



Web3D Town Hall

SIGGRAPH 2013

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Agenda

- Introductions
- The Web3D Community & the Web3D Consortium
- Members
- Spec & Working Group Updates
- Initiatives & Future Direction







Open Standards for Interactive 3D on the Web www.web3d.org

- webl3D CONSORTIUM
 - Portability
 - Durability
 - Interoperability
 - Royalty-free
 - International recognition and support







Widely Used

X3DOM... 3D

Great

Projects by

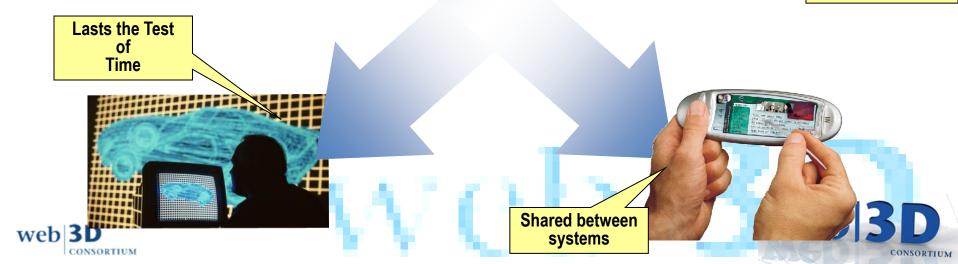


Shared between applications

Shared world wide

"X3D enables the communication of real-time 3D across networks and XML-based web services"

Royalty-free; Numerous implementations including Open source



Web3D Collaboration & Convergence



- XML, Dec3D

- HTML 5

- SVG

Interoperability
& Access
Across Verticals



- N-D Presentation State

- Volume data





- Extensible 3D (X3D)

- Humanoid Animation (H-Anim)

- VRML



- OpenGL, WebGL

- COLLADA



- Web3DS

-CityGML

- KML







web 3D

CONSORTIUM

Adoption

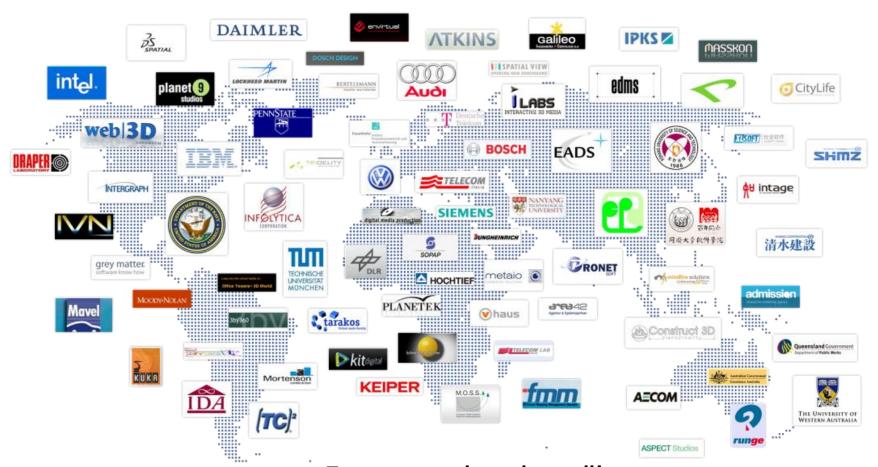


















Extensible 3D (X3D), VRML, H-Anim

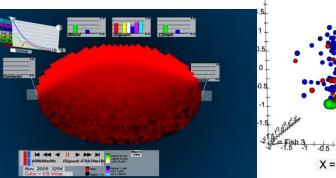


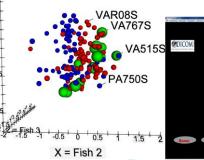


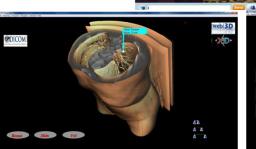


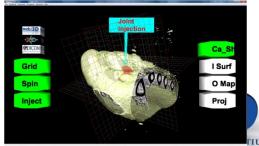
See videos and case studies at web3d.org:

- http://www.web3d.org/realtime-3d/case-studies
- http://www.web3d.org/realtime-3d/videos
- http://www.youtube.com/vtvisionarium









Web3D Community

This means US!

- We all want our assets to be portable and durable
- We all have a stake in a royalty-free future for 3D on the web
- Active Working Groups organized around vertical applications of the X3D spec: CAD, Geospatial, Medical, Augmented Reality
- Join us we are member-supported organization!







The Web3D Consortium 2013

Directing Members

- Naval Postgraduate School
- Virginia Tech

Organizational Members (Partial list)

- Bitmanagement
- DFKI
- EDF
- Fraunhofer
- George Mason University C4I Center
- KAIST
- KIST
- MBARI
- NIST
- <u>Suwon</u>
- Vicomtech

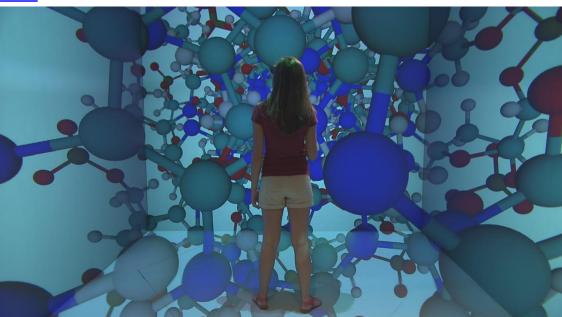
Web3D Chapters

• <u>Korea</u>





Professional Members



Web3D C Member Benefits

- Early-access to technology
- Leadership in standardizing technology
- Co-marketing & Publicity (website, press releases, booth)
- Collaboration (proposals, projects)
- Discounted Conformance Testing
- Web3D Conference Partners







X3D / ISO Status

Number	Common Name	Status
19775-1	Abstract Specification	Final Draft IS ballot starts in September
19775-2	Abstract SAI Specification	Draft IS ballot starts in August
19776-1	XML Encoding	Draft IS text submitted this Summer
19776-2	ClassicVRML Encoding	Draft IS text submitted this Summer
19776-3	Compressed Binary Encoding	Draft IS text submitted this Fall
19777-1	JavaScript Language Binding	Draft Amendment text submitted this Fall
19777-2	Java Language Binding	Draft Amendment text submitted this Fall

- Status of the Various X3D Specification Documents
- Public Documents at
 - http://www.web3d.org/realtime-3d/specification/version/V3.3





Working Group Updates 2013

- Geospatial
 - OGC Web3DS, examples
- CAD
 - Examples, NURBS
- Medical
 - DICOM, TATRC
- Augmented & Mixed Reality
 - ISO Reference Model, X3D extensions
- SIGs:
 - eLearning







Initiatives & Future Directions

Call for Compression

Specification Development Paths

- X3D 3.4
- X3D 4.0 ala Dec3D
- H-Anim
- 3







Call for Compression technologies (Open)

- Web3D C released an open call for contributions of royalty-free compression technologies
- Work in X3D Binary has helped defined the problem
- Scope includes: geometry-specific schemes, volumetric data, streaming shapes and animations
- Available at:

http://www.web3d.org/realtime-3d/working-groups/x3d/compressed-binary/x3d-compressed-binary-encoding-call-contributions



Going Forward

- Public Web3D Wiki
- V3.4:
 - http://web3d.org/wiki/index.php/X3D version 3.4 Development

- V4.0
 - http://web3d.org/wiki/index.php/X3D version 4.0 Development

web



X3D V3.4 Enhancements

- Near-term release of features to support Web3D Members and community interest
- Maintain Backwards Compatibility with V3.3 and VRML



Modules & Components

- CAD
- H-Anim
- Medical / Volume



Nodes

- Royalty-Free Audio & Video Formats
- MultiTexture clarifications
- Viewing & Navigation
- Rendering



Structural/Architectural

- Asynchronous Networking
- Streaming (JSON)
- Security & Privacy



Schedule

- Commence Fall 2013
- Draft text 4Q2014







X3D V4.0 Features

- Significant enhancements to fully integrate with HTML5
 - Potential major architectural changes
 - HTML5
 - X3DOM / Declarative 3D (D3D)
 - CSS
- Support for Augmented Reality Continuum (ARC)
- Additional topics from V3.4
- Schedule
 - Initial work to commence 1Q2014
 - Draft text 1Q2015







Discussion







Events @ SIGGRAPH

- Web3D Booth # 233
- Tuesday
 - BOFs in 201D: CAD, Carto, Medical, TownHall Mtng
- Wednesday
 - BOFs in 201C: X3D Futures w/ HTML5, AR/MR
 - TechTalk (Exhibit Hall 3:45pm)
- ACM 19th Annual Web3D Conference to be Colocated with SIGGRAPH 2014, Vancouver



Join Us!

Professional and Institutional opportunities!

- Anita Havele, Executive Director
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- Nicholas Polys, Ph.D., President
 - npolys@vt.edu





