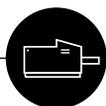


# Axis Print Servers

High Performance Multi-Protocol  
Print Servers for Virtually All Networks



AXIS 570/670 User's Guide v3.0



## Read Me First

To get your print server quickly up and running, follow the instructions below:

1. Connect the AXIS 570/670 to your network and to your printer as described in *Connecting the Printer to the Network*, on page 6.
2. Proceed to the setup sections that are relevant to your network environment, as described in the table below:

Environment	Network Configuration	Action
AS/400	SNA	1. <i>SNA Printing in the AS/400 environment</i> , on page 8
	TN5250E (TCP/IP)	1. <i>Assigning an IP address</i> , on page 7 2. <i>TN5250E Printing in the AS/400 environment</i> , on page 11
	PPR/PPD (TCP/IP)	1. <i>Assigning an IP address</i> , on page 7 2. <i>AS/400 IPDS over PPR/PPD Printing</i> , on page 13
IBM Mainframe	SNA	1. <i>SNA Printing in the Mainframe Environment</i> , on page 16
	TN3270E (TCP/IP)	1. <i>Assigning an IP address</i> , on page 7 2. <i>SNA Printing in the Mainframe Environment</i> , on page 16
	PPR/PPD (TCP/IP)	1. <i>Assigning an IP address</i> , on page 7 2. <i>Mainframe IPDS over PPR/PPD Printing</i> , on page 23
NetWare	NDPS	1. <i>Setup for NDPS</i> , on page 26
	Standard NetWare	1. <i>Setup for NetWare</i> , on page 27
Windows 95/98/NT	NetBIOS/NetBEUI	1. <i>Setup for Windows 95/98 &amp; NT</i> , on page 25
	TCP/IP	1. <i>Assigning an IP address</i> , on page 7 2. <i>Setup for Windows 95/98 &amp; NT</i> , on page 25
Windows 3.1/WfW	NetBIOS/NetBEUI	1. <i>Setup for Windows 3.1 and WfW</i> , on page 25
	TCP/IP	1. <i>Assigning an IP address</i> , on page 7 2. <i>Setup for Windows 3.1 and WfW</i> , on page 25
OS/2	NetBIOS/NetBEUI	1. <i>Setup for OS/2</i> , on page 28
Macintosh	AppleTalk	1. <i>Set up for Macintosh</i> , on page 29
UNIX	TCP/IP	1. <i>Assigning an IP address</i> , on page 7 2. <i>Setup for UNIX</i> , on page 30

Please proceed to *Management and configuration*, on page 31 for information about supported management and configuration tools.

## Safety notices

Take some time to read through the safety notices before installing the AXIS 570/670. Please observe all safety markings and instructions when using this product.

**Warning!** - must be observed to avoid bodily injuries.

**Caution!** - must be observed to avoid loss of data or damage to your equipment.

**Important:** - must be observed to avoid operational impairment.

Do not proceed any of the above notices, until you have fully understood the implications.

**Electromagnetic Compatibility (EMC) USA** - This equipment generates and radiates radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference. Shielded cables should be used with this unit to ensure compliance with the Class A limits.

**Europe** - This digital equipment fulfils the requirements for radiated emission according to limit B of EN55022/1994,  and the requirements for immunity according to EN50082-1/1992 residential, commercial, and light industry (Compliance is not valid for unshielded network and printer cables).

**Liability** - Every care has been taken in the preparation of this manual; if you detect any inaccuracies or omissions, please inform your local Axis office, which can be found on the cover of this document. Axis Communications AB cannot be held responsible for any technical or typographical errors and reserves the right to make changes to the product and manuals without prior notice. Axis Communications AB makes no warranty of any kind with regard to the material contained within this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Axis Communications AB shall not be liable nor responsible for incidental or consequential damages in connection with the furnishing, performance or use of this material.

**Year 2000 Compliance** - Axis Communications warrants that all versions of the AXIS 570/670 with software versions 5.54 or later are Year 2000 compliant.

**Axis' Trademarks** - NetPilot, ThinWizard, 570, 670, 570e, 670e, IP Installer.

**Other Trademark Acknowledgments** - Adobe Acrobat Reader, Apple, Ethernet, EtherTalk, IBM, LAN Manager, LAN Server, Macintosh, Microsoft, Novell NetWare, OS/2, OS/400, TokenTalk, UNIX, Windows, are registered trademarks of the respective holders.

**Support Services** - Should you require any technical assistance, please contact your Axis dealer. If your questions cannot be answered immediately, your Axis dealer will forward your queries through the appropriate channels to ensure you a rapid response.

If you are connected to Internet, you can find on-line manuals, technical support, software updates, application software, corporate information, etc., on any of the locations listed below.

WWW:	<a href="http://www.axis.com">http://www.axis.com</a>
FTP server:	<a href="ftp://ftp.axis.com/pub/axis">ftp://ftp.axis.com/pub/axis</a>

All local Axis Offices are displayed on the document cover.

AXIS 570/670 User's Guide

Part No: 16456

Copyright © Axis Communications AB, 1995 - 1998

Revision 3.0

Dated: December 1998

## Product Overview

The AXIS 570/670 is a LAN attached multiprotocol print server that prints IBM and ASCII datastreams to any ASCII printer. Supporting IBM Mainframes, AS/400, NetWare, UNIX, LAN Server Manager, Windows, OS/2 and Apple EtherTalk, this product is ideal for IBM Mainframe and AS/400 sites that are migrating from pure IBM networks to LAN environments.

**Important:**

Unless specifically stated the AXIS 570, AXIS 670, AXIS 570e and AXIS 670e models are collectively described as the AXIS 570/670 throughout this document.

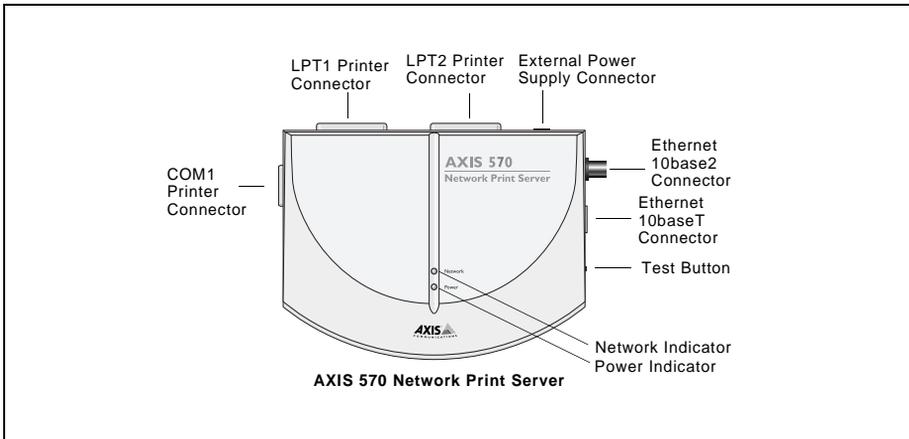
A more comprehensive description of the AXIS 570/670 is presented in the AXIS 570/670 User's Manual, which is available on the AXIS Online CD.

## Product Model Summary

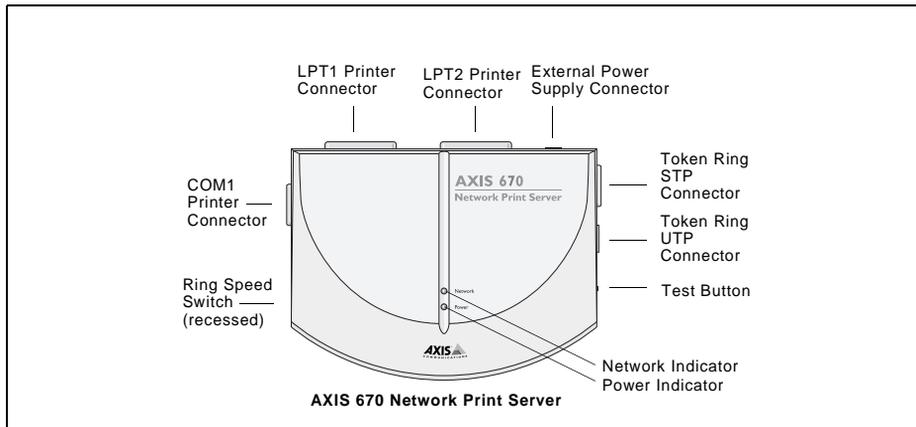
	AXIS 570	AXIS 570e	AXIS 670	AXIS 670e
Ethernet	X	X		
Fast Ethernet		X		
Token Ring			X	X
Network Connection	10baseT or 10base2	10baseT or 100baseTX	STP (media type 1) or UTP (media type 3)	STP (media type 1) or UTP (media type 3)
Network Speed	10 Mbps	10 or 100 Mbps	4 or 16 Mbps	4 or 16 Mbps
IPDS data streams		X		X
SCS data streams	X	X	X	X

Table I: Product Model Summary

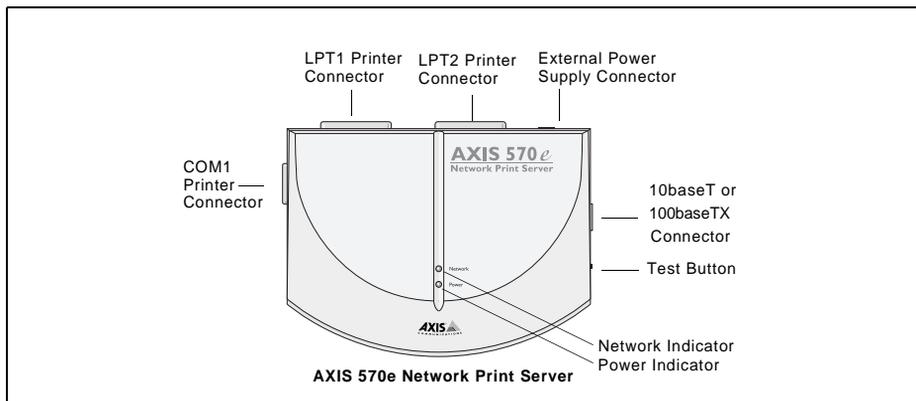
### The AXIS 570 Print Server



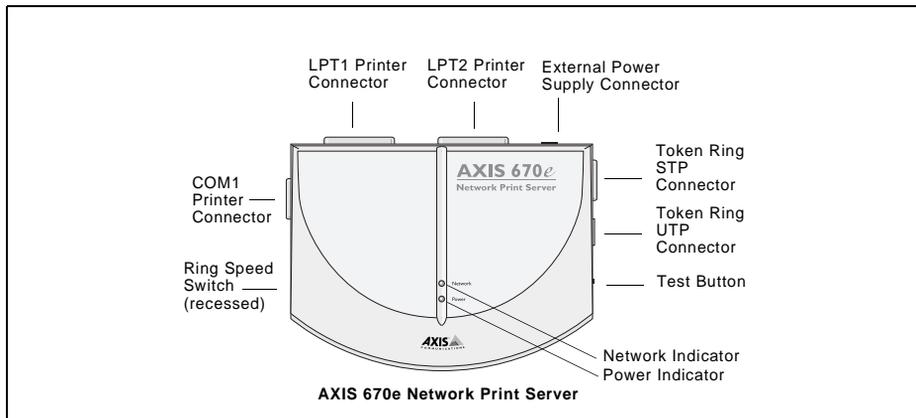
### The AXIS 670 Print Server



### The AXIS 570e Print Server



### The AXIS 670e Print Server



## Hardware Inventory

Unpack and check all the items using the following check list. Contact your dealer if anything is missing or damaged. All packing materials are recyclable.

Hardware	Model variants	Part Numbers
Print Server	AXIS 570	0056-1
	AXIS 670	0057-1
	AXIS 570e	0080-2
	AXIS 670e	0057-6

Power Supply Type	Model variants	Part Numbers	
Power Supply Type	AXIS 570, AXIS 670 & AXIS 670e (PS-B)	Europe	13267
		UK	13268
		Australia	13269
		USA	13270
		Japan	13936
	AXIS 570e (PS-D)	Europe	14233
		UK	14234
		Australia	14255
		USA	14253
		Japan	14254

Media	Title	Part Numbers
CD	AXIS Online CD	Revision no. 5.2 & higher
Printed Materials	AXIS 570/670 User's Guide	16456
	Product Brochure	14412

Optional accessories	Description	Part Numbers
Cables	Serial Printer Cable	13281
	Parallel Printer Cable	13360
Kits	Flash Loading Kit	0041-4

## AXIS Online CD

The AXIS Online CD provides an easy-to-use electronic catalog, that includes all of the latest AXIS Utilities Software, Product Software, White Papers, User Documents, Technical References, etc. It is compatible for use within all of the supported Axis computing environments.

You can view the contents of the AXIS Online CD via an Adobe Reader interface or an HTML interface. However, all documents presented on the CD are in PDF format.

### Note:

If the Adobe Acrobat Reader 3.0 is not installed on to your system, you can download it by clicking the Acrobat Reader button located on the starting page of the AXIS Online CD.

Should you not have access to a CD-drive, please contact your local dealer to receive diskettes containing the available Axis Utilities software and hard copies of the appropriate documentation.

You can also create your own AXIS Utilities diskettes from the AXIS Online CD interface.

## Connecting the Printer to the Network

Follow the instructions below to connect your printer to the network:

1. Switch off the printer and disconnect the AXIS 570/670 external power supply.
2. Locate the serial number, found on the underside label of the AXIS 570/670, and write it down. You will need this number during the network configuration.

### Note:

Each AXIS 570/670 is pre-configured with a unique node address that is identical to its serial number.

3. Connect the printer to the LPT1, LPT2 or the COM1 port on your AXIS 570/670 using an appropriate printer cable.
4. Connect your AXIS 570/670 to the network using the appropriate cabling types as defined in *Table 1: Product Model Summary*, on page 3.
5. *For the AXIS 670 and AXIS 670e only:* Slide the Ring Speed switch to 4 or 16, as appropriate for your Token Ring network.
6. Switch on the printer and connect the external power supply to the AXIS 570/670. The power light comes on. If the network indicator starts to flash, the AXIS 570/670 is correctly connected to the network.
7. Press and release the test button on the AXIS 570/670 to print a test page. If the AXIS 570/670 is correctly connected to the printer, the AXIS 570/670 internal test page will be printed.

## Assigning an IP address

To establish communication with the TCP/IP network, an IP Address must be assigned to your AXIS 570/670. Choose an appropriate method from the table below:

	Server Platform Availability		Comments
	UNIX	Windows	
<b>ARP</b>	X	X	Requires the IP address for each new device to be downloaded individually. Cannot be used over routers.
<b>RARP</b>	X		Downloads the IP Address to each device automatically
<b>BOOTP</b>	X		Similar to RARP, although can operate on the entire network.
<b>DHCP</b>	X	X	Automatic but temporary assignment of IP address from a central pool.
<b>AXIS IP Installer</b>		X	An Axis software tool that sets the IP address of each device.

**Note:**

Refer to *Setting the IP address*, on page 30, for setting the IP address in the Macintosh environment.

All methods are enabled by default. This means that if you have a DHCP server running on your network, the AXIS 570/670 will receive its IP address immediately after you have connected it to the network.

As the ARP command is available in all supported environments, it is described in detail in the table below. Refer to the AXIS 570/670 User's Manual for a comprehensive description of the other methods.

### AXIS 570 & AXIS 570e Print Servers:

	Syntax	Example
<b>Win. 95, 98 &amp; NT</b>	arp -s <Internet address> <Ethernet address> ping <Internet address> arp -d <Internet address>	arp -s 192.168.3.191 00-40-8c-10-00-86 ping 192.168.3.191 arp -d <192.168.3.191>
<b>UNIX</b>	arp -s <host name> <Ethernet address> temp ping <host names>	arp -s npsname 00:40:8c:10:00:86 temp ping npsname

### AXIS 670 & AXIS 670e Print Servers:

	Syntax	Example
<b>Win. 95, 98 &amp; NT</b>	arp -s 802.5 <Internet address> <node address> ping <Internet address> arp -d <Internet address>	arp -s 802.5 192.168.3.191 00-02-31-48-00-61 ping 192.168.3.191 arp -d <192.168.3.191>
<b>UNIX</b>	arp -s <host name> <Node address> temp ping <host names>	arp -s npsname 00:02:31:48:00:61 temp ping npsname

If you are using host names, you can map a unique host name to the IP address. Refer to your system manuals or to your network administrator for instructions on how this is performed on your system.

The AXIS 570/670 supports WINS (Windows Internet Name Service), which is recommended when setting the IP address using DHCP in Windows NT environments.

## SNA Printing in the AS/400 environment

### Important!

If you are using OS/400 Version 3 Release 1 or above, the AS/400 host in 5494 CU Mode will be configured automatically. The information provided in this section describes this automated configuration procedure.

For information regarding manual configuration, refer to the AXIS Network Print Servers technical reference that is supplied on the AXIS Online CD or see the Technical Notes that are available on the Axis Web site.

### Configuring the AS/400 Host System

Follow the instructions below to verify that the AS/400 host is correctly configured for SNA printing:

1. Type **DSPNETA** on the AS/400 command line. For your future reference, note the values of the `Local network ID` and `Default local location` parameters. Press F3.
2. Type **DSPLIND xxxxxxxxxxxx**, where `xxxxxxxxxx` is the name given to your LAN Line Description used with the AXIS 570/670. If you do not know the name of the Line Description, type **WRKCFGSTS \*LIN** to get a list of all line descriptions on the system.
3. Press F11 to display keywords.
4. For your future reference, note the values of the `Local adapter address (ADPTADR)` and `Maximum Controllers (MAXCTL)` parameters. Press return to view the active switched controllers display and verify that the number of controllers does not exceed `MAXCTL`.
5. Press ENTER repeatedly to display the SSAP list. Make sure there is at least one SSAP entry dedicated for SNA. For your future reference, note the SSAP value for this entry.
6. Press ENTER repeatedly to display the `Autocreate controller (AUTOCRTCTL)` parameter. Ensure that the `AUTOCRTCTL` parameter is set to `*YES`. Press F3 to return to the command line.
7. Type **WRKSYSVAL**. Find the `QAUTOCFG` and `QAUTORMT` parameters and check that both are `ON(1)`. Press F3.
8. Type **DSPMODD QRMTWSC** on the command line to check that the mode description exists on the system. Press F3. Refer to the AXIS 570/670 User's Manual for information regarding the QRMTWSC mode.
9. Type **DSPUSRPRF QUSER**. Make sure that the `QUSER Status` is `*ENABLED` and has its `Maximum Storage Allowed` parameter set to `*NOMAX`. Press F3.

10. Use the command `WRKCFGSTS *CTL xxxx*`, where `xxxx` is the first 4 characters of the AXIS 570/670 LU Name, to delete any previously created Controller and Device descriptions specific to your AXIS 570/670. Delete the Device Descriptions (indented text) first and then the Controllers. You can print a test page if you are unsure of the AXIS 570/670 LU Name.

## Configuring the AXIS 570/670

### Important!

To perform the instructions presented in this section, you should first assign an IP address to your AXIS 570/670 using one of the methods presented in *Assigning an IP address*, on page 7. If your network does not support the TCP/IP protocol suite, you can still configure the AXIS 570/670 using the AXIS Netpilot™ installation tool.

Follow the instructions below to configure the AXIS 570/670 using a Web browser:

1. Complete the Configuring the AS/400 Host System procedures on page 8.
2. Start a Web browser, e.g. Internet Explorer or Netscape Navigator.
3. Enter the IP address or the host name of the AXIS 570/670 in the location field and press the Enter key on your keyboard. The internal Web pages of the AXIS 570/670 appear. You may be asked to enter a user name and a password. The default values are *root* and *pass*, respectively.
4. Click the **Configuration** button.
5. Select **SNA** from the header.
6. Select 5494 from the **3174/5494 Emulation Parameter** drop-down list.
7. Enter the SSAP in the **Local SAP value** text field.
8. Enter the `Local network ID` in the **Local 5494 Network Name** text field.
9. Enter the `Local adapter address` in the **Host MAC address** text field.
10. Enter the `Local network ID` in the **Host Network Name** text field.
11. Enter the `Default local location` in the **Host LU Name** text field and click the **Submit SNA settings** button.

Depending on your choice of data streams, continue the installation by selecting the appropriate set of instructions below:

### IPDS data streams (AXIS 570e and AXIS 670e only)

1. Select **IBM IPDS Configuration** from the header.
2. Select your preferred system language from the **System Language** drop-down list and click the **Submit IBM IPDS Configuration settings** button.
3. Select **IBM IPDS Printer Driver** from the header.

4. Select the paper size for each paper bin from the **Paper Size** drop-down list and click the **Submit IBM IPDS Printer Driver settings** button.
5. Select SNA from the header.
6. Select an IPDS printer emulation from the **Logical unit data stream** drop-down list that corresponds to the logical printer you want to use. If you are using several logical printers, each corresponding Logical unit data stream should be set.
7. Set the **Automatic link establishment (dialing)** radio button to Yes and click the **Submit SNA settings** button.

### SCS data streams

1. Select **IBM BASIC CONFIGURATION** from the header.
2. Select your preferred system language from the **System Language** drop-down list.
3. Select a twinax printer emulation from the **Printer Emulation** drop-down list and click the **Submit IBM BASIC CONFIGURATION settings** button.
4. Select **IBM PRINTER DRIVER** from the header.
5. Make sure that the **Printer Driver** parameter is matching your printer and click the **Submit IBM PRINTER DRIVER settings** button.
6. Select **IBM PAGE FORMAT** from the header.
7. Select the appropriate page properties and click the **Submit IBM PAGE FORMAT settings** button.
8. Select SNA from the header.
9. Set the **Automatic link establishment (dialing)** radio button to Yes and click the **Submit SNA settings** button.

### Verifying the communication link

1. Type **WRKCFGSTS \*CTL xxxx\***, where **xxxx** is the first four characters of the AXIS 570/670 LU Name, on the AS/400 command line. The following items are displayed:
  - One APPC controller with the same name as the AXIS 570/670 LU Name.
  - One APPC device with the same name as the AXIS 570/670 LU Name, one controlling session (QRMTWSC) and the currently active (default = 3) printer sessions (QRMTWSC).
  - One twinax controller named xxxxxRMT, where xxxxxx is the first five characters of the AXIS 570/670 LU Name.
  - Three twinax printer devices named xxxxPRT0z where xxxxx is the first four characters of the AXIS 570/670 LU Name and z is the printer device number.

The status of all items should now be ACTIVE or VARIED ON.

2. Type **STRPRTWTR ~~xxxx~~PRT01** on the AS/400 command line, where **~~xxxx~~PRT01** is the printer device name. This will start the writer for this printer device.
3. Press the AXIS 570/670 test button once to print a test page. Ensure that the SNA status is defined on the test page as *Idle*, *Actv* or *LU-1*.

## TN5250E Printing in the AS/400 environment

### Before you begin:

Make sure that the AS/400 host is running OS/400 V3R2 or higher with TCP/IP support installed and configured.  
 Make sure that the latest PTFs are installed. Information about which PTFs to use can be obtained from <http://as400service.rochester.ibm.com/as4sde/nas4apar:nsf/nas4aparhome>.

### Configuring the AS/400 Host System

Follow the instructions below to verify that the AS/400 host is correctly configured for TN5250E printing:

- Type **DSPSYSVAL QAUTOVRT** on the AS/400 command line. Make sure that the value of the QAUTOVRT parameter is greater than the number of auto-configured virtual devices on your AS/400 system.

### Configuring the AXIS 570/670

Follow the instructions below to configure the AXIS 570/670 for TN5250E printing using a Web browser:

1. Start a Web browser, e.g. Internet Explorer or Netscape Navigator.
2. Enter the IP address or the host name of the AXIS 570/670 in the location field and press the Enter key on your keyboard. The internal Web pages of the AXIS 570/670 appear. You may be asked to enter a user name and a password. The default values are *root* and *pass*, respectively.
3. Click the **Configuration** button.
4. Ensure that the IP address, subnet mask and default router are appropriately set for your network.
5. Select **IBM BASIC CONFIGURATION** from the header.
6. Select your preferred system language from the **System Language** drop-down list.
7. Select **3812\_TX** from the **Printer Emulation** drop-down list and click the **Submit IBM BASIC CONFIGURATION settings** button.

8. Select **IBM PRINTER DRIVER** from the header.
9. Make sure that the **Printer Driver** parameter is matching your printer and click the **Submit IBM PRINTER DRIVER settings** button.
10. Select **IBM PAGE FORMAT** from the header.
11. Select the appropriate page properties and click the **Submit IBM PAGE FORMAT settings** button.
12. Select **TN5250E** from the header.
13. Enter the IP address of your AS/400 host in the **Host IP Address** field.
14. Enter a printer device name of your choice in the **Printer Name** field. The name may comprise the letters A-Z and the numerals 0-9, but must begin with a letter. A maximum of 10 characters are allowed.
15. Enter the AS/400 host's Telnet port number in the **Port** field. The default port number (23) can be used in most environments.
16. Select which logical printer to use from the **Logical Printer** drop-down list.
17. Set **Auto Connect** to ON
18. Repeat steps 13-17 for each session you want to set up.
19. Click the **Submit TN5250E settings** button to initialize the TN5250E sessions.

## Verifying the communication link

1. Type **WRKCFGSTS \*DEV xxxxx\***, where **xxxxx** are the first four characters of the printer device name, on the AS/400 command line. A list of printer devices will be displayed. Make sure that a virtual printer device is active.
2. Direct a printout to this printer device to check the integrity of the communication link.

## AS/400 IPDS over PPR/PPD Printing

**Note:**

IPDS is only supported by the AXIS 570e and the AXIS 670e print servers.

**Before you begin:**

Make sure that the AS/400 host is running OS/400 V3R6 or higher with TCP/IP support installed and configured.  
 Make sure that the latest PTFs are installed. Information about which PTFs to use can be obtained from <http://as400service.rochester.ibm.com/as4sde/nas4apar:nsf/nas4aparhome>

### Configuring the AXIS 570e/670e

Follow the instructions below to configure your AXIS 570e/670e using a standard Web browser:

1. Start a Web browser, e.g. Internet Explorer or Netscape Navigator.
2. Enter the IP address or the host name of the AXIS 570e/670e in the location field and press the **Enter** key on your keyboard. The internal Web pages of the AXIS 570e/670e appear. You may be asked to enter a user name and a password. The default values are *root* and *pass*.
3. Click the **Configuration** button.
4. Select **TCP/IP** from the header.
5. The Reverse Telnet parameters PR1, PR2 and PR3 are by default setup for IPDS data streams, emulating an IBM 4028 printer model 1 on the port numbers 5001, 5002 and 5003 respectively. If you need to change a port number, enter a new number in the text field and click the **Submit TCP/IP settings** button. Otherwise you do not have to do anything.
6. Select **IBM IPDS Configuration settings** from the header.
7. Select your preferred system language from the **IPDS System Language** drop-down list.
8. Click the **Submit IBM IPDS Configuration settings** button.
9. Select **IBM IPDS PRINTER DRIVER** from the header.
10. Select the appropriate page properties and click the **Submit IBM IPDS PRINTER DRIVER settings** button.

### Configuring the AS/400 Host System

When configuring the AS/400 host system you must:

- create a PSF configuration
- create a printer device description

### Creating a PSF Configuration

Follow the instructions below to create a PSF configuration:

1. Issue the command `CRTPSFCFG`.
2. Press F11 to display keywords.
3. Select a name for the PSF configuration and enter it at the `PSF configuration (PSFCFG)` line. The name may comprise the letters A-Z and the numerals 0-9, but must begin with a letter. A maximum of 10 characters are allowed.
4. Enter `QGPL` at the `Library` line.
5. Enter `*YES` at the `IPDS pass through (IPDSPASTHR)` line.
6. Enter `*NORDYF` at the `Activate release timer (ACTRLSTMR)` line.
7. Enter `*NOMAX` at the `Release timer (RLSTMR)` line.
8. Press the Enter key on your keyboard to create the PSF configuration.

### Creating a Printer Device Description

Follow the instructions below to create a printer device description:

1. Issue the command `CRTDEVPRT`.
2. Select a name for the printer device and enter it at the `Device Description (DEVDD)` line. The name may comprise the letters A-Z and the numerals 0-9, but must begin with a letter. A maximum of 10 characters are allowed.
3. Enter `*LAN` at the `Device class (DEVCLS)` line.
4. Enter `*IPDS` at the `Device type (TYPE)` line.
5. Enter `0` at the `Device model (MODEL)` line.
6. Enter `*IP` at the `LAN attachment (LANATTACH)` line.
7. Enter a port number at the `Port number (PORT)` line. The default port numbers are defined in the table below:

Port Number	Data Stream/ IPDS Printer Emulation	Logical Printer Destination
5001	IPDS_4028_1	PR1
5002	IPDS_4028_1	PR2
5003	IPDS_4028_1	PR3

8. Enter a FGID number at the `Font Identifier (FONT)` line. A list of all supported FGIDs is available in the *AXIS 570/670 User's Manual*.
9. Define the `Remote location (RMTLOCNAME)`. Use the IP address of the *AXIS 570e/670e*.
10. Enter the name of the previously created PSF configuration at the `User-defined object (USRDFNOBJ): Object` line.
11. Enter the library of the previously created PSF configuration at the `User-defined object (USRDFNOBJ): Library` line.
12. Enter `*PSFCFG` at the `User-defined object (USRDFNOBJ): Object type` line.
13. Press the Enter key on your keyboard to create the printer device description.

## Verifying the communication

Follow the instructions below to verify the communication by sending a print job to the *AXIS 570e/670e*:

1. Type `WRKCFGSTS *DEV AX570PR1` on the AS/400 command line to display the previously created printer device. The status of the printer device should be `VARIED OFF`.
2. Vary on the printer device by typing `1` in the `Opt` field. Press `ENTER`.
3. Press `F5` to refresh the display. The printer device should now be `VARIED ON`.
4. Start the printer writer by typing `STRPRTWTR AX570PR1` on the AS/400 command line. Press `ENTER`.
5. Press `F5` to refresh the display. The printer device should now be `ACTIVE/WRITER`.
6. Direct a printout to this printer device. A successful printout verifies the communication link between the AS/400 and the *AXIS 570e/670e*.

**Note:**

In the example above, the logical printer `PR1` is used and the printout is directed to the destination `AX570PR1`.

The *AXIS 570e/670e* is now ready for printing in the AS/400 environment.

## SNA Printing in the Mainframe Environment

### Configuring the Mainframe Host System for SNA printing

1. Define a VTAM Major Node Definition where the Print Server definitions will be placed. Using a channel attached 3174 as a gateway to the host, this definition is typically defined as a Local Major Node. If you are using a remotely attached gateway via a 37X5 communications controller or a LAN attached 3172, you will be working with a Switched Major Node definition.
2. Add the Print Server PU and LU definitions to the major node definition.

**Note:**

For Switched Major Node definitions you will need to:

- Add the IDBLK (default = E07) and IDNUM (default = last 5 digits of the 570/670 MAC address) entries to the PU definition.
- Code a PATH definition using the unit's full 12 digit MAC address.

**Example:**

An AXIS 670 with a MAC/node address of 000231B80937 will be defined as:

```
PA6701 PATH DIALNO=0104000231B80937, GID=1, PID=1, GRPNM=gggggg
```

3. Ensure that the corresponding VTAM Logon-mode entries are available and that the appropriate LU session types (LU1 or LU3) are used.
4. Vary ACTIVE the VTAM Major Node definition for the AXIS 570/670.

### Configuring the AXIS 570/670 for SNA Printing

**Important!**

To be able to perform the instructions presented in this section, you should first assign an IP address to your AXIS 570/670 using one of the methods presented in *Assigning an IP address*, on page 7. If your network does not support the TCP/IP protocol suite, you can still configure the AXIS 570/670 using AXIS Netpilot.

Follow the instructions below to configure the AXIS 570/670 using a Web browser:

1. Start a Web browser, e.g. Internet Explorer or Netscape Navigator.
2. Enter the IP address or the host name of the AXIS 570/670 in the location field and press the Enter key on your keyboard. The internal Web pages of the AXIS 570/670 appear. You may be asked to enter a user name and a password. The default values are *root* and *pass*, respectively.
3. Click the **Configuration** button.
4. Select SNA from the header.

5. Select 3174 from the **3174/5494 Emulation Parameter** drop-down list.
6. Enter the SSAP in the **Local SAP value** text field.
7. Enter the LAN-to-host gateway MAC/LAA address in the **Host MAC address** text field.
8. Enter the host SSAP in the **Host SAP value** text field.
9. Enter the node identifier xxxnnnnn, where xxx = IDBLK and nnnnn = IDNUM, in the **Local node ID** text field. These values must match the entries that were defined in the VTAM PU setup.
10. Click the **Submit SNA settings** button.

Depending on your choice of data streams, continue the installation by selecting the appropriate set of instructions below:

**IPDS data streams** (*AXIS 570e and AXIS 670e only*)

1. Select **IBM IPDS Configuration** from the header.
2. Select your preferred system language from the **System Language** drop-down list and click the **Submit IBM IPDS Configuration settings** button.
3. Select **IBM IPDS Printer Driver** from the header.
4. Select the paper size for each paper bin from the **Paper Size** drop-down list and click the **Submit IBM IPDS Printer Driver settings** button.
5. Select **SNA** from the header.
6. Set the **Automatic link establishment (dialing)** radio button to Yes and click the **Submit SNA settings** button.

**SCS data streams**

1. Select **IBM BASIC CONFIGURATION** from the header.
2. Select your preferred system language from the **System Language** drop-down list.
3. Select a coax printer emulation from the **Printer Emulation** drop-down list.
4. Click the **Submit IBM BASIC CONFIGURATION settings** button.
5. Select **IBM PRINTER DRIVER** from the header.
6. Make sure that the **Printer Driver** parameter is matching your printer and click the **Submit IBM PRINTER DRIVER settings** button.
7. Select **IBM PAGE FORMAT** from the header.

8. Select the appropriate page properties and click the **Submit IBM PAGE FORMAT settings** button.
9. Select **SNA** from the header.
10. Set the **Automatic link establishment (dialing)** radio button to **Yes** and click the **Submit SNA settings** button.

## Verifying the communication link

1. Power on the Print Server and wait for 2 minutes.
2. Press the **AXIS 570/670 test** button once to print a test page and ensure that the SNA status is defined as **Idle**, **Actv**, **LU-1** or **LU-3**.

The **AXIS 570/670** is now ready for use in the SNA environment.

### Note:

If the LAN media at the remote (Print Server) location differs from that at the host location (e.g. Remote LAN = Ethernet and Host LAN = Token Ring), the MAC address definitions must be modified, as outlined below:

#### Print Server Modifications:

The **AXIS 570/670** Host MAC address (**HI\_MAC\_ADDR**) must be bit-order reversed for each byte, e.g. if the host address is **08005AB77D49** the converted address will be **10005AEDBE92**.

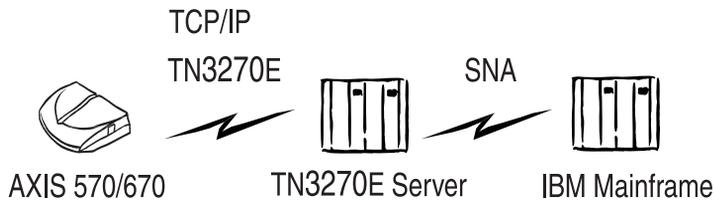
#### Host Modifications:

The required Host modifications are dependent upon the VTAM definition for the Major Node where the Print Server definition is placed.

- Case 1 - VTAM Major Node definition is a Switched Major Node.  
The MAC address of the **AXIS 570/670** must be bit-order reversed in the **PATH** entry. An **AXIS 570** with a MAC/node address of **00408C1B06D4** will be defined using the MAC/node address **000231D8602B** as follows:  
**PA5701 PATH DIALNO=0104000231D8602B, GID=1, PID=1, GRPNM=gggggg**
- Case 2 - VTAM Major Node definition is a Local Major Node.  
When using a channel attached controller as gateway to the host, the MAC address of the **AXIS 570/670** is configured in the gateway. The address must be reversed, as in case 1 above.

## TN3270E Printing in the Mainframe environment

Communication between the AXIS 570/670 and Mainframe host is achieved via a TN3270E server using the TCP/IP transport protocol for the supported data streams, as illustrated below:



The configuration procedures defined within this section are consequently presented in the following three stages:

### Configuring the Mainframe host

Consult your TN3270E server documentation and make sure that the appropriate VTAM host system definitions are set up for mainframe-to-TN3270E server SNA communication.

### Configuring the AXIS 570/670

Follow instructions below to configure the AXIS 570/670 using a Web browser:

1. Start a Web browser, e.g. Internet Explorer or Netscape Navigator.
2. Enter the IP address or the host name of the AXIS 570/670 in the location field and press the Enter key on your keyboard. The internal Web pages of the AXIS 570/670 appear. You may be asked to enter a user name and a password. The default values are *root* and *pass*, respectively.
3. Click the **Configuration** button.
4. Select **TN3270E** from the header.
5. Enter the IP address of your TN3270E server in the **Server IP Address** field.
6. Enter the printer device name in the **Printer name** field. The name may comprise the letters A-Z and the numerals 0-9, but must begin with a letter. A maximum of 8 characters are allowed. This name must correspond to the configured printer name in the TN3270E server.
7. Enter the TN3270E server's Telnet port number in the **Port** field. The default port number (23) can be used in most environments.
8. Select which logical printer to use from the **Logical Printer** drop-down list.
9. *AXIS 570e/670e only*: Select your IPDS printer emulation from the **IPDS printer emulation** drop-down list.
10. Set **Auto Connect** to ON.

11. Repeat steps 5-10 for each session you want to set up.

**Note:**

The AXIS 570/670 supports eight semi-concurrent TN3270E host sessions.

12. Click the **Submit TN3270E settings** button to initialize the TN3270E sessions.

Depending on your choice of data streams, continue the installation by selecting the appropriate set of instructions below:

**IPDS data streams** (*AXIS 570e and AXIS 670e only*)

1. Select **IBM IPDS Configuration** from the header.
2. Select your preferred system language from the **System Language** drop-down list and click the **Submit IBM IPDS Configuration settings** button.
3. Select **IBM IPDS Printer Driver** from the header.
4. Select the paper size for each paper bin from the **Paper Size** drop-down list and click the **Submit IBM IPDS Printer Driver settings** button.
5. Click the **TCP/IP** tab and ensure that the IP address, subnet mask and default router are appropriately set for your network.

**SCS data streams**

1. Select **IBM BASIC CONFIGURATION** from the header.
2. Select your preferred system language from the **System Language** drop-down list.
3. Select a coax printer emulation from the **Printer Emulation** drop-down list and click the **Submit IBM BASIC CONFIGURATION settings** button.
4. Select **IBM PRINTER DRIVER** from the header.
5. Make sure that the **Printer Driver** parameter is matching your printer and click the **Submit IBM PRINTER DRIVER settings** button.
6. Select **IBM PAGE FORMAT** from the header.
7. Select the appropriate page properties and click the **Submit IBM PAGE FORMAT settings** button.
8. Click the **TCP/IP** tab and ensure that the IP address, subnet mask and default router are appropriately set for your network.

## Setting up the TN3270E server

This section describes how to configure *Microsoft's SNA Server*.

**Note:**

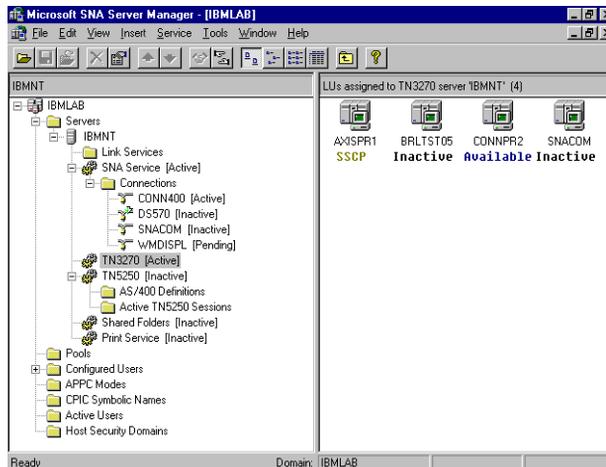
For information on how to configure other TN3270E-capable servers, please refer to the AXIS 570/670 User's Manual, supplied on the AXIS Online CD or the Technical Notes featured on the AXIS Website

Communication is established in two separate stages, SNA Server-to-Host connection and SNA Server to AXIS 570/670 connection, described below:

### Stage 1: SNA Server-to-Host Connection

Follow the steps below to set-up a SNA Server-to-Host connection for the AXIS 570/670:

1. Start Microsoft SNA Server Manager and click the Servers folder. The Main SNA Server Manager Window is featured in the illustration below.
2. Insert a new Connection to the host under Connections. Refer to the online help for assistance on how to configure the SNA connection.
3. Select the new connection and Insert a 3270 Application LU (LUA) to this connection.
4. Set the LU Number to the LU Number specified in the host.
5. Set the LU Name to the name you want to use for the printer device. This is the same name that you specify in the TN3270E Printer Name parameter of the AXIS 570/670.
6. Click OK.



SNA Server Manager Main Window

### Stage 2: SNA Server - AXIS 570/670 connection

1. Select the new LUA and drag it to the TN3270 connection definition (highlighted in the SNA Server Manager Window above).
2. Select the properties of the LUA.
3. Click on the TN3270 tab in the properties popup window.
4. Select Generic Printer Type.
5. Click on the IP Address List tab.
6. Specify the IP Address of the client(s) that you want to assign to this LU. This is the IP address of the AXIS 570/670, i.e. the same as the INT\_ADDR parameter in the Print Server.
7. Click OK.

### Verifying the Communication

Follow the instructions below to verify communication from the AXIS 570/670 to the Mainframe host via the SNA Server:

1. Activate the connection you created in step 2 of the above *SNA Server - AXIS 570/670 connection* procedures. The status of the connection should be "active".
2. Make sure the corresponding LU in the host is activated.
3. Activate the TN3270 connection to the AXIS 570/670. The LUA should change status to SSCP.
4. Send a print job from the host.

The AXIS 570/670 is now ready for use.

#### Note:

You can check the status of the TN3270E connection by printing a test page from the print server. This is done by pressing the test button once. Make sure the TN3270E status (St:) line for your server connection is defines as either:

- SSCP
- LU-1
- LU-3

## Mainframe IPDS over PPR/PPD Printing

**Note:**

IPDS is only supported by the AXIS 570e and the AXIS 670e print servers.

### Configuring the Mainframe host

1. Define the Communication Control Unit, e.g. 3172, to MVS.
2. Modify the PSF/MVS Startup Procedure with the following entry:

**Example:**

```
//WRT4317 PROC
/* The PSF/MVS TCP/IP Writer Procedure */
/* PRINTDEV
//PRT4317 CNTL
//      MGMTMODE=OUTAVAIL,
//      DISCINTV=0,
//      IPADDR='xxx.xxx.xxx.xxx',
//      PORTNO=5001,
//PRT4317 ENDCNTL
```

Note that xxx . xxx . xxx . xxx denotes the IP address of your AXIS 570e/670e.

3. Define the printer to JES2 or to JES3.

**JES2:**

```
FSSDEF FSSNAME=FSS4317, PROC=WRT4317, HASPFSSM=HASPFSM,
PRT4317 FSS=FSS1, MODE=FSS, PRMODE=(LINE, PAGE, SOSI1),
      CLASS=C, UCS=0, SEP, NOSEPDS, CKPTPAGE=100,
      DRAIN, MARK, TRKCELL=YES
```

Make sure that the parameter PROC matches the PROC name in the PSF/MVS Startup Procedure.

**JES3:**

```
FSSDEF TYPE=WTR FSSNAME=FSS4317, PNAME=WRT4317, SYSTEM=SYS1, TERM=NO
DEVICE, JNAME=PRT4317, JUNIT=(,SYS1, ,OFF), FSSNAME=FSS4317,
      MODE=FSS, PM=(LINE, PAGE, SOSI1), CHARS=(YES, GT12)
```

Make sure that the parameters PNAME and JNAME matches the PROC name in the PSF/MVS Startup Procedure.

## Configuring the AXIS 570e/670e

Follow the instructions below to configure your AXIS 570e/670e using a standard Web browser:

1. Start a Web browser, e.g. Internet Explorer or Netscape Navigator.
2. Enter the IP address or the host name of the AXIS 570e/670e in the location field and press the **Enter** key on your keyboard. The internal Web pages of the AXIS 570e/670e appear. You may be asked to enter a user name and a password. The default values are *root* and *pass*.
3. Click the **Configuration** button.
4. Select **TCP/IP** from the header.
5. The Reverse Telnet parameters PR1, PR2 and PR3 are by default setup for IPDS data streams, emulating an IBM 4028 printer model 1 on the port numbers 5001, 5002 and 5003 respectively. If you need to change a port number, enter a new number in the text field and click the **Submit TCP/IP settings** button. Otherwise you do not have to do anything.
6. Select **IBM IPDS SETTINGS settings** from the header.
7. Select your preferred system language from the **IPDS System Language** drop-down list.
8. Click the **Submit IBM IPDS Configuration settings** button.
9. Select **IBM IPDS PRINTER DRIVER** from the header.
10. Select the appropriate page properties and click the **Submit IBM IPDS PRINTER DRIVER settings** button.

## Verifying the communication

By sending a print job from the Mainframe to the AXIS 570e/670e, you can verify that the setup procedures have been performed correctly and that communication is established.

## Setup for Windows 95/98 & NT

---

### AXIS Print Monitor

AXIS Print Monitor is the preferred method for network printing within Windows 95, Windows 98 and Windows NT environments. It allows you to install, configure and manage locally networked printer ports over NetBIOS/NetBEUI and TCP/IP, as easily as any local printer port. An Installation Wizard is provided to guide you through the installation process.

For peer-to-peer printing, the AXIS Print Monitor must be installed on all printing clients, while it is only necessary to install it on the server for client-server printing.

Install the AXIS Print Monitor software, if you have not already done so. It is available on the AXIS Online CD. Once installed, the AXIS Print Monitor is automatically initialized on system start-up.

To install a printer with the AXIS Print Monitor, you should use the Add Printer Wizard. The AXIS Print Monitor's built-in help system describes how to install printers as either NetBIOS/NetBEUI or TCP/IP printer ports.

## Setup for Windows 3.1 and WfW

---

### AXIS Print Utility for Windows

AXIS Print Utility of Windows is the preferred method for network printing within Windows 3.1 and Windows for Workgroups environments.

Install the AXIS Print Utility of Windows software, if you have not already done so. It is available on the AXIS Online CD in the *software\prt\_srv\utility\axpuw\latest* folder.

**Client-server printing** - This print method is suitable for larger networks and requires only one user to install the AXIS Print Utility for Windows software onto a workstation. The setup procedure is described below:

1. Install AXIS Print Utility for Windows onto the file server.
2. Set up your AXIS 570/670 from the file server as described in the peer-to-peer printing section below, but you must additionally check the **Share** box for your printer.

Your shared printers can now be used by all the Windows clients and you do not need to install the AXIS Print Utility on the clients.

#### Important!

The server setup described above should only be made on a Windows for Workgroups workstation.

**Peer-to-peer printing** - This print method is recommended for smaller networks and requires that all users install the AXIS Print Utility for Windows on their workstations. Follow the instructions below to install your AXIS 570/670 for peer-to-peer printing on a Windows for Workgroups or Windows 3.1 workstation:

1. Double-click the AXIS Print Utility icon.
2. In the Port menu, click **Add**. In the NPS Port list, select the AXIS 570/670 port to be installed. The ports appear as <name> . LP1, <name> . LP2, and <name> . CM1, where <name> is AX followed by the last six digits of the AXIS 570/670 serial number. For example:  
AX100B35 . LP1
3. Accept or change the suggested Windows port name, and type any comments in the Description field. Make a note of the Windows port name as you will need this later. Click **OK** to install the Windows port.
4. In the Port menu, click **Connect** to bring up the Windows Printers dialog.
5. Select a printer driver from the list of Installed Printers, or click **Add>>** to install a new driver. Click **Connect...**
6. Select the Windows port name defined in step 4 above that should now feature at the bottom of the Ports list.
7. Click **OK** to close the Connect dialog, and **Close** to close Printers.

The setup is completed and you can now print through your AXIS 570/670.

**Notes:**

Windows 3.1 requires network support such as LAN server or LAN Manager Workstation software to be installed in order to redirect a local printer port to a network device.

AXIS Print Utility for Windows must be running when you print through your AXIS 570/670. We strongly recommend that you copy the AXIS Print Utility icon into your StartUp folder.

## Setup for NDPS

**Important!**

Before the AXIS 570/670 can be installed in NDPS IPX mode, you must install NDPS and an HP Gateway on your NetWare file server. The HP Gateway is included in the NDPS software and is automatically installed together with NDPS.

Follow the instructions below to install the AXIS 570/670 as a Public Access printer:

1. Make sure that the HP Gateway is configured to automatically create a public access printer.
2. Connect the AXIS 570/670 to the NetWare network, if it is not already connected.

As soon as the HP Gateway finds the AXIS 570/670, it will automatically create a public access printer, which is found with the Novell Printer Manager. All users have access to the public access printer.

By using the NetWare Administrator software, you can easily configure your Public Access Printer to become a Controlled Access Printer.

**Note:**

NDPS requires that you run NetWare 4.11 or higher.

## Setup for NetWare

AXIS NetPilot is the tool you should use when you are installing the AXIS 570/670 in the NetWare environment. Install the AXIS NetPilot software, if you have not already done so. It is available on the AXIS Online CD.

**Note:**

The AXIS NetPilot software must be installed on a Windows platform running a NetWare client.

Follow the instruction below to install your AXIS 570/670 using the AXIS NetPilot Installation Wizard:

1. Start AXIS NetPilot by double-clicking the AXIS NetPilot icon. The icon is located in the folder where AXIS NetPilot was installed.
2. Locate the AXIS 570/670 in the 'New Axis Units' folder. Select it and click the **Install** button on the AXIS NetPilot toolbar. If your network is large, it could take a few seconds before the print server appears in the folder.
3. Choose the **with Installation Wizard** option and click **OK**. The Installation Wizard will then guide you through the installation process.

Should you require assistance with any of the operations, click the Help icon and follow the instructions provided in the Help window.

After you have completed the installation you are ready to print in the NetWare environment.

### Connecting additional print queues

Follow the instructions below to enhance your installation by adding extra print queues:

1. Select the Network Print Server to be set up by clicking its icon.
2. Choose **Network** from the Setup menu.
3. Select the NetWare tab, select the printer port and click the **Connect...** button.

A new window opens that allows you to create new print queues and connect print queues to the AXIS 570/670. You can also select Print Server mode or Remote Printer mode for each queue.

## Setup for OS/2

### AXIS Print Utility for OS/2

AXIS Print Utility for OS/2 is the preferred method for network printing within OS/2 environments.

Install the AXIS Print Utility for OS/2 software, if you have not already done so. It is available on the AXIS Online CD in the *software\prt\_srv\utility\axpu\latest* folder.

#### Note:

Use the MTPS/LAPS (LAN Server) or SETUP (LAN Manager) to activate the NetBEUI protocol.

**Peer-to-peer printing** - This print method is recommended for smaller networks and requires that all users install the AXIS Print Utility for OS/2 on their workstations.

Follow the instructions below to install your AXIS 570/670 for peer-to-peer printing:

1. Open an OS/2 window and execute the install.exe program.
2. With the AXIS Print Utility for OS/2 running, click **Install** to install your AXIS 570/670. The ports appear as <name> .LP1, <name> .LP2, and <name> .CM1, where <name> is AX followed by the last six digits of the AXIS 570/670 serial number. For example:  
AX100B35 .LP1
3. Select the ports you want to install, then click **Install**.

Repeat this procedure for each server using the AXIS 570/670.

#### Creating a print queue:

Continue with the instructions below to create a print queue:

1. Double-click the Templates folder, then drag the Printer icon out to the Workplace Shell (or into a folder) while holding the right mouse button down.
2. Type a name of your choice in the Name field.
3. Select \PIPE\<name>.LP1 or \PIPE\<name>.LP2 or \PIPE\<name>.CM1 from the Port list, and select a printer driver suitable for your printer from the Standard Printer list.
4. Click **OK** to confirm the printer definition.

**Client-server printing** - This print method is suitable for larger networks and requires only one user to install the AXIS Print Utility software onto one workstation. Follow the setup procedure below:

1. Install AXIS Print Utility on an OS/2 workstation.
2. Set up your AXIS 570/670 from the file server as described in *Peer-to-peer printing*, on page 28.
3. The print queue must be shared before it can be accessed by other OS/2 clients. Open an OS/2 window and type the following command:  
NET SHARE queue\_name /PRINT, where queue\_name is the name of the queue to be shared.

Your shared print queues can now be used by all OS/2 clients.

### Important!

The AXIS Print Utility for OS/2 must be running when you print through your AXIS 570/670. We strongly recommend that you copy the AXIS Print Utility icon into your StartUp folder.

## Set up for Macintosh

---

### Important!

There is no support for Apple TokenTalk in the AXIS 670 and the AXIS 670e.

Follow the instructions below to choose a printer:

1. Select **Chooser** from the Apple menu.
2. Click the LaserWriter, alternatively the LaserWriter 8.0 icon.
3. If your network has more than one zone, click the name of the default zone. If your network has no zones, this box does not appear.
4. Click the name of the printer you want to use. The default printer name is shown as AXIS<nnnnnn>\_<port>, where <nnnnnn> are the last six digits of the serial number, and <port> is LPT1, LPT2, or COM1 respectively.
5. For LaserWriter 8.0 printer driver only:  
Click **Setup...**, and then **Select Auto Setup**. If the printer as well as the print server supports bi-directional printing, the installation will be automatically performed. If not, you will be prompted to select a PPD file matching your printer. Click **OK**.
6. Click the **close** box. This completes the configuration.

Repeat this procedure for each Macintosh using the AXIS 570 or AXIS 570e.

## Setting the IP address

Follow the instructions below to set the IP address:

1. Open the Chooser and select a network printer driver. Any LaserWriter will do.
2. Select the printer port which name ends with “\_CFG” and close the Chooser.
3. Open a text editor, e.g. SimpleText and write a text file containing the following:  
INT\_ADDR: <IP address>

**Example:**

```
INT_ADDR: 171.16.2.143
```

4. Print the above text file. The settings will be stored permanently in the print server.
5. Open the Chooser and select the printer port you wish to use for printing documents. Close the Chooser.

**Important!**

The \_CFG port disappears 60 minutes after the AXIS 570 or AXIS 570e has been powered on. If you want it to reappear, you must restart the print server.

## Setup for UNIX

### axinstall

Use the Axis automatic installation script *axinstall* to integrate the AXIS 570/670 into your host spooler. This utility software is resident on the AXIS 570/670 and can be downloaded using FTP. It is also provided on the AXIS Online CD in the *software\prt\_srv\utility\axinstall\latest* folder.

Follow the procedure below to download *axinstall* to your host using FTP:

1. Log in to the AXIS 570/670 by typing:  
`ftp <host name>` or `ftp <IP address>` in the UNIX shell window.
2. Enter `root` as the user id and `pass` as the password.
3. Download the *axinstall* utility by typing: `get axinstall`

Follow the instructions below to install the AXIS 570/670 using the *axinstall* script:

1. Type the command:  
`sh axinstall` in the UNIX shell window.
2. Follow the instructions that appear when the script is started.

When the AXIS 570/670 is installed, it will appear as if it is directly connected to the host printer spooler.

## Management and configuration

If you have assigned an IP address to your AXIS 570/670 you are free to manage and configure it from any standard Web browser.

Follow the procedures below to access the AXIS 570/670 internal Web management pages:

- Simply enter the IP address or host name of the AXIS 570/670 as a URL in your browser, as follows:

**Examples:**

http://192.36.253.96  
http://salesdept

- Press the Enter key on your keyboard.

The Home Page of the AXIS 570/670 will now be displayed in your browser, where links to the AXIS 570/670 Configuration, Management, Status, Account, and Help services are available.

### Configuration overview

The following table shows which configuration and management tools that are available for the AXIS 570/670.

Operating System Protocols	Configuration/Management methods
<b>IPX/SPX</b> (NetWare)	AXIS NetPilot, HP JetAdmin, Novell Utilities
<b>TCP/IP</b> (UNIX, Windows 95/98/NT, Windows 3.1/WfW)	Web Browser, AXIS ThinWizard(*), FTP, telnet, SNMP, HP Web JetAdmin
<b>NetBIOS/NetBEUI</b> (Windows 95/98/NT, Windows 3.1/WfW, OS/2)	AXIS NetPilot
<b>AppleTalk</b>	Web browser, Mac-FTP, AXIS NetPilot via a PC platform in the same network.

\* The AXIS ThinWizard server cannot run in Windows 3.1 or Windows for Workgroups environments.

**Note:**

Please refer to the AXIS 570/670 User's Manual for a comprehensive description of the supported configuration and management tools.

## Test Button

All Axis print servers are equipped with a test button. The functionality of the test button is determined by the number of times the button is being pressed.

- Press the test button once to print a test page that contains basic information about the AXIS 570/670.
- Double-click the test button to print out the current parameter settings of the unit.

You can also reset the AXIS 570/670 parameters to their factory default settings by using the test button. Follow the instructions below:

1. Remove the external power supply to switch off the AXIS 570/670.
2. Press and hold down the test button, while you reconnect the external power supply. Continue to hold down the test button until the network indicator starts to flash at one second intervals. This should take about 5 seconds.
3. Release the test button and wait until the network indicator flashes at least five times.
4. Press and hold down the test button again until the network indicator remains constantly lit.
5. Restart the AXIS 570/670 by switching it off and on.

**Note:**

All parameters except the node address (NODE\_ADDR) and the IP address (IP\_ADDR) are reset.