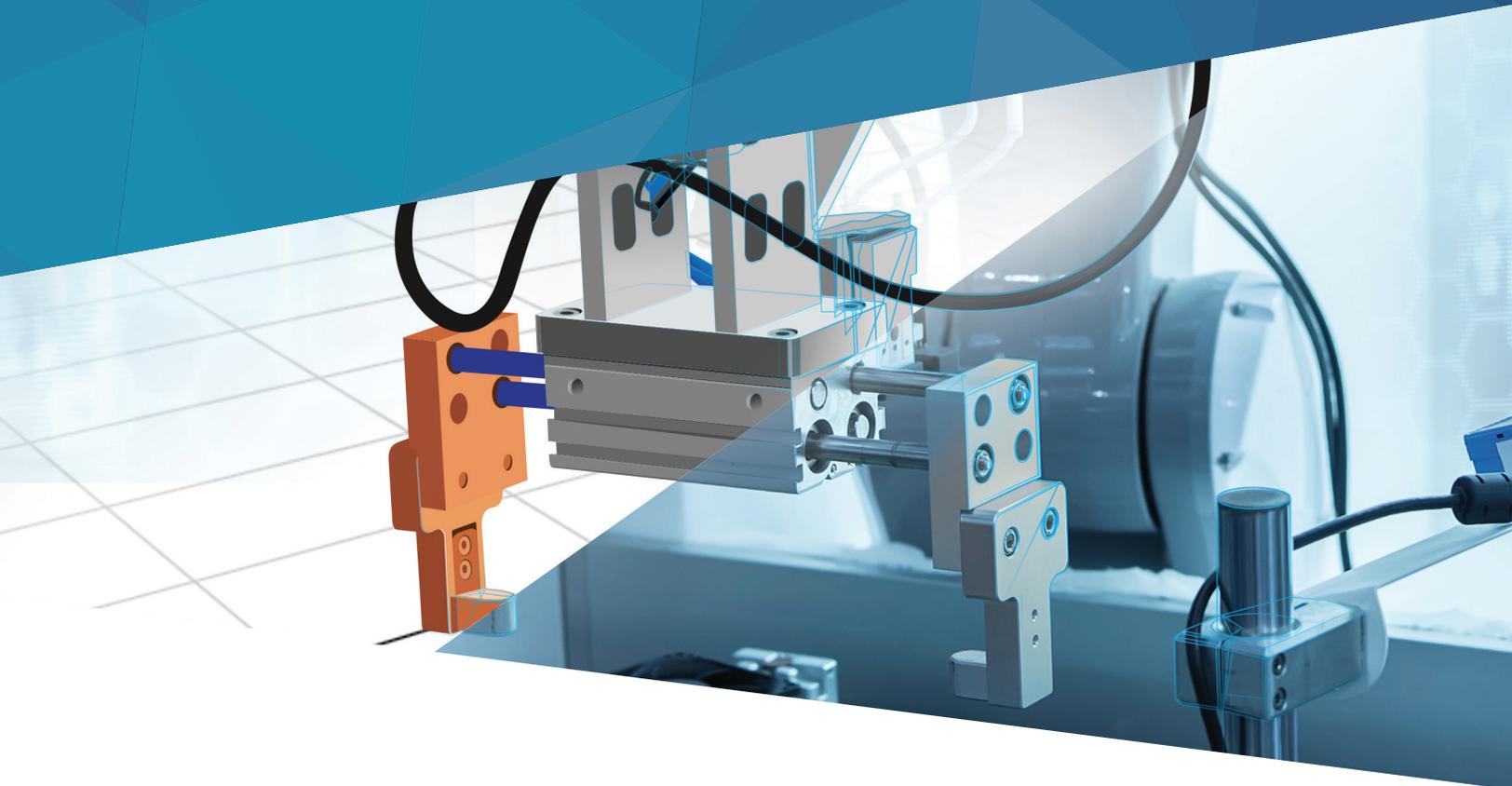


DIGITAL TWINS FOR VIRTUAL COMMISSIONING



Maplesoft
Engineering
Solutions

With decades of experience, our modeling experts are here to assist you at every step of the virtual commissioning process.

Make Virtual Commissioning your Reality

Whether you are creating a new product or making modifications to an existing design, virtual commissioning helps you identify problems much earlier in the development cycle, when they are much easier and less expensive to correct. When you implement virtual commissioning, you can:

- Reduce cost overruns
- Increase your ability to compete by lowering costs through avoiding rework and unnecessary over-engineering of components
- Reduce risks of recalls and shutdowns caused by unforeseen behaviors
- Gain more predictable time-to-market estimates

Maplesoft Engineering Solutions helps automation companies implement virtual commissioning using model-based digital twins, putting the benefits of virtual commissioning within reach even for those who are just getting started.

Maplesoft Engineering Solutions offers support and training at every stage to help make virtual commissioning your reality.

- Digital Twin Creation with CAD Import
- Custom-Built Apps for Design, Sales, and Operations
- Tools for Component Sizing
- Trade-off Studies and Optimization
- Digital Twin Interaction with Automation Software
- Customized Training Courses and Contract Staff

How will a Digital Twin help me?

A digital twin is a virtual representation of your product, and the perfect companion for diagnostics, maintenance, and product innovation. As an essential component of modern virtual commissioning, digital twins serve as realistic models for fast, accurate PLC testing, ensuring that design issues are ironed out before the production floor.

Because model-based digital twins do not require physical performance data to predict behavior, they can be used for a greater range of engineering tasks:

1. **Conceptual Development**
Will this product work if I build it?
2. **Virtual Commissioning**
How can we ensure a fast, successful system integration?
3. **Online Diagnostics**
Can we detect failures before they become serious?
4. **Smarter Designs**
Can we predict better maintenance schedules, or replace physical sensors with virtual ones?

Maplesoft Technology Works With:



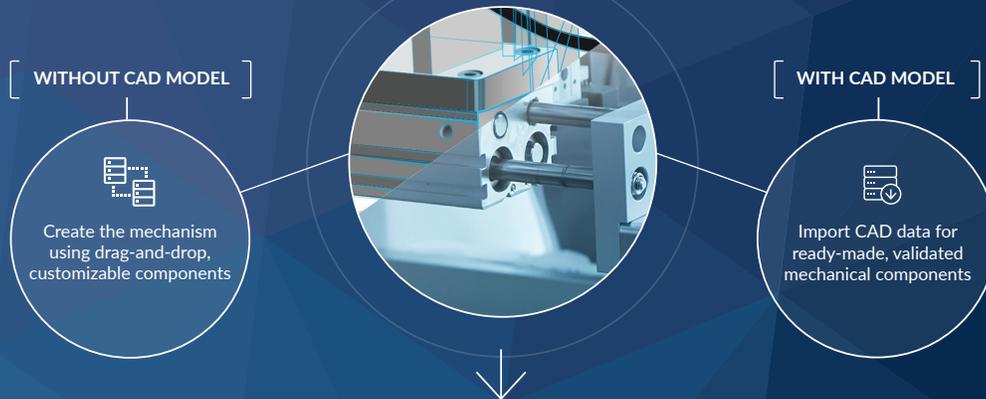
BECKHOFF

**Rockwell
Automation**

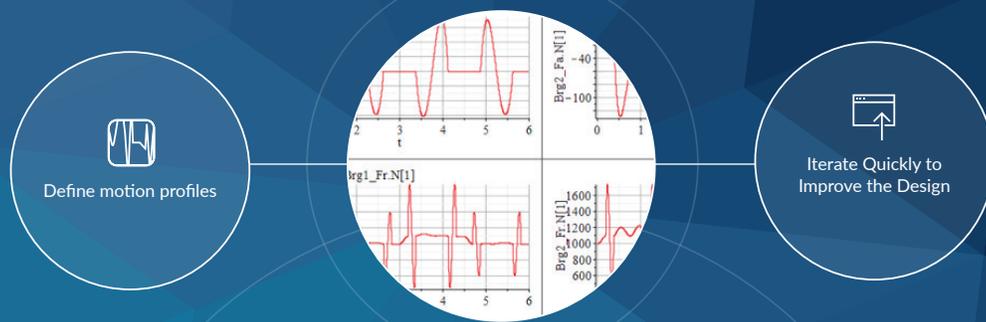
HOW IT WORKS



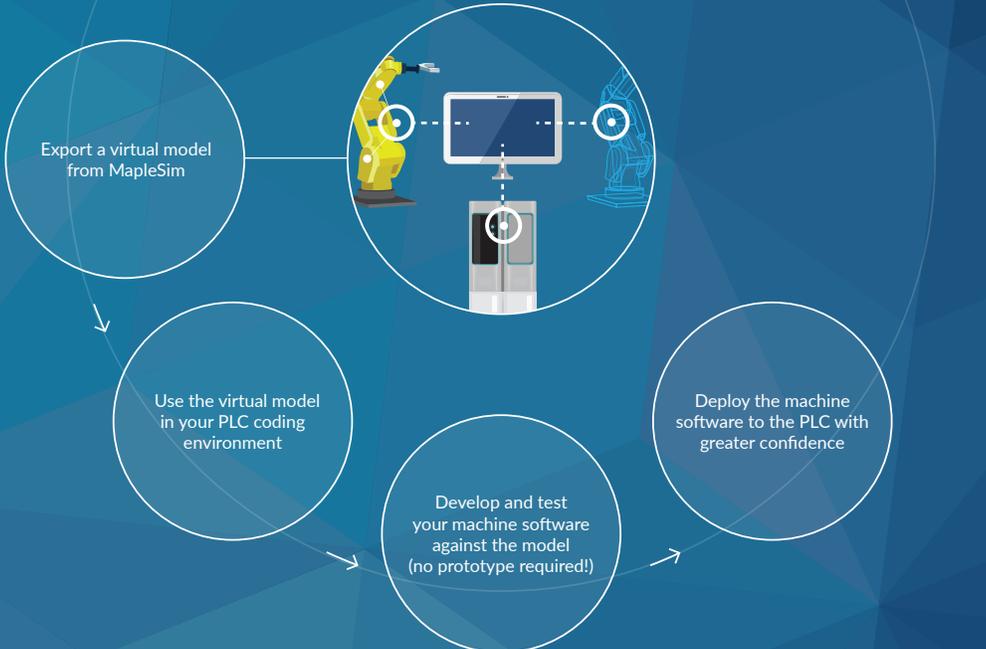
1- BUILD THE MECHANISM IN MAPLESIM



2- ACTUATE & ANALYZE



3- VIRTUAL COMMISSIONING



Why Choose Maplesoft?

Maplesoft Engineering Solutions is trusted by industry leaders to solve complicated problems by using model-based technologies that are purpose-built for each individual customer.

Customers We've Worked With:

Rockwell Automation

NASA

Lockheed Martin

BMW

FLSmidth

GE

Caterpillar

Hitachi

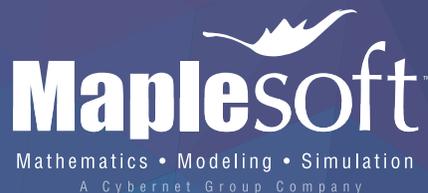
Siemens

Boeing

Beckhoff

“Maplesoft’s products and expertise have been valuable in helping us to develop the required insight into our machine designs. We have been able to address issues long before we invest in the first build. This has significantly reduced our development costs already.”

Willem Fourie, Development Manager, FLSmidth



www.maplesoft.com | info@maplesoft.com
Toll-free: (US & Canada) 1-800-267-6583 | Direct: 1-519-747-2373

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