



A 'one-stop shop' for Conformance and Interoperability Testing

Interoperability challenge

Delivery of cross-border digital services in different sectors using generic and re-usable building blocks has, and will continue to, place strong demands on interoperability. Most of the currently available testing applications are dispersed, allowing usually testing only a part or a feature of systems at a time.

A new test environment

Minder is open source generic testing environment, which enable checking technical conformance and interoperability of building blocks for e-Delivery, e-Documents, e-ID and semantics. This technology is now available to provide a 'one-stop shop' test environment for any cross-border implementation.

About Minder

Minder is a generic and modular web-based control flow management engine, developed within the e-SENS project, with the aim to support the sustainability of the e-project network. It ensures the conformance and interoperability of the participant systems to the developed e-SENS interoperability specifications. Minder performs test of developed technical modules and piloting packages, facilitating the adoption of the e-SENS system by the targeted organizations. The software is also capable of developing new interoperability testing scenarios to accommodate possible future extensions to the infrastructure and possible future use cases.

Minder provides a generic testing environment that can be used for any domain and implementation. It connects the system under tests (SUT) to each other with a signal-slot based architecture. It provides a high level test definition language (MTDL) which supports test definition reusability. Minder offers a Web GUI for users to register SUTs for testing, create test definition language scripts, run tests based on the TDL scripts, observe and report the test results.



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Features of Minder

- Minder is an **open source** online control flow management application.
- The **modular** development framework enables complex inter-system communication to be handled easily.
- An online scripting capability and modular development framework helps create a **sustainable** architecture.
- The Powerful Play-Scala-Java combination provides a **stable** architecture that is immune to performance drawbacks.
- The SCALA based MTDL scripting capability provides an extremely **powerful** testing engine.
- Minder offers an **easy** to explore data model based on grouping of the inventories.

Use of Minder

Apart from conformance and interoperability tests of the e-SENS participant systems, Minder was used in the Testing event of e-SENS/AS4 profile addressed to non-project participants. Minder was also selected by the Connecting Europe Facility programme as the Testbed for the e-Delivery DSI.

GITB compliance

Minder is compliant with the Global e-Business Interoperability Test Bed methodologies (GITB). GITB is a global initiative hosted by the European Committee for Standardization (CEN) and supported by the European Commission. It focuses on methodologies and architectures that support e-business standards assessment and testing activities from early stages of business standards development to implementation and deployment of large-scale solutions. GITB promotes the reusability of testing resources and capabilities among different domains and different standards.

