

DIRECWAY® HTTP Performance Enhancement Proxy (HPEP)

HUGHES
NETWORK SYSTEMS

DiDIRECWAY®

DIRECWAY® is a family of high-speed broadband solutions via satellite brought to you by Hughes Network Systems (HNS), the market leader in providing satellite products and services to enterprises and consumers alike. DIRECWAY satisfies the increasing demand by customers for greater bandwidth to enable a variety of high-speed multimedia applications.

The HPEP (HTTP Performance Enhancement Proxy) software product by HNS helps users of HNS broadband satellite systems to make the most of satellite's speed when browsing the Web. Designed as a platform-independent solution, the HPEP substantially reduces the time required to access a Web page. In addition, the HPEP software can be used with any of the HNS DIRECWAY® platforms, in particular, the DW series of broadband hardware products.

The HPEP software helps to optimize speed and productivity for a range of Web activities:

- Internet Web page access
- Intranet Web page access
- Web-based file transfer

HPEP Features

- Reduced response time and Internet access utilization
- No TCP session startup overhead and delay
- Reduced TCP acknowledgments
- Compatibility with Microsoft Internet Explorer 5.0 and higher and Netscape 4.7 and higher
- Advanced compression techniques optimized for HTTP requests
- API (Application Programmable Interface) for integration with other applications
- Comprehensive security features to protect the customer's sensitive business data with HTTPS support

HPEP Offers

- Increased productivity
- Increased web browsing speeds
- Ease of use, deployment, management and support

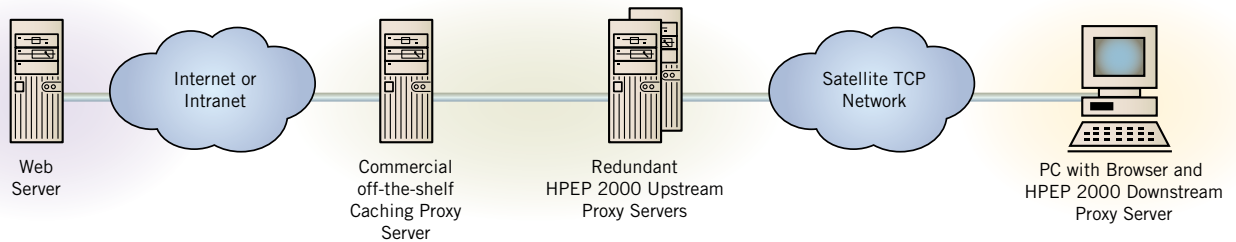
How Does HPEP Work?

The HPEP system consists of the HPEP Downstream Proxy Server located on the user's PC at one side of the satellite "pipe" and a HPEP Upstream Proxy Server at the network operations center – on the opposite side of the "pipe".

The HPEP Downstream Proxy Server works closely with the web browser on the user's PC. HTTP requests generated by the web browser are sent to the Downstream Proxy Server. The Downstream Proxy Server then sends the requests to the Upstream Proxy Server across a single, persistent TCP connection. By using just one persistent TCP connection, the number of TCP acknowledgments is reduced, thereby reducing the overall traffic over the satellite inroute and allowing faster and more efficient Web browsing.



HPEP Proxy Data Flow



Highlights and Technical Specifications

Minimum Upstream Proxy Server Hardware Requirements

- Server class PC with PIII 500MHz or better
- 512 MB RAM
- 10 GB hard drive
- Two 10/100BaseT Ethernet adapters

Upstream Proxy Server Software Requirements

- Microsoft Windows NT 4.0
- Upstream Proxy Server software

Minimum Downstream Proxy Server Hardware Requirements

- Pentium class processor
- 64 MB RAM
- 10 GB hard drive
- 10/100BaseT Ethernet adapter

HPEP Downstream Software Requirements

- Microsoft Windows 95/98/ME/2000/Win NT4.0/XP

Terminology

HPEP - HTTP Performance Enhancement Proxy

Downstream Proxy Server - software that resides on the client PC

Upstream Proxy Server - software that resides on a server at the NOC side of network

For more information or to locate a sales office near you, visit our Web sites at www.hns.com or www.direcway.com.