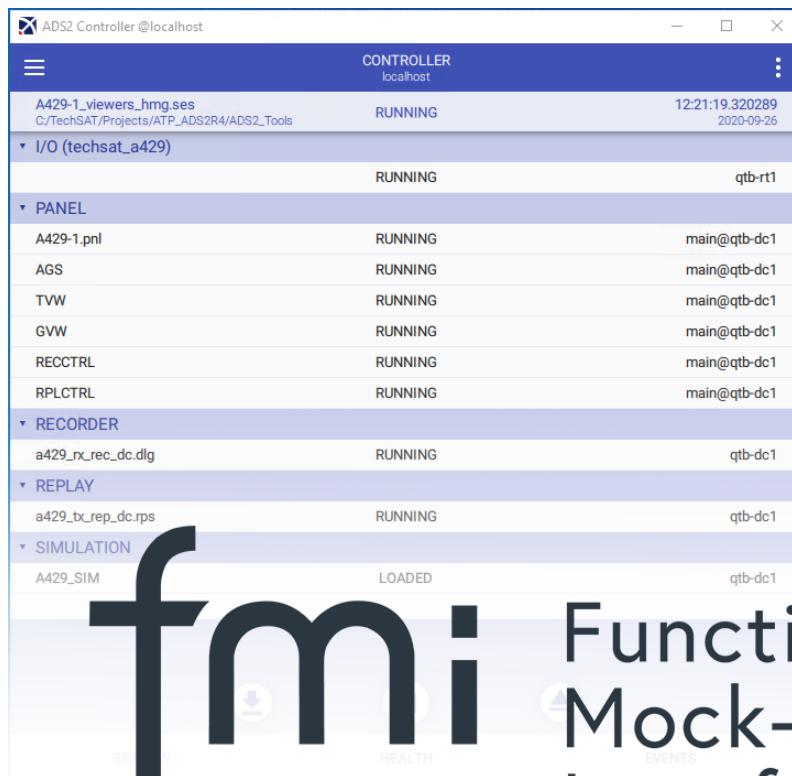


ADS2 FMI FMI Co-Simulation Adaptor Generator

Integrate and run FMI Co-Simulations
in ADS2 Environment



CONTROLLER localhost		
A429-1_viewers_hmg.ses C:/TechSAT/Projects/ATP_ADS2R4/ADS2_Tools	RUNNING	12:21:19.320289 2020-09-26
▼ I/O (techsat_a429)		
	RUNNING	qtb-rt1
▼ PANEL		
A429-1.pnl	RUNNING	main@qtb-dc1
AGS	RUNNING	main@qtb-dc1
TVW	RUNNING	main@qtb-dc1
GVW	RUNNING	main@qtb-dc1
RECCTRL	RUNNING	main@qtb-dc1
RPLCTRL	RUNNING	main@qtb-dc1
▼ RECORDER		
a429_rx_rec_dc.dlg	RUNNING	qtb-dc1
▼ REPLAY		
a429_tx_rep_dc.rps	RUNNING	qtb-dc1
▼ SIMULATION		
A429_SIM	LOADED	qtb-dc1

fmi Functional Mock-Up Interface

- Integrate FMI Simulation on ADS2 real-time platform
- All FMI 2.0 datatypes supported
- Support of FMI 2.0 Co-Simulations
- Automatic generation of all needed configuration files
- Monitoring of FMU local variables in ADS2



ADS2 FMI FMI Co-Simulation Adaptor Generator

Application Scope

The **ADS2 FMI** addon imports FMI 2.0 Co-Simulations from FMU container. An ADS2 simulation interface generator is provided to generate all ADS2 files needed to run FMI 2.0 Co-Simulations.

General

- Support FMI 2.0 Co-Simulation based on FMU container
- Automatic generation of all required ADS2 configuration files
- Support of CVT aliases for automatic linking (e.g. by TechSAT X-ACT)
- Optional generation of VHTNG-compliant state machine
- CVT interface to control the simulation states
- Local FMU variables can be monitored from ADS2
- Generated ADS2 application supports both ADS2R4 scheduling modes: **Fixed Frame Size** and **AFAP** (as fast as possible)

- 20-sim
- DS_FMU_Export_from_Simulink
- Dymola
- ControlBuild
- catia
- Easy5
- EcosimPro
- FMUSDK
- MapleSim
- Mworks
- Silver
- SimulationX

Further tools can be evaluated on request.

Datatypes and Variables

- Support of all FMI 2.0 datatypes: Real, Integer, Boolean, String, Enumeration

Supported FMI Generation Tools

The interface is tested for FMUs generated from following tools:

- Openmodelica
- FMI Toolbox from Modelon

Technical Data

Hardware Requirements

- n/a

Software Requirements

- ADS2R4 above 4.8.0

Operating System Options

- Windows 10 64 bit
- Linux 64 bit (CentOS7)
- Other options on request

Related Products

- X-ACT (PN 202250)

Part Number

- 202228