



Reachin API is a modern development platform that enables the development of sophisticated haptic 3D applications in the user's programming language of choice, such as C++, Python, or VRML (Virtual Reality Modeling Language). The API is unique in that it provides a base of pre-written code that quickly interprets the user's needs and thus allows for easy, rapid development of applications that fit the specific needs of the user. Since its inception, the technology platform has evolved to embed not only advanced high-fidelity haptic features, but also a complete set of classes, nodes and interfaces for managing and synchronizing the haptics and graphics, and audio aspects of advanced 2D and 3D applications.

The Reachin API is available in two versions, Standard and Professional. The Standard version makes it possible to develop powerful applications using vrml and Python. The Professional version unleashes the full potential of the API with full control to customize and develop even more advanced haptic-enabled applications using C++.

Reachin API Professional

- Development using C++, VRML and Python.
- Includes C++ and VRML examples
- Includes an extensive library of high quality textures

Reachin API Standard

- Development using VRML and Python
- Includes VRML and Python examples
- Includes a library of high quality textures.

Features in API 4.2

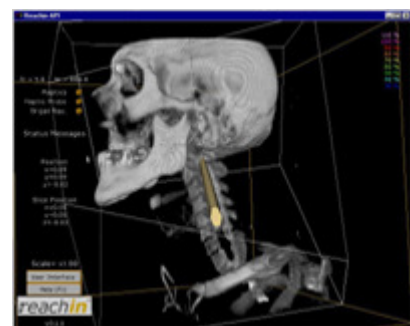
ForceModel™ library

The addition of the ForceModel library allows users to easily add sophisticated haptic effects to the developed application. All ForceModels can be created and modified from both C++ and VRML. ForceModels can also be combined to create more complex effects.

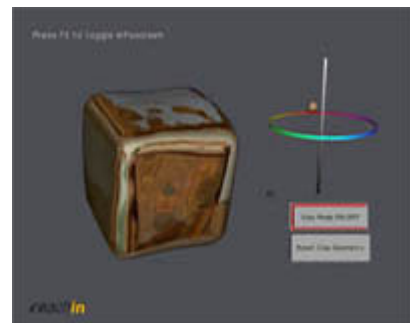
Network support

CUSTOMER APPS

CT Viewer



Virtual Clay Modelling



Medical Trainer



The Reachin API 4.2 ships with examples that shows how to implement network support so multiple users can interact in the same scene graph over the internet or local network. All of the source code is included and can easily be altered to meet specific needs.

Support for advanced graphic features such as vertex and pixel shading

The addition of the OpenGL Shading Language (GLSL) allows users to create custom materials with incredible realism which further enhances the experience of the developed application.

Support for Microsoft Visual Studio .NET 2005 and 2003

The Reachin API supports Microsoft Visual Studio .NET, which will give the user access to a single, unified, fully customizable environment with excellent debugging capabilities. Microsoft Visual Studio .NET provides an advanced IDE to further speed up development, using improved flow control and extensive linking options.

Advanced sound system

The sound system supports 3D surround sound and support for precise mathematical sounds.

Updated hardware support for 3DConnexion devices

Support for the latest devices from 3DConnexion, including Space Mouse Plus, Space Traveler and Space Pilot.

Supports Microsoft Standard Template Libraries (STL)

Conforms to Microsoft's implementation of STL.

Improved device interface

The device interface has been improved for better support of 3rd party hardware such as SensAble, Novint, Force Dimension and 3D Connexion.

Updated 3rd party component support

Python 2.4
OpenGL

Improved and extended support for image formats

Support for several new image formats such as: JPG, BMP, GIF, DDS and TIFF has been added.

Extensive documentation and On-line Help System

The documentation of the API and User Interface Toolkit has been completely rewritten to a more standardized and intuitive form. The new improved Python documentation makes it even easier to get started with the Reachin API. A search feature has been added to the documentation and the Programmer's Guide has been updated.

Project Wizard for MS Visual Studio

Fast forward feature for application development through C++ programming.

System Support Tool to improve communication.

A System Support Tool has been added to help the user collect detailed information about the API setup to facilitate efficient communications with the Reachin support team.

Professional texture library included

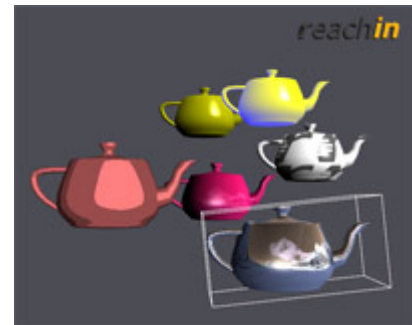
The Reachin API comes bundled with over one hundred professional textures from Arroyo Textures.

Extensive set of examples and code snippets

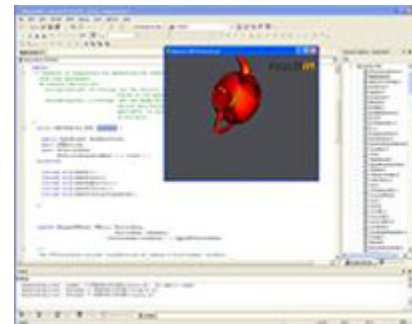
The Reachin API contains several examples both for VRML/Python and C++.

API FEATURES

GLSL Support



Work in MS Visual Studio



Inertia Models





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