

The HOOPS Net Server (HOOPS/Net) is a software module that facilitates the rapid development of client/server functionality such as real-time collaboration or on-demand streaming. HOOPS/Net may be used as an independent component for adding new functionality to existing application or in conjunction with other HOOPS components such as the HOOPS 3D Application Framework and HOOPS Stream Toolkit for new application development.

ADVANTAGES OF HOOPS/Net

- **Management of multiple-sessions / multiple users.** HOOPS/Net manages multiple distinct collaboration sessions, each with multiple users. Built-in, high-level support is provided for session creation/management, with full support for joining/exiting sessions.
- **File Serving.** Selective file serving capabilities for applications requiring on-demand or view-dependent streaming where sub-portions of a file are streamed upon request. This is particularly useful for applications dealing with large, complex models and assemblies.
- **Session-control management.** The server manages the requesting/granting of application “control” and can track individual access rights. Developers have full freedom over how to handle control of collaborative sessions as well as how access rights are determined and managed.
- **Platform and network-protocol independence.** A high-level, portable message passing API is provided, that serves as an abstraction layer on top of raw transport protocols such as TCP/IP and HTTP. Proxy authentication is also fully supported.
- **Ease of configuration/customization for server and client.** The server can be extended to support custom logic via a callback mechanism that enables the developer to register unique message handlers. A high-level client-side message-handling scheme makes it easy to add new message types and associated logic to the client.
- **Late Join.** Users may join an in-process collaboration session and be synchronized with others users.
- **Network reliability management.** The module provides fault-tolerance to address situations where a client or the server becomes unreachable (via a crash, bad connection, etc.)
- **Reference implementation.** HOOPS/Net is accompanied by source-code level reference applications that demonstrate use of the module, providing an example of collaborative view/markup functionality and examples of how the server may be customized to provide application-specific functionality.



Screenshot courtesy of SolidWorks

FOR MORE INFORMATION

- For more information about the HOOPS/Net please visit:
http://techsoft3d.com/products/net_server.html
- To register to download a free evaluation copy of TS3D's HOOPS/Net go to:
<http://techsoft3d.com/downloads/eval.html>