

# **Print Server**

## **User Guide**

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## Introduction

*This chapter provides an overview of your Print Server's features.*

### Features

Congratulations on the purchase of your new Print Server. Your Print Server was designed to provide a simple and efficient network printing solution. It is packed with features, including:

- **Versatility.** The Print Server supports up to four protocols: TCP/IP, SMB (Service Message Block), AppleTalk (EtherTalk), and NetBEUI. It features a 10/100BaseT Ethernet interface port for connection to your LAN and operating system support includes Unix, NetWare (NDPS LPR printing), and Microsoft Windows.
- **Easy Installation.** The Print Server makes adding printers or plotters to your network simple.
- **Easy Setup.** A number of utility programs are supplied to simplify setup. For Windows 2000/XP users, the BiAdmin program makes it easy to configure the Print Server for a variety of network and server configurations.
- **Web-based Interface.** The Web-based interface provides an easy method of configuration in TCP/IP networks regardless of your operating system.
- **Compact Size.** This allows the Print Server to be used even where space is limited.
- **Remote Management Tools.** A variety of software tools are provided. In most environments, both the Print Server and attached bi-directional printers can be configured remotely.
- **Internet Printing Protocol (IPP) Support.** The Print Server can act as an IPP (Internet Printing Protocol) Server, allowing clients, suppliers, colleagues and others to print to your printer from anywhere on the Internet. Windows IPP Client software is also supplied on the CD-ROM.



Refer to the "Protocol Support" and "Feature Support" tables in Appendix A.

## Safety Instructions

For your own safety, and to protect your Print Server, please observe the following safety advice.

1. Unplug this device from its power source before cleaning. Use only a slightly dampened cloth for cleaning. Do not use liquid or aerosol cleaners.
2. Avoid using this product near water. Exposure to water poses an electric-shock hazard.
3. Do not place the Print Server on an unstable surface. The device may fall causing serious damage to the device.
4. This device should only be used with the power supply type specified on the marking label. If you are not sure of type of your local power supply, consult your dealer or the local power company.
5. Do not pinch, crimp or otherwise damage the power cord. If exposed to foot traffic, ensures that the cable is properly shielded and does not pose a tripping hazard.
6. If using an extension cord, makes sure the total ampere rating of the products using the cord does not exceed the extension cord's ampere rating.
7. Do not attempt to service this device, as opening or removing casing may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
8. The Print Server should be serviced by qualified service personnel under the following conditions:
  - The power cord is damaged or frayed.
  - Liquid has been spilled onto the product.
  - The product has been exposed to rain or water.
  - The product does not operate normally in accordance with the operating instructions.
  - The device has been dropped or the casing has been damaged.

## Package Contents

You should find the following items packaged with your Print Server. If any items are missing, contact your dealer immediately.

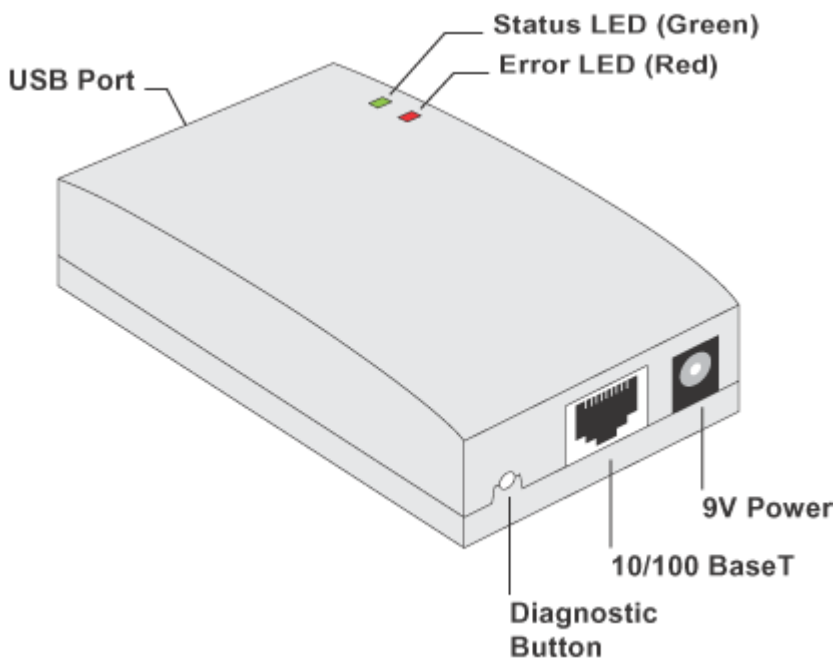
- The Print Server unit
- Power Adapter
- One CD-ROM containing all support programs and this manual
- Quick Install Guide

## Physical Details

Details of the LEDs and connections are in this Chapter. Further details are contained in *Appendix A - Specifications*.

### ALL0751

- 1 USB Printer Port
- 10/100BaseT LAN connection



**Figure 1: ALL0751**

## LED Indicators

The Print Servers have LED indicators on the top. The Error LED is red. The Status indicator LED is green. The LED indicator modes are described in the following table.

Status LED (Green)	Error LED (Red)	Status Description
Off	Off	No power.
On	Off	Normal operation - Idle.
Flashing	Off	Normal operation - transmitting or receiving packets from the network.
On	On	Hardware error.
Flashing	Flashing	Firmware upgrade in progress.

## Diagnostic Push Button

The button is recessed; a pin or paper clip can be used to press it. This button has 2 functions:

- Restore the factory default settings
- Print a test page containing all current settings.

### To restore the factory default settings:

1. Turn the Print Server OFF.
2. Press and hold the diagnostic button. While pressing the button, switch the Print Server ON.
3. If you continue pressing the button for 10 seconds, a diagnostic page will be printed, showing the new (default) settings.

### To generate a Diagnostic print out

1. Ensure that both the Print Server and the attached printer are ON.
2. Press the diagnostic button, and hold it in for 2 seconds.
3. The test page, containing the current settings, will be printed.

#### **Note:**

PostScript printers are unable to print this page. If you have a PostScript printer, the test page will not be printed.

# LAN Installation

*This chapter describes how to install the Print Server in your Local Area Network.*

## Procedure

### 1. Preparation

- Ensure the power is OFF. Do not connect the Print Server while power is On.
- Find the *Default Server Name* for your Print Server. The *Default Server Name* is shown on a sticker on the base of the device. It consists of 8 letters and/or digits. Record this name; it may be needed during configuration.

### 2. Connect the Printer

Use the cable supplied with your printer to connect the printer to the USB port on the Print Server unit.

### 3. Connect the Network Cable

Connect the network cable to the 10/100BaseT LAN connector on the Print Server.

### 4. Power Up

Plug in the power adapter cable and power up. Start-up will take only a few seconds.

**Use only the Power Supply unit provided with the Print Server. Using a different Power Supply may cause damage.**

### 5. Check the LEDs

- The Error LED should flash, then turn Off. When the Error LED goes off and the Status LED remains lit or flashes, the Print Server is ready.
- The Error LED will remain flashing if the Print Server can't connect to the USB printer.

# MFP Configuration

*This chapter provides an overview of the configuration process.*

## Overview

The Print Server is designed to support many different platforms, and the configuration required would depend upon the environment in which it is installed.

- The Print Server usually requires configuration, but if there's a DHCP server on your network, then the device is just plug-and-play. A Windows-based setup Wizard is also provided on the CD-ROM to simplify this task.
- PCs wishing to use the printer attached to the Print Server always require configuration. See *Chapter 4- Client Configuration* for details.
- If you wish to use a queue-based printing system using **Windows NT Server/Windows 2000/Windows XP**, the Network Server must be configured as detailed in *Appendix B - Windows Server Configuration*. However, it is not necessary to use a Network Server-based queue; client PCs can print directly to the Print Server using the *Peer-to-peer Printing* installed by the *User* setup option on the CD-ROM.

## Configuration Methods

The following methods are available to perform the required Print Server configuration:

- **Windows-based Wizard** - see below for details.
- **Web-based setup** - see Chapter 4 for details.

## Advanced Configuration and Management

The BiAdmin management utility is provided for advanced configuration and management. This program is installed by default when the **Administrator** install option is chosen. See Chapter 5 for details on using BiAdmin.

## Using the Windows Wizard

The Windows-based Wizard is supplied on the CD-ROM, and runs on Windows 95, 98, NT4.0, ME, Windows 2000 and Windows XP.

Using this Wizard is the recommended method to configure the Print Server.

It can be used configure the Print Server for your Network environment, even if the Print Server does not have a valid IP address.

## Procedure

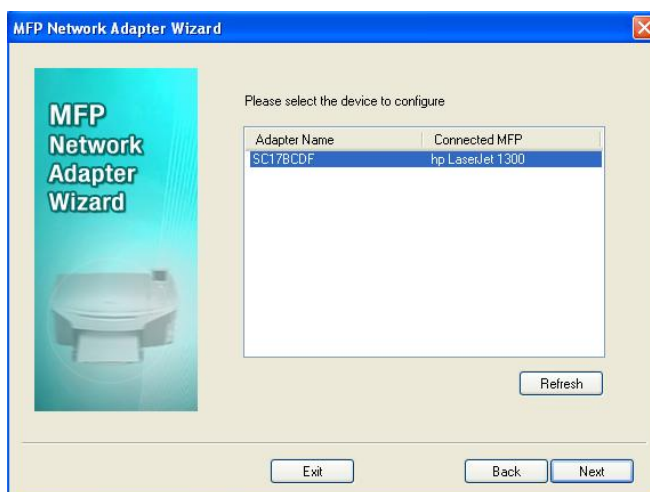
1. Insert the supplied CD-ROM into your drive. If the setup program does not start automatically, run *SETUP.exe* in the root folder.
2. On the first screen, shown below, click *Setup Wizard*.





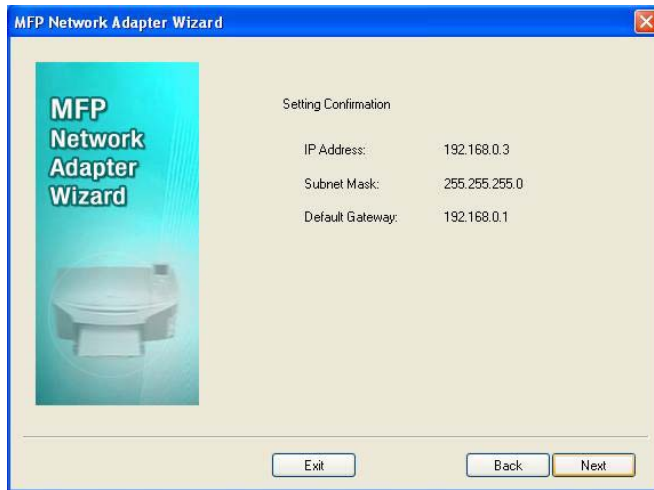
**Figure 2: MFP Screen**

3. Click *OK* or *Skip* if all the setup procedures listed on the first screen are checked.
4. Select your MFP Network Adapter, then click *Next* to continue.



**Figure 3: Adapter Screen**

5. Click *Next* to configure the *IP Address* screen.
  - Select *Obtain IP Address automatically* if your LAN has a DHCP Server, otherwise select *Use following IP address*.
  - For *Use following IP address*, enter an unused address from the range used on your LAN.  
Use the same *Subnet Mask* and *Default Gateway* as PCs on your LAN.
6. Click *Next* to see the following screen



**Figure 4: Status Screen**

7. Click *Next* and *Exit* to continue to the final screen
8. Click *Finish* to save the data to the MFP Network Adapter.

#### **If the desired MFP is not listed:**

- Check that both the MFP Network Adapter and the printer are properly connected, and powered on.
- Check that the proper Printer Driver has been installed.

## **Windows Setup**

1. Insert the supplied CD-ROM into your drive. If the setup program does not start, run SETUP.exe in the root folder.
2. Click *PC Install* to install the utility and bus driver.

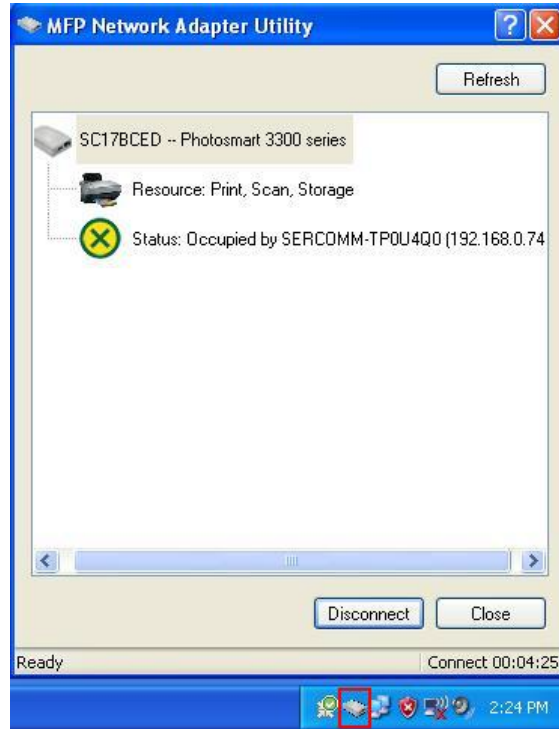


**Figure 5: Main Screen**

3. Follow the prompts to complete the installation.
4. The MFP Network Adapter Utility will then run.

## MFP Network Adapter Utility Setup

1. The program will search for the MFP Printer Servers on the network, and the *MFP Network Adapter Utility* screen will be displayed.
  - The names of the attached printer servers will be displayed if possible.
  - If the MFP is occupied, the status field will display the information of the user and IP address. Otherwise the default status should be "Ready" if the MFP is available.



**Figure 6: MFP Icon**

### **If your MFP Network Adapter is not listed:**

- Check that both the MFP Network Adapter and the printer are properly connected, and powered on.
- Check that the proper Printer Driver has been installed.

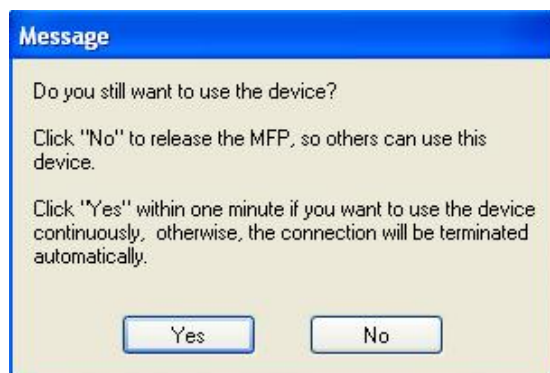
2. Click "Connect" button. It will automatically configure the MFP for the first time. Normally, you only need to do the configuration once.
3. Once the MFP has been connected successfully, the button will show "Disconnect" instead of "Connect".



**Figure 7: Utility Screen**

4. Configuration is now complete.

**Note:** If MFP has been idled for 5 minutes after connected, you will see the following message



**Figure 8: Idle Message**

The MFP will be disconnected automatically if you don't respond to the message within 1 minute.

# Chapter 4

# 4

## Web-Based Management

*This chapter explains how to use your Web Browser to configure the Print Server.*

### Overview

The Print Server incorporates the HTTP server. This allows you to connect to the Print Server and configure it using your Web Browser. Most browsers should work, provided they support tables and forms.

### Preparation

Because it supports dynamic IP Address allocation using DHCP, BOOTP, or RARP, the Print Server ships with an IP Address of 0.0.0.0.

This is NOT a valid IP Address.

Therefore, you must do ONE of the following:

- Check your **DHCP server** (if you have one), and determine the IP Address allocated to the Print Server.
- Use the **Diagnostic Button** (if fitted) to print a report which includes the current IP address. (Press the Diagnostic Button, and hold it for 2 seconds.)
- Use the **Setup Wizard** or another Print Server utility to allocate a valid IP Address to the Print Server.
- Add an entry to the **arp** table to associate the hardware address of the Print Server with the desired IP address, as follows:

```
arp -s IP_Address 00:c0:02:xx:xx:xx    (Unix)
```

```
arp -s IP_Address 00-c0-02-xx-xx-xx    (Windows)
```

Where:

IP\_Address is the IP Address you wish to assign to the Print Server.

00:c0:02:xx:xx:xx is the hardware address of the Print Server.

Example (Unix):

```
arp -s 192.168.0.21 00:c0:02:12:34:56
```

Example (Windows):

```
arp -s 192.168.0.21 00-c0-02-12-34-56
```

**Note:** The hardware address of the Print Server is shown on a sticker on the base of the device.

# Connecting to the Print Server

1. Start your Web Browser.
2. In the *Address* box, enter *HTTP://* followed by the IP Address of the Print Server.  
e.g.  
`http://192.168.0.100`
3. You will then be prompted for the password. If no password has been set, just press ENTER.
4. Use the menu bar to move from one screen to another. Remember to save each screen before changing to a different screen.

# Configuration Screens

The following configuration screens are available.

## TCP/IP

TCP/IP

Settings for the TCP/IP network protocol.  
Using a fixed IP Address is recommended.

IP Address:

IP Address: ☐ DHCP Client  
☒ Fixed IP Address:  

Device IP Address

192168032

Subnet Mask

2552552550

Gateway Address

19216801

Connection:

Delay before reconnection attempt (secs)  (0..255)  
Number of reconnection attempts  (0..255)

Retrieve Defaults

Save

Cancel

Figure 9: TCP/IP Screen

IP Address	
DHCP Client	Select this if your LAN has a DHCP Server. The Print Server will then automatically obtain an IP address from the DHCP Server.
Fixed IP Address	Select this to assign a fixed IP address to the Print Server. If selected, you must enter a the Device IP Address, Subnet Mask, and Gateway.
Device IP Address	IP Address assigned to the Print Server. Enter an unused IP address from the address range used on your LAN.
Subnet Mask	Use the same values as PCs on your LAN (or on the same LAN segment, if you have a Router).
Gateway Address	Use the same values as PCs on your LAN (or on the same LAN segment, if you have a Router).

Connection	
<b>Delay before reconnection attempt</b>	Sets how long the Print Server should wait before retrying a TCP/IP connection which is lost. Allowable values are from 0 to 255 seconds, with 2 as the default.
<b>Number of reconnection attempts</b>	Set how many attempts at reconnection will be made. After that, the TCP/IP session will be terminated. Allowable values are from 0 to 255, with 254 as the default.

## Other Screens

### Server Status

This screen shows server system data and the current settings for all of the other screens. It is read-only; no data can be input on this screen.

### Printer Status

This screen displays the current status of each port. For each port, the following data is listed:

- **Connected Printer**- the model name of the printer connected to the port, if the printer name is known. (If the printer is not bi-directional, this information is unavailable.)
- **Status** - the current status of the printer (On-line, Off-line, Out of paper)
- **Printing Information** - this will show either *Idle* or *Printing*.

# Appendix A

## Specifications



### General Specifications

ALL0751 MFP Print Server	
Power Consumption	5.5w max.
External Power Adapter	9V DC
LEDs	2
USB Port (1.1)	1
Ethernet Connector	10/100BaseT
FCC / CE	FCC, CE. Class B

Environmental Specifications	
Operating Temperature	0 ~ 40°C
Storage Temperature	-10 ~ 70°C
Shipping Temperature	-40 ~ 70°C
Operating Humidity	10 ~ 80%
Storage Humidity	5 ~ 90%
Shipping Humidity	5 ~ 100%

### Protocol Support

Model	TCP/IP	NetBeui	AppleTalk
ALL0751	√	√	√

### Feature Support

Model	HTTP Setup	E-mail Printing	IPP Support	AutoIP
ALL0751	√	√	√	√





Germering, Jan 2007

**EC – Declaration of conformity**

for

**ALL0751 MFP Print Server**



This equipment conforms with the requirements of the Council Directive

**89/336/EEC** and the mutual recognition of their conformity.

The safety advice in the documentation accompanying the products shall be obeyed.  
The conformity to the above directive is indicated by the CE sign on the device.

The ALLNET ALL0751 MFP Print Server conforms to the European Directives 89/336/EEC.

This equipment meets the following conformance standards:

**EMI: EN 55022 : 1998 (Class B)**

**EMS: EN 55024 :1998/A1 :2001/A2 : 2003**

**EN 61000-3-2: 2000, EN 61000-3-3: 1995/A1: 2001**

This equipment is intended to be operated in all countries.

This declaration is made by

ALLNET Computersysteme GmbH  
Maistr. 2  
82110 Germering

and can be downloaded from <http://www.allnet.de/ce-certificates/> .