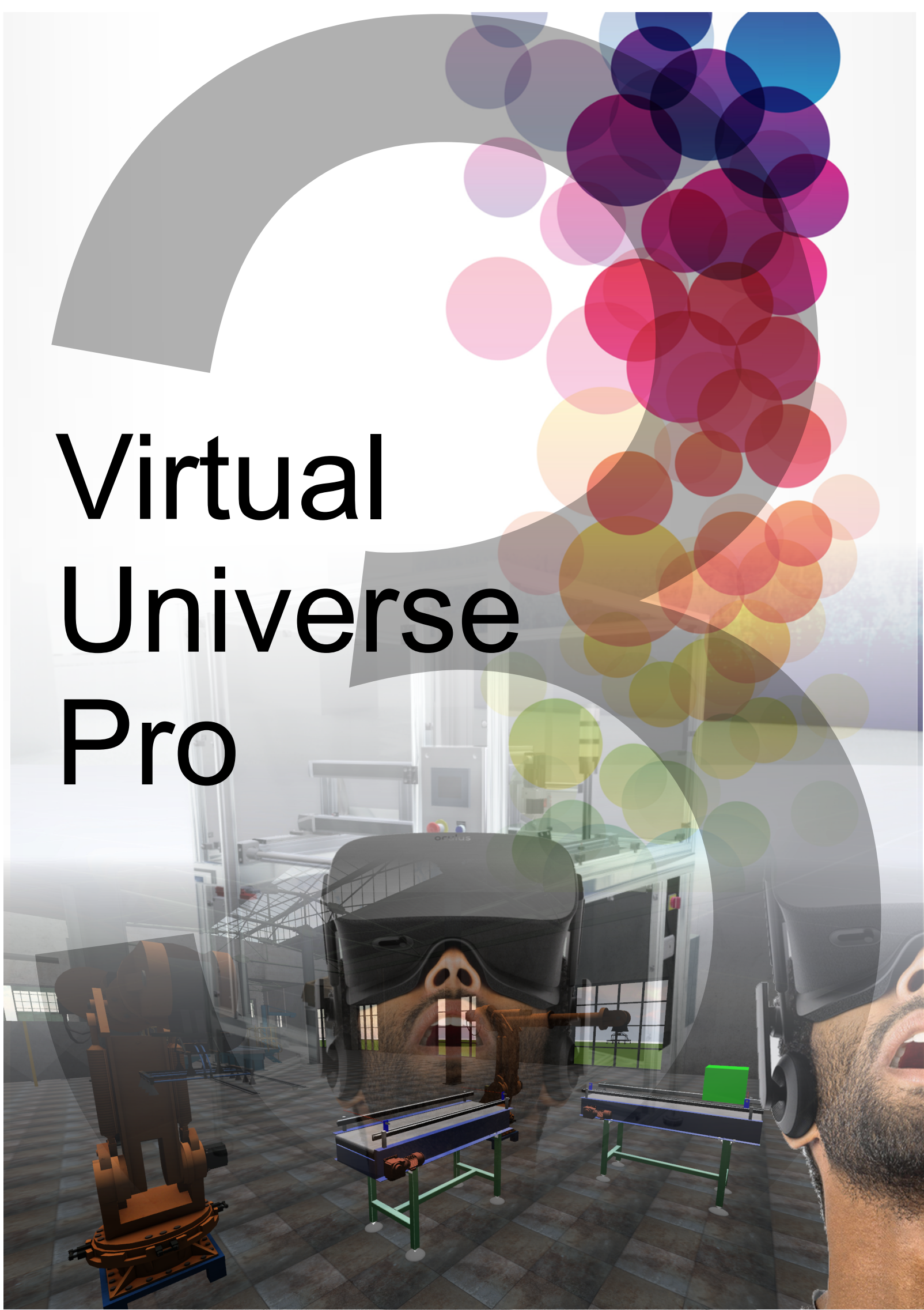


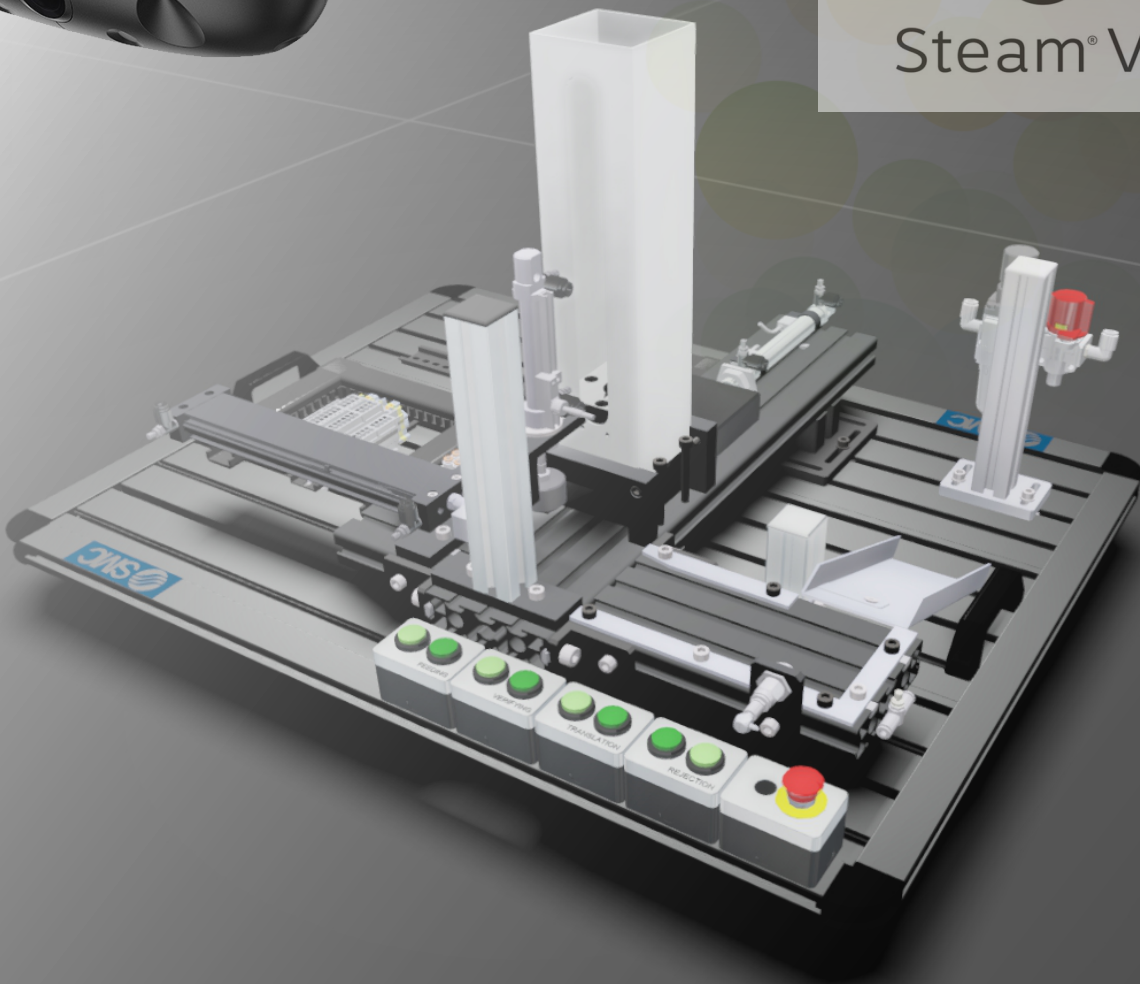
Virtual Universe Pro



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.



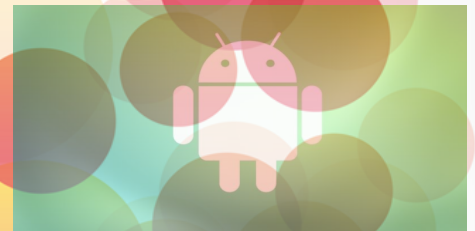
Steam® VR





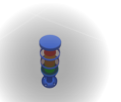
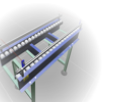
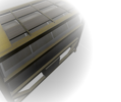





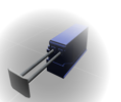
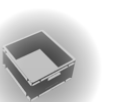
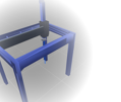
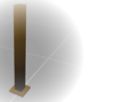
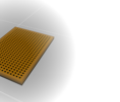


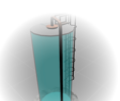
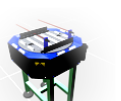

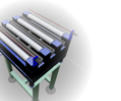

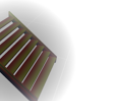
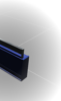








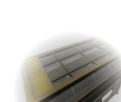
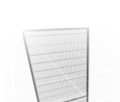


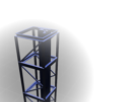









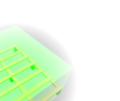


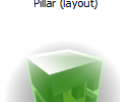
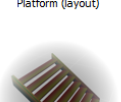


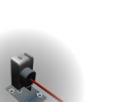




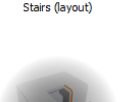








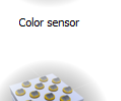




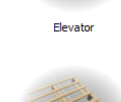
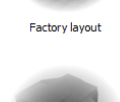

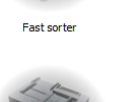

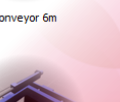

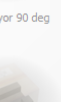

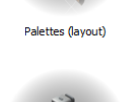
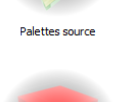
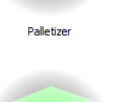
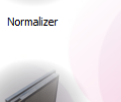

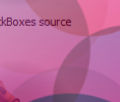
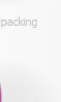
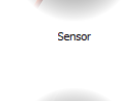
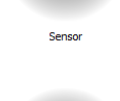
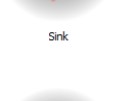


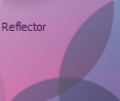

courtesy of SMC Training International

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

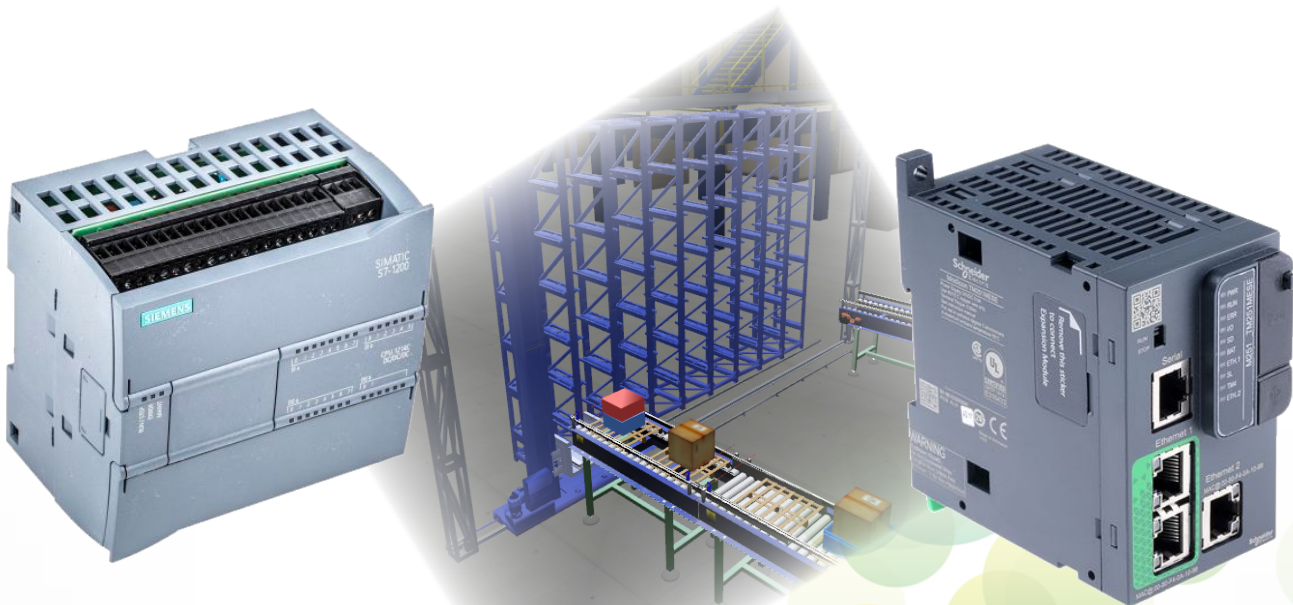
Simulations can be accessed from a range of devices including smart-phones, tablets and laptops anywhere in the world.



More than 60 predefined objects

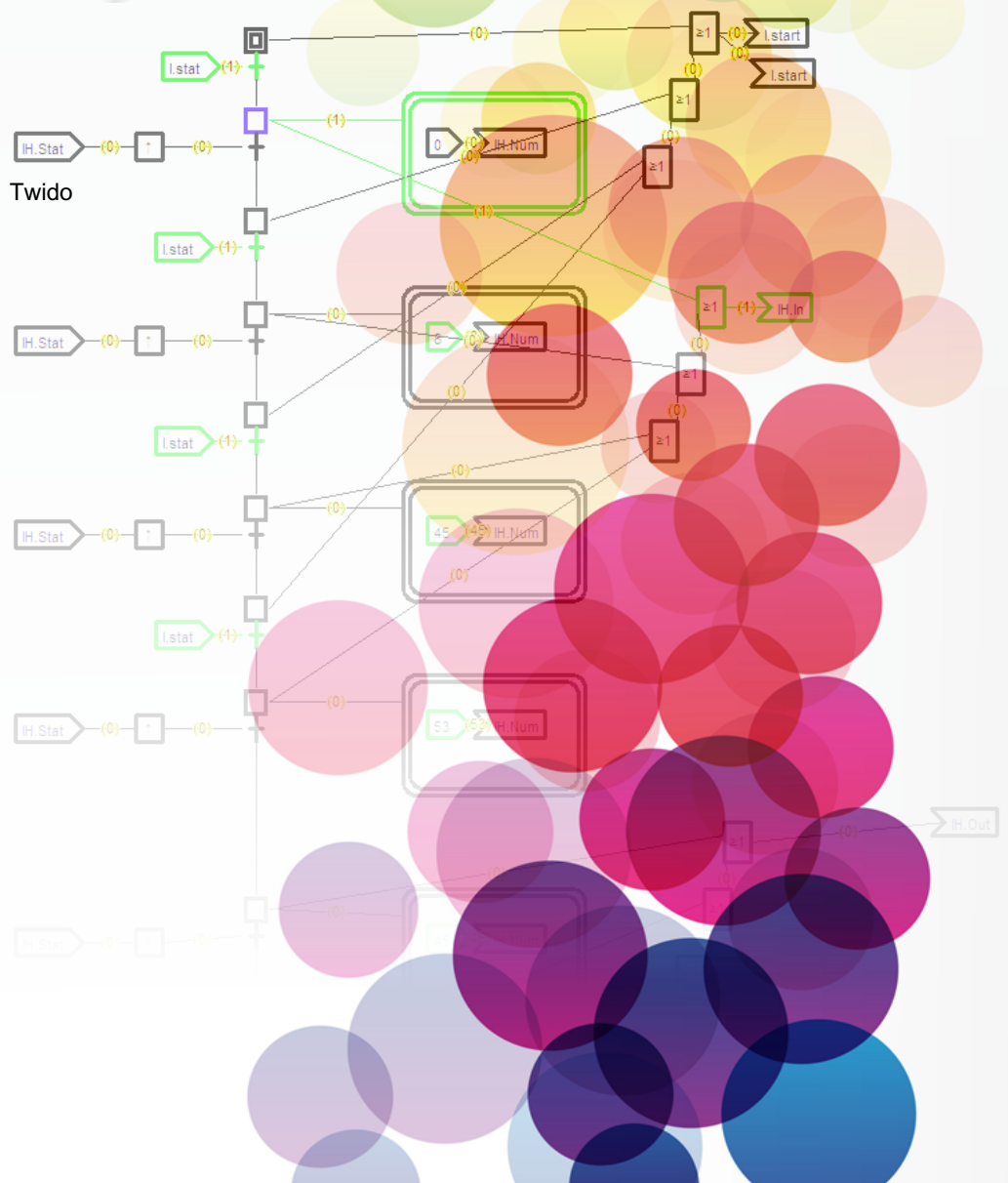
							
HMI tablet	HMI tablet support	Light column	Loading conveyor	Gaz tank (layout)	Grid	Handrail	Helper
							
Primitive part "A"	Primitive part "B"	Pusher	Rack	Pick and place	Pillar (layout)	Platform (layout)	Polymorphous art
							
Store	Tank	Turn table	Vive controller #1	Sorter	Source of boxes with overpacking	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	Weighing conveyor	

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

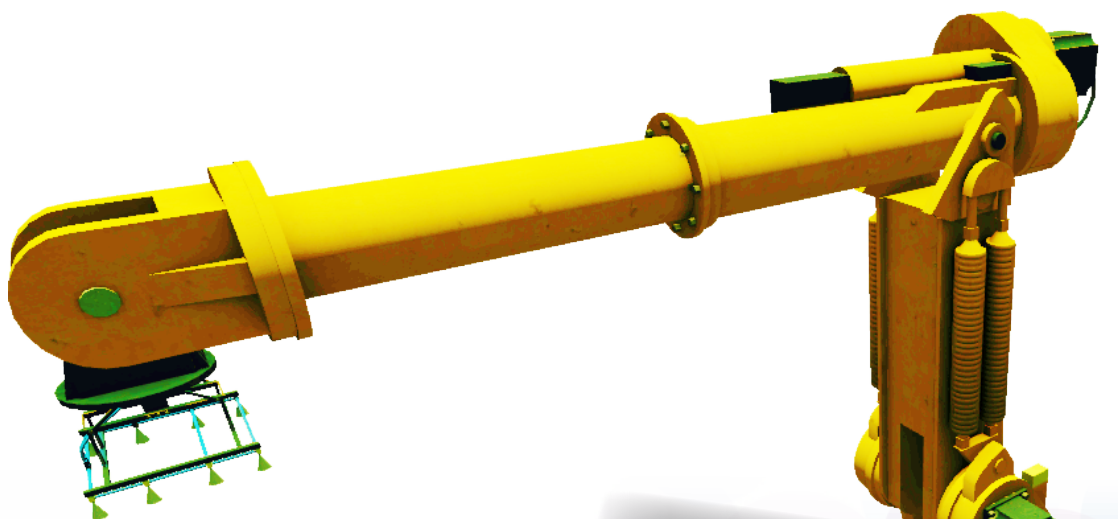


Siemens S7 IP, MPI, PPI
 Siemens S5
 Schneider Electric TSX, SoMachine, Twido
 Beckhoff
 Mitsubishi
 Rockwell Ethernet IP
 CodeSys PLCs compatibles
 Automgen targets (Eg. Arduino)
 Modbus TCP, SLMP, OPC

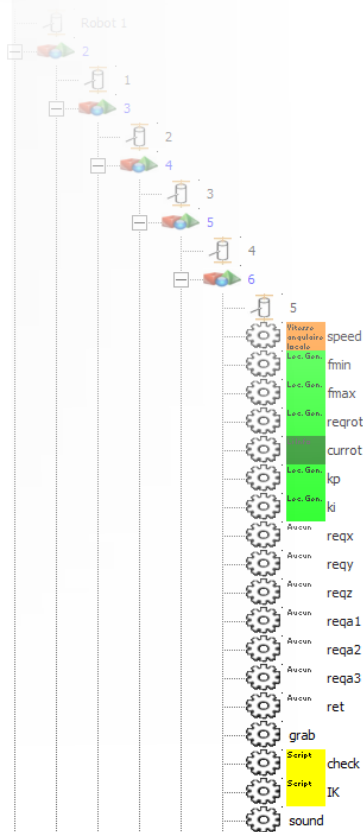
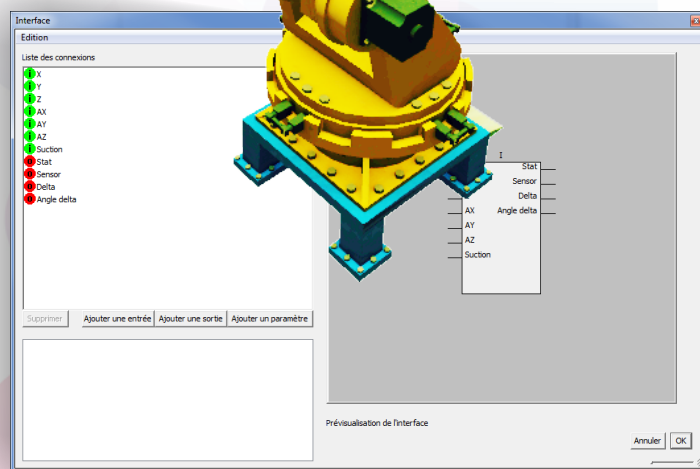
Siemens PlcSim
 Schneider Unity
 Schneider SoMachine
 Mitsubishi Gx-Simulator
 Mhj WinSps
 CodeSys
 Omron Cx-Simulator
 Rockwell SoftLogix
 Automgen (all compatible targets)
 Matlab Simulink
 Labview
 Proteus
 all software or programming tools
 dll, ip, universal memory access



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



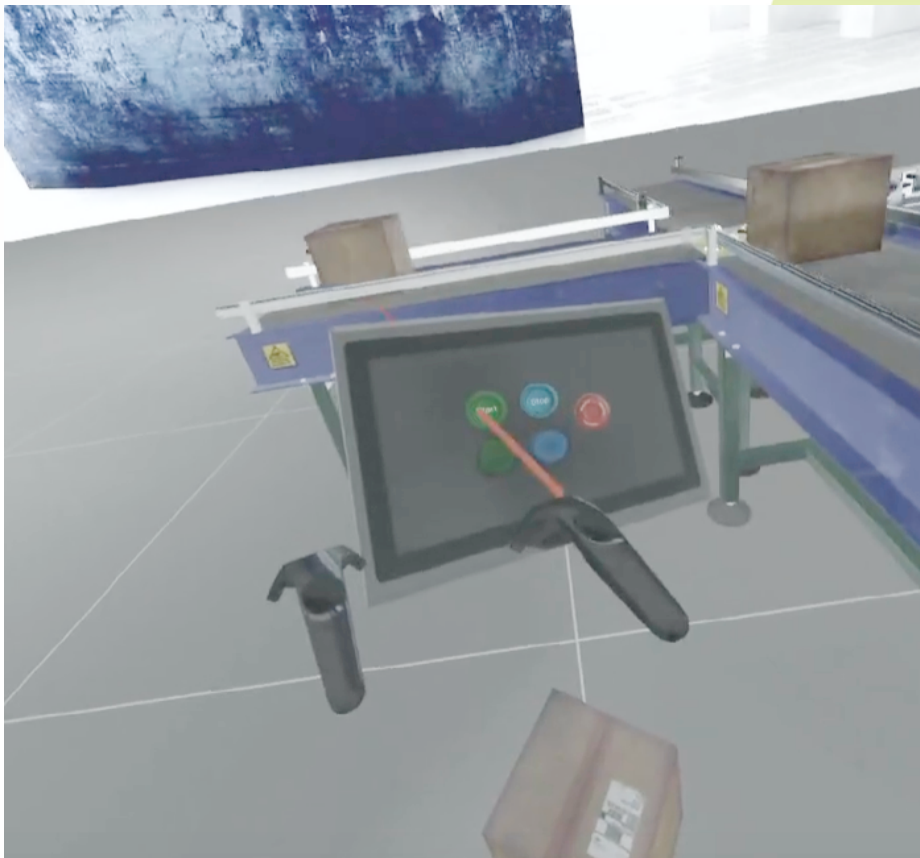
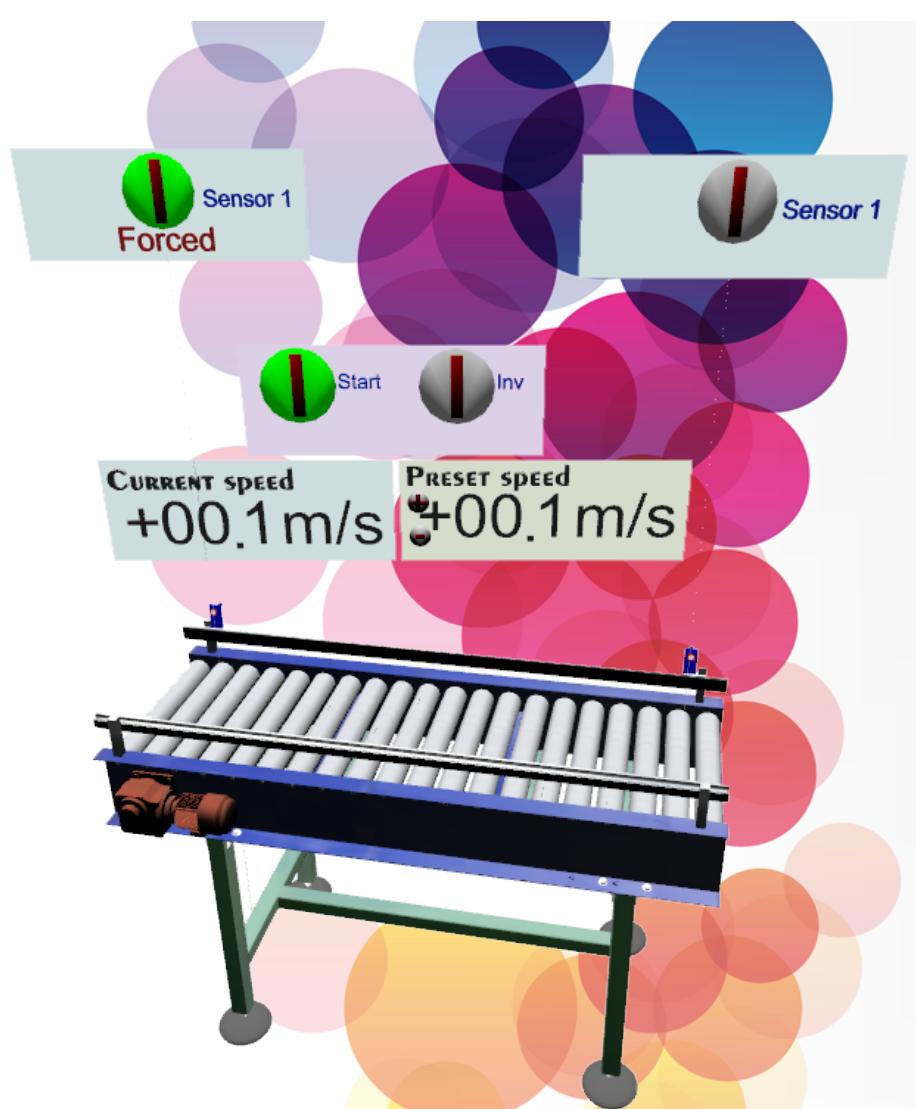
For each object, an optimized interface composed of inputs, outputs and parameters makes it easy to control the object from an automation program.



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 XP
Windows Vista
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 and controllers
Mixed reality headsets and controllers
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

WebGL
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

Integated 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 programming tools
dll, ip, universal memory access

Integrated programming tools

Ladder
Grafcet
Function blocks
Script (Basic)
C language

IRAI
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30110 La Grand Combe
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www.iraifrance.com
Tel +33 4 66 54 91 30
contact@irai.com

* 32 or 64 bits

** ability to import constraints