IBM®

IBM eNetwork Host On-Demand Version 2.0 Delivers One-Click Secure Access to Data Across Diverse Networks and Platforms

Overview

IBM eNetwork Host On-Demand Version 2.0 gives you one-click secure access to your enterprise's data using the power of Java™. One click opens the door to the intranet's key asset, the enterprise data needed for daily business operation.

eNetwork Host On-Demand delivers TN3270, TN5250, VT52, VT100, and VT220 emulation and CICS® Gateway for Java access in a single package and can run in any Java-enabled environment. This gives you simple and consistent access to your enterprise data, and eliminates the need for user installation, user configuration, and costly software upgrade administration.

eNetwork Host On-Demand is Java-based, so users in different operating environments ─ whether they are using network computers, traditional PCs, or advanced workstations ─ get the same look and feel. This consistency reduces retraining costs when users change operating environments and reduces service costs because each user is on the same version of the code.

You can extend the reach of your enterprise data and applications by using eNetwork Host On-Demand's Secure Sockets Layer (SSL) authentication and encryption to gain secure access across the Internet (refer to **Planning Information** for server environments supporting SSL).

eNetwork Host On-Demand Version 2.0 also provides many features that enable users to customize the interface and to transfer data to other desktop applications. File transfer, cut and paste, and print screen are included to increase user productivity. A Java-based programming API for application development is available to customize desktops. National language versions are also available, including versions for double-byte character sets and file transfers.

Additional information can be found on the eNetwork Host On-Demand Version 2.0 home page at URL:

http://www.networking.ibm.com/ enetwork/ondemand/hod.html

Intended Customers

Customers who are planning to implement solutions involving network computers, or mixed-environment solutions, will want to consider eNetwork Host On-Demand Version 2.0. Many network computers require Java-based applications, so eNetwork Host On-Demand is the best choice available to these users for host access and terminal emulation.

Key Prerequisites

A browser, access to a Web server, and a server supporting one or more of the TN3270, TN5250, VT52/100/220 protocols, or a CICS Gateway for Java (as required).

Planned Availability Date

September 26, 1997

Description

eNetwork Host On-Demand Version 2.0 delivers one-click secure Java access to mission-critical data, which is essential to the operation of any business. This new offering reflects the combination of IBM's long-term experience in providing host access products with IBM's understanding of today's requirements for Java-based applications. Java-based applications can be used across a wide range of operating environments.

With Host On-Demand Version 2.0, every user in an enterprise can get the same secure level of access to enterprise databases. This is whether they are using a locally attached network computer, an advanced workstation at a key supplier's warehouse, or a laptop in a customer's office. This consistency across diverse networks and platforms embodies IBM's eNetwork Software vision ─ to provide Enterprise-class universal connectivity and information access for cost-effective network computing.

On-Demand Access to an Intranet's Key Asset ─ Enterprise Data

eNetwork Host On-Demand uses the power of Java to open the doors to mission-critical enterprise data whenever it is needed, from wherever it is needed, with a hyperlink from a browser. This single click launches a Java applet that delivers access to the majority of the data in any intranet. Host On-Demand delivers TN3270, TN5250, VT52, VT100, and VT220 emulation as well as CICS Gateway for Java access in a single package. Other new features delivered with eNetwork Host On-Demand include 3270 file transfer, cut and paste, print screen, and keyboard remapping.

The newly-developed eNetwork Host On-Demand Host Access Class Library Application Program Interface (Host Access API) allows other programs to utilize the emulator data stream and then present a customized user interface that meets your business needs. eNetwork Host On-Demand is compatible with the CICS-defined Java-EPI, which allows the Host Access API and other new Host On-Demand functionality to be utilized by CICS users.

The Host Access API interface is available in a Java format in eNetwork Host On-Demand and is also available in a C++ interface format in Personal Communications Version 4.2 for Windows 95 and Windows NT™. With this compatibility, enterprises can develop customized applications that manipulate and present host data in desired formats in either a procedural or a Java environment, and then easily adapt that application to the other environment.

Simplest Way to Reach Enterprise Data

eNetwork Host On-Demand is the simplest way ever for users to reach all the intranet data that they need, since the user is not required to load or configure any software. Users just click on a hyperlink to launch a session with the host.

Multiple sessions can be launched with multiple hosts, so users can operate at maximum efficiency. Unlike many competitive offerings for Web-enabled access to host data, eNetwork Host On-Demand launches in its own window, leaving the browser free for concurrent access to other Web-based data.

Secure Access Across the Internet

eNetwork Host On-Demand also extends enterprise data access across the Internet by communicating with SSL V3.0 servers using server authentication and encryption on the link to the server. Certificates to be provided include those of the principal certifying authorities, plus one provided for the IBM Host On-Demand environment. Utilities are also provided, which allow an enterprise to create an enterprise certificate.

With this authentication support, mobile workers can simply access the secure Web site, get authenticated, and then establish communication with enterprise hosts. Since Host On-Demand Version 2.0 is delivered to the client as a signed Java applet, the server's Java Virtual Machine (JVM) treats Host On-Demand as a trusted applet and sets up links to trusted hosts as needed.

When access to multiple hosts is required, Host On-Demand maintains a secure link across the global Internet and establishes sessions with the other hosts.

Consistent User Interface for Every Operating Environment

Host On-Demand significantly improves productivity and greatly diminishes user training costs because the Java-based user interface is the same in every operating environment, including the new network computers. What's more, users can define a set of host access preferences that are stored on the server and returned with the Java applet each time the user clicks for access. National language versions are also available, including versions for double-byte character sets and file transfers.

Cost-Effective Distribution of Software Updates with Java

eNetwork Host On-Demand also reduces software maintenance costs for most customers, since a new copy of the applet is downloaded each time a user clicks for access, except when a user has a locally-resident copy. For all other users, system administrators no longer need to schedule maintenance upgrades for user workstations. Furthermore, the consistency of user interfaces across operating environments, and the expectation that every user has the latest version of the applet, greatly simplifies the process of problem determination. With today's rapid pace of change in workstation software, this simplified administration process greatly increases the value of Host On-Demand for many customers.

Flexibility of Client Installation

You also have the option of installing a permanent copy of the Host On-Demand code on your PC or workstation. With this setup, users with Netscape V4.01 or Internet Explorer V3.0 browsers can avoid the network traffic created by each applet download. This feature is especially useful for users connected to the host intranet via low-speed links, but new versions of the applet are not automatically downloaded to such users when the server is updated. The optional Host On-Demand Express function can also be used to reduce the data transferred across the low-speed link, saving bandwidth and improving response times.

Additional Product Information

eNetwork Host On-Demand Version 2.0 communicates across industry-standard TN3270, TN5250, and VT52/100/220 socket connections. Many product functions can be invoked in a JVM 1.02 environment, but a JVM 1.1 environment (with Abstract Windowing Tool (AWT) support) is needed to fully utilize the functionality of eNetwork Host On-Demand Version 2.0.

Customized installation routines are provided for server installation on Windows NT servers. Detailed instructions for manual installation on AIX®, OS/2®, Sun Solaris, and NetWare servers are provided with the product. An OS/390™-compatible version of Version 2.0 will be delivered in the future.

An installation program is provided for client installations on Windows 95 and Windows NT. When downloaded from a server, the client applet will run in Java-enabled Windows 95, Windows NT, AIX, OS/2, and Macintosh environments as well.

Summary of Key Features

eNetwork Host On-Demand Version 2.0 expands on the functionality provided with IBM's original Host On-Demand release in the following ways:

- Improved TN3270 emulation
- TN5250 emulation
- VT52/100/VT220 emulation
- CICS Gateway for Java access
- Host Access API
- Persistent user configuration
- Error logging and tracing
- File transfer, cut and paste, and print screen
- Telnet redirection
- IBM eNetwork Host On-Demand Express
- Keyboard remapping

Year 2000

This product is Year 2000 ready. When used in accordance with its associated documentation, it is capable of correctly processing, providing, and/or receiving date data within and between the twentieth and twenty-first centuries, provided all other products, (for example, software, hardware, and firmware) used with the product properly exchange date data with it.

Product Positioning

The Internet or World Wide Web (WWW) reaches more and more users every day. In addition to the Internet, intranets are emerging as valuable internal assets for companies. IBM eNetwork Host On-Demand is an Internet-to-host interconnectivity solution that provides host application access through the WWW. Web users needing host applications, such as public catalogs, databases, and other resources, can use eNetwork Host On-Demand from inside their Java-enabled Web browsers to access central computer data.

Host On-Demand delivers network computing to the WWW by enabling Web-browser users to seamlessly access non-Internet-based 3270, 5250, ASCII, and CICS Gateway for Java applications, content and services.

More information can be found on the eNetwork Host On-Demand home page at URL:

http://www.networking.ibm.com/enetwork/ ondemand/hod.html

Host On-Demand is recommended for intranet/Internet users requiring ordinary emulation function. IBM eNetwork Personal Communications is recommended for full-function emulation, more extensive programming APIs, and a wider range of protocols or connectivities. More information on eNetwork Personal Communications can be found at URL:

http://www.networking.ibm.com/pcf/pcfprod.html

For users requiring strong TCP/IP application support or access to Lotus Notes® mail systems and the full-function host access (via emulation) provided by Personal Communications, the IBM eNetwork Communications Suite provides a cost-effective alternative to the purchase of multiple single-function products. Additional information on eNetwork Communications Suite may be found on its home page at URL:

http://www.networking.ibm.com/ecs

Reference Information

- Software Announcement 297-084, dated April 1, 1997
- Software Announcement 297-349, dated September 9, 1997

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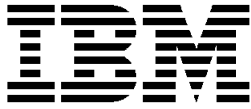
Publications

The *eNetwork Host-On Demand Administrator's Guide* (SC31-8627) can be ordered from Mechanicsburg immediately. To order, contact your IBM representative or call 800-426-7282.

Technical Information

Specified Operating Environment

Hardware Requirements: 15 MB of disk space must be available on the server to support applet files, the Host On-Demand redirector function, and Host On-Demand Express Server.

A PC or Workstation or Network Computer with sufficient processor speed, memory and disk to run a complex browser/Java™ environment.

Software Requirements: eNetwork Host On-Demand can be installed on any server which supports the required JVM 1.1, including the following:

- Windows NT™ 4.0
- AIX® V4.2
- OS/2® Warp
- Sun Solaris SunOS Release 5.5.1
- NetWare Version 4.11

With an appropriate browser and JVM support, Host On-Demand is supported on any of the following desktop platforms when downloaded from a server:

- Windows® 95
- Windows NT 4.0
- AIX V4.1.5 with latest PTFs, or V4.2
- OS/2 Warp
- Macintosh MACOS 7.5

With an appropriate browser and JVM support, Host On-Demand is supported on any of the following desktop platforms when installed locally as a client:

- Windows 95
- Windows NT 4.0
- AIX V4.1.5 with latest PTFs, or V4.2

Browser requirements:

- A browser that provides a JVM 1.02 or later is required. Tested browsers include Netscape 2.02 (OS/2), 3.0x and 4.0x (Win32), Microsoft® Internet Explorer 3.0 and 4.xx (Win32), Sun HotJava™ (Win32), Netscape 3.01 and 4.0, and Sun HotJava (AIX).

- For file transfer, a browser that supports signed applets is required. Tested browsers include Netscape 4.0x, Microsoft Internet Explorer 3.0 and 4.xx, Sun HotJava (Win32), and Netscape 4.0 (AIX).

- For cut/copy/paste, print screen, and all non-English-language support, a browser that provides full JVM 1.1 support including AWT is required. A tested browser is Sun HotJava 1.0 (Win32 and AIX).

Host On-Demand can be used as a Java client to the CICS® Gateway for Java V1.1.3.

Given that browser vendors are continually making improvements to the JVM functions that Host On-Demand uses, it is strongly recommended that the latest supported level of the browser be used.

Compatibility: eNetwork Host On-Demand is compatible with TN3270, TN5250, VT52, VT100, and VT220 compliant servers.

Performance Considerations: Host On-Demand is a Java applet, and performance is a function of the speed of the network, processing power of the workstation, as well as the characteristics of the browser being used.

Planning Information

- Secure Sockets Layer encryption is supported on the following platforms:

  - Windows NT server
  - Windows 95 and NT downloaded and locally installed clients
  - Other supported clients if the browser on the client has a JVM 1.1 (AWT not required)

- The Web server, Host On-Demand redirector, TN server, and VT servers must be placed appropriately in the network to meet security, performance, and network requirements.

Since Java is a rapidly evolving technology and individual browsers do not yet support all the functions provided by Host On-Demand, you are responsible to determine whether the desired Host On-Demand functions are supported by your browser of choice. IBM will periodically post on its Host On-Demand home page at URL:

> **http://www.networking.ibm.com/enetwork/ ondemand/hod.html**

information identifying which functions are supported by various browsers.

For server-based installation, the server must have a Web server. For optimum client functionality, each client platform should have a browser that supports JVM 1.1 and includes AWT.

For server-based installation, the server must be running Windows NT Version 4.0, AIX V 4.1.5, OS/2 Warp, Sun Solaris SunOS 5.5.1, or NetWare Version 4.11, or later. Customers planning to use the security functions or the Host On-Demand Express feature of Host On-Demand must have a Windows NT Version 4.0 server for this release. For Host On-Demand Express, the client must have Windows 95 or Windows NT.

Since Host On-Demand communicates using TN3270, TN5250, and VT52/100/220 protocols, the customer network must also have at least one of these servers

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operating in the network into which Host On-Demand is installed. These servers can be installed on the same server as Host On-Demand, the target host which contains the data to be accessed by Host On-Demand clients, or on an intermediate gateway server that converts from the telnet protocol to the native protocol of the target host. When Host On-Demand is used to access CICS through a CICS Gateway for Java, a CICS Gateway must be available in the network.

Installability: Host On-Demand can be installed on a server for downloading or on individual client devices. Customers determine which type of installation best fits their requirements.

Host On-Demand Express can improve network performance over low speed connections if Host On-Demand is installed on both client and server.

Packaging: eNetwork Host On-Demand is provided in both exportable and non-exportable packages. You are responsible for compliance with export regulations. Refer to the section on **Security, Auditability, and Control** for additional considerations.

The IBM eNetwork Host On-Demand Version 2.0 program package is distributed with the following materials:

- CD-ROM
- Proof of Entitlement (PoE)
- License Information
- International Program License Agreement
- IPLA Pointer
- Administrator's Guide

Security, Auditability, and Control

eNetwork Host On-Demand uses the security and auditability features of the host operating system and other functions, included with the product, to enhance data security and privacy.

Host On-Demand provides SSL V3.0 encryption support using non-exportable 128-bit (designated U.S./Canada use only) and exportable 40-bit encryption algorithms for international use.

In customer configurations where Host On-Demand might be downloaded across national boundaries, the customer is responsible to assure that the non-exportable Host On-Demand applet is not made available outside the U.S. and Canada. Both the non-exportable and exportable Host On-Demand products can be used in combination to allow the appropriate Host On-Demand applet to be downloaded based on different URLs.

You are responsible for any desired firewall support to meet your security requirements.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering Information

The program package for eNetwork Host On-Demand Version 2.0 includes authorization for one user. In addition, concurrent user access can be acquired authorizing concurrent use of a single program package license up to the quantity of concurrent use acquired.

Host On-Demand may be installed on either a server or a client. Each program package license includes authorization for one user. For client installations, or for server installations where there is downloading of the applet, the customer must acquire concurrent user authorizations sufficient to support their maximum number of concurrent users.

Program Name	Order Type	Feature Number	Part Number
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM English —U.S./ Canada use only	5801-AAR	8573	4122198
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM English — International use	5801-AAR	8559	4122207
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM French —U.S./ Canada use only	5801-AAR	8656	4073751
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM French — International use	5801-AAR	8561	4122237
eNetwork Host On-Demand Version 2.0 One Concurrent User	5807-AAR	8336	4073429

Software Advantage

Program Name	Order Type	Part Number
eNetwork Host On-Demand Version 2.0 One Concurrent User for Software Advantage	5807-AAR	4122177
eNetwork Host On-Demand Version 2.0 CD-ROM English —U.S./ Canada use only Media Pack for Software Advantage		4122185
eNetwork Host On-Demand Version 2.0 CD-ROM English — International use Media Pack for Software Advantage		4075898

Program Name	Order Type	Part Number
eNetwork Host On-Demand Version 2.0 CD-ROM French ─ U.S./ Canada use only Media Pack for Software Advantage		4076008
eNetwork Host On-Demand Version 2.0 CD-ROM French ─ International use Media Pack for Software Advantage		4076014

Software Advantage Upgrade Protection

Program Name	Order Type	Part Number
Software Advantage Upgrade Protection for eNetwork Host On-Demand One Concurrent User ─ One-Time Charge (OTC)	5809-AAR	4122178

Terms and Conditions

Licensing: IBM International Program License Agreement. PoEs are required for all authorized use. **Program Unique Terms:** The Host On-Demand Express feature of this product is licensed for use in a wired network only. Use across a wireless network is expressly prohibited.

Limited Warranty: Yes

Program Services: Available until January 31, 2001

Guarantee: 30-day, money-back guarantee for program packages

Copy and Use on Home/Portable Computer: Yes

Usage Restriction: Yes. Charges for this program are based upon the number of users connected. You must acquire one authorization for each user logged on. The total number of users logged on may not exceed the number authorized by the applicable PoE. If the total number exceeds the quantity in the PoE, you must notify IBM or its reseller as stated in the IPLA.

Support Line: Personal Systems

Volume Orders: Yes, contact your IBM representative.

Software Advantage Applies: Yes

Upgrade Protection Applies: Yes

Entitled Upgrade for Current Upgrade Protection Licensees: No

Variable Charges Apply: No

Charges

Program Name	Part Number	OTC
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM English ─ U.S./ Canada use only	4122198	$199
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM English ─ International use	4122207	199
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM French ─ U.S./Canada use only	4073751	199
eNetwork Host On-Demand Version 2.0 Program Package CD-ROM French ─ International use	4122237	199
eNetwork Host On-Demand Version 2.0 One Concurrent User	4073429	169
eNetwork Host On-Demand Version 2.0 One Concurrent User for Software Advantage	4122177	169
Upgrade Protection for eNetwork Host On-Demand One Concurrent User ─ OTC Software Advantage	4122178	99

Monthly Optional Support Line Charge: $85

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To order, contact the IBM North America Sales Centers, your local IBM representative, or your IBM Business Partner™.

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Internet: ibm─direct@vnet.ibm.com
Mail: IBM North America Sales Centers
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           P.O. Box 16848
           Atlanta, GA 30321-0848
Reference: YE001

To identify your local IBM Business Partner or IBM representative, call 800-IBM-4YOU.

Note: Shipments will begin after the planned availability date.

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