Reference guide

IBM

WebSphere software



### **IBM Host Access Client Package**

IBM Host Access Client Package software lets you efficiently manage migration of Web-to-host technologies at your own pace. With one package, you can support a diverse user community, avoid working with multiple vendors and provide access to legacy applications for all types of users—regardless of their needs.

With tools that are available today, you can start to build your e-business applications of the future. You can take your applications and rapidly create host-access e-business applications based on your legacy systems. These tools enable you to achieve a competitive advantage in your marketplace, help reduce expenses and leverage your existing investments.

Host Access Client Package can help you reach your e-business goals by:

- Providing market-leading host connectivity and emulation.
- Capitalizing on existing investments and extending enterprise applications to Web-based technologies.
- Extending the reach of your enterprise's host applications with Java<sup>™</sup> technologybased host access.
- Providing multiple security options for access across the Internet.

# Customizable solutions to meet your host access needs

IBM Host Access Client Package for Multiplatforms provides access to applications and data residing on IBM @server® iSeries™ (5250), IBM @server zSeries® (3270) and DEC/UNIX™ (VT) hosts for traditional and Web users in Systems Network Architecture (SNA) and intranet environments. If you require only iSeries server access, the IBM Host Access Client Package for iSeries systems is a more appropriate solution.

Both packages include IBM Personal Communications for traditional emulation and IBM WebSphere®
Host On-Demand software for browser-based emulation. You can also create custom e-business applications with the comprehensive set of application program interfaces (APIs) included in each package.

Host Access Client Package provides the solution for your host connection needs. The package includes:

IBM Personal Communications
 Get access to applications and data residing on midrange and host systems. This market-leading emulator contains state-of-the-art, comprehensive tools that simplify connectivity and

access to host data. It offers features like multiprotocol environments, consistent look and feel, easy licensing options and open system architecture. Personal Communications software offers Host Access Beans for Java software and a Java interface for Host Access Class Library (HACL)—technologies that help reduce rework. These technologies also enable your applications to remain fully functional as your business evolves.

• IBM WebSphere Host On-Demand Secure Web-to-host access and ebusiness application programming support with one interface to your TN3270E, TN5250, VT52, VT100, VT220, VT320, VT420 and IBM CICS® applications, consistently across platforms. Maximize your productivity with standard desktop utilities, file transfer and host print. Using the deployment wizard, administrators can create custom HTML files that contain different configuration information for host sessions. Create custom e-business applications using Host Access Beans for Java software and HACL. Web server installation means users always access the latest version. WebSphere Host On-Demand requires no middletier server and supports your choice of client and server platforms.

### **IBM Personal Communications**

IBM Personal Communications — a host communication and terminal emulation package features 3270, 5250 and VT emulation; SNA application support; integration; and SNA and TCP/IP connectivity. Personal Communications — a key component of Host Access Client Package and IBM WebSphere Host Integration Solution — helps enable security-rich access to mission-critical business systems for virtually every user.

Personal Communications can bring the power of personal networking to the workstation and can exploit your existing networking capabilities. These capabilities include SNA applications and technologies, such as advanced program-to-program communication (APPC) and High-Performance Routing (HPR). It also provides TCP/IP support and an extensive application programming interface (API) set, offering HACL and Emulator High-Level Language Applications Programming Interface (EHLLAPI) through programming languages like C++, VBScript and Java technology.

Personal Communications can help you reach your e-business goals by:

- Providing market-leading host connectivity and emulation.
- Including tools to easily combine host and desktop applications.
- Helping to capitalize on existing investments and extend applications to Internet Protocol (IP)-network technologies.
- Enabling users to have access to missioncritical business systems.

Personal Communications enhancements include:

- "Designed for Microsoft Windows $^{\mathbb{R}}XP$ "
- Windows Terminal Services support
- IPv6 support for Telnet sessions
- New emulator features
- Improved security features

## **Industry-leading emulation**

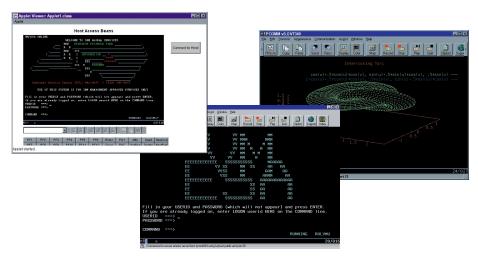
Personal Communications continues to set the standard for terminal access to business-critical applications and data on different host systems, taking advantage of 3270, 5250, TN3270E, TN5250, VT52, VT100, VT220 and VT340 emulation. The Personal Communications industrystandard APIs include 32-bit EHLLAPI APIs, as well as Windows HLLAPI (WinHLLAPI) APIs.

### Improved development capabilities

Personal Communications supports
Host Access Beans for Java (based on the JavaBeans specification),
Visual Basic automation objects
and VBScript. Building on Personal
Communications leadership in objectoriented programming, the HACL API
provides a Java programming interface
that enables you to create applications
for both Personal Communications and
WebSphere Host On-Demand. This
capability allows flexibility while preserving your investments for the future.

### Security when you need it most

With Personal Communications, you can be confident that you have a security-rich environment when you need it most. Personal Communications supports Secure Sockets Layer (SSL), Version 3.0 and Transport Layer Security (TLS), Version 1.0. When combined with support for load-balancing Service Location Protocol (SLP)—found in products such as IBM Communications Server—Personal Communications can be configured to connect to only SSL-enabled servers. Helping to provide more network security.



Multiple Personal Communications sessions illustrate SSL support, VT340 graphics and a custom application using Host Access Beans for Java.

### Accelerate the transition to e-business

Personal Communications helps ensure that you are ready to make the transition to e-business with tools you can use today.

Network integration
 Personal Communications can handle a wide variety of protocols —including Integrated Services Digital Network
 (ISDN), HPR, SNA and IP—to help you

connect users to the data they need.

• Connectivity

Personal Communications offers a fast, network-efficient connection to employees, customers, suppliers and trading partners. Replace outdated, disparate communication tools with one solution for access to mission-

critical business systems.

## • e-business tools

Personal Communications Java
Interface for HACL helps you make
the change to a Web-to-host environment easier and more efficient.
Using this tool can help you preserve
your application development investment as you make the move to other
WebSphere Host Integration Solution
products.

Open-system architecture
 From EHLLAPI to TCP/IP to SNA,
 Personal Communications provides industry-standard solutions to help extend your investments into the future.

- Extensive language support
   Personal Communications is multilingual. Available in 22 languages, it includes double-byte character set (DBCS) languages, supports the euro sign and includes extensive keyboard and code-page support.
- Microsoft certification
   Designed for Microsoft Windows XP,
   this certification ensures that Personal
   Communications takes advantage
   of the new features in Windows XP
   and that Personal Communications
   has been extensively tested to meet
   Microsoft XP quality standards.

# • SNA over IP backbone

Through the use of Enterprise Extender (EE) in Personal Communications, you can maintain the integrity of SNA LU6.2/CPIC/APPC and LU0 applications over IP. EE technology in Personal Communications transports native SNA applications over an IP network, allowing these applications to run unchanged even as the network changes. The IP network infrastructure does not need to change to handle these applications. Everything is done at the endpoints, and the routers forward the IP packets as if they were native IP applications.

Windows platforms, Version 5.7	3270	5250	VT
Installation and customization			
EEE 802.2	Х	Х	
3174 Peer Communication (LAN over coaxial); not supported on Windows 2000	Х	Х	Х
PX/SPX		Х	
Communications Server API client			
• Advanced program-to-program communication (APPC)	X	Х	
•LUA	X		
TCP/IP	X	Х	Х
SNA Distributed Function Terminal (DFT)	X		
Non-SNA DFT	X		
Twinaxial		Х	
IBM @server iSeries and S/3x Console (asynchronous and twinaxial)		Х	
Synchronous Data Link Control (including auto-dial capability)	X	Х	
Wide Area Connector (WAC)	X	X	
SNA over asynchronous	X	X	v
Asynchronous  Asynchronous for IBM Clobal Naturals® (ICN)	X	Х	Х
Asynchronous for IBM Global Network® (IGN) Home3270	X		
Hayes Autosync	X	v	
Hayes Autosync Hayes Autosync II (Windows 95 and Windows 98 only)	X X	X	
Microsoft SNA Server	A	х Х	
FMI	Х	^	
Windows APPC		Х	
Windows LUA	X		
APPC3270 (LU2 over APPC)	Х		
BM AnyNet® (SNA over TCP/IP)	Χ	Х	
3270 pass-through by iSeries	Х		
SDN, X.25	X	Х	
PCIMPA	Х	X	
Enterprise Extender	Х	Х	
3270 pass-through over twinaxial	X		
Original equipment manufacturer (OEM) adapter support	X	Х	
Application-initiated detect and repair	X	Х	Х
Silent installation	Х	Х	Х
Microsoft Systems Management Server (SMS) support	X	Х	Х
nstallation and configuration from LAN server	X	Х	Х
Simultaneous sessions with different code pages and keyboard languages	X	Х	Х

Windows platforms, Version 5.7 (continued)	3270	5250	VT
Installation and customization			
Automatic logon	Х		
26 display and printer emulation sessions	х	Х	:
Selectable display sizes	х	Х	
VT52/VT100/VT220/VT340 emulation			:
Toolbar customization	x	Х	:
Text configuration files	х	Х	
Configuration update files	X	Х	
Initial configuration definitions	х	Х	
System policy System policy	Х	Х	:
Microsoft Windows Installer	Х	Х	1
Print support			
Host print	Х	Х	
• 3812 printer emulation	X		
• Host print transform		Х	
• ASCII transparent	Х	Х	
Printer definition table (PDT)	Х	Х	
Screen print	Х	Х	
Associated printer support	Х		
ZIPPRINT	Х		
Networking function			
SNA data compression (emulator sessions)	Х	Х	
SNA data compression (LU 6.2 sessions)	X	Х	
VPD/EVPD, Alert		Х	
Response time monitor (RTM)	X		
Command start/stop/query SNA node	Х	Х	
SLP	Х	Х	
SSL, Version 3.0	Х	Х	
Client certification authentication for SSL	Х	Х	
HPR routing over IP for nondisruptive backup	X	Х	
Automatic link reactivation	х	Х	
IBM Advanced Peer-to-Peer Networking® (APPN) end node	X	Х	
APPN LEN node	Х	Х	
HPR	x	Х	
Dependent LU requester (DLUR)	х	х	
Express logon function	х		
Smart Card support	Х	Х	

Vindows platforms, Version 5.7 (continued)	3270	5250	VT
Administration tools	X	Х	Х
nformation bundler for problem determination	x	Х	Х
nternet service	x	Х	Х
Enhanced log or trace viewer	х	Х	Х
Microsoft Windows 2000/XP certified	x	Х	Х
Macro conversion tool for Host On-Demand	Х	Х	Х
Product update tool	Х	Х	Х
User interface			
Graphical, customizable toolbar feature	Х	Х	Х
Rule line	х	Х	Х
Menu-bar customization	х	Х	Х
Pop-up keypad and hot keys	Х	Х	Х
B-D hot spots	х	Х	Х
Macro record and play	х	Х	Х
Graphical keyboard remapping	х	Х	Х
National language support (NLS) key-caps support	х	Х	Х
DBCS unique keyboard support	Х	Х	
Customizable mouse	Х	Х	Х
Orag-and-drop color remapping	X	X	Х
Crisp fonts, automatic sizing, fixed font size	X	X	X
Display setup, view setup, window setup	X	X	Х
nternet hot spots	X	X	X
DLE/ActiveX objects	X	Х	Х
\PL support	X	.,	.,
Automation and scripting utility (CMMOUSE)	X	X	X
Accessibility for handicapped users Status bar	X	X	X
Eurosign	X X	X X	X
ntelligent spreadsheet support	X	X	X
Blink attribute support	X	X	X
/T history	Χ	^	^ X
Multilanguage support	Х	Х	X
			^
Series application support PC organizer and text assist		v	
Enhanced nonprogrammable terminal user interface (ENPTUI)		X X	

Windows platforms, Version 5.7 (continued)	3270	5250	VT
Programming interfaces			
DOS EHLLAPI	X	Х	Х
EHLLAPI, DDE, PCSAPI	Х	Х	Х
REXX EHLLAPI support	Х	Х	Х
Visual Basic scripting	Х	Х	Х
SRPI	Х		
REXX PSCAPI support	Х	Х	Х
HACL	Х	Х	Х
TCP62	Х	Х	
Request Unit Interface (RUI)	Х		
Session Level Interface (SLI)	Х		
WinHLLAPI support	Х	Х	Х
32-bit HLLAPI	Х	Х	Х
Convert macro to VBScript or XML	Х	Х	Х
Host Access Beans for Java	Х	Х	Х
Microsoft Open Database Connectivity (ODBC) 3.0 for SNA, using IBM DB2® Connect™			Х
CPIC and APPC APIs supporting both dependent and independent LU6.2	Х	Х	
Node operator facility (NOF)	Х	Х	
File transfer			
File transfer through emulator session	Х	Х	Х
Command line invocation	Х	Х	Х
Lists	Х	Х	Х
Templates	Х	Х	Х
Import/export	Х		
Datatransfer		Х	
ASCII — host file transfer			
• Xmodem			Х
•XModem1K			Х
• Ymodem • YModemG			X
Data transfer by IP		V	^
		Х	
Host graphics			
Graphics Data Display Manager (GDDM) and Graphic Objects Content Architecture (GOCA)	X		
Programmed symbol set	Х		
Vector	Х		
Copy graphics images VT340 ReGIS and Sixel support	Х		X

# IBM Personal Communications for Windows, Version 5.7 at a glance

### Hardware requirements

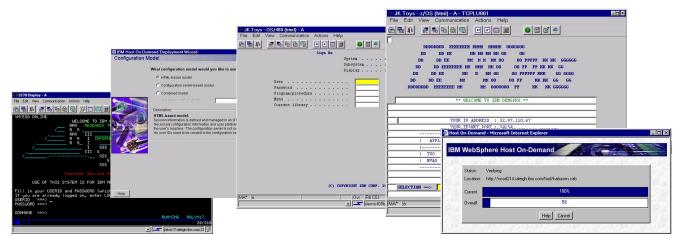
16MB RAM minimum, 24MB recommended for Windows 95 OS Release 2, Windows 98, Windows 98 Second Edition, Windows NT $^{\odot}$ , Windows 2000

- 486 or higher system processor
- 125MB fixed disk space minimum—additional space may be required depending on installation options

# Software requirements

Supported by the following desktop platforms:

- Windows 95 OS Release 2
- Windows 98, 98 SE
- Windows Millennium Edition
- Windows 2000 Professional
- Windows XP Professional and Home Edition (32 bit)
- Windows NT 4 with Service Pack 6, and above
- Windows 2000 Server
- Windows Server 2003
- Terminal Services (Windows NT 4 Terminal Server Edition, Windows 2000 and Windows 2003)
- Citrix Metaframe 1.8 for Windows Terminal Server 4.0 and Windows 2000 Server
- Citrix Metaframe XP Presentation Server (Versions s,a,e) for Windows
- Microsoft SNA Server Client (optional)
- IBM Communications Server Client (optional)
- · Direct connection to the host



With IBM WebSphere Host On-Demand, you can easily access and manage your 3270, 5250 or VT host applications.

# IBM WebSphere Host On-Demand: Quick, easy access to critical host data

IBM WebSphere Host On-Demand provides cost-effective and secure browser-based and non-browser-based host access to users in intranet and extranet environments. Host On-Demand is installed on a Web server, simplifying administrative management and deployment. The Host On-Demand applet is downloaded to the client browser, providing user connectivity to critical host applications and data.

Host On-Demand uses the power of Java technology to help open the doors to your host data directly from your browser. Just click a hyperlink to launch the WebSphere Host On-Demand Java applet. This Web-to-host connectivity solution helps provide secure Web-browser access to host applications, so you can take existing host applications to the Web without programming.

With support for TN3270E, TN5250, VT52, VT100, VT220, VT320, VT420 and CICS Transaction Gateway access, users can have a single interface to their key host data. Because WebSphere Host On-Demand is Java technology-based, its interface has the same look and feel across various types of operating environments. It also provides an alternate terminal option to help simplify the experience for users unfamiliar with traditional green screens.

WebSphere Host On-Demand can help you attain your e-business goals by:

- Extending the reach of your enterprise's host applications with Java technologybased host access.
- Supporting TN3270E, TN5250, VT52, VT100, VT220, VT320, VT420 and IBM CICS Transaction Gateway access.
- Letting you quickly create new e-business applications using Host Access Beans for Java, Host On-Demand Connector, JavaScript API and reusable components.
- Providing multiple security options for access across the Internet.
- Allowing installation on a Web server for centralized management and deployment.
- Providing an alternate terminal option for users unfamiliar with traditional host screens.
- Supporting host access to iSeries and zSeries servers.
- Providing File Transfer Protocol (FTP) and VT access to all FTP- and VTsupported server types.

### A cost-effective approach

You can save money in product deployment and maintenance by using WebSphere Host On-Demand, eliminating the need to deploy the software to individual user desktops. Users can connect directly to a host system, such as an iSeries system or a zSeries system, without the need for extra hardware and software between the client and the Telnet server. You can install WebSphere Host On-Demand on nearly any server platform, accommodating various-size organizations and branch offices.

As software updates occur, the latest version of WebSphere Host On-Demand is downloaded each time a user accesses the software, helping eliminate the need to install the entire product on client workstations. With the cached client feature, users download the product (or software) only once. Subsequent sessions then originate from user hard drives, while code updates are handled in the background through the cached client. Users can be productive and have the newest version of code, with low distribution costs for your business.

## Connect directly to any Telnet server

With WebSphere Host On-Demand, the client applet contains the emulation functionality, eliminating the need for a middle-tier server — and enhancing your performance. Once the applet is served to the client, it's easy to connect directly to any standard Telnet server that provides the most efficient access to the required data. You can change the Telnet connection as often as user requirements for new data change and access many host sessions concurrently.

### Create new e-business applications

A rich Java tool set—including
Host Access Beans for Java, HACL
API, WebSphere Host On-Demand
Connector and JavaScript API—lets
you rapidly create custom e-business
applications to achieve competitive
advantage. Because WebSphere Host
On-Demand is part of the WebSphere
product family, applications developed
using the toolset can be incorporated
as part of other WebSphere software
projects. This helps you preserve your
WebSphere Host On-Demand investment and provide a jump-start to moving
to the Web and e-business.

The HACL API provides access to 3270, 5250 and VT data streams. This class library allows you to use mission-critical information in new ways, including integrating data from one application with another.

Host Access Beans for Java provides host connectivity and emulator functions through simple, component-based development tools, like IBM WebSphere Studio Application Developer. Use Host Access Beans for Java or Host On-Demand Connector to rapidly create custom applications to deliver the specific functions you want to include in your e-business applications. Using the JavaScript API, you can integrate a Host On-Demand session within your company's Web page.

# Security-enhanced access across the Internet

Using the Transport Layer Security (TLS) Protocol or SSL, Version 3.0, WebSphere Host On-Demand software extends host data access across intranets, extranets and the Internet with added security. Mobile workers can establish security-enhanced communication with an enterprise host. With client and server certificate support, WebSphere Host On-Demand can present a digital certificate (X.509, Version 3) to the Telnet server—such as IBM Communications Server for

OS/390®—to facilitate authentication.
Certificates can be kept in the client's browser, a dedicated security device—like a Smart Card, or in a local or network-accessed file in PKCS12 or PFX format, which is protected by a password.

### **Deployment options**

WebSphere Host On-Demand provides access to host applications from a Web browser. The browser downloads the WebSphere Host On-Demand Java applet from the Web server and then connects to most standard Telnet servers to access host applications. The WebSphere Host On-Demand applet needs configuration information to determine which host to connect to and identify other host session properties. This configuration information can be provided to the WebSphere Host On-Demand applet from an HTML file or by using the WebSphere Host On-Demand configuration server.

# Flexible configuration models support your unique needs

If you don't want to manage WebSphere Host On-Demand, administrators can use the deployment wizard to create HTML files that contain configuration information for host sessions. This means you are not required to use the WebSphere Host On-Demand configu-

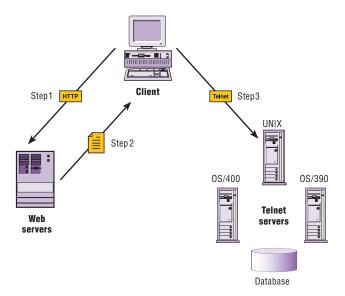
ration server to specify sessions. If you allow users to save changes to host-session configuration information, the changes are stored on the local file system where the browser is running.

If you need to manage WebSphere
Host On-Demand users, host-session
information is maintained on the
configuration server using the
administration utility. Preferences are
defined using a user and group structure.
The configuration server normally stores
its data locally on the WebSphere
Host On-Demand server, though it can
be configured to use Lightweight
Directory Access Protocol (LDAP)
instead. Users access their configurations using either custom HTML files
created in the deployment wizard or by
using one of several HTML files provided

as part of WebSphere Host On-Demand. If administrators allow users to save changes, WebSphere Host On-Demand stores user preferences based on user ID in the configuration server.

# Simple host access from IBM WebSphere Portal software

Access 3270, 5250 or VT applications from IBM WebSphere Portal software without any programming. By combining WebSphere Host On-Demand and WebSphere Portal software, you can create custom Host On-Demand portlets for simple host application access. Users can also create custom portlets using Host On-Demand deployment wizard or using one of our sample portlets available on the IBM Service Key site.



IBM WebSphere Host On-Demand is a two-tier solution that eliminates the need for a middle-tier server. Step 1. The user opens a browser and clicks a hyperlink. Step 2. IBM WebSphere Host On-Demand applet downloads to the client workstation. Step 3. When the applet is downloaded, IBM WebSphere Host On-Demand connects directly to any Telnet server to access host applications.

## IBM WebSphere Host On-Demand, Version 8.0 at a glance

### Hardware requirements

Disk space must be available on the server to support applet files, the WebSphere Host On-Demand redirector function and WebSphere Host On-Demand service manager. These requirements are based on a typical installation and are only estimates. Sizes can vary by operating system and the languages installed.

Server space per additional user:

- For Windows NT and Windows 2000, 375MB of disk space for one user interface language, plus an additional 8MB of disk space for each additional user interface language
- For IBM AIX® operating systems, 363MB of disk space (includes English as a user interface language and additional security files), plus an additional 8MB of disk space for each additional user interface language
- For Sun Solaris operating environment, Linux, HP-UX and UNIXware, 363MB of disk space (includes English as a user interface language), plus an additional 8MB of disk space for each additional user interface language
- · All other operating systems, 475MB (all languages installed)

### Software requirements

Can be installed on the following servers, which must have Java Virtual Machine (JVM) 1.1.8 or JVM 1.3 installed:

- Windows NT 4.0 with Service Pack 5 or higher
- Windows 2000 (Professional Edition, Server Edition and Advanced Server Edition)
- Windows XP Professional (32-bit)
   (Note: Do not use for a large-scale production server.)
- Windows Server 2003
- AIX, Version 4.3.3, Version 5.1 and Version 5.2
- IBM OS/2 WARP® Server, Version 4 and IBM OS/2 Warp Server for e-business, Version 4.5
- Novell NetWare, Version 4.2, Version 5.1 and Version 6
- Sun Solaris operating environment, Release 7, Release 8 and Release 9
- IBM OS/400®, Version 5 Release 1 and Version 5 Release 2
- IBM OS/390. Version 2 Release 10
- IBM z/OS™, Version 1 Release 1, Version 1 Release 2, Version 1 Release 3 and Version 1 Release 4
- HP-UX, 11.0 and 11i
- Red Hat Linux, Version 7.1, 7.2 and 7.3, 8.0 Professional and 8.2
- Red Hat Enterprise Linux AS 2.1
- Red Hat Linux, Version 8.0 Personal and Version 8.0 Professional
- Red Hat Linux, Version 9.0 Personal and Version 9.0 Professional
- SuSE Linux 7.1, 7.2, 7.3 and 8.0, 8.1 Professional and 8.2
- Caldera Open Linux, Version 3.1
- SCO Caldera Open Linux Workstation 3.1.1, Server 3.1.1
- TurboLinux, Version 6.5 and Version 7.0, 8.0 workstation, 8.0 Server
- ullet IBM Linux on IBM @ server zSeries systems

Supported on the following desktop operating environments when downloaded from a server:

- Windows 95 (no local client option)
- Windows 98 (local client option)
- Windows Millennium Edition (Windows Me) (local client option)
- Windows NT 4.0 with Service Pack 5 (local client option)
- Windows 2000 Professional Edition (local client option)
- Windows XP Professional Edition and Home Edition (32-bit) (local client option)
- AIX, Version 4.3.3 and Version 5.1, 5.2
- OS/2 WARP, Version 4
- Sun Solaris operating environment, Release 7 and Release 8, Release 9
- HP-UX, 11.0 and 11i
- Red Hat Linux, Version 7.1, 7.2 and 7.3
- Red Hat Enterprise Linux AS 2.1
- Red Hat Linux, Version 8.0 Personal and Version 8.0 Professional
- Red Hat Linux, Version 9.0 Personal and Version 9.0 Professional
- MAC OS X 10.2.1

### IBM WebSphere Host On-Demand, Version 8.0 at a glance (continued)

#### Software requirements

Supported on the following desktop operating environments when downloaded from a server:

- SuSE Linux 7.1, 7.2, 7.3 and 8.0, 8.1 Professional, 8.2
- Caldera Open Linux, Version 3.1
- SCO Caldera Open Linux, Version 3.1.1, Server 3.1.1
- TurboLinux, Version 6.5, Version 7.0, 8.0 Workstation, 8.0 Server
- · Windows Terminal Server, Version 4
- Windows Terminal Services for 2000
- IBM NetStation, Version 2 Release 1 Modification 0
- Citrix Metaframe 1.8 for Windows Terminal Server 4.0 and Windows 2000 Server
- Citrix Metaframe XP, Version s, Version a and Version e for Windows

#### Supported browsers

The following browsers are supported for download of the WebSphere Host On-Demand clients from a remote WebSphere Host On-Demand server, or to run WebSphere Host On-Demand on a locally installed client:

- Netscape Navigator 4.7, 6.1 and 6.2 (Windows 95, Windows 98, Windows NT, UNIX®), 7.0 (works only with Java 1.4.1 plug-in)
- Netscape Navigator 4.6.1 (IBM OS/2®) and IBM Mozilla Web Browser, Version 1.2 for OS/2
- Microsoft Internet Explorer 4.01 with IBM Service Pack 1, 5.0, 5.1, 5.5 and 6.0
- Other browsers that support the Java Runtime Environment (JRE) 1.3, 1.3.1 and 1.4 (Sun and IBM) plug-ins Browsers are dynamic. For the most up-to-date information, visit:

ibm.com/software/webservers/hostondemand

## **Supported Web servers**

- IBM WebSphere Application Server, Version 4.0, 5.0; WebSphere Application Server Express, Version 5.0
- Apache HTTP Server 1.3 and 2.0
- Lotus® Domino™, Release 6 (manual configuration required)
- Netscape iPlanet (JRun), Version 4.1
- iPlanet Web Server Enterprise Edition, Version 6.0
- iPlanet Application Server, Version 6.0
- IBM HTTP Server, Version 1.3.12.6, Version 1.3.19.2, Version 1.3.26 and Version 2.0.42
- Microsoft IIS Version 4, 5, 5.1, 6
- Lotus GO. Version 4.6

#### Supported development environments

- IBM VisualAge® for Java, Version 3.5 and Version 4
- WebSphere Studio Application Developer, Version 4.0
- WebSphere Studio Application Developer Integrated Edition, Version 4.1
- WebSphere Studio Site Developer Advanced, Version 4.0
- WebGain VisualCafe Professional Development Edition, Version 4.0 and Version 4.1
- WebGain VisualCafe, Version 4.5.1 (Standard Edition, Expert Edition and Enterprise Edition)
- WebGain VisualCafe Enterprise Suite, Version 4.5.2
- Borland/Inprise JBuilder, Version 3.5, Version 4.0, Version 5.0 and Version 6.0

### **Supported LDAP servers**

- IBM LDAP Directory Server, Version 3.2.2
- Netscape Directory Server, Version 4.0 (both on Windows NT and AIX systems)
- IBM LDAP Server running on OS/390, Version 2 Release 9 and Version 2 Release 10
- IBM LDAP Server running on z/OS, Version 1 Release 1, Version 1 Release 2, Version 1 Release 3 and Version 1 Release 4
- IBM Directory Server, Version 4.1, 5.1

# Miscellaneous supported software

- IBM WebSphere Portal for Multiplatforms, Version 2.1, Version 4.1 and Version 4.2
- Acrobat Reader (or Acrobat), Version 4.0 or higher; Acrobat Reader or Acrobat, Version 5.0 or higher is required for DBCS PDF support.
- Netegrity Siteminder, Version 5.5
- IBM Tivoli Access Manager for e-business, Version 4.1
- CICS Transaction Gateway, Version 5.01.

# IBM WebSphere Host On-Demand, Version 8.0 features at a glance

## Security

## Web Express Logon

Web Express Logon allows users to access host systems and host applications without having to provide a user ID and password. Unlike Certificate Express Logon, Web Express Logon works in conjunction with your existing network security application and does not require client certificates.

### SSH

Host On-Demand now supports secure VT display sessions and secure file transfer (sftp) sessions using Secure Shell (SSH). SSH is a popular protocol for running secure sessions over a nonsecure transport layer such as TCP/IP. Host On-Demand supports a subset of SSH, Version 2.

### Secure FTP

The Host On-Demand FTP client now provides TLS and SSL-based secure file transfer.

## Technology

# Web Start

Web Start client is new Java 2 technology that provides the ability to run Host On-Demand without a browser. This client type can eliminate problems that can occur when running in a browser, such as inadvertently closing the browser during an active session.

### TN3270E

WebSphere Host On-Demand 3270
Display sessions now support the
TN3270E protocol. TN3270E is an
enhanced form of the TN3270 protocol
that allows users to specify an LU
or LU pool to which the session will connect. TN3270E also supports the Network
Virtual Terminal (NVT) protocol for
connecting to servers in ASCII mode (for
example, in order to log on to a firewall).

WebSphere Host On-Demand also supports the contention-resolution mode feature of TN3270E. This feature allows the 3270 host to indicate to the client when the host has finished updating the application screen. Several parameters have been added to the Host On-Demand macro language to take advantage of contention-resolution mode.

### Support for IPv6

Internet Protocol, Version 6 (IPv6) is the next generation of the Internet Protocol. With the introduction of IPv6, the current version of the Internet Protocol is referred to as Internet Protocol, Version 4 (IPv4). IPv6 expands the number of available Internet addresses and provides improvements over IPv4 in routing and network configuration. Java, Version 1.4 is required for this support.

### Macintosh support

The WebSphere Host On-Demand emulator and database clients now support Macintosh OS X.

Cached client improvements for Java 2
WebSphere Host On-Demand offers
several improvements in the Java 2
cached client. For most types of Java 2
cached clients, including the emulator
client, the Database On-Demand client
and the new user client, you can now
do the following:

- Install the client from a local area network (LAN) drive or CD-ROM drive.
- Share the client between more than one user on Windows 2000 or Windows XP.
- Upgrade the client in the background.
- Remove the client in one operation, without having to clear the Java 2 plug-in cache.

These improvements raise the Java 2 cached client to the same level of user-friendliness and flexibility as the Java 1 cached client.

### Programmable Host On-Demand API

Programmable Host On-Demand allows you to incorporate the Host On-Demand terminal and its GUI elements into your own application without having to wire the beans.

### Unicode support for OS/400

For 5250 Display sessions, WebSphere Host On-Demand now supports iSeries hosts that send Unicode data using tagged CCSID fields. This capability is supported by OS/400, Version 5 Release 2. This enhancement allows Unicode data to be displayed in 5250 Display sessions. WebSphere Host On-Demand supports CCSIDs 13488 (0x34B0) and 17584 (0x44B0).

### Productivity

### **ZipPrint**

Host On-Demand now allows you to automatically print some types of 3270 documents in their entirety with a single selection. This ZipPrint capability is similar to the ZipPrint functions in the IBM Personal Communications product. You can also add your own customized document types.

# Sharing and reusing macro, keyboard and toolbar components

Administrators and users can now share and reuse the following configuration components from one session to the next:

- Macros
- Keyboard definitions
- Toolbar definitions

This increases productivity because administrators no longer need to reconfigure these components for each individual session or HTML file, and users can share a single component definition across sessions.

# Macro programming guide

The new WebSphere Host On-Demand Macro Programming Guide, available in both HTML and PDF format, describes how to use the Macro Editor, the Code Editor and the macro language, and provides examples.

### Macro enhancements

WebSphere Host On-Demand offers new enhancements to the macro capability:

- You can invoke methods in Java classes.
- You can print screens or a series of screens using new print actions.

### Server macro libraries

The host sessions window of the deployment wizard now allows you to deploy server macro libraries to selected sessions from either a Web server or a shared network drive. This eliminates the need to import large macros into a session, and you can update them without modifying the Host On-Demand sessions or HTML definitions.

### Redirector enhancements

The Redirector now provides connection logging and allows connections to remain active during a specified period of inactivity. You can specify the amount of time to wait before dropping an inactive Redirector connection.

# List function in the Directory Utility

Directory Utility now adds a list function to its other actions, all calculated to save time by allowing management of configuration data in a batch mode environment. With this new function you can perform searches on users and groups, using criteria with flexible wildcard options. The list function writes search results to output files that can be reused as input for other actions.

### Usability

# Back-up servers

On most session types you can specify up to two back-up servers in addition to the main server. If you specify backup servers, the Host On-Demand client automatically tries to connect with the back-up servers if the connection with the main server fails.

### Accessibility improvements

While we do not offer every accessibility feature based on Section 508 of the U.S. Rehabilitation Act, Host On-Demand offers new accessibility features to help users who have physical disabilities such as restricted mobility, limited or no vision, or limited or no hearing—use host sessions successfully. Enhanced features include a textual version of the Operator Information Area (OIA); keyboard equivalents for actions (mouseless operation); support for display system settings for size, font, color and high contrast; and an improved Color Remap window for the emulator screen. Accessibility features require Java 1.4, which is a specific version of the Java 2 Platform.

### CICS client improvements

Now users have more power to customize CICS Gateway sessions according to their work habits. Users can either specify which CICS transaction starts upon host connection, or choose to begin their sessions without an initial transaction.

## Importing and exporting sessions

The Host Sessions window of the deployment wizard now gives you the option to import and export entire host sessions. In previous releases of WebSphere Host On-Demand, this option was only available from the Administration Utility.

### For more information

To learn more about IBM Host Access Client Package, visit:

ibm.com/software/network/hostaccess

To learn more about IBM Personal Communications, visit:

ibm.com/software/network/pcomm

To learn more about IBM Host On-Demand, visit:

**ibm.com**/software/webservers/hostondemand

To learn more about IBM Screen Customizer, visit

ibm.com/software/network/screencustomizer

To learn more about IBM Service Keys, visit: www6.software.**ibm.com**/aim/home.html

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