



Host On-Demand on OS/400 and i5/OS: Installation and TN5250 emulation

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Note: Before using this information and the product it supports, read the information in [Notices](#).


First Edition (May 2005)

This edition applies to Version 9.0 of IBM WebSphere Host On-Demand (program number 5648-E90) and to all subsequent releases and modifications until otherwise indicated in new editions.

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The following icons are used in this document:

 Points out important notes.

 Highlights tips.

Features and benefits of Host On-Demand

The Web browser-based access of IBM WebSphere Host On-Demand gives your users a simple way to reach critical host data. Just click a hyperlink to launch the Host On-Demand Java^(TM) 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^(R) Transaction Gateway access, along with Database On-Demand and FTP, users can have a single interface to their key host data. Because Host On-Demand is based on Java technology, its interface has the same look and feel across various operating environments.

Host On-Demand provides access to host applications from a Web browser. The browser downloads the Host On-Demand Java applet from the Web server and then connects to most standard Telnet servers to access host applications. With Host On-Demand, the client applet contains the emulation functionality. The host configuration information can be provided to the applet from an HTML file or by using the Host On-Demand configuration server.

Using Host On-Demand eliminates the need to deploy the software to individual user desktops. Users can connect directly to a host system, such as IBM iSeries or eServer i5 systems, without the need for extra hardware and software between the client and the Telnet server. You can install Host On-Demand on many server platforms, 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 code on client workstations. With the cached client feature, users download only once, after the initial installation

or once after a software update. Subsequent uses 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.

WebSphere Host On-Demand is sold as part of the IBM Host Access Client Package for Multiplatforms, and the Host Integration Solution. The Host On-Demand library web page has more information on these packages:

<http://www.ibm.com/software/webservers/hostondemand/library.html>

This document provides information about installing IBM WebSphere Host On-Demand Version 9 on an iSeries or eServer i5 server and using TN5250 emulation. The IBM WebSphere Host On-Demand product has many additional functions that are described in the Information Center located on the web at:

<http://publib.boulder.ibm.com/infocenter/hod9help>

The most recent version of this document is available as a tutorial in the Host On-Demand Version 9 Information Center. Use the Information Center feedback form to send us your comments. We appreciate your suggestions!

For more information about Host On-Demand, refer to the following address:

<http://www.ibm.com/software/webservers/hostondemand/features.html>

Installing and Configuring Host On-Demand for TN5250 Emulation

Here is a high-level overview of steps to install and configure Host On-Demand for TN5250 emulation.

1. [Obtaining the documentation and CD-ROM from the package](#)
2. [Verifying access to the OS/400 operating system](#)
3. [Verifying personal computer operating system](#)
4. [Verifying OS/400 operating system prerequisites](#)
5. [Installing Host On-Demand](#)
6. [Verifying the HTTP server installation](#)
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8. [Configuring a Host On-Demand session](#)
9. [Loading the files to the server and deploying](#)
10. [Loading the TN5250 client](#)

Details on the steps to install and configure Host On-Demand for TN5250 emulation.

1. **Obtaining the documentation and CD-ROM from the package**

Obtain the following materials from the IBM Host Access Client Package Version 5 or Host Integration Solution Version 5 package:

WebSphere Host On-Demand Version 9.0 for Windows and OS/400 CD-ROM

PPA Media Pack Pointer Sheet

License Information publication booklet

Read the pointer sheet and the license information before using the installation program.

2. **Verifying access to the OS/400 operating system**

Verify you have access to the iSeries or eServer i5, with QSECOFR authority,


3. Verifying personal computer operating system

You will also need a personal computer with one of the following Microsoft Windows operating systems:

- Windows NT 4.0 with SP5 or later
- Windows 2000 Professional, Server, and Advanced Server
- Windows XP Professional (32-bit)
- Windows Server 2003

4. Verifying OS/400 operating system prerequisites

Confirm the OS400 operating system level and that prerequisite licensed programs are installed.

 Use the `dsppctf` command on the system to determine the level of operating system installed. Recent cumulative service is recommended. You can use the `go licpgm` command on the system. Select option 10 to display all, then press F11 twice to display the option number.

Confirm that the server operating system level is OS/400 Version 5 Release 1 (V5R1), Version 5 Release 2 (V5R2), or i5/OS.

Confirm a Telnet server is configured to accept a non-SSL connection. The instructions in this document are for a non-SSL connection. For information about Host On-Demand SSL connections, refer to the [Information Center](#).

Confirm TCP/IP utilities are installed.

Verify one of the following HTTP servers is installed:


- IBM HTTP Server for iSeries
- HTTP Server (powered by Apache)
- Lotus Domino for iSeries

Check that QShell Interpreter, for resource **5722SS1**, is listed as option **30**.

Check that IBM Java Toolbox and IBM Developer Kit for Java, for resource **5722JV1**, is listed as ***Base**. The Java Toolbox levels are as follows:

Toolbox level	Option number
1.2	3
1.1.8	4
1.3	5
1.4	6

Verify that the server operating system has the latest level of fixes for Java. Java PTFs are ordered separately from the cumulative OS/400 or i5/OS fixes. For more information, refer to the Server requirements for Host On-Demand on i5/OS and OS/400 operating systems, in the *Planning, Installation, and Customization Guide*. Java PTFs are ordered separately from the cumulative OS/400 or i5/OS fixes.

 For OS/400 V5R1 and earlier, use the following Display Data Area command, `DSPDTAARA QJAVA/SFnnnnn` where `SFnnnnn` is the Java Group identifier. For OS/400 V5 R2, use the following command: `WRKPTFGRP PTFGRP (SFnnnnn)`. The status returned by this command should be installed.

The recommended minimum PTF levels are as follows:

Table 2. Java PTF Levels

i5 / OS	PTF
V5R1	SF99069
V5R2	SF99169
V5R3	SF99269

5. Installing Host On-Demand

Use the following procedure to remotely install Host On-Demand onto an OS/400 or i5/OS operating system, from a personal computer. Refer to the *Planning, Installation, and Customization Guide* for additional details about installing on i5/OS and OS/400.

If there is a previous Host On-Demand installation, use the ENDHODSVM command (from a command line) to stop the Host On-Demand Service Manager.

Stop the HTTP server using the ENDTCPSPVR SERVER(*HTTP) command.

Insert the WebSphere Host On-Demand V9.0 for Windows and OS/400 CD-ROM in the drive of the personal computer. If the computer has CD-ROM autoplay enabled, you will see the product launch pad or Welcome screen. Click on **Install to Remote iSeries**.



If CD-ROM autoplay is not enabled, access CD-ROM's file structure to launch setupwin.exe in the root directory of the CD-ROM.

You will be prompted to provide the following information, when the installation wizard starts:

- o **System:** which is TCP/IP address or host name for the iSeries or eServer i5 server
- o **User ID:** iSeries user ID
- o **Password:** iSeries user ID's password.


Read the software agreement. You must accept the software agreement to continue the installation.

If you have a previous version of Host On-Demand installed, you will be instructed to uninstall it. Click **Next** to automatically delete the previous version. The existing customized HTML files and other customized configuration files will be saved. After the previous version is deleted, Host On-Demand installation continues.


The language selection dialog allows you to choose support for multiple languages. English is automatically installed.

You will be shown a list of Web servers that are detected on the iSeries or eServer i5 system. Select which Web server you want to configure for Host On-Demand. For a list of supported Web servers, refer to the *Planning, Installation and Customization Guide*.

Specify the Service Manager port, through which Host On-Demand clients communicate with the Service Manager. In this tutorial, the Host On-Demand client will communicate license usage with the Service Manager. IBM recommends designating port 8999 for these purposes. Check your server documentation to see if this port is being used. If port 8999 is in use, you can change the port during installation or at a later time. For more information about changing the Service Manager configuration port, refer to the online help.

 This communication is necessary when using the configuration server to maintain session configuration information (as in the configuration server-based and combined deployment models). Refer to the **Planning for deployment** information in the *Planning, Installation and Customization Guide*. or for License-Use Counting. Refer to the license usage information in the online help.

If the installation program detects IBM WebSphere Application Server (version 4.0 or 5.0) on your system, you will be asked if you want to configure the Host On-Demand configuration servlet in WebSphere Application Server. For this tutorial, click **No** .

 If you click **Yes**, you will be prompted to choose from the versions of the application servers that were detected. The installation program automatically deploys the configuration servlet on the Web application server that you designate, and configures your clients to access the Service Manager through the servlet. If you run Host On-Demand through a firewall, this functionality eliminates the need to open an extra port for client communications with the Host On-Demand Service Manager. Refer to the **Installing the configuration servlet** information in the *Planning, Installation and Customization Guide* for more information. If you click **No**, the installation program configures the clients to access the Service Manager directly on port 8999 (or an alternative port specified by you).

Review the summary of your input. Click **Next** to install the program.

After installation is complete, click **Finish** to exit the wizard.

From a command line, enter `STRTCPSVR SERVER (*HTTP)` to start the HTTP server.

Enter `STRHODSVM` to start the Host On-Demand Service Manager.


6. Verifying the HTTP server installation

When selecting the Web server that will host Host On-Demand, you can allow the Host On-Demand installation program to configure the Web server or you can choose to manually configure the Web server. This section provides information about two of the IBM Web servers that can be installed on the server's operating system.

Confirm if both IBM HTTP Server and IBM HTTP Server (powered by Apache) are installed. If IBM HTTP Server (powered by Apache) is installed, then follow the steps for the IBM HTTP Server (powered by Apache) [HTTP server](#).

IBM HTTP Server

Use the `WRKHTTPCFG` command to configure IBM HTTP Server. This will call up the default instance. An instance is a configuration of the HTTP server. Each instance uses a port. If you create multiple instances that use the same port, the first one started by the HTTP server will be enabled. Confirm that the proper parameters have been entered, and the http server has started

 Entries that start with # are comments, and are not processed by the HTTP server.

Verify that the host name has been entered.

```
# Syntax:
# HostName
# HostName your.full.host.name
#
```

Verify that the method directives or Enable statements are correct. GET , HEAD and POST should be enabled.


```
# Enable <GET | HEAD | POST>
# -----
```

```
Enable GET
Enable HEAD
Enable POST
#
```

Verify that the mapping directives Pass statements are correct and that they point to the correct Host On-Demand library.

```
#
Pass /hod/* /QIBM/ProdData/hostondemand/HOD/*
#
```

Start the IBM HTTP server with the STRTCPSVR *HTTP command.

 You can use the WRKACTJOB command to see if the instances are running. All of the instances that are running will appear under the QHTTPSVR subsystem. In this example, you should see that these **Admin** and **Default** instances are running.

IBM HTTP Server (powered by Apache)

 The IBM HTTP Server (powered by Apache) Web site <http://www.ibm.com/servers/eserver/iseries/software/http/services/apache.htm> provides information on the basic configuration for the HTTP server and discusses instance configuration.

In a Web browser, connect to the Administrative port for the iSeries or eServer i5, at the following address: `http://hostname:2001`. The *admin instance must be started. You must have proper authority on the server to access this page.

Select **Administration and Manage HTTP Servers**. Select the instance to be configured. The HTTP server selected must be APACHEDFT with **Apache** type. If the type is **Original**, this is [IBM HTTP Server](#).

Under Web Site Definition, select **Aliases and Redirection**.


Click **Add in the Map URLs to the host file system section**.

Select **Alias**. Set the URL path to /hod and the Host directory to /QIBM/ProdData/hostondemand/hod.

Select **Edit Configuration File** (located in the bottom right). Add the following text lines to the configuration, just before the < line.

```
< Directory /QIBM/ProdData/hostondemand/hod>
<LimitExcept GET POST>
order deny,allow
deny from none
</LimitExcept>
AllowOverride None
UseCanonicalName Off
HostNameLookups Off
Options +FollowSymLinks
</Directory>
```

Start the IBM HTTP server with the STRTCPSVR SERVER (*HTTP) command.

 You can use the WRKACTJOB command to see if the instances are running. All of the instances that are running will appear under the QHTTPSVR subsystem.

7. Testing the configuration


Open a browser on a Windows machine and type the following address: `http://hostname/hod/HODMain.html` If you see the Host On-Demand HTML page, the HTTP Web server has found the Host On-Demand publish directory.

8. Configuring a Host On-Demand session

Host On-Demand provides a sample HTML file generated by the Host On-Demand Deployment Wizard. This sample file provides 3270, 5250, VT, and FTP sessions, which include download client and Java auto-detection components.

Locate the `hodclients.zip` file on your Host On-Demand server in the `/<HOD install directory>/hod/samples/html` directory.

Copy this zip file to your `/<HOD install directory>/hod` directory.

 If you would like to create your own Host On-Demand Deployment Wizard files, or use other Host On-Demand options, see the Host On-Demand Information Center. Reference the information about using Host on-Demand emulator clients.

9. Loading the files to the server and deploying


Web pages from the Deployment Wizard can be distributed to servers using the DWunzip tool. DWunzip is located in the following directory on the iSeries or eServer i5: `/<HOD install directory>/lib/samples/DWunzip/` The file is called `DWunzip-AS400.sh`. To load the `hodclients.zip` file to the server using DWunzip, do the following:

Open the `DWunzip-AS400.sh` file. Verify that the runtime variables are correct and correspond with your environment. Change the default values of the runtime variables if they do not correspond with your environment. These include the following:

- o Location of the JRE
- o Location of the Host On-Demand publish directory on the server
- o Target paths specified within the command file

Confirm that DWunzip is authorized with the needed execute permissions and authorized to write to the publish directory on the server.

From the server OS command prompt, use the `QSH` command to run `QSHELL`.

 `QSH` commands are case-sensitive. You can print the `QSH` scroller to place the information into a job log for future reference.

Run the DWunzip command file for your operating system, from the Host On-Demand published directory.

```
DWunzip-AS400 hodclients
```

Here, *hodclients* is the name of the sample file to be deployed, without the `.zip` extension or path. When DWunzip is running, it will display status messages, showing the files and folders that were extracted, overwritten, or created. It will also display a message when the command is complete. If you have run this tool once and are running it again on the same `.zip` file, you will be asked whether you want to overwrite the files. If you do not overwrite the files, the tool will close.

10. Loading the TN5250 client

The following procedure loads the Host On-Demand TN5250 emulator.

Open a browser window.

To download the Host On-Demand client, type the URL of the Web server in the browser address bar. For example, if you use the hodclients.zip file, and my.host is the Web server's host name, the URL will be as follows: *http://my.host/hod/hodclients.html* The Host On-Demand client will begin downloading to your personal computer. You should see the Host On-Demand Desktop, which has session icons, a Host On-Demand banner, and a gray background.

Right-click on the 5250 session icon. Click **Properties** to modify the session properties (such the destination address) for your iSeries or eServer i5 Telnet server and port. Click **OK** to exit.

Double-click on the 5250 session icon. A TN5250 Emulator window will appear. You can log onto the host system using the Host On-Demand client and the host telnet server. Refer to the online Help for information on the emulator functions.

Additional information

Registering to obtain service updates and fix packs

To download the latest service updates or fix packs for Host On-Demand, you must register with the IBM Software Internet Service Delivery site, at the following address:

<https://www14.software.ibm.com/aim/web/home.html>

After registering, you need to add the Service Key to your registration. You can then download the product that matches the key you have entered.

You can register multiple keys for the registration ID. The Service Key is the 10-digit number located on the Service Key Card for Host On-Demand Version.

The Service Key provides access to code that contains encryption technologies. Therefore, it must be treated with the same care given to the base product, in terms of Export and Import regulations. You should read and comply with the information on the download authorization Web page. You must agree to the terms before you are allowed to download.

For more information on service updates, see the Host On-Demand Information Center.

Host On-Demand Support site

The Host On-Demand support site is at the following address:

<http://www.ibm.com/software/webservers/hostondemand/support.html>

Some of the available information includes the following:

- Support downloads and fix packs
- Flashes
- Technotes
- APARs

My Support news

To receive Host On-Demand support news flashes, do the following:

1. Go to the Host On-Demand support Web site at <http://www.ibm.com/software/webservers/hostondemand/support.html>
2. Under Personal Support, click **My Support**.
3. If you are already have an IBM Registration ID, you can sign in. If not, you must register.
4. After you sign in, select **Networking** from the product family list.

5. Select the products for which you want to receive news flashes. Click **Save and Return**.
6. Your support profile is listed on the next screen. For your mail preference, you can choose to receive e-mail flashes, downloadable files, or both. Click **Submit**.
7. You will receive a message indicating that your profile has been updated. Click **Sign out** to end the session.

Information Center

The Host On-Demand Information Center is at the following address:

<http://publib.boulder.ibm.com/infocenter/hod9help>

The Information Center includes the following:

- Product documentation
- Tutorials and white papers
- Troubleshooting and Support
- Links to related product pages

You can also search across any or all of the HTML documents in the Information Center.

Appendix. Notices

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