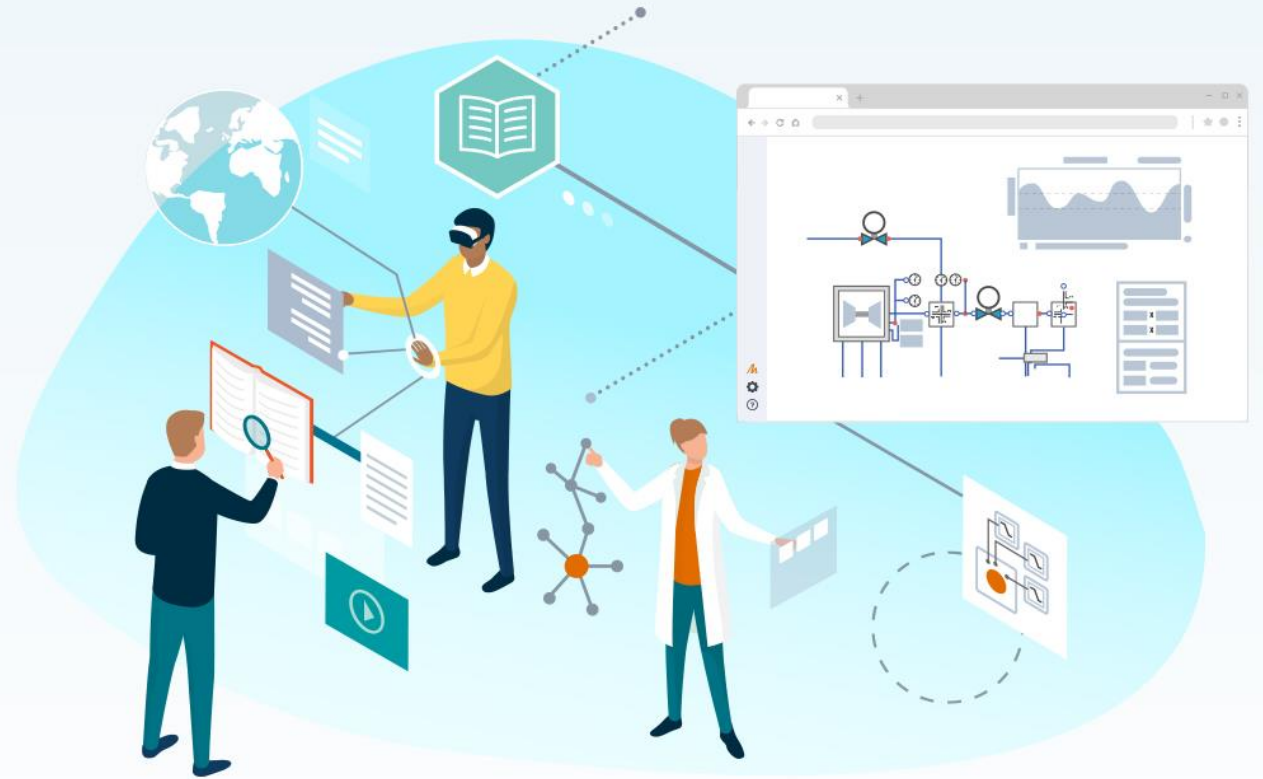


# Getting Started with Modelon Impact Cloud

Presented by Modelon



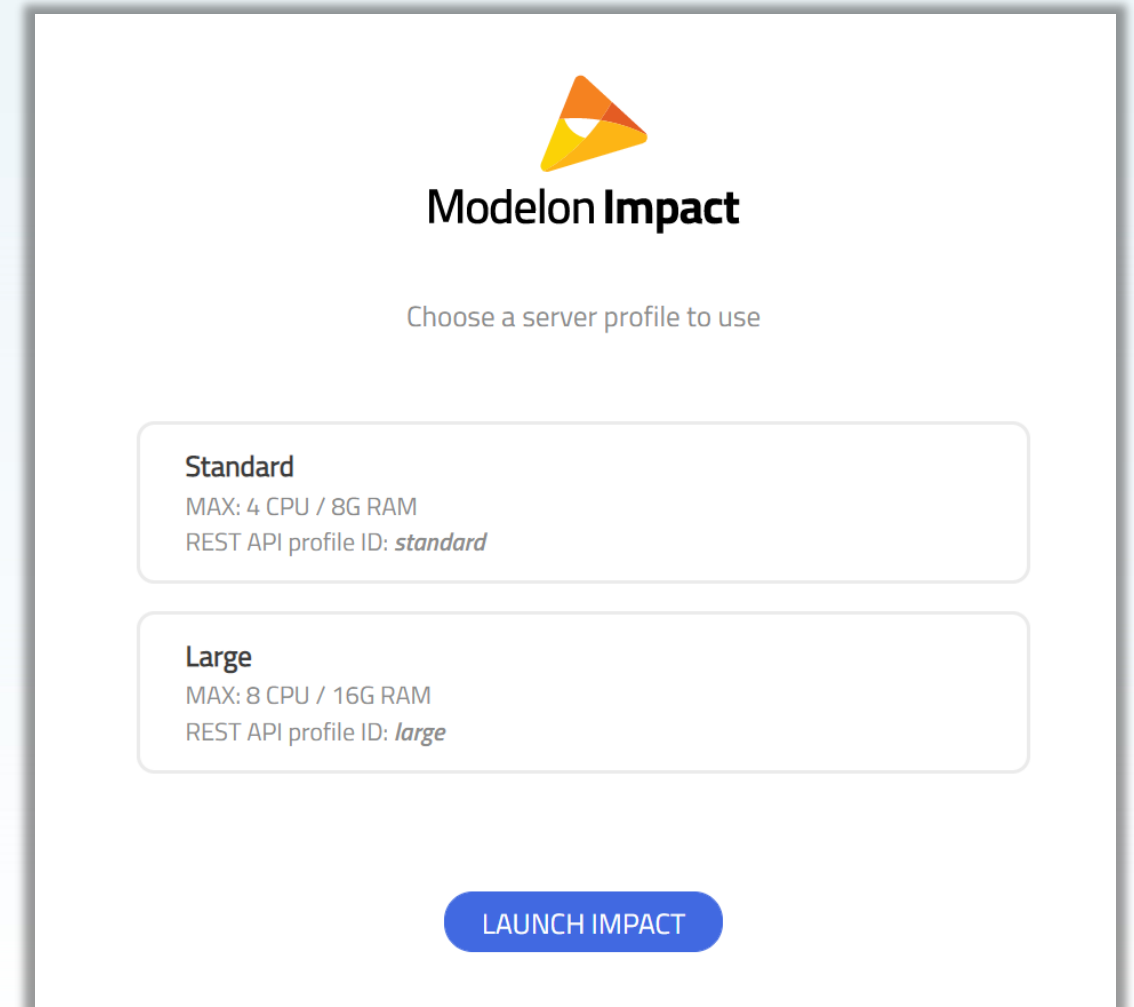
# Modelon Impact Cloud

Modelon Impact 1.8 – 2022.2

- <https://impact-innovate.modelon.cloud/>


Help Center:

- <https://help.modelon.com/latest/>



# Login

- Username
- Password



## Modelon Impact

Username or email

Password

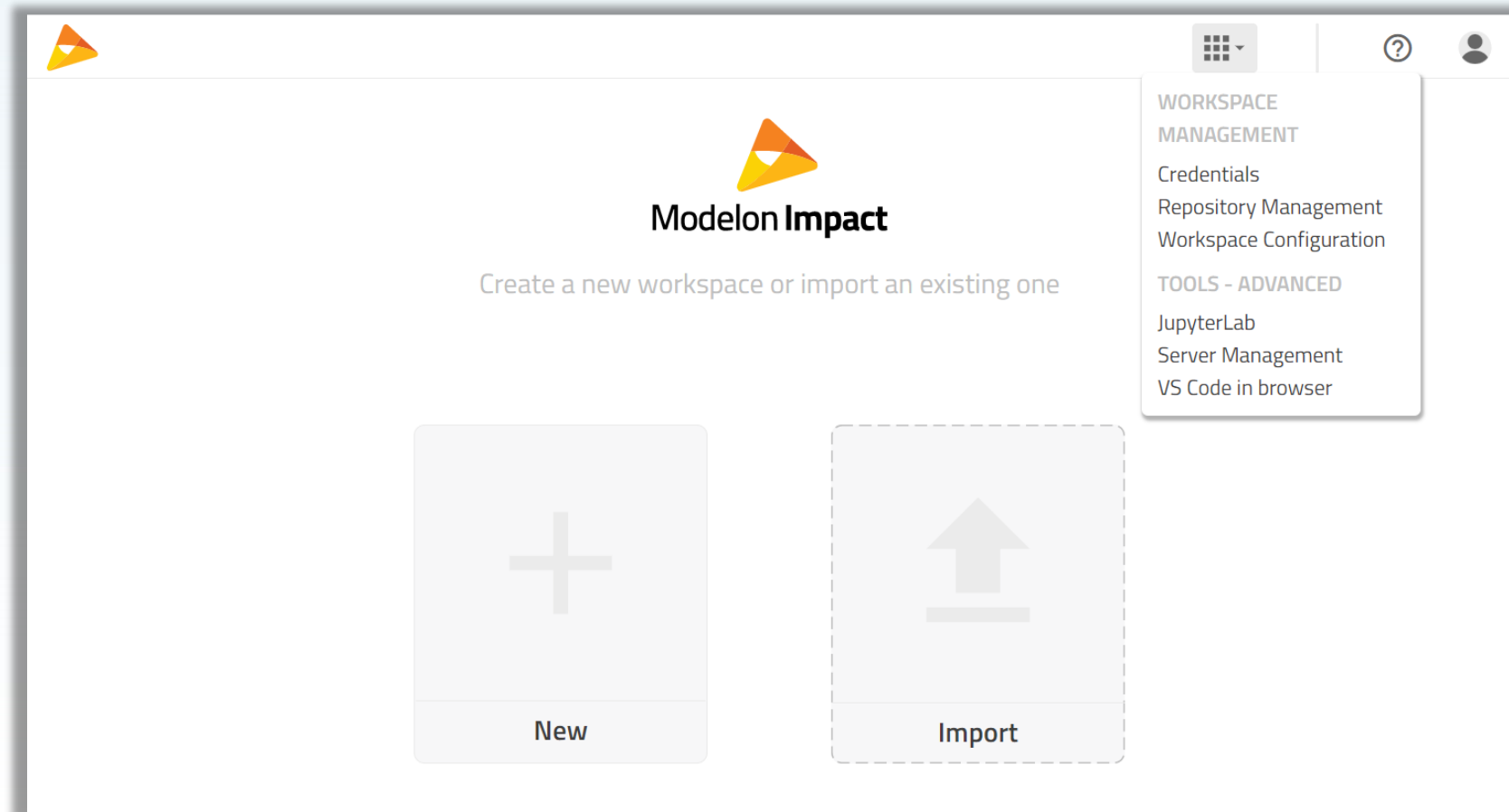
[SIGN IN](#)

---

Or sign in with

[AD](#)

# Create a new workspace



# Workspace Configurator

Workspace

Repositories

Credentials

Workspace name

Innovate

EDITABLE LIBRARIES

No libraries yet

Drop libraries here to include them as editables

DEPENDENCIES

Electrification 1.8

Hydraulics 4.17

Modelon 4.1

Drop libraries here to include them as dependencies

CREATE WORKSPACE

AVAILABLE LIBRARIES

AirConditioning 1.24

AircraftDynamics 1.7

EngineDynamics 2.9

EnvironmentalControl 3.13

FuelCell 1.15

FuelSystem 5.2

HeatExchanger 2.9

HydroPower 2.15

IndustryExamples 1.1

JetPropulsion 2.4

LiquidCooling 2.9

Pneumatics 2.13

ThermalPower 1.24

ThermoFluidPro 1.24

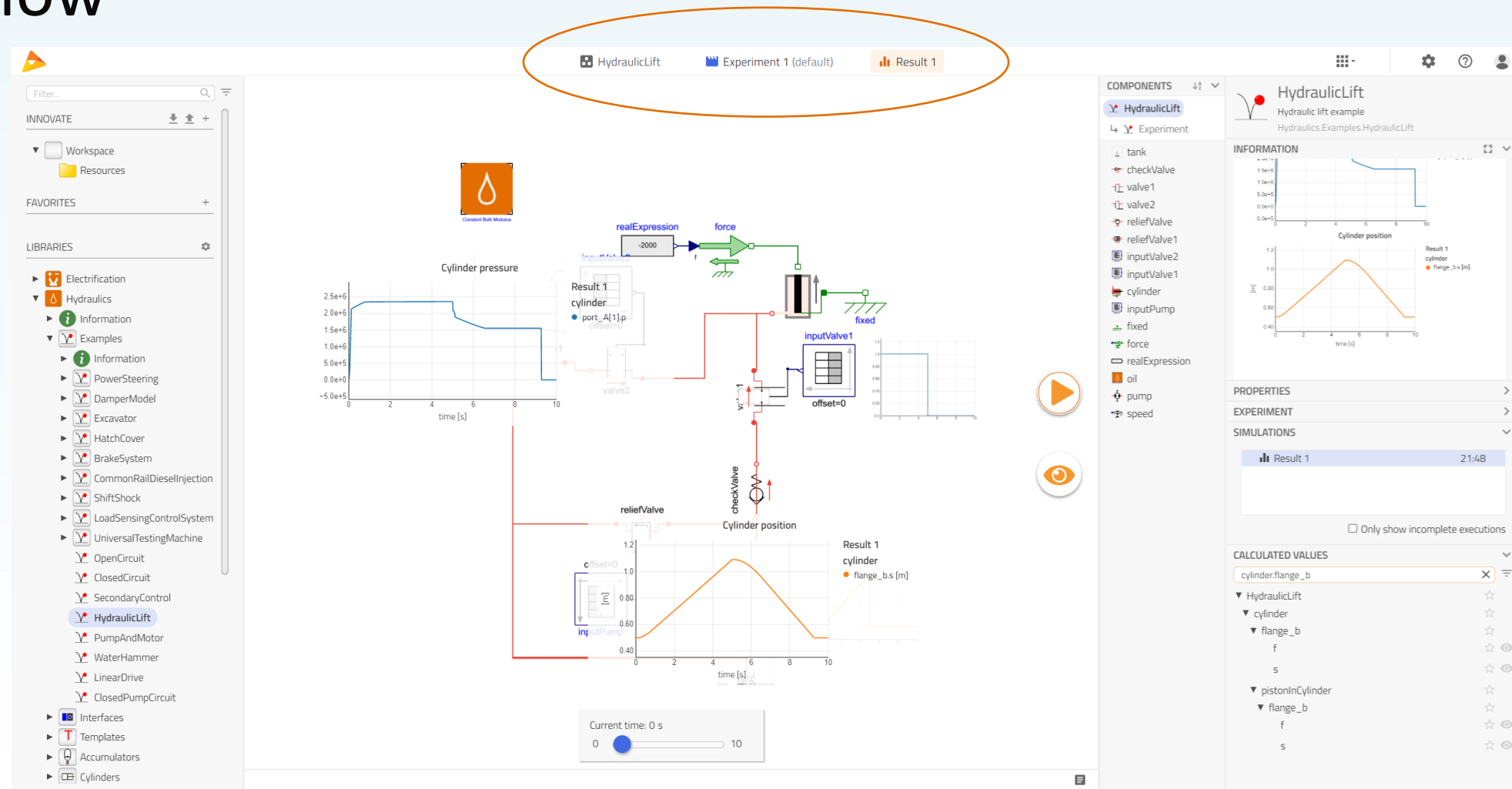
VaporCycle 2.9

VehicleDynamics 4.1

[Clone/checkout new library](#)

# Basic workflow

- Author
- Configure
- Experiment
- Results



# Demo

# Modelon Impact Training Content

- More in-depth hands-on training content in Help Center:

[https://help.modelon.com/latest/training/training\\_overview/](https://help.modelon.com/latest/training/training_overview/)

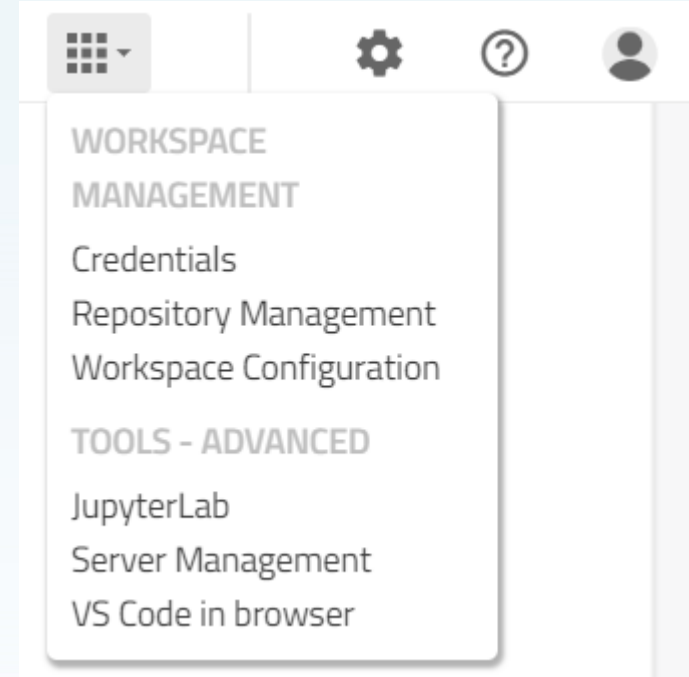
## Lectures & Workshops

Topic	Description	Day	Duration	Parts	Level
<b>Basic User Training</b>	Focus on basic workflow, from composing a system model, to simulation and getting the results	1	1 day	5	Beginner
<b>Advanced User Training</b>	Focus on advanced model architecture, states and initialization, model utilization and troubleshooting	2	1 day	4	Advanced
<b>Modelica Basics Training</b>	First introduction to modelica language and equation based modeling	3	1 day	4	Intermediate
<b>Modelica Advanced Training</b>	Advanced modelica concepts allowing for flexible model and data achitecture, hybrid systems, external code interfaces	4	1 day	4	Advanced



# New tools

- Modelon Impact cloud comes with:
- JupyterLab
  - Python scripting and notebook environment
  - File management system
- Server Management
- VS Code in Browser



# Server Management

My server

Modelon Impact version

1.8.0

App version

1.0.6

Disk usage

1%

SERVER MANAGEMENT

—

If you want to free up server resources or need to switch container image you can use the button below which will log you out and shut down the running server.

LOG OUT

ENVIRONMENT VARIABLES

+

SERVER ACCESS TOKENS

+

# Storage

- Remove result files

Application

Execution

Export

Units

Storage

Workspace

**DELETE DATA**

You can free up more space by deleting experiment results. This will remove generated data permanently from your disk. This can't be undone. You can regenerate these files by compiling and re-running your simulations.

**Timespan**

☒ Older than 30 days

☐ Older than 7 days

☐ Older than 1 day

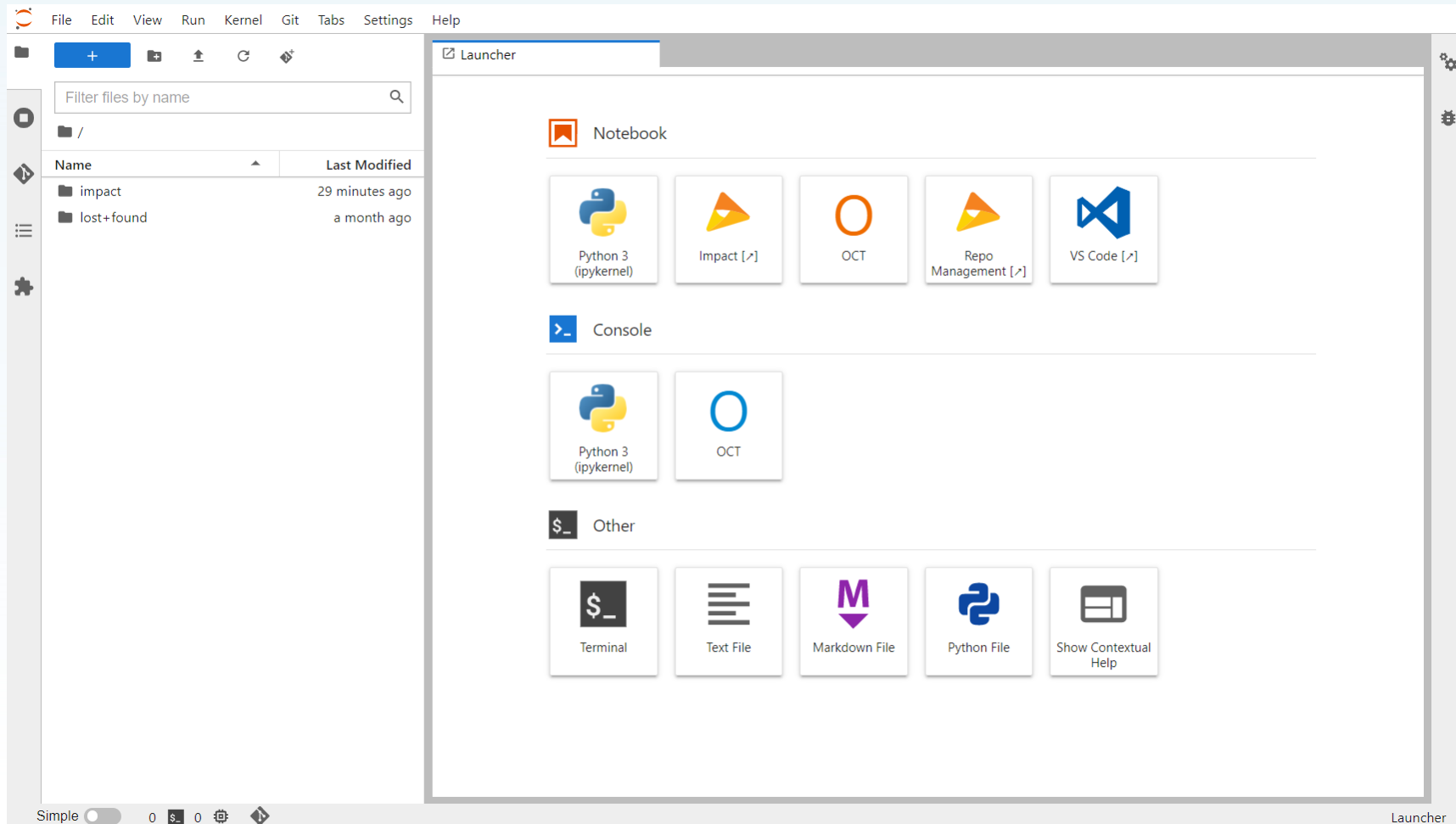
☐ Older than  days

This will delete **0** out of 1 results.

CANCEL

DELETE

# JupyterLab



# Demo

New features



# Modelon Impact

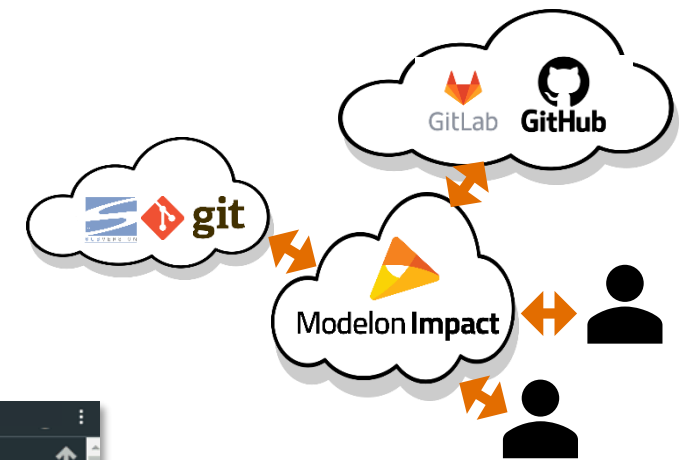
## Release 2022.2

What's New  
July 2022



# Modelon Impact is available online!

Modelon Impact on cloud: [impact.modelon.cloud](https://impact.modelon.cloud)

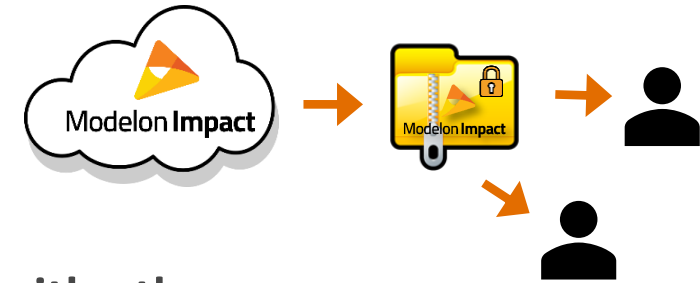


- Available online
- No need to install
- Sign in (if not already) and start working
- Create, select, and configure your workspace
- Connect to external version control
- Daily account backup

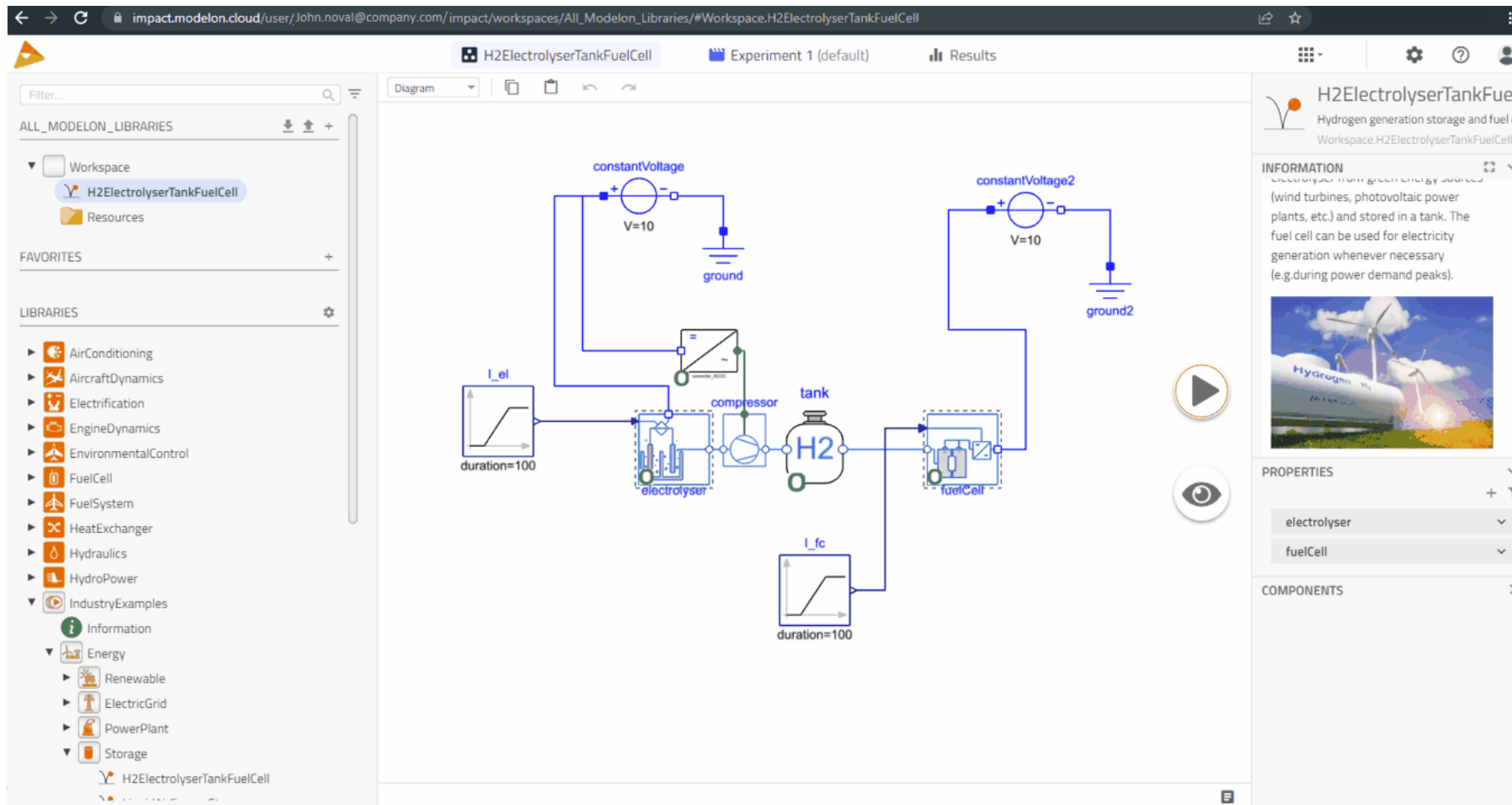


# App Mode

- **Export** your model as an app!



App mode allows experienced users to create a “locked” model and share it with others



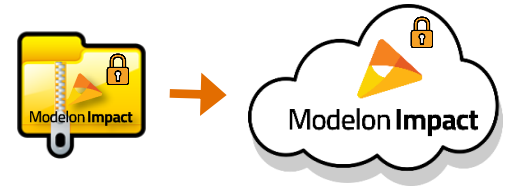
- Prepare a model with plots and stickies
- Export the model into the workspace
- Download it from cloud
- Send / share with others

**Modelon**

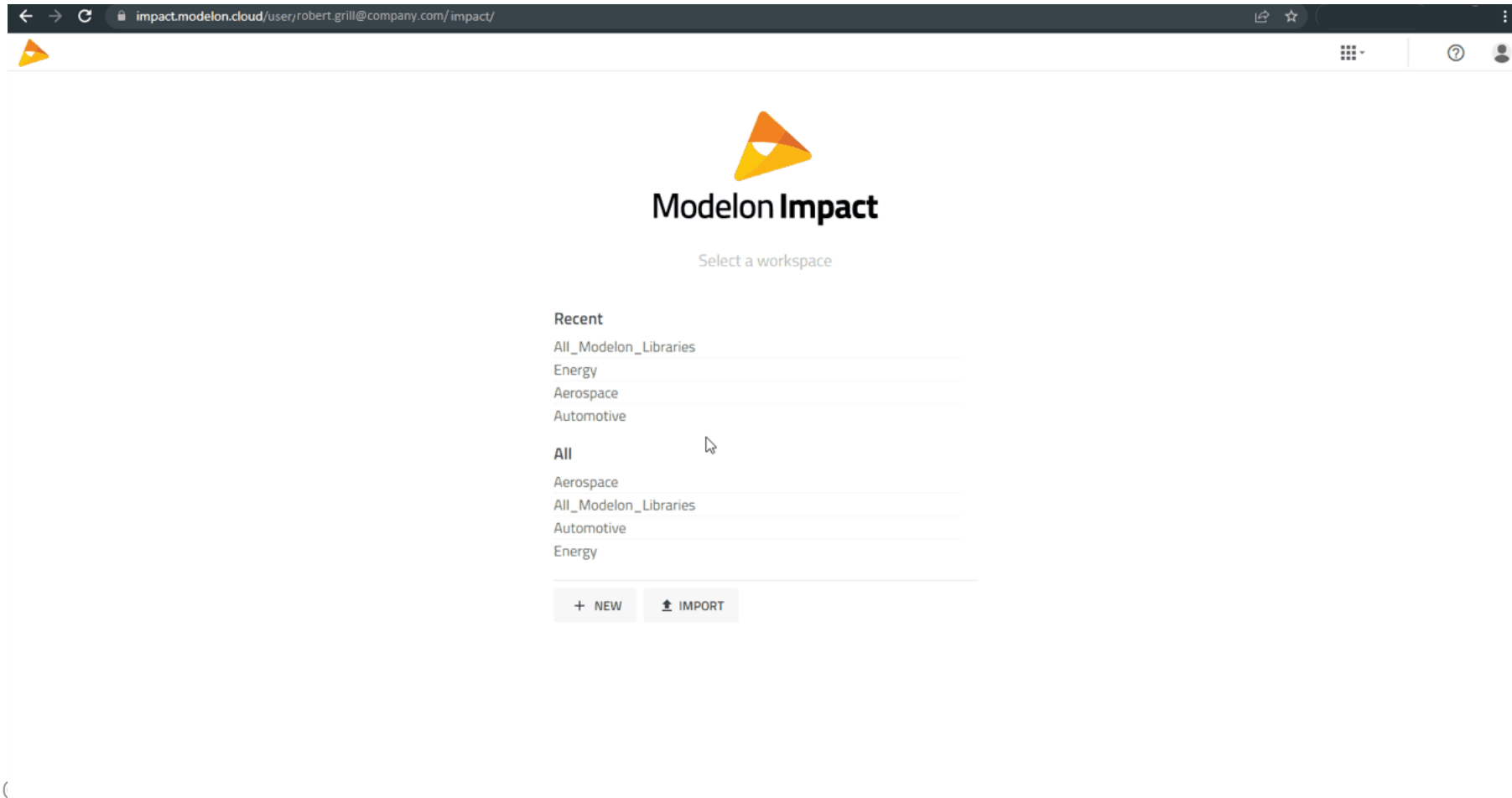


# App Mode

- **Import** your model as an app!



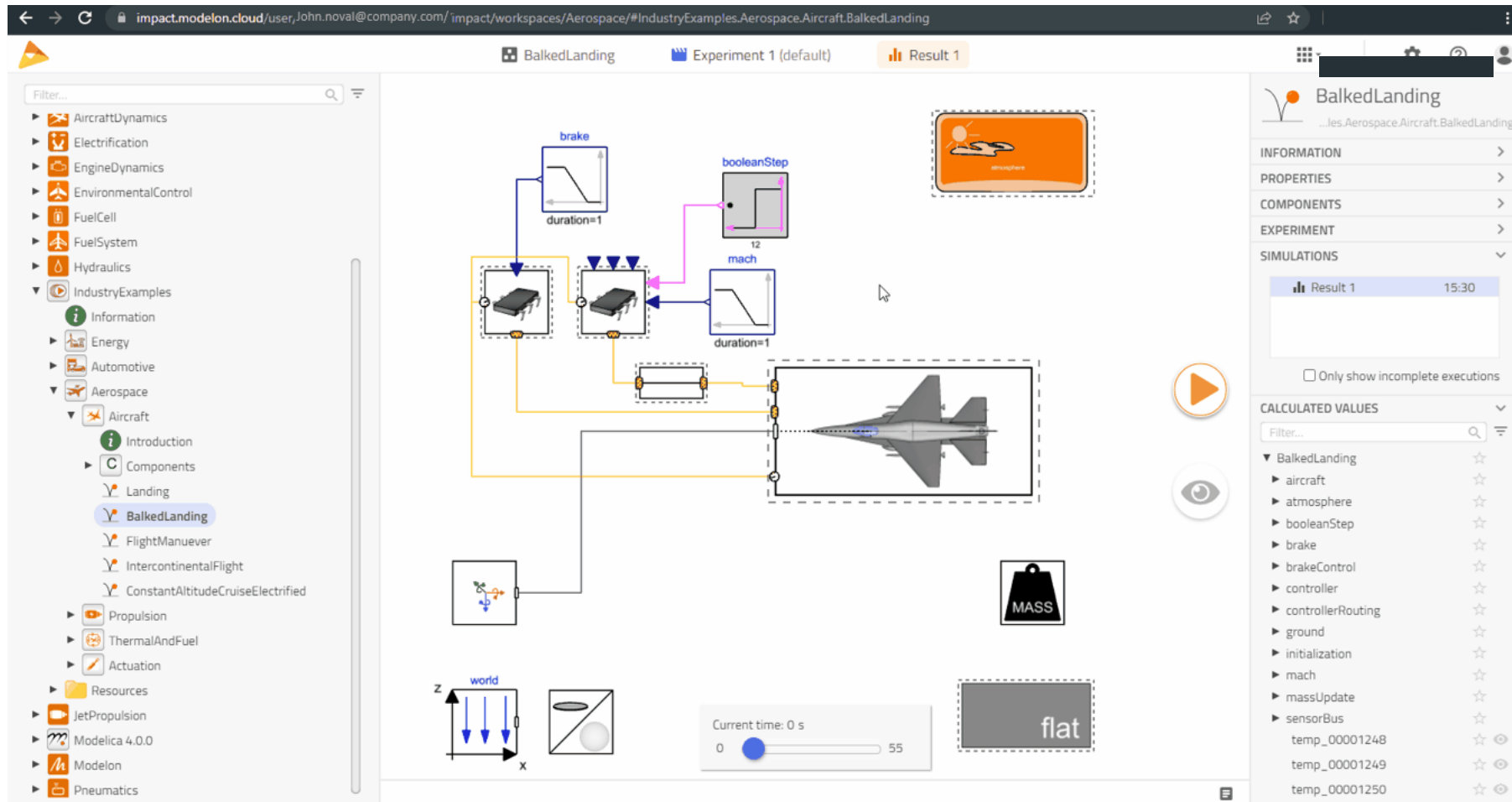
App mode allows experienced users to create a “locked” model and share it with others



- Import a model as an app
- Model editing disabled
- Run with default or adjusted solver options
- Open predefined plots and stickies
- Export results

# Workspace Clean-up

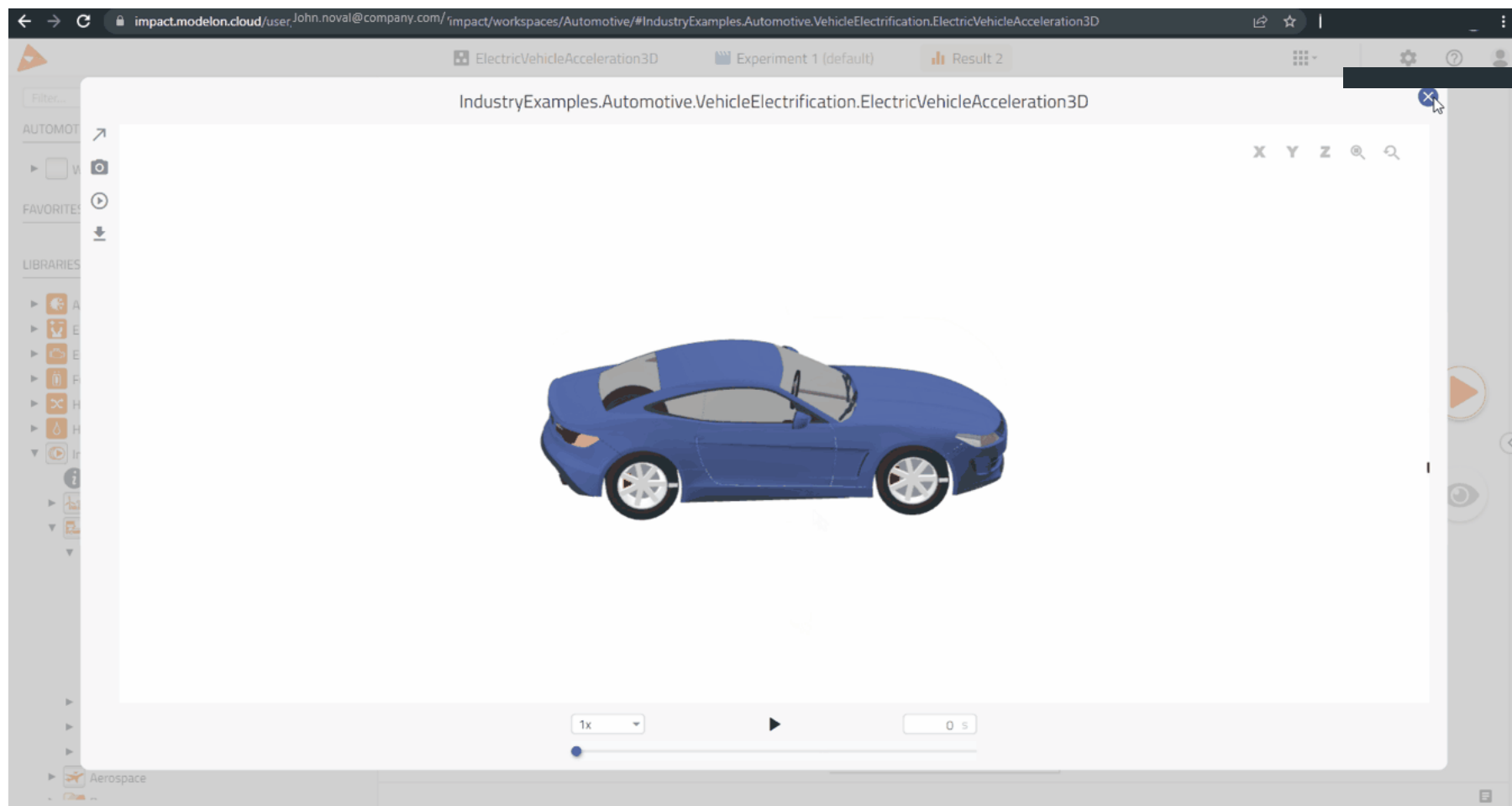
Clean-up your workspace from outdated results to save disk space!




- Delete results older than selected number of days
- Accessible from user interface
- Helps to clean up and reduce size of cloud account

# Manual re-compilation

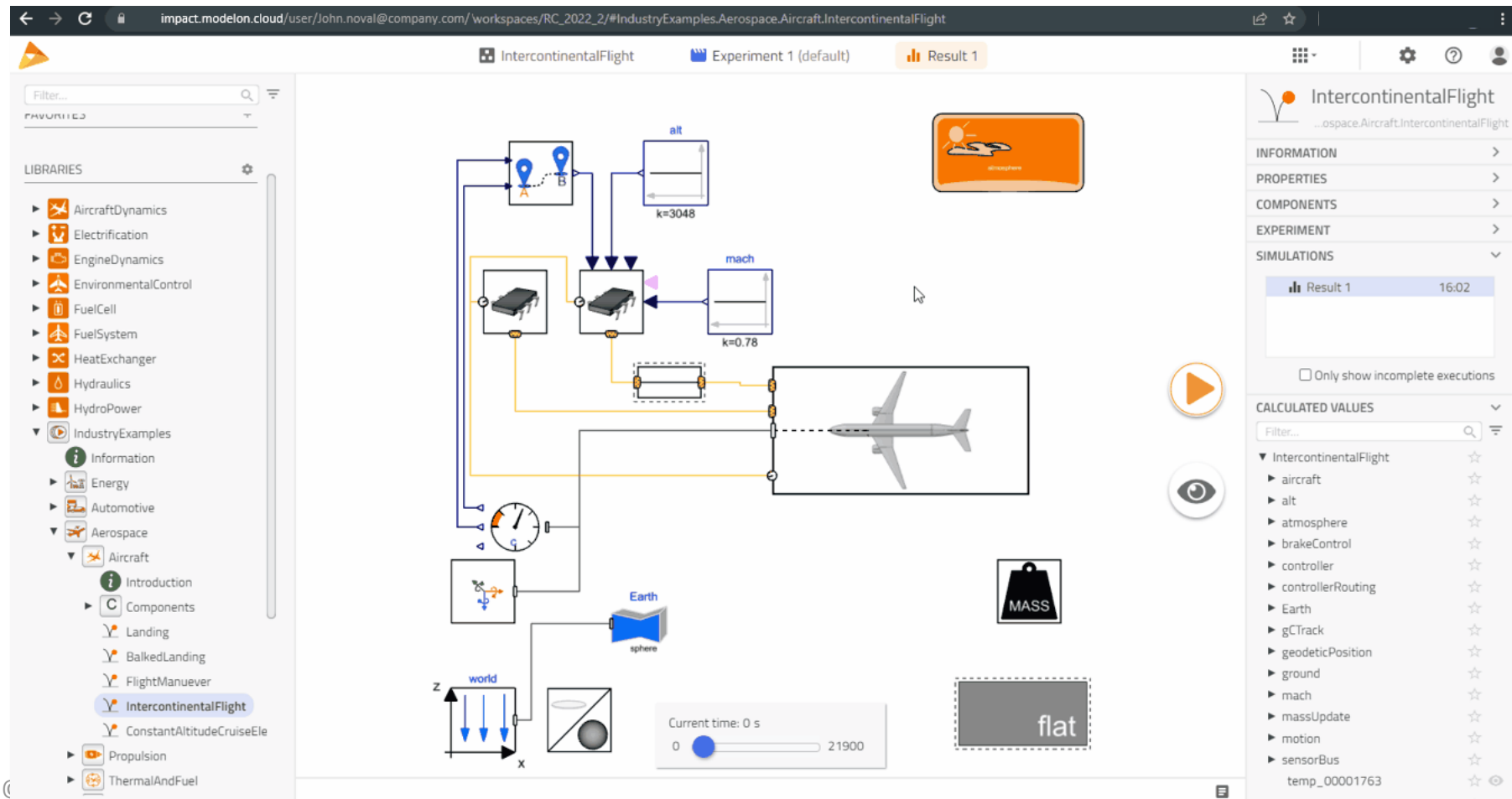
## User can manually (force) model re-compilation



- Manually force re-compilation by **SHIFT+**  button for already compiled model
- Re-compile your model before simulation for special cases (HiL, FMU export, ext. dependencies, etc.)

# Zoom to selected component

## Zoom to selected component in the 3D View



- Right click on a component and select 3D View
- Zoom to a component in large models / systems to find it quickly

# Better diagnostics and other improvements



## Improved Diagnostics:

- Balancing check improvements
- More information for encrypted models
- Modelica compliance check
- Check against incorrectly defined duplicated variables
- Check against incorrectly defined derivative annotations in Modelica functions
- Improved error check for connect clauses
- Improved option to convert parameters to constants
- Improved handling of switching between MSL version
- Removed default linking of ModelicaStandardTables (and its header)



## Improved Modules / Add-ons:

- Support for very large result files in PyFMI
- Importing CS FMUs from other vendors more robustly



Accurate Simulations. Better Decisions.