ArtemiS SUITE
JURY TESTING
ASM 50ff

SQala - ArtemiS SUITE Jury Testing Module

- SQala Basic (Code 5050)
- SQala Net (Code 5051)
- SQala Server (Code 5058)
- SQala Client (Code 5059)
  [no licence is required]

Extension module for creating and performing listening tests

Overview

SQala is a modular listening test software in ArtemiS SUITE for creating and performing listening tests.

SQala is characterized by its straightforward, solution-oriented user interface. For the creation of listening tests, a modern, clearly arranged page layout is provided, which makes it easy to create both simple and complex listening tests in a very short time. The listening tests can be customized, saved, and re-used as needed for various listening test scenarios.

The types of listening tests supported are Category Judgement, Simultaneous Category Judgment, Paired Comparison, Ranking, and Semantic Differential. For the supervision and management of the tests, easy-to-use monitoring and control tools are provided, helping the supervisor to keep control and overview of the tests at any time. Sessions can be created and interactively controlled conveniently. The results of the listening tests are saved to the SQala Server.

The SQala Extension API allows users to develop user-specific listening test steps and to fully integrate them into SQala.

For preparation and post-processing, SQala provides seamless access to a wide range of functions of ArtemiS SUITE.

Features

Creation of listening tests

- Straightforward, intuitive user interface
- Modern, functional page design for quick creation of complex listening tests without expert knowledge
- Custom design options
- Configurable pages for information, demo sounds, interviews, etc.
- Saving and re-using of created SQala Projects for various listening testing scenarios and types

Jury testing scenarios and types

- Single-user system
- Listening studio
  - Individual Mode / Group Mode
- Category Judgement / Simultaneous Category Judgment / Paired Comparison / Ranking / Semantic Differential

Management and saving of listening tests

- Functional server for managing and saving SQala Projects
- SQala Server Manager for straightforward provision of sessions in listening studios

Control and supervision of listening tests

- SQala Session Administration for interactive monitoring and supervision of listening tests
- Status overview for all individual participants during a listening test

Performing listening tests

- SQala Client for each listening place for performing the listening tests
- Full touchscreen support
- Export of results to Excel

Preparation and evaluation of the results with ArtemiS SUITE

- Extensive pre- and post-processing tools (ASM 01 to 27)

Equalizer from HEAD acoustics for the correct binaural playback

- SQala software optimally matched to the binaural equalizers for playback via headphones, subwoofer, and speakers

SQala Extension API

- Programming interface for individual extension of the jury testing software SQala

- Extensive programming documentation with preconfigured examples

SQala System

SQala is a modular software:

- SQala Basic: Creation of listening tests (test leader)
- SQala Net: Performing listening tests with multiple participants, e.g. in a listening studio (test leader)
- SQala Server: Management of listening tests (test leader)
- SQala Client: Performing listening tests (participants)

SQala Basic - ASM 50

SQala Basic allows the quick creation and execution or testing of listening tests in local mode.

- Test template

  For the quick creation of a complete listening test, SQala provides a unified, functional page layout. The straightforward, modern design is based on the latest standards and avoids distraction of participants during the execution of the listening test.
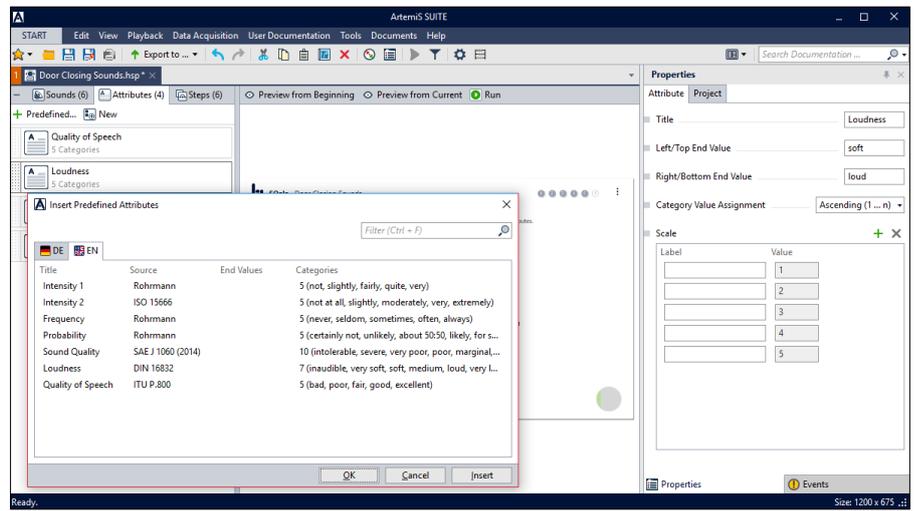
  Users can create custom combinations of the desired listening test types, thus intuitively assembling their listening tests step by step. No expert knowledge is required thanks to the straightforward, easy-to-use interface. This allows even large listening tests to be created quickly and safely.
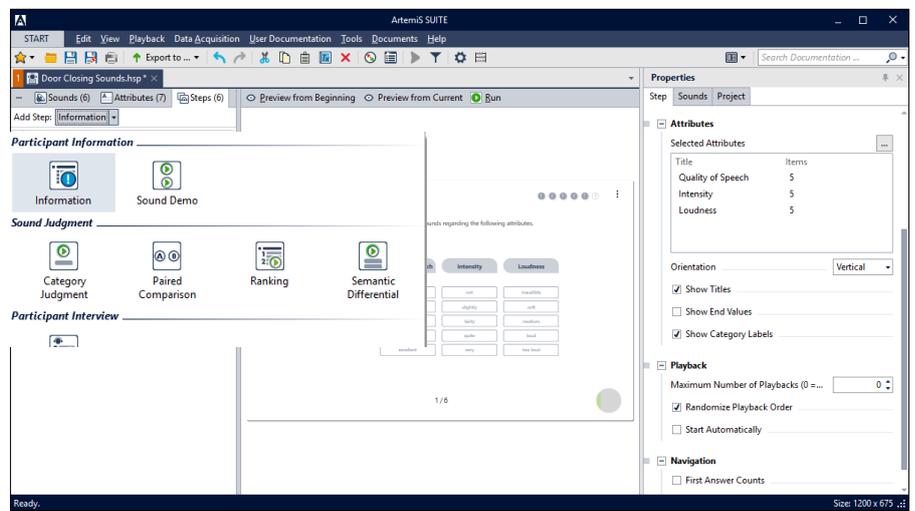
- Preview

  The preview always displays the current state of the listening test exactly like a participant would see it. This applies both to the scope and the layout of the pages.
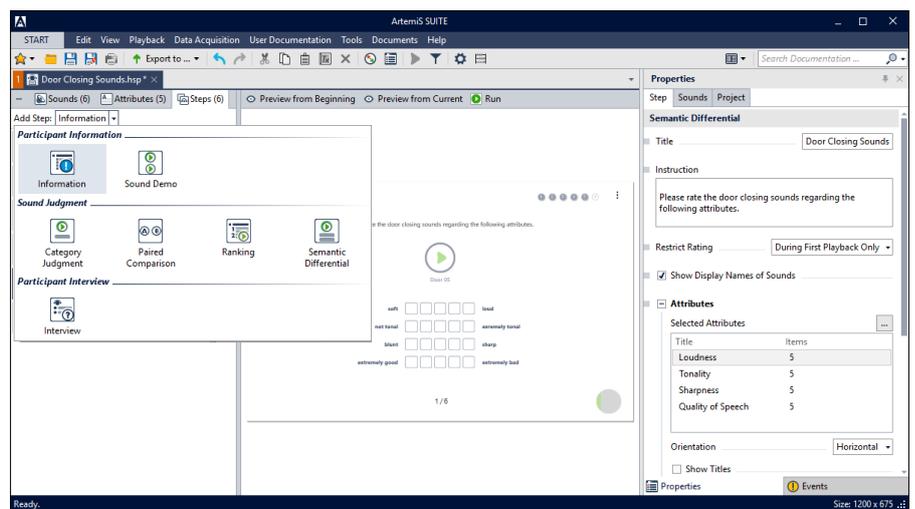
- Execution in local mode

  If no listening studio or only a single workplace is available, users can execute a completed SQala Project locally using SQala Basic. This allows users to perform listening tests successively with several participants, too.

Various options are available for a quick configuration of the rating attributes. Manual editing is possible as well.

To select a suitable layout, users can choose their type of listening test from various pages and customize it further.

The creation of a listening test is supported by selection dialogs, allowing users to configure even large listening tests without expert knowledge.

SQala Net - ASM 51

SQala Net allows listening tests to be performed with multiple participants in a listening studio (Individual Mode or Group Mode). The test leader is provided with a number of control tools.

- **SQala Server Manager**

  The SQala Server Manager is used to provide a session to multiple participants in a listening studio scenario . The connection between the SQala Server (test leader) and the individual SQala Clients (participants) is established very quickly.

- **SQala Session Administration**

  For supervising the listening tests, SQala Session Administration is provided as a straightforward monitoring and control tool.

  The tool helps test leaders to keep full control and overview of all listening test steps. They can intervene at any time and, for example, unlock certain steps or add new participants.

  In the case of possibly unintended playback modifications by the participants, the supervisor is automatically alerted.

  A graphical interface displays the progress of each participant at any time, as well as the completion of the listening test. Tooltips provide additional information, e.g. about the number of referenced sound files.

- The results of listening tests can be exported to Excel for further processing.

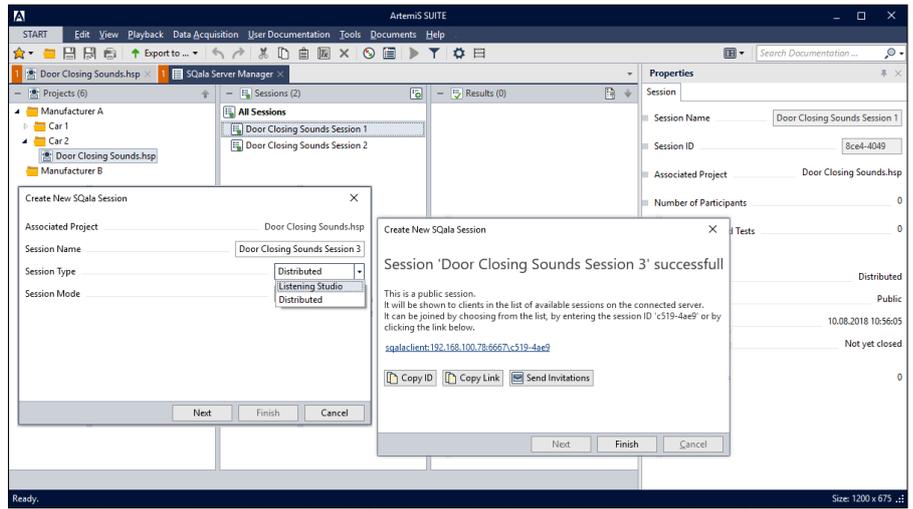SQala Net requires the license of ASM 58.

SQala Server - ASM 58

The SQala Server is used to store and manage SQala Projects.
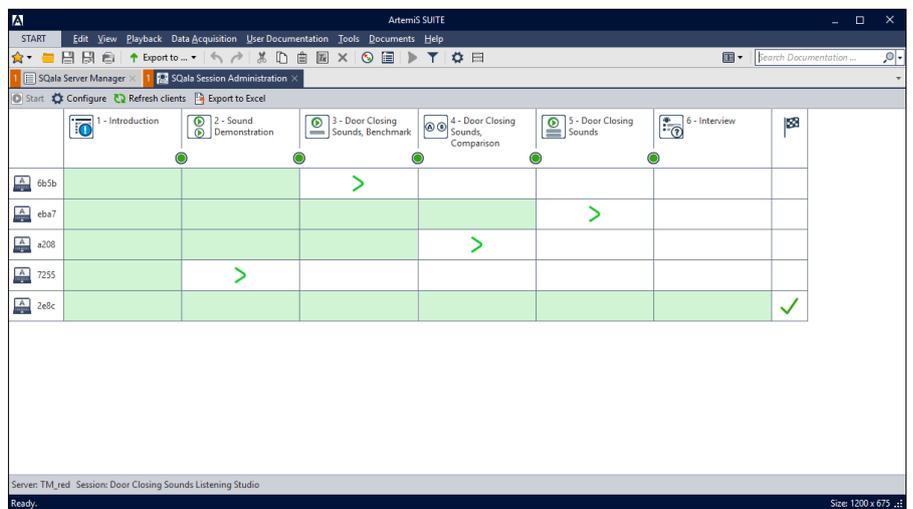
SQala Server requires the license of ASM 51.
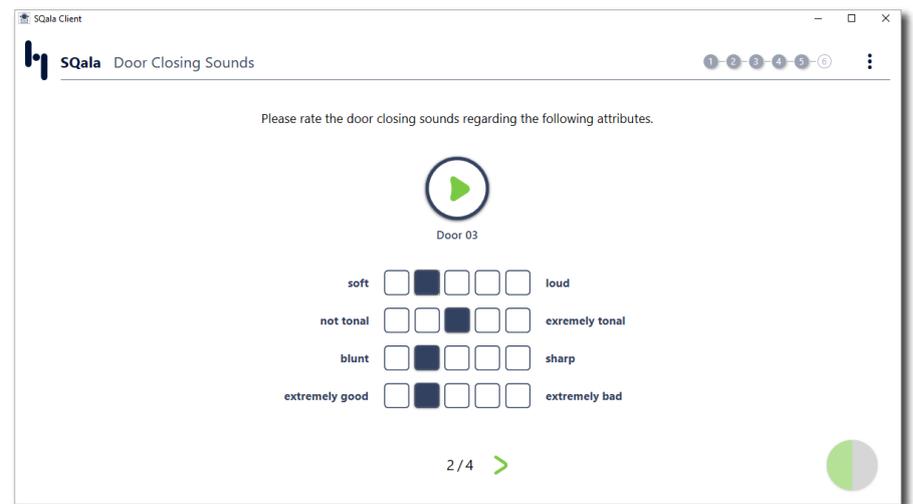
SQala Client - ASM 59

The SQala Client must be installed at each participant's listening place. No dongle and no separate license is required.

Providing a listening test in a listening studio or a network is very easy and straightforward with the SQala Server Manager.

The SQala Session Administration helps the test leader to keep an overview of the current status of the listening test.
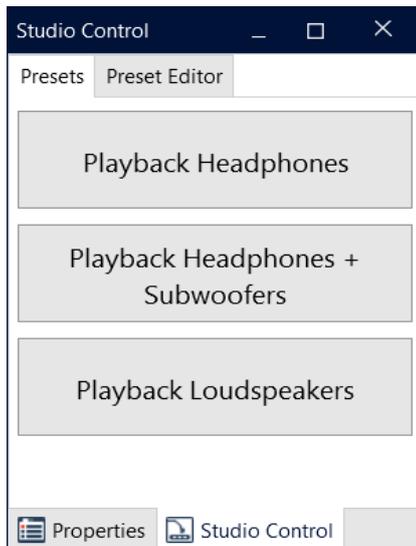

Test participants submit their results via the SQala Client. The functional layout reduces possible distractions, thus ensuring that valid results are achieved.
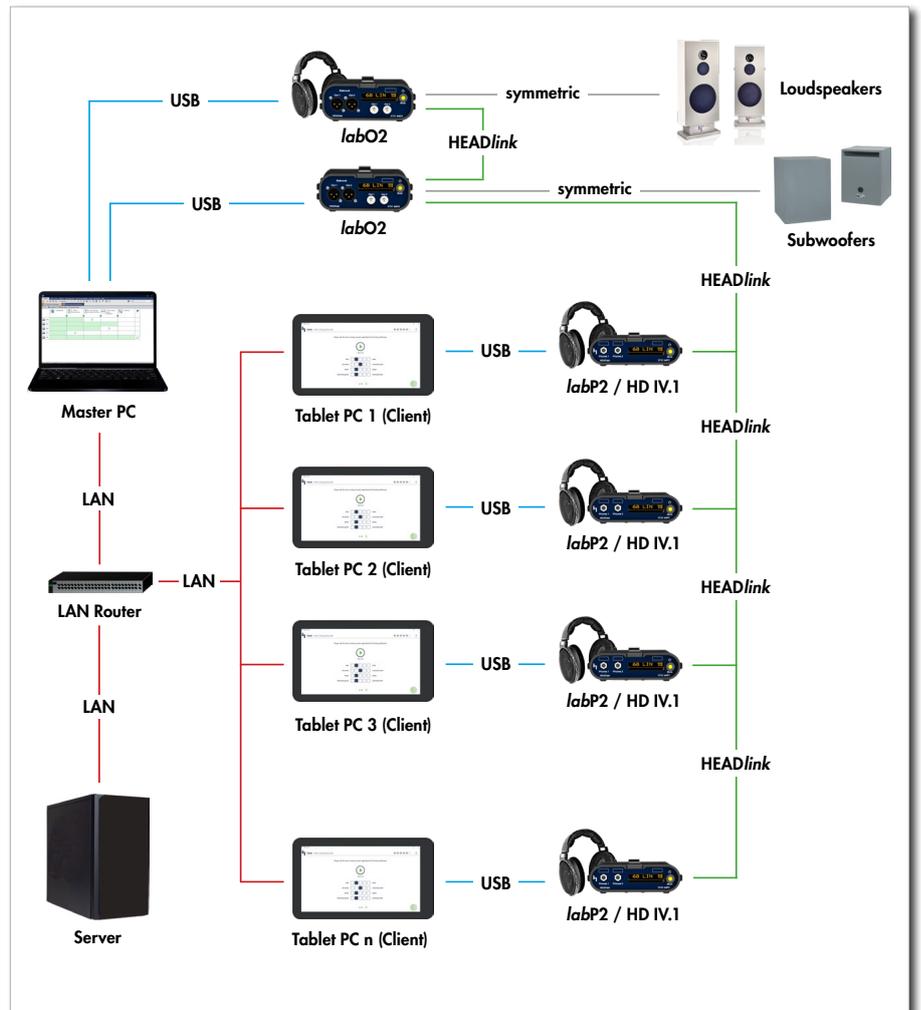
Studio Control

Studio Control (included in ASM 11) serves for the quick configuration of playback frontends for the usage in a listening studio.

Users can edit and save distinct playback scenarios (the signal distribution and filter settings of the playback frontends). After the composition of individual listening studio configurations, users can switch between the needed configurations with a single click. The signal distribution and the individual filter settings of the playback frontends are automatically adjusted.
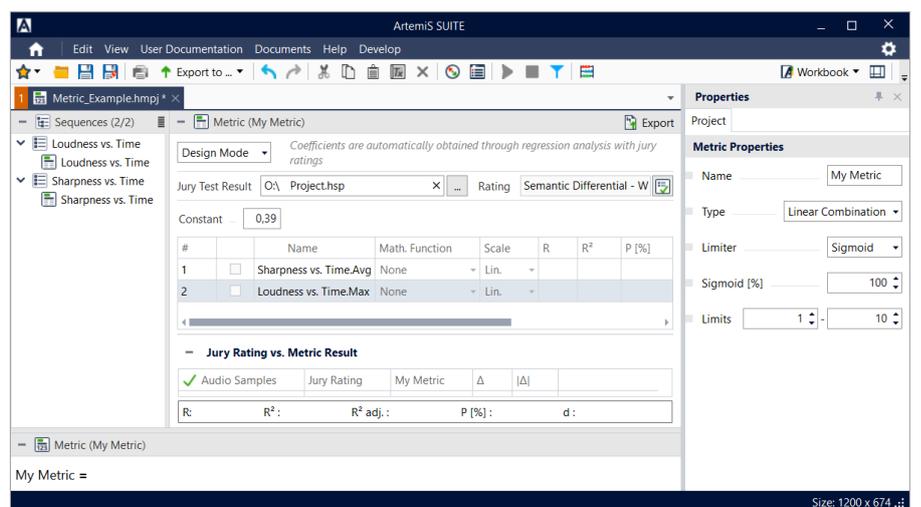

Studio Control displays the configurations as buttons. With a click, the corresponding configurations are transferred to the connected frontends.

Studio Control allows to save different playback scenarios in a listening studio and to activate the needed scenarios at the push of a button, e.g., headphones / headphones + subwoofers / loudspeakers + subwoofers / loudspeakers / …

Metric Project

Jury test ratings from SQala jury test results can be used in a Metric Project (included in ASM 27). Users may select for which rating (step and attribute) of a SQala Project of the types Category Judgement, Semantic Differential, and Simultaneous Category Judgement the metric shall be calculated.

The close connection between SQala and the Metric Project enables users to map results of time-consuming and costly listening tests by reproducible analysis results that can be determined using measurement technology.

Scope of supply

- License files:
  - SQala Basic Module ASM 50 (Code 5050)
  and
  - SQala Net Module ASM 51 (Code 5051)
  - SQala Server Module ASM 58 (Code 5058)
  and
- No licence is required:
  - SQala Client Module ASM 59 (Code 5059)

Requirements

- ArtemiS SUITE Basic Framework (Code 5000)

  ⇒ Player for binaural playback is included

Recommended programming interface ASX

- ASX 03 (Code 5093)
  SQala Extension API
  Programming interface for individual extension of the jury testing software SQala

  The programming interface allows users to develop new test steps, to integrate them into SQala, and to execute them in local mode.

- ASX 00 (Code 5090)
  System Integration and Extension Guidelines

  Comprehensive documentation, including a number of practical application examples and programming references.

Recommended ArtemiS SUITE modules

- Basic Analysis Module (Code 5001)

  ⇒ Basic analyses and statistical operations, filters, single values, signal cutting, etc.

- Psychoacoustics Module (Code 5012)
  Advanced Psychoacoustics Module (Code 5016)

  ⇒ Psychoacoustic analyses, e.g. Tonality, Relative Approach, etc.

- Signal Editor Module (Code 5020)

  ⇒ Editing signals, etc.

- Signal Generator Module (Code 5021)

  ⇒ Generating signals and merging generated and measured signals.

- Advance Playback Module (Code 5011)

  ⇒ Studio Control

- Calculation Module (Code 5027)

  ⇒ Metric Project

Recommended playback hardware from HEAD acoustics

In order to ensure meaningful listening tests, the playback quality must be excellent. It is essential to use an equalized playback chain consisting of matched components, such as equalizers, headphones, subwoofers, and speakers from HEAD acoustics. This ensures the correct playback of binaural recordings, increasing the validity of listening tests.

Playback equalizers

- *lab*P2 (Code 3732)
  Binaural headphone equalizer with USB interface
  and/or:
  *lab*P2-V1 (Code 3732-V1)
  Binaural headphone equalizer with USB interface

  ⇒ Binaural headphone playback with automatic configuration of the correct signal level and equalization.

- *lab*O2 (Code 3731)
  2-channel playback equalizer with Line outputs and USB interface
  and/or:
  *lab*O2-V1 (Code 3731-V1)
  2-channel playback equalizer with Line outputs, headphone connector, and USB interface

  ⇒ Playback via speakers and via subwoofers for low frequencies. *lab*O2-V1 also supports playback via a binaural headphone.

In a listening studio for example, the equalizers from HEAD acoustics are connected with only one cable each.

Open, dynamic headphones

- HD IV.2 (Code 2481)
- HD IV.1 (Code 2380)

Loudspeakers / subwoofers

- HPL (Code 2968)
  2 x High Precision Loudspeaker
- HSW I (Code 2950)
  HEAD Subwoofer

With the *lab*P2 equalizer and the HD IV.2 or HD IV.1 headphone, the original sound spectrum and the spatial distribution of the sound field can be reproduced accurately.

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