DISTAF

Digital Identity Systems

Trustworthiness Assessment

Framework

User Manual

Version 2.0

Acknowledgements.

The Institute is named in honour of Alan Turing, whose pioneering work in theoretical and applied mathematics, engineering and computing is considered to have laid the foundations for modern-day data science and artificial intelligence. It was established in 2015 by five founding universities and became the United Kingdom's (UK) National Institute for Data Science and Artificial Intelligence. Today, Turing brings together academics from 13 of the UK's leading universities and hosts visiting fellows and researchers from many international centres of academic excellence.

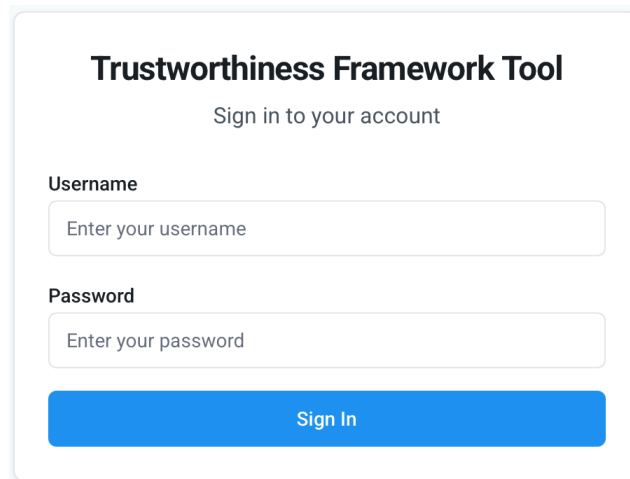Turing also liaises with public bodies and is supported by collaborations with influential organisations.

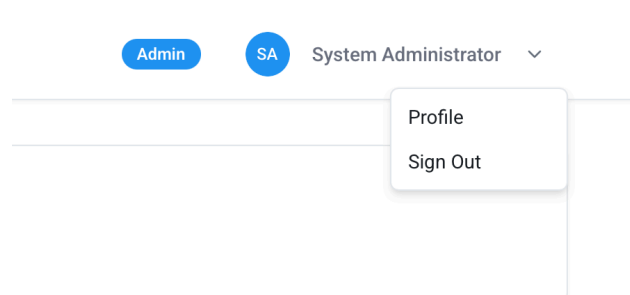# Contents

Log-In and Log-out

The login process is a mandatory step to verify the identity of a user attempting to access the system. It involves the following steps:

1. Connect to the site at the URL where it is deployed
2. Enter your username and password
3. Press the **Sign In** button

Symmetrically, the log-out process is used to close the current session, as follows:

1. On the top right page select your name
2. Select the **Sign Off** item from the drop-down menu

How to change own password

Every user has the possibility of changing its own password, with the following steps:

1. On the top right page select your name
2. Select the **Profile** item from the drop-down menu
3. Type the **current password** in the appropriate field
4. Enter the **new password** in the appropriate field
5. **Repeat** the new password in the appropriate field
6. Select the **Change Password** button at the top right to confirm the change

Creating a new user and assigning roles

When logged-in as an administrator, it is possible to create a new user and to assign the corresponding permission (roles):

1. Select **User Management** from the top menu
2. Select the **Create User** button on the right

Now it is possible to add the details and assign roles, following the steps:

1. Insert the **username** (must be unique) and **email**
2. Add **first** and **last** name
3. Type the initial **password**
4. In the **Role** dropdown, select the role to which the new user shall be assigned
5. press the **Create User** button to save the changes

Resetting a user password

In case a user forgot their own password, it is possible to reset it with the following steps:

1. Select **User Management** from the top menu

2. **Check** the relevant user and c**lick** on the **key** icon from the right menu
3. A popup will appear with the possibility of specifying a new password
4. Click the **Reset Password** button to confirm the operation and return to the user page
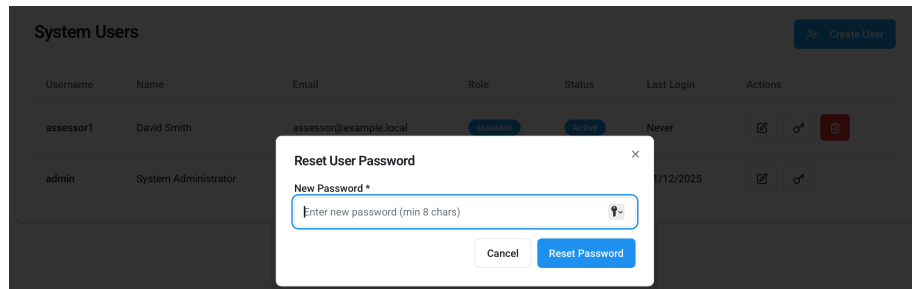
Creating and editing an assessment

In order to <u>create a new</u> assessment, follow the steps:

1. Click on **Dashboard** in the top menu
2. Click on **New Assessment** button, opening a new page
3. Insert the **System Name** (must be unique), and the **System Description**
4. Select the **Assessment Status**, choosing between Draft-In Progress-Complete
5. Select the **Visibility**, either Private (available to admins and assessors) or Public
6. Finalise the creation by clicking on **Create Assessment**

When saved, the edit assessment page is opened, giving the possibility of assigning scores to metrics. Note that the page auto-saves itself, so there is no need to press any save button. In the page there are:

1. The **assessment details** (Name, Description, Status and Visibility) are still present and editable
2. An **assessment progress** bar allows to track the percentage of completeness of the metrics
3. Six buttons are available to select each specific **pillar**

When a pillar is selected, the bottom of the page displays the mechanisms and the metrics from such a pillar:

1. Metrics can be **filtered** using the **Completion Status** dropdown, allowing to keep All metrics, just the one already completed or, symmetrically, only the one yet to assign.
2. Metrics can also be filtered using the **Metric Type** dropdown, allowing to focus on operational or design metrics only.
3. The pillar is composed by several mechanisms, each one represented by a box with:
   a. Name and description of the mechanism
   b. A **checkbox** which provides the possibility of excluding the mechanism from the evaluation
   c. The **average score** and the **percentage of metrics assigned**, both as numeric values and as progress bar.

When clicking on a mechanism box, the section expands, displaying the corresponding metrics. Score can be assigned following these steps:

1. The assessor can choose a **Quick Configuration Preset** from the dropdown menus (either operational or design) to pre-assign score to relevant metrics
2. With more detail, the assessor can navigate through the metrics using the navigation buttons (**Next** or **Previous** metrics)
3. The score of each metric can be assigned using a checkbox or a slider, and immediately saved; in doing so, the score and the progress of the mechanism are also updated
4. Optionally, the assessor can also add notes/comment/justification.

Working with an existing assessment

When the assessment has been already created, it is visible in the dashboard page. On the same row, on the right, there is menu to access all aspects of the assessment:

- Clicking on **View Results**, it shows the trustworthiness profile of the system, with the possibility of downloading a report
- Clicking on **Standard Compliance**, the assessor can immediately fill the metrics corresponding to standards to which the system is already compliant
- Clicking on **Edit Assessment**, the assessor can return to the edit assessment page and continue assigning scores
- Clicking on **Close Assessment**, the assessor can create a copy of the assessment, maintaining the previously assigned scores; in this clone, the assessor can add/modify metrics to create an updated version of the assessment

Declaring compliance to a standard

A quick way to start an assessment is by declaring to which international standards the EIDS system has already been proved to be compliant. In doing this, all metrics connected to those standards are automatically satisfied, according to these steps:

1. Click on the **Standard Compliance** action button of the assessment
2. Identify the standards and click on the corresponding checkbox on the left; the standard will be marked as compliant, and all related metrics will marked as satisfied.

Viewing the results of an assessment

An assessment can be evaluated by accessing its **View Results** page. In the latter, a polar diagram shows its trustworthiness fingerprint, both in the operational and design phase (selectable).
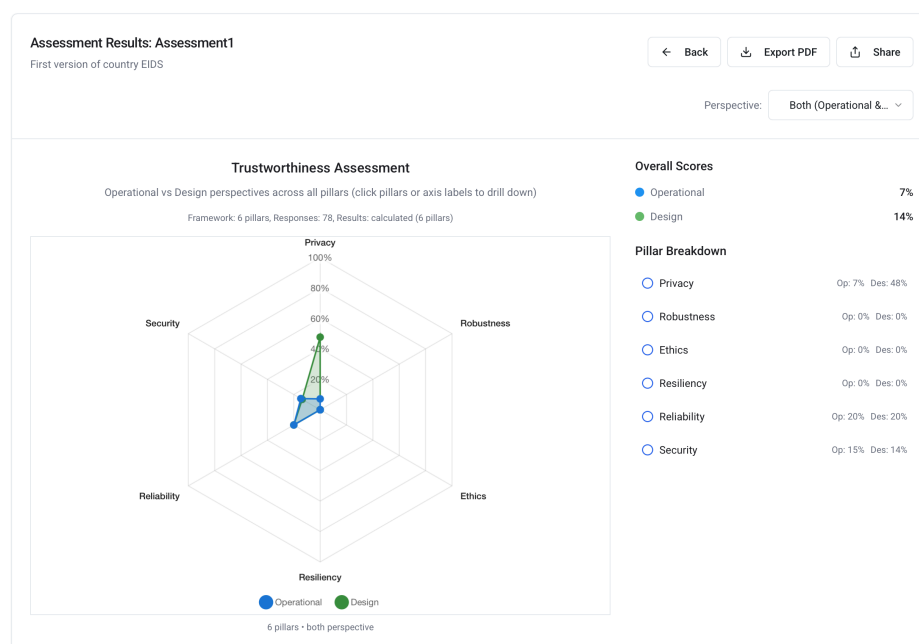
By clicking on a specific pillar, the same diagram is drilled down to such specific pillar, highlighting the mechanisms. If any icons are visible on the right panel, it means the mechanisms is capped by one or more unsatisfied mandatory metrics. In such a case, by hovering the mouse on those icons, the assessor can check which metrics are missing.
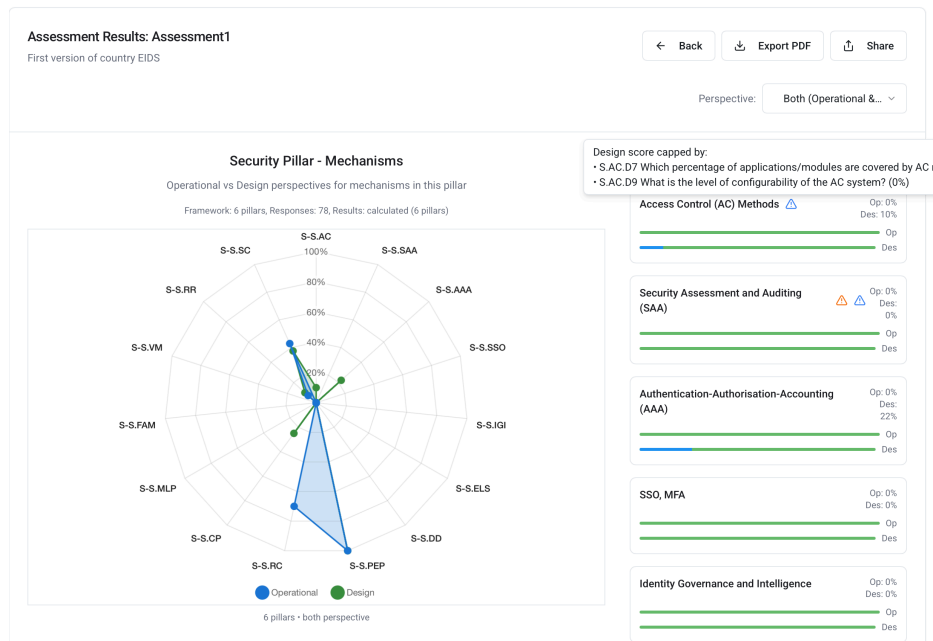
By clicking on the **Export PDF** button, the user can also export a report of the assessment, showing all aspects, from the pillars down to all metrics and scores.
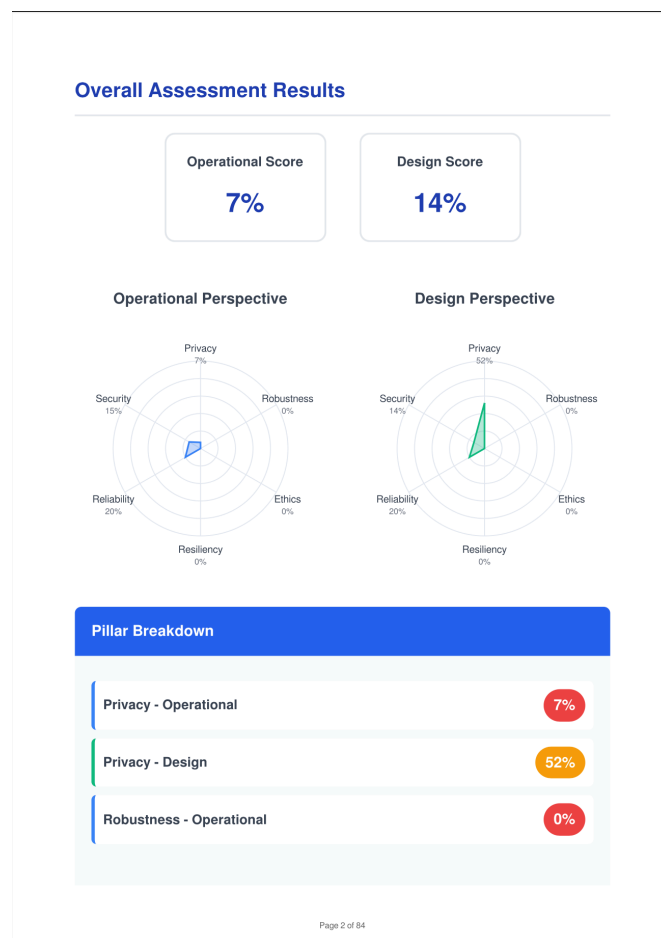
Comparing two assessments

When multiple assessments have been conducted, possibly using the clone functionality to create a new version, it could be useful to create a report to investigate the differences. This can be done as follows:

1. In the assessment list (dashboard) page, select two assessments
2. A button named **Compare Selected** will appear

Recent Assessments   New Assessment

2 assessments selected   Clear Selection   📊 Compare Selected (2)

	SYSTEM NAME	STATUS	LAST MODIFIED	VISIBILITY	OWNER	ACTIONS
☑	Assessment2 Second version of country EIDS	Draft	Just now	Private	System Administrator	...
☑	Assessment1 First version of country EIDS	Draft	1 hour ago	Private	System Administrator	...

When the button is clicked, a new report is generated that compares both assessments, highlighting the differences, from the pillar level…

Overall Assessment Scores

Operational Score   Design Score   +2%
         7% → 7%   —   14% → 15%

Pillar Breakdown Comparison

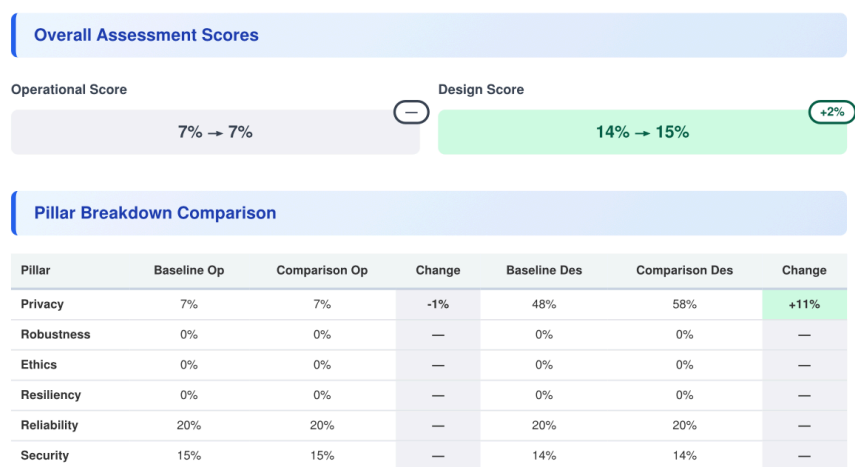| Pillar	Baseline Op	Comparison Op	Change	Baseline Des	Comparison Des	Change
Privacy	7%	7%	-1%	48%	58%	+11%
Robustness	0%	0%	—	0%	0%	—
Ethics	0%	0%	—	0%	0%	—
Resiliency	0%	0%	—	0%	0%	—
Reliability	20%	20%	—	20%	20%	—
Security	15%	15%	—	14%	14%	—

down to the metrics..

Privacy - Detailed Comparison

Collection and Data minimisation

Operational   Design   Changes
                                                                     Op: —
         62% → 62%   100% → 100%   Des: —

Metric-Level Changes
                        No significant metric changes

User Consent for attributes' collection, processing, re-use and release

Operational   Design   Changes
                                                                     Op: —
         17% → 17%   25% → 100%   Des: +75%

Metric-Level Changes

P.UC.D1 User consent has been obtained (design)	0%	100%	+100%
P.UC.D2 Data processing has been declared (design)	0%	100%	+100%
P.UC.D4 Provision for Dispute resolution (design)	0%	100%	+100%
P.UC.D5 Training provision for manual verification (design)	0%	100%	+100%
P.UC.D6 Criteria for issuing data retention notice (design)	0%	100%	+100%
P.UC.D7 Requirements for secure data disposal (design)	0%	100%	+100%