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Introduction to SimMechanics Link Software

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Install and Register SimMechanics Link Software

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Before You Begin

You must have a valid MATLAB license and one of the supported CAD applications:

•

Autodesk Inventor

®

software

•

PTC

®

Creo

™

software

•

SolidWorks

®

software

Your MATLAB and CAD installations must have the same system architecture—e.g.,

Windows 64-bit.

Step 1: Get Installation Files

1

Go to the

SimMechanics Link download page

.

2

Follow the prompts on the download page.

3

Save the zip archive and .m file in a convenient folder.

Select the file versions matching your MATLAB release number and system

Step 2: Run Installation Function

1 Run MATLAB as administrator.

2 Add the saved installation files to the MATLAB path.

Install and Register SimMechanics Link Software

You can do this by entering addpath('foldername') at the MATLAB command prompt. Replace foldername with the name of the folder in which you saved the installation files—e.g., C:\Temp

3 At the MATLAB command prompt, enter install\_addon('zipname'). Replace zipname with the name of the zip archive—e.g., smlink.r2015b.win64.zip.

3. Register MATLAB as Automation server

- run command “regmatlabserver” in matlab

**Enable the Plug-In**

Once you have downloaded and installed the Simscape Multibody Link plug-in, you must enable it on your Autodesk Inventor application. To do this, at the MATLAB® command prompt, enter [smlink\_linkinv](https://www.mathworks.com/help/physmod/smlink/ref/smlink_linkinv.html). A Simscape Multibody Link menu appears in the Inventor menu when you start or open a CAD assembly.

If your computer has more than one Inventor application, the smlink\_linkinv command adds the Simscape Multibody Link plug-in to all installations simultaneously. However, you must select the Simscape Multibody Link check box in the Add-Ins dialog box individually for each installation you want to export CAD from.

5. Go to Inventor 🡪 Add-Ins 🡪 Export Simscape

- an xml and stl files will be generated and

6. Copy all stl and xml files to a separate folder.

7. Open cmd terminal in directory.

8. simmechanics\_to\_urdf {xml\_filename} --output xml --outputfile {filename.urdf}

9. Open urdf file and add the full file path to each stl file

10. Import the URDF into VREP, Plugins🡪 Import URDF