

## ecu.test lab increases the accessibility of complex test benches

**ecu.test lab** is a framework for creating customizable, web-based user interfaces with adaptable widgets. It provides intuitive access to test environments controlled by **ecu.test** in the background.

**ecu.test lab** offers particular advantages in the early development phases and for exploratory testing in SiL environments because processes can be easily tracked in real time despite the lack of a GUI.

Due to the separation of the user interface and technical control, the behavior of a test bench as well as the software under test can be visualized and controlled without requiring in-depth technical knowledge of the test environment.

### Features overview

#### Access to all interfaces of ecu.test

- Access types:
  - Globales mapping
    - Mapping name selection
    - Direct access for reading and writing values
  - Package
    - Execute a parameterized package to set a value
    - Execute a package to read one of the return values
  - Expression
    - Access to internal API and user extensions (UserPyModules)

#### Creation of individual views

- Creation and configuration of different views

- Adding widgets for different application purpose
  - Gauge, Bar, Slider, Indicator, Button, Write Text, Write Number, Read Value, Toggle, Image, Video, HTML, **ecu.test log**
- Scaling and placement of widgets within a grid
- Easy switching between views of different configurations

#### Personalization of widgets

- Widget properties
    - Assignment of an optional label
    - Definition of the widget's accent colors
    - Further settings depending on the widget type
  - Access to **ecu.test**\*
    - Global mapping, package access, or expression
- \* Not all interfaces are available for every widget

#### Monitoring and control

- Starting/stopping configurations in **ecu.test**
- Direct updating of the value of a display widget via the update button
- Direct writing of a value by selection and confirmation
- Monitoring mode
  - Automatic updating of mapping-based widgets according to their configuration
  - Unrestricted control during runtime

#### System configuration (in ecu.test)

- HTTP port
- Password for accessing the web interface
- Autostart of the server with **ecu.test**
- Autostart of the monitoring mode of a specific view when the configuration is started

### Technical Data

- Up to 100 widgets simultaneously in one view
- Minimum update rate of 100ms\*
 

\*The update rate in monitoring mode is largely dependent on the performance of the interfaces used for access

### System requirements

#### ecu.test:

- **ecu.test** from version 2025.2
  - Windows, Linux
- License option for **ecu.test lab**

#### Browser\*

- Mozilla Firefox from version 137
- Google Chrome from version 135
- Microsoft Edge from version 135

\* Recommended browser: Google Chrome

#### Required open ports

- HTTP: 26673 (configurable in **ecu.test**)
- Websocket: 8999