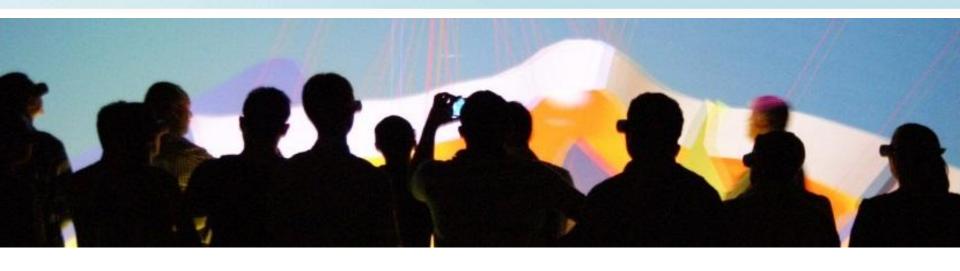


Workshop: "Lightweight Visualization"



From Immersive to Lightweight Visualization : collaborative visualization by TechViz

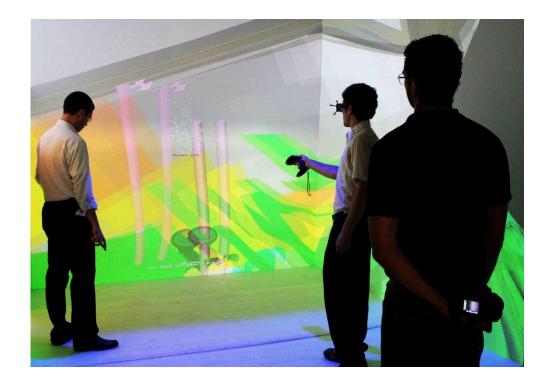
Dr-Eng Alexis Vartanian CTO TechViz



Agenda

About TechViz

- Large size Virtual Prototyping
- Collaborative Virtual Prototyping
- Collaviz project
 - Project introduction
 - TechViz X3D connector
 - Collaborative session



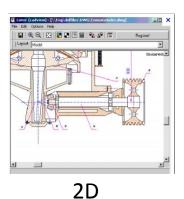


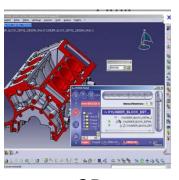
Virtual Prototyping

From Product Design to VP



Product design





3D



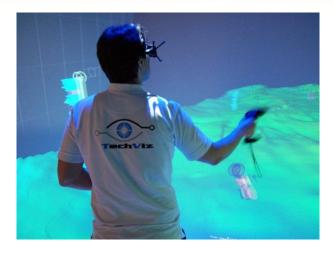
Virtual Reality Collaboration

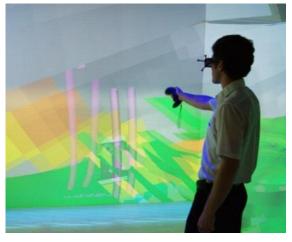


The ability to virtually explore a complete product before conception. Technique in the process of product development Using CAD software. Validate a design before committing to making a physical prototype.



TechViz







Founded in 2004
Headquarter and R&D
Located in Paris

Software editor

- Provider in advancedvisualization solutions
- For 3D applications

Cutting edge technology

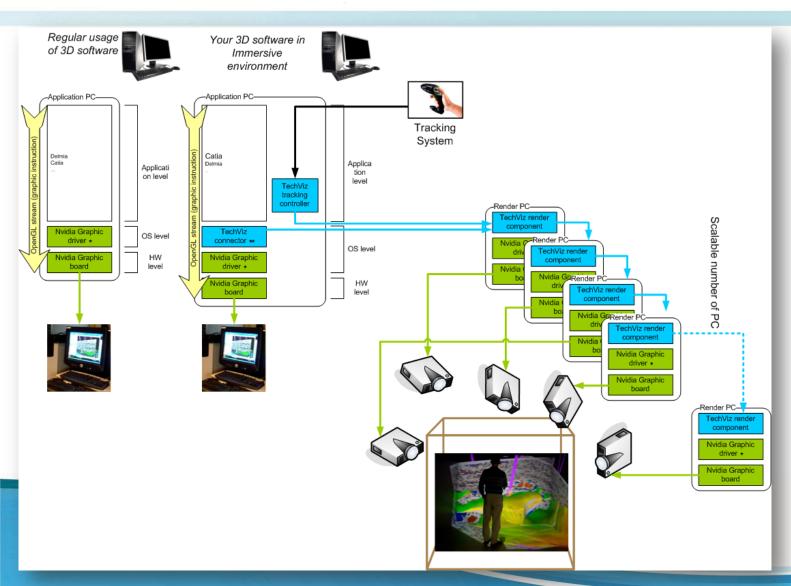
R&D experts in:

- Computer architecture
- 3D rendering
- Cluster computing
- Virtual Reality

Exhibitor hall Booth 652



TechViz XL Connector



Works like a hardware driver With more than 150 3D applications Easy to install

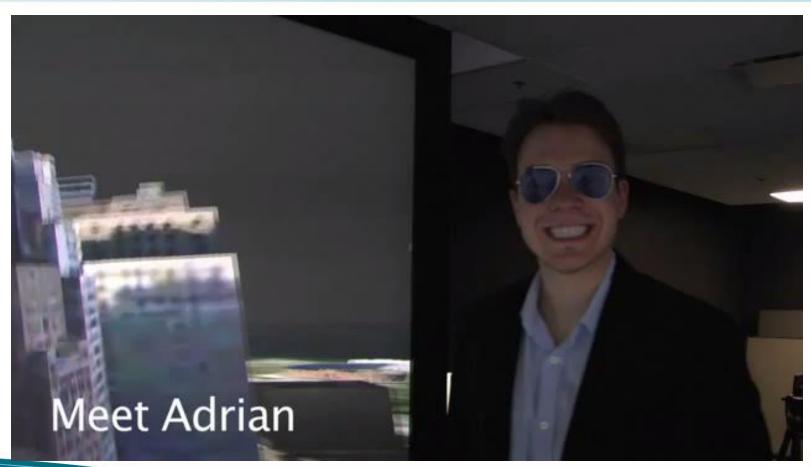


TechViz Overview





In a CAVE





Over 150 certified 3D applications

By vendor				By application field			
DASSAULT SYSTEMES	Autodesk	PTC	AVEVA	CAD	VR/Simulation	CAE/CAM	3D Toolkits
3DVia Composer Player	3ds Max	CoCreate	PDMS	Lumiscaphe Patchwork 3D	Eon Studio	RecurDyn	OGRE
3DXML Player	Alias	Product View	Review	Rhino 3D	BSContact	Fluent	XJ3D
Abaqus	AutoCAD	Pro/Engineer	Tribon	MAXXON Cinema 4D	Presagis Vega Prime	FieldView	SGI OpenGL Performer
CATIA V5	Image Studio	Division 2000i2	Marine	AC3D	Disti GL Studio	KineoCam Path Planner	VSG OpenInventor
CATIA V6	Inventor			Blender	Walkinside	GNS Animator	OpenSceneGraph
Enovia DMU	Maya	CEI	ESRI	3DNature	Dolphinity Racer	Corys TESS	VTK
Delmia	MotionBuilder	Ensight	ArcGIS	RapidForm Polyworks	Scanner	RAMSIS	CERV Arevi
Seemage	Navisworks	EnLiten		Bentley Microstation 8.1	Vertice Nova	Powerviz	Coin3D
SolidWorks	Opticore Revit Architecture	Intergraph	AGI AGI STK	Lattice XVL Player	Unity Cosmo Player	C-Motion Visual 3D Basic	Java3D
eDrawings Viewer Virtools	Showcase	Smart Plant	AGI STK Viewer	MADymo	Cosmo Player	Oil&Gas	Molecular
Virtools 3D XE Office Player		Smart Plant Review		Octaga Player	Scientific	Roxar RMS	VMD
Icem Viewer	Adobe		Google	Ikea Home Planner	VMD	Roxar Tempest	PyMol
Icem Surf	Acrobat	Right Hemisphere	Google Earth Google	Kompas 3D	Pymol	Tecplot RS	Medsumo
	Adobe 3D Reviewer	Deep View	Sketchup	Perspectix Px5	Paraview	SIM Reservoir	
Siemens PLM		Deep Exploration		VAPP	MeVisLab	SMT VuPak	Office
JT2G0	RTT		Landmark	Nsided Argile	Celestia	Geovel	Internet Explorer
SolidEdge	RTT DeltaGen	Paradigm	Geoprobe		MineSet		Firefox
NX	RTT DeltaView	VoxelGeo	SeisWorks	Medical	Avizo	Entertainment	Microsoft Office
Jack		3D Canvas	StratWorks	Brain Explorer	VisIT	Far Cry	Mplayer
Tecnomatix	Schlumberger	GoCAD	OpenVision	Bone Labs	Cloud Compare	Doom 3	VLC (Videolan)
TeamCenter (VisMockup)	Gigaviz	GeoDepth	AssetView	Amira	Fledermaus	Quake 4	Stereoscopic Player
RobCAD	Petrel				Matlab	Second Life	OpenOffice
	Eclipse				AVS		



Virtual Prototyping Collaboration

End user "needs":

- Reduce traveling
- Speedup conception process/decision making
- Better decision/more control by the management
- Work group more and more worldwide

- Interaction with existing collaboration technologies:
 - Telephone
 - Conference call
 - Text Chat/Forums
 - Video Conference
 - Desktop sharing

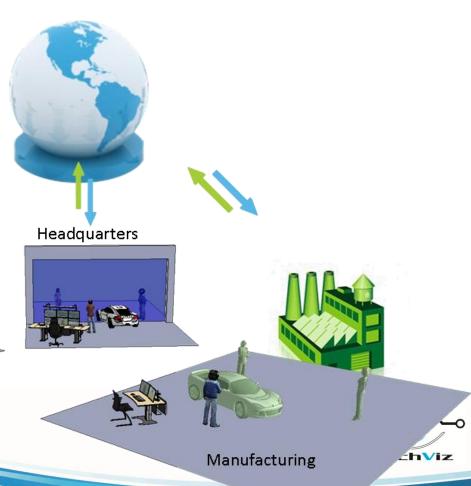


TechViz Collaborative

- Collaboration between worldwide locations
- Visualize 3D model + remote users' avatar
- Pinpoint remote users' attention
- Unlimited number of sites
- Work on corporate connection
- Heterogeneous display system







TechViz Collaborative

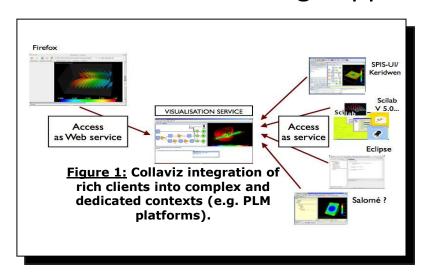


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Collaviz

- Collaborative research project funded by French ANR, 4M€, 2009-2012
- Design a Collaborative Platform for simulation-based design applications



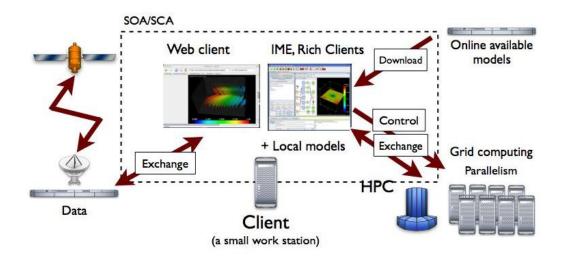






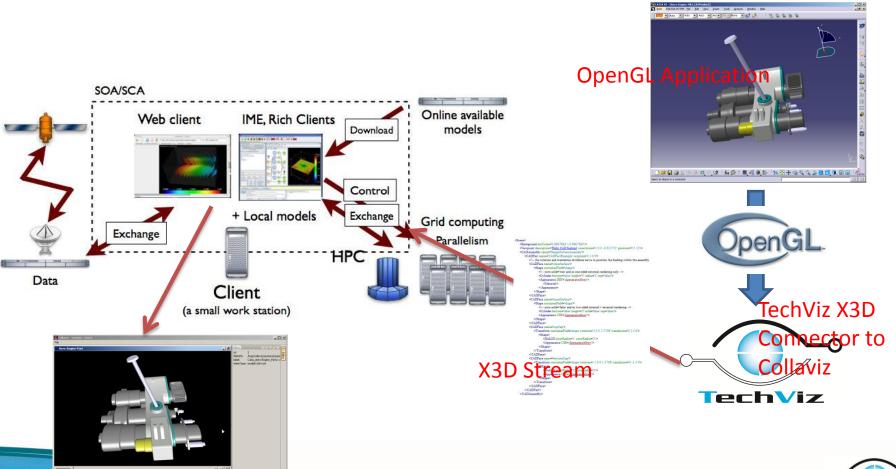
Collaviz and X3D

X3D is the standard for 3D data in the platform

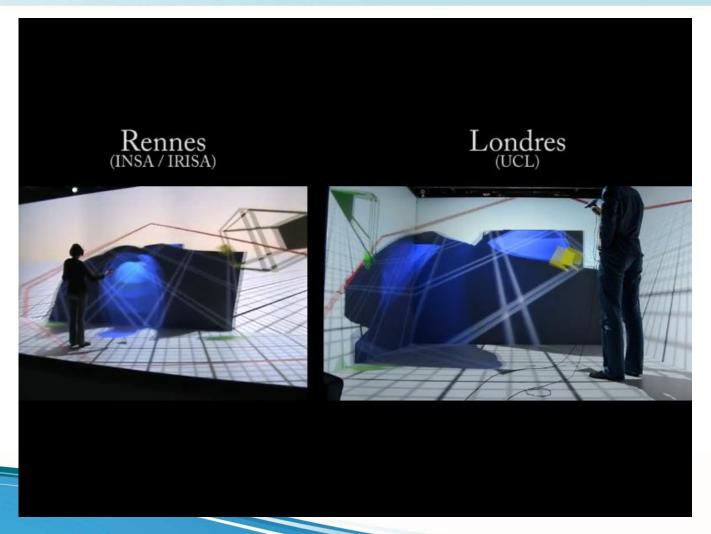




TechViz X3D Connector



Virtual Prototyping Collaboration in Collaviz







Merci Beaucoup



See our demo in Booth 652

