1-PORT **WIRELESS SERVER USER MANUAL** MODEL 509077 WRELINET



Thank you for purchasing the INTELLINET NETWORK SOLUTIONS™ 1-Port MFP USB Wireless Print Server, Model 509077. Unlike many MFP (multi-function printing) servers, it can communicate with your all-in-one printer as if it were connected directly to your computer, allowing all users to share print, scan, card reader and fax functionalities over the network. You can even monitor important information such as ink levels.

The 1-Port MFP USB Wireless Print Server features IEEE 802.11g/b wireless LAN connectivity (up to 54 Mbps data transfer rate), an Ethernet network port (10/100 Mbps Ethernet) and a USB 2.0/1.1 port, and can be connected to your 802.11g/b wireless network or wired network.

The easy-to-follow instructions in this user manual help make setup and operation relatively simple. *NOTE:* Some screen images have been modified to fit the format of this manual.

SAFETY & COMPLIANCE STATEMENTS

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC (Federal Communication Commission) Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio technician for help.

Operation is also subject to the following two conditions: 1) This device may not cause harmful interference; and 2) this device must accept any interference received, including interference that may cause undesired operation.

FCC WARNING

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

FCC RADIATION EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

RADIO FREQUENCY INTERFERENCE REQUIREMENTS

This device is restricted to indoor use due to its operation in the 2.4 GHz frequency range. The FCC requires this product to be used indoors in the 2.4 GHz



frequency range to reduce the potential for harmful interference to co-channel mobile satellite systems.

RSS-210 COMPLIANCE STATEMENT

The term "IC:" before the certification/registration number only signifies that Industry Canada technical specifications were met. Operation is subject to the following two conditions: 1) This device may not cause interference; and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

TRANSMITTER ANTENNA

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that required for successful communication. This device has been designed to operate with an antenna having a maximum gain of 5dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

IC RADIATION EXPOSURE STATEMENT

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body. This device and its antenna(s) must not be co-located or operated in conjunction with any other antenna or transmitter.

R&TTE COMPLIANCE STATEMENT

This equipment complies with all the requirements of Directive 1999/5/EC of the European Parliament and the Council of March 9, 1999, on radio equipment and telecommunication terminal equipment (R&TTE) and the mutual recognition of their conformity. The R&TTE directive repeals and replaces Directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) as of April 8, 2000.

EU COUNTRIES INTENDED FOR USE

The ETSI version of this device is intended for home/office use in Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the U.K., and is also authorized for use in EFTA member states Iceland, Liechtenstein, Norway and Switzerland. (EU countries not intended for use: none.)

GENERAL SAFETY

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this manual and of the computer manufacturer must, therefore, be followed at all times to ensure the safe use of the equipment. Be sure to read and follow all warning notices and instructions.

- Do not continue operating if you notice smoke or unusual odors or sounds.
 Continued operation may result in electric shock or fire. Immediately turn off power and remove the power adapter from the outlet, then contact your vendor.
- Do not disassemble or modify the product in any way (unless described in the instructions). Doing so may cause injury or electric shock.
- · Make sure you use the power adapter supplied with the MFP server. Use of a



different power adapter could damage the MFP server.

- Do not handle plugs with wet hands. Doing so may result in electric shock.
- Do not use damaged power cords. Doing so may result in electric shock or fire. Observe the following when handling power cords:
 - · Do not modify power cords.
 - Do not place heavy objects on power cords.
 - Do not sharply bend, twist or pull on power cords.
 - Do not route power cords near heating equipment.
- Do not attempt to repair the power adapter or cord. Contact your vendor to order a new one.
- Handle power plugs with care. Improper handling may result in fire. Observe the following when handling power plugs:
 - Do not plug in power plugs that are dusty or dirty.
 - · Firmly plug in power plugs all the way.
- Periodically remove power plugs from the outlet and clean the base of the plug.
 If power plugs are left plugged into an outlet for long periods, dust may accumulate near the base, posing a risk of short-circuiting and fire.
- To ensure safety, always unplug the power adapter from the outlet when the product will not be used for an extended period.
- Make sure to connect the cables to the correct ports.
- Place connecting cables carefully so that no one will step on them or trip over them.
- Avoid locations that are subject to rapid changes in heat or humidity, shocks or vibrations, or dust.
- Do not expose the device to dampness, dust or corrosive liquids.
- Discontinue use if a foreign object or water or other liquid enters the product.
 Continued use may result in electric shock or fire. Immediately remove the power adapter from the outlet and then contact your vendor.

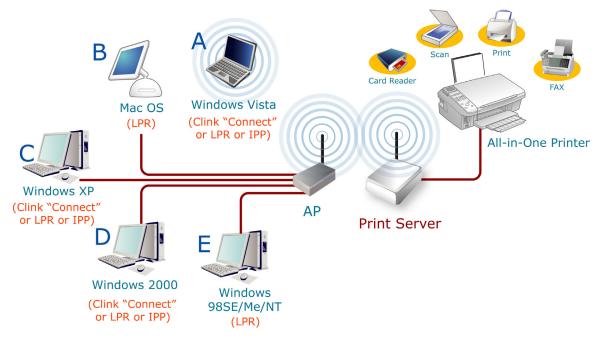


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1. MFP PRINT SERVER MODES

The 1-Port MFP USB Wireless Print Server supports two modes: All-in-One MFP Server mode and MFP Server mode. Users can choose one of these modes to share all-in-one or other printer functions through the MFP print server.



All-in-One MFP Server Mode

The MFP print server can communicate with an all-in-one printer as if it were connected directly to your computer. This enables users to connect to the all-in-one for sharing print, scan, card reader and fax functions (if available). The supported operating systems in this mode are Windows 2000 SP4 and above, Windows XP SP1 and above, and Windows Vista 32 and Vista 64. The All-in-One MFP Server mode doesn't support Windows 98SE/Me/NT, Linux/Unix or MAC OS. For detailed instructions, refer to the following chapters in this manual:

- 2. Using the All-in-One Printer
- 3. MFP Manager

MFP Server Mode

The MFP print server also supports LPR, IPP and RAW printing protocols, which enable users to share the print function from an all-in-one printer. The supported operating systems are Windows 98SE/Me/NT/2000/XP/Server 2003/Vista, and MAC OS 9.x and above. For detailed instructions, refer to the following chapters:

- 6. LPR Printing
- 7. RAW Printing
- 8. IPP Printing
- 9. MFP Print Server Installation in MAC OS



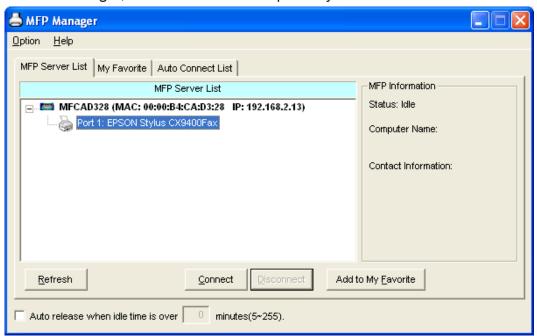
2. USING YOUR ALL-IN-ONE PRINTER

After you've followed the install wizard to finish the all-in-one installation, you're able to start sharing print, scan, card reader and fax functions.

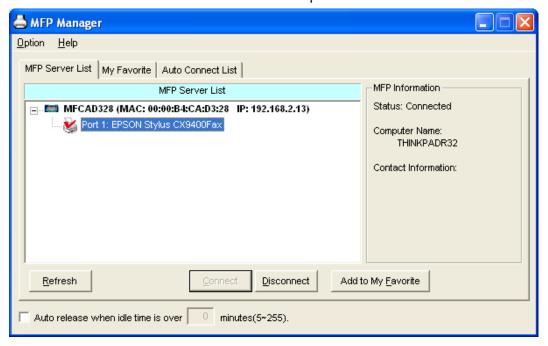
To print a document, just follow the steps you normally would.

To scan or read the memory card, follow the steps below.

- On the desktop, go to Start, then All Programs; select "MFP Server Utilities\
 MFP Manager."
- 2. In "MFP Manager," select the all-in-one printer you would like to use.



3. Click "Connect" to connect to the all-in-one printer.



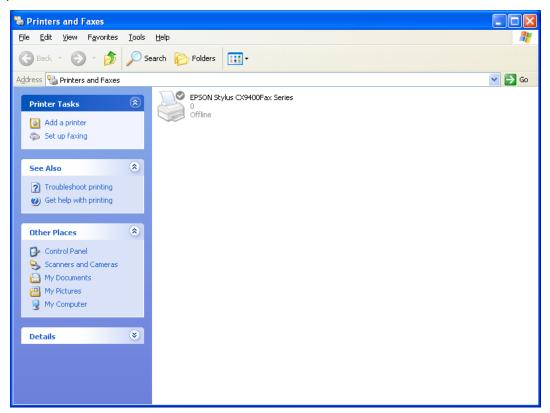
4. You can use the all-in-one printer for printing, scanning or reading the memory card over the MFP print server.



NOTE: Once you've finished using the all-in-one printer, click "Disconnect" to release it. Other users can't use the all-in-one printer until it's released.

2.1 Printing

The all-in-one printer will be added to "Printers and Faxes" after the printer is installed. You can select the printer for printing a document by following the usual steps.



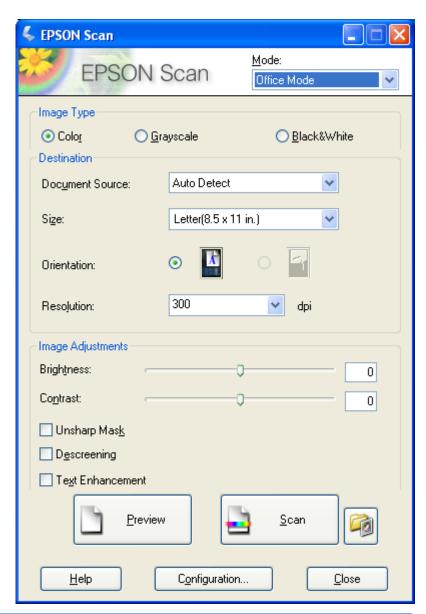
NOTE: If you've sent a print job to it while the all-in-one printer is connecting to another user, you may be prompted that the device is not found or the document failed to print. Re-send the print job when the all-in-one printer is idle or not connected.

2.2 Scanning

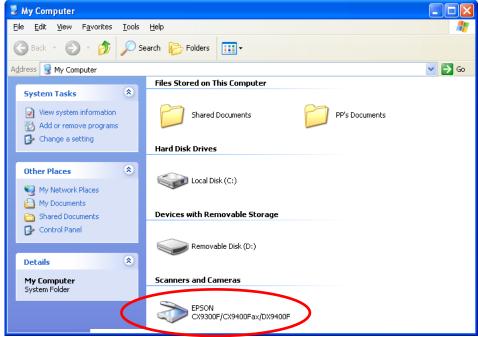
The all-in-one printer provides a scan utility to scan pictures or documents. In Windows XP/Vista, you can also scan from the Windows XP/Vista scanning utility or use third-party scanning utilities such as Photoshop, Photoimpact, Paint Shop Pro, etc.



EXAMPLE: EPSON CX-8400/9400 Series Utilities



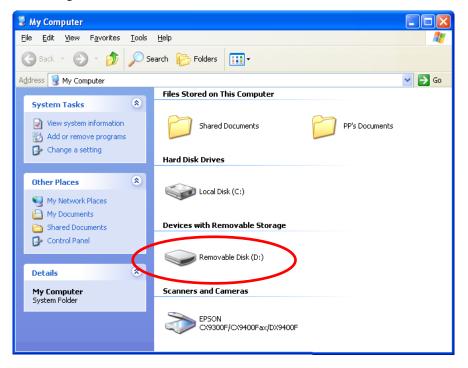
Windows XP Scanning Utility





2.3 Reading Memory Cards

You can read the files from a memory card through the MFP print server.

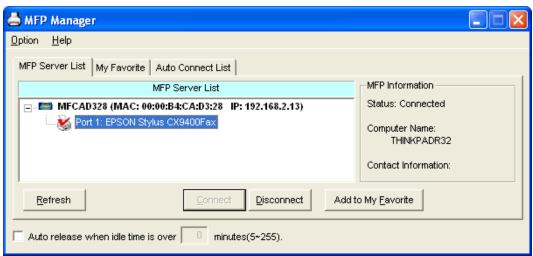


3. MFP MANAGER

3.1 MFP Server List

MFP Manager can automatically find the MFP print server in the network and show it in the MFP Server List. You can select an all-in-one printer and click "Connect" to use the printer as if you had directly connected the printer to your computer through a USB cable. MFP Manager also displays info about the connection status. When you don't want to use the all-in-one printer, click "Disconnect" so other users

can use it. If you forget to disconnect, the MFP print server will automatically be disconnected after five minutes. (You can re-configure the time period: Refer to the settings below.) If you unplug the USB cable or turn off the all-in-one printer, the device will not display in the list. After you reconnect the USB cable or turn on the all-in-one printer, you need to click "Refresh" and "Connect" in MFP Manager to recover the connection.





MFP Server List

MFP Server List

The MFP server list will list all the MFP servers within the network. You can find information about the MFP servers. including MFP server names, MAC IDs, IP addresses and the device that is connected to the MFP server.

MFP Server/MFP Information

When you click on an MFP server in the MFP server list, you'll see the MFP server description and the Idle Timeout setting for that MFP server.

MFP Server Description – This is a description that can help users to identify where or what the MFP server is.

Idle Timeout – From here, each user can know his/her auto-release setting. To avoid occupying the all-in-one printer unnecessarily, each user is recommended to enable the "Auto Release" setting at the bottom of the MFP Manager utility. It is used to automatically disconnect the connection after the all-in-one printer is idle for a specified period of time. By default, it is enabled to release the all-inone printer after five minutes.

When you click on "all-in-one printer" in the MFP server list, you'll see information that includes status, the computer name and contact information.

Status – This displays the status of the all-in-one printer: "Connected," "Idle" or "Busy." "Connected" indicates that you are connecting the all-in-one printer. "Idle" indicates that the all-in-one printer is not being used. "Busy" indicates that another user is using the all-in-one printer to scan, print, etc.

Computer Name - This is the computer name of the user who is connecting to the all-in-one printer.

Contact Information – When the current user has set his contact information, you can see it here. You can contact the current user to disconnect the all-in-one printer.

Refresh

Refreshes the MFP server list immediately.

Connect

Lets the all-in-one printer be connected to your computer.

Disconnect

Disconnects the selected all-in-one printer.

Add to My Favorite

Adds the MFP servers that you frequently use to the My Favorite list.

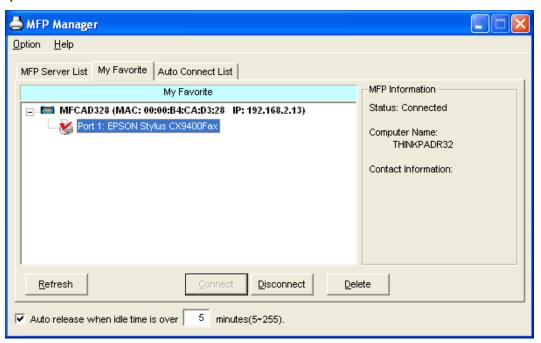
idle time is over xx minutes (5-255)

Auto Release when To avoid occupying the all-in-one printer overtime, you can set up the auto release function. It is used to automatically disconnect the current connection after the all-in-one printer is idle for a specified period of time. By default, it is enabled to auto release the all-in-one printer after five minutes. You can set the time period longer; the maximum setting is 255 minutes.



3.2 My Favorite

You can add frequently used MFP print servers to the My Favorite list. The MFP print servers in the list will be added to the quick link list when you right-click the MFP server icon in the system tray. Refer to Section 3.4 to learn about the quick setup functions.



My Favorite List

My Favorite List

The My Favorite list will list your favorite MFP servers. You can find information about the MFP servers, including MFP server names, MAC IDs, IP addresses and the device that is connected to the MFP server.

MFP Server/MFP

Information

Refresh

Connect

Disconnect

Delete

Auto Release when idle time is over xx minutes (5-255)

The information listed here is the same as on the MFP

server list (see Section 3.1).

Refreshes the MFP server list immediately.

Lets the all-in-one printer be connected to your computer.

Disconnects the selected all-in-one printer.

Deletes the selected MFP server from the My Favorite list.

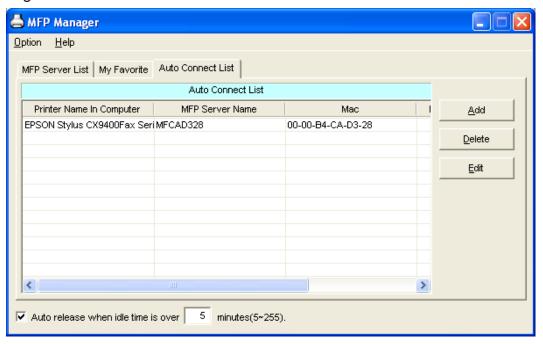
To avoid occupying the all-in-one printer overtime, you can set up the auto release function. It is used to automatically disconnect the current connection after the all-in-one printer is idle for a specified period of time. By default, it's enabled to auto release the all-in-one printer after five minutes. You can set the time period longer; the maximum setting is 255 minutes.



3.3 Auto Connect List

To let the system occupy the MFP server automatically when you want to print a document, you can add the all-in-one printer to your Auto Connect list. The system will send the printing jobs to the all-in-one printer when the MFP server is idle and is not being connected.

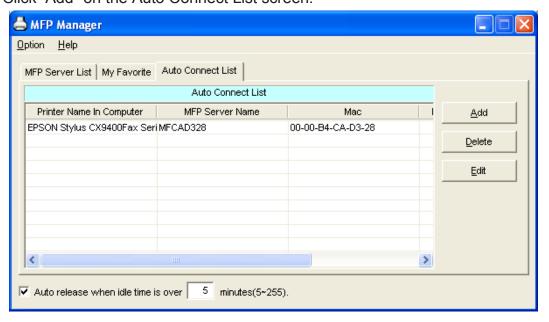
When you install the all-in-one printer, the MFP server automatically enables the settings.



NOTE: If you've sent a printing job to the all-in-one printer while it's connecting to another user, you may be prompted that the device is not found or the document failed to print. Follow the prompt to re-try, and the printer will queue your printing job in your computer spooler. The MFP server will then print the job after the all-in-one printer is idle or disconnected.

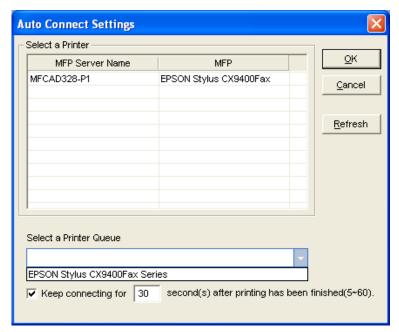
To add the all-in-one printer to the Auto Connect list, follow the steps below.

1. Click "Add" on the Auto Connect List screen.

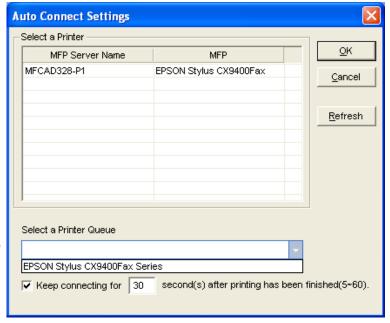




2. The MFP servers within the network will be displayed. Select the MFP server you'd like to add to the list.



3. Select the all-in-one printer that's connected to the selected MFP server. Click "OK." **NOTE:** In some cases. new printing jobs cannot be printed because the all-in-one printer is already disconnected. This causes unformatted messages to be printed out. "Keep connecting for 30 second(s) after printing has been finished (5-60)" is enabled by default to help avoid this kind of situation.



4. The setup is finished.

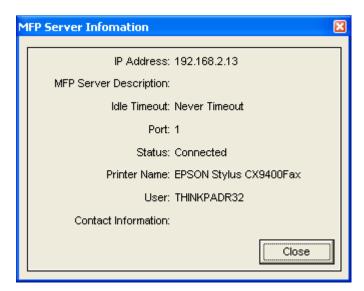
3.4 Quick Setup

Right-click on the MFP server icon in the system tray to see the MFP servers you

have designated for the My Favorite list. You can directly connect or disconnect the all-inone printer and check its status from here.







Quick Setup	
Status	The current status of the all-in-one printer will be displayed here. "Connected" indicates that you are connecting to the all-in-one printer. "Busy" indicates the all-in-one printer is being used. "Idle" indicates that the all-in-one printer is free to use by any users.
Connect	If the all-in-one printer is free to use, "Connect" will be available. Otherwise it will be grayed out.
Disconnect	Disconnect the selected all-in-one printer. "Disconnect" will be available only for the current user.
Information	Click to see more information about the MFP server and the all-in-one printer (as shown above).

3.5 Option Settings

3.5.1 General Settings





General Settings

Windows starts

Run MFP Manager when Execute MFP Manager when Windows starts every time. By default, it is enabled.

Minimized when starting MFP Manager

Minimize MFP Manager to an icon in the system tray when you start MFP Manager. By default, it is enabled.

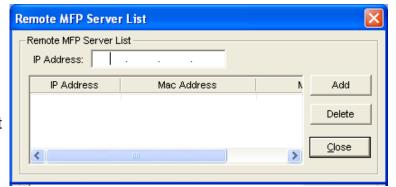
Refresh status every xx seconds. (5-300)

Set up the refresh interval for device status update. By default, it is enabled.

Your Contact Information | Enter your contact information here. When you connect to the all-in-one printer, your contact information will be displayed on the right side of the program for other users to contact you.

3.5.2 Search for an MFP Server

If a particular MFP server is not in the same network as your computer, you can enter the IP address of the MFP server to do a remote search. The MFP server in the Remote MFP Server List will be added to the MFP Server list for you to configure. NOTE: If the



remote MFP server you've searched for is behind a NAT router, the MFP server may not operate normally.

4. SERVER CONFIGURATION

4.1 Introduction

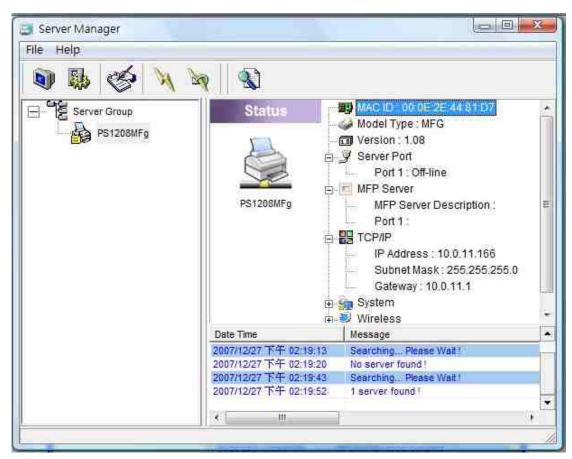
This chapter introduces the MFP print server's system configuration utility in a Windows environment. This utility provides the most complete management and configuration functions on the MFP server side. This utility only provides configuration functions for the MFP server itself; it does not include configuration functions for the client side or other file servers in the network environment.

The Configuration utility provides these configuration and management functions:

- Search MFP Server: Search all available MFP servers on the network.
- Status: Display MFP server network status.
- General Configuration: Configure general settings about the MFP server, such as server name and password.
- TCP/IP Configuration: IP address and DHCP server configuration.
- System Configuration: MFP server network ability setting and firmware upgrade.
- Wireless Configuration: Search for the available wireless networks and configure the wireless settings of the MFP server for the wireless connection.
- MFP Server Management: For administrators to manage the MFP server. Administrators can force-disconnect the current connection of the MFP server.
- Report: List the information of all available MFP servers on the network.



4.2 Search for All Available MFP Servers

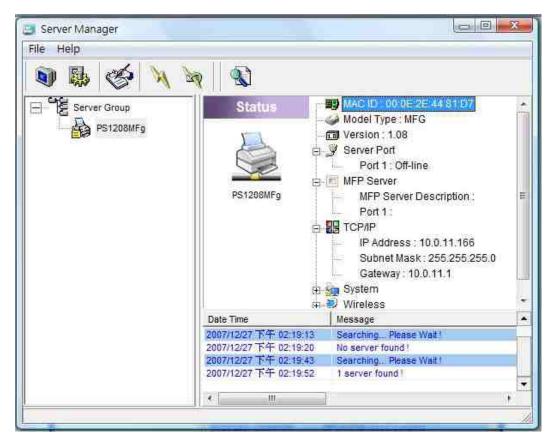


To run the Server Manager configuration utility, click the Search icon (left) on the tool bar. The configuration utility will delay for several seconds because the utility is using the system's available network protocols to search for all MFP servers on the network. All available MFP servers will be listed under "Server Group" on the left side of the screen.

Select the MFP server you would like to configure from the list. At the same time, the system will display the selected MFP server's status on the right side of the screen.



4.3 Status of the MFP Server



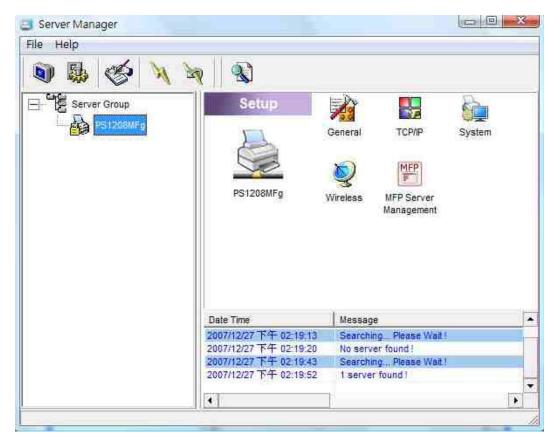
Click the Status icon (left) on the tool bar. The status of the currently selected MFP server will be shown on the right side of the screen. The information about the MFP server includes MAC ID, model type, firmware version, status of each server port, IP address, subnet mask, default gateway and supported printing protocols.



You can restart the MFP server by clicking the Reboot icon (left).



4.4 Set Up the MFP Server



Click the Setup icon (left) on the tool bar. The setup items of the currently selected MFP server will be shown on the right side of the screen.

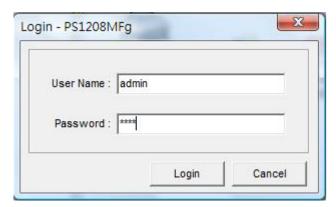
Double-click one of the icons to set up the selected MFP server. A screen will display to verify the username and password of the MFP server. The default values: Username = admin; Password = 1234.

NOTE: When you've finished with the settings, click the Reboot icon (left) to re-start the MFP server to let the settings take effect.



4.5 General Configuration

Double-click the General icon to display the login window, then enter your username and password. The default values: Username = admin; Password = 1234.



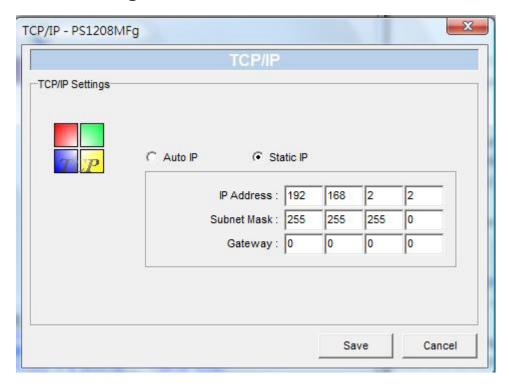


After entering the username and password, the General configuration screen (above) will display, presenting basic MFP server information. You can configure the server name, username and password here.

Server Name is the name of the MFP server. You can use this name to identify the MFP server when searching for the MFP server using the Server Manager utility.
 User Name/Password is used to authenticate the administrator to log in to the MFP server to configure it from the Server Manager utility or the Web Management tool.



4.6 TCP/IP Configuration



Double-click the TCP/IP icon to display the TCP/IP configuration screen.

You can configure the MFP server to automatically get an IP address from a DHCP server or manually specify a static IP address. The MFP server also has a built-in DHCP server, which you can enable manage the IP address for you.

IP Address Assignment

If you need the MFP server to automatically get an IP address from a DHCP server, select "Auto IP." You also can select "Static IP" to manually assign the IP address, subnet mask and gateway for the MFP server. The default IP address settings of the MFP server are as follows.

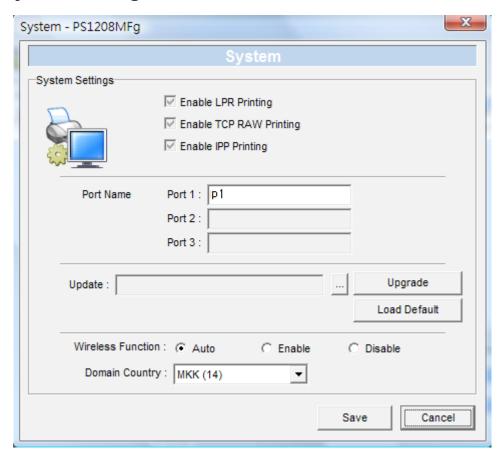
IP Address: 192.168.2.2 Subnet Mask: 255.255.255.0

Auto IP: The IP address information of the MFP server obtained from a DHCP server will be displayed in the address field. If no DHCP server is present, you need to assign the information manually.

Static IP: Manually assign the IP address information in the same network with your computer to the MFP server.



4.7 System Configuration



Double-click the System icon to display the System configuration screen, where you can see all available printing protocols and upgrade the firmware.

Port Name: You can name the port the MFP server connects to. The default port name is "p1."

Upgrade Firmware: You can use this Upgrade Firmware tool to upload the newest firmware for the MFP server. Click and select the correct firmware in your PC. After selecting the firmware file, click "Upgrade" to finish the firmware update process. **NOTE:** Before you upgrade the firmware, make sure the IP address settings of the MFP server are in the same network as your computer.

Load Default: Click to reset the MFP server to default factory settings.

Wireless Function: Select "Auto," "Enable" or "Disable" to manually configure the wireless function.

• "Auto" is the default setting of the MFP server. In this mode, the MFP server will automatically decide to enable or disable the wireless function. When the MFP server starts up, it will auto-detect if the LAN port is connected to an active network by an Ethernet cable. If this is the case, the MFP server will run in Ethernet mode. If the MFP server is not connected to an active network by an Ethernet cable, the MFP server will run in wireless LAN mode. You can plug the Ethernet cable into the MFP server, then, after configuring the MFP server features and wireless settings, unplug the Ethernet cable to enable the wireless connection. This makes the configuration much easier without creating the wireless connection in advance. **NOTE:** After setting the wireless function, remove the Ethernet cable and then remove and re-connect the power cable of the MFP server to activate the wireless connection.



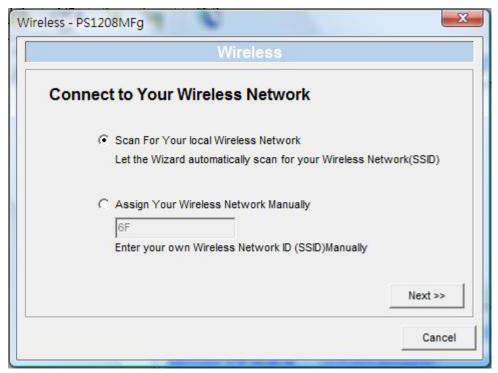
- "Enable" activates the wireless function only: The MFP server's wireless LAN will be enabled and Ethernet will be disabled.
- "Disable" de-activates the wireless function: The MFP server's wireless LAN will be disabled and Ethernet will be enabled.

Domain Country: The wireless channels vary from country to country. Generally, the channels are from 1 to 11 in the U.S. and from 1 to 13 in Europe. The operating channel will be set at the factory. If you move or travel to a different country, set the available channels according to your location.

4.8 Wireless Configuration

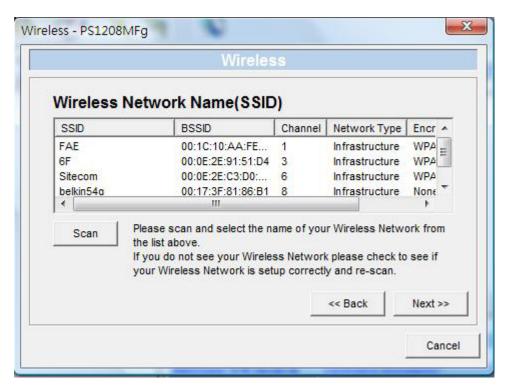
Double-click the Wireless icon and enter your username and password to display the wireless configuration screen. The default values: Username = admin; Password = 1234.

Infrastructure Mode



In Infrastructure mode, you need to let the MFP server associate with an access point. You can let the MFP server scan for an available access point automatically or manually assign the SSID of the access point you want to use. If you choose to let the MFP server scan for an available access point, the following screen will display.





The table will list the available access points near the MFP server. Select an access point on the list and click "Next." If you can't find the access point that you want to use, click "Scan" to let the MFP server scan again.

The 1-Port MFP USB Wireless Print Server supports WEP, WPA-PSK and WPA2-PSK security modes. Make a selection from the Security Mode drop-down menu, then follow the corresponding procedure below to implement your chosen mode.

WEP Security Mode

To use WEP encryption, select "WEP(ASCII)" or "WEP(HEX)." The wireless security setting should match other wireless devices in the same network.







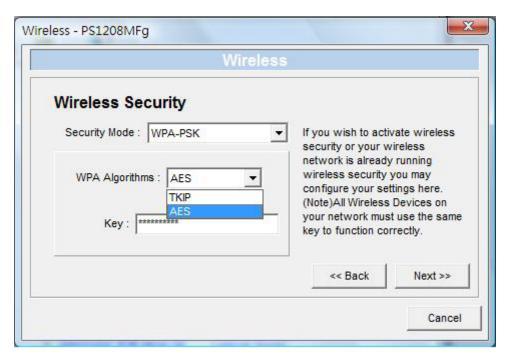
You can select "64 bit" or "128 bit" length and "Hexadecimal" or "ASCII" format for the encryption key. A longer key length can provide stronger security, but lower the communication performance.

PassPhrase: This entry simplifies the WEP encryption process by automatically generating the WEP encryption keys for the MFP server. This setting is only valid when the security mode is in "WEP(HEX)."

Key 1 to Key 4: Enter four key values by following the rules below and select one key as the default key.

- If the key length is 64-bit, enter 10-digit Hex values or 5-digit ASCII values as the encryption keys. For example: "0123456aef" or "Guest."
- If the key length is 128-bit, enter 26-digit Hex values or 13-digit ASCII values as the encryption keys. For example: "01234567890123456789abcdef" or "administrator."





Both "WPA-PSK" and "WPA2-PSK" require that you select advanced encryption methods — i.e., TKIP or AES — and enter a set of keys.

TKIP: Temporal Key Integrity Protocol (TKIP) changes the temporal key every 10,000 packets, ensuring much greater security than standard WEP security.

AES: Developed to ensure the highest degree of security and authenticity for digital information, this is the most advanced solution defined by IEEE 802.11i for security in a wireless network.

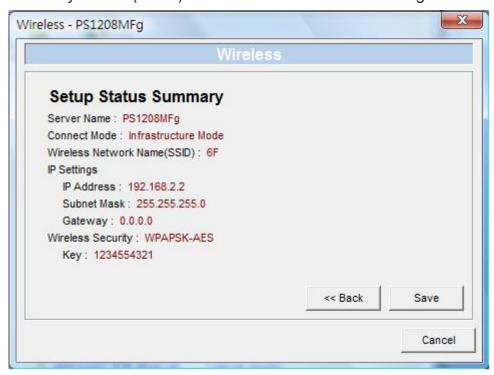
Key: Enter 8 to 63 digits in ASCII format as the authentication key within the network.

When you finish configuring the wireless security, click "Next."





You can choose to let the MFP server automatically obtain IP settings with DHCP Client or manually assign the IP settings. If you manually assign the IP settings, enter the IP address, subnet mask and default gateway address (as shown above). When you finish configuring the IP settings, click "Next" to display the Setup Status Summary screen (below) and confirm the IP address configuration.

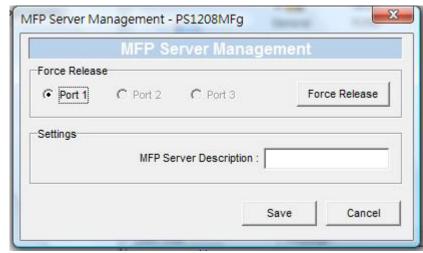


Click "Save" to save the wireless configuration.

4.9 MFP Server Management

Double-click the MFP Server Management icon to display the configuration screen, from which you can manage the MFP server.

Force Release: Select the port number, then click "Force Release" to help disconnect the current connection

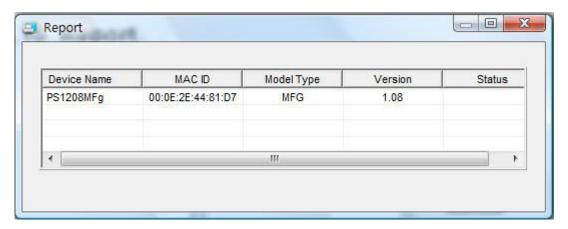


between the user and the connected device. This is very useful when a user forgets to disconnect the all-in-one printer. The administrator can release the connection so the all-in-one printer is available for use.

MFP Server Description: Enter a description of the MFP server — such as its location or other information — to help users find the MFP server more easily.



4.10 Report



Click the Report icon (left) on the tool bar to display the Report screen. This lists basic information about all available MFP servers on the network, including the device name, MAC ID, model type and firmware version.

5. WEB MANAGEMENT

5.1 Introduction

The MFP server can be configured and managed on the Web. Through the local area network, or even the Internet, the administrator can easily configure and manage the MFP server's various main functions in a browser. Simply enter the MFP server's IP address into your browser's address field to manage an MFP server through its built-in Web server. The default settings:

IP Address: 192.168.2.2 User Name: admin Password: 1234

5.2 Login

You may use any Web browser to review the status or configure the settings of the MFP server. After entering the IP address of the MFP server, a login page

displays. Enter the correct username and password in order to proceed to the Web Management pages.

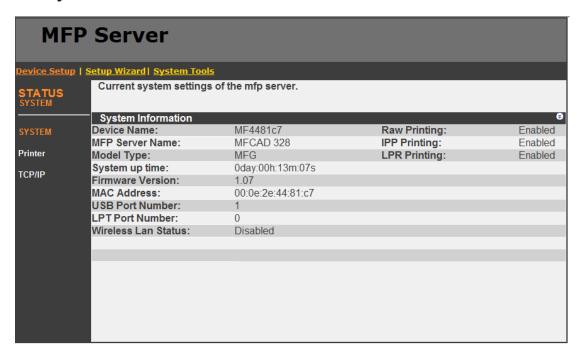
The default values: Username = admin; Password = 1234.





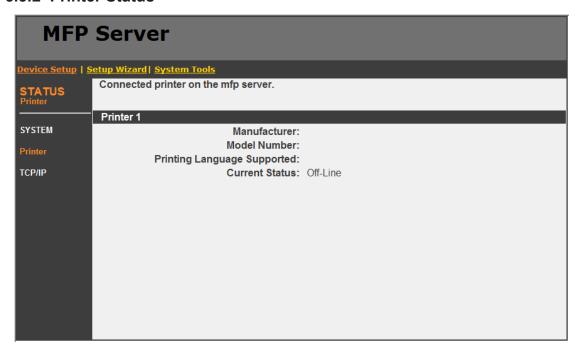
5.3 Device Status

5.3.1 System Status



System Information includes device name, MFP server name, model type, firmware version, MAC address, wireless configuration and the protocols enabled status.

5.3.2 Printer Status



This screen lists information and status of the all-in-one printer or the printer connected to the MFP server port. The status conditions — detailed below — are "Connected," "Ready," "Off Line" or "Paper Out."

Connected: A user has clicked "Connect" in the MFP Manager utility. The user's



computer and the all-in-one printer are connected.

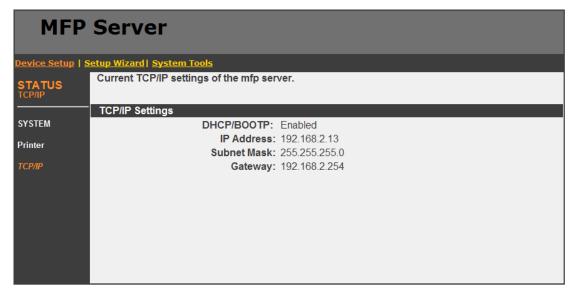
Ready: The printer is not connected to a user and is ready to use.

Off Line: The printer is not connected to the MFP server through a USB cable, or

it is turned off.

Paper Out: The printer is not connected to a user and is out of paper.

5.3.3 TCP/IP Status



This screen lists all TCP/IP settings of the MFP server, including the IP address, subnet mask and gateway. It also can tell whether the DHCP server is on or off.

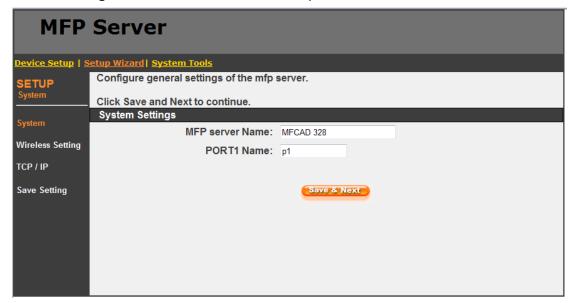
5.4 Setup Wizard

NOTE: You can configure the MFP server from the Setup Wizard. For the changes to take effect, click "Save Settings" in the menu on the left to reboot the MFP server.

5.4.1 System

5.4.1.1 General Settings

You can change the MFP server name and port name on this screen.

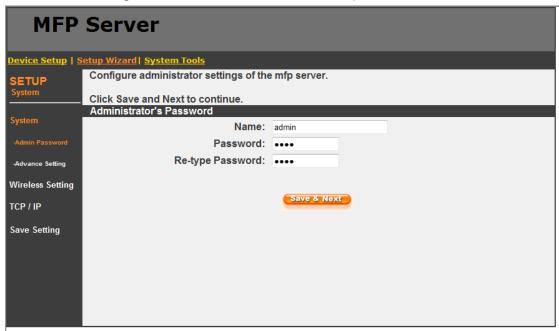




MFP Server Name: The name of the MFP server, which you can use to identify the MFP server when you're searching by using by the Server Manager utilities.
PORT Name: The name of the port which MFP server plugs into. The default port name is "p1."

5.4.1.2 Admin Password

You can also change the administrator's name and password on this screen.



MFP Server Name: The name of the MFP server, which you can use to identify the MFP server when you're searching by using by the Server Manager utilities.

Password: In alphanumeric format, enter the password you want to change for the MFP server. The default password is 1234.

Re-type Password: Enter the same password for the MFP server again.

5.4.1.3 Advanced Settings

Some advanced features of the MFP server can also be set here.

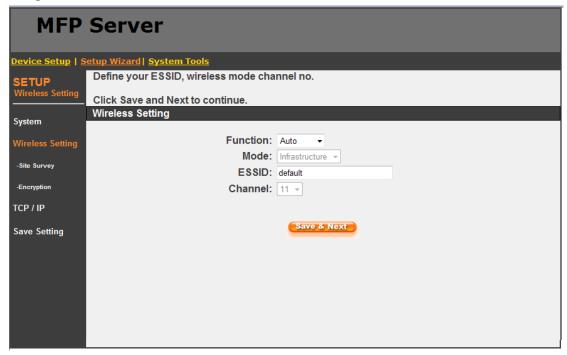




TCP/IP Printing (LPR/IPP/RAW): The MFP server supports the TCP/IP network protocol and LPR/IPP/RAW printing protocols. By default, these protocols are enabled.

5.4.2 Wireless

If you want to use the MFP server through a wireless LAN, set up the MFP server through Ethernet first and make sure your wireless LAN setting is correct. After setting the wireless LAN, unplug the Ethernet cable and restart the MFP server. Then you can start to use the MFP server through the wireless LAN. If the wireless configuration doesn't work, plug in the Ethernet cable again, re-start the MFP server and configure the MFP server through Ethernet until the wireless LAN settings are correct.



You can enable/disable the wireless function and set up the wireless parameters — including Function and ESSID — for the MFP server from here. You can manually set the wireless network that you want to connect on this screen or use the Site Survey screen to automatically search for an available wireless network and associate with it.

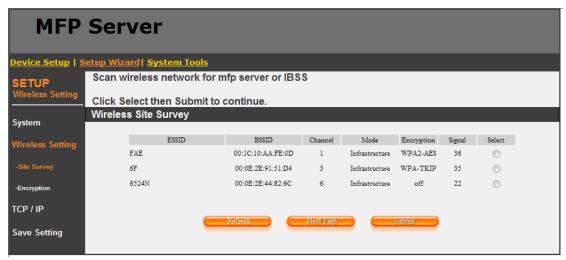
Function: Allows you to disable, enable or let the MFP server auto-select to connect to a wired or wireless network. If "Disable" is selected, the MFP server can only connect to the network through wired Ethernet. If "Enable" is selected, the MFP server can only connect to the network through a wireless LAN. If "Auto" is selected, the MFP server can automatically decide to enable or disable the wireless function.

The MFP server only can work in Ethernet or wireless LAN mode. It can't work in both Ethernet and wireless LAN mode at the same time. When the MFP server starts up, it will auto-detect if the LAN port is connected to an active network by an Ethernet cable. If the MFP server is connected to an active network by Ethernet cable when starting up, the MFP server will run in Ethernet mode. If the MFP server is not connected to an active network by Ethernet cable when starting up, the MFP server will run in wireless LAN mode. The MFP server default mode is "Auto."



ESSID: The unique name identified in a wireless LAN. The ID prevents any unintentional merging of two co-located WLANs. Make sure that the ESSIDs of all stations and access points in the same WLAN network are the same. **Channel Number:** "Auto" adjusts it automatically; "Enable" lets you set it manually.

5.4.2.1 Site Survey

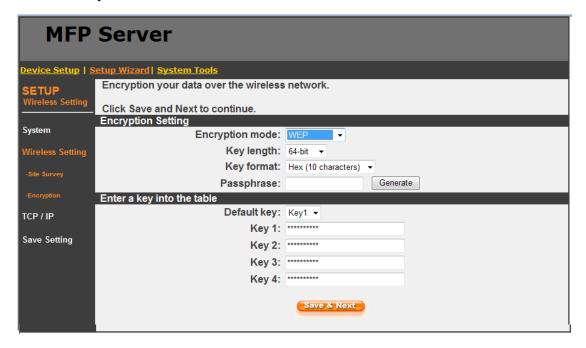


You can use the Site Survey screen to search for available access points in your location. In the list is the information for all available access points or wireless stations, including the SSID, BSSID, channel, type, encryption method and signal strength. You can select one wireless device in the list for this MFP server to associate with or go back to the Wireless screen (see 5.4.2 – Function) to manually set up the wireless parameters.

5.4.2.2 Encryption

This MFP server supports WEP, WPA-PSK and WPA2-PSK security modes. Select one of them from the drop-down menu in the Encryption Mode field. The wireless security setting should match other wireless devices in the same network.

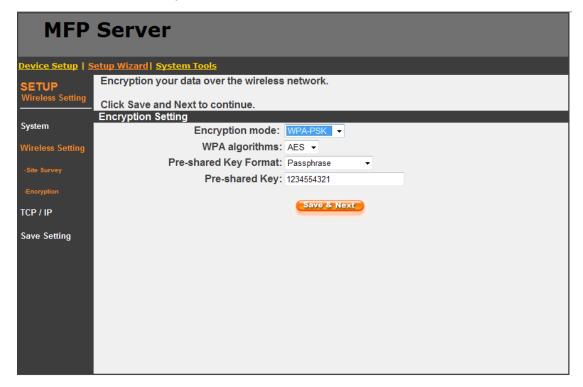
WEP Security Mode





- **Key Length:** Choose "64-bit" to use WEP with 64-bit key length encryption or choose "128-bit" to use WEP with 128-bit key length encryption. The longer key length can provide better security but a reduced transmission throughput.
- **Key Format:** You can select ASCII characters (alphanumeric format) or hexadecimal digits (in the "A-F," "a-f" and "0-9" range) to be the WEP key.
- **Passphrase:** This simplifies the WEP encryption process by automatically generating the WEP encryption keys for the MFP server.
- **Default Key:** Select one of the four keys to encrypt your data. Only the key you select in the "Default key" field will take effect.
- **Key 1 Key 4:** The WEP keys are used to encrypt data transmitted within the wireless network. Fill in the field as directed below.
 - 64-bit WEP: Input 10-digit hex values (in the "A-F," "a-f" and "0-9" range) or 5-digit ASCII characters as the encryption keys. For example: "0123456aef" or "Guest."
 - 128-bit WEP: Input 26-digit hex values (in the "A-F," "a-f" and "0-9" range) or 10-digit ASCII characters as the encryption keys. For example: "012345678901 23456789abcdef" or "administrator."

WPA-PSK Mode Security Mode



WPA-PSK requires users to select the advanced encryption method — i.e., TKIP or AES — and enter a set of keys.

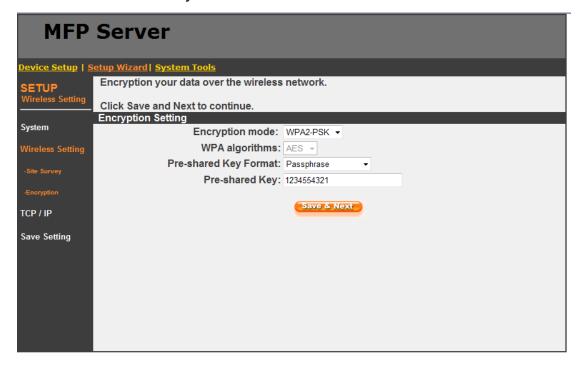
TKIP: Temporal Key Integrity Protocol (TKIP) changes the temporal key every 10,000 packets, ensuring much greater security than standard WEP security.

AES: Developed to ensure the highest degree of security and authenticity for digital information, it's the most advanced solution defined by IEEE 802.11i for security in the wireless network.

WPA Pre-Shared Key: Enter 8 to 63 digits in ASCII format to be the key for authentication within the network.

When you finish entering settings, click "Save & Next" to confirm the configuration.

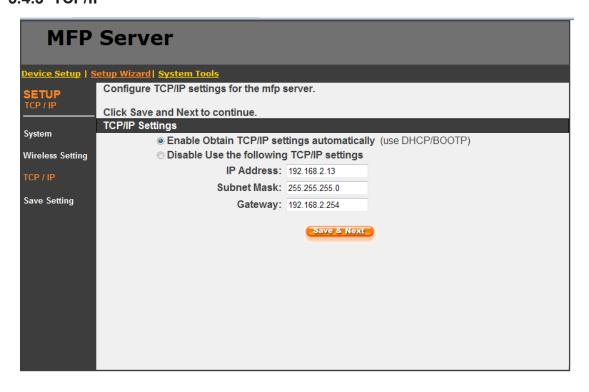




- **TKIP:** Temporal Key Integrity Protocol (TKIP) changes the temporal key every 10,000 packets, ensuring much greater security than standard WEP security.
- **Pre-shared Key Format:** Select the type of pre-shared key: Passphrase (8 to 63 alphanumerical characters) or Hex (64 characters (in the "A-F," "a-f" and "0-9" ranges).
- **WPA Pre-Shared Key:** Enter 8 to 63 digits in ASCII format to be the key for authentication within the network.

When you finish entering settings, click "Save & Next" to confirm the configuration.

5.4.3 TCP/IP

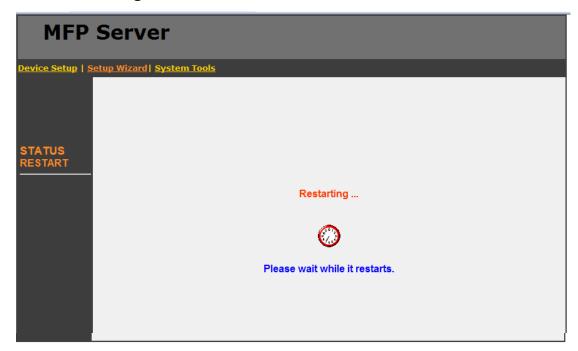




You can configure the MFP Server to automatically get an IP address from the DHCP server or manually specify a static IP address.

If you need the MFP server to automatically get an IP address from a DHCP server, select "Enable Obtain TCP/IP Settings Automatically (Use DHCP/ BOOTP)." You also can select "Disable Use the following TCP/IP Settings" to manually assign an IP address, subnet mask and gateway for the MFP server.

5.4.4 Save Settings



After configuring the MFP server, click "Save Settings" to save the settings and restart the system.

5.5 System Tools

5.5.1 Load Default



You can use this screen to restore the factory default settings. **NOTE:** All of your previous setting will be cleared.



5.5.2 Upgrade Firmware



You can upgrade new firmware for this MFP server on this screen. Click "Browse" to select the new firmware, then click "OK." The firmware will be updated within a few minutes. **NOTE:** Be aware that if you have started upgrading firmware, you need to follow all the upgrading steps or the MFP server can't return to its normal configuration.

6. LPR PRINTING

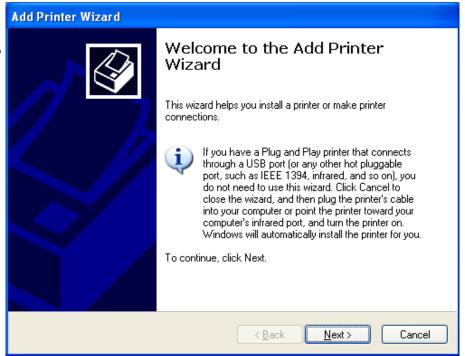
LPR (Line Printer Remote) printing allows users to connect to printers via TCP/IP for print sharing. A computer with a Windows 98SE/Me/NT/2000/XP/Server 2003/ Vista operating system can use this protocol to share printing in the network. The MFP server can support LPR printing by default.

If you install the MFP server in Windows 98SE/Me/NT, the MFP server provides a Network Port Setup tool that helps to add the LPR protocol to users' computers easily (refer to Chapter 9).

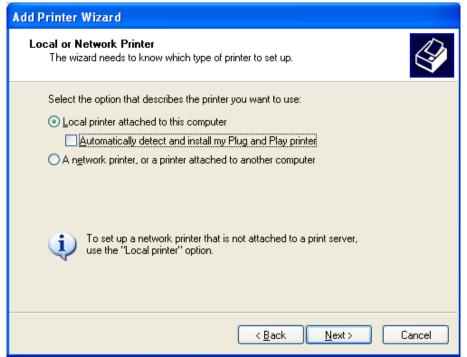
To configure the LPR setting in Windows 2000/XP/Server 2003/Vista, follow the steps below. Note that the following procedures and sample screen images are representative. For each of the Windows platforms, the procedures are similar.



- 1. On the desktop, go to Start, then Settings. Select "Printers and Faxes."
- 2. Click "Add a Printer."
- 3. When the Add Printer Wizard screen displays, click "Next."



4. Select "Local Printer attached to this computer" and click "Next."





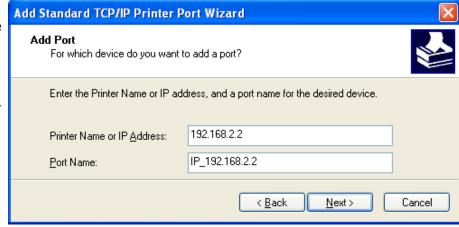
5. Choose
"Create a new port" and
"Standard
TCP/IP Port."
Click "Next."



6. Make sure that the MFP server and the all-in-one printer (or other printer) is turned on and connected to the network correctly before you continue. Click "Next."

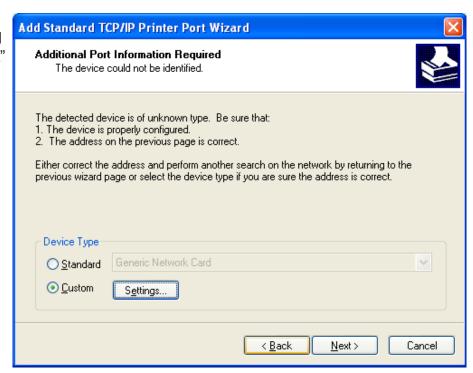


7. Enter the IP address of the MFP server in the "Printer Name or IP Address" field. Click "Next."

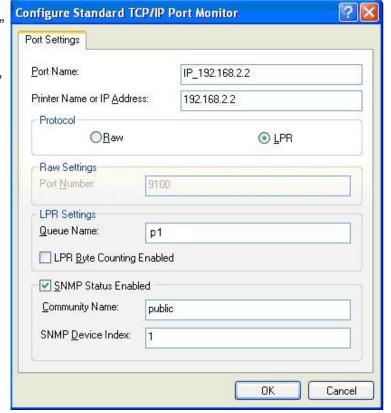




8. Select
"Custom" and click "Settings."
When you've finished the settings in Step 9, click "Next" to continue.

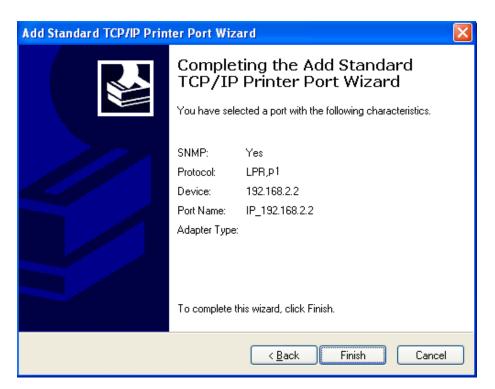


 Select "LPR" and enter "p1" in the "Queue Name" field, then click "OK." By default, the queue name of the MFP server is "p1."

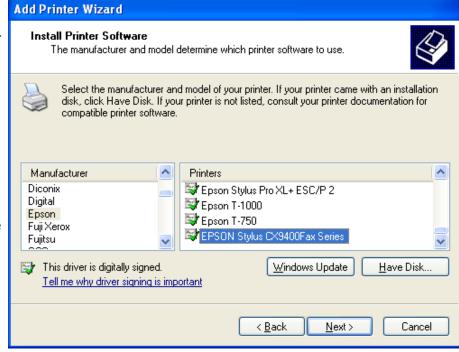




10. Click "Finish."



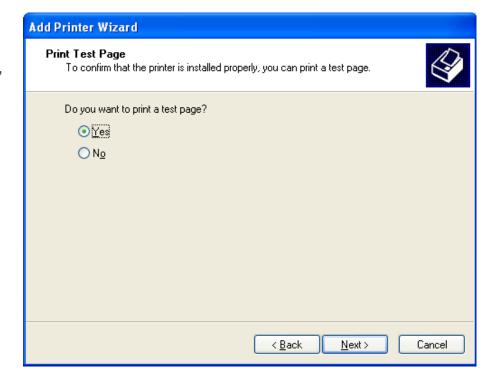
11. Select the manufacturer and the printer model and click "Next." If your printer is not on the list. click "Have Disk..." to install the driver of the printer. After installation, the printer model will be added to the list.



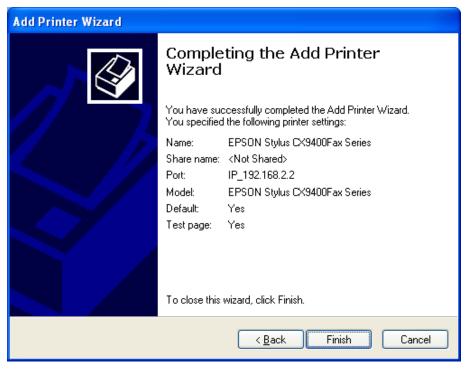
12. Choose
whether or not
to set the
printer as the
default printer.
Click "Next."



13. Choose to print a test page or not. Click "Next."



14. You have successfully added the network printer to the PC. The information for the printer is displayed on the screen. Click "Finish."



NOTE: In Windows Vista, you need to close the "Bi-directional" function for better compatibility with some printers. On the desktop, go to Start and Settings, then select "Printers." On the Printers screen, right-click the printer and select "Properties." On the Properties screen, disable the bi-directional support.

7. RAW PRINTING

RAW printing allows users to connect to printers via TCP/IP for print sharing. A computer with a Windows 2000/XP/Server 2003 operating system can use the protocol to share printing on the network. The MFP server can support RAW printing by default.

To configure the RAW setting in Windows 2000/XP/Server 2003, follow the steps below. Note that the following procedures and screen samples are representative of Windows XP. For Windows 2000/Server 2003, the procedures are similar.

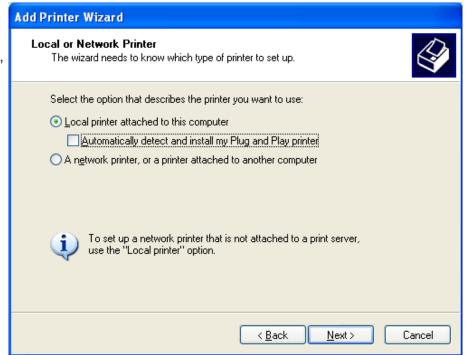
- 1. On the desktop, go to Start, then Settings. Select "Printers and Faxes."
- 2. Click "Add a Printer."



3. When the Add Printer Wizard screen displays, click "Next."

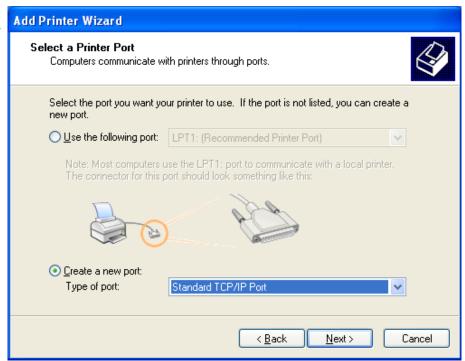


4. Select "Local Printer attached to this computer" and click "Next."

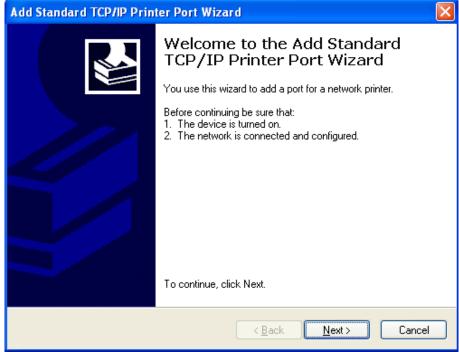




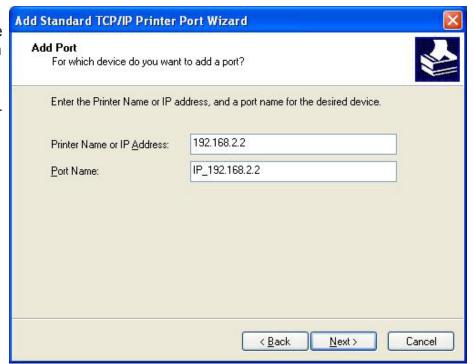
5. Choose
"Create a new port" and
"Standard
TCP/IP Port."
Click "Next."



6. Make sure that the MFP server and the all-in-one printer (or other printer) are turned on and connected to the network correctly before you continue. Click "Next."



7. Enter the IP address of the MFP server in the "Printer Name or IP Address" field. Click "Next."

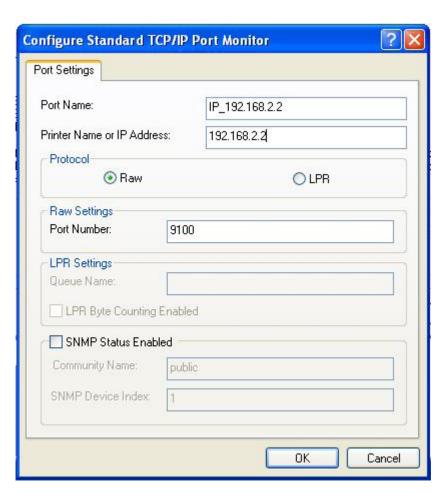


8. Select
"Custom" and click "Settings."
When you've finished the settings in Step 9, click "Next" to continue.

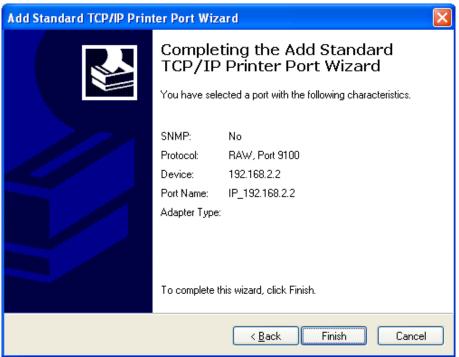




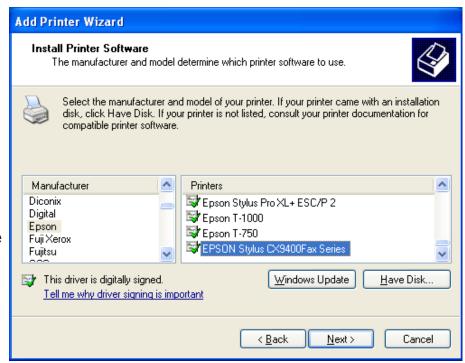
9. Select "RAW" and then click "OK."



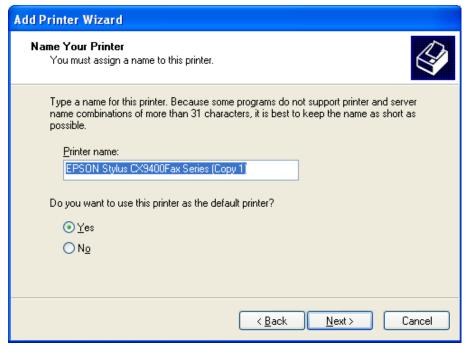
10. Click "Finish."



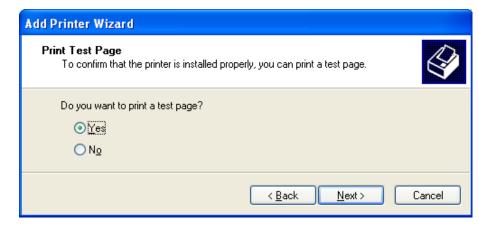
11. Select the manufacturer and the printer model and click "Next." If your printer is not in the list, click "Have Disk..." to install the driver of the printer. After installation, the printer model will be added to the list.



12. Choose
whether or
not to set the
printer as the
default printer.
Click "Next."

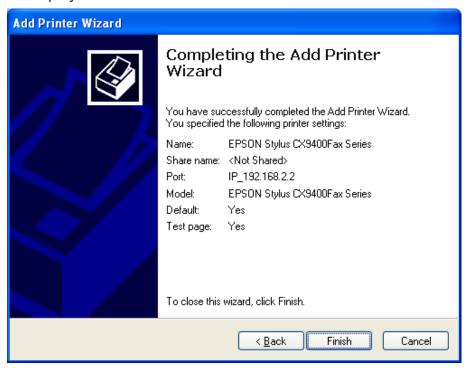


13. Choose whether or not to print a test page. Click "Next."





14. You've added the network printer to the PC successfully. The information for the printer is displayed on the screen. Click "Finish."



8. IPP PRINTING

8.1 Introduction

IPP (Internet Printing Protocol) printing provides a convenient way of remote printing service using TCP/IP. The MFP server can support IPP printing in Windows 2000/XP/Server 2003 by default. By using IPP printing, you can share the printer with all the PCs that can access the MFP server through the IP address. You can even share your all-in-one printer (or other printer) with Internet users.

8.2 System Setup

8.2.1 MFP Server Side

Make sure the MFP server has the correct IP settings. If you want to share the printers with Internet users, you have to set a real IP address for the MFP server. You also have to make sure that any gateway, router or firewall does not block the IPP protocol if you have these gateway devices installed in your network.

8.2.2 Client Side

You only need to perform the Windows standard Add New Printer procedure.

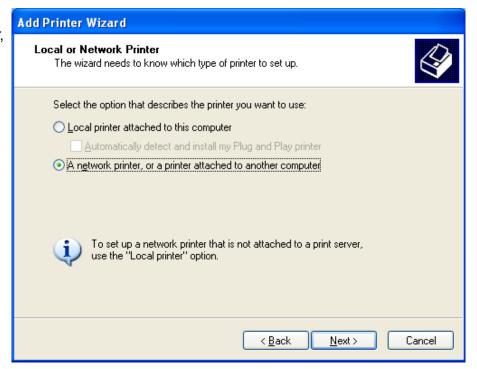
- 1. On the desktop, go to Start, then Settings; then select "Printers and Faxes."
- 2. Click "Add a Printer."



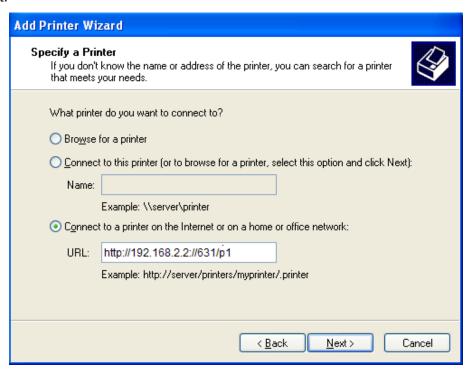
3. When the
"Add Printer
Wizard" screen
displays, click
"Next."



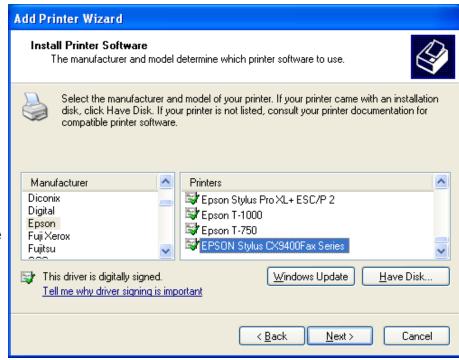
4. Select "A network printer, or a printer attached to another computer." Click "Next."



5. Select "Connect to a printer on the Internet or on a home or office network" and enter the URL of the MFP server. The URL format is "http://IP:631/Port Name." The IP address should be the MFP server's IP address. The number 631 is the IPP standard port number. "Port Name" is the port name of the MFP server that your printer is connected to. The default port name is "p1." One example of the URL is http://192.168.2.2:631/p1. After entering the URL of the MFP server, click "Next."

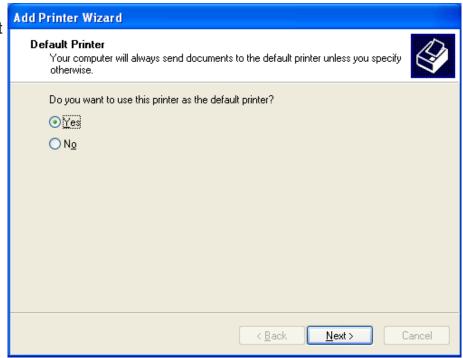


6. Select the manufacturer and the printer model and click "Next." If your printer is not in the list, click "Have Disk..." to install the driver of the printer. After installation, the printer model will be added to the list.

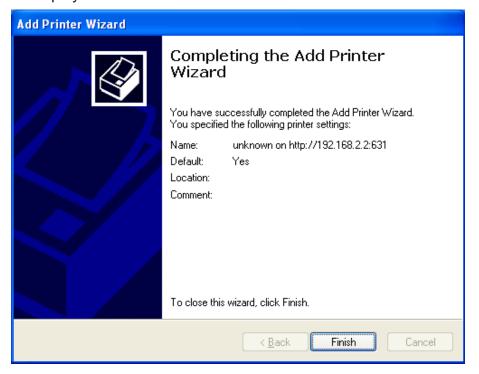




7. Choose whether or not to set the printer as the default printer. Click "Next."



8. You've added the network printer to the PC successfully. The information for the printer is displayed on the screen. Click "Finish."



9. MFP SERVER INSTALLATION WITH MAC OS

LPR (Line Printer Remote) printing allows Macintosh computers to connect to printers via TCP/IP. LPR printing can be set up on any Macintosh with version 9.x or above.

9.1 Mac 10.4.x

- 1. Open "Print and Fax" from System Preferences.
- 2. With the Printing tab selected, click "Add."
- 3. When the printer browser opens, select "IP Printer."
- 4. On the IP Printer screen, make the following entries/selections.
 - Protocol: Select "Line Printer Daemon LPD."
 - IP Address: Enter the MFP server's IP address; e.g., 192.168.2.3.
 - Queue: Enter "p1."
 - Name: Enter a name for the all-in-one printer (or other printer).
 - Location: Enter the location of the all-in-one printer (or other printer).
 - Printer: Select the all-in-one printer or other printer model attached to the MFP server.
- 5. Click "Add" to complete the all-in-one printer (or other printer) installation.

9.2 Mac 10.3.x

1. On the desktop, go to System Preferences.

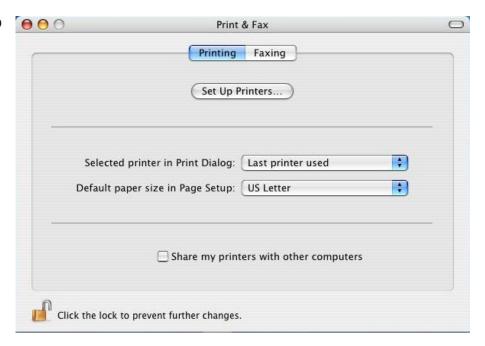


2. Click "Print & Fax."

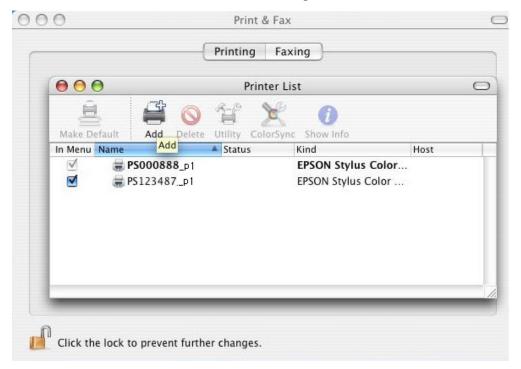




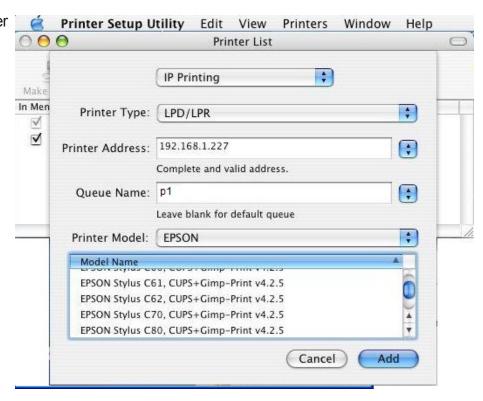
3. Click "Set Up Printers..."



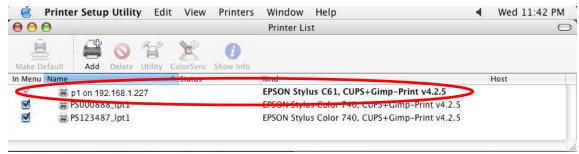
4. Click "Add" to add the new MFP server through TCP/IP.



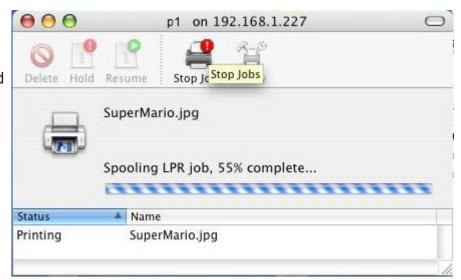
5. On the Printer List screen, make the following entries/ selections.



- Printer Type: LPD/LPR
- Printer Address: Enter the IP address of the MFP server.
- Queue Name: Enter "p1."
- Printer Model: Select the printer attached to the MFP server. Click "Add" to continue.
- 6. The MFP server is completely installed. You can see it in the Printer List.



7. You can print a file to check that the MFP server is installed successfully.





10. TROUBLESHOOTING

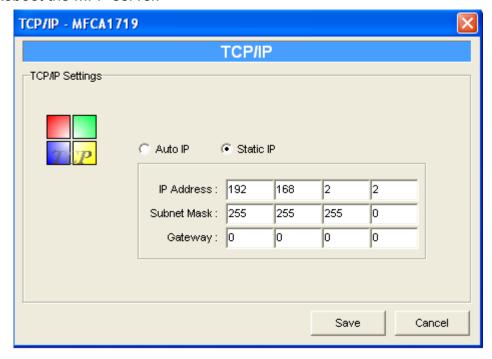
Below are several questions and situations that may arise during your installation or use of the 1-Port MFP USB Wireless Print Server, with accompanying answers and suggested solutions.

The MFP server can't be found even after searching with MFP Manager.

- Check that the power adapter and the network cable are properly connected to the MFP server.
- Check that the LAN and Ready LEDs are on.
- Check that the IP address of the MFP server is in the same network segment
 as your computer. NOTE: If you're not sure of the IP address setting of the MFP
 server, check the TCP/IP setting of the MFP server from Server Manager.

How is the IP address of the MFP server changed?

- If a DHCP server is installed, you can let the MFP server obtain an IP address from the DHCP server automatically.
 - 1. Open Server Manager and select "TCP/IP" setting.
 - 2. Select "Auto IP" and click "Save."
 - 3. Reboot the MFP server.
- If setting up the IP address manually:
 - 1. Open Server Manager and then select "TCP/IP" setting.
 - 2. Select "Static IP" and enter the IP address and subnet mask that match your computer. Click "Save."
 - 3. Reboot the MFP server.



NOTE: Setting a static IP address for the MFP server is recommended since a DHCP assignment may dramatically change the IP address of the MFP server.

A user stays connected to the MFP server.

- Contact the current user and request that he disconnect the device.
- If the user forgets to disconnect the device, you can ask the administrator to release the device.



I can't use the all-in-one printer to scan, print, use the card reader or fax a file even when I've followed the instructions in the manual.

• Attach the all-in-one printer to a PC directly and make sure it is operating correctly.

My computer has installed a firewall, and the MFP server can't work normally.

Some firewalls — for example, the Network Access Manager firewall program
installed with the NVIDIA network card — may block the communication between
the MFP server and your computer. If this is the case, add the MFP server
programs servoap.exe and mfpagent.exe to the exception list of your firewall

11. SPECIFICATIONS

General

- IEEE 802.3 Ethernet and IEEE 802.3u Fast Ethernet compliant
- IEEE 802.11g/b (2.4 GHz) Wireless compliant

Wireless

- Complies with IEEE 802.3, IEEE 802.3u Wired Ethernet and IEEE 802.11g/b (2.4 GHz) Wireless LAN standards
- CPU: MIPS CPU (240 MHz)
- Flash: 2 MB NOR Flash
- RAM: 32 MB DDR
- USB port: USB 2.0 type A x 1
- LAN port: 10/100 M UTP port x 1 (Auto-MDI/MDI-X)
- Antenna: external 2 dBi dipole antenna
- Output power: 16 18 dBm
- Power: 5 V DC, 1 A power adapter
- Dimensions: 20 (H) x 58 (W) x 87 (D) mm
- Temperature: 0 55°C
- Humidity: 10 90% (non-condensing)
- Certification: FCC, CE

Package Contents

- Wireless USB MFP Server
- Antenna
- Power adapter
- Setup CD and user manual





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