

$IBM^{^{\circledR}}$ WebSphere $^{^{\intercal}}$ Host Publisher Planning and Installation Guide for AS/400 $^{^{\circledR}}$

Version 2 Release 2



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Note Before using this information and the product it supports, be sure to read the general information under "Appendix A. Notices" on page 13.

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Planning and Installing Host Publisher

As with any software, some planning is necessary to ensure a successful installation. Use this planning information to help you install the Host Publisher components.

Hardware and software requirements

Host Publisher Studio runs on Windows 95, Windows 98, Windows NT Version 4, and Windows 2000.

Hardware requirements

Host Publisher Server AS/400e Server

- Model AS/400e Server 170 with minimum Processor Feature 2385, or a higher model AS/400e server
- 512 MB RAM minimum
- 200 MB DASD Host Publisher Server base code and all languages
- Java capable CPU feature code

Refer to *AS/400 Performance Capabilities Reference* (http://publib.boulder.ibm.com/pubs/html/as400/onlinelib.htm)

To access all AS/400 books, go to: http://as400bks.rochester.ibm.com/.

Host Publisher Studio

Windows 95, Windows 98, Windows NT, and Windows 2000:

- · Pentium 166 processor or higher
- Minimum of 128 MB RAM
- 90 MB of free disk space
- A display with a color depth of 256 colors or higher.

Software requirements

Host Publisher Server

OS/400 V4R4 or OS/400 V4R5 with latest cumulative PTF fix package applied

5769DG1

IBM HTTP Server

One of the following versions of WebSphere Application Server:

5769AS1

IBM WebSphere Application Server Standard Edition V2.0.3.1.

Obtain by applying WEBAS Group PTF SF99027 dated December 1, 1999 or later to WebAS V1.1. See http://www.as400.ibm.com/tstudio/websphere/services/service.htm for information about SF99027.

5733AS3

WebSphere Application Server, Standard Edition, V3.0.2

5733WA2

WebSphere Application Server Advanced Edition, V3.0.2

5769JV1

Java Developer Kit 1.1.7 on OS/400 V4R4 or V4R5

or

Java Developer Kit 1.1.8 on OS/400 V4R5

5769JC1

AS/400 Java Toolbox

5769ST1

DB2/400 Toolkit

5769SS1

Option 30 - Qshell interpreter

Host Publisher Studio

Windows 95, Windows 98

None

Windows NT

Windows NT Workstation or Server Version 4.0, Service Pack 4

Windows 2000

Windows 2000 Professional, Server, or Advanced Server

Limitations

Host Publisher Version 2.2 uses IBM WebSphere Application Server V2.0.3.1 or IBM WebSphere Application Server V3.0.2. Refer to documentation on those products to understand any limitation considerations they might have.

Performance considerations

Host Publisher Version 2.2 is a Java product. Performance is a function of the speed of the network and the processing power of the server. Refer to *AS/400 Performance Capabilities Reference*

(http://publib.boulder.ibm.com/pubs/as400/onlinelib.htm).

CD layout

This is not an AS/400 format CD; it is a PC-DOS format CD. AS/400 license program save files are in stream file format and are copied to the AS/400 library file system to enable installation using the rstlicpgm command. The Qshell script, install.sh, located in the root directory of the CD, performs the copy and rstlicpgm.

Before installing Host Publisher

Before you begin installing Host Publisher, you must know:

- The number of licenses (Host Publisher connections to host or database resources) for which you are authorized
- The National Language version code for online help and documentation. See the following table.

Language	Java code	NLV code
Chinese (Simplified)	zh_CN	89
Chinese (Traditional)	zh_TW	87
English	en_US	24
French	fr_FR	28
German	de_DE	29
Italian	it_IT	32
Japanese	ja_JP	62
Korean	ko_KR	86
Portuguese (Brazilian)	pt_BR	80
Spanish	es_ES	31
Turkish	tr_TR	56

Installing Host Publisher Server

Installation of the Host Publisher Server includes the following:

- Host Publisher Version 2.2 Server code
- · Host Publisher Server Administration files
- National Language version of online help and product documentation
- A server configuration file (server.properties) that contains the purchased number of licenses

Publishing of applications is handled by the Host Publisher Studio; however, some database and host access samples have been provided for your use.

Refer to http://www.ibm.com/software/network/hostpublisher/downloads/for the latest information about the samples.

Installation program actions

The installation program performs the following actions on your system:

- · Installation of the Host Publisher Server program and documentation files
- Configuration of IBM HTTP Server to run Host Publisher. By default, Host Publisher installation modifies the default HTTP Server configuration, CONFIG. If WebSphere Application Server is associated with a different HTTP Server configuration, you can specify the name of the configuration with the -h parameter of install.sh. See "install.sh syntax" on page 6 for information about the optional parameters.

The following directives are added:

- pass /_IBM_HP_WebAdmin_/*
 /QIBM/UserData/HostPublisher/Server/production/documents/*
- pass / IBM HP doc /* /QIBM/ProdData/HostPublisher/doc/*
- pass /HostPublisher/*
 /QIBM/UserData/HostPublisher/Server/production/documents/*

The alias name in the last pass directive is set to HostPublisher. This is the alias name you use in URL requests to view Host Publisher documents you deploy. You can change the alias name to meet your needs. Use the AS/400 command WRKHTTPCFG to edit the HTTP configuration.

• Modification of the following files:

WebSphere 2.0.3.1

- The bootstrap.properties file, to allow it to access Java code installed with Host Publisher 2.2
- The servlets.properties file, to define the Host Publisher Server Administration servlet, and to enable WebSphere Application Server to access your Host Publisher documents.
- Web server configuration files, to configure the Host Publisher Server pass directive.

WebSphere 3.0.2

- The admin.properties file, to add Host Publisher directories to WebSphere Application Server's classpath.
- WebSphere Application Server's configuration database, to define the Host Publisher Server Administration servlet, and to enable WebSphere to access your Host Publisher documents.
- Submission of several batch jobs to perform native OS/400 Java compiles. These jobs are reported via messages to your log output file (which is normally the Qshell session screen). Monitor the jobs for completion using the OS/400 command wrkjob when you exit the Qshell environment. **These**

jobs take from 45 minutes to 2 hours to complete, depending on your AS/400 model, CPU feature, memory, and current workload. When these jobs complete successfully, you can continue with the Host Publisher configuration of the IBM HTTP Server. If currently stopped, *do not start* the IBM HTTP Server until the Host Publisher Java compilation jobs have completed successfully.

Installation destinations

Host Publisher Server is predominately a Java-based product; for that reason, it installs most code and data files into the AS/400 Integrated File System (IFS). The root installation directories are /QIBM/ProdData/HostPublisher and /QIBM/UserData/HostPublisher. There are some product objects in native OS/400 format that are installed to library QHPN in the native library file system of OS/400.

Installing on OS/400

These instructions assume you have already configured the default IBM HTTP Server instance or some other named instance on your AS/400 to enable or run WebSphere Application Server. If you have not, please refer to WebSphere documentation or Web site for instructions.

- 1. Sign on to OS/400 for an interactive 5250 session using a profile with *SECOFR authority.
- 2. Ensure that all prerequisite software is installed and operating normally.
- 3. If IBM HTTP Server is already running, it is not necessary to stop it to perform the Host Publisher installation; however, you must stop and start it for configuration changes to take effect.
- 4. If you are installing Host Publisher to run with:
 - WebSphere Application Server Version 2.0.3.1, it is not necessary to stop it to perform the Host Publisher installation; however, you must stop and start it after installation for configuration changes to take place.
 - WebSphere Application Server Version 3.0.2, the WebSphere subsystem, QEJBSBS, must be running when installing Host Publisher Server.
- 5. Insert the CD into your AS/400 system CD reader.
- 6. Run these commands from an OS/400 command line:
 - chgjob ccsid(37) to ensure that the installation script is interpreted correctly in Qshell
 - qsh to enter the Qshell environment.
- 7. In Qshell, run these commands
 - a. cd /QOPT/HP22
 - b. install.sh with any of the optional parameters described in "install.sh syntax" on page 6.
- 8. When the install.sh script finishes, review all messages in the session to verify that installation was successful.

9. Press F3 to exit Qshell.

Installation notes:

- Installation of base code and one language takes approximately 5-to-10 minutes; installation of only one language takes approximately 3-to-5 minutes.
- The batch jobs to perform native OS/400 Java compiles are reported via messages to your log output file (which is normally the Qshell session screen). Monitor the jobs for completion using the OS/400 command wrkjob when you exit the Qshell environment. These jobs take from 45 minutes to 2 hours to complete, depending on your AS/400 model, CPU feature, memory, and current workload. If the IBM HTTP Server is currently stopped, do not start it until the Host Publisher Java compilation jobs have completed successfully.
- If Host Publisher is installed to run with WebSphere Application Server Version 2.0.3.1, IBM recommends that WebSphere be configured to run "in-process" within the HTTP server. Refer to the WebSphere documentation for instructions about configuring the **bootstrap.properties** file.

install.sh syntax

```
The syntax of the install.sh command is as follows:
install.sh [-n nn] [-l number_licenses] [-nobase] [-h http_config_name] [-w nnn]

[-q] [-config]
```

where:

- -n nn specifies the 2-digit value for your national language version of translated help and documentation. The default is 24, which is US English.
- -l number_licenses specifies the number of resource connections for which you are authorized or that you have purchased. The default value is 1.
- -nobase does not install the base code. Installation performs language installation and configuration. Run install.sh with this parameter and the -n parameter if you want to install additional national language versions of the help and documentation.
- -h http_config_name configures Host Publisher to work with the HTTP Server configuration named http_config_name. The default is **CONFIG**, which is the default configuration name for IBM HTTP Server.
- -w nnn configures Host Publisher for use with the WebSphere Application Server version nnn. This parameter is only necessary if more than one version of WebSphere Application Server is installed. The values allowed for nnn are:

2031 WebSphere Application Server Standard Edition, Version 2.0.3.1

If you are migrating from Host Publisher Server Version 2.1, the default value is 2031. Otherwise, the default value is 302.

- -q performs a quiet installation. Messages are logged to the file /QIBM/ProdData/HostPublisher/Install/HPInstall.log
- -config does not install any code, but performs configuration. Use this parameter if you need to restore the default configuration of Host Publisher.

Note: All install.sh parameters are optional.

Testing installation of the Server

After you complete installation of Host Publisher 2.2, start the Web server, then access a simple HTML page. In this way, you can ensure that the Host Publisher alias is working.

1. Copy the following HTML code to a file named test.html.

```
<!doctype html public "html2.0">
<html>
<body>
<h1 align="center">My home page</h1>
</body>
</html>
```

- 2. Place test.html in the <code>install_dir/Server/production/documents</code> directory path, where <code>install_dir</code> is the directory in which Host Publisher is installed. <code>install_dir</code> defaults to /Qibm/UserData/HostPublisher.
- 3. Load http://myhost/alias/test.html in your browser, where alias is the alias you defined when installing Host Publisher. The default alias is /HostPublisher/.

If the test file is not found, check the Web Server's configuration files to ensure the Host Publisher alias is defined. Stop and restart the Web Server if you make changes.

If you are running Host Publisher under WebSphere Application Server 3.0.2, start the Host Publisher Application Server using the WebSphere Administrator's Console application. Under WebSphere 3.0.2, Host Publisher is configured in its own JVM as its own Application Server.

The Console is started with the adminclient.sh script. The adminclient file is located in the /WebSphere/AppServer/bin directory. In the Console, select the HostPubServer Application Server you find beneath your Node, and press the Start icon. A dialog box will indicate when the server has successfully started.

Next, access a simple JSP page to make sure all the basic WebSphere Application Server settings are correct.

1. Copy the following HTML code to a file named test.jsp.

```
<html>
<head>
<title>JSP Test</title>
</head>
<body>
<h2>Hello world</h2>
<h4>I'm at <%=request.getRequestURI() %></h4>
</body>
</html>
```

- 2. Place test.jsp in the <code>install_dir/Server/production/documents</code> directory path, where <code>install_dir</code> is the directory in which Host Publisher is installed.
- Load http://myhost/alias/test.jsp in your browser, where alias is the alias you defined when installing Host Publisher. The default alias is /HostPublisher/.

If http://myhost/alias/test.jsp fails to load, ensure that WebSphere Application Server is started. If you are running Host Publisher under WebSphere Application Server 3.0.2, ensure that the Application Server named HostPubServer is started in the WebSphere Administrator's Console.

Next, check the configuration of Host Publisher to WebSphere Application Server.

WebSphere 2.0.3.1:

- 1. Start WebSphere Administration.
- 2. Ensure that the Host Publisher Server Administration servlet is defined and started.
- 3. Ensure that the servlet initialization parameters appear in the WebSphere Application Server administration. These parameters are:
 - install dir
 - log_dir
 - server dir

WebSphere 3.0.2:

- 1. Start the WebSphere Administrator's Console.
- Ensure that the HostPubServer, HPServletEngine, hostpublisher, and _IBM_HP_WebAdmin_ entries appear in the topology tree.

If these entries are not present, manually run the configuration script located in <code>install_dir</code>, where <code>install_dir</code> is the directory in which Host Publisher is installed. To run the configuration script, type the following on the command line:

./HostPubWAS HostPubWASConfig.xml

3. Load http://myhost/alias/showCfg in your browser, where alias is the alias you defined when installing Host Publisher, to see more configuration information. The default alias is /HostPublisher/.

Finally, test the sample applications. Refer to http://www.ibm.com/software/network/hostpublisher/downloads/ for information on downloadable test applications.

Diagnosing installation problems

If problems occur during installation, first check the messages listed in the Qshell session. Some OS/400 system commands issued from the install.sh script are run in batch jobs, so also check the message queue and spooled output of the profile performing the install.

To check the message queue, from a native OS/400 command line, run command dspmsg. To check for spooled output and job logs, run command wrksplf.

If more detailed diagnostic information is required, Host Publisher Server installation creates a detailed log of commands and messages performed during installation. This log file is named

/QIBM/ProdData/HostPublisher/Install/HPInstall.log. Review all messages for diagnostic information and clues to possible error recovery. Have this log file, in case you need to contact IBM Support for assistance.

You can perform the install.sh procedure and the procedure of subordinate Qshell scripts manually; these files are ASCII text files. Running system commands from the OS/400 native command line enables you to obtain second-level help for the message issued by commands, either interactively using the F1 or HELP keys or by reading the job log.

Installing Host Publisher Studio

- 1. Double-click setup.exe in the CD root directory.
- 2. Proceed through the installation windows.
- 3. Click Finish when the final window appears.

Note: If you plan to create a response file for silent installation of the Host Publisher Studio on other machines, refer to "Silent installation of Host Publisher Studio" on page 10. The Host Publisher Studio is installed following the creation of the response file.

Silent installation of Host Publisher Studio

Silent installation of Host Publisher Studio requires the creation of a response file. After creating a response file, the Host Publisher Studio is installed in the location you specify on the installation panels.

To create a response file that contains the information required on the installation panels, and install the Host Publisher Studio, type the following at a command prompt:

```
setup.exe -r -flresponsefile path -f2logfile path
```

where *responsefile_path* and *logfile_path* are the paths where you want the response file and log file to reside.

```
The -f2 parameter is optional. For example:
setup.exe -r -f1c:\WINNT]setup.iss
or
setup.exe -r -f1c:\HostPublisher\setup.iss -f2c:\HostPublisher\setup.log
This creates a response file with a typical .iss extension in the specified
```

directory.

To run a silent installation using the response file, at the command prompt, type:

```
setup.exe -s -flresponsefile_path -f2logfile_path
The -f2 parameter is optional. For example:
setup.exe -s -flc:\WINNT]setup.iss
or
setup.exe -s -flc:\HostPublisher\setup.iss -f2c:\HostPublisher\setup.log
```

The setup.log file provides installation details. If the silent installation is successful, the ResultCode is 0. If the silent installation fails, the ResultCode is often -12. This indicates that the information in the response file does not exactly correspond to the panels presented during the silent installation. It is important for the response file information to match the installation panels, so make sure you create the response file and run the silent installation in the same environment.

Uninstalling Host Publisher

To uninstall Host Publisher Studio:

- 1. From the Control Panel, click Add/Remove Programs.
- 2. Select IBM Host Publisher Studio.
- 3. Click Add/Remove.

To uninstall Host Publisher Server on OS/400:

- 1. Sign on to OS/400 for an interactive 5250 session using a profile with *SECOFR authority.
- 2. Stop IBM HTTP Server by issuing OS/400 command endtcpsvr *http. It may take a few minutes for the server to shut down after the command has finished.
- 3. If Host Publisher is installed to run with WebSphere Application Server Version 3.0.2, the WebSphere subsystem, QEJBSBS, must be running so uninstallation can remove Host Publisher from the WebSphere Application Server configuration database.
- 4. Run OS/400 command dltlicpgm 5648D31.

Uninstall notes:

- The IFS root directory /QIBM/UserData/HostPublisher is not removed because it may contain your user data.
- OS/400 authorization lists QSYS/QHPNPAUTL and QSYS/QHPNDAUTL are left on the system because they are in use securing /QIBM/UserData/HostPublisher.
- Any files that have been copied into the original directory tree rooted at /QIBM/ProdData/HostPublisher are deleted.

Appendix A. Notices

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Programming interface information

This Planning and Installation Guide contains information on intended programming interfaces that allow the customer to write programs to obtain the services of Host Publisher.

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- Websphere

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Readers' Comments — We'd Like to Hear from You

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