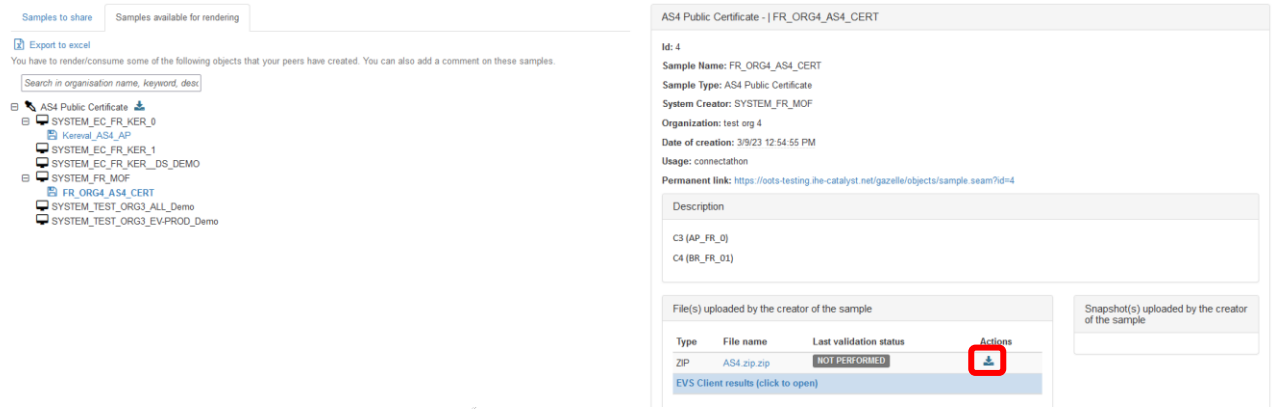
5. The detail information of your test partner AS4 public certificate is displayed.



6. The C3 and C4 identifiers are stated in the description section, configure your system with these identifiers.



7. The AS4 public certificate is compressed in zip format, click on the icon to download the zip file.



8. Once the file is downloaded successfully. Unzip the file and configure your SUT with your test partner's AS4 public certificate.

2.4 Download your test partner's CA certificate

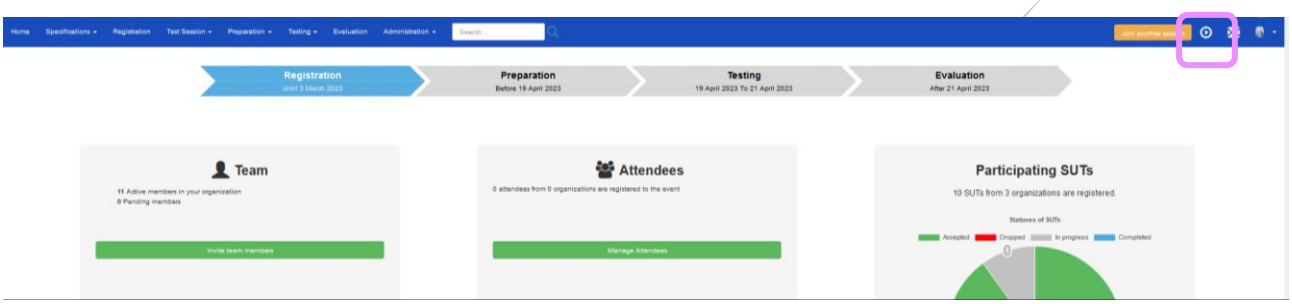
Follow the steps in 2.0.3 Download your test partner's AS4 public certificate and C3 and C4 identifiers (skip step 6), select **CA certificate** in the "Sample to share" tab.

3 Execute preparatory tests in Gazelle

The preparatory tests are no-peer tests to help you validate and prepare your SUTs before the event. Gazelle generates list of test cases that need to be executed based on the registered profile/actor/option combinations.

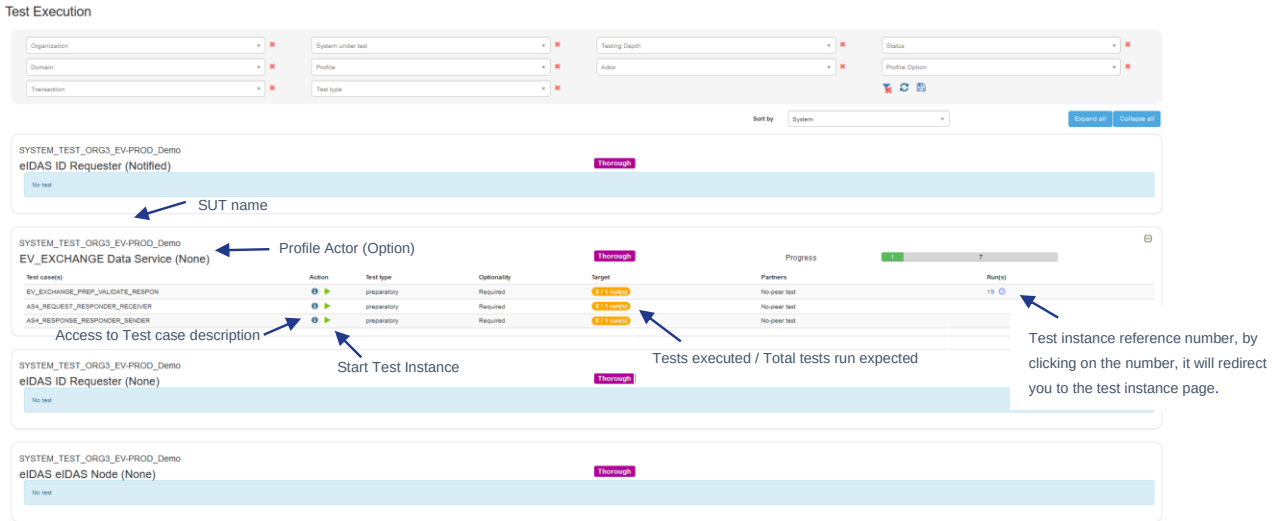
3.1 Access test cases

1. To access to the test execution page, click on the icon on the top right menu, or select “Test execution” in the “Testing”menu.

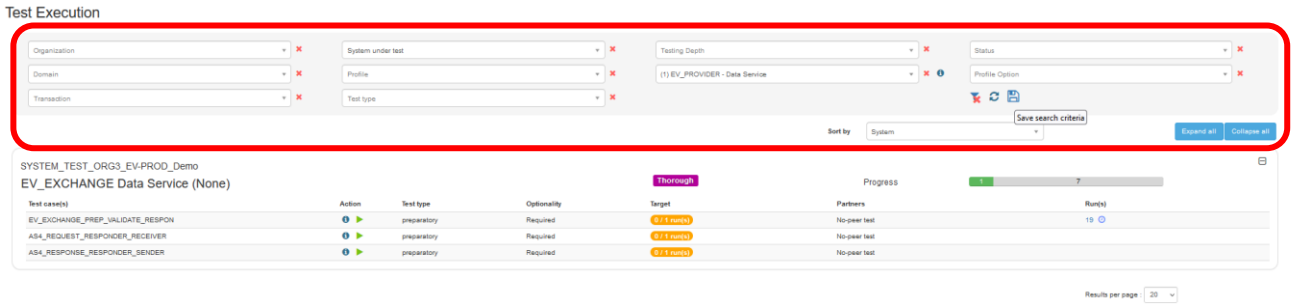


2. The Test Execution page lists all the tests that the system should cover.

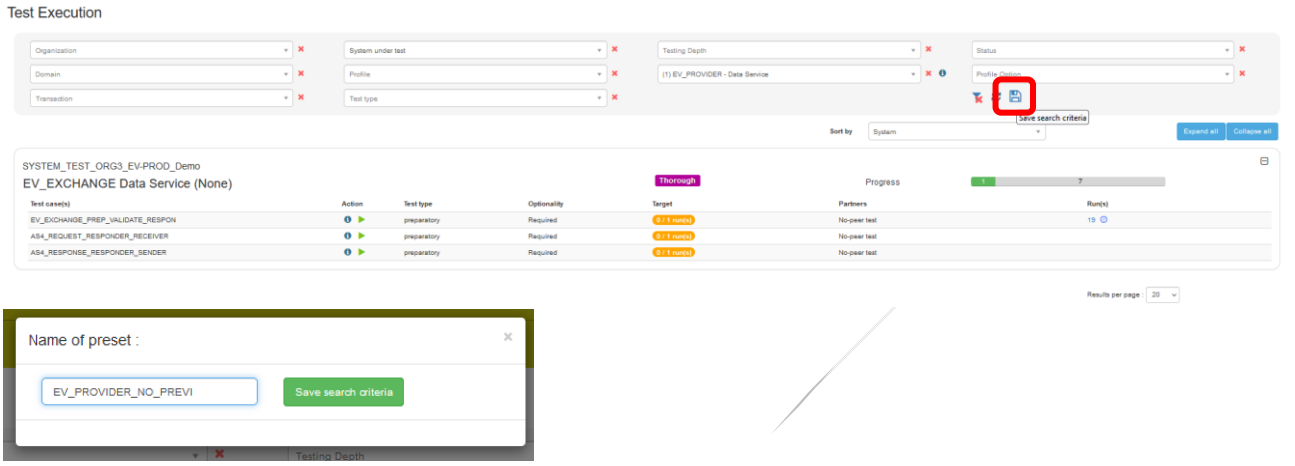
   The test cases are grouped by the SUT and Profile/Actor/Option.



3. The test execution page can be filtered according to several criteria. When you select more than one criteria, the AND clause applies.

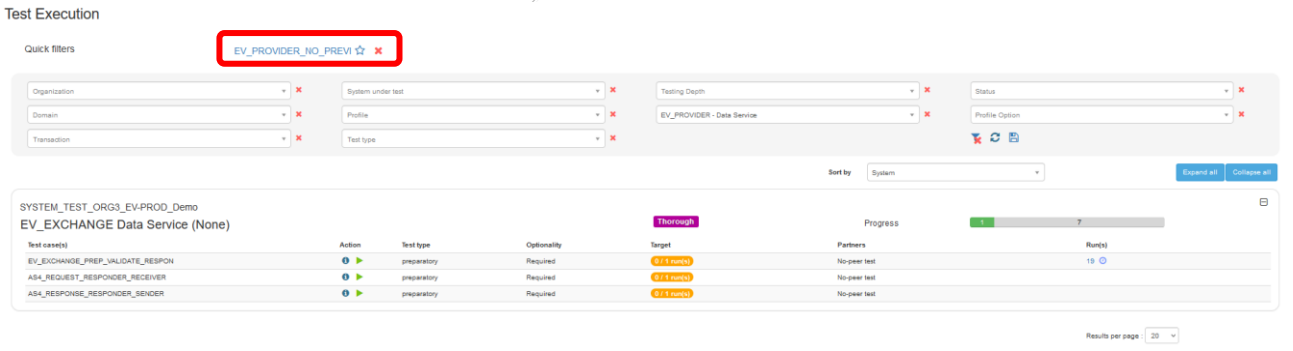


4. You can save the filter by click on the icon and then enter a Name to the filter.



5. You can access to the saved filter by clicking on the filter name you created.

   You can set the filter as favorite/default filter by clicking on the ☆ icon.
   To delete the saved filter by clicking on the ✖ icon.

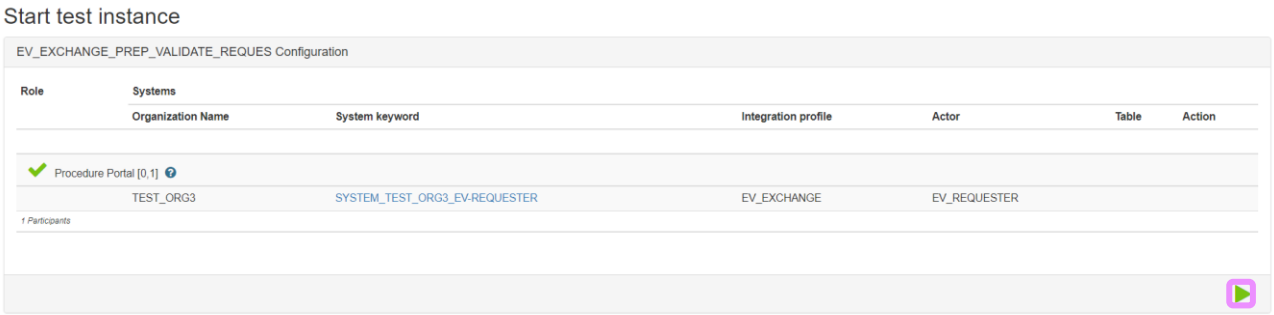


3.2 Execute the test

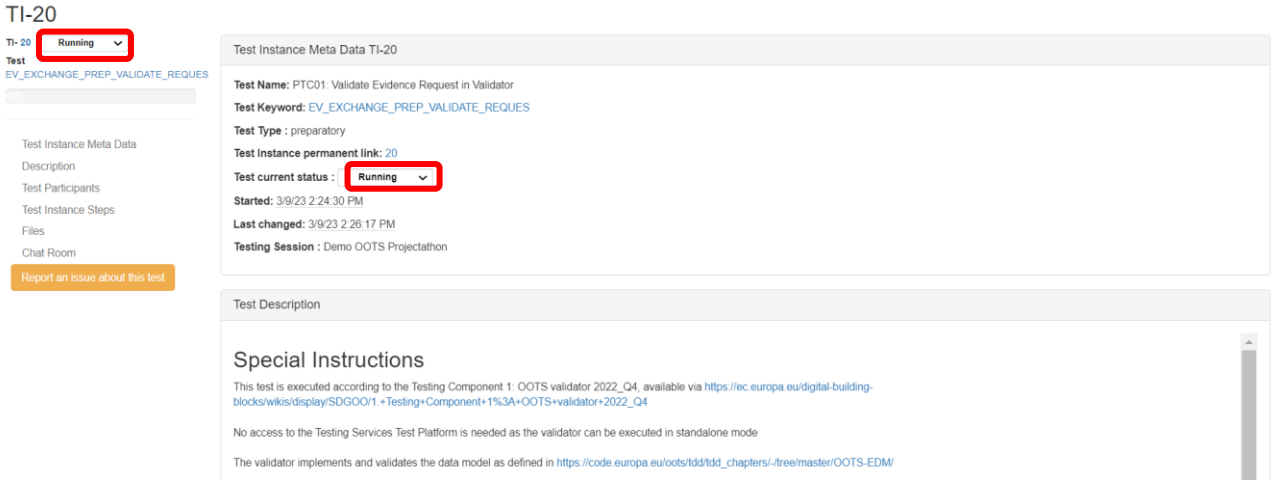
1. To start a test instance, click on the ▶ button.

2. You will be redirected to the Start test instance page.

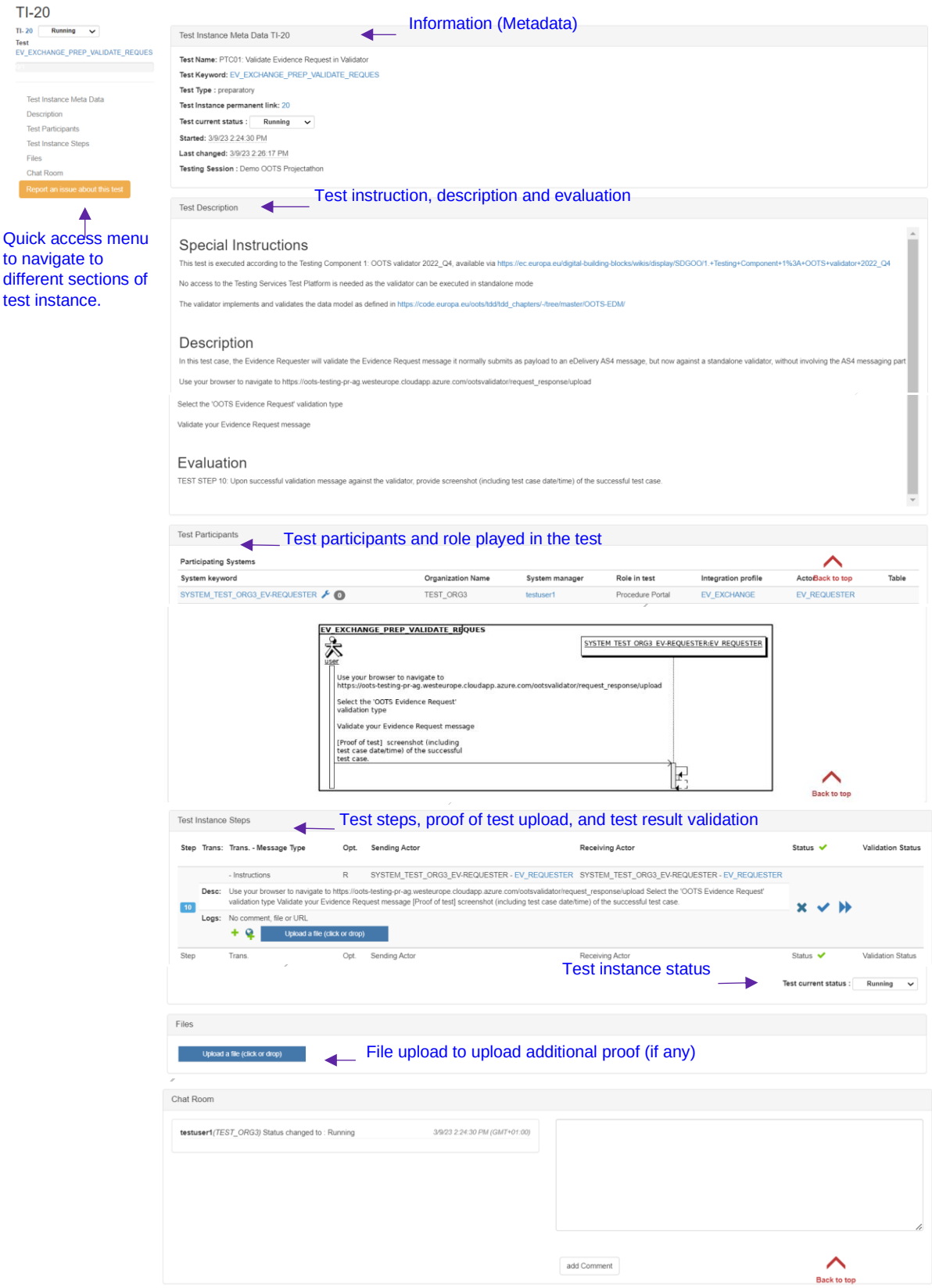
   In the Start test instance page, click on the ▶ button.



3. Once your test instance is started, the status of the test is " Running ".



4. A test instance is always presented in the same way, with:

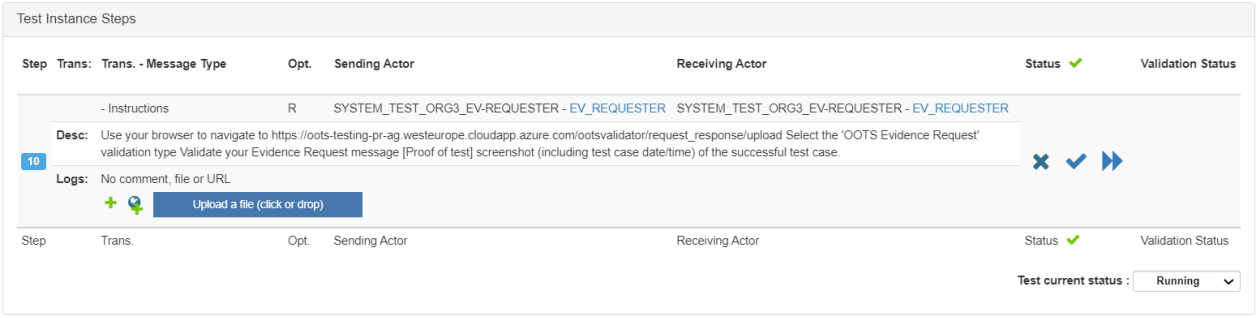

TI-20
Test Instance Meta Data
Description
Test Participants
Test Instance Steps
Files
Chat Room
Report an issue about this test
Quick access menu to navigate to different sections of test instance.
Information (Metadata)
Test Instance Meta Data TI-20
Test Name: PTC01: Validate Evidence Request in Validator
Test Keyword: EV_EXCHANGE_PREP_VALIDATE_REQUES
Test Type : preparatory
Test Instance permanent link: 20
Test current status : Running
Started: 3/9/23 2:24:30 PM
Last changed: 3/9/23 2:26:17 PM
Testing Session : Demo OOTS Projectathon
Test instruction, description and evaluation
Test Description
Special Instructions
Description
Evaluation
Test participants and role played in the test
Test Participants
Participating Systems
Test steps, proof of test upload, and test result validation
Test Instance Steps
Test instance status
Files
Upload a file (click or drop)
File upload to upload additional proof (if any)
Chat Room
add Comment
Back to top

5. Carefully read the test description section.

   Follow the test steps, validate the test result with validator and upload the proof of test such as log, print screen, messages…

   - A test step always includes the following information:
     - Test steps number.
     - Type of message sent/validated in the step (can be null)
     - Actors involved in the test steps
     - Description of the test step: to be read and respected
     - button: Add comment or message regarding the test step.
     - button: Add the permanent link (URL) from the validator, EVS Client tool.
     - An "Upload File" button: to provide proof of testing such as log, print screen and messages.

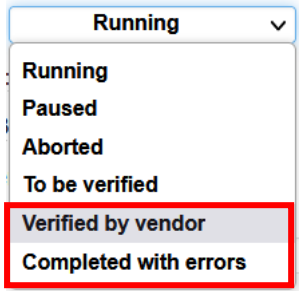
       Please upload a print screen and / or a log file of your test here.



6. After completed each test step, update the test step status by pressing the ✖ , ✔ or ⏩ buton:

   - *Failed* ✖ *:* the test has failed on this step (e.g. validation result KO).
   - *Completed* ✔ *:* the test step has been completed.
   - *Skiped* ⏩ *:* the step does not require any action from the user.

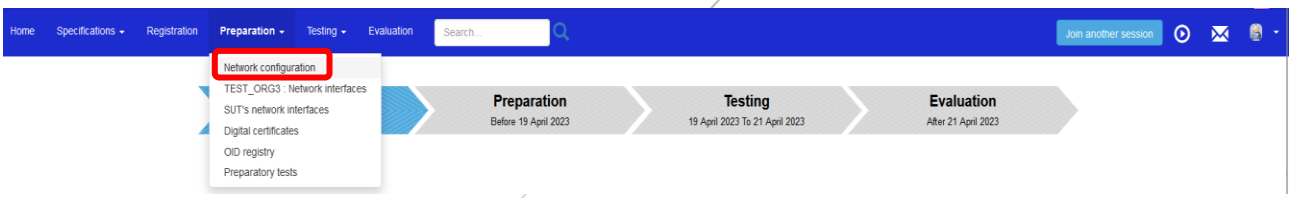
7. Once all the test steps are completed, update the test instance status to:
8. Verified by vendor (success)
9. Completed with errors (Failed)



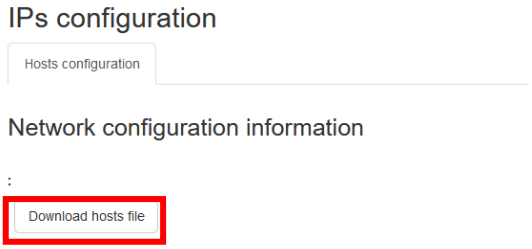
4 Connectivity tests

4.1 Configure your firewall

1. Go to the Menu “Preparation > Network configuration”



1. Download the host white-list by clicking on the “Download hosts file” button.

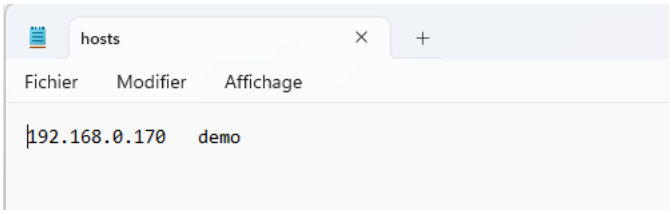


2. The hosts file contains all the nodes that are part of the « online-test-network » for the event.

It can be used as:

- data source to configure your firewall
- hosts file in case of DNS delay or issue

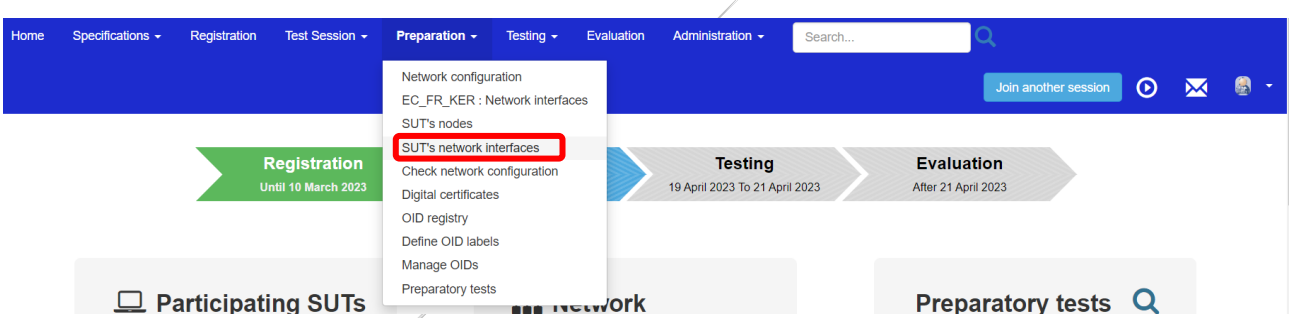
Example hosts list:



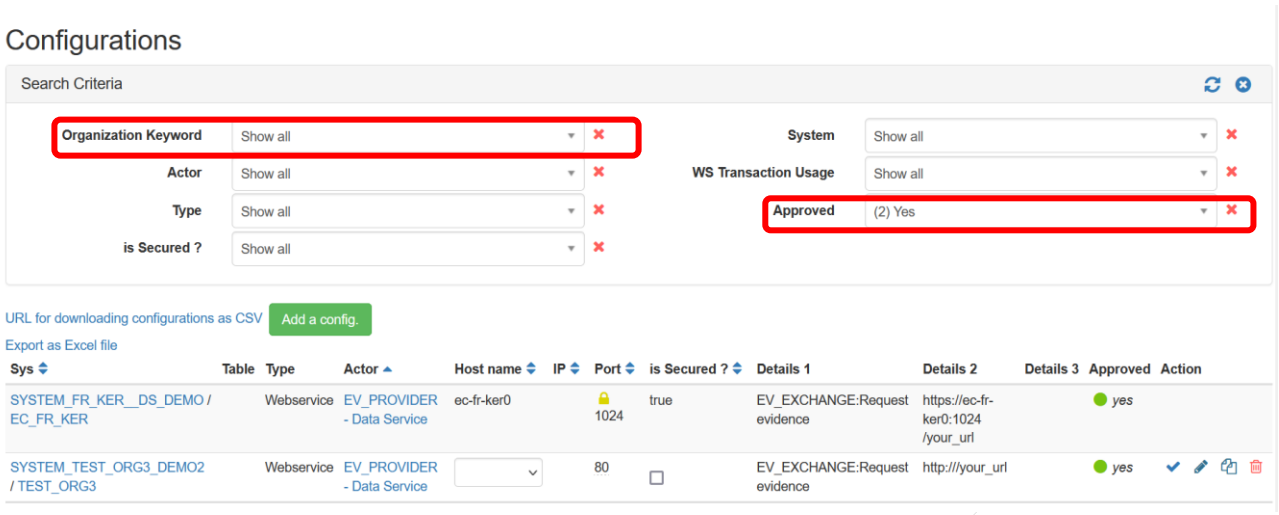
3. You can use this file to update or verify your Firewall configuration.

4.2 Export the System Interfaces Network list

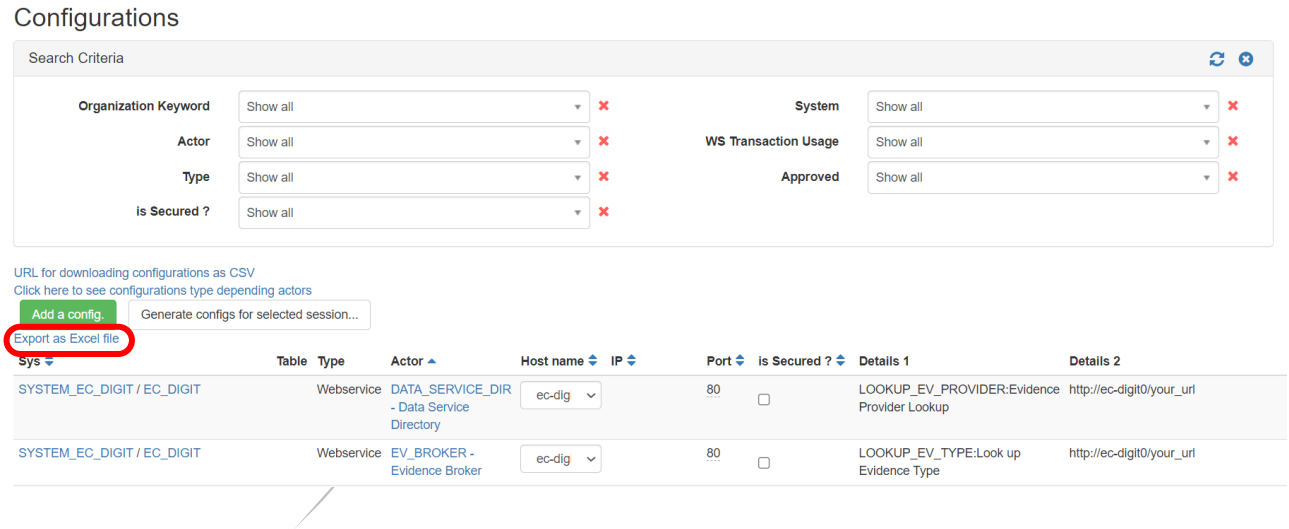
1. Go to the Menu “Preparation > SUT’s network interfaces”



2. Set the filter to all organizations and approved network configuration by:
   - Remove the filter on the Organization keyword by clicking on the × icon.
   - Set Approved to “Yes”

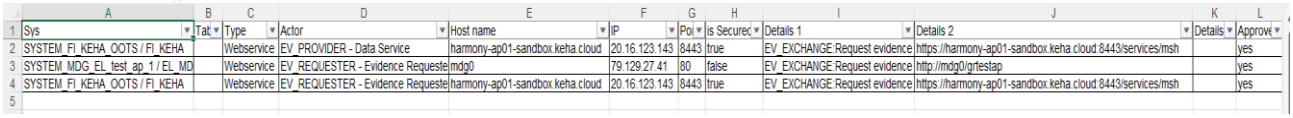


3. The approved systems Interfaces are listed, click on the “Export as Excel file” link to download the file.



4. A file called configurations.xls is downloaded.

   Example configurations.xls:



	A	B	C	D	E	F	G	H	I	J	K	L
1	Sys	Tat	Type	Actor	Host name	IP	Poi	is Secure	Details 1	Details 2	Details	Approve
2	SYSTEM_FI_KEHA_OOTS / FI_KEHA		Webservice	EV_PROVIDER - Data Service	harmony-ap01-sandbox.keha.cloud	20.16.123.143	8443	true	EV_EXCHANGE:Request evidence	https://harmony-ap01-sandbox.keha.cloud:8443/services/msh		yes
3	SYSTEM_MDG_EL_test_ap_1 / EL_MD		Webservice	EV_REQUESTER - Evidence Requeste	mdg0	79.129.27.41	80	false	EV_EXCHANGE:Request evidence	http://mdg0/grtestap		yes
4	SYSTEM_FI_KEHA_OOTS / FI_KEHA		Webservice	EV_REQUESTER - Evidence Requeste	harmony-ap01-sandbox.keha.cloud	20.16.123.143	8443	true	EV_EXCHANGE:Request evidence	https://harmony-ap01-sandbox.keha.cloud:8443/services/msh		yes
5												

5. Convert the configurations.xls to csv format.

4.3 Execute the Connectivity Test script

1. Go to https://gitlab.inria.fr/gazelle/specific-tools/connectivity-test-scripts
    - The script works on Windows and Unix
    - Read instructions in the README.md

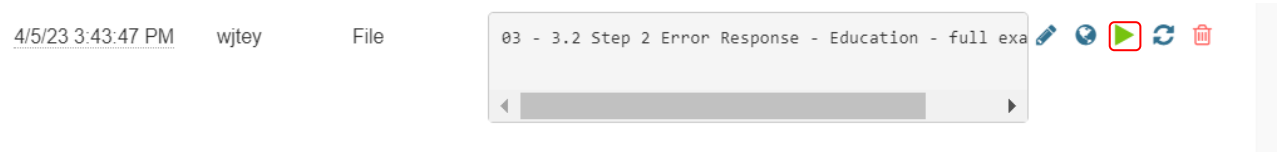
2. Execute the script as below with the converted SUT network interfaces list (configurations.csv) and save the test result into a file.

```
$ ./connect-test.[sh|ps1] -csv configurations.csv > connectivity-results.csv
```

3. Report your connectivity results to the technical management team (EC-OOTS-SUPPORT@ec.europa.eu)

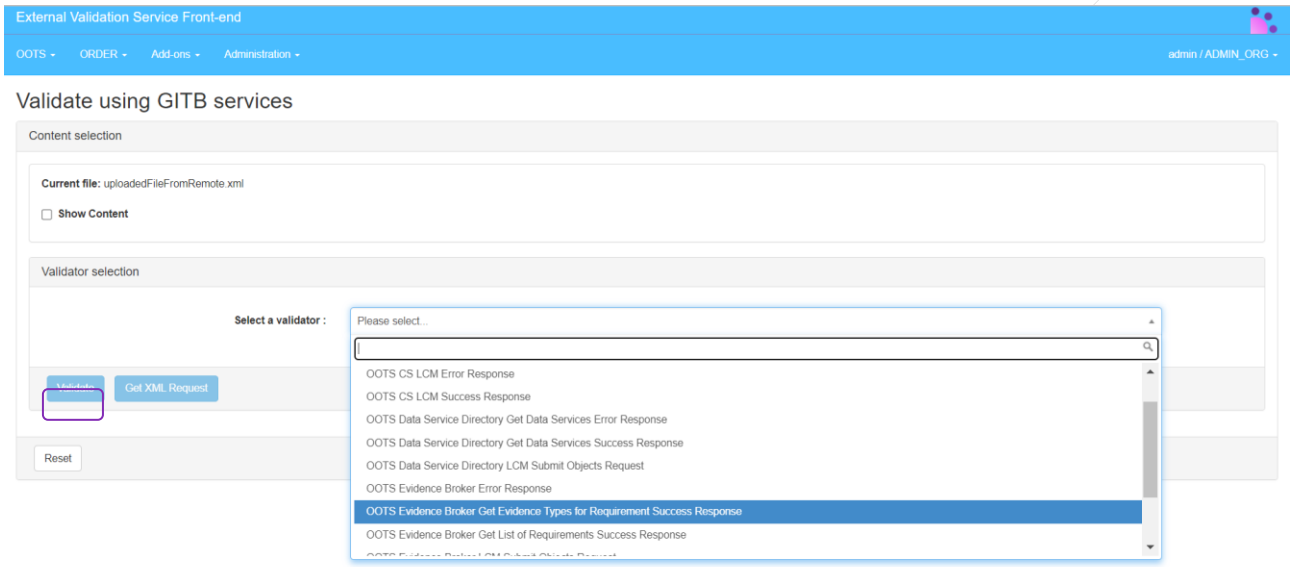
5 How to use the validator

1. You can validate your proof of test by clicking on the button in the test step.

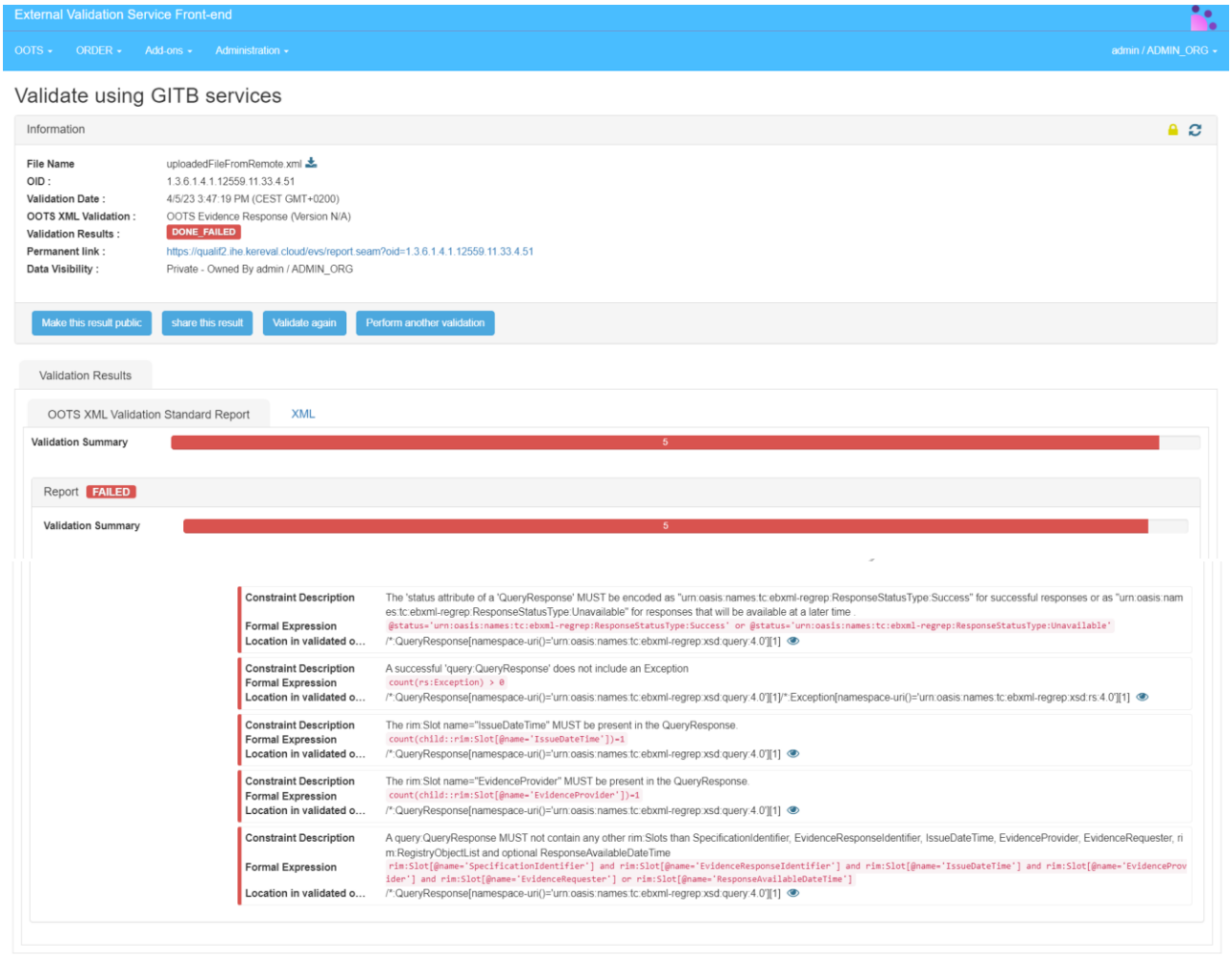


2. You will be redirected to the Gazelle tool, EVS Client.

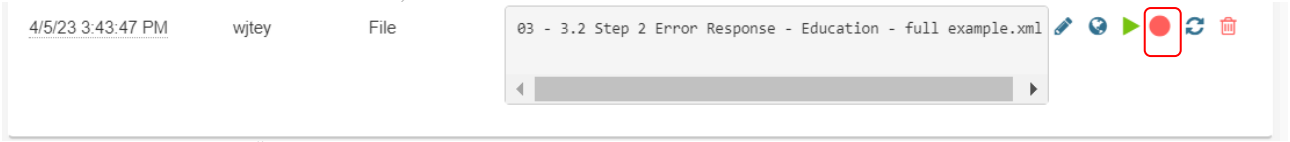
   Select the type of validator you would like to validate your file. And then click on the "Validate" button.



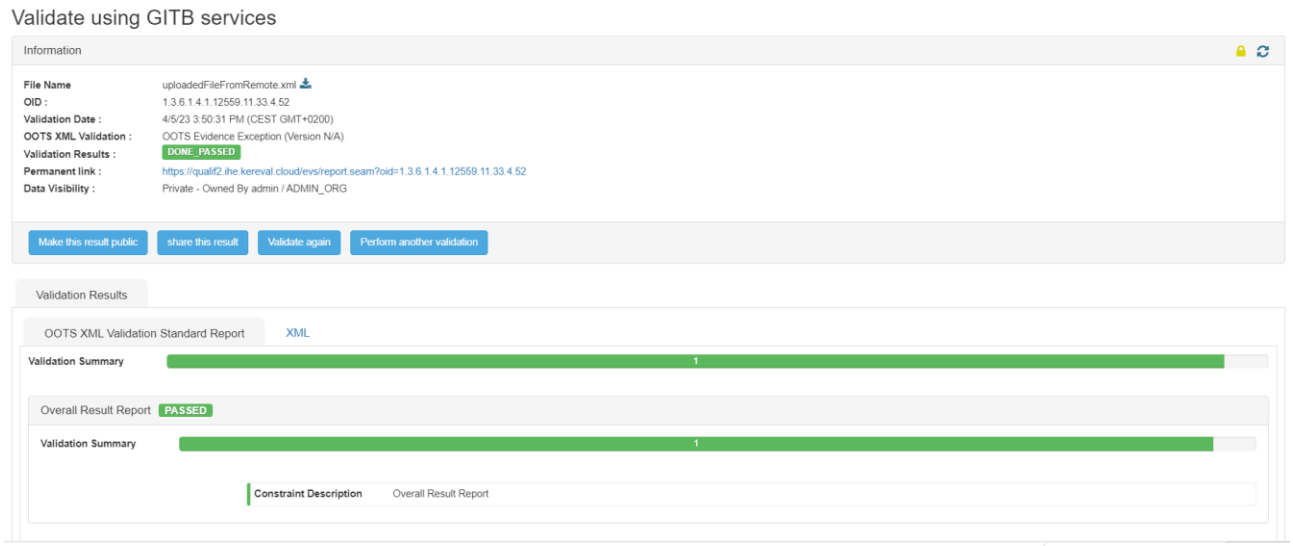
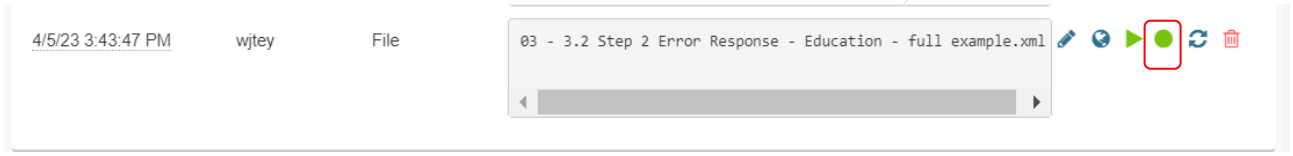
3. The validator result is displayed:
   - Validation failed



A red dot will appear in the test step where you validate your proof of test to indicate the validation is failed. If the validated result is not displayed immediately, you can click on the icon to refresh the result.



- Validation passed



A green dot will appear in the test step where you validate your proof of test to indicate the validation is passed. If the validated result is not displayed immediately, you can click on the icon to refresh the result.