Introduction

Welcome to the Apple Internet Server Solution for the World Wide Web. On the accompanying CD-ROM disc, you'll find a collection of software that lets you establish a Web site on the Internet quickly and easily. Using the programs provided, you can create a Web site that includes pages with hypertext links, clickable maps, pictures, interactive forms, and database integration. You can then make your Web site available to users on the Internet or on your organization's internal network (intranet). You can also provide domain name services for your network using MacDNS.

This booklet describes the procedures for setting up and starting to use the software. These include

- installing the software from the Apple Internet Server Solution CD-ROM disc
- connecting your server to a TCP/IP network or the Internet
- configuring your TCP/IP connection

The software installation process creates a local Web site on your server. Be sure to read the documents on this local site; they offer tips and suggestions for using the Apple Internet Server Solution (AISS) software to set up and maintain your own Web site. If you haven't already done so, you should also review the printed manuals that came with your server hardware.

About Web servers

When you browse the World Wide Web using an application like Netscape Navigator[™], you view screens, called *pages*, that present information in a graphical, easy-to-read format. A collection of Web pages organized around a particular topic and linked with one another through hypertext links is called a *site*. A Web site is identified by an address, called a *URL* (an acronym for *uniform resource locator*). Sites can be "owned" by individuals, companies, institutions, or governments, among others. For example, you can visit a Web site maintained by Apple Computer by choosing Open Location from the File menu in Netscape Navigator and entering the URL http://www.apple.com.

When people visit a particular Web site, they are in effect connecting to the computer where the Web pages for that site are stored. The computer runs a Web server application, such as WebSTAR, that "serves" the Web pages to people who visit the site. Depending on how you set up your Web server, you can make your site accessible to people on the Internet or to people on your company or school network only. This latter configuration, called an *intranet*, allows you to create a Web site that is only accessible to users on a specific local area or wide area network. For example, if you want to provide confidential information for employees of your company, you can create a Web site on a server located on your local area network (LAN).

Contents of the Apple Internet Server Solution CD

Software

The *Apple Internet Server Solution* CD includes applications with which you can set up a Web server and additional programs that extend the functions of your server. The applications, arranged by function, include these:

Administration tools

- LogDoor provides real-time management for a server's log file.
- MacTCP Watcher reports details of TCP connections and activity.
- **PageSentry** monitors and tests several types of servers, reports failures, and restarts servers that are down.

Browsers and viewers

- Adobe[™] Acrobat[™] Reader lets you read and print Portable Document Format (PDF) documents, regardless of the application or type of computer that created those documents.
- Netscape Navigator lets you browse Web pages on your server and on the Internet. It also gives you the opportunity to preview your pages as you're creating them.

Database tools

- **Butler SQL Server** provides relational database management for multiple users and a variety of application programs.
- **Tango Enterprise** provides tools to integrate database content into Web applications.

HTML editors

- **BBEdit** is a versatile text editor that lets you work directly with HTML files and manage a Web site.
- **Claris Home Page** gives you an easy way to create Web pages without having to be familiar with HTML (Hypertext Markup Language)—the standard language for Web pages.
- **GoLive CyberStudio** lets you create Web pages in a graphical environment and offers drag-and-drop image placement and table editing.

Server software

- FireSite[™] accelerates Web site operation by moving large files to the service provider's site and using the provider's fast connection to serve those files. The program also lets one server contain multiple domain names.
- **MacDNS** lets you assign domain names, IP addresses, aliases, and mail exchange information for a server.
- **NetCloak** allows you to control numerous elements on your Web pages and configure the content delivered according to the user, password, domain name, and many other variables.
- **Rumpus (FTP Server)** provides the software to set up an FTP server, which is used for file transfers and efficient access to archived files.
- WebSTAR is a Mac OS-based Web server system that provides the software necessary to serve your Web site on the Internet or on an intranet.

See the Appendix of this booklet for the manufacturers' names and Web addresses, along with a more detailed description of each application.

Software keys

Some applications on the AISS CD require that you type a set of numerals and letters, known as a *key* or *serial number*, the first time you use the program. See the Read Me file on the CD for specific information about the keys you need for AISS software.

Software support

The software on the AISS CD comes from several different companies, including Apple. The developer of each application supports that application.

IMPORTANT If you have a problem with an application on the AISS CD, contact the company that manufactures that application. See the document named "ProductSupport.html" in the HTMLpages folder (in the Documentation and HTML folders) for contact information.

Documentation

Documentation for each application in the Apple Internet Server Solution is provided in electronic form, as a PDF (portable document format) file that you read, print, and search with Adobe Acrobat Reader, or as a set of HTML files that you read or print with Netscape Navigator. The electronic manual for each application is located in the Documentation folder.

AISS also has its own set of HTML documents, located in the HTML Pages folder, which you can view and print using Netscape Navigator. These documents provide tips and ideas for adding features such as clickable maps and interactive forms. The HTML documents also provide technical support information and include hypertext links to additional sources of information about Web servers, the Internet, and related topics.

In addition, the Apple Internet Server Solution package contains the book *Planning and Managing Web Sites on the Macintosh: The Complete Guide to WebSTAR and MacHTTP*, by Jon Wiederspan and Chuck Shotton (Addison-Wesley Developers Press, 1996). This comprehensive book details the WebSTAR software, offers a digest of HTML tags, and provides extensive coverage of CGI scripting. The book contains a CD with numerous shareware and freeware applications, software demonstration versions, and examples of server documents.

Sample Web pages

The Apple Internet Server Solution provides sample Web pages for a fictional company called Global Networks, Ltd. These sample Web pages illustrate what you can do with electronic art, clickable maps, interactive forms, and hypertext links. Look at these pages for ideas or use them as templates for your own Web pages.

IMPORTANT When you install the AISS software, the sample Web pages are installed as your server's default home page. Be sure that you either rewrite the sample pages to provide information about your Web site or replace the sample pages with Web pages that you've created for your site. If you don't rewrite or replace the sample pages, users visiting your Web server will see the home page for the fictional company (Global Networks) instead of a home page for your Web site.

For more information

Books about the Internet and the Web

There are hundreds of books available about the Internet and the World Wide Web, with dozens more coming out every month. Here are a few:

Ablan, Jerry, and Scott Yanoff. *Web Site Administrator's Survival Guide*. Sams.net Publishing, 1996.

Anthony, Tobin. *Building and Maintaining an Intranet with the Macintosh*. Hayden Books, 1996.

LeVitus, Bob, and Jeff Evans. *WebMaster Macintosh: How to Build Your Own World-Wide Web Server Without Really Trying* 2nd edition. AP Professional, 1996.

Morgan, Eric Lease. *Teaching a New Dog Old Tricks*. A comprehensive book about Macintosh computers and the World Wide Web. Available on the Web at http://152.1.24.177/teaching/manuscript/.

Sachs, David, and Henry Stair. *The 7 Keys to Effective Web Sites*. Prentice Hall PTR, 1997.

Taylor, Dave. Macworld Creating Cool HTML 32 Web Pages. IDG Books, 1996.

Apple Web sites

Apple Computer offers several Web sites with information about the Internet and related topics. The following table lists the URLs for some of the Apple Web sites that you may want to visit.

Web site (URL)	What it provides
http://www.info.apple.com/AISS/	The AISS site, which provides up-to-date information and links to developers of the AISS applications
http://www.apple.com	Apple's home page
http://www.info.apple.com/	General support and product information
http://www.solutions.apple.com/	Internet facts and ideas, and general networking product information
http://education.apple.com	News and information about Apple's education products and programs
http://applenet.apple.com/hi/web/web.html	Excellent advice for planning Web content of any size or scope
http://macos.apple.com	Mac OS information and updates
http://www.solutions.apple.com/apple-internet/	Extensive group of mailing lists on the Internet and related subjects

Installing the Software

The Apple Internet Server Solution includes tools and utilities for a variety of server functions and site-management tasks. You may not want to use all of the software in AISS, depending on the purpose of your Web server. The table that follows presents the amount of memory occupied by each application to help you determine which ones to install.

Application	Minimum RAM	Recommended RAM
Acrobat Reader	2.2 MB	6.4 MB
BBEdit	1.8 MB	2.2 MB
Butler SQL	4.9 MB	6.9 MB
FireSite	1.6 MB	1.6 MB
GoLive CyberStudio	10.4 MB	18.4 MB
Home Page	3.5 MB	5.8 MB
LogDoor	1.2 MB	1.4 MB
MacDNS	1.5 MB	1.5 MB
MacTCP Watcher	0.6 MB	0.6 MB
PageSentry	1.4 MB	2.2 MB
Rumpus (FTP Server)	3.3 MB	5.3 MB
Tango Enterprise	1.3 MB	1.8 MB
WebStar	1.6 MB	3.3 MB
WebStar Admin	0.6 MB	0.6 MB

Once you decide which applications you want to use, you can begin the installation process. If you aren't sure whether you need all the applications, it's a good idea to install all the AISS software. You can later remove any applications you don't need.

Follow these steps to install the software from the *Apple Internet Server Solution* CD.

1 Insert the *Apple Internet Server Solution* CD in your server's CD-ROM drive and open the CD's icon.



The CD's contents look like the illustration below.

2 Double-click the Install AISS icon and click Continue in the opening screen.

When you click Continue, the main Installer window appears.



3 Go through the first three steps on the Installer screen to prepare for installation. Instructions on the screen tell you when each step is complete. 4 Click the button next to "Install the Software" at the bottom of the Installer screen to transfer the software from the CD to the disk you designated for installation.

You have a choice of which software to install. Apple recommends that you install all the software.

Software Installation			
Click Start to install the AISS 3.0 software and any selected software on "Macintosh HD."			
Option	nal software	Installation status	
🛛 🛛 Appl	e Internet Server S	Solution Will be installed	Û
Adot	oe Acrobat Reader	3.0 Will be installed	4
Custor	nize	Cancel Star	t

Click the box next to each item you don't want to install. This will remove the X.

5 Click Start to begin software installation.

Messages on the screen report the progress of installation. If you're installing Acrobat Reader, you are asked to read and accept the software license. Click Agree.

6 Click Restart to restart the server when software installation is complete.

After you restart your server, a dialog box appears and asks you to register your copy of WebSTAR.

7 Register your copy of WebSTAR by entering the number located on the WebSTAR registration card.

The WebSTAR registration card comes in the Apple Internet Server Solution package.

8 Open Netscape (if necessary) by locating and double-clicking its icon in the Browsers folder.

The software may start up automatically after you register WebSTAR. If a license agreement appears on the screen, read it and click Agree.

WebSTAR and Netscape Navigator are now running. The Apple Internet Server Solution home page (stored locally on your server), similar to the one shown below, appears in a Netscape Navigator window.



If you do not see the AISS home page, go to the section "Viewing the AISS Home Page" later in this booklet for instructions.

Making a Network Connection

Your server must be connected to a network before people can visit your Web site. In most cases, this means that you need a connection between your server and the Internet. See the instructions in this section for details about connecting to the Internet. If you aren't planning on connecting your server to the Internet and want to put your server on a company network (intranet), skip the instructions here and go directly to the section "Configuring Your TCP/IP Connection."

IMPORTANT If you don't yet have a network connection, you can still get started with the Apple Internet Server Solution. Begin by reading the documents in the "HTML Pages" folder. See the previous section, "Installing the Software," for step-by-step instructions on installing the software.

Follow these steps to set up an Internet connection:

1 Obtain an account with an Internet service provider (ISP).

A list of some domestic and Internet access providers is included in the AISS Web pages.

2 Choose a method of physically connecting your Web server to the Internet.

For some people, this may be as simple as using a modem and a telephone line. If you want your server to be accessible 24 hours a day or if you expect many visitors (thousands) at your Web site, you may want to invest in a more robust connection method, such as a T1 line or an ISDN connection. Consult your Internet service provider about the methods that may best serve your needs. If your server is on a local area network (LAN), you probably need a router to connect your network to the Internet service provider's network. Consult your network administrator.

3 Obtain the following TCP/IP configuration information from your ISP (or network administrator).

You'll use this information when you set up your TCP/IP connection, described in the next section.

Connection type

If your server is directly connected to a network, such as a LAN, you'll probably want to choose Ethernet. If you have a dial-up (modem) connection to the Internet using SLIP (Serial Line Internet Protocol) or PPP (Point-to-Point Protocol) software, you'll select the SLIP or PPP connection type. Consult your ISP for instructions.

IP address

An IP address is a set of four numbers from 0 to 255, separated by periods (for example, 140.140.54.2). It uniquely identifies your server on the network. Your ISP or network administrator should provide you with an IP address.

• Gateway address (also called a *router address*)

A router is a device that directs information along the most efficient or appropriate network path. It connects two or more network cables, thereby allowing computers and other network devices on each cable to communicate with each other. Your ISP or network administrator should provide you with a gateway (router) address.

Note: If you have a dial-up connection to the Internet using SLIP or PPP software, you do not need to enter a router address.

Domain name

For the purposes of this booklet, the domain name is the name that identifies the Web site where your server is located. For example, if your company is called "JNP Designs," your domain name may be something like "jnpdesigns.com." Consult your ISP or network administrator for your particular domain name. • IP address for a server providing domain name services

In many cases, the domain name services are provided by your ISP. If your ISP provides domain name services, consult your ISP for the appropriate IP address. If you plan to use MacDNS to provide your own domain name services, use the IP address of the machine that will be running the MacDNS software; this can be the same machine that WebSTAR is running on or another machine on your network.

Subnet mask

Some organizations use a subnet mask number to manage the number of IP addresses that are available for a network. If your network uses a subnet mask, you must enter it for your server to work correctly on the network. A subnet mask is a set of four numbers from 0 to 255, separated by periods (for example, 255.255.255.0).

Configuring Your TCP/IP Connection

Once your server is connected to a network, you need to configure TCP/IP on the server. You use the TCP/IP control panel for this purpose.

The following TCP/IP settings are appropriate for most users. Consult your ISP or network administrator to verify that they are appropriate for your server. For detailed descriptions of all the settings available in the TCP/IP control panel, refer to the *Workgroup Server Administrator's Manual* that came with your server.

1 Open the TCP/IP control panel.

You can open the control panel by choosing Control Panels from the Apple (**•**) menu and choosing TCP/IP from the submenu.

2 Choose User Mode from the Edit menu and click the Administration button. Then click OK.



3 Choose the appropriate connection type from the "Connect via" pop-up menu.

Ethernet is the most common connection type.

AppleTalk (MacIP)	
 Ethernet 	
Ethernet	

4 Choose Manually from the Configure pop-up menu.

 Manually 	Ν
Using BootP Server	-7-
Using DHCP Server	
Using RARP Server	

- 5 Type your server's IP address in the "IP Address" box.
- 6 If you have a subnet mask number, type it in the "Subnet mask" box.
- 7 If you have the IP address for a router, type it in the "Router address" box.
- 8 If you have the IP address of a name server, type it in the "Name server addr" box.

You can enter more than one name server address in the "Name server addr" box. Press Return after each address. You can specify as many name servers as you want as long as you do not type more than 255 characters.

Note: If you are using MacDNS, type the IP address of the machine running the MacDNS software.

- 9 Close the TCP/IP control panel.
- 10 If you have made configuration changes, an alert box asks if you want to save changes. Click Save.

If you have changed the default port, the alert box also tells you that the change will interrupt any TCP/IP services that are established.

Your changes are saved as the default configuration and take effect immediately.

If, after configuring the TCP/IP control panel, you see an error message such as "Unable to locate host" or "Could not create a socket," your software is unable to reach the network. This indicates a problem in the TCP/IP configuration. See the administrator's manual that came with your server for more information, or consult your ISP or network administrator.

Viewing the AISS Home Page

When you install the Apple Internet Server Solution software, the Installer places a file named "Welcome.html" on your server. This HTML file is the AISS home page. When you restart your server after installation, the home page appears in a Netscape Navigator window. Use the home page as the jumping-off point to learn more about the AISS software and about Web servers in general.

If the AISS home page doesn't appear in the Netscape window when you restart your server, you can locate and view it in one of the following ways.

If you're not yet connected to a network

To access the home page locally on your server, follow these steps. (You do not have to be connected to a network to use this method.)

- 1 Open Netscape Navigator.
- 2 Choose Open File from the File menu.
- 3 In the dialog box, locate and open the file named "Welcome.html."

The path is

Documentation:HTML:HTMLpages:Welcome.html. In other words, the file is located in the "HTMLpages" folder, in the HTML folder, in the Documentation folder on your hard disk.

The AISS home page appears in a Netscape Navigator window.

If you are already connected to a network

This method for viewing the home page simulates the way other people on a network will reach your Web site. (To use this method, WebSTAR must be running on your server.) You can use this method to test whether your Web site is accessible to users on the network.

- 1 Open Netscape Navigator.
- 2 Choose Open Location from the File menu.
- 3 In the dialog box, type

http://yourIPaddress/Documentation/HTML/HTMLpages/
welcome.html

For example, if your IP address is 17.255.34.35, you'd type

http://17.255.34.35/Documentation/HTML/HTMLpages/
welcome.html

4 Click Open or press Return.

The AISS home page appears in the Netscape Navigator window.

Appendix Software on the Apple Internet Server Solution CD

The following software is provided on the *Apple Internet Server Solution* CD. The manufacturer's name and Web address for each application appears in parentheses at the end of the software description.

Note: The manufacturer of each application supports that application. Contact information for the manufacturers is provided in the "Productsupport.html" document in the HTML Pages folder on the CD. Also check the Apple Web site for AISS (http://www.info.apple.com/AISS) for product news and information about software updates.

Adobe Acrobat Reader lets you read, print, and search documents that have been prepared in the Portable Document Format (PDF). Acrobat Reader is the premier choice for Web documents when maintaining the look and feel of the document is of particular importance. (Adobe Systems; http://www.adobe.com)

BBEdit is an HTML editing tool for creating documents in HTML format, the basic presentation format for the World Wide Web. BBEdit readily integrates with Internet services (such as Web browsers) to speed the previewing and composition of Web pages. (Bare Bones Software; http://www.barebones.com)

Butler SQL is a database query tool that takes your requests for information, searches the relevant database, and returns the desired data. (EveryWare Development Corporation; http://www.everyware.com)

Claris Home Page is an excellent tool for people who want to create Web pages but are unfamiliar with HTML (Hypertext Markup Language). You can add graphics to pages, design tables, create image maps, and establish or change links easily with Home Page. The program saves your work as HTML files that can be used with any Web browser or Web server software. (Claris Corporation; http://www.claris.com)

FireSite is a Web server accelerator that increases the operating speed of your server. This program uses the Internet service provider's equipment as a graphics cache to allow the rapid flow of information on your Web server. This version of FireSite also provides "multihoming," which allows one server to have numerous domain names. (Clearway Technologies; http://www.clearway.com)

GoLive CyberStudio provides WYSIWYG editing and sophisticated layout capabilities for Web pages. This program lets you set up a grid and place objects within it by dragging. Then the software generates HTML codes to match your design. Another view of the content shows only HTML codes, which makes editing simple; still another view shows all the documents and links in a site. Especially good for sites with multimedia elements. (GoLive Systems; http://www.golive.com)

LogDoor is a tool for monitoring and logging server access that can detect and locate broken links, bad links to your site or sites, unreadable pages, traffic on one or more sites, and a real-time summary of site activity. (Open Door Networks; http://www.opendoor.com)

MacDNS is a domain name server for the Mac OS. Its function, like that of all domain name servers, is to map the name of a specific computer on the Internet to its IP address. (Apple Computer; http://www.apple.com)

MacTCP Watcher monitors TCP operations, supplies a list of TCP connections, and reports any errors associated with TCP use. MacTCP Watcher also can trace the path TCP packets follow to a specified destination. (Peter N. Lewis; http://www.stairways.com)

NetCloak is a Web server add-on that gives you more than 30 new commands that you can use in your Web pages. NetCloak provides new commands to HTML that turn your static Web pages into dynamic ones—pages can change "on the fly" depending on the criteria you choose. Although these HTML extensions are nonstandard, they are processed entirely on your Web server, so they work with any Web browser. (Maxum Development Corporation; http://www.maxum.com)

Netscape Navigator is a Web browser. It allows you to view HTML or PDF documents on your own system or anywhere on the World Wide Web. You access pages directly by clicking underlined, hypertext links. You can also access documents on your system by choosing Open File from the File menu and then using standard Macintosh file techniques to locate and open a file. If you know the address (the URL) of a page on the Web, you can go to that page by choosing Open Location from the File menu and typing in the URL. (Netscape Communications Corporation; http://www.netscape.com)

Page Sentry is a server monitoring tool that uses real HTTP, FTP, SMTP, DNS, and Telnet client services to test the whole server. If a server fails, PageSentry alerts you. (Maxum Development Corporation; http://www.maxum.com)

Rumpus (FTP Server) is software that lets you set up and manage an FTP (File Transfer Protocol) server on your computer. This type of server is widely used for uploading and downloading files to a Web site and for archiving large documents. An FTP server also provides access to Web content, such as your HTML documents and graphics, from a remote location. (Maxum Development Corporation; http://www.maxum.com)

Tango Enterprise lets you publish databases on the Web and provides a CGI (common gateway interface) to process queries from visitors to your site and deliver the requested data. (EveryWare Development Corporation; http://www./everyware.com)

WebSTAR is the heart of your server, the program that lets users access your pages. Getting started with WebSTAR is extremely easy, but you can also learn many tricks and techniques to help make your server a better, more versatile resource. (StarNine Technologies; http://www.starnine.com)



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<hl>Welcome to the World Wide Web

Apple Internet Server Solution

Software overview and installation

É Apple Computer, Inc.

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