

3D Technologies and Interactivity: Introducing Infinity 3D Web Technology

Motivation

Despite tremendous progress, websites are still defined as *HTML* pages. This document format does not naturally extend into three dimensions so any 3D content must be hosted in a variety of non-standard page regions – in WebGL or via a variety of plugins. Current de facto browsers do not provide integrated support for standard 3D browsing so the user experience is confused.

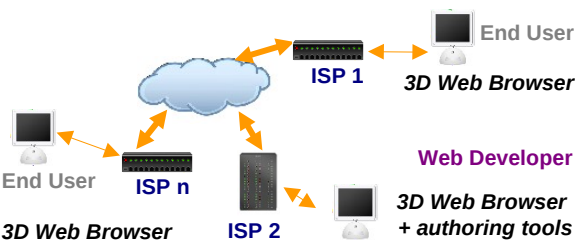
Innovation

<>< Infinity technology enables 3D websites to be built and hosted on any web server without interfering with existing content.

This enables online real-time 3D content broadcasting, viewing and interaction – “the 3D web”.

<>< Infinity Professional authoring tools enable 3D Studio Max™ artists to create complete custom 3D websites.

This **solution** raises the bar in the online broadcast sector, enabling exciting new media opportunities to be explored.



Products & Features

Products

<>< **Infinity** – a free downloadable 3D web browser.

<>< **Infinity Professional** – associated 3D website authoring tools*.

* custom content creation currently also requires Autodesk's 3D Studio Max™

Features

3D browser - includes a complete customizable real-time 3D user interface.

The browser navigates 3D websites which can include 3D hyperlinks, objects and panels displaying live content, including webpages - delivered via mozilla/gecko technology – the same technology powering Firefox.

Image delivery via standard web formats, dds and jpeg 2000.
 Video streaming enables the 3D Internet TV experience.

Custom functionality can be developed in C++, C#, Javascript or Java, with support for other languages via our native interface.

XSG: We introduce a new 3D file format for the web.
 .xsg = Extensible Scene Graph.
 An XML format optionally compressed as FastInfoSet binary XML.



Example Screen Shots



Collaboration

The Multimedia Group in the Faculty of Computing and Advance Software Ltd are working in collaboration on the following:



- Researching the needs of web designers and end users for 3D websites and associated technology.
- Development of the open XSG 3D web file format to enable efficient, cross platform content delivery.
- Enhancements to other products to enable 3D website content creation.
- Consideration of new software projects to extend the capabilities of the 3D web platform.
- Encouraging BSc and MSc students to present their work in xsg format 3D website form.

Dr Romas Mikušauskas
 (r.mikusauskas@londonmet.ac.uk)

Seeking Partners / Customers

- Architects and Interior Designers
- CAD Companies
- Colleges & Universities
- Digital Museums
- E-Commerce Websites
- TV & Web Broadcasters
- Video Games Developers