



## MapleSim: Low-Risk **Virtual Commissioning**

Performing machine-level integration testing with a model-driven **Digital Twin**

**75%**  
Reduction in integration time <sup>1</sup>

**50% - 100%**  
Lower project cost overruns <sup>2</sup>

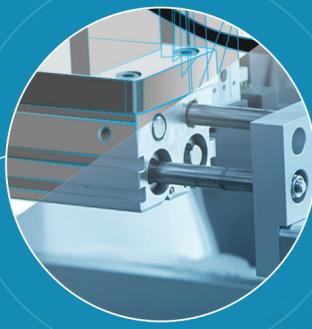
  
Develop better control strategies

## HOW IT WORKS

### 1- BUILD THE MECHANISM IN MAPLESIM

[ WITHOUT CAD MODEL ]

  
Create the mechanism using drag-and-drop, customizable components



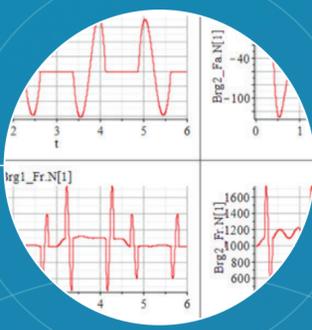
[ WITH CAD MODEL ]

  
Import CAD data for ready-made, validated mechanical components

### 2- ACTUATE & ANALYZE

[ WITHOUT CAD MODEL ]

  
Define motion profiles



[ WITH CAD MODEL ]

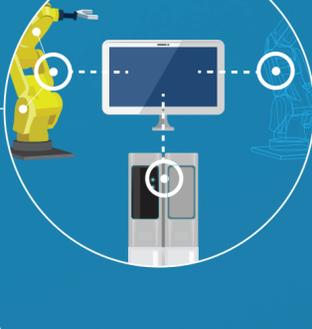
  
Iterate Quickly to Improve the Design

- Functional verification
- Motor sizing
- Vibration analysis
- Parameter optimization

### 3- VIRTUAL COMMISSIONING

[ WITHOUT CAD MODEL ]

Export the model to a Functional Mock-up Unit (FMU)



[ WITH CAD MODEL ]

Use the FMU in common automation software (such as B&R Automation Studio)

Deploy to the PLC with greater confidence during commissioning

Test and validate PLC code with the FMU

Make Virtual Commissioning your Reality

**ASK US HOW**

[www.maplesoft.com](http://www.maplesoft.com)

### Go Beyond Virtual Commissioning with MapleSim

- Reduce sensor requirements with model-based controllers
- Online diagnostics that yield better insight into issues
- Deploy purpose-built applications for optimizing machine performance