



VIRES Virtual Test Drive (VTD®) is a complete tool-chain for driving simulation applications:

VTD provides tools for road generation, scenario generation, traffic simulation, sound simulation, simulation control and image generation. It uses established standard file formats.

VTD provides open interfaces for 3rd party components and a plug-in concept with API for 3rd party modules.

VTD is an established software package which is in service at numerous installations in the automotive industry.



Key Features:

- complete tool-chain from road design to simulation framework
- modular design
- open interfaces
- use of open standards (OpenDRIVE, OpenCRG etc.)
- real-time compliance
- extensible by 3rd party modules



Key Applications:

- assessment of advanced driver assistance systems (ADAS) and active safety systems in software/driver/vehicle/hardware-in-the-loop environments
- sensor simulation (radar / video)
- general purpose engineering simulation
- training simulation
- showrooms

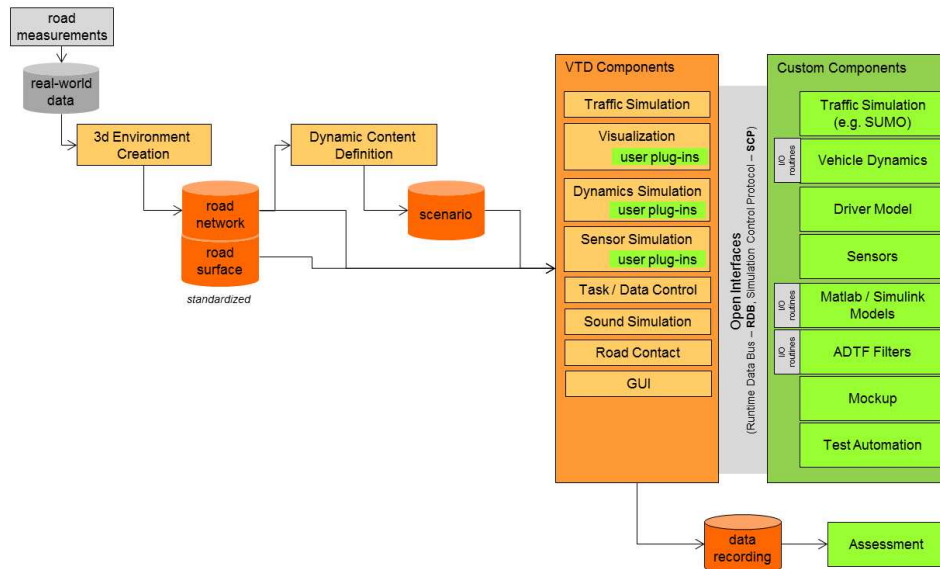


Key Customers:

- automotive OEMs
- automotive suppliers
- research institutes

VTD uses / supports: **OpenDRIVE®** **OpenCRG®**

The Components in Detail



Road Designer ROD®

interactive road network editor

- compliant with road construction rules
- extensive libraries of 3d objects, textures etc.
- creation of tiled databases

v-TRAFFIC / v-SCENARIO

traffic / scenario editor, monitor and simulation module

- autonomous traffic
- deterministic traffic
- custom trigger options / simulation control
- pedestrian simulation

v-IG

high-end image generator

- real-time shadows / sun-glare
- reflections on wet street surfaces
- high quality car rendering
- rain / snowfall / fog
- pedestrian module
- infrared module
- high quality headlight visualization
- on-the-fly video generation
- high-dynamic-range rendering
- real-time ray-tracing

v-TaskControl

core module

- task and data management
- simulation control
- record/playback functionality
- gateway for 3rd party modules

v-IOS

graphical user interface for configuration and operation

SOUND

3d-sound module

System Requirements

standard PC hardware with

- Linux operating system (64bit)
- nVIDIA® graphics card and graphics driver