Using GL Studio Live Components within Microsoft Office and Course Authoring Applications

Did you know you can use your existing GL Studio components with the GL Studio ActiveX Control in order to drop your photo-realistic interactive 3D content into other applications? Microsoft PowerPoint™ presentations, Excel™, Word™ and other similar types of application will support this capability.

This functionality is implemented using a set of features called the Attribute Interface. This interface is primarily string based and allows for generic access to the "Properties" of GL Studio Components through a simple get and set interface along with an event generation and capture mechanism. For simple data access, the ActiveX Control uses the Attribute Interface defined as SetAttrib() and GetAttrib() methods.

The user will define the "Properties" while creating the GL Studio Component within the GL Studio Editor. These properties can provide access to simple values, or they can perform complex behaviors.

The GL Studio ActiveX Control requires that Components be packaged in standard .cab files. Components should be created as a "Live Component" from a wizard generated project which results in a DLL file.

A sample batch file (make_cab_example.bat) is provided from the GL Studio Support Site (located at www.glstudio.com/support) to demonstrate the commands required to produce a .cab file. Create a copy of this batch file and modify it to include your own DLL and supporting file names. The supporting files should include any supporting DLLs, config files, external textures, sounds, etc.

After the .cab file has been created you have the option to digitally sign it. A batch file for signing .cab files is included in the .zip file (sign_cab_example.bat). To use it, drag your .cab file and drop it on the .bat file. By default it will perform a signature using a test certificate. To properly sign the .cab file, you must purchase a digital signature from a company like VeriSign® that allows you to uniquely sign all of the content you create.

For Microsoft Office 2003 (PowerPoint, Excel, Word)

Select Insert / Object. From the object list choose "GLStudioComponentControl", and click OK. The control will load with the default image. Once the document is saved, the properties can be set. There are two property pages that will be used, the Component specific page and the general property page.

To see the Component specific page, right click the control and select "GLStudioComponentControl/Control Object"/"Properties…". In the ComponentDLL field, type in the name of the .cab file containing the desired Component DLL. If the base name of the desired .dll is not the same as the .cab file, place a "?your_component_name.dll" after the .cab file name. The Class name of the Component may be specified here. If it is not specified, the default class name for the Component DLL will be used. Hit "OK" to apply the changes. Now open the same property page again. You now see the Available Attributes for this Component listed on the left. These can be selected and added to the Initial Attribute Settings list. Once on this list, the values can be changed by selecting the item and changing the value in the Value field.

The remaining control properties can be accessed on the general properties page. Access this by right-clicking and selecting "Properties". The general properties page contains all of the properties of the object, but without the helpers of the Control specific page. The details of each of these properties are listed in the help document that comes with the ActiveX Developer download from the GL Studio support Site.

Visual Basic for Applications (VBA) can access all of these properties using GetAttrib() and SetAttrib() calls.

For example, to apply the value of a scrollbar to the heading of an MFD called "mfd1":
Call mfd1.SetAttrib("Heading", ScrollBar1.Value).

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http://web.nbaa.org

I/ITSEC 2005
Nov 28 - Dec 1
Booth # 549
Orange County Convention Center
Orlando, Florida
http://www.iitsec.org

ITEC 2006
May 16 - 18
Excel Center
London, UK
http://www.itec.co.uk

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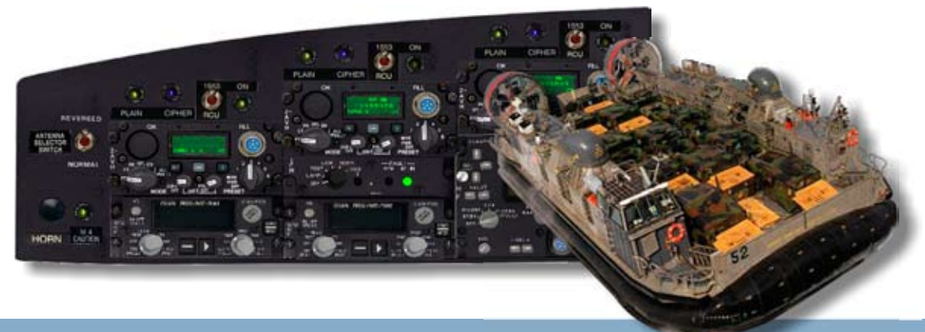
Corporate Highlights

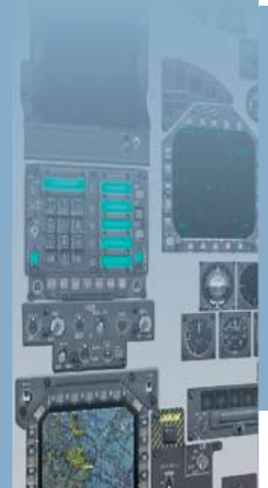
DiSTI Opens West Coast Office

In order to keep pace with our rapid growth, DiSTI has added a west coast sales office which will be lead by our new Western Regional Sales Manager, Chris Lindberg. This addition will offer an improved regional focus for our North American customers by providing a full time west coast presence based in Los Angeles, California. Chris comes to DiSTI with an extensive background in the real time embedded and simulation solution markets. Prior to his establishment of the DiSTI west coast office, Chris was the Western Regional Sales Manager for Altia Inc. In addition to his background in visualization and HMI tools, Chris worked at Wind River Systems for ten years. This combination of experience has positioned Chris to understand both real time visualization and embedded systems needs in order to help DiSTI customers discover new ways to deliver the next generation solution today.

UNITECH® Awards DiSTI $1.1M Contract for LCAC Maintenance Training Contract

DiSTI is proud to announce our participation in the development of next generation training materials for the US Navy LCAC platform. As part of a team headed by UNITECH, DiSTI will work to blend approximately 200 hours of Service Life Extension Program (SLEP) maintenance training into the existing Propulsion and Lift System Maintenance and Craft Control Systems Maintenance course. DiSTI will be using GL Studio™ and DiSTI's VMTE (Virtual Maintenance Training Environment) to bring unprecedented realism to the Virtual Maintenance Market, and to develop a virtual LCAC that will be completely reusable for both the Maintenance Training and Courseware portions of this contract. The new curriculum for LCAC SLEP maintenance personnel will include these new interactive 3D components for the students in hands-on laboratory exercises along with the relevant training devices.





DiSTI Offers a Competative Upgrade Program for Users of Engenuity® VAPS, Designers Workbench™ and Altia™ Design

After receiving numerous requests from users of legacy graphics solutions, DiSTI has established a competitive upgrade program for users interested in utilizing GL Studio's state of the art capabilities. Many industry users have become concerned by recent consolidations in the tool market and uncertainty in long term support for applications based on dated technology. Use of GL Studio's open architecture can help mitigate these risks through its modern technology and robust, focused support organization.

Several organizations have already taken advantage of this offer and have realized the advantages that GL Studio has to offer. These advantages include ease of use, a wide array of operating systems, unmatched technical support, lower cost of ownership, unmatched performance and reusability.

VAPS, Altia and DWB users can now obtain a development license of GL Studio, which includes our C++ code generator, one year of maintenance, access to nearly 100 example GL Studio designs and a training seat in our Corporate Headquarters in Orlando, Florida, at a dramatically discounted rate.

To learn more about how GL Studio can improve your capabilities please contact your DiSTI sales office.

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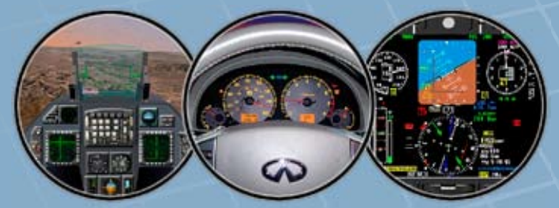

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GL Studio Highlights

Lockheed Martin® Chooses GL Studio for CCTT RVS Program

Lockheed Martin has been awarded a CCTT program follow on contract to produce a Reconfigurable CCTT trainer called RVS (Reconfigurable Vehicle Simulators). The CCTT RVS will simulate combat, combat support, and combat service support tactical vehicles. It will provide crew members the ability to see the battlefield in three dimensions from their crew position as well as maneuver on the battlefield and utilize available weapon systems. It will also allow for communications via simulated voice and digital communication systems to other crew members participating in an exercise.

As part of this effort, DiSTI will produce all the virtual controls for five vehicle variants including the cargo and armored versions of the High Mobility, Multipurpose Wheeled Vehicle (HMMWV), the Striker Fire Support Vehicle, and the cargo and fuel tanker versions of the Heavy Expanded Mobility Tactical Truck (HEMTT).

Evans & Sutherland, under contract to Lockheed Martin, has selected GL Studio over VAPS for the development of reticles and instrumentation within the CCTT RVS program. This expands our existing relationship which established the GL Studio EPX plugin for E&S EPX image generators.

DiSTI Expands North American Presence

DiSTI would like to introduce Scott Ariotti as the new Eastern Regional Sales Manager. Scott will be based out of our corporate headquarters in Orlando, Florida and comes to DiSTI with 11 years of experience in the Simulation and Training Industry. Scott, a graduate of Embry-Riddle Aeronautical University, has extensive experience with real time 3D development software and carries a strong technical background. Prior to joining the DiSTI team, Scott worked for some of the best known firms in the business including MultiGen-Paradigm®, ECC International® and the Lockheed Martin's Real3D® company.

Military Training Technology Magazine Highlights Simulation Based Maintenance Training

DiSTI's expertise and the GL Studio software package has extensive coverage in the "3D Models and Maintenance Training" article written for Volume 10, Issue 4, 2005 of Military Training Technology magazine. The article covers embracing 3D technology for use in the expanding maintenance training market.

Highlights of the article include DiSTI's contributions to the F/A-18 Simulated Aircraft Maintenance Trainer (SAMT) program with joint team members ASC and SIMTECH. The complete article is available at www.simulation.com.

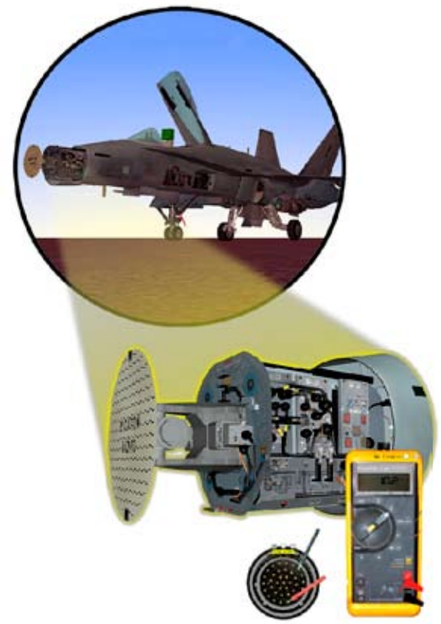
GL Studio v3.2 Coming Soon

GL Studio version 3.2 is slated for release by the beginning of 2006. The new version of GL Studio will have a significant increase in performance, feature updates and upgrades.

Some of the major new features include Dongle Support for licensing, a Proportional Text Plug-In, Quick Pick Colors, and Color Palette Creation capabilities. There will also be several generic avionics instruments included with the installation to help facilitate a quick start with learning and using GL Studio.

GL Studio Thrives in Maintenance Training

DiSTI's Virtual Maintenance Training Environment (VMTE™) continues to enjoy rapid expansion in the Maintenance Training and Virtual Hardware markets. With the addition of the GL Studio Content Interpreter™, GL Studio users can now automate a significant portion of their content importation and RSO production from CAD, 3D Studio Max™, Creator™, and Designers Workbench™ files. Taken with GL Studio's ability to deploy into a wide range of target environments, DiSTI provides the Maintenance Training community with unprecedented reuse potential and program life cycle cost savings.



Successful demonstrations of these capabilities include the ASC® F-18 SAMT maintenance trainer which raised the bar on 'reality and utility for the dollar'. Our new approach brings a full interactive 3D training environment into the Navy for less money than the low fidelity environments that came before it.

Another example of how GL Studio has revolutionized training can be seen in the PC-based simulations (SIMs) for NAVAIR's Aviation Maintenance community. Developed for the Navy Aviation Technical Training Center (NATTC) in Pensacola, these SIMs will replace the hardware trainers that are currently being used as part of the NATTC formal training.

GL Studio Expanded Support for Embedded Operating Systems

DiSTI is aggressively expanding GL Studio support for embedded environments and flight ready hardware.

GL Studio currently supports run time libraries for LynxOS®, Green Hills Integrity® and Wind River's VxWorks® providing embedded systems developers with a variety of options. Support for embedded systems is one of the cornerstones of the DiSTI concept of end to end content reusability throughout the life cycle of your system. Sharing of content should start at initial conceptualization and continue through prototype, production, deployment, and on into training and documentation.

DiSTI supports a number of drivers on each platform and our engineers can easily port the GL Studio Run-Time libraries to work with any OpenGL based embedded driver or operating system. Contact your DiSTI Sales Manager for further information.

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