Service ID S00182

Location   Italy, Remote

Execution of digital testing

Provider service

Politecnico di Milano (POLIMI), Università degli Studi di Milano (UMIL)

Link to content

https://agrifoodtef.eu/catalogue-of-services/execution-digital-testing

Type of Sector

Arable farming, Food processing, Greenhouse, Horticulture, Livestock farming, Tree Crops, Viticulture

Accepted type of products

Data, Software or AI model

Type of service

Test execution

Description

This service assists customers in executing digital tests using agrifoodTEF's digital infrastructure. Tests can either be defined by the customer or designed through agrifoodTEF services (e.g., S00176, S00177, S00178). If specific activities are required to properly interface the system under test with the digital infrastructure, these can be handled by either the customer or agrifoodTEF (via Service S00180).Support provided by this service includes general assistance during the test execution phase, such as monitoring to ensure compliance with the testing protocol or offering immediate help in identifying and resolving issues. Additionally, the service provides technical support during the test execution of the system under test, including ensuring that all necessary processes are correctly configured and running, as well as helping the customer address any unforeseen challenges that may arise when complex digital systems interact.Finally, through this service, agrifoodTEF manages the technical infrastructure for test execution, ensuring smooth data exchange between the system under test and the agrifoodTEF infrastructure, and verifying that all testing requirements—potentially identified during the desk assessment phase (Service S00179)—are met during the actual test runs.

How can the service help you

Testing digital systems (e.g., software, AI models) requires a robust computing infrastructure, high-quality relevant data, and the expertise to properly interface the systems under test with both the infrastructure and data, as well as to execute the tests effectively. This service enables customers to leverage agrifoodTEF's infrastructure and data resources for testing their own digital systems, while providing expert technical support at every stage of the process.

How the service will be delivered

Example Service: During AI model validation runs (e.g., within a virtual environment pre-configured through S00180), our team ensures that backup copies of logged evaluation results are regularly stored in agrifoodTEF's centralised storage system after every X number of test iterations.

Ahead of the actual tests, toy runs will be conducted on limited data (e.g., via S00180) to verify key elements, such as correct software execution without errors, resolution of any data formatting issues, and accurate computation of all required evaluation metrics (e.g., as defined via S00178). Additional support is provided during the test phase to resolve any unexpected code execution errors that may arise.

Service customisation

This digital service, typically lasting 4 to 12 weeks, varies depending on the complexity of the systems being tested. The customer provides the software to be tested, a description of its interfaces, and a detailed outline of the tests to be performed. Data required for testing can either be supplied by the customer or sourced from agrifoodTEF.

The test descriptions and/or data can also be developed through other agrifoodTEF services, such as "Design & Development of Computational Environments for Digital Testing" or "Design of Testing Protocols for Digital Testing".

Once preparations are complete, the customer submits the executable code for the systems to be tested (under NDA), and agrifoodTEF delivers the test results.