Introduction to Modelon Impact

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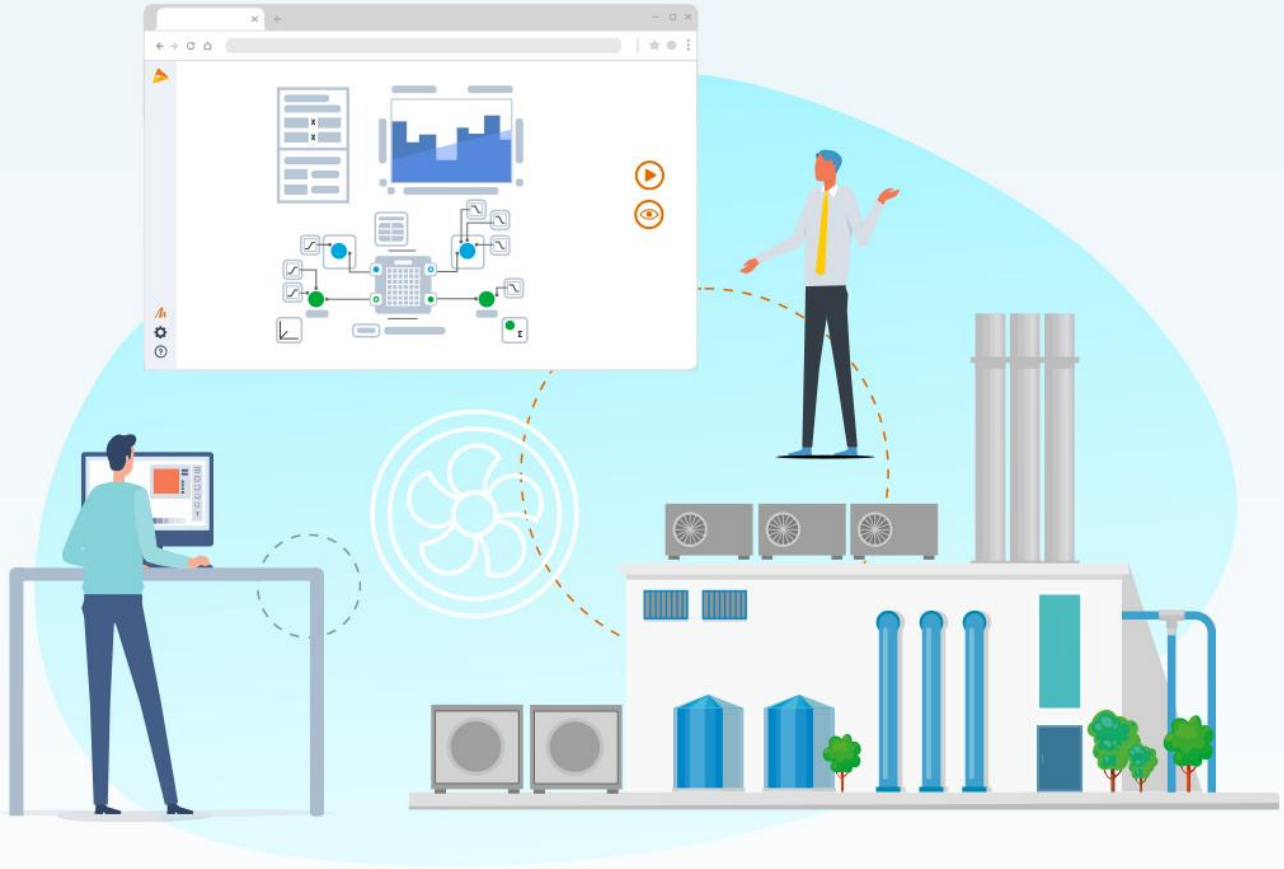
Principal Application Engineer



Get to know Modelon Impact

- Core workflow
- Additional apps
- 2024.2 feature highlights

Modelon Impact

- *Core workflow demo*

DEMO

Open a shared workspace and follow along!

Impact workspace: GettingStartedWorkspace

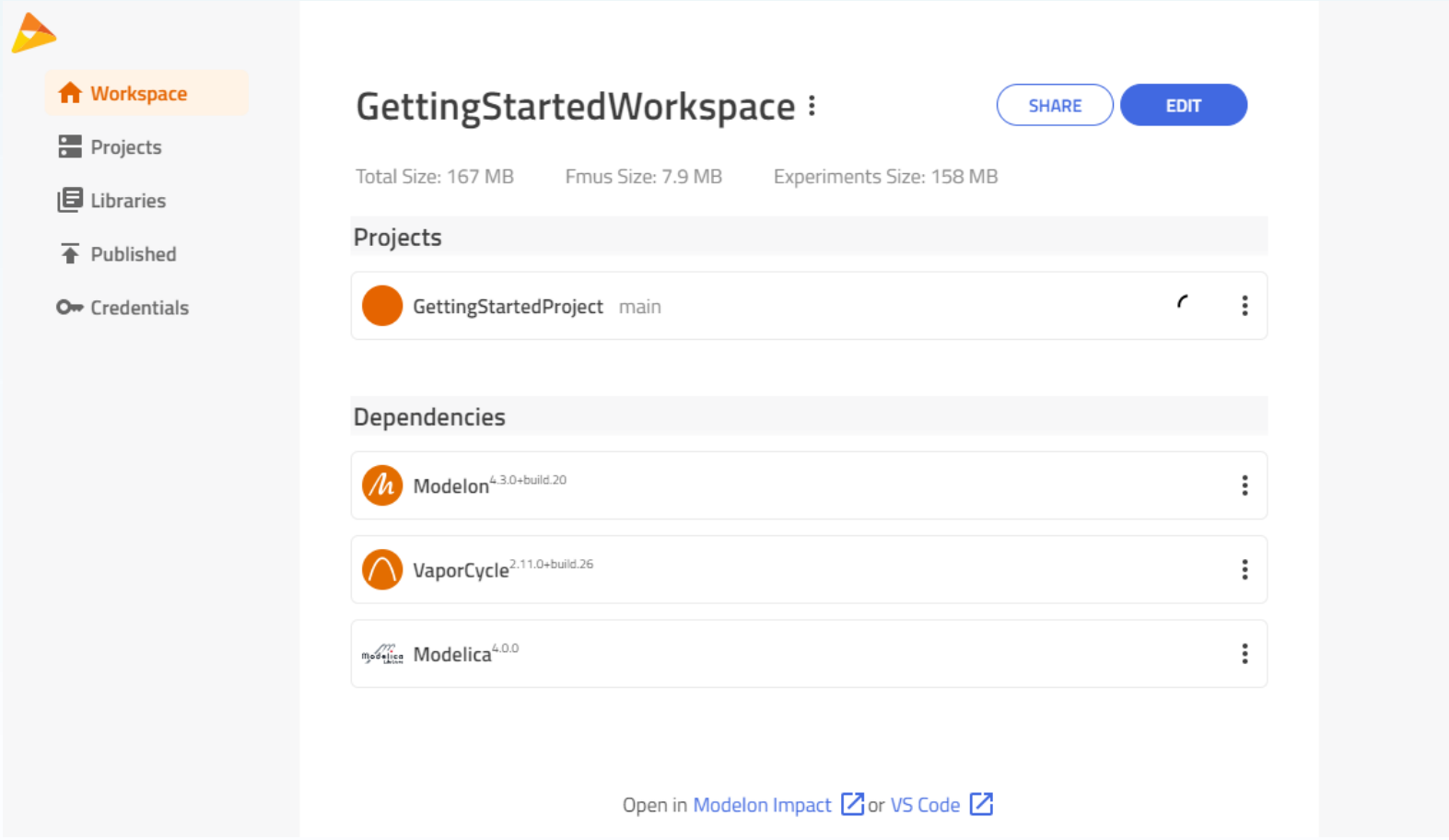
- Browse a workspace
- Investigate a model
- Parameter sweep

Additional Apps

Workspace and Project manager

Maintain your work

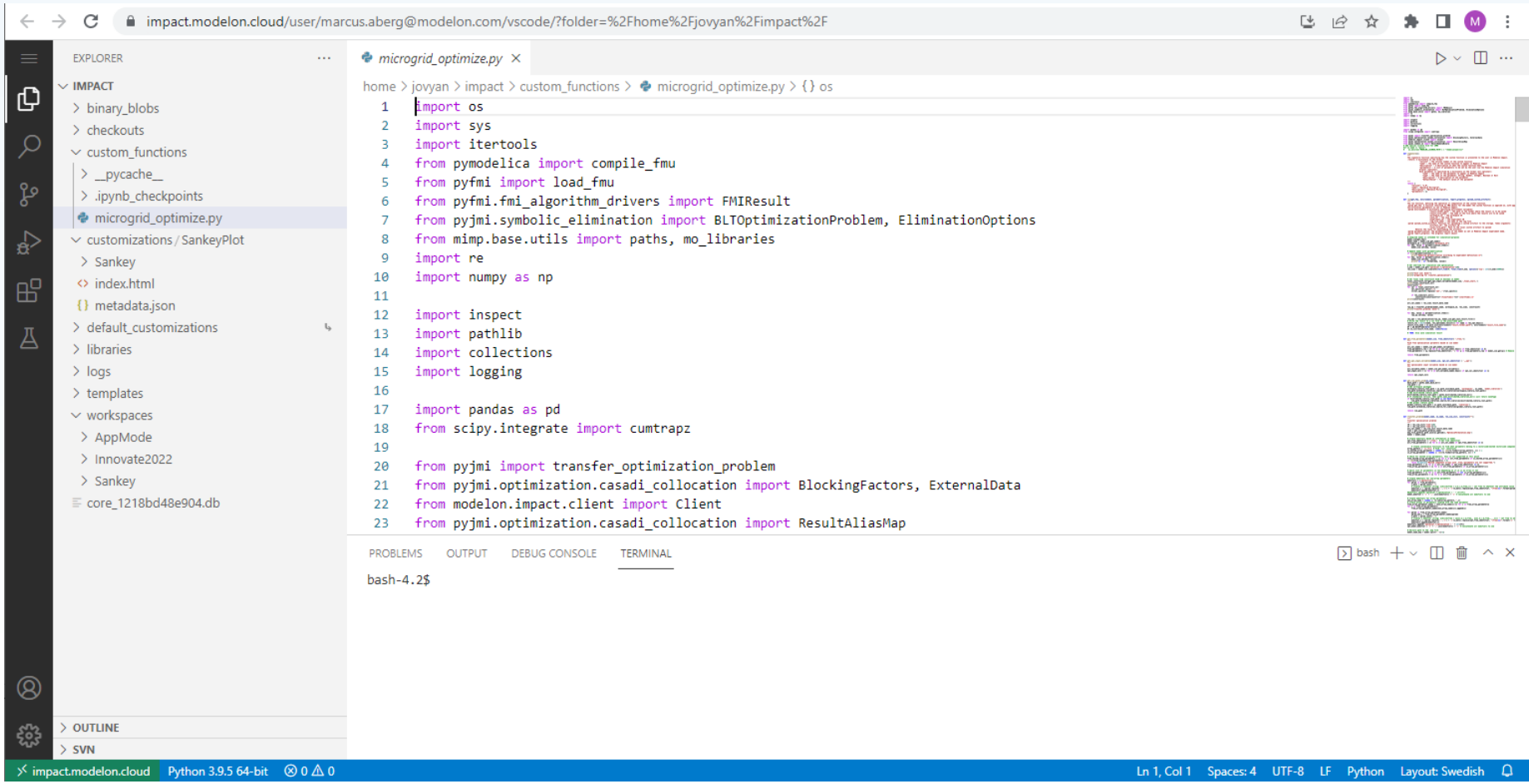
- Workspaces
- Projects
- External Libraries
- Sharing
- GIT credentials locker



VS Code - Cloud

Web Version of Visual Studio Code

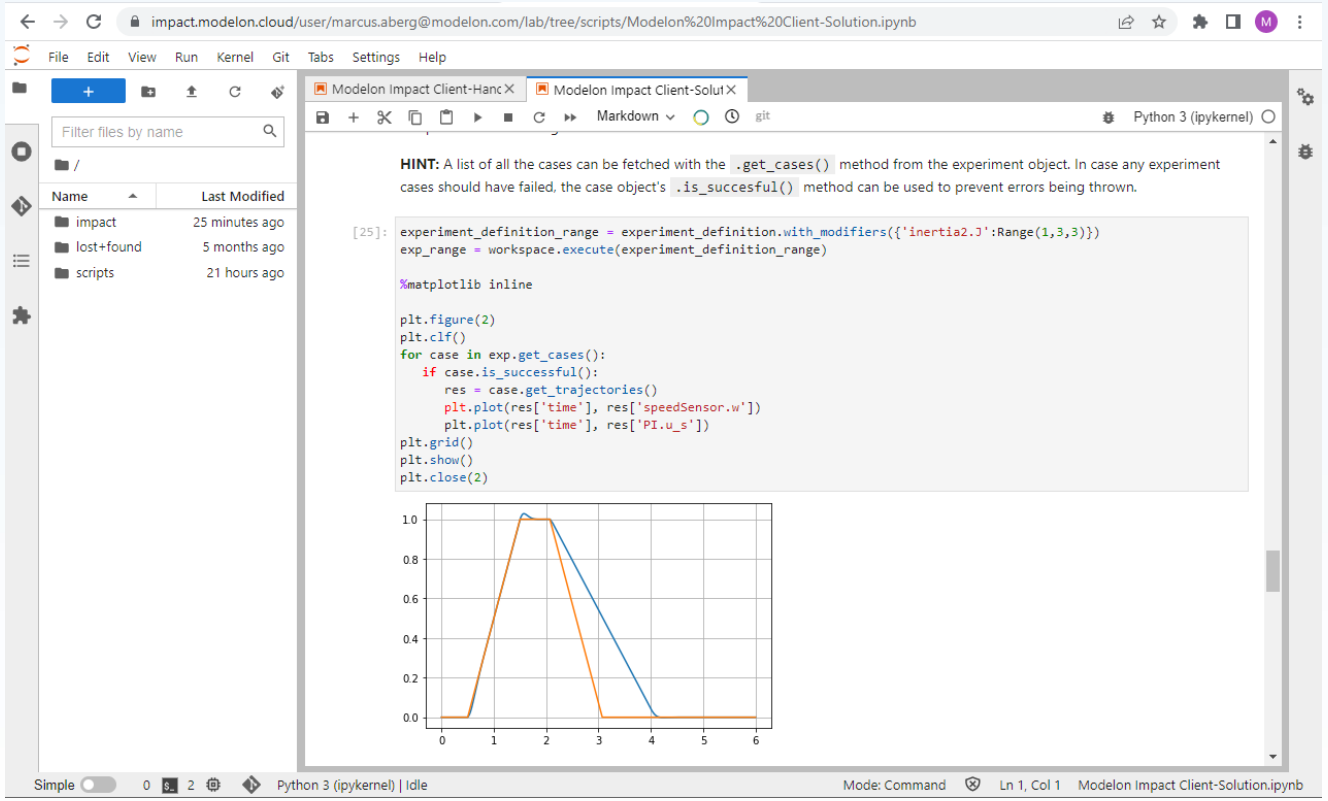
- File Explorer
- Coding IDE
- Version Control
- Debugger
- Terminal



JupyterLab - Cloud

Interactive development environment

- File Explorer
- Notebook Editor
- File Editor
- Terminal
- Python Shell

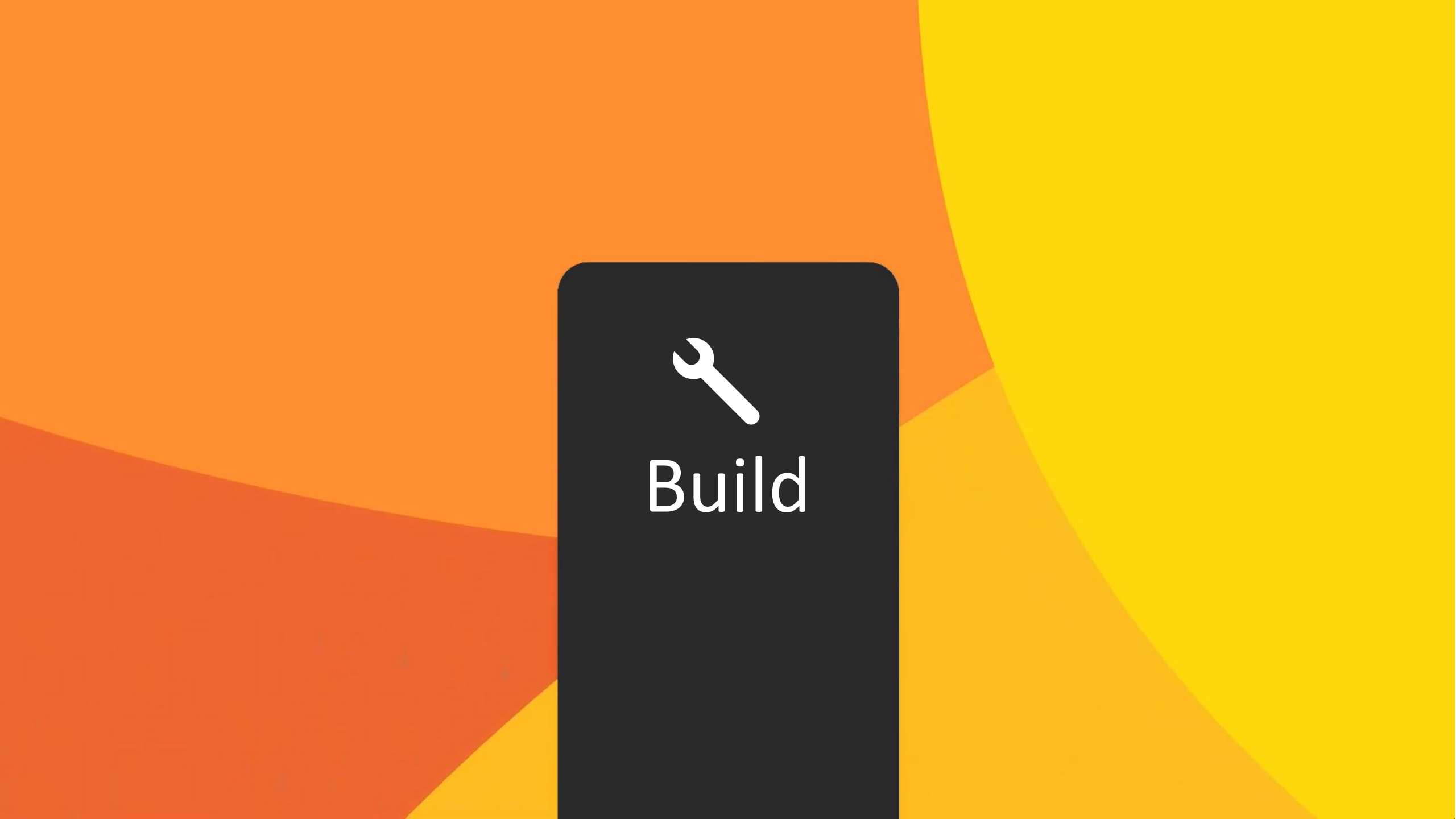


DEMO

- Open Jupyter Notebook
- Connect to workspace
- Run parameter sweep
- Plot the results
- Connect back to Impact UI

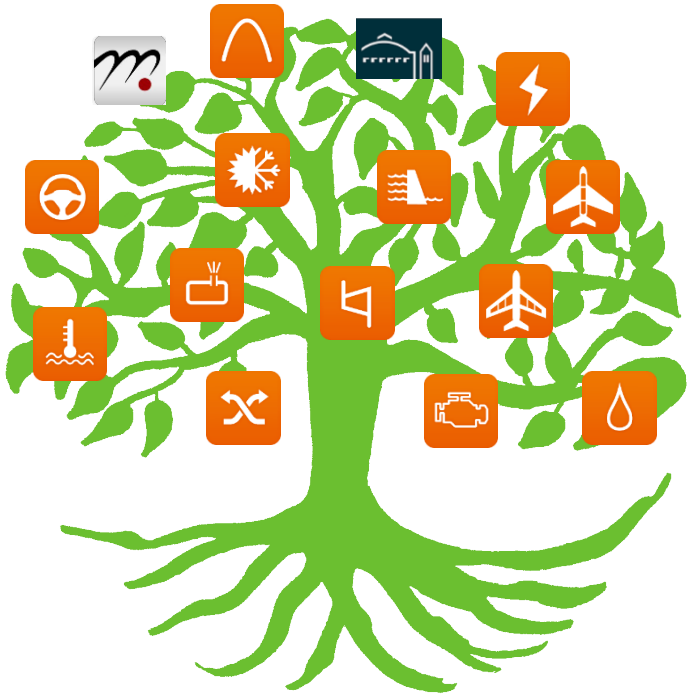
2024.2 Highlights

- *General Availability: Sep-19 2024 at Modelon Cloud*

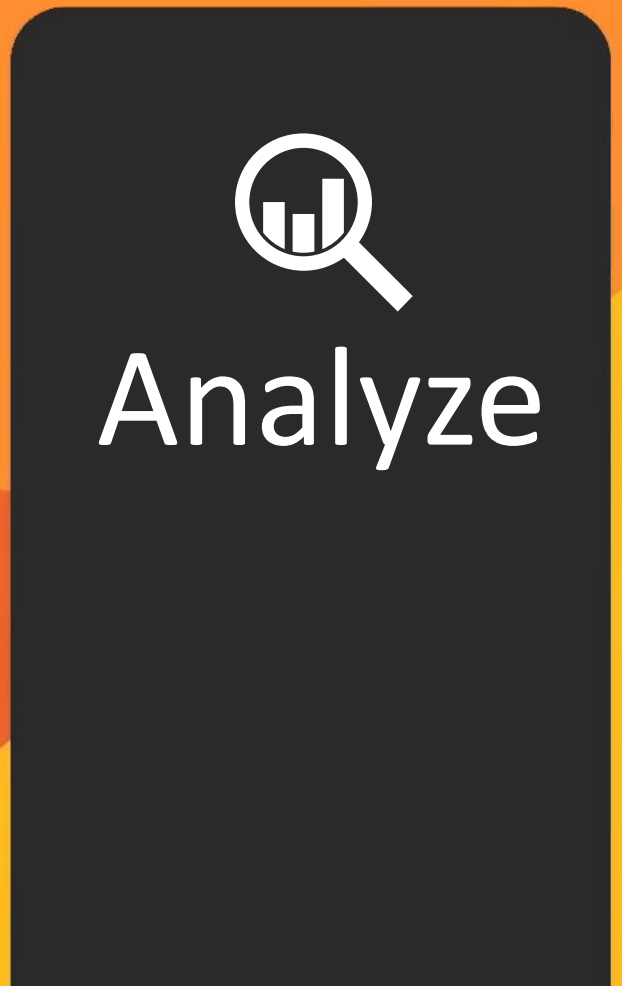

Build

2024.2 Modelon Library Suite

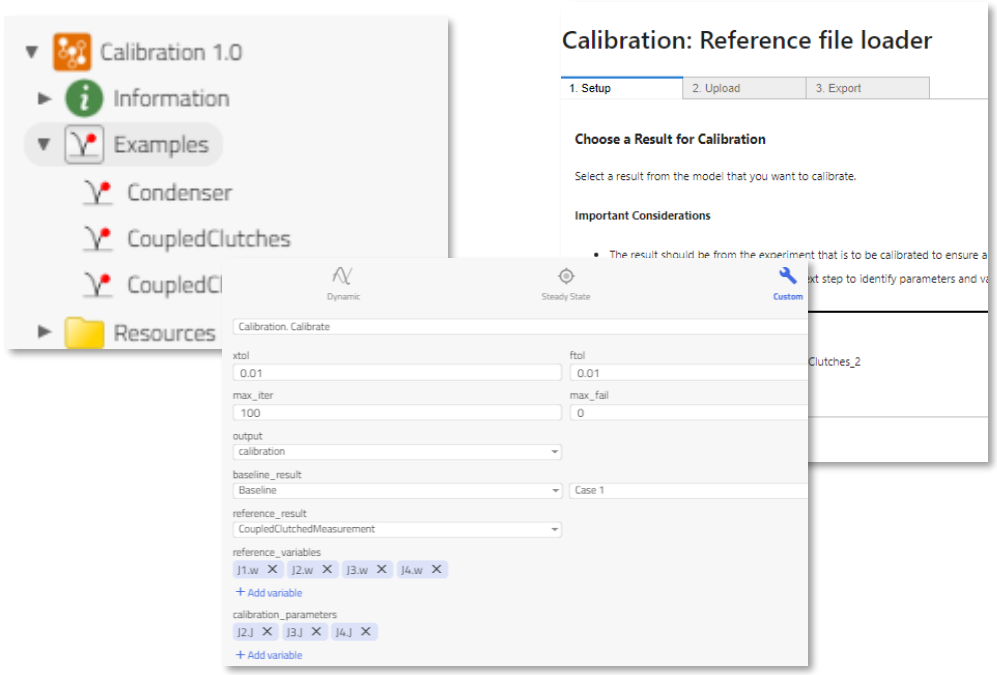
Talk to our experts to find out more!

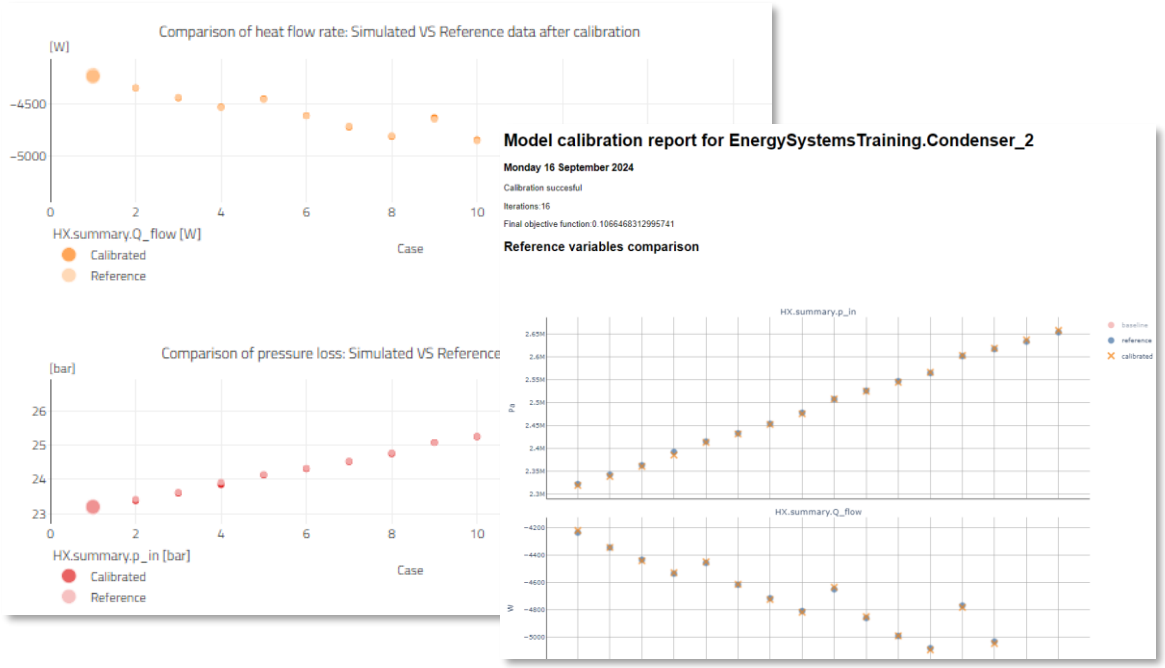


Support for licensing of 3rd party commercial Modelica libraries


Analyze

Solver – Calibration against steady-state data **(BETA)**





Calibration Library

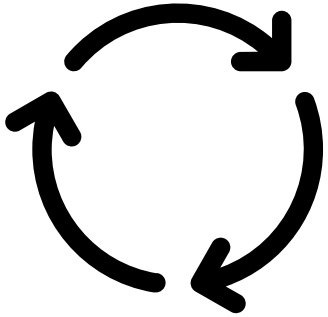
- Examples
- Custom functions
- Custom Web App

Note, requires Pro license

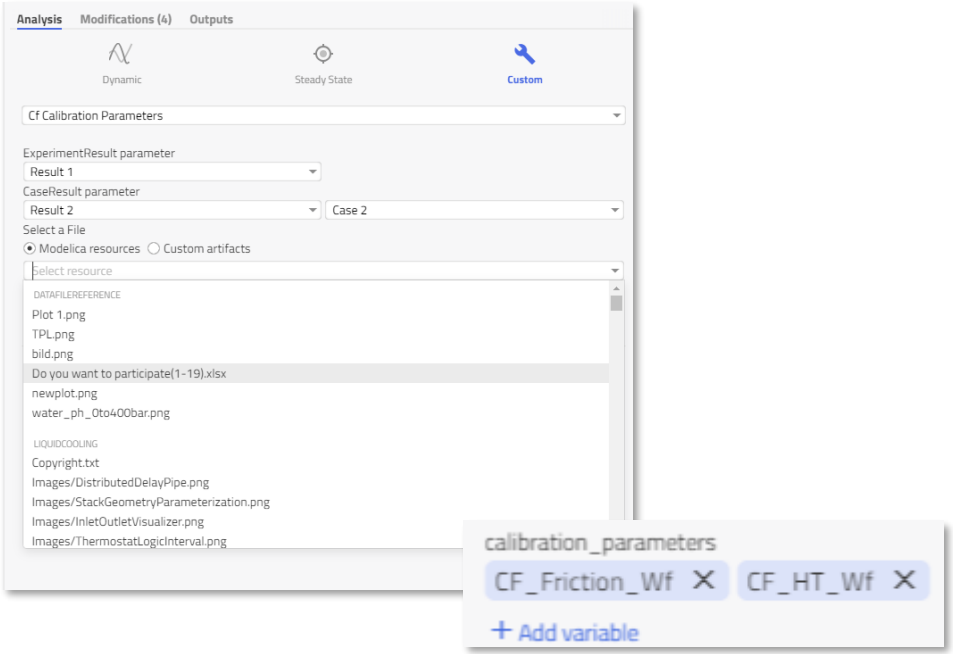
Calibration Capabilities

- Fast (steady-state) or Robust (dynamic simulation)
- Faster with Productivity licenses (parallel execution)
- Reference data: Single or multi-point
- Reference data: Measurement or simulation (high fidelity model)
- Analyze result: UI or calibration report

Solver – More powerful custom functions



Productivity add-on enables parallel execution



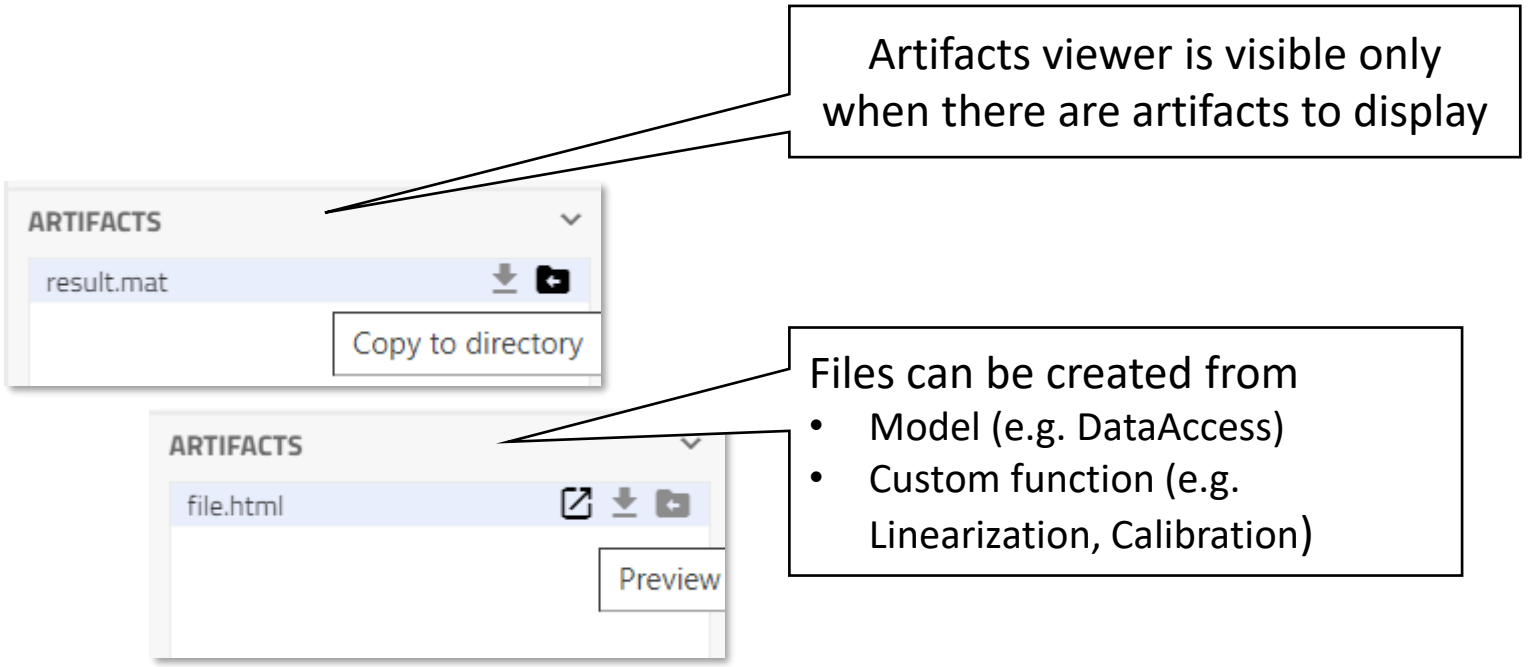
Major custom function API extensions

- Support of algorithms that iteratively schedule and execute cases (Orchestrator custom function)
- Access to data and results as input arguments

Custom function UI extensions

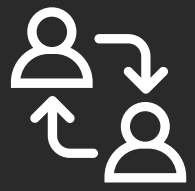
- Support to select results, cases, and files
- Support to select parameters & variables from a model

Visualization Tools – UI-support to display generated artifacts



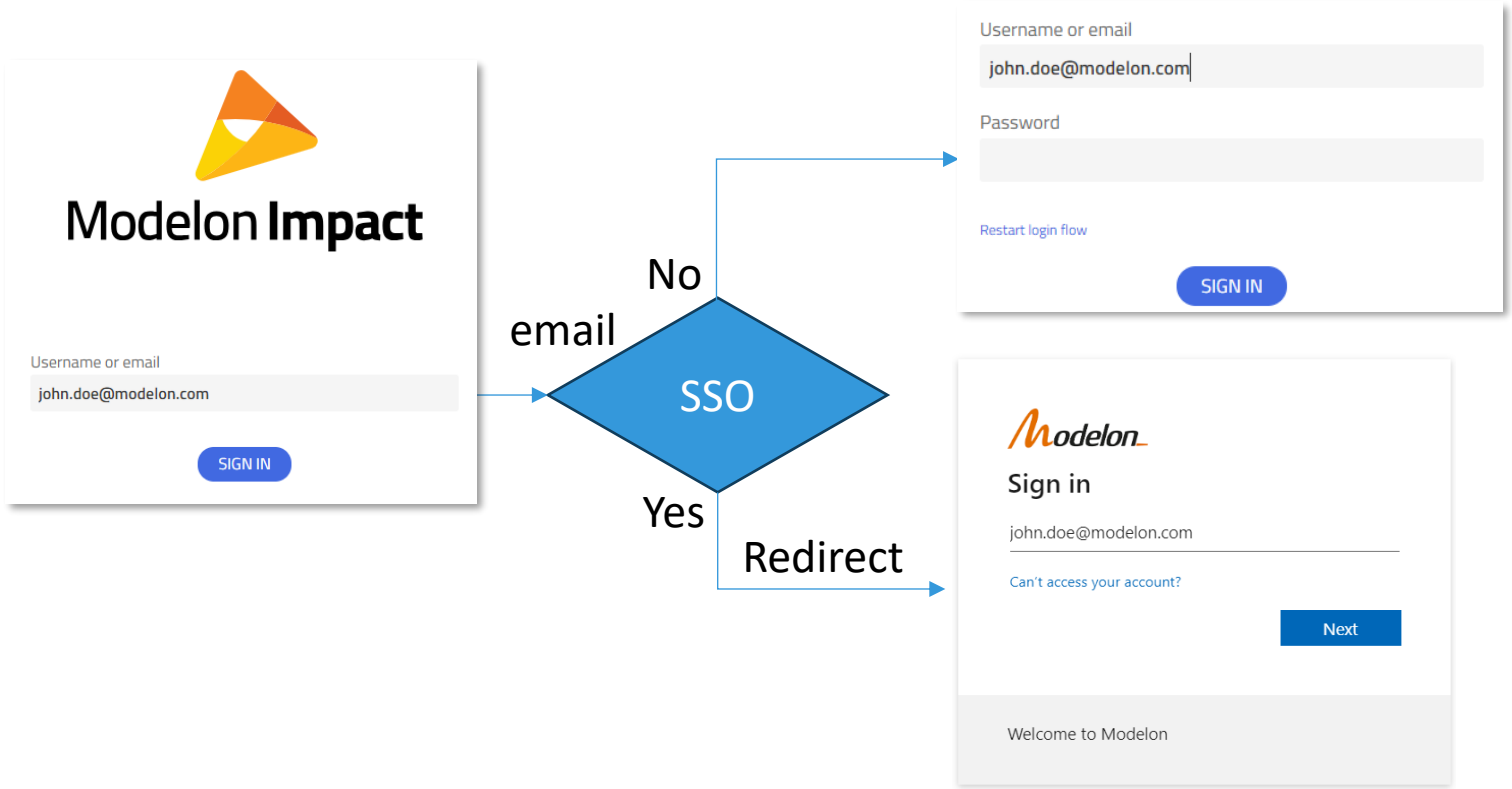
Artifacts viewer

- Overview of all generated artifacts
- Preview artifact in a new browser tab (e.g. view a html-report)
- Copy to directory (e.g. data file to Resource folder)
- Download



Collaborate

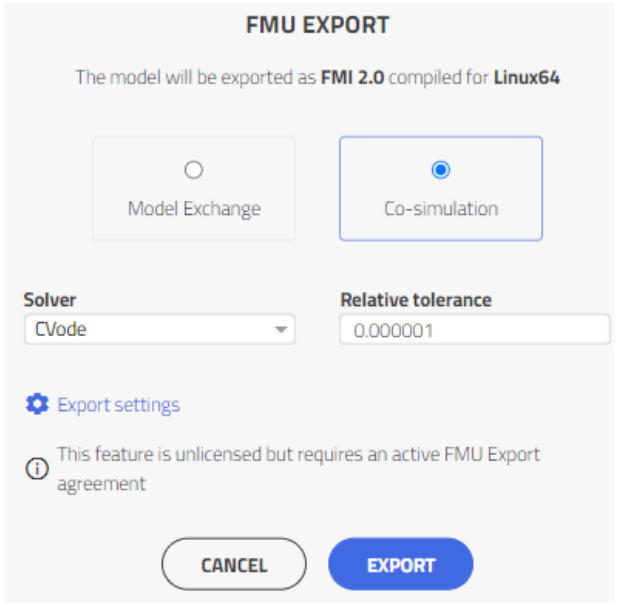
Access - Single Sign-On for enterprise accounts

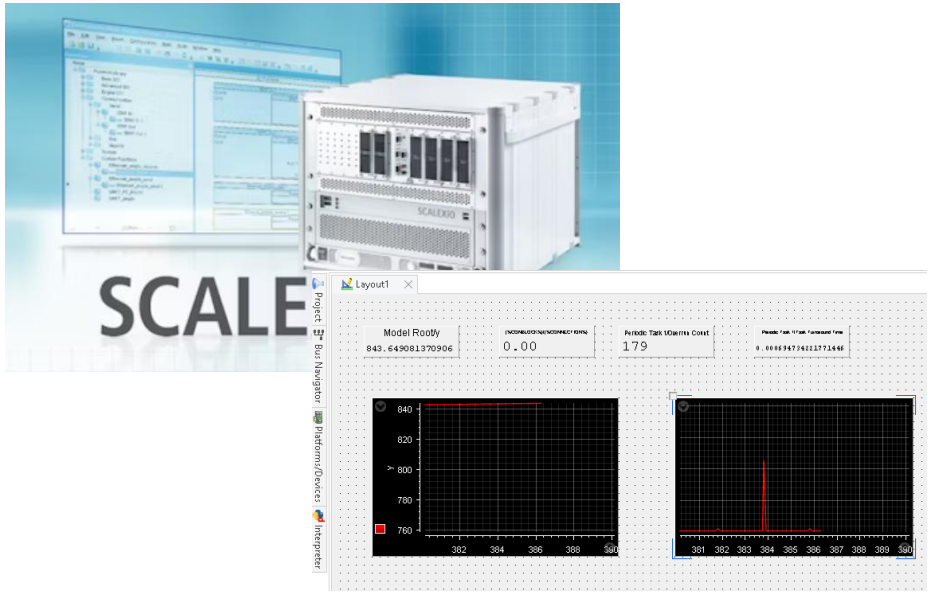


Single Sign-On @ Modelon Cloud

- Enable customers to configure and use existing authentication system incl security settings such as multi-factor authentication

Sharing Tools - FMU export to dSPACE SCALEXIO





Directly export FMUs into one of the most popular real-time platforms

- Export FMU binary into dSPACE SCALEXIO
- dSPACE has support for FMU binary import

Thank you!

Questions?

Accurate Simulations. Better Decisions.