



Virtual Universe Pro 4



Creating powerful 3D simulations of automated systems has never been easier. Users will experience amazing immersive experiences enjoying the best high quality rendering technology supporting virtual reality headsets.



OpenGL®

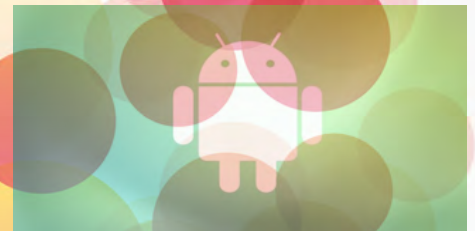


Steam® VR



Developing powerful simulations in the cloud places your users in a collaborative environment which enhances their experience beyond anything available before.

Simulations can be accessed from a range of devices including smart-phones, tablets and laptops anywhere in the world.



More than 60 predefined objects



HMI tablet



HMI tablet support



Light column



Loading conveyor



Colored boxes source



Concave part "A"



Concave part "B"



Convex part "A"



Primitive part "A"



Primitive part "B"



Pusher



Rack



Pick and place



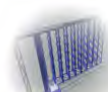
Pillar (layout)



Platform (layout)



Polymorphous art



Store



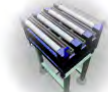
Tank



Turn table



Vive controller #1



Sorter



Source of boxes with overpacking



Stairs (layout)



Stopper



Colored boxes source



Concave part "A"



Concave part "B"



Convex part "A"



Boxes source



Chute



Cnc



Color sensor



Gaz tank (layout)



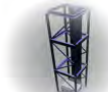
Grid



Handrail



Helper



Elevator



Factory layout



Factory layout



Fast sorter



Pick and place



Pillar (layout)



Platform (layout)



Polymorphous art



Palette



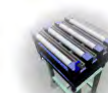
Palettes (layout)



Palettes source



Palletizer



Sorter



Source of boxes with overpacking



Stairs (layout)



Stopper



Sensor



Sensor



Sink



SmartSource



Boxes source



Chute



Cnc



Color sensor



Alarm



Arm



Array sensor



Box



Elevator



Factory layout



Factory layout



Fast sorter



Conveyor 4m



Conveyor 6m



Conveyor 6m



Conveyor 90 deg



Palette



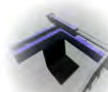
Palettes (layout)



Palettes source



Palletizer



Normalizer



Normalizer



OverpackBoxes source



Overpacking



Sensor



Sensor



Sink



SmartSource



Reflector



Reflector



Robot



Robot arm



Alarm



Arm



Array sensor



Box



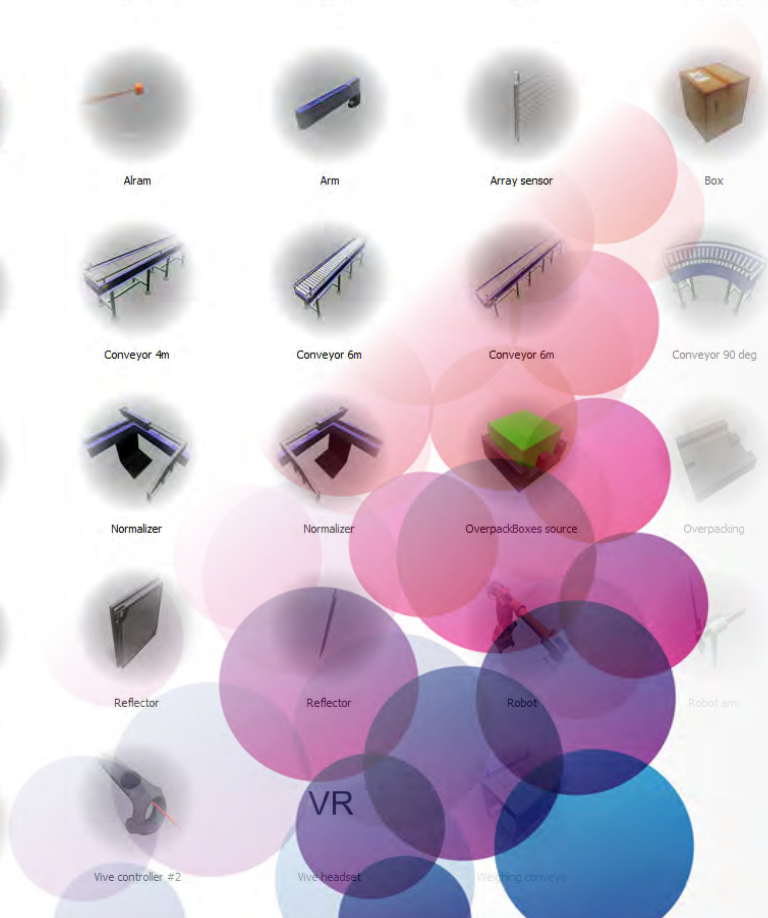
Vive controller #2



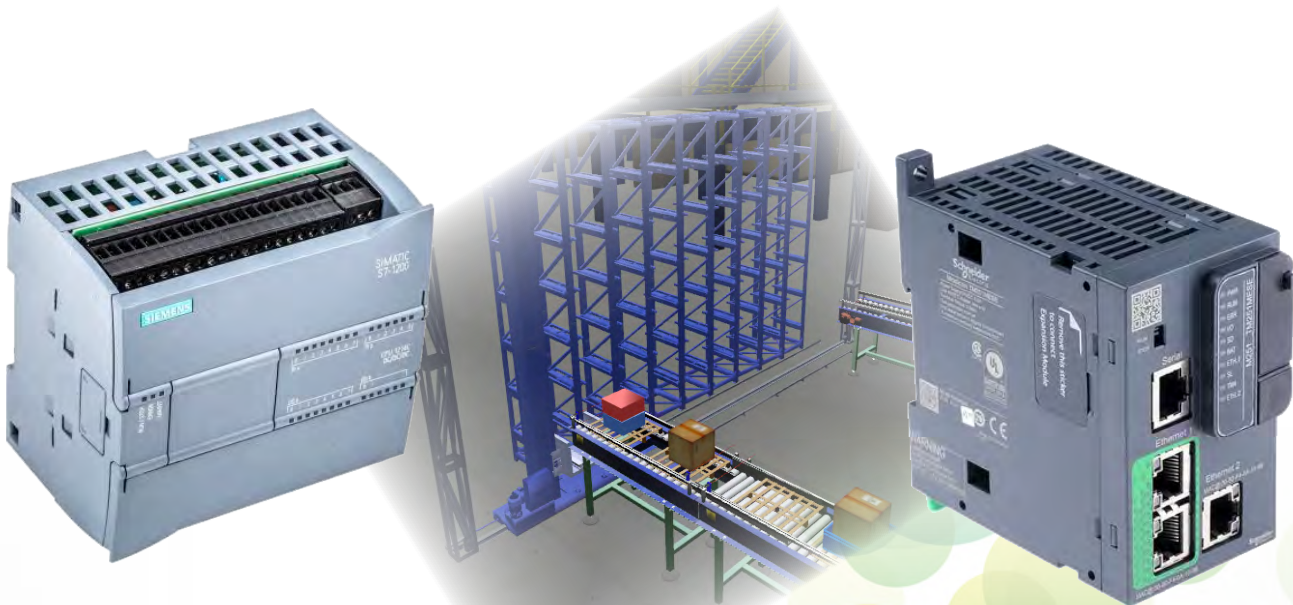
Vive headset



Waiting conveyor

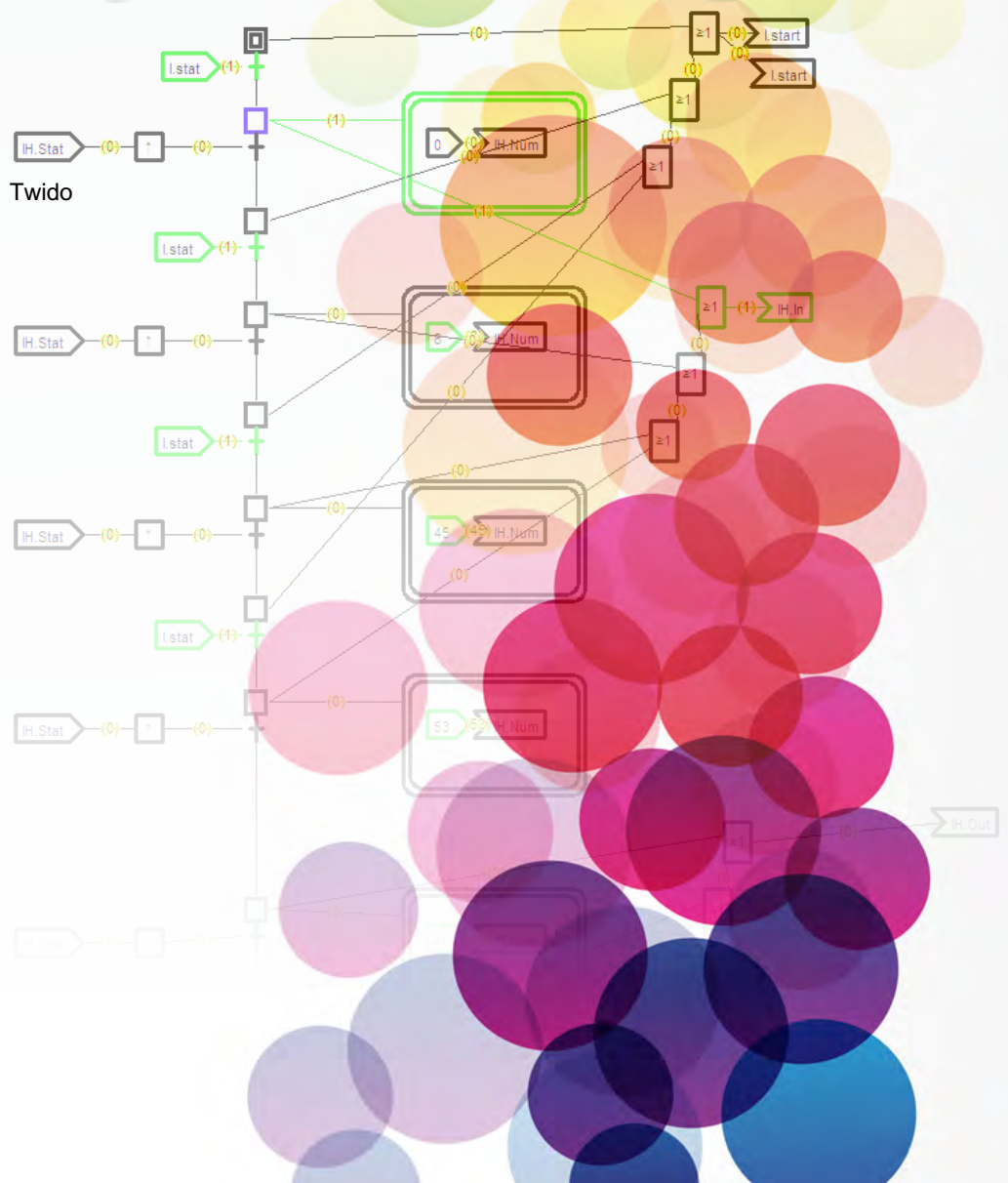


Drive the simulations with a real PLC*, an automation workshop** or a virtual controller included in Virtual Universe Pro.

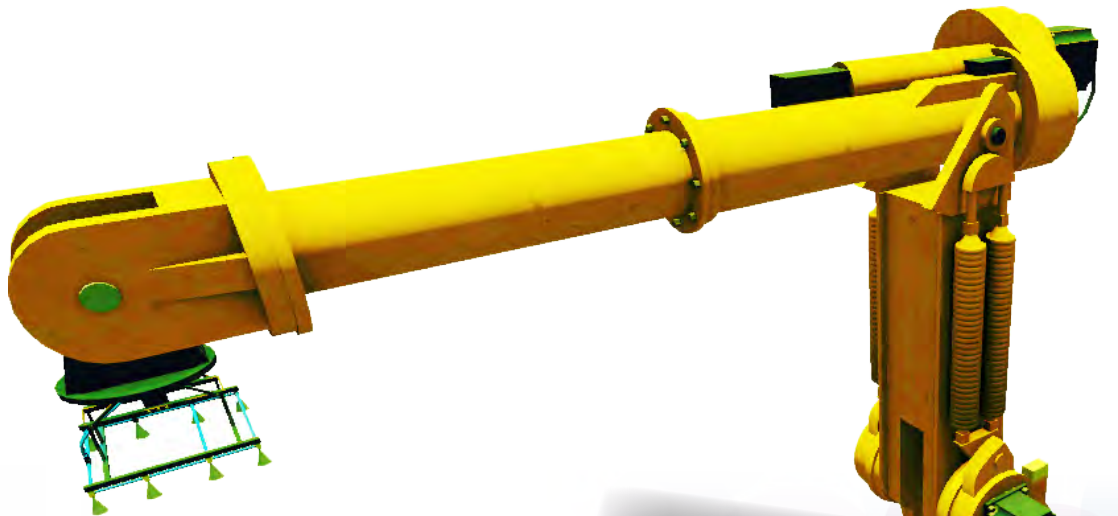


- Siemens S7 IP, MPI, PPI
- Siemens S5
- Schneider Electric TSX, SoMachine, Twido
- Beckhoff
- Mitsubishi
- Rockwell Ethernet IP
- CodeSys PLCs compatibles
- Automgen targets (Eg. Arduino)
- Modbus TCP, SLMP, OPC

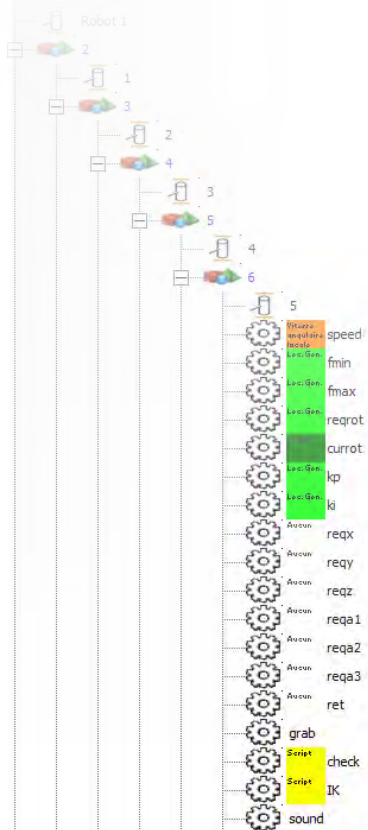
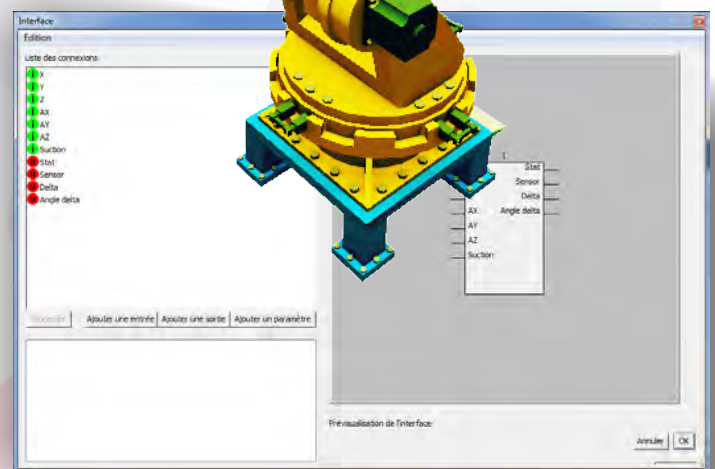
- Siemens PlcSim
- Schneider Unity
- Schneider SoMachine
- Mitsubishi Gx-Simulator
- Mhj WinSps
- CodeSys
- Omron Cx-Simulator
- Rockwell SoftLogix
- Automgen (all compatible targets)
- Matlab Simulink
- Labview
- Proteus
- all software or programming tools
- dll, ip, universal memory access



About fifteen ready-to-use examples illustrate the use of the library objects.



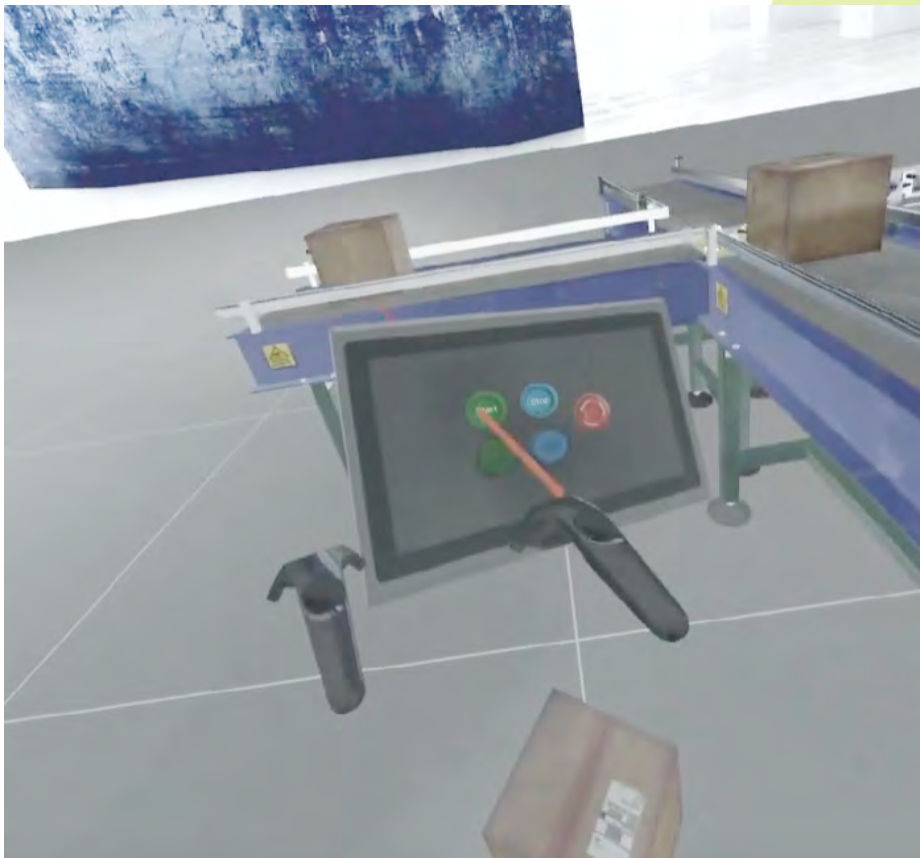
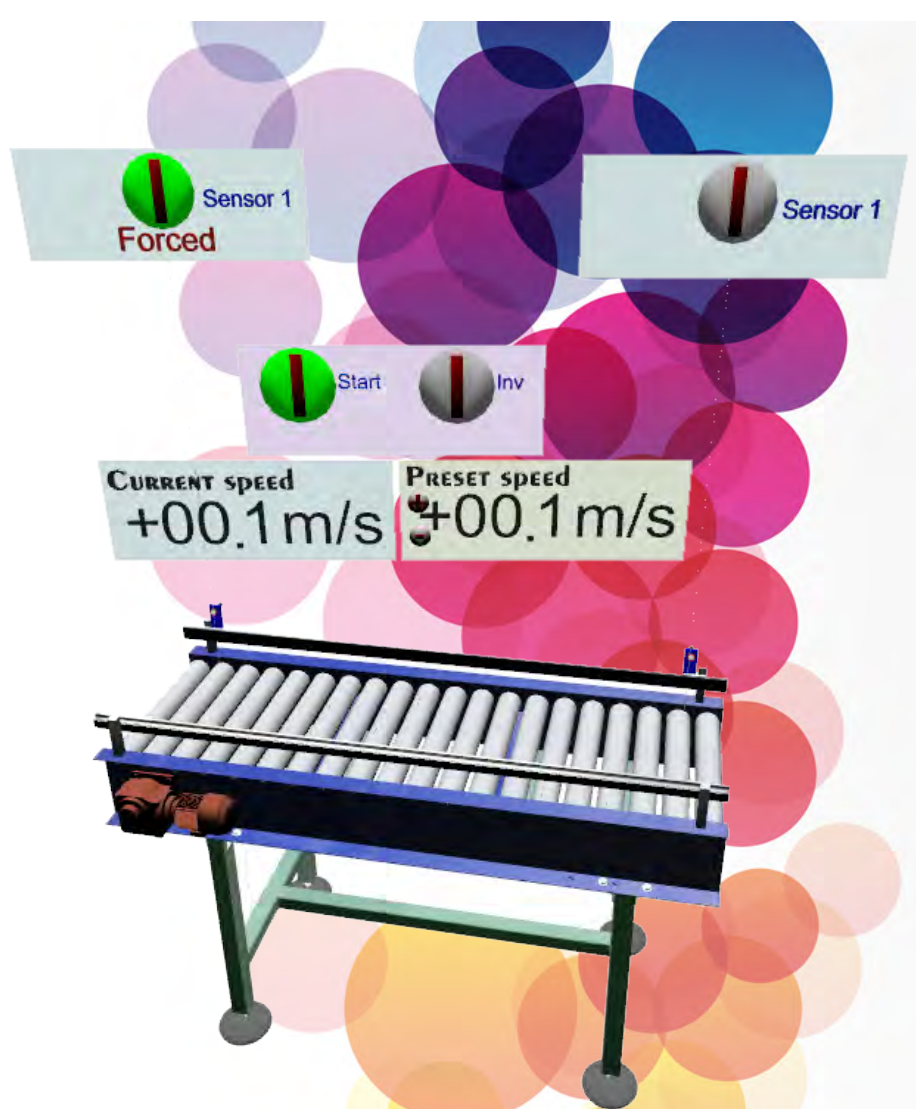
For each object, an optimized interface composed of inputs, outputs and parameters makes it easy to control the object from an automation program.



The configuration of each object is accessible and editable, this allows you to redefine the characteristics of the objects of the library and to understand how to create your own objects. You can also mix library objects with your own creations created from your usual CAD* software.

*import from Solidworks, Catia, Solid Edge, Inventor, etc. is available with the STANDARD and ULTIMATE versions of Virtual Universe Pro

Control panels are used to drive the objects manually and to observe the various associated states. They have the dual purpose of being able to test the functioning of the objects before realizing the program that will use them and also to simulate failures.



All the library objects are compatible with the use of a virtual reality headset. The controllers associated with the vr headset allow a full immersion and interaction.

Specifications

Development Operating System*

Windows 7

Windows 8

Windows 10

PC Configuration

Nvidia GTX 980 equivalent or higher

Intel Core I5 or higher

4 Gb ram or higher

Licence

standalone soft code

or floating license

or web license

VR

Oculus Rift headset

Htc Vive headset, controllers and trackers

Mixed reality headsets and controllers

Leap Motion

All Steam VR compatible systems

AR

Microsoft Hololens

Android devices

CAD Import Formats

DS Solidworks**

DS Catia

Autodesk Inventor

Siemens Solid Edge

Import from 3D files

3DXML, OBJ, 3DS, FBX

X, VRML, STL, DXF, SKP

Physic engines

Newton Dynamics

Nvidia Physix

Chrono Engine

Rendering

Realtime, HQ, PBR, Unity 3d

Web Player

WebGI

IE, Chrome, Firefox, Safari

Collaborative cloud simulation

Server on Windows

Web clients on PCs

Web clients on mobile devices

Web clients on Macs

Clients on Windows + VR Headsets

Intergated Simulation Tools

Pneumatic

Hydraulic

Electric

Digital Electronic

Schematic Blocks (Simulink)

Direct PLCs Connections

Siemens S7 IP, MPI, PPI

Siemens S5

Schneider TSX, SoMachine compatible PLCs,

Unity compatibles PLCs, Twido

Beckhoff

Mitsubishi

Rockwell Ethernet IP

CodeSys PLCs compatible

Automgen compatible target (Eg. Arduino)

I/O connection with Advantech cards

PLC protocols

Modbus TCP, SLMP, OPC

PLC simulators interface

Siemens PlcSim

Schneider Unity

Schneider SoMachine

Mhj WinSps

CodeSys

Omron Cx-Simulator

Rockwell SoftLogix

Mitsubishi Gx-Simulator

Software connections

Automgen (all compatible targets)

Matlab Simulink

Labview

Proteus

ABB Robotstudio

Mitsubishi RT-Toolbox2

mBlock

all softwares or programing tools

dll, ip, universal memory access

Integrated programing tools

Ladder

Grafcet

Function blocks

Script (Basic)

C language

Python

iScratch (Mit Scratch like language)

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* 32 or 64 bits

** ability to import constraints