

Samples Pack

Manual

1. INSTALLATION

Pre-requisites:

- Windows 10
- [SCANer™ Licence \(request a trial\)](#)
- The latest version of [SCANer™ Studio 2021](#)

Installation:

1. Download the [Samples Pack](#)
2. Extract in “...\AVSimulation\SCANerstudio_2021\”
3. Edit the configuration file “...\AVSimulation\configurations.cfg” and copy/paste at the end of the file lines below:







```
SAMPLE_2021_ADAS = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_ADAS
SAMPLE_2021_ADAS_LKA_ACC = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_ADAS_LKA_ACC
SAMPLE_2021_CAMERACAPTURE = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_CAMERACAPTURE
SAMPLE_2021_CARMAKER = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_CARMAKER
SAMPLE_2021_DATAEXCHANGE = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_DATAEXCHANGE
SAMPLE_2021_FMI = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_FMI
SAMPLE_2021_HEADLIGHTS = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_HEADLIGHTS
SAMPLE_2021_LATERAL_CTRL = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_LATERAL_CTRL
SAMPLE_2021_LONGI_CTRL = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_LONGI_CTRL
SAMPLE_2021_PIXEL_LIGHTING = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_PIXEL_LIGHTING
SAMPLE_2021_SCENARIO_IMPORTER = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_SCENARIO_IMPORTER
SAMPLE_2021_VEHICLE_PLAYER = ${STUDIO_PATH}/SCANerstudio_2021/config/SAMPLE_VEHICLE_PLAYER
```

2. GET HELP

- Samples manuals are below ↓
- Read the [Evaluation FAQ](#)
- Contact the [@Support team](#)

3. CONTENTS

Demo	Key words	Description
EVAL_ADAS	Sensors ScannerAPI C/C++ Simulink Python Co-Simulation Vehicle control	Connect C/C++, Simulink and Python ADAS features to SCANeR™ Studio. <ul style="list-style-type: none"> - Pedestrian anti-collision system
EVAL_ADAS_LKA_ACC	Sensors ScannerAPI C/C++ Simulink Co-Simulation Vehicle control HMI	Connect C/C++ and Simulink ADAS algorithms to SCANeR™ Studio. <ul style="list-style-type: none"> - Lane Keeping Assist - Active Cruise Control
EVAL_LATERAL_CTRL	Sensors ScannerAPI C/C++ Vehicle control	Connect a C/C++ algorithm to follow the curve of a race track.
EVAL_LONGI_CTRL	Sensors ScannerAPI C/C++ Python Vehicle control	Connect C/C++ and Python algorithms to control the vehicle according to various laws <ul style="list-style-type: none"> - Speed control - Acceleration control - Pedal command
EVAL_DATA_EXCHANGE	Real-Time RT-Gateway	Exchange simulation data with a Real-Time platform. The demo makes use of the RT Gateway to exchange numerical values with a dummy C program.
EVAL_HEADLIGHTS Demo manual Tutorial	Night Test Manager AFS	Use the Headlight and Adaptive Frontlight System (AFS) features of SCANeR™ to simulate glare-free headlamps.
EVAL_PIXEL_LIGHTING	Night Test Manager Image Sharing Visual Plugin	Demonstrates dynamic modification of headlamps photometry in real time in order to simulate a pixel lighting feature.
EVAL_CAMERACAPTURE	Scenario Sensors ScannerAPI Image Sharing C/C++	Capture each frame of a camera sensor along with radar detection outputs in a CSV.
EVAL_SCENARIO_IMPORTER Demo presentation Demo video Feature documentation	Digitalization From real-world Experiment replication	After recording a real-world experiment, import and reproduce the scenario in SCANeR™ simulation environment.
EVAL_VEHICLE_PLAYER	Vehicle Player Replay data	Vehicle Player replays a recorded vehicle trajectory. The sample shows how to convert a source data to use it in Vehicle Player.

<u>EVAL_FMI</u>  Demo presentation  Demo video  Feature documentation	FMI, FMU Model exchange Co-simulation	Connect an external FMU (Functional Mock-up Unit) to SCANeR™. The physical model of a bouncing ball is run and traced in SCANeR™.
<u>EVAL_ROS</u>  Tutorial  Tutorial sources	ROS Linux	Co-simulation with ROS (Robot Operating System) on Linux
<u>EVAL_CARMAKER</u>  Tutorial	IPG CarMaker Co-simulation Vehicle Dynamics	Co-simulation with IPG CarMaker