

Reliable and accurate delivery of digital packages

The Hughes Enterprise Package Delivery (EPD) system from Hughes Network Systems (HUGHES) is a Hughes-designed software product that provides a convenient, quick, and accurate mechanism to multicast digital packages. The EPD provides a value-added service for ISPs (Internet Service Providers), content providers, and distributors that gives them a “first-to-market” advantage with a new and creative service.

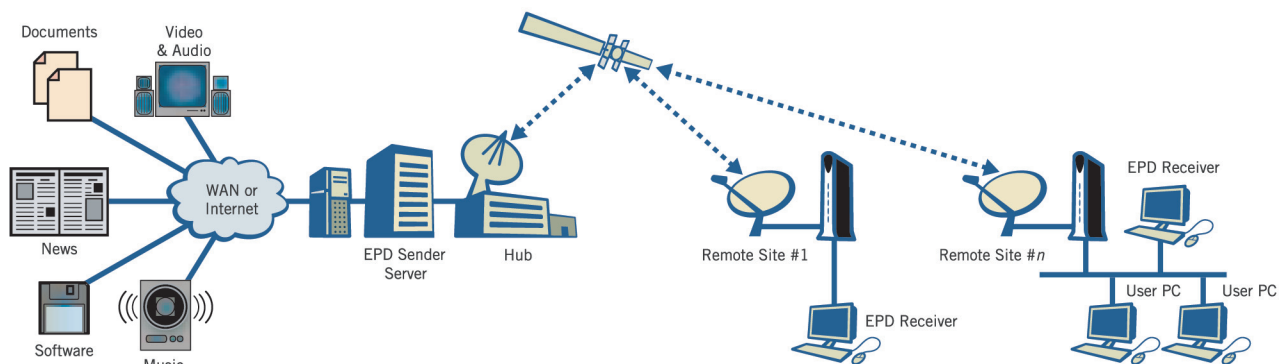
The EPD system is designed as an IP-based, stand-alone software package. It can be used in any networking environment, as well as integrated with the Hughes family of broadband satellite terminals developed by Hughes or with satellite terminals developed by other manufacturers. The EPD takes advantage of the broadcast nature of satellite communications to greatly reduce the cost of receiving, in parallel, digital packages by all sites in a network. The EPD Web-based user interface simplifies the process of creating and scheduling packages for delivery. It also monitors and verifies the package delivery process.

How does EPD work? The provider of the information sends a package to the directory at the EPD sender location. The EPD sender **stores the package until it is ready to be distributed to designated locations.** The information provider specifies the list of recipients and the time to submit the package for delivery. The EPD sender transmits the package to all designated locations simultaneously. At each location the package is delivered to a customer's PC or server, which is equipped with an EPD client application. Each EPD client can

confirm to the EPD sender that the package was received successfully. Upon confirmation of delivery to all recipients, the EPD sender sends a status report to the information provider's email address.

EPD Features

- Supports IP unicast and multicast
- Simultaneous transmission
- **Auto-scheduling**
- Transmission rate control (10 kbps to 9 Mbps)
- Package prioritization
- Auto-retransmission of lost packets
- Delivery confirmation, logs, and email status reports
- Post-processing executable support
- FEC (Forward Error Correction) for one-way transmission
- GUI (Graphical User Interface) Web-based and command-line administrative user interfaces
- Package management, SNMP (Simple Network Management Protocol), and FTP (File Transfer Protocol) support
- Hot standby for high-availability networks
- Flexibility, as the EPD can be ported to a variety of platforms
- API (Application Programmable Interface) for integration with other applications
- Optional auto-rebroadcasts
- Optional use of signatures for highest security



EPD Implementation via a Hughes Broadband Satellite Network



HughesNet encompasses all broadband solutions and managed services from HUGHES, for large enterprises, governments, small businesses, and consumers. HughesNet solutions and services are marketed directly by Hughes and its authorized resellers and distributors throughout North America, Europe, India, and Brazil. In all other regions of

the world, Hughes products and services are available from a growing family of value-added providers and resellers. Hughes satellite products are based on global standards approved by the TIA, ETSI and ITU standards organizations, including IPoS, RSM-A and GMR-1.

EPD Offers

- Increased productivity
- Reliable and accurate package transmission
- Delivery assurance
- Reduced time and costs of using the telecommunication equipment, space segment, etc.
- Easy-to-use, deploy, manage, and support
- Comprehensive security features to protect customers' sensitive data
- Scalable to an unlimited number of recipients with no increase in bandwidth or time

Applications

- Electronic software distribution
- Database replication
- Corporate presentations, literature, and demos
- Transmission of critical information to field offices
- Distribution of multimedia information to local servers
- Replication of Web servers to the edges of networks for improved performance
- Web site mirroring and pre-caching
- Radio, TV, and print advertising
- News stories, images, and video clips
- Medical imaging files and video
- Real estate images and 3-D walkthroughs
- Weather images and radar screen animations
- Mapping and geodesic information

Highlights and Technical Specifications

■ Minimum EPD sender requirements

Pentium III class processor, 500 MHz
256 MB RAM
30 GB hard drive
10/100BaseT Ethernet adapter

■ EPD sender software requirements

Microsoft Windows 2000 Professional
Oracle 8i Standard Edition
Microsoft Internet Information Server (IIS) 5.0 or higher (free with Win2000)
ColdFusion Professional 4.5 or higher

■ Minimum EPD receiver requirements

Pentium II class processor, 266 MHz
128 MB memory
10 GB hard drive
10/100BaseT Ethernet adapter

■ EPD receiver software requirements

Microsoft Windows 95/98/ME/2000/Win NT4.0
(with service pack 5.0 or greater)/XPhigher

■ Terminology

EPD sender is a PC that acts as a server and is located at the headquarters or at the hub.

EPD receiver is a customer PC (running the EPD client application) connected to a VSAT or another type of transport mechanism.

Package represents a binary stream file containing data or application software. One package can deliver multiple archived files simultaneously.

For more information or to locate a sales office near you,
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