

Systemsimulation to go

So gelingt die Demokratisierung der
Systemsimulation im Unternehmen

Your presenters for today

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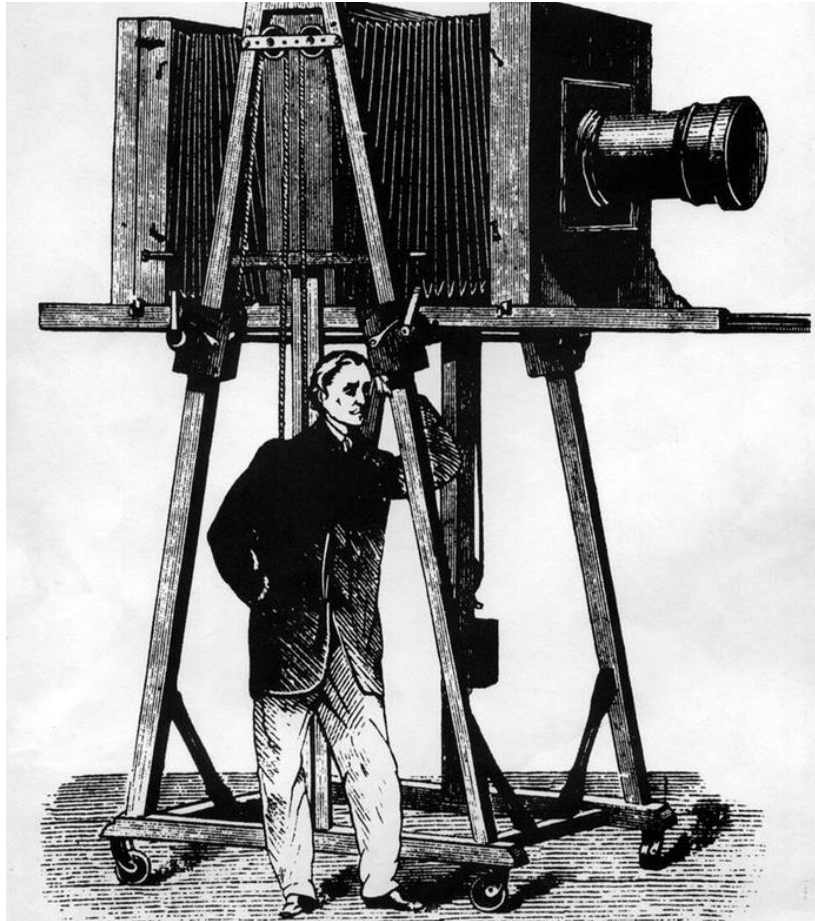
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**What do you mean by democratization of
system simulation?**



What is democratization of system simulation?



Daguerrscher Apparat von 1866.
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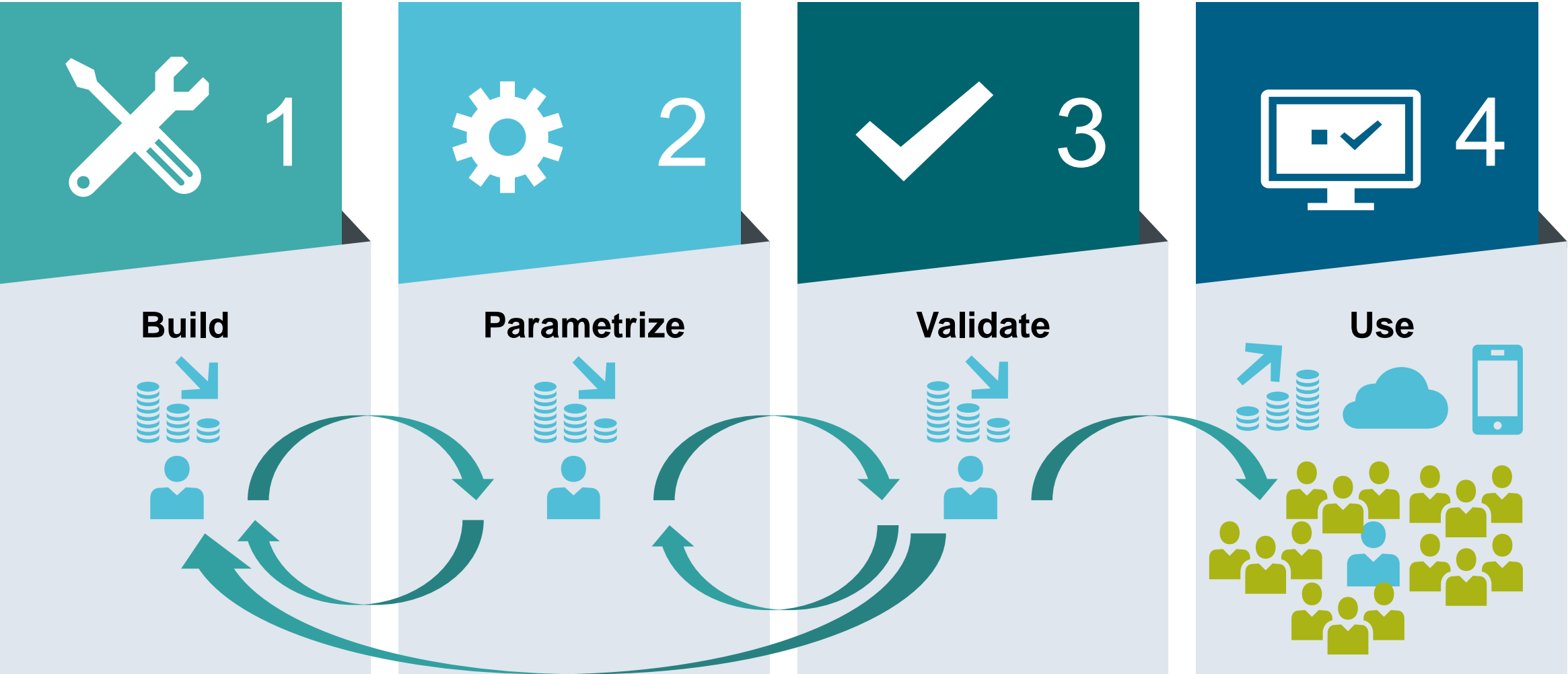


What is democratization of system simulation?

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Model Lifecycle



**Why do you think democratization of
system simulation is important?**



The world is evolving...

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In global crisis times
working remotely is
becoming the new norm

“In 2025 every engineer will do virtual calculations”

“CAE processes must be able to be operated without special expertise”

Ralph Sundermeier
Head CAE Methods
Volkswagen AG

**What are the challenges democratization
of system simulation can solve?**



Challenge

„I want to share our models from the simulation department with other colleagues and departments, so that they can use them easily, without the need to install the software or taking care about license servers“

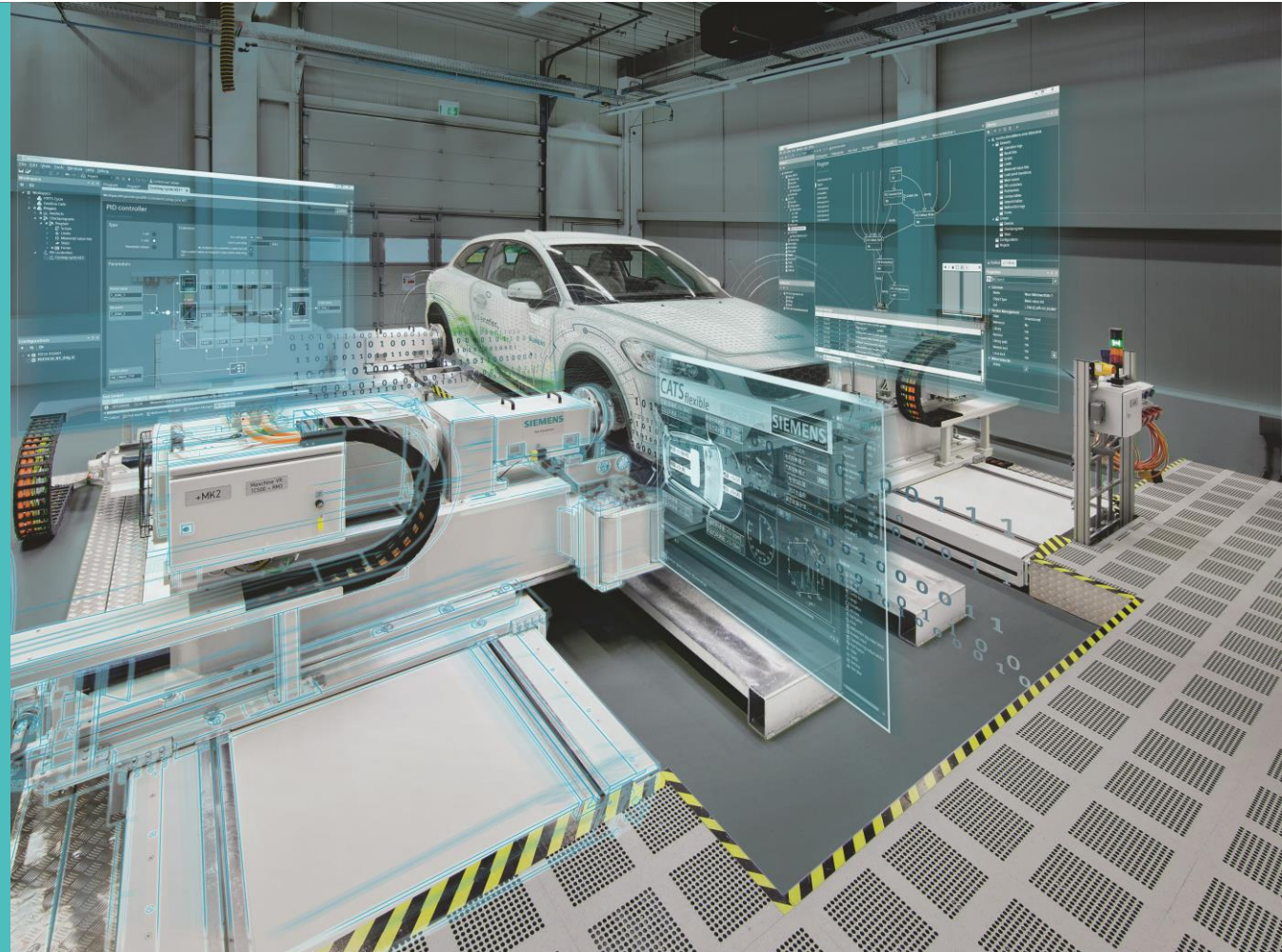
Anthony, simulation engineer



Challenge

„I want to define for my test correct boundary conditions. I want to use system simulation but I have no expertise and no simulation tools?“

Michael, test engineer



Challenge

„I want to use system simulation models in our company to discuss technically with customers the quotes“

Eric, Sales engineer



How do you want to solve the challenges?



A man with glasses and a plaid shirt is smiling while using a tablet. He is standing in a factory setting with industrial machinery in the background. Overlaid on the image are various digital graphics: a blue mechanical part, purple and pink wavy lines, and a data visualization with red and blue points and lines. The overall theme is digital manufacturing and data analysis.

Simcenter Webapp Server

What makes Simcenter Webapp Server unique?

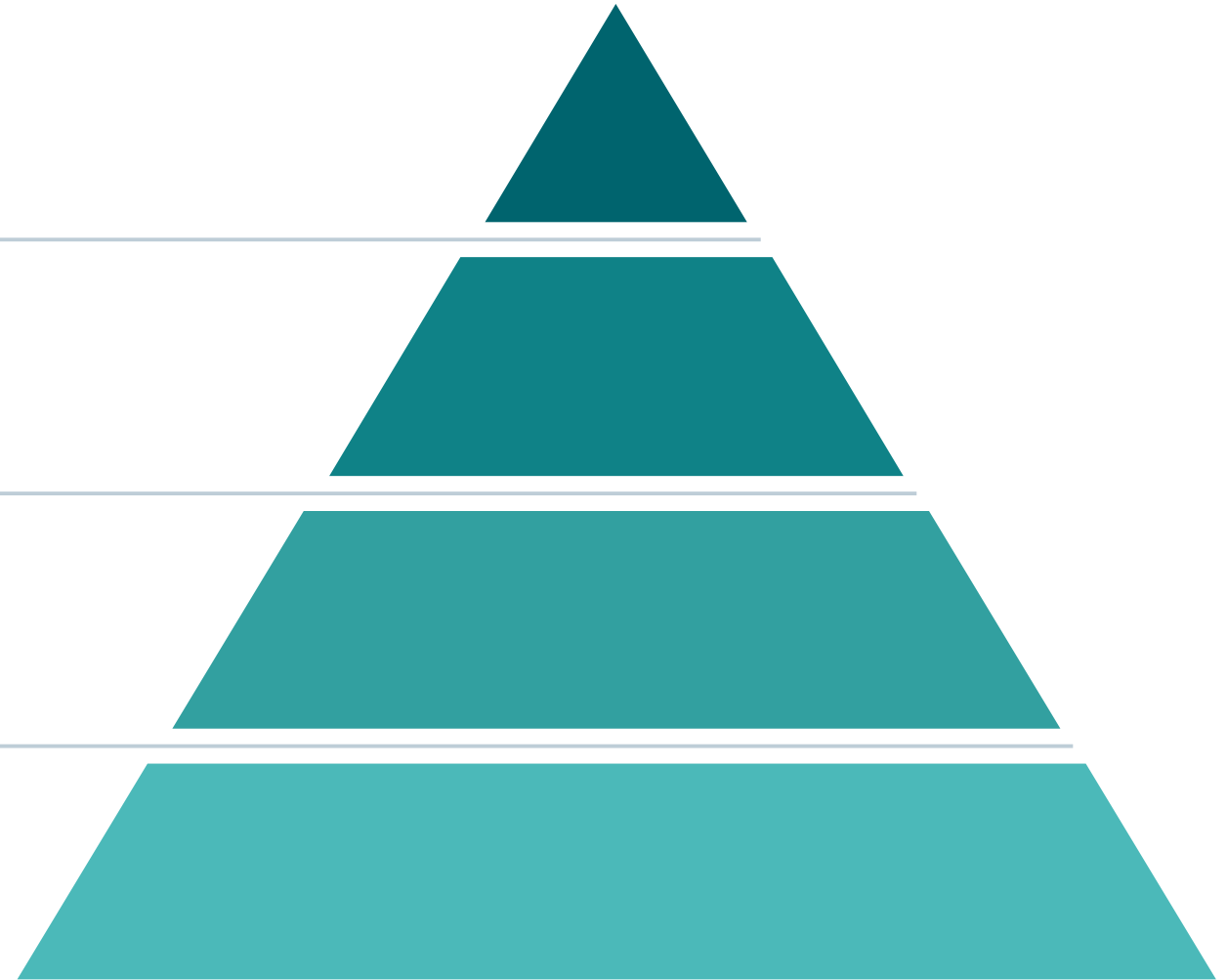


System Simulation Experts

CAE - Experts

Technical - Experts

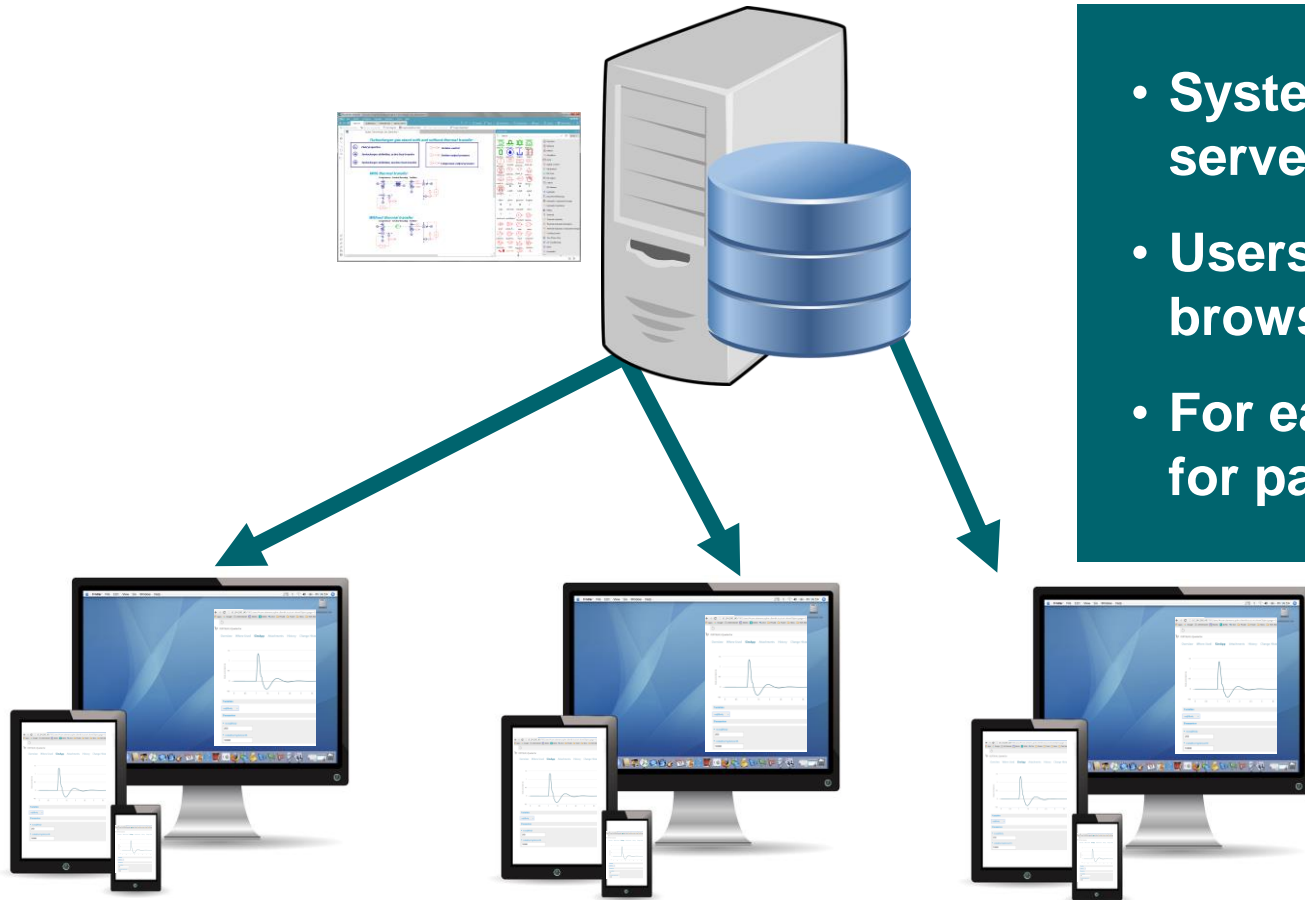
Non-Technical Experts



Can you explain how it works?



How does Simcenter Webapp Server work?



- System simulation models are stored on a server
- Users can access these models through a browser with their login
- For each model, users get access to a webapp for parameterization and simulation

How to proceed with Simcenter Webapp Server?

Model author:
prepare Simcenter Amesim models for Simcenter Webapp Server

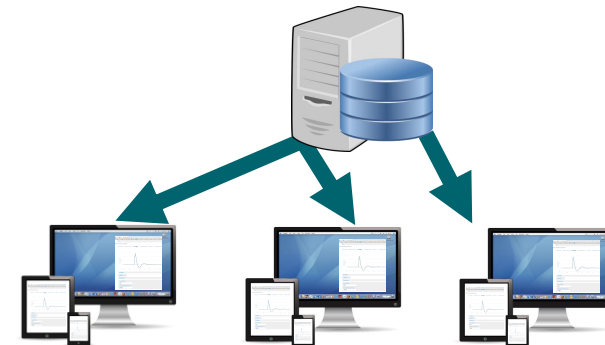
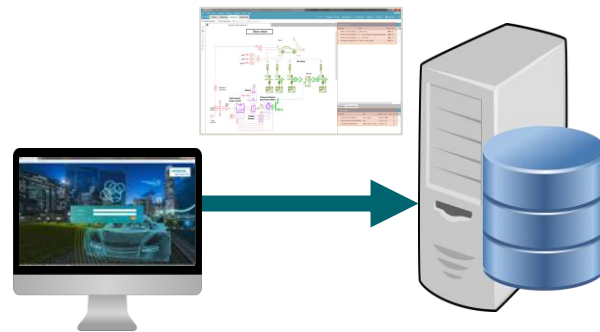
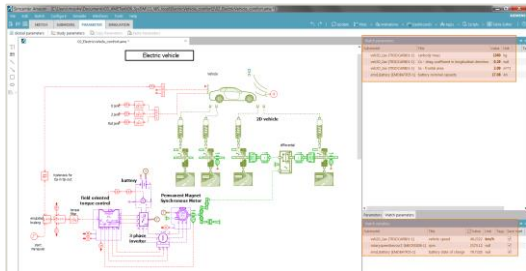
Model consumer:
rapidly access simulation
results

Define
parameters
and variables
of interest

Upload
models to the
server using a
standard
browser

Give access
and share
models with
model
consumers

=
Get models into
the workspace
on the server,
change
parameters,
display results



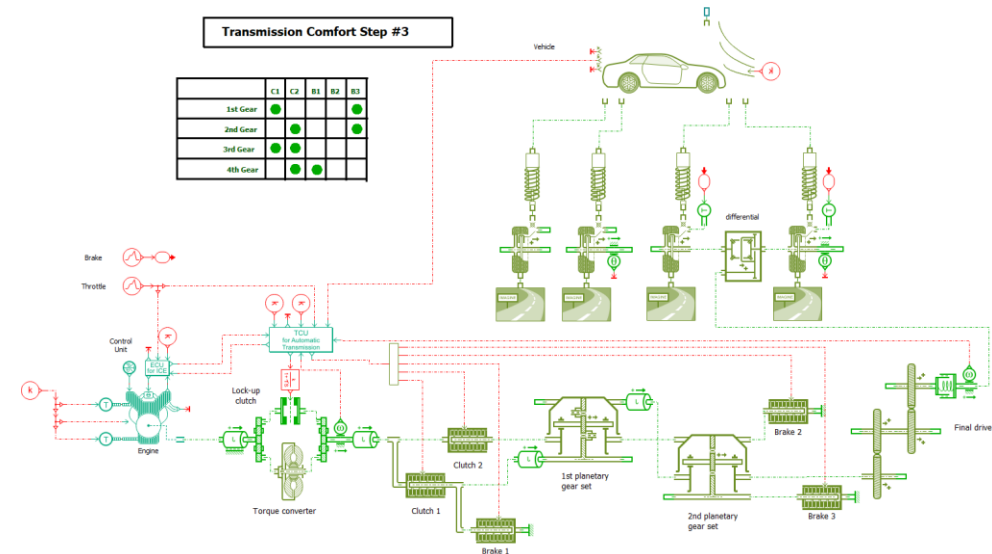
Live Demo

Which models do you support?



Simcenter Amesim

Functional Mockup- Interface Units (FMUs)



How about security aspects?



Secure Access



**How can you further democratize system
simulation in the company?**

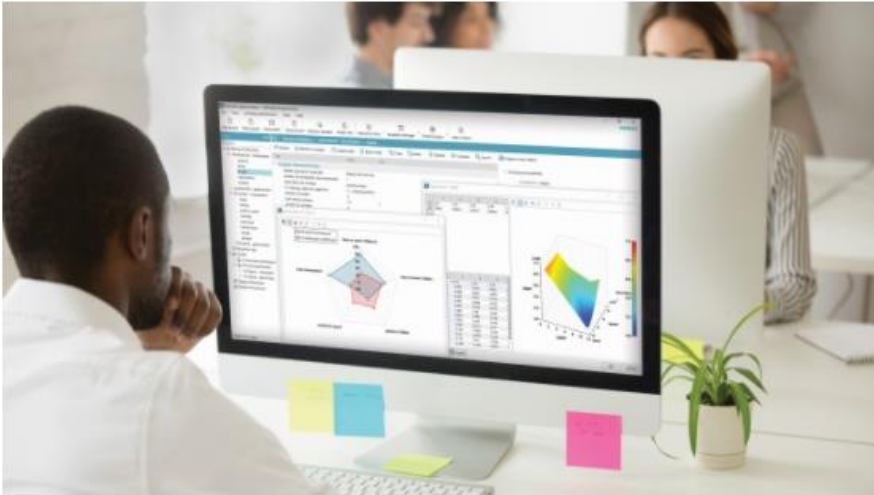


Simcenter system simulation solutions

Deploy & reuse



Expand system simulation model usage throughout project teams



Simcenter System Analyst <

Historically, system simulation has been mainly in the hands of few experts. Today, new roles have emerged, and project engineers need a fast and easy-to-use solution to run multiple variant analyses in order to evaluate design options and balance mechatronic systems' performances.

To answer this need, Siemens offers Simcenter System Analyst, a collaborative solution that provides an industry-specific application to drive system simulation models.

Simcenter System Analyst can be deployed by any type of industrial companies and ensures the model continuity without changing the toolchain. Model reuse by an increased number of people helps maximizing return on investments for the model development effort.

Simcenter System Analyst also facilitates the deployment of a simulation factory throughout the company thanks to an easy to use environment. Using models and multi-attribute analysis is now accessible to any project engineer.

<https://www.plm.automation.siemens.com/global/de/products/simcenter/system-analyst.html>

Let's Summarize



Summary

- ✓ **Easy to use and deskill** simulation platform to democratize system simulation
- ✓ **Accessible from everywhere and anywhere**
- ✓ **Flexibel and scalable** process



Thank You

