fmi_adapter

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BOSCH

FUNCTIONAL
MOCK·UP
INTERFACE

http://fmi-standard.org/

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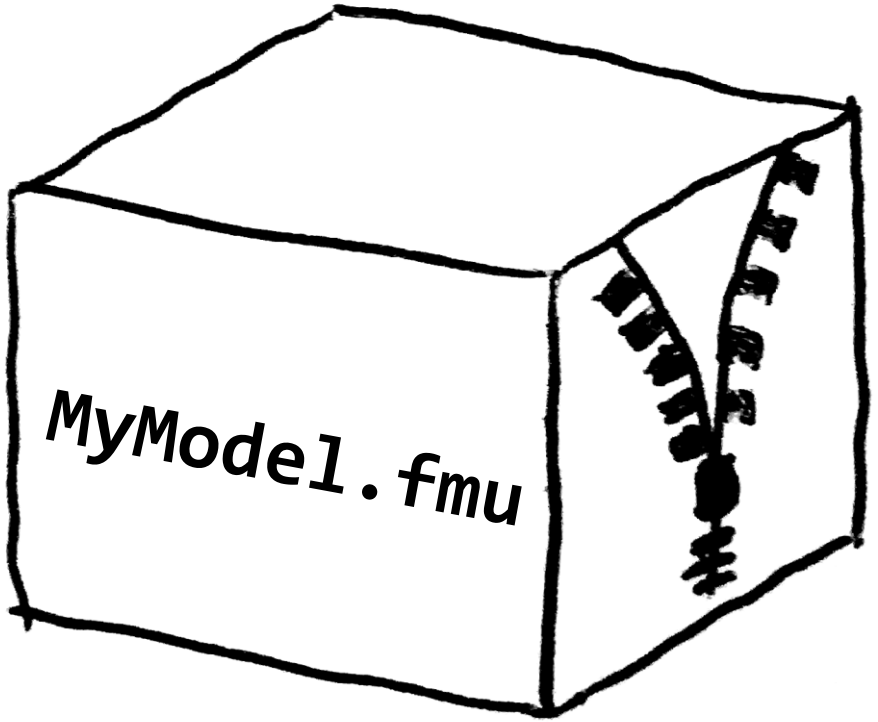
-sim 4C · @Source · Adams · AGX Dynamics · AMESim · ANSYS DesignXplorer · ANSYS SCADE Displa
CADE Suite · ANSYS Simplorer · AUTOSAR Builder · AVL CRUISE · AVL CRUISE M · AVL Model.CONNE
B&R Automation Studio · BEAST · Building Controls Virtual Test Bed · Cameo Simulation Toolkit (MagicDra
ANoe · CarMaker · CarSim · CATIA · ControlBuild · Coral · CosiMate · CPPFMU · Cybernetica CENIT · Cy
DACCOSIM · DAE Tools · DAFUL · DS - FMU Export from Simulink · DS - FMU Import into Simulink · DSH
SCALEXIO · dSPACE SYNECT · dSPACE TargetLink · dSPACE VEOS · Dymola · DYNA4 · Easy5 · Ecosi
· EnergyPlus · ETAS - ASCMO · ETAS - FMI-based Integration and Simulation Platform · ETAS - FMU Ge
· ETAS - FMU Generator for Simulink® · ETAS - INCA-FLOW (MiL/SiL Connector) · ETAS - ISOLAR-EVE
U) · ETAS - LABCAR-OPERATOR · Flowmaster · FMI Add-in for Excel · FMI add-on for NI VeriStand · FM
set for Simulink · FMI Composer · FMI Library · FMI Target for Simulink Coder · FMI Toolbox for MATLAB/S
· FMI4j · FMPy · FMU-proxy · FMUSDK · General Energy Systems (GES) · GT-SUITE · Hopsan · IBM Rati
· ICOS Independent Co-Simulation · IGNITE · INTO-CPS Co-simulation Orchestration Engine (COE) · Jav
odelica.org · LMS Virtual.Lab Motion · MapleSim · MESSINA · MoBA Lab · Morphee · MpCCI CouplingEnvi
· NI LabVIEW · OpenModelica · OPTIMICA Compiler Toolkit · optiSLang · Overture · PROOSIS · Ptolemy I
tor · RecurDyn · Scilab/Xcos FMU wrapper · Silver · SIMPACK · Simulation Workbench (SimWB) · Simulat
ing Activate · Squish GUI Tester · SystemModeler · TLK FMI Suite · TLK TISC Suite · TRNSYS FMU Expo
imulation Framework · TWT FMU Trust Centre · VALDYN · Virtual Engine · WAVE-RT · XFlow · xMOD



Shared library

- Equations
- Solver

modelDescription.xml

(C sources)

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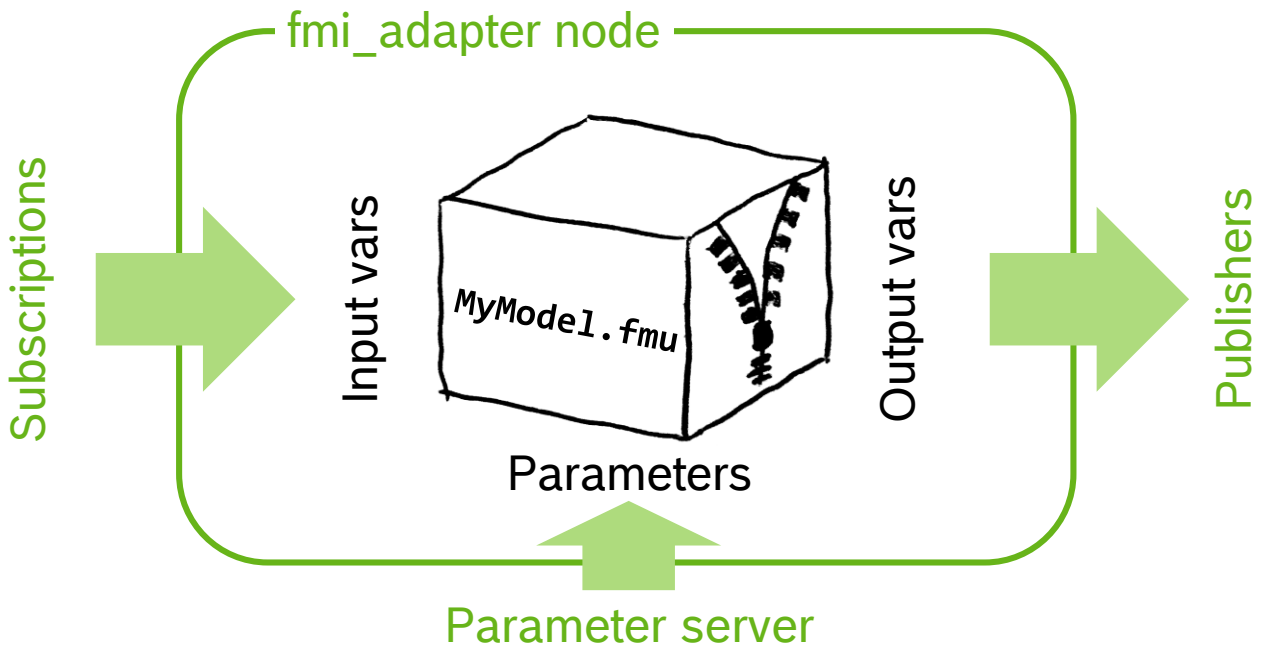


```
$ rosrun fmi_adapter node fmu_path_:=MyModel.fmu
```

```
FMIAdapter adapter("MyModel.fmu");

vector<string> names =
            adapter.getParameterNames();

adapter.setInputValue("phi", 4.5);
adapter.doStepsUntil(ros::Time::now());
double y = adapter.getOutputValue("y");
```

class fmi_adater::FMIAdapter

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wiki.ros.org/fmi_adapter

github.com/boschresearch/fmi_adapter