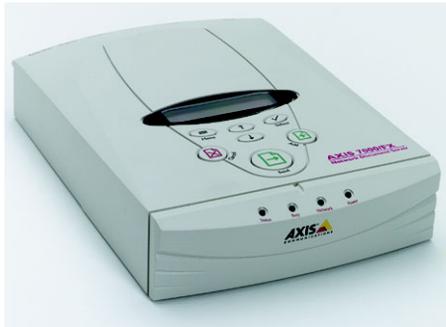


AXIS 7000/FX Network Document Server

User's Manual



Notices

Safety Notices

Take some time to read through the safety notices before installing the AXIS 7000/FX. Please observe all safety markings and instructions when using this product.

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 beyond any of the above notices, until you have fully understood the implications.

Copyright Information

The unauthorized copying of materials that are covered by copyright and other international proprietary or intellectual property rights is prohibited in most countries. Axis Communications AB recommends that the users of this equipment seek the necessary authorizations for copying material. The instructions for use in the manual shall not be considered as an inducement to make illicit duplications of material. Any duplication will be made at the user's own risk.

Electromagnetic Compatibility (EMC)

USA – This equipment generates, uses, and can radiate 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/her 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, and the requirements for immunity according to EN55024 residential, commercial, and light industry (Compliance is not valid for unshielded network 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. 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.

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Maintenance

It is recommended that you use a moist cloth to clean the unit. Do not use petroleum based substances as this may cause damage.

AXIS 7000/FX User's Manual

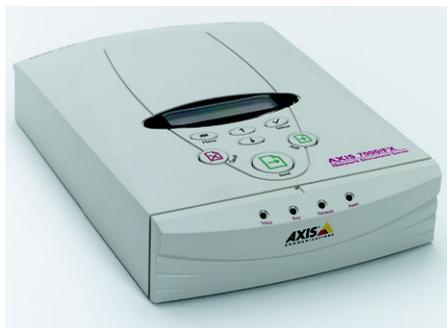
Revision 1.0

Date: August 2001

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Preface

Thank you for purchasing the AXIS 7000/FX Network Document Server. This product allows digital copiers and scanners to be connected anywhere in Ethernet and Fast Ethernet networks. Based on AXIS ThinServer™ Technology, the optimized product hardware and Web-based management software simplifies the distribution and archiving of paper-based information across workgroups, organizations and the Internet.



About This Manual – This manual applies to the AXIS 7000/FX with software release 1.00E and above. It provides introductory information as well as detailed instructions on how to install and manage the AXIS 7000/FX in your networking environment. Some knowledge of networking environments would be beneficial to the reader, but is not considered prerequisite.

About Axis – Axis Communications is dedicated to providing innovative solutions for network-connected computer peripherals. Since the start in 1984, it has been one of the fastest growing companies in the market and is now a leader in its field.

ThinServer™ Technology – enables Axis' products to act as intelligent file server independent ThinServer devices. A ThinServer device is a network server which includes "thin" embedded server software capable of simultaneous multiprotocol communication, scalable RISC hardware and a built-in Web server which allows easy access and management via any standard Web browser. The ThinServer technology makes it possible to connect any electronic device to the network, thus providing "Access to everything".

Today, Axis Communications is offering six major ThinServer product lines consisting of:

Network Print Servers – offer a powerful and cost-efficient method for sharing printer resources in your network. They connect to any standard printer, featuring high performance, simple management and easy upgrading across the network. The print servers are available in Ethernet, Fast Ethernet and Token Ring versions.

IBM Mainframe and S/3x - AS/400 Print Servers and Protocol Converters - include a wide range of LAN, coax and twinax attached print servers for the IBM host environment. By emulating IBM devices, these servers provide conversion of the IPDS, SCS and 3270DS data streams to the major ASCII printer languages.

Network Attached CD/DVD Servers - provide a flexible and cost-efficient solution for sharing CD-ROMs, DVD-ROMs and other optical media across the network. They are available in Ethernet, Fast Ethernet and Token Ring versions.

Network Attached Storage Servers - make it possible to easily make hard disk storage available in Ethernet networks. Through direct access by clients, yet integrating into existing security schemes, and requiring a minimum of maintenance they also provide a low total cost of ownership for network storage.

Network Camera Servers - provide live images using standard Internet technology, thus enabling access to live cameras via any standard Web browser. They offer a perfect solution for remote surveillance over the Internet; their sharp images can bring life into any web site. These servers support Ethernet as well as PSTN and GSM phone lines.

Network Document Servers - enable easy distribution of paper-based information across workgroups and the enterprise. By sending scanned documents to your destination via the Internet/intranet, you will reduce your faxing/ mailing costs, as well as save time, thus improving your organization's efficiency.

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.

WWW:	http://www.axis.com
Support e-mail	support@axis.com

Table of Contents

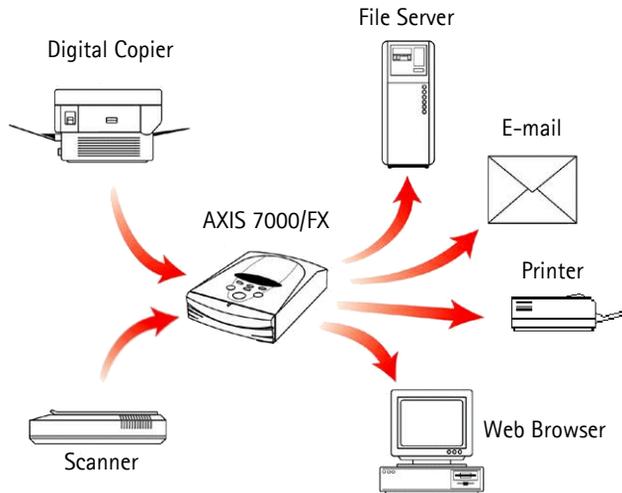
Section 1: Introduction	7
The AXIS 7000/FX Network Document Server	7
Features and Benefits	8
Section 2: Physical Description	11
Control Panel	13
External Keyboard	15
Section 3: Basic Installation	17
Checking the Hardware Inventory	17
Connecting Digital Copiers and Scanners	19
Connecting the AXIS 7000/FX to the Network	20
Assigning an IP Address	21
Mapping a Host Name to the IP Address	31
Verifying your Installation	31
Section 4: Configuring the AXIS 7000/FX	33
Overview of the Administration Tools	33
Specifying the System Settings	36
Specifying Network Settings	39
Specifying Authentication Settings	52
Specifying Destinations	54
Specifying Profiles	64
Specifying Paper Sizes	72
Configuring Using a Text Editor and FTP	73
Section 5: Using the AXIS 7000/FX	75
Sending Methods	76
Authentication	79
Sending to Destinations	80
Adding Temporary Destinations	82
Adding Temporary Profiles	86
Scanning Parameters	87
Sending to your Web Browser	89
Viewing Image Files	91

Appendix A: Troubleshooting	95
Restoring Factory Default Settings	95
Front Panel Indicator Conditions	98
Error and Warning Messages	99
Displaying the Log File	102
Appendix B: LDAP	105
Introduction	105
Structure Example	105
Usual Attribute Types	106
Example searches	109
Appendix C: The Parameter List	111
Appendix D: Updating the Software	121
Obtaining the Updated System Software	121
Updating the Flash Memory	122
Appendix E: Technical Specifications	123
Appendix F: Glossary	127
Index	131

Section 1 Introduction

The AXIS 7000/FX Network Document Server

The AXIS 7000/FX Network Document Server distributes paper-based information to any e-mail address, file server, PC or printer. Simply connect the AXIS 7000/FX to a digital copier or scanner and plug it into your Ethernet network to effortlessly send documents, photographs, reports and other paper-based information to corporate distribution lists or around the world.



Supplied as a standalone unit and located beside your scanner or digital copier, one AXIS 7000/FX is required for each device for convenient electronic distribution of copied materials to e-mail addresses and application servers.

Features and Benefits

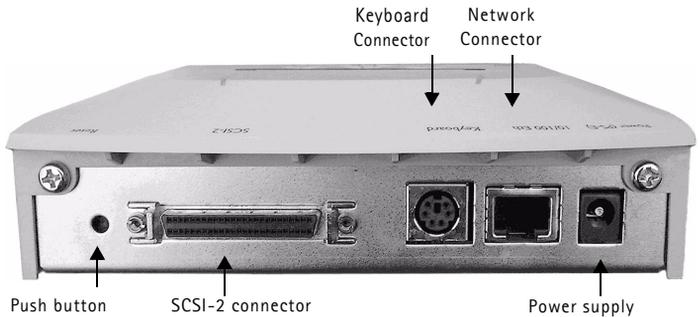
- | | |
|--------------------------|--|
| File Server Independence | The AXIS 7000/FX is connected as a node in Ethernet or Fast Ethernet networks, enabling digital copiers and scanners to be accessed via standard Internet protocols. Communicating directly with the network client, the AXIS 7000/FX can be used independently of file servers, which means reduced network licensing fees. The product affords high performance, reliability and operational independence from other equipment. |
| Simplicity | The file-server-independent approach makes installation quick and convenient. In most environments, the physical connection to the network is the only installation required prior to using the AXIS 7000/FX. No additional software is required on clients or file servers, except for viewing applications for displaying images in TIFF, JPEG and PDF format. |
| Web-based Management | The built-in Web server provides cross platform management from any standard Web browser, such as Netscape Navigator or Internet Explorer. The dynamically generated Web pages provide menu-based configuration and management capabilities as well as context sensitive help and links or user documentation and on-line support. |
| Flexibility | <p>From the AXIS 7000/FX control panel, you can send or copy directly to e-mail addresses, FTP servers or desktop directories, and even to network printers. You can also use a standard Web browser to trigger and save scanned documents.</p> <p>The diverse range of transfer methods and image formats available means that the AXIS 7000/FX can easily be integrated into existing workflows and adapted to satisfy your specific requirements.</p> |

- Ease of Use** The AXIS 7000/FX is designed for quick and easy installation on both your network and your digital copier or scanner. It has a number of interesting features that will help you to simplify the distribution of your paper-based information, including:
- Send-to-e-mail
 - Send-to-Web browser
 - Send-to-File
 - Send-to-Print over Raw TCP or LPD
 - Web-based (HTTP) management and configuration
 - Plug-and-play functionality for supported scanners and digital copiers
 - No additional or special software required
 - Integrated scanner drivers, image-file creation and network transfer methods
 - Destinations and profiles saved for regular use
 - External e-mail addresses supported
 - Supports industry standards
- Speed** Auto-sense for automatically detecting the speed of the local network segment and varying the rate of data communication accordingly, between 10Mbps and 100Mbps. Transparent operation for Ethernet and Fast Ethernet networks.
- Improved AXIS ETRAX 100 hardware, comprising an integrated 32 bit RISC processor and associated network controllers. Provides high performance and reliability combined with low power consumption.
- Security** Password protection of Administration tools.
User authentication supported.
- Upgrading** Firmware downloadable to Flash memory using FTP.

Section 2 Physical Description

This section provides a physical description of the AXIS 7000/FX and explains the purpose and function of the unit connectors, indicators and user interface.

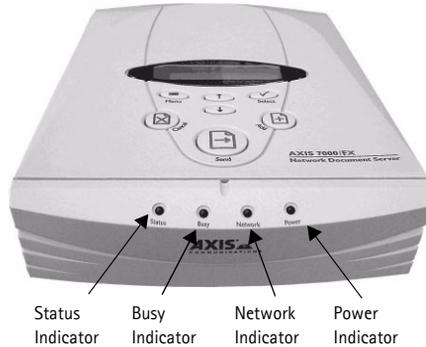
The Back Panel



- Push Button** The Push button can be used for restoring the AXIS 7000/FX parameters to the factory default settings. See “*Restoring Factory Default Settings*” on page 95.
- SCSI Connector** A SCSI-2 connector for connection to the scanning device.
- Network Connector** The AXIS 7000/FX is designed for 10 Mbps Ethernet and 100 Mbps Fast Ethernet networks (10baseT and 100baseTX) and connects to the network via an RJ-45 connector, via twisted pair category 5 cable.

Auto-sensing allows the AXIS 7000/FX to vary the speed of data communication from 10 Mbps to 100 Mbps according to the local network segment.
- Keyboard Connector** A Mini-DIN connector for connection of a standard PC compatible keyboard.
- Power Supply** The AXIS 7000/FX can use either the AXIS PS-C or AXIS PS-E power supply.

The Front Panel



The front panel indicators show the status of the AXIS 7000/FX. The function of each indicator is described below.

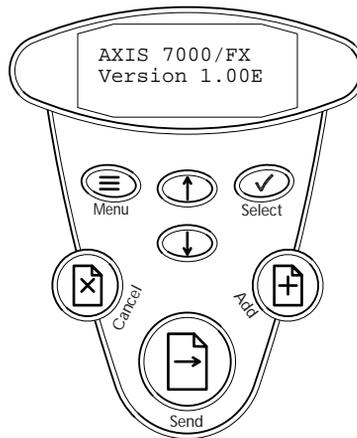
- | | |
|-------------------|---|
| Status Indicator | The Status indicator flashes during startup and remains lit when the AXIS 7000/FX is ready for use. If the status indicator turns off, this may indicate an error. |
| Busy Indicator | The Busy indicator turns on when the AXIS 7000/FX is allocated for use and remains on during the scanning process. |
| Network Indicator | The tri-colored Network indicator flashes:
yellow - indicating network activity on a 10MB Ethernet network.
green - indicating network activity on a 100MB Fast Ethernet network.
red - indicating that the unit is not correctly connected to the network. |
| Power Indicator | The Power indicator is normally on while power is applied. If the indicator remains off or flashes, this indicates a problem with the AXIS 7000/FX or its power supply. |

Note:

When the AXIS 7000/FX is idle: the Power indicator should be on, the Network indicator should flash randomly, the Busy indicator should be off and the Status indicator should be permanently lit.

Control Panel

The AXIS 7000/FX Control panel has user keys (described below) and a message display that describes the selected menu options and current status of the unit.



The message display consists of 2 lines of 16 characters indicating status and menu options.

User Keys The function of each user key is described below:

- Add** The Add key  scans the material in the scanning device. Use this key to scan each page of bound materials, for example, books and magazines.
- Cancel** The Cancel key  cancels the sending process at any stage and clears any selections made from the menu. It also resets error messages on the display.
- Menu** The Menu key  scrolls the menu.
- Select** The Select key  selects multiple destinations.

Send The Send key  sends the scanned material to the selected destination(s) and releases the AXIS 7000/FX for other users. For a single page/stack of sheets, use this key to scan the material and send the image in one step.

Up/Down The Up  and Down  keys scroll and select menu options.

User Key Combinations

Advanced Settings

Menu Pressing and holding the Menu key  while simultaneously pressing the Select key  displays the **Advanced menu**.

Up/Down Use the Up  and Down  scroll keys to select:

- Event Log
- Firmware version number
- Network settings

Select Use the Select key  to enter the sub menu.

External Keyboard

It is possible to connect a standard PC compatible keyboard to the AXIS 7000/FX. This allows you to easily search long e-mail listings and add any non-listed addresses as temporary additions to the resident address list.

Note:

Be sure to power off the AXIS 7000 before connecting the keyboard.

Keys The function of each key is described below:

F1 The F1 key scans the material in the scanning device. Use this key to scan each page of bound materials, for example, books and magazines. F1 corresponds to the **Add** key on the control panel.

F2 The F2 key sends the scanned material to the selected destination and releases the AXIS 7000/FX for other users. For a single page or stack of sheets, use this key to scan the material and send the image in one step. F2 corresponds to the **Send** key on the control panel.

Esc The Esc key cancels the sending process at any stage and clears any selections made from the menu. It also resets error messages. Esc corresponds to the **Cancel** key on the control panel.

Tab The **Tab** key scrolls the menu. **Tab** corresponds to the **Menu** key on the control panel.

Enter The **Enter** key selects multiple destinations. **Enter** corresponds to the **Select** key on the control panel.

Up/Down The **Up** and **Down** arrow keys scroll and select menu options. The **Up** and **Down** arrow keys correspond to the **Up/Down** keys on the Control Panel.

Note:

When sending your document, the product always uses the destination and scanning options most recently displayed, whether explicitly selected or not.

- Insert** Press the **Insert** key to add an address or subject.
- Enter** Press **Enter** to finish a new address or subject.
- Delete** Press **Delete** to remove a temporary address or to delete characters when editing a subject.
- Backspace** Press **Backspace** to delete characters.
- Left** Press the **Left** arrow key to go backwards in the menu.
- Page Up** Press **Page Up** to go to the next entry with a different first character in the "Send to:" or "Sent by:" list.
- Page Down** Press **Page Down** to go to the previous entry with a different first character in the "Send to:" or "Sent by:" list.
- Home** Press **Home** to go to the first entry in a list.
- End** Press **End** to go to the last entry in a list.

Section 3 Basic Installation

This section describes the various aspects of product installation and includes:

- A detailed hardware inventory
- Instructions for installing the AXIS 7000/FX onto your networking environment
- Instructions for setting the IP address using the AXIS 7000/FX control panel, DHCP, RARP, BOOTP and AXIS IP Installer
- Instructions for setting a host name
- Instructions on how to verify your installation

Checking the Hardware Inventory

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

Hardware	Model
AXIS 7000/FX Network Document Server	AXIS 7000/FX
Power Supply Note: the PS-E and PS-C are interchangeable.	AXIS PS-E
	AXIS PS-C
SCSI Cable	50-pin high-density shielded SCSI-2 connector (micro-D)
Bracket	Mount AXIS 7000/FX on the side of the digital copier
Media	Title
CD-ROM	AXIS Online CD for AXIS 7000/FX

AXIS Online CD The AXIS Online CD provides an easy-to-use electronic catalog, that includes the AXIS utilities software, user documents, technical notes and references etc. It can be used within all of the supported Axis computing environments. AXIS 7000/FX does not require any additional software installation from the AXIS Online CD.

You can view the contents of the AXIS Online CD via HTML interface. Most of documents presented on the CD are in PDF format.

Notes:

- You can download the Acrobat Reader from the AXIS Online CD or from the Adobe Web site at www.adobe.com

Connecting Digital Copiers and Scanners

Important!

- Check that the power supply provided with your AXIS 7000/FX is marked with the correct mains voltage.
- Make sure the scanning device is switched off and the AXIS 7000/FX power supply is disconnected. The SCSI bus may become damaged if you connect or disconnect units when power is on.

Connecting the AXIS 7000/FX to your scanner or digital copier:

1. Switch off the scanning device and disconnect the AXIS 7000/FX external power supply.
2. Connect the SCSI cable to the SCSI connector on the AXIS 7000/FX.
3. Connect the SCSI cable to the scanning device. The AXIS 7000/FX uses a built-in SCSI terminator. Note that the scanning device must also be terminated properly. Refer to the documentation supplied with your scanner or digital copier.

Connecting the AXIS 7000/FX to the Network

Important!

Always consult your Network Administrator before making changes to the network configuration.

Follow the instructions below to connect the AXIS 7000/FX to your network:

1. Turn off the AXIS 7000/FX by unplugging the power supply.
2. Connect your AXIS 7000/FX to the network.

Note:

The AXIS 7000/FX is designed for 10 Mbps Ethernet and 100 Mbps Fast Ethernet networks and connects to the network via a twisted pair category 5 cable (10baseT and 100baseTX).

3. Switch on the scanning device.
4. Connect the external power supply to the AXIS 7000/FX. The network indicator will flash during power up and self test. The following message will appear on the display during self test:

```
AXIS 7000/FX  
Version: x.xxx
```

where **x.xxx** is the software version number, e.g. 1.00E

Notes:

The tri-colored Network indicator flashes:

- yellow - indicating network activity on a 10MB Ethernet network.
- green - indicating network activity on a 100MB Fast Ethernet network.
- red -if there is no network connection.
- Not lit - indicates that there is no network activity.

Assigning an IP Address

To establish communication with the TCP/IP environment, you must assign an IP address and optionally choose a unique host name for your AXIS 7000/FX.

Available Methods Choose your preferred method for setting the IP address from the list below then proceed to the appropriate instructions defined later in this section:

Method	Environment	Description
Control Panels	Suitable for all supported environments.	Provides a convenient method for setting the IP address in all supported networking environments. <i>Note: the administrator can disallow this function from the Web-based Administration pages.</i>
PC Keyboard (Not supplied)	Suitable for all supported environments.	Connecting a PC compatible keyboard directly to the Mini-DIN connector of the AXIS 7000/FX provides a quick and convenient method for managing the unit, and setting the IP address during system startup. <i>Note: the administrator can disallow this function from the Web-based Administration pages. For further details, refer to "User Options" on page 38.</i>
AXIS IP Installer	Suitable for all supported networking environments.	Supplied on the AXIS Online CD and available via the Axis Website, this is an Axis tool that simplifies the setting of IP addresses for all Axis ThinServer™ devices, including print servers, camera servers, storage servers and document servers. <i>Note: you should not use AXIS IP Installer to set the IP address of the AXIS 7000/FX, if you have an active DHCP server on your network.</i>
DHCP	Available in Windows NT and UNIX. Recommended method on Windows NT networks	Operates on the entire network and allows for automatic but temporary assignment of IP addresses from a central pool. DHCP will, when enabled, cause the selected host to automatically allocate and download a free IP address, default router address and subnet mask to the requesting AXIS 7000/FX. It also provides validation data that defines how long the IP addresses will remain valid. This is the recommended method on networks, since it allows a number of parameters to be set automatically, provided the DHCP server has been configured to do so.

ARP	Available in Windows 95/98, Windows NT, UNIX and OS/2, Does NOT work over routers.	Requires the IP address for each new device to be downloaded individually.
RARP	Available in UNIX only.	Downloads the IP address to each device automatically. It requires a RARP daemon on your system and operates within a single network segment only.
BOOTP	Available in UNIX only.	Similar to RARP, but operates on the entire network. It requires a BOOTP daemon on your system.

Control Panel

Follow the instructions below to set the IP address from the control panel:

1. Power up the AXIS 7000/FX. Press Menu  when this display appears:

```
AXIS 7000/FX
Version: 1.00E
```

2. After a few seconds this display will be shown:

```
IP address:
000.000.000.000
```

3. Press Select  to edit the IP address:

```
Edit IP address:
000.000.000.000
```

4. Press Menu  to move through the digits and highlight each digit, one at a time.
5. Use   to increase or decrease each highlighted digit, as required.
6. Press Select  to confirm the changes.
7. Press Menu  to display the default router address setting:

```
Default router:
000.000.000.000
```

8. Press Select  to edit the default router address:

```
Edit router:
000.000.000.000
```

9. To change the value, repeat steps 4 - 6 above.
10. Press Menu  to display the subnet mask setting:

```
Net mask:
000.000.000.000
```

11. Press Select  to edit the subnet mask:

```
Edit net mask:
000.000.000.000
```

12. To change the value, repeat steps 4 - 6 above.
13. Press Menu  to display the node address. This address is not editable. The node address should equal the AXIS 7000/FX serial number found on the underside label of the unit.
14. Press Menu  once more to display the final instructions:

```
Press  if you
are finished
```

15. Press Select  to exit the IP settings. The AXIS 7000/FX then completes the startup sequence.
16. Write the name or IP address of the AXIS 7000/FX on the supplied Instructions label and attach it to the top cover.

The AXIS 7000/FX is ready for use when the Status indicator stops flashing and remains lit.

Note:

If you make a mistake while editing the parameters, press the Cancel key on the control panel to cancel the operation.

Verifying the Network Settings

Access the **Advanced** menu from the AXIS 7000/FX control panel to verify that the chosen network settings are correct, as described below:

1. Press and hold down the Menu key  while simultaneously pressing the Select key . The **Advanced** menu is displayed.
2. Use   to find the Network Settings option.
3. Press Select  to enter the submenus.
4. Use   to scroll through and check the parameter settings.

Using a PC keyboard

Connecting a PC compatible keyboard directly to the Mini-DIN connector of your AXIS 7000/FX provides a quick and convenient method for managing the unit and setting the IP address during system start up. Follow the procedures below to set the IP Address from the keyboard.

Note:

The Administrator can disallow this function from the Web-based Administration pages. For further details refer to "User Options" on page 38.

1. The following commands are for the setup of the IP parameters at start-up only. If the keyboard is not already connected, make sure that the AXIS 7000/FX power supply is disconnected before connecting the keyboard to the Mini-DIN connector located on the rear panel.

Connect the AXIS 7000/FX power supply and Press **Tab** when the following message appears:

```
AXIS 7000/FX
Version 1.00E
```

2. After a few seconds the following message will appear:

```
IP address:
000.000.000.000
```

3. Press **Enter** to edit the IP address:

```
Edit IP address:
000.000.000.000
```

4. Use the following keys to enter the IP address:
 - Use the numeric keys to enter the digits.
 - Press **Left** or **Right** arrow to edit the previous or next digit.
 - Press **Backspace** to erase the last entered digit.
 - Press **Space** to move to the next three-digit group.
 - Press **Home** or **End** to go to the first or last three-digit group.
 - Press **Enter** to save and exit.
 - Press **Esc** to cancel.

The instructions above also apply for editing the router address and subnet mask setting.

Using DHCP, ARP, RARP and BOOTP Use DHCP, ARP, RARP and BOOTP as an alternative to setting the IP address from the control panel or keyboard. Follow the appropriate instructions for the preferred method below.

Important!

Do not use the IP address used in any of the following examples.

Before you begin:

- **Power**
Make sure the AXIS 7000/FX is powered on and attached to the network.
- **System Privileges**
You will need *administrator* privileges on the Windows NT server or *root* privileges on the UNIX system.
- **Ethernet Address**
Depending on the method you are using, you will need to know the Ethernet address of your AXIS 7000/FX. The Ethernet address is based upon the AXIS 7000/FX serial number. You will find the number on the underside label.
- **IP Address**
Acquire an unused IP address from your Network Administrator.

Using DHCP Follow these steps to use the DHCP method:

1. Edit or create a scope in the DHCP manager of the DHCP daemon. For Windows NT servers, refer to the "*Windows NT Resource Kit*" on how to do this. The entries made in this scope typically include the following parameters:
 - Range of IP addresses
 - Subnet mask
 - Default router IP address
 - Lease duration
 - Mail server IP address
 - DNS server IP address
 - Domain name
 - NTP server IP address
2. Activate the scope.

Notes:

- DHCP is enabled by default but can be disabled by an Administrator using the System Settings page.
- The IP address and all the other settings will be downloaded automatically. You do not need to restart the AXIS 7000/FX.

Using ARP in Windows In Windows 95 and Windows NT, you can download the IP address using ARP. Perform the following commands to download the IP address and verify the communication.

Important!

Windows 95 only: If the ARP table is empty, you must first ping an existing unit on your network before setting the IP address of your AXIS 7000/FX. Type arp -a to display the ARP table.

From the DOS prompt, type the following:

```
arp -s <Internet address> <Ethernet address>
ping <Internet address>
```

The Ethernet address equals the serial number of the AXIS 7000/FX with each pair of digits separated by a hyphen.

Example:

```
arp -s 172.16.253.80 00-40-8c-11-00-86
ping 172.16.253.80
```

The host will return 'Reply from 172.16.253.80...' or a similar message. This indicates that the address has been set and that the communication is established.

Notes:

- ARP is enabled by default but can be disabled by an Administrator using the System Settings page.
- Once the AXIS 7000/FX has established communication using an appropriate IP address, the `arp/ping` commands cannot be used to change the address. The reason for this is to avoid accidental or unauthorized changes of the IP address. Restart the AXIS 7000/FX to make it accept the setting of the IP address. You can perform a restart remotely via the AXIS 7000/FX web interface. See "*Specifying the System Settings*" on page 36.
- When you execute the `ping` command for the first time, the response time may be significantly longer than usual.

Using ARP in
UNIX and OS/2

In UNIX and OS/2, type the following commands to download the IP address and verify the communication:

```
arp -s <host name> <Ethernet or node address> temp  
ping <host name>
```

The `Ethernet address` or `node address` equals the AXIS 7000/FX serial number with each pair of digits separated by a colon.

Example:

```
arp -s spserv 00:40:8c:11:00:86 temp  
ping spserv
```

The host will return `'spserv is alive'` or a similar message. This indicates that the address has been set and that communication is established.

Notes:

- ARP is enabled by default but can be disabled by an Administrator using the System Settings page.
- The `arp -s` command may vary between different systems. Some BSD-type systems expect the host name and Ethernet address in reverse order. IBM AIX systems require the additional argument `ether` for Ethernet networks, e.g. `arp -s ether spserv 00:40:8c:11:00:86 temp`
- Once the AXIS 7000/FX has established communication using an appropriate IP address, the `arp/ping` commands cannot be used to change the address. The reason is to avoid accidental or unauthorized change of the IP address. Restart the AXIS 7000/FX to make it accept the setting. You can perform a restart remotely via the AXIS 7000/FX web interface. See "*Specifying the System Settings*" on page 36.
- When you execute the `ping` command for the first time, the response time may be significantly longer than usual.

Using RARP in UNIX

Follow these steps to download the IP address using the RARP method:

1. Append the following line to your Ethernet address table. This is typically performed by editing the file `/etc/ethers`.

```
<Ethernet address> <host name>
```

Example:

```
00:40:8c:24:c0:1c spserv
```

2. If necessary, update your host table and alias name databases as required by your system.
3. Start the RARP daemon, if it is not already running. This is typically performed using the command `rarpd -a`
4. Restart the AXIS 7000/FX to download the IP address. See "*Specifying the System Settings*" on page 36

Note:

RARP is enabled by default but can be disabled by an Administrator using the System Settings page.

Using BOOTP in UNIX

Follow these steps to download the IP address using the BOOTP method:

1. Append the following entry to your boot table. This is typically performed by editing the file `/etc/bootptab`.

```
<host name>:ht=<hardware type>:vm=<vendor magic>:\
:ha=<hardware address>:ip=<Internet address>:\
:sm=<subnet mask>:gw=<gateway field>
```

where:

ht	ether for Ethernet
vm	rfc1048
ha	The Ethernet or node address, i.e. the AXIS 7000/FX serial number
ip	The IP address of the AXIS 7000/FX
sm	The subnet mask
gw	The default router address

Example:

```
spserv:ht=ether:vm=rfc1048:\
:ha=00408c24c01c:ip=172.16.253.80:\
:sm=255.255.0.0:gw=172.16.253.254
```

2. If necessary, update your host table and alias name databases as required by your system.
3. Start the BOOTP daemon, if it is not already running. This is typically performed using the command `bootpd -a`
4. Restart the AXIS 7000/FX to download the IP address, default router address and subnet mask.

Notes:

BOOTP is enabled by default but can be disabled by an Administrator using the System Settings page.

Mapping a Host Name to the IP Address

If you are using host names, you can map a unique host name to the acquired IP address. Refer to your system manuals or to your Network Administrator for instructions on how to perform the name mapping on your particular system.

Note:

If the host name has not been included in the system host table, you can still perform the following instructions on how to download the IP address. In this case, simply replace the host name entry with the IP address wherever needed.

Verifying your Installation

After successful installation, the AXIS 7000/FX will verify the attached digital copier/scanner and display the name of the detected device. If the digital copier/scanner is not supported, an error message will be displayed.

If no destinations have been specified yet, the AXIS 7000/FX will display:

Connect using
Web browser

If one or more destinations have already been specified, the AXIS 7000/FX will display:

Send to:
xxxxxxx

where “xxxxxxx” is the first destination in the destination list.

To verify the communication, you can access the AXIS 7000/FX using a standard Web browser such as Netscape Navigator or Internet Explorer:

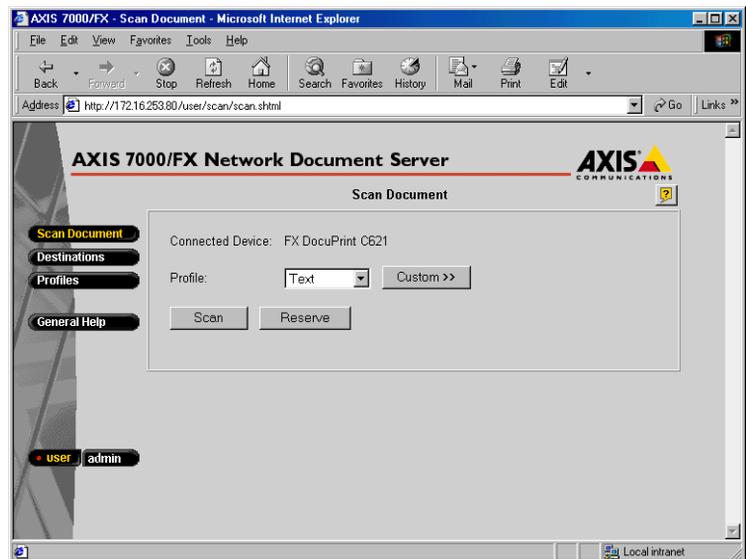
1. Place a document in the digital copier/scanner.
2. Start your Web browser.

3. Enter the name or IP address of your AXIS 7000/FX in the location/address field.

Example:

```
http://172.16.253.80
```

4. The AXIS 7000/FX Home Page, the **Scan Document** page is displayed. Place an image in the digital copier/scanner and click **Scan**. Depending on the image format specified by the profile, the Web browser will display the scanned image in an associated image viewer or ask you to save the file.



Section 4 **Configuring the AXIS 7000/FX**

This section is targeted specifically to users responsible for the administration of the AXIS 7000/FX. The *Administrator* is granted with high-level privileges denied to the ordinary *user*.

Important!

To access the AXIS 7000/FX configuration file, you must first set the IP address as described in "Assigning an IP Address" on page 21.

You configure the AXIS 7000/FX from a standard Web browser such as Netscape Navigator or Internet Explorer.

Alternatively, edit the configuration file using a text editor and upload the file to the AXIS 7000/FX using FTP.

Important!

The following settings must be specified by the Administrator before the AXIS 7000/FX can be used for distributing documents on your network:

- Network settings - define the parameters for TCP/IP and SMTP protocols.
- Destinations - specify the e-mail address, file server, or printer to which you wish to send your document.

The Administrator can optionally modify:

- System settings - system information, administrator password, language, user privileges etc.
- Profiles
- Paper sizes

Overview of the Administration Tools

Online help  is available on every page within the AXIS 7000/FX web interface. This is of particular relevance when configuring the unit and should be used as a first point of reference for any administration queries. The help system is stored internally in the AXIS 7000/FX.

The Web-based Administration tools provide a convenient method for managing destinations, profiles, defining the network protocol settings, establishing user privileges, authentication etc. The tools are password protected and available to the *Administrator* only.

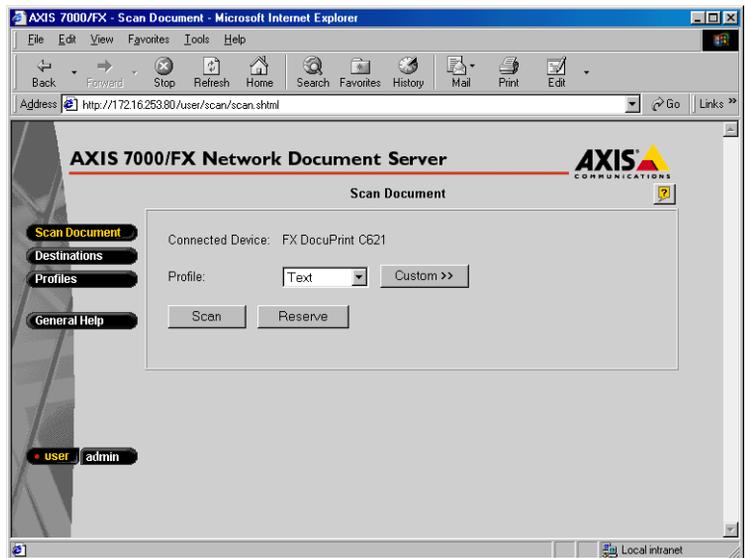
Accessing the Tools You can access the AXIS 7000/FX Home Page using a standard Web browser such as Netscape Navigator or Internet Explorer.

1. Start the Web browser.
2. Enter the name or IP address of the AXIS 7000/FX on the location/address line:

Example:

```
http://172.16.253.80
```

3. This brings you to the AXIS 7000/FX Home Page.



4. Click **admin**.

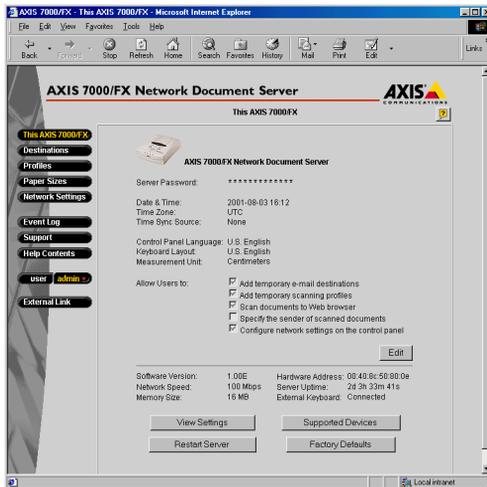


A prompt for a *username* and *password* is displayed when entering these pages for the first time during a Web browser session. At the prompt, log on as *root* and use the default password *pass*.

Note:

It is recommended that you change the password of your AXIS 7000/FX as soon as possible, since all Axis products are shipped with the same password as default.

5. The This AXIS 7000/FX page is displayed:



The *Administrator* can modify the system settings directly from this page. Access the other Administration tools using the control buttons to the left of the page.

Specifying the System Settings

Click **This AXIS 7000/FX page** to display software version, unit hardware address, memory size information and the current system settings.

Important!

When installing the AXIS 7000/FX for the first time, it is recommended that the Administrator retains the default system settings, profiles and paper sizes. Optionally, customize these when you are familiar with the unit operation and functionality.

Services overview

The table below provides an overview of the information and services provided by each button on this page:

Button	Description
Edit	Allows editing of the General, Date & Time, User Options, International, Authentication and Meta Information settings. See <i>The Edit Button</i> below.
View Settings	Lists the current parameter settings in the configuration file.
Restart Server	Restarts the AXIS 7000/FX. Removes all previously loaded temporary destinations and profiles from the memory.
Factory Defaults	Restores the factory default settings and restarts the AXIS 7000/FX automatically. All previously loaded destinations are erased from memory.
Supported Devices	Displays the list of the devices supported by the AXIS 7000/FX.

The Edit Button

Click the **Edit** button to display the **This AXIS 7000/FX - Edit** Page. Clicking the appropriate tag displays the **General, Date & Time, User Options, International,** and **Authentication** settings for your AXIS 7000/FX as described below:

General

Server Password and Confirm

This is the *Administrator* password required for accessing the AXIS 7000/FX for administration tools.

To change the password, simply enter your new password in the **Server Password** field. Repeat the new password in the **Confirm** field to check the spelling and syntax.

Notes:

- It is recommended that you change the password of your AXIS 7000/FX as soon as possible, since all Axis products are shipped with the same password as default.
- If you lose the Server password, you must restore the factory default settings. See "*Restoring Factory Default Settings*" on page 95.
- An asterisk * is displayed for each alphanumeric character that comprises the password in the Server password field of the This AXIS 7000/FX page.

Date & Time

If you are using time synchronization, specify the time zone in which the AXIS 7000/FX operates. UTC is Universal Time Coordinated which used to be known as Greenwich Mean Time (GMT), i.e. the local time at the Greenwich meridian (zero degrees longitude). No_DST means that automatic adjustment for DST (Daylights Savings Time) is not included. However, the country specific time zones include adjustment for DST.

The AXIS 7000/FX has a built-in real time clock with a back-up battery which will keep the time when the power supply is disconnected.

Automatically using the Network Time Protocol (NTP)

Click here to obtain date and time information from a time synchronization source. Time stamps are used in the event log.

NTP Server

Specify the name or IP address of the NTP server used for time synchronization.

Manually

Click here to set date and time manually.

User Options The **Allow Users to:** field defines the privileges allowed to normal *users* by the *Administrator(s)*. Check the corresponding checkbox for each task a *user* is allowed to perform, namely:

- Add temporary e-mail destinations
- Add temporary profiles
- Scan documents to Web browser
- Specify the sender of scanned documents
- Configure network settings on the control panel

Notes:

- All tasks, except *specifying the sender* are enabled by default.
- Configuring the network settings on the control panel allows the user to change the IP Address using the control panel.

International Allows the *Administrator(s)* to select:

- The preferred language for messages displayed on the AXIS 7000/FX control panel display - English, French, German, Spanish, Italian and Swedish are supported
- The keyboard layout which is compatible with the external keyboard
- The measurement unit to be used for displaying defined paper sizes (centimeters or inches).

Notes:

- The language default is set to English and the measurements to centimeters.
- When a new language is selected you must go back to the **Profiles** page and click **Restore Predefined Profiles** to change the language in the Profile Name list. This also applies to the language in the Paper Sizes list, i.e. you must go back to the **Paper Sizes** page and click **Restore Predefined Paper Sizes**.

Note: All user-defined profiles and modifications to predefined profiles will be lost when you click Restore Predefined Profiles.

Authentication Authentication makes it possible to allow access to the AXIS 7000/FX to authenticated users only. For more information, please refer to “*Specifying Authentication Settings*” on page 52.

Specifying Network Settings

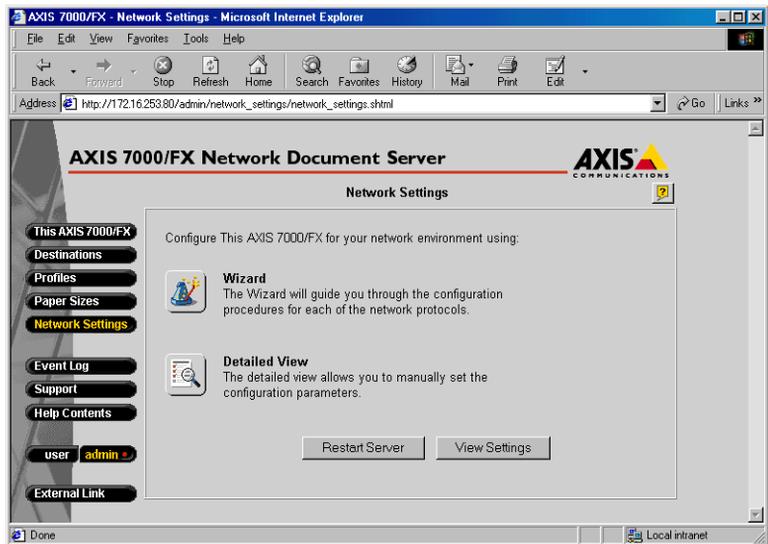
Click **Network Settings** to view and modify the configuration parameters for all supported protocols, namely:

- **TCP/IP** - defines the IP Address, default router and subnet mask, automatic download method (BOOTP, RARP or DHCP), domain name, and DNS server.

Notes:

The network settings are set automatically if you use RARP, DHCP or BOOTP for downloading the IP address. However, it is recommended that you verify the network settings using the Web browser interface, regardless of how the initial network setup was done.

- **Web (HTTP)** - an external URL reference with URL to page or image options.
- **E-mail (SMTP)** - defines the IP Addresses or DNS names for primary and secondary e-mail servers, connection time-out, e-mail reply address.
- **External Address Book** - defines an external e-mail address book on an LDAP server or a destination list on an FTP server which is automatically retrieved and downloaded to the AXIS 7000/FX..



Services Overview

The table below provides an overview of information and services available from this page

Button	Description
Wizard	<p>Guides the user through the setup procedures for the following protocols - TCP/IP, E-mail (SMTP) and the External Address book.</p> <p><i>Note: You cannot set up all of the supported protocols with one pass of the Wizard. After completing one protocol, you then return to the Network Settings Wizard page where you can optionally proceed with another protocol.</i></p>
Detailed View	<p>Displays the Protocols page that allows all of the supported protocols to be set up within a single dialog.</p>
Restart Server	<p>Restarts the AXIS 7000/FX. LED indicators flash during startup and self test. When they have stopped and the Network indicator starts flashing to indicate network activity, the unit is ready for use. New configuration settings will then become active.</p> <p><i>Note: Clicking Restart deletes all temporary destination and profiles.</i></p>
View Settings	<p>Lists the current parameter settings in the configuration file.</p>

Using the Wizard

The Wizard provides a convenient way to set up the AXIS 7000/FX in your networking environment. Follow the instructions below to configure the supported networking protocols:

Important!

- The Network settings for the TCP/IP and E-mail (SMTP) protocols must be specified by the Administrator before the AXIS 7000/FX can be used for distributing reproduced documents on the network. You can *optionally* configure the External Address Book for automatic retrieval and loading of e-mail addresses and/or other destination types.
- In order to prevent conflicts with other network devices please be sure to acquire a unique and unused IP address from your Network Administrator.

1. Click **Network Settings**.
2. Click **Wizard**  to have the AXIS 7000/FX guide you through the configuration procedures for each of the supported network protocols.
3. Click **Detailed View** to verify the settings.

Note:

The Wizard configures each supported protocol one at a time, i.e. after configuring TCP/IP you must then initiate another pass of the Wizard to configure the E-mail (SMTP) protocols and External Address Book.

4. Click **Close**.

Detailed View

Follow the instructions below to configure all of the supported networking protocols using the **Detailed View**.

Important!

- The Network settings for the TCP/IP and E-mail (SMTP) protocols must be specified by the Administrator before the AXIS 7000/FX can be used for distributing reproduced documents on the network. You can *optionally* configure the External Address Book for automatic retrieval and loading of e-mail addresses and/or other destination types.
- In order to prevent conflicts with other network devices please be sure to acquire a unique and unused IP address from your Network Administrator.
- The Online help button  provides instructions and general information on all system parameters and is your first point of reference for any administration queries.

1. Click **Network Settings**.
2. Click **Detailed View**  to display the **Protocols** dialog.
3. With reference to services overview below and the **Online Help** information, click the appropriate tag to view and modify the protocols to your choosing.
 - Click **Apply** to save your changes without closing the dialog box.
 - Click **OK** to save your changes and close the dialog box.

Services Overview

The table below provides an overview of the supported protocol settings describing both purpose and function:

Protocol setting	Purpose and function
TCP/IP	Defines the IP Address, default router and subnet mask, automatic download method (BOOTP, RARP or DHCP), domain name, and DNS server.
Web (HTTP)	An external URL reference with URL to page or image options.
E-mail (SMTP)	Defines the IP Addresses or DNS names for primary and secondary e-mail servers, connection time-out, e-mail reply address and Bcc address.
External Address Book	Defines an external e-mail address book on an LDAP server or destinations list on an FTP server.

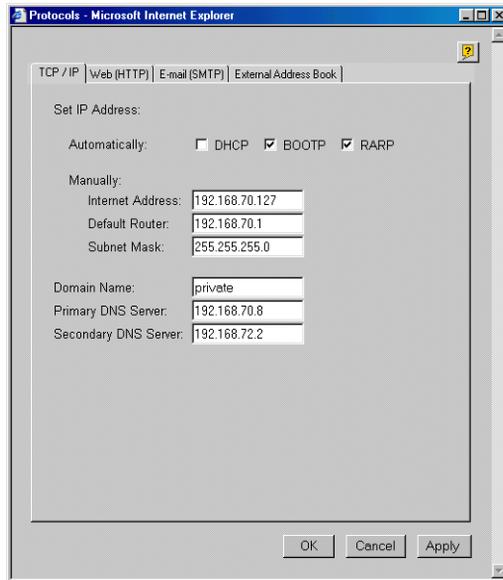
Note:

The AXIS 7000/FX configuration parameters are fully described in "The Parameter List" on page 111.

Configuring the TCP/IP Settings

Follow the instructions below to configure the TCP/IP settings:

1. From the **Protocols** dialog, click the **TCP/IP** tag.



2. Check the appropriate checkbox to define your preferred method for setting the IP Address automatically, i.e. DHCP, BOOTP or RARP. For further information on these methods, refer to "Assigning an IP Address" on page 21.

Notes:

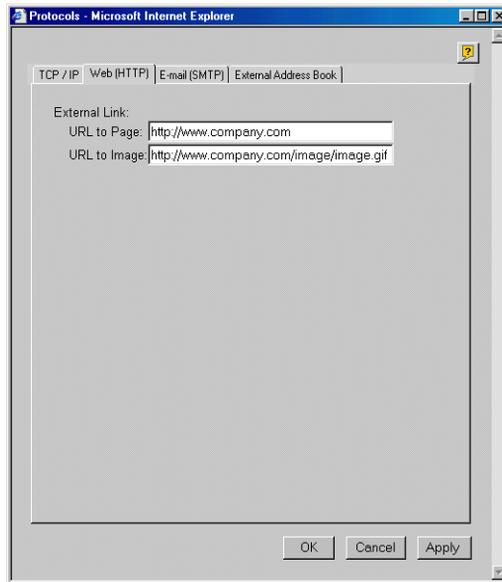
- If DHCP, BOOTP or RARP is enabled, your manual settings might be overridden when you restart the AXIS 7000/FX.
- Depending on how your network has been configured, other Internet-related parameters such as the default router, subnet mask, mail server, time server etc. might also be set automatically. However, it is recommend that you verify the settings when the AXIS 7000/FX has been restarted and then enter any missing parameters manually.

3. Enter the **IP Address** of your AXIS 7000/FX, e.g. 172.16.253.80

Notes:

- If the IP address is changed, you must re-establish the HTTP communication using the new address.
 - You can also set the IP address from the AXIS 7000/FX control panel. Refer to "Assigning an IP Address" on page 21.
4. Enter the IP address for the **Default Router**. All traffic directed outside the local network (according to the subnet mask) is sent to the default router. Any re-routing via other routers is done automatically. The setting 0.0.0.0 indicates that no default router is set.
 5. Specify the **Subnet Mask** used for determining when the traffic should be sent via a router. This number combined with the IP address identifies on which network the AXIS 7000/FX is located. For example, the normal class C mask is 255.255.255.0. The setting 0.0.0.0 indicates that automatic router sensing is used.
 6. Specify the **Domain Name** to which the AXIS 7000/FX belongs. Domain refers to a set of computers on a network that have been assigned a group name. A domain might contain two or more workgroups.
 7. Specify the IP address of the **Primary DNS Server**. DNS (Domain Name System) servers are used for identifying computers with names instead of IP Addresses.
 8. Specify the IP address of the **Secondary DNS Server** that will be used in case the primary DNS server is disconnected or unavailable.

Web (HTTP) Select **Web(HTTP)** to add a customized link to the AXIS 7000/FX Home Page:



- **URL to Page:** Useful for establishing guidelines and rules of usage for the AXIS 7000/FX. The full path must be specified, e.g. `http://www.company.com`
- **URL to Image:** Link to an image used as a customized link. Specify the full path; for example: `http://www.company.com/images/image.gif`, or the path relative to the URL of the page, e.g. `images/image.gif`.

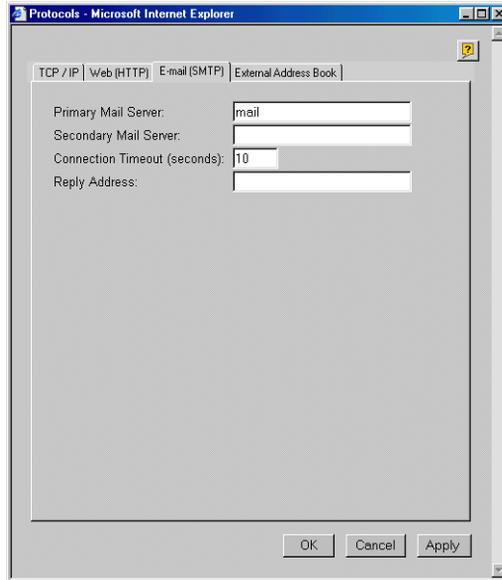
Note:

Note that the width of the image can not exceed 117 pixels. Leave blank to use a standard button.

E-mail (SMTP) The Network settings for the e-mail (SMTP) protocols must be specified by the Administrator before the AXIS 7000/FX can be used for distributing reproduced documents on the network.

Follow the instructions below to configure the e-mail (SMTP) protocol.

1. From the **Protocols** dialog, click the **E-mail (SMTP)** tag.



2. Specify the name or IP address of the **Primary Mail Server** that provides the e-mail facilities, e.g. mail or mail.domain.com or 172.16.253.80.
3. Optionally, specify the name or IP address of the **Secondary Mail Server**. The secondary mail server is only used if the primary mail server is disconnected or unavailable.
4. In the **SMTP Port** field, specify the number of the TCP/IP port.
5. Define the **Connection Timeout** period, i.e. how long the AXIS 7000/FX is to wait before timing out when connecting to the e-mail (SMTP) server. This must be greater than 5 but no more than 65535 seconds.
6. In the **Reply Address** field, specify the e-mail address that is to feature as the *default sender* when sending to e-mail destinations.

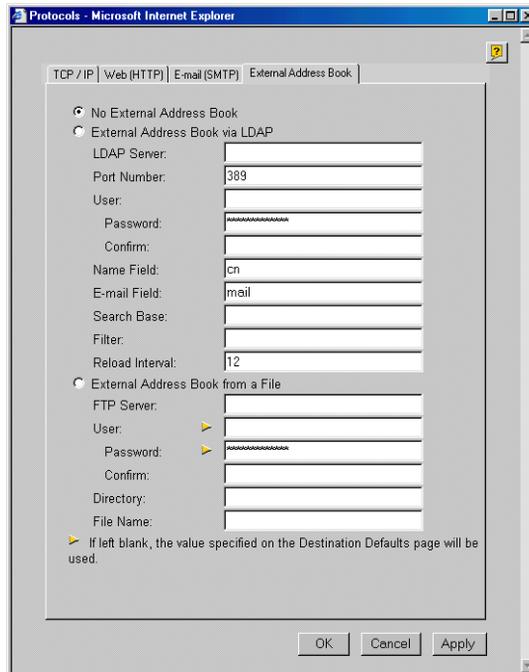
Notes:

- The user can specify another sender at the moment of scanning. This, however, does not apply if the administrator has enabled Authentication or if the *Specify the sender of scanned documents* option is not selected (see the admin|Edit|User Options tab).
- Make sure that your AXIS 7000/FX has a valid SMTP reply address to avoid rejection by spam filters.
- To be able to receive mail from the AXIS 7000/FX you may need to configure the IP address or host name of the AXIS 7000/FX in the mail server.

External Address Book A Destination Address Book can be retrieved from an LDAP (Lightweight Directory Access Protocol) server or from a specified file on an FTP server. Alternatively, you can choose not to retrieve an address book.

Follow the instructions below to configure the External Address Book:

1. From the **Protocols** dialog, click the **External Address Book** tag.



The screenshot shows a dialog box titled "Protocols - Microsoft Internet Explorer" with a tab labeled "External Address Book". The dialog contains two radio button options:

- No External Address Book
- External Address Book via LDAP

Under the "External Address Book via LDAP" option, the following fields are visible:

- LDAP Server: []
- Port Number: 389
- User: []
- Password: []
- Confirm: []
- Name Field: cn
- E-mail Field: mail
- Search Base: []
- Filter: []
- Reload Interval: 12

Below these fields is another radio button option:

- External Address Book from a File

Under this option, the following fields are visible:

- FTP Server: []
- User: []
- Password: []
- Confirm: []
- Directory: []
- File Name: []

At the bottom of the dialog, there is a note: "If left blank, the value specified on the Destination Defaults page will be used." and three buttons: "OK", "Cancel", and "Apply".

Your options are:

- **No External Address Book** - Select this option if you do not want to retrieve an External Address Book.

- **External Address Book via LDAP (e-mail destinations only)** - Select this option to retrieve an external address book from an LDAP (Lightweight Directory Access Protocol) server. For more information on LDAP, see "LDAP" on page 105. Check the AXIS 7000/FX Support Web for more information on the settings for your specific LDAP server.
 - LDAP Server** - Specify the name or IP Address of the LDAP server.
 - Port Number** - Specify the number of the TCP/IP port.
 - User** - Specify the name for logging on to the LDAP server, e.g. *cn=name, o=companyname, c=countrycode*. If left blank, no authorization will be attempted. If the contents in this field does not include a "=" or a comma, the string "cn=" is automatically added to the beginning of the contents.
 - Password** - Specify the password for logging on to the LDAP server. If the User field is left blank, this setting will be ignored.
 - Confirm** - Confirm the password to make sure it was spelled correctly.
 - Name Field** - Specify the name of the field that contains the destination name.
 - E-mail Field** - Specify the name of the field that contains the e-mail address.
 - Search Base** - Specify where to begin the search, e.g. *o=companyname, c=countrycode*.
 - Filter** - Specify an LDAP filter in order to reduce the length of the destination list. The filter can be a real LDAP filter, e.g. *(givenName=*)*. You can also specify a list of conditions, e.g. *mail=adm*,telephoneNumber=+1 800**. In this case, the AXIS 7000/FX will generate a real LDAP filter.

- **External Address Book from a File** (e-mail, printer and file destinations) - Select this option to read an external address book from a file on an FTP server.

FTP Server - Specify the name or IP Address of the FTP server.

User - Specify the user name for logging on to the FTP server. If left blank, the User and Password specified on the **Destination Default** page will be used.

Password - Specify the password for logging on to the FTP server. If the User field is left blank, this setting will be ignored.

Confirm - Confirm the password to make sure it was spelled correctly.

Directory - Specify the directory on the FTP server where the file is stored. Example: /pub/axis7000/address

If left blank, the root directory on the FTP server will be used.

File Name - Specify the name of the file. The file must be a text file using the following syntax:

```
[Destination-<destination name>]
```

```
Description           = <destination name>
Transfer method       = Scan-to-e-mail (SMTP)/
                       Scan-to-URL (SMTP & FTP)/
                       Scan-to-file (FTP)
                       Scan-to-print (LPD)
                       Scan-to-print (TCP)
Destination          = <e-mail address>/<directory>
                       = <queue>/<port>
Information level    = Nothing/Basic/Complete
Profile              = <profile>
Server               = <ftp server>
                       = <LPD server>
                       = <printer>
User                 = <user name>
Password             = <password>
File name            = <file name>
Index file           = Yes/No
Resolutions          = <A subset of: 75 100 150 200 300
                       = 600 1200>
Paper sizes          = <A subset of: Executive Letter
                       = Legal Ledger A4 A3>
Duplex supported     = Yes/No
Duplex selection     = SingleSided/DoubleSided/
                       = AsScanned
LPD mode             = SingleDataFile/SplitSourceFile/
                       = BufferDataFiles/
                       = MultipleDataFiles/
```

The **Password**, **File name** and **Index file** fields only apply to file destinations. The **Server** and **User** fields only apply to file and printer destinations. The last five fields only apply to printer destinations. The **Description**, **Transfer method** and **Destination** fields are mandatory for all destination types. For file and printer destinations, the **Server** field is mandatory as well. If the other fields are omitted, default values will be used. These are in most cases defined on the Destination Default page.

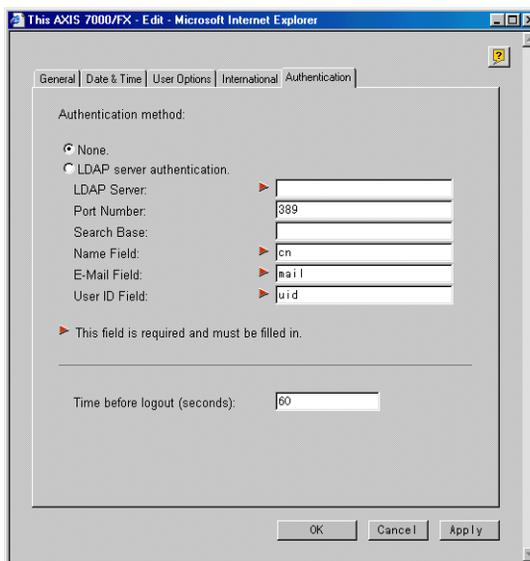
For an example, create a destination with the selected transfer method and check the config.ini file.

Notes:

- The external e-mail addresses will appear in alphabetical order together with existing destinations in the destination list on the AXIS 7000/FX message display.
- The event log will show how many e-mail addresses that have been loaded with LDAP or FTP.

Specifying Authentication Settings

Authentication makes it possible for the administrator to allow access to the AXIS 7000/FX for authenticated users only. Click the **Edit** button on the **This AXIS 7000/FX** page and then click the **Authentication** tag to modify the authentication parameters.



1. Click one of the radio buttons to disable/enable authentication:
 - Click **None** to disable authentication. Authentication is disabled by default.
 - Click **LDAP server authentication** to enable authentication. Specify the parameter settings as described below.

Parameter	Description
LDAP Server	Specify the name or IP Address of the LDAP server
Port Number	Specify the number of the TCP/IP port used by the LDAP server
Search Base	Specify where to begin the search, e.g. o=company name, c=country code
Name Field	Specify the name of the field that contains the destination name, e.g. cn
E-mail Field	Specify the name of the field that contains the e-mail address, e.g. mail

User ID Field	Specify the User ID field that contains the user ID/user name of the user to be authenticated, e.g. uid
Time before logout	Specify the number of seconds that the AXIS 7000/FX waits for user input before it automatically logs out the authenticated user.

2. Click **Apply** to save your changes, then click **OK** to return to the **This AXIS 7000/FX** page.
If you want to return to the **This AXIS 7000/FX** page without saving your changes click **Cancel**.

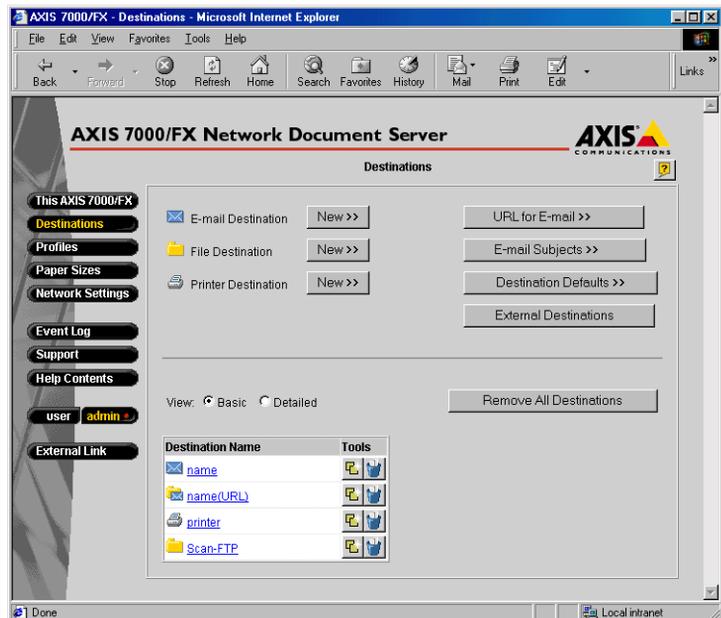
Specifying Destinations

A destination is used when sending scanned images from the AXIS 7000/FX control panel and is defined as one of the following:

- an e-mail address 
- a file on an FTP server referenced by a URL hyperlinks 
- a file on an FTP server 
- a printer 

Click **Destinations** to display the Destinations page for:

- a list of currently available e-mail, file and printer destinations
- editing and creating new destinations
- creating copies of existing destinations
- selectively deleting destinations



Services Overview

The table below provides an overview of the information and services provided by each button on this page.

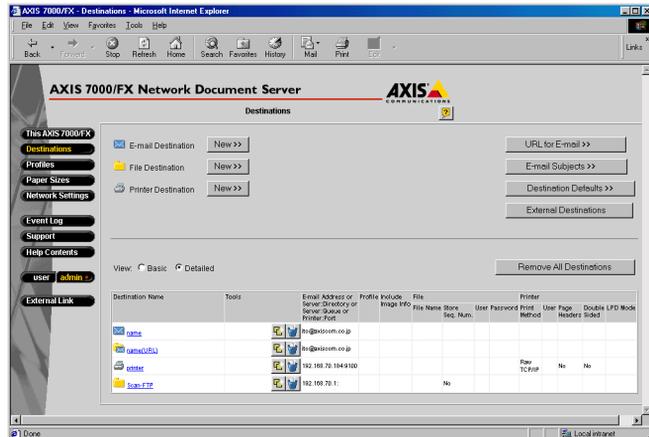
Button	Description
E-mail Destination New >>	Creates a new e-mail destination.
File Destination New >>	Creates a new file destination.
Printer Destination New >>	Creates a new printer destination.
URL for E-mail >>	Defines the storage location for images sent as hyperlinks to e-mail destinations.
E-mail Subjects >>	Specifies the text to be displayed in the subject field when sending to e-mail destinations. <i>Note: US ASCII characters only.</i>
Destination Defaults >>	Displays the default parameters for each destination, e.g. the associated profile for a particular destination, the transfer type, etc. <i>Note: Editing the default settings causes all destinations using the default value to be changed automatically.</i>
Remove All Destinations	Deletes all destinations from table.
External Destinations	Displays the external destinations. Destinations are displayed using the same syntax as an external address book stored on an FTP server (see Network Settings Detailed View)

Creating and Editing E-mail Destinations

E-mail destinations allow the users to send scanned images to e-mail addresses using the SMTP protocol.

Follow the instructions below to create new or edit existing e-mail destinations.

1. Click **Destinations**.
2. Previously added e-mail, file and printer destinations are listed in the table. Click **Detailed** to view the detailed settings.



3. If you want to edit an existing destination in the displayed list, click the **Destination Name** link and proceed to step 5.
4. Click **E-mail Destination New >>** to add a new destination to the list.
5. Specify a descriptive name for the e-mail destination in the Destination Name field. This is the name that will appear in the destination list.
6. Specify the e-mail address of the recipient in the E-mail Address field. Multiple recipients must be separated by a comma (,) e.g. user1@company.com, user2@company.com
7. From the drop-down Profile list, select the profile to be used as the default for this destination.

Note:

The user can specify another profile from the AXIS 7000/FX control panel at the moment of scanning. <Default-xx> is the default value specified on the Destination Defaults page.

8. With reference to the table below, select the amount of information to be attached with the image:

Option	Description
<Default-xx>	Default value specified on the Destination Defaults page
<Complete>	Information about the AXIS 7000/FX, the connected digital copier/scanner, the parameter settings used when scanning etc.
<Basic>	Includes the image-related profile settings.
<None>	Does not include any information.

9. The e-mail can include the scanned image as an e-mail attachment, or a hyperlink (URL) to the original file. Click the appropriate radio button to determine how the scanned image should be sent.

Important!

When selecting a URL that points to a scanned image, you must specify the location for storing the scanned images. Click URL for E-mail to specify the directory where all such images will be stored.

10. To complete this task, do one of the following:
 - To enter a new destination, click **Add to list**. Once your destination additions are complete, click **Done** to return to the Destinations page.
 - To save an edited destination click **OK**

Notes:

- You can enter more than one e-mail destination. Separate the different entries with a comma (,) e.g. *user1@company.com, user2@company.com*
- You can also define an external e-mail address book on an LDAP server or destinations list on an FTP server. See "*External Address Book*" on page 48.

Adding Permanent Destinations

The *Administrator* can permit users to add temporary e-mail destinations using the **New Destination** button on the **User|Destination** page. If this privilege is enabled, the five most recently added temporary destinations will appear at the top of the table on the **Destinations** page.

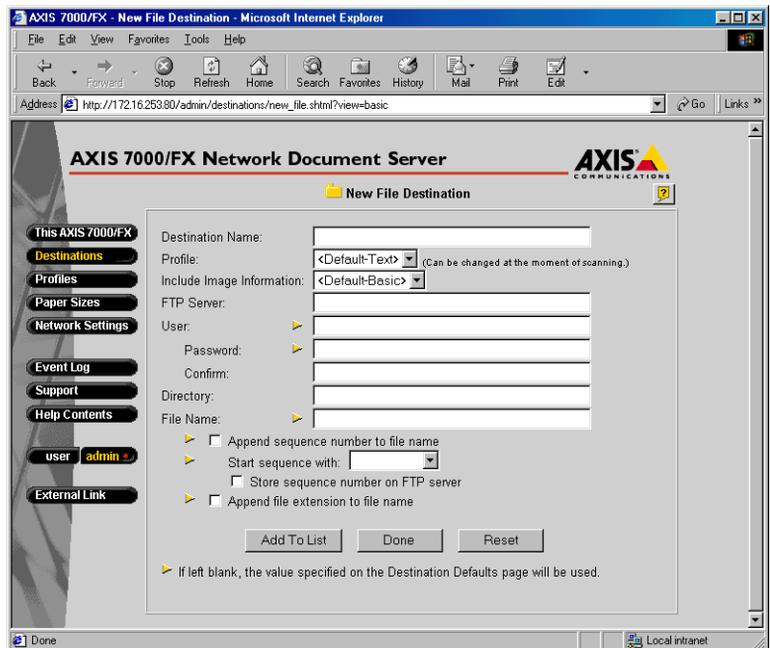
The *Administrator* can make these temporary destinations permanent simply by clicking the **Make Permanent**  button.

Creating and Editing File Destinations

File destinations  allows the user to store scanned images in a directory on a file server using the FTP protocol.

Follow the instructions below to edit, copy or create a new file destination:

1. Click **Destinations**.
2. If you want to edit an existing destination in the displayed list, click the **Destination Name** link and proceed to step 4.
3. Click **File Destination New >>** to add a new destination to the list.



The screenshot shows the 'New File Destination' configuration page. The browser title is 'AXIS 7000/FX - New File Destination - Microsoft Internet Explorer'. The address bar shows 'http://172.16.263.80/admin/destinations/new_file.shtml?view=basic'. The page content includes a navigation menu on the left with options like 'Destinations', 'Profiles', 'Paper Sizes', 'Network Settings', 'Event Log', 'Support', 'Help Contents', 'user admin', and 'External Link'. The main form has the following fields and options:

- Destination Name:
- Profile: (can be changed at the moment of scanning.)
- Include Image Information:
- FTP Server:
- User:
- Password:
- Confirm:
- Directory:
- File Name:
- Append sequence number to file name
- Start sequence with:
- Store sequence number on FTP server
- Append file extension to file name

Buttons at the bottom: , , . A note at the bottom states: 'If left blank, the value specified on the Destination Defaults page will be used.'

4. Specify a descriptive name for the file destination in the **Destination Name** field. This is the name that will appear in the destination list.
5. From the drop-down **Profile** list, select the profile to be used as default for this destination.

Note:

The user can specify another profile from the AXIS 7000/FX control panel at the moment of scanning. <Default-xx> is the default value specified on the Destination Defaults page.

6. With reference to the table below, select the amount of information to be included with the image:

Option	Description
<Default-xx>	Default value specified on the Destination Defaults page
<Complete>	Information about the AXIS 7000/FX, the connected digital copier/scanner, the parameter settings used when scanning etc.
<Basic>	Includes the image-related profile settings
<None>	Does not include any information

7. Specify the name or IP address of the FTP server on which the scanned image will be stored in the FTP Server field.
8. Specify the user name for logging on to the FTP server in the User field.

Note:

Leaving the User field blank causes the user and password defined in the Destination Defaults page to be used.

9. If required, specify the password for logging on to the FTP server. Repeat the password in the Confirm field to check the spelling and syntax.
10. Specify the directory on the FTP server where the image will be stored.
11. Define the file name of the scanned image.

Note:

The filename defined in the Destination Defaults page is used if the Filename field is left blank.

12. With reference to “*Filename Sequence Numbers and Extensions*” on page 60, optionally combine the filename with a sequence number and/or a file extension, e.g.

```
<filename><sequencenumber>.<fileextension>
```

13. To complete this task do one of the following:

- To save a new File Destination, click **Add to list**. Once your File Destination additions are complete, click **Done** to return to the Destinations page.
- To save an edited File Destination or to save a copy of a File Destination, click **OK**.

Filename Sequence Numbers and Extensions

The filename defined within the **New File Destination/Edit File Destination** page can be appended with a sequence number and/or an extension. These numbers and extensions specify the file name and define which application is needed to automatically launch the appropriate image viewer, i.e. `tif`, `jpg`, or `pdf`.

Check the **Append Sequence number to file name** if you want to sequentially save a series of image files. This causes a new image file to be stored every time a user scans to the specified destination. For example, if you select 01 as the sequence number from the drop-down list, the first time you scan an image to the specified destination, the file will be saved as `filename00`. The next time the file will be saved as `filename01`, . . . etc.

For a directory with many files, performance increases if you store the sequence number on the FTP server. However, to do that, the AXIS 7000/FX must be permitted to overwrite/delete files in the specified directory.

The table below summarizes the available sequence numbers and extensions:

Option	Description
Append sequence number to file name	Adds a unique sequence number to the file name.
Start sequence with:	Selects the sequence number to be appended to the first image scanned to this destination. For example, if you choose 01, the first image will be called <code><filename>00</code> , the second will be called <code><filename>01</code> , etc.

Option	Description
Store sequence number on FTP server:	Check this box to store the sequence number on the FTP server. For a directory with many files, performance will increase. However, the specified user must have change and delete access rights to the specified directory on the FTP server.
Append file extension to file name:	Check this box to add the file extension to the file name, i.e. tif, jpg or pdf. The file extension will correspond to the profile used. It is needed for automatically launching the appropriate image viewer.

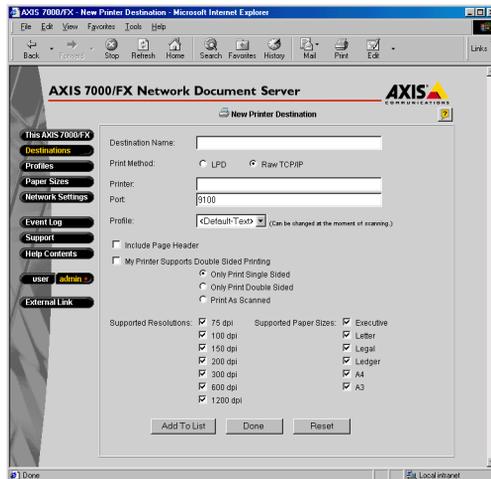
Creating and Editing New Printer Destinations

Printer destinations  allow users to send scanned or copied images to a PCL printer on the network, using either the Raw TCP or LPD printing method.

Raw TCP Printing

Follow the instructions below to edit or create a new TCP/IP printer destination:

1. Click **Destinations**.
2. If you want to edit an existing destination in the displayed list, click the **Destination Name** link and proceed to step 5.
3. Click **Printer Destination New >>** to display the New Printer Destination Page.



4. Enter a descriptive **Destination Name** for the printer.

5. Check the **Raw TCP/IP** radio button.
6. Type the IP Address or Host Name of the destination printer in the **Printer** field.
7. Specify the port number that the printer uses (normally 9100).
8. From the drop-down Profile list, select the profile to be used as the default for this destination.

Notes:

- The user can specify another profile from the AXIS 7000/FX control panel at the moment of scanning. <Default-xx> is the default value specified on the Destination Defaults page.
- Select the PCL image format as it is primarily for use with printer destinations.

9. Check the **Include Page Header** check box only if you want **date**, **time**, **destination**, **sent by**, and **page number** to appear on your printer output.
10. If the target printer supports double sided printing, check the **My Printer Supports Double Sided Printing** checkbox and define your printing preferences by clicking the associated radio buttons, namely: **Only Print Single Sided**, **Only Print Double Sided** or **Print As Scanned**.
11. Check the appropriate check boxes to define the supported resolutions and paper sizes for the target printer.
12. To complete this task do one of the following:
 - If you have added a new printer destination, click **Add to List**. After adding all of your required printers, click **Done**.
 - If you have edited or copied an existing printer destination, click **OK**.

LPD Printing Follow the instructions below to edit or create a new LPD printer destination:

1. Click **Destinations**.
2. If you want to edit an existing destination in the displayed list, click the **Destination Name** link and proceed to step 5.
3. Click **Printer Destination New >>** to display the **New Printer Destination Page**.

4. Enter a descriptive **Destination Name** for the printer.
5. Check the **LPD** radio button.
6. Type the IP Address or Host Name of the LPD server in the **Server** field.
7. In the **Print Queue** field, type the name of the target printer queue on the server. Optionally, enter a username to identify ownership of the print job.
8. Define the LPD Mode by clicking one of the adjacent radio buttons, namely, **Axis Compatible Print Server**, **Windows Queue**, **Unix Queue** or **Other**.

Notes:

- Click **Other** if your destination printer server is not Axis-compatible.
- Click the **Unix Queue** button only if you wish to distribute the file to a dedicated LPD server on your network.

9. From the drop-down **Profile** list, select the profile to be used as the default for this destination.

Note:

The user can specify another profile from the AXIS 7000/FX control panel at the moment of scanning. <Default-xx> is the default value specified on the **Destination Defaults** page.

10. Check the **Include Page Header** checkbox only if you want **date**, **time**, **destination**, **Sent By** and **Page Number** to appear on your printer output.
11. If the target printer supports double sided printing, check the **My printer supports double sided printing** checkbox and define your printing preferences by clicking the associated radio buttons, namely, **Only Print Single Sided**, **Only Print Double Sided** or **Print As Scanned**.
12. Define the supported resolutions and paper sizes for the target printer by checking the appropriate check boxes.
13. To complete this task do one of the following:
 - If you have added a new Printer Destination, click **Add to List**. After adding all of your required printers, click **Done**.
 - If you have edited or copied an existing destination, click **OK**.

Specifying Profiles

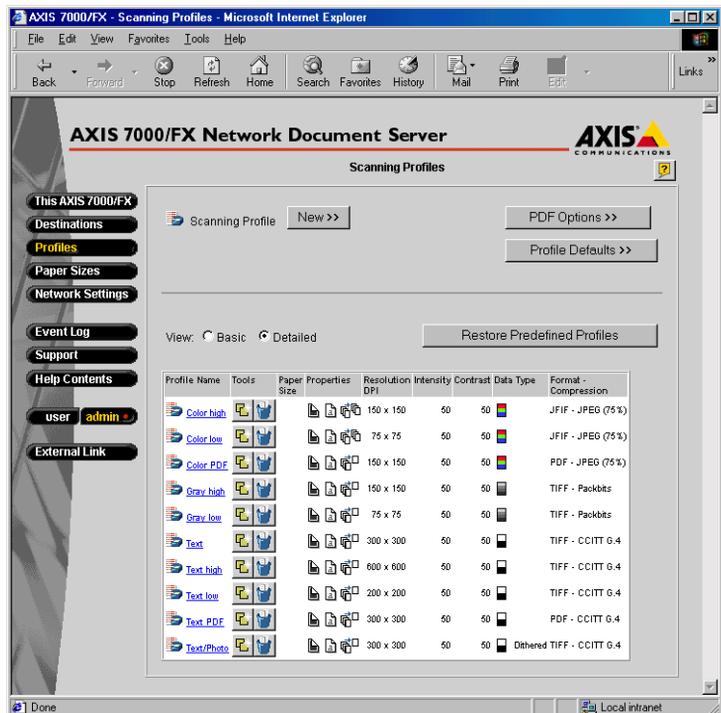
A profile defines the digital copier/scanner and image parameters to be used when scanning and is optionally part of the destination definition.

Note:

Although a profile is normally associated with a destination, the user can override that setting by choosing another profile from the AXIS 7000/FX control panel at the moment of scanning.

Click **Profiles** for:

- Viewing permanent and temporary profiles
- Viewing the parameter settings
- Editing a profile
- Making temporary profiles permanent
- Creating copies of an existing profiles
- Selectively deleting profiles



Services Overview

The table below provides an overview of the information and services provided by each button on this page

Button	Description
Profile New>>	Allows an administrator to create a new profile. See Creating new profiles below.
PDF Options>>	Enables the user to insert the document in the same orientation as when copying on a digital copier i.e. long-edge first.
Profile Defaults>>	Allows the administrator to set the default paper size to be used for all profiles using the default.
Restore Predefined Profiles	<p>The AXIS 7000/FX includes a number of predefined general purpose profiles. Clicking this button restores the predefined profiles. See Predefined Profiles below for details.</p> <p><i>Note: all user-defined profiles are lost if you restore the predefined profiles.</i></p>

Creating and Editing Profiles

Follow the instructions below to edit the existing profiles or create new profiles for specific document types such as invoices, mailings etc.

Notes:

- *When you have selected a new language you must go to the Profiles page and click **Restore Predefined Profiles** to change the language in the Profiles list. It is recommended that you select your preferred language before defining and modifying paper sizes and profiles.
Note: All user-defined profiles (except the set default paper size) and modifications to predefined profiles will be lost when you click **Restore Predefined Profiles**.*
- The AXIS 7000/FX will display an error message if the selected settings combination is not valid as some combinations of settings are incompatible.

1. Click **Profiles**.
2. The previously added profiles are listed in the table. The Profile Name is the text that appears in the profile list on the AXIS 7000/FX interface. If you want to edit an existing profile, click the **Profile Name** link and proceed to step 4.
3. Click **Profile New >>** to add a new profile to the list.

4. In accordance with the information provided in the Profiles Parameters table (below), define all of the parameters featured in the **New Scanning Profile/Edit Scanning Profile** page.
5. To complete this task do one of the following:
 - If you have added a new profile, click **Add To List**. Once your profile additions are complete, click **Done**.
 - Click **Reset** only if you wish to clear the current profile settings.
 - If you have edited or copied an existing profile, click **OK**.
6. Click **Scan** to scan the material currently placed in the digital copier/scanner using the current profile settings. Depending on the image format used, the Web browser will either display the image or ask you to save the file.

Profiles Parameters

Parameter Name	Options	Instructions
Profile Name	-	This is the name that will appear in the profile list. Specify a descriptive name for the profile.
Paper Size	<ul style="list-style-type: none"> A3, A4 (default), A5, B4, B4 (JIS), B5, B5 (JIS) Business card Executive Ledger Legal Letter Photo 3.5 x 5" Photo 4 x 6" 	Select the paper size from the drop-down dialog box. <i>Note: <Default-xx> is the default paper size that is specified on the Profile Defaults page within the Administration pages.</i>
Duplex Scanning	<ul style="list-style-type: none"> Single sided Double sided 	Click the appropriate radio button to specify whether the digital copier/scanner should scan the document on both sides of the paper. <i>Note: This feature is only available for digital copiers/scanners that support duplex scanning.</i>
Paper Orientation	<ul style="list-style-type: none"> Portrait: top along the short edge Landscape: top along the long edge 	Click the appropriate radio button to specify your chosen orientation.
Multipage Documents	<ul style="list-style-type: none"> All pages in one file Separate file for each page 	Click the appropriate radio button to select whether multipage documents should be saved in one multipage image file or separated into one image file per page. <i>Note: Not all TIFF viewers support multipage image files.</i>
Resolution	-	Specify the resolution to be used for scanning for X and Y respectively, in dots per inch (DPI). <i>Note: Higher-resolution settings produce higher-quality scanning. However, your documents might take longer to scan. The resolutions used when scanning depend on your scanner's capabilities.</i>

Parameter Name	Options	Instructions
Intensity	0 - 100 (%)	Enter the level of intensity as a percentage ratio
Contrast	0 - 100 (%)	Enter the level of contrast as a percentage ratio. <i>Note: The contrast is the tonal gradation between the highlights, mid-tones and shadows in an image.</i>
Data Type	<ul style="list-style-type: none"> • Black and White • Grayscale • Color 	Select data type depending on the material you are scanning and the imaging application you intend to use.
Format - Comp.	<ul style="list-style-type: none"> • TIFF - No compression • TIFF - CCITT G.3 - one dim • TIFF - CCITT G.3 - two dim • TIFF - CCITT G.4 • TIFF - Packbits • PDF - No compression • PDF - CCITT G.3 - one dim • PDF - CCITT G.3 - two dim • PDF - CCITT G.4 • PDF - Packbits • PDF - JPEG • PCL - PCL5 • JFIF - JPEG 	Choose your combination of image format and compression from the methods displayed in the drop-down dialog. <i>Note: The format compression choices within the drop down list will vary dependent upon the selected Data Type. See "Guidelines for Format and Compression" on page 70 for further information on each of the available techniques.</i>

Parameter Name	Options	Instructions
<p>Dithering Method (b/w only)</p>	<ul style="list-style-type: none"> • None (recommended for text) • Dithered (recommended for photos) <i>Converts pixels with gray values above the middle gray level to white, and pixels with gray values below the middle gray level to black.</i> • Error diffusion (also recommended for photos) <i>Evaluates the gray-level value of each pixel and converts it to either a black or a white value. The amount of error is transferred to surrounding pixels before they are converted. In this way, the error is diffused throughout the image</i> 	<p>Select the dithering method for black/white images from the drop-down dialog.</p> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • Not all digital copiers/scanners support dithering. • Both of the available dithering methods result in a grainy, film like texture.
<p>JPEG Quality Level</p>	<p>0 - 100 (%)</p>	<p>Define the JPEG quality level for the JFIF - JPEG and PDF - JPEG formats as a percentage ration.</p> <p><i>Note: An image compressed using a higher quality will be less compressed, thus taking up more disk space than an image compressed using a lower quality level. Using 75% JPEG quality level, you will not normally notice any difference from the original image.</i></p>

Predefined Profiles The AXIS 7000/FX is pre-installed with 10 standard profiles to cover most needs. This table lists the predefined profiles:

Name	Resolution	Type	Image format
Color high	150	24-bit color	JPEG
Color low	75	24-bit color	JPEG
Color PDF	150	24-bit color	JPEG
Gray high	150	4-bit grayscale	TIFF/Packbits
Gray low	75	4-bit grayscale	TIFF/Packbits
Text	300	black/white	TIFF/CCITT G.4
Text high	600	black/white	TIFF/CCITT G.4
Text low	200	black/white	TIFF/CCITT G.4
Text PDF	300	black/white	TIFF/CCITT G.4
Text/Photo	300	black/white	TIFF/CCITT G.4

Temporary Profiles If the Administrator allows users to add temporary profiles, the five most recently added profiles will appear in the profiles list. The Administrator can make temporary profiles permanent by clicking the **Make Permanent**  button.

Guidelines for Format and Compression

In editing or creating a new profile it is necessary to specify the format and compression techniques that are to be employed. The table below highlights the significant benefits of each method.

Format	Comments
TIFF	For black/white and grayscale images. Both single- and multipage images are supported
JFIF	For color images. Single page images only.
PDF	For color and grayscale images. Both single- and multipage images are supported. Requires the Adobe Acrobat Reader.
PCL	Profile used for print destinations - black and white only.

Notes:

- Compression techniques are distinguished by whether they remove detail from the image. CCITT encoding is a family of lossless compression techniques for black/white images, of which CCIT G.4 is the most efficient compression method.
- JPEG is a "lossy" compression technique that effectively reduces file size by identifying and discarding extra data not essential to the display of the image.
- If you intend to manipulate a color image using an image editor, you are recommended to use uncompressed TIFF.

Notes:

- Although the generated TIFF files do not contain searchable text, you can use an Optical Character Recognition (OCR) application to convert the bitmap to text that can be edited, indexed, searched or copied to other files.
- The generated PDF image files do not contain searchable text. You can use Adobe Capture or the built-in capture function in Adobe Acrobat to make the text searchable.

Specifying Paper Sizes

The **Paper Sizes** parameter defines the size of the scanned image and is optionally part of the profile.

Note:

A user can override the Paper Size setting used by a profile by choosing another paper size from the AXIS 7000/FX control panel at the moment of scanning.

Predefined Paper Sizes

The AXIS 7000/FX includes 14 predefined standard paper sizes to cover most needs. This table lists the predefined paper sizes:

Name	Width (cm)	Length (cm)	Width (inches)	Length (inches)
A3	29.70	42.00	11.69"	16.54"
A4	21.00	29.70	8.27"	11.69"
A5	14.80	21.00	5.83"	8.27"
B4	25.00	35.30	9.84"	13.90"
B4 (JIS)	25.70	36.40	10.12"	14.33"
B5	17.60	25.00	6.93"	9.84"
B5 (JIS)	18.20	25.70	7.17"	10.12"
Business Card	5.50	9.50	2.17"	3.74"
Executive	18.41	26.67	7.25"	10.50"
Ledger	27.94	43.18	11.00"	17.00"
Legal	21.59	35.56	8.50"	14.00"
Letter	21.59	27.94	8.50"	11.00"
Photo 3.5" x 5"	8.89	12.70	3.50"	5.00"
Photo 4" x 6"	10.16	15.24	4.00"	6.00"

Follow the instructions below to optionally edit any of the predefined paper sizes listed above, or create new ones to suit your specific needs:

Note:

When a new language is selected you must go to the **Paper Sizes** page and click **Restore Predefined Paper Sizes** to change the language in the Paper sizes list. It is recommended that you select your preferred language before defining and modifying paper sizes and profiles.
Note: All user-defined profiles and modifications to predefined paper sizes will be lost when you click Restore Predefined Paper Sizes.

1. Click **Paper Sizes** to specify paper sizes. To edit a paper size in the list, click the **Paper Size Name** link. To create a new paper size, click **Paper Size New >>**.
2. If you need to restore the predefined paper sizes, click **Restore Predefined Paper Sizes**. Note that all your current paper sizes will be lost.

Configuring Using a Text Editor and FTP

The AXIS 7000/FX configuration file includes all the system parameter settings regarding network protocols, profiles, paper sizes and destinations.

As an alternative to Web-based configuration, you can edit the configuration file directly using a text editor and upload the file to the AXIS 7000/FX using FTP.

Note:

To access the AXIS 7000/FX configuration file, you must first set the IP address as described in "*Assigning an IP Address*" on page 21.

Follow these instructions to edit the configuration file using FTP:

Caution

Windows 95 has a directory called 'config' that contains important system files. It is important to change to another directory using the `cd` command before modifying your AXIS 7000/FX configuration file from within a windows 95 environment. Failure to do this may result in some of your files being overwritten

1. In a DOS or UNIX window, type `ftp <Internet address>`, where `<Internet address>` is the name or IP address of your AXIS 7000/FX.
2. Login using the user id `root` and the password `pass`.

Note:

The password might have been changed by the Administrator. Check the **admin | Edit | General** page

3. Type `get config.ini` to download the configuration file to your current directory.
4. Edit the file using your preferred text editor. In Windows 95 and Windows NT environments, you can for example use Notepad.

Note:

Do not use MS Word or other similar word processor.

5. Type `put config.ini` to download the file to the AXIS 7000/FX and save it permanently.
6. To exit FTP, type the command `quit`, `bye`, or `exit`.

Notes:

- The configuration file can be used as a template when configuring multiple document servers.
- It is sufficient to download the configuration parameters that have changed. The other parameter settings will remain unchanged.
- All parameter settings apart from the IP address, Gateway and Subnet mask can be changed using FTP. Please refer to "*The Parameter List*" on page 111.

Section 5 Using the AXIS 7000/FX

This section describes how to use the AXIS 7000/FX and includes the following information, given from the perspective of a *user*:

- Sending methods
- Sending to destinations
- Sending multiple pages
- Adding temporary destinations and profiles
- Sending to the Web browser
- Viewing image files

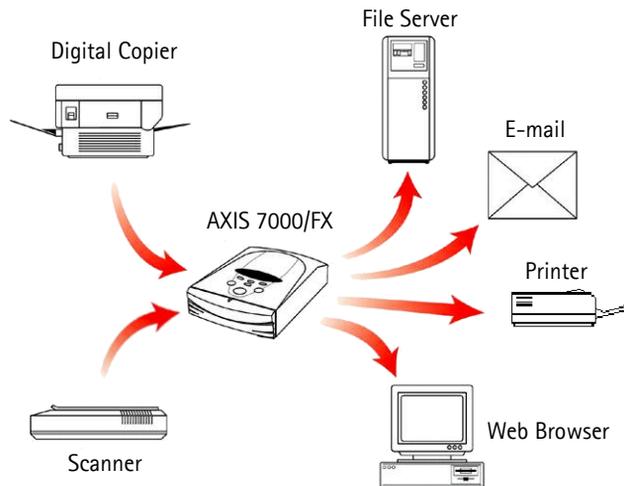
Note:

"Section 4 - Configuring the AXIS 7000/FX" is targeted specifically to users responsible for the administration of the AXIS 7000/FX. Please refer to this section if you wish to access the AXIS 7000/FX as an Administrator.

Sending Methods

The AXIS 7000/FX supports five basic methods for distributing scanned and copied documents over the network:

- Send-to e-mail destinations
- Send-to-file destinations
- Send-to-printer destinations
- Send-to-URL
- Send-to-Web browser



The AXIS 7000/FX allows document information from network attached document distribution devices, such as scanners or digital copiers to be distributed to e-mail, file and printer destinations.

In addition to the resident profiles and destinations established by your Administrator, users can also create both temporary e-mail destinations and profiles, using either the Web-based user interface or user keyboard (if connected by your administrator).

- Destinations** Documents are typically distributed using the AXIS 7000/FX control panel or an attached PC compatible keyboard (if connected by your administrator), to selected e-mail, file or printer destinations.
- Users can add temporary e-mail destinations using the Web interface or keyboard if the destination you wish to send your document to does not exist in the destination list.
- Contact your Administrator if you wish to add a new file or printer destination, or add a permanent e-mail address.
- Send-to-E-mail** This allows document images to be distributed to any e-mail address defined in the destination list. This service is often referred to as Internet faxing.
- E-mail transfer uses the Simple Mail Transfer Protocol (SMTP) whereby the document image is sent as a MIME-encoded e-mail attachment, or stored on a file server as an accessible hyperlink within an e-mail notification.
- Double-clicking the hyperlink or an e-mail attachment that is associated with an image viewer automatically starts the appropriate application.
- Send-to-File** This means that the document image is sent to and then stored on a networked storage device. This could be on a server, a client with a shared drive, a mainframe, or any chosen network device available to your filing system. Image files are distributed and archived using the File Transfer Protocol (FTP) that facilitates the storage of files over the Internet.
- Typically a file is sent to a specific software management application, for example groupware, document management and workflow systems.

Note:

Users can arrange to have their own directories on an FTP server to which they can send document image information. In operating systems like Windows 95/98 and Windows NT/2000, shortcuts to image directories can be placed directly on the user's desktop. This gives easy access to the document image information.

It is strongly recommended that you choose the send-to-print function for distributing documents to printer destinations. However, in some circumstances it may be desirable to send an image to a network printer using the send-to-file function instead. To do this, you must ensure that the destination printer supports FTP and PCL, or FTP and TIFF. Refer to the AXIS 7000/FX Support Web for more information.

Send-to-URL Sending to URL (Uniform Resource Locator) is a combination of send-to-e-mail and send-to-file, where images/documents are stored on a file server. The recipient will receive an e-mail containing the URL (Web link) to the file, instead of an e-mail attachment. This off-loads the mail server from handling large attachments.

Send-to-Web Browser This is a convenient method for users that do not have an e-mail address. It is also useful if you want to try a number of different profiles.

Simply place the document in your scanning device and access the AXIS 7000/FX from a standard Web browser. Scanning is triggered directly from your Web browser and the image is saved within the Web browser dialog. The Web browser displays the image in an associated viewer or asks you to save the file, depending on the associated image format.

Data is sent directly between the AXIS 7000/FX and the user, i.e. peer-to-peer. This results in minimum network load and avoids the transmission of data over the backbone of the network.

Send-to-Printer This allows document images to be distributed to any printer defined in the AXIS 7000/FX destination list using either Raw TCP or LPD as printing method.

Raw TCP printing support means that you can distribute your document images across network segments to any TCP/IP printer connected on a local or remote network.

Authentication

If the administrator has enabled authentication the user must enter a user name and password to gain access to the AXIS 7000/FX. If the authentication process is not enabled, proceed to the next section “*Sending to Destinations*” on page 80.

1. When the following display appears, enter your user name and press **Menu** (on the control panel) or **Tab** (on the keyboard).

```
User Name:
```

2. Enter your password and press **Menu** (on the control panel) or press **Tab** (on the keyboard):

```
Password:
```

3. The following message will appear:

```
Login in progress
```

4. If the following message appears the authentication process has failed. Press **Cancel** (on the control panel) or press **Esc** (on the keyboard) to try again.

```
Login failed!
```

5. If the authentication process is successful the following message is displayed informing you that you can log out by pressing **Cancel** for two seconds (on the control panel) or **Esc** (on the keyboard).

```
To logout press  
Cancel 2 sec.
```

6. To continue press any key or wait until the following message appears:

```
Send to:  
xxxxxxx
```

Sending to Destinations

Note:

Before sending to an e-mail address or a file, the Administrator must have set up the destinations as described in "Specifying Destinations" on page 54.

Perform these instructions from the AXIS 7000/FX control panel:

1. The AXIS 7000/FX display shows "Send to: xxxxxxx" when it is ready for use. For example:

```
Send to:
Accounting Dept
```

2. Use   scrolling keys to find your required destination from the list. Press and hold the key to autorepeat scrolling. If you want to add a temporary E-mail destination, refer to "Adding Temporary Destinations" on page 82.
3. If you want to send the image to more than one destination, press Select  to choose each destination:

```
Send to:      +1
Accounting Dept
```

Note:

When sending to a printer, the image can not be sent to another destination type and is only sent to one printer at a time.

4. Repeat steps 2 and 3, until all desired destinations are selected.

Note:

Be careful not to transmit images to an unwanted destination. The scanned image is always sent to the destination shown in the display, whether explicitly selected or not.

5. Optionally, press Menu  to change the default settings for scanning parameters. You can select temporary settings for profile, paper size and double-sided. Use   to select the desired value.

Note:

Press the **Cancel** button to reset all temporary settings to the default values.

6. Insert a single page into the flatbed or a stack of paper into the sheet feeder of the attached digital copier/scanner.

One single page or a stack of paper in the sheet feeder:

- a. Press **Send**  to scan and send the image to the destination in one step.

Several separate pages or stacks of paper:

- a. Press **Add**  to scan each page or stack.
- b. Insert the next page or stack and press **Add**  again. Repeat the procedure until all the pages have been scanned.
- c. Press **Send**  to transmit the image to the destination.

During the scanning this message appears on the display:

Scanning #1
please wait

Note:

If you do not press **Send** within 60 seconds after scanning a page by pressing **Add** the scan job will automatically be finished and sent.

7. When you have pressed **Send**  and the transfer of the document image is completed, the AXIS 7000/FX is released for other users to access.

Notes:

- By scanning multiple pages, you can accumulate several pages into one image file. See "*Multipage Image Files*" on page 82.
- If no operations are performed within five minutes of allocation, the AXIS 7000/FX will return to its default settings.
- The AXIS 7000/FX keeps all temporary settings in memory for 60 seconds from the last scan, and then resets all settings to the default settings.
Note: if authentication is enabled the time span before memory reset is set by the administrator.

Multipage Image Files Multipage documents are by default, collated and output into a single PDF or TIFF image file.

Deselect the **All pages in one file** parameter only if you want each page to appear separately in several PDF or TIFF files.

Notes:

- The JPEG format sends each page as one separate image file.
- The PCL format sends several pages in a single PCL file.
- TIFF viewers not supporting multipage image files require that the Multipage Documents parameter is set to Separate file for each page using a profile. Alternatively, scan each page using the **Send** button.
- Double-sided is only available if the scanning device supports duplexing.

Paper orientation on digital copiers

To receive an upright image, the setting should be "Portrait" and the paper should be placed with the short-edge in the ADF (Automatic Document Feeder) or in the A4-R position on the flatbed inside the digital copier.

Note:

The PDF rotation option can be used to enable the same feeder orientation as when copying i.e long-edge first.

Adding Temporary Destinations

The e-mail list resident within the AXIS 7000/FX is initially created by your administrator. If you want to send a scanned document to an e-mail destination that is not featured in the list, you can add a temporary e-mail destination using either:

- a standard PC keyboard, or
- any standard Web browser

Using a standard PC
Keyboard

Connecting a standard keyboard to your AXIS 7000/FX will allow you to quickly search any destination within the resident list. You can do this by simply typing in the first couple of characters of the destination you wish to search for. The AXIS 7000/FX message display will automatically show the destination that best matches the keyboard input.

Note:

If the searched destination does not exist within the resident list the `Add Address:` prompt will be displayed as shown below.

Follow the instructions below to add a new e-mail address to the list:

1. If the keyboard is not already connected, disconnect the AXIS 7000 power supply, connect the keyboard to the keyboard connector located on the rear panel, and then reconnect the power supply.
2. Press the **Insert** key on your keyboard. The following prompt will appear on the message display:

Add address:

3. Enter the new e-mail address you want to add, then press **Enter**.

Note:

Only the five most-recently added temporary destinations will appear in the destination list. Contact your Network Administrator if you want to add a destination permanently.

Please refer to the following table for information on additional keyboard functions:

Key	Function
Tab and Right arrow	To scroll the menu
Enter	To select multiple destinations To complete an address or subject entry
Up / Down arrows	To scroll and select menu options
Esc	To cancel the scanning process at any stage To clear any selection made from the menu To reset error messages <i>Note: Press Esc for 2 seconds to log out if authentication is enabled</i>
F1	To scan each page of bound materials, for example, magazines and books
F2	To send the scanned material to the selected destination and release the AXIS 7000/FX for other users. For a single page/stack of sheets, use this key to scan the material and send the image in one step
Space	To search the next word/name in an address (e.g. J<Space>S to find John Smith)
Insert	To add an address or subject
Delete	To remove a temporary address To delete characters when editing To exit search mode
Backspace	To remove characters
Left arrow	To go backwards through the menu
Page Up	To go alphabetically to the next entry with a different first character in the "Send to:" or "Sent by:" list
Page Down	To go alphabetically to the previous entry with a different first character in the "Send to:" or "Sent by:" list
Home	To go to the first entry in a list
End	To go to the last entry in a list

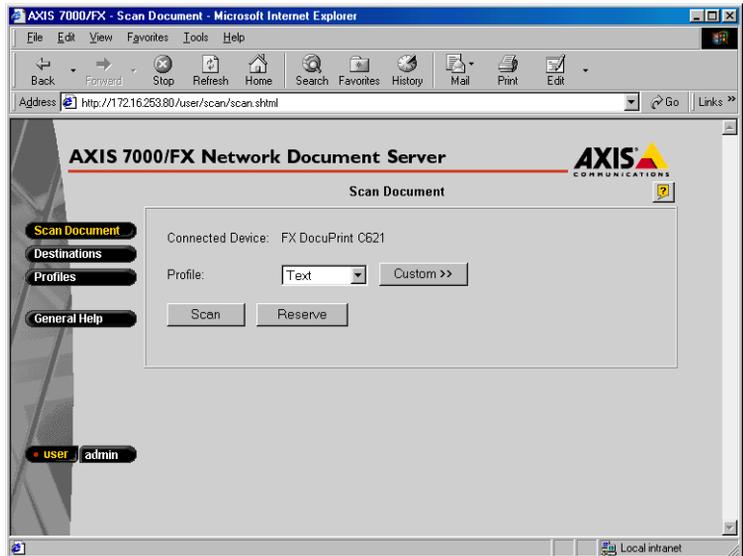
From a Web browser: Follow the instructions below to remotely add temporary e-mail addresses to the address list:

1. Start the Web browser.
2. Enter the name or IP address of your AXIS 7000/FX on the location/address line.

Example:

http://172.16.253.80

This displays the AXIS 7000/FX Home Page



3. Click **Destinations**. The table lists the available destinations.
4. Click **New Destination** and specify the settings for the new destination.
5. Click **OK** to save the destination temporarily.

Notes:

- Only the five most-recently added temporary destinations will appear in the destination list. Contact your Administrator if you want to add a destination permanently.
- All temporary destinations are erased when the AXIS 7000/FX is shut down or re-started.

Adding Temporary Profiles

If you have tried all the available profiles but are still not satisfied with the result of your scanned image, you can add a temporary profile from the Web browser interface.

1. Start the Web browser.

Note:

The Administrator might not allow the user to add temporary profiles.

2. Enter the name or IP address of your AXIS 7000/FX on the location/address line.

Example:

`http://172.16.253.80`

3. This brings you to the AXIS 7000/FX Home Page. Click **Profiles**.
4. The table lists the available profiles. Click **New Profile** and specify your settings. If you place a document in the scanning device, you can click **Scan** to monitor the results.

Note:

The Administrator can disable the option for users to add temporary profiles in which case the New Profile button will not appear.

5. Click **Add** to save the profile temporarily. Contact your Network Administrator to make a profile permanent.

Notes:

- Only the five most recently added temporary profiles will appear in the profile list. Contact your Administrator if you want to add a profile permanently.
- All temporary profiles will be erased when the AXIS 7000/FX is shut down or re-started.

Scanning Parameters

From the AXIS 7000/FX control panel, press Menu  to scroll through the scanning menu. Use   to find the desired value.

The table below describes the available parameters for each destination type:

Parameter	Destination Type		
	E-mail /URL	FTP	Printer
Send to	yes	yes	yes
Sent by	yes	no	yes
Subject	yes	no	no
Number of copies	no	no	yes
Profile	yes	yes	yes
Paper size	yes	yes	yes
Double sided	yes	yes	yes

Note:

If you do not specify anything, the default settings will be used.

Profile The AXIS 7000/FX comes pre-installed with 10 standard profiles designed to cover most needs. Refer to “*Predefined Profiles*” on page 88 for details.

The profiles are maintained by the Administrator. If you have been granted permission by your *administrator*, you can define your own temporary profiles. For details, refer to “*Adding Temporary Profiles*” on page 86.

Select a profile appropriate to the document to be scanned. Documents typically use one of the Text profiles. Pictures could use one of the Text/Photo, Gray or Color profiles.

Scanning color images to JPEG/JFIF can be time consuming due to the amount of computation performed by the AXIS 7000/FX. You should therefore avoid using a higher resolution than is really needed. “Color low” (75 dpi) is normally sufficient for web publishing of color images.

If you intend to manipulate a scanned color image using an image editor, it is recommended that you use uncompressed TIFF.

Note:

- Should you select a profile that is not supported by the digital copier/scanner, the output file will automatically default to PDF. For example, if you select color JPEG on a black and white digital copier/scanner, the output is generated as PDF.
- Uncompressed TIFF may generate very large files.

Predefined Profiles This table outlines when to use the predefined profiles:

Name	Description
Color high	Color pictures with high demand for precision. Suitable for photos, databases, clip art in documents etc. Not suitable for web publishing, since the image is larger than what the display will show. The JPEG/JFIF format cannot generate multipage files.
Color low	Color pictures suitable for web publishing, databases, clip art in documents etc. The JPEG/JFIF format cannot generate multipage files.
Gray high	Black/white pictures, diagrams etc. which require more detail. Generates 16 shades of gray.
Gray low	Black/white pictures suitable for web publishing. Generates 16 shades of gray.
Text (default)	Black/white documents intended for OCR, or documents containing small text. Suitable for most kind of document scanning. This is the default profile.
Text high	Black/white documents containing very small text. Excellent for OCR. If the digital copier/scanner does not support 600 dpi, its maximum resolution will be used instead.
Text low	Black/white documents not intended for OCR, or documents containing large text, e.g. invoices. Suitable when maximum scanning speed and minimum file size is required.
Text/Photo	Black/white documents with pictures. The pictures are dithered to create a rasterized effect. Especially good for faxing. Not suitable for OCR. As an alternative, try a grayscale profile.
Text PDF	Creates a Black and white PDF document; suitable for printing or distribution as an e-mail attachment.

Name	Description
Color PDF	Creates a 150 dpi PDF document; suitable for printing or distribution as an e-mail attachment.

Paper Sizes

The AXIS 7000/FX comes pre-installed with 14 paper sizes designed to cover most needs. The default paper size is A4. The paper sizes are maintained by the Administrator. See also the table on “*Predefined Paper Sizes*” on page 72.

Double-sided

If supported by the attached digital copier/scanner, you can select Double-sided to scan both sides of a page simultaneously. This option is also known as *duplex* and may be referred to by that term in the digital copier/scanner documentation.

Note:

By default the double-sided (Duplex) parameter is set to **off**.

Sending to your Web Browser

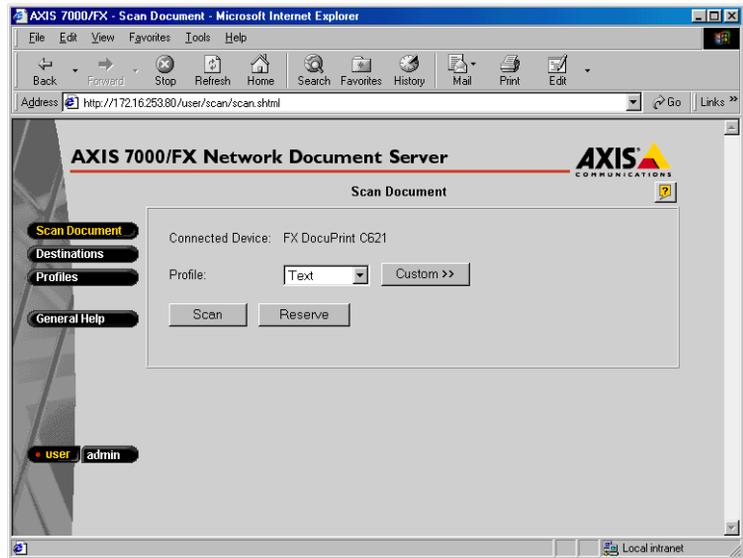
Follow these steps to scan to your Web browser:

1. Place the material in your scanner or digital copier.
2. Start the Web browser.
3. Enter the name or IP address of the AXIS 7000/FX on the location/address line:

Example:

`http://172.16.253.80`

- This brings you to the AXIS 7000/FX Home Page, the Scan Document page.



We recommend that you add the address as a bookmark, or as a link on the Department or Workgroup Web page.

- Optionally change the default profile.
- Click **Scan** and wait for the image to appear in your Web browser. Depending on the image format specified by the profile, the Web browser will display the image in an associated viewer or ask you to save the file. For further processing, you must save the image from within the viewer as the Web browser will normally use a temporary file name.
- If you are not satisfied with the result, you can try one of the other available profiles or set up a new one by clicking **Custom >>**.
- If you have additional documents to scan, click **Reserve Scanner** to lock the unit for your own use and then complete the scanning from the AXIS 7000/FX control panel.
- Insert a single page on the flatbed or a stack of paper into the sheet-feeder of the attached digital copier or scanner.
- At the AXIS 7000/FX control panel, continue as follows:

One single page or a stack of paper in the sheet feeder:

- a. Press Send  to scan and transmit the image to your Web browser in one step.

Several separate pages or stacks of paper:

- a. Press Add  to scan each page or stack.
- b. Insert the next page or stack and press Add  again. Repeat the procedure until all your pages are scanned.
- c. Press Send  to transmit the image to your Web browser.

During the scanning this message appears on the display:

```
Scanning #1
please wait
```

11. When you have pressed Send  and the transfer of the scanned image is completed, the AXIS 7000/FX is released for other users to access.

Notes:

- By scanning multiple pages, you can accumulate several pages into one image file. See "*Multipage Image Files*" on page 82.
- You must press the **Add** button or the **Send** button on the control panel within 5 minutes. Otherwise, the operation will be executed automatically.
- The **Reserve Scanner** function is not available when Authentication is enabled.

Viewing Image Files

The AXIS 7000/FX generates standard TIFF, JPEG and PDF formats that are supported by most image-related applications; and PCL format, that is supported by most printers.

Although the AXIS 7000/FX does not rely on any product-specific software installed on each client, tools for viewing and manipulating the images are required.

There are basically two different types of imaging tools:

- Tools optimized for image/picture editing
- Tools optimized for handling scanned documents

Tools for Image/Picture Editing

Tools for image/picture editing normally support JPEG and single-image uncompressed TIFF format. They are optimized for handling color and gray-scale images. Such tools are delivered with the desktop scanners. Most tools will work, as long as JPEG and/or TIFF formats are supported.

Tools for Viewing, OCR and Archiving

Tools for viewing, OCR and archiving generally support multipage compressed TIFF, but often also JPEG. Document viewers are optimized for presenting document data in a readable format on a screen. Suitable tools are often bundled with desktop scanners. Tools that combine viewing and simple archiving are becoming increasingly popular. These tools are delivered with Windows 95/98 and Windows NT.

Notes:

- Although the generated TIFF image files do not contain searchable text, you can use an Optical Character Recognition (OCR) application to convert the bitmap to text that can be corrected, indexed, searched or copied to other files.
- The generated PDF image files do not contain searchable text. You can use Adobe Capture or the built-in capture function in Adobe Acrobat to make the text searchable.

Acrobat Reader

The PDF format requires the Adobe Acrobat Reader. Acrobat Readers for Windows (3.1, 95/98, NT), Macintosh and UNIX can be downloaded free of charge from Adobe Systems Web site <http://www.adobe.com>. Adobe Acrobat Reader is also supplied on the AXIS Online CD.

Notes:

- When using the "Text" profiles for scanning documents, make sure that the viewing tool supports multipage CCITT G.4-compressed TIFF; the TIFF format is the most common standard for imaging and archiving of scanned documents. If your application does not support multipage documents, you can create a profile that generates single page documents, or scan each page as a separate job.
- When scanning pictures for web publishing, create a JPEG file using either the "Color low" or "Color high" profiles. The image files generated by these profiles are supported by almost all existing image editors and Web browsers.
- The AXIS 7000/FX is compatible with the majority of today's popular tools. However, if you find a tool that is not supported by the AXIS 7000/FX, we would like to know about it. For information on how to contact us see "Preface" on page 3.
- For further information, see the Axis web site at <http://www.axis.com>

Associating Image
Formats with
Applications

Applications are typically associated with a file format automatically during the installation procedure. If not, we recommend that you manually associate your image applications with the supported image file formats, so that double-clicking on an image icon launches the appropriate application.

Follow the instructions below to associate an application with a specific file format in Windows 95 and NT:

1. In Windows Explorer, click the View menu, click **Options**, and then click the **File Types** tab.
2. To create a new file type, click **New Type**. To modify the settings for an existing file type, select the type, and then click **Edit**.
3. Specify a description for the file type and the file name extension associated with this type of file.
4. Click **New** to define an action for this file type.
5. In the Action field, type `Open`. In the **Application used to perform action** field, specify the path to the application you want to use for opening files that have this extension.

Appendix A Troubleshooting

This appendix helps you to:

- Restore factory default settings to the AXIS 7000/FX
- Interpret the AXIS 7000/FX front panel indicators
- Interpret the AXIS 7000/FX error messages
- Display the log file

Restoring Factory Default Settings

The factory default settings can be restored using one of the following methods:

- Push button
- Web browser
- FTP

Important!

When you restore the factory default settings, all your current settings including the destinations and profiles will be lost. You will need to re-assign the IP address as described in "Assigning an IP Address" on page 21.

Push Button Follow these steps to restore the default settings using the Push button:

Important!

If you have forgotten the previously installed server password, the push button provides the only method available for resetting the unit to factory default.

1. Turn off the AXIS 7000/FX by disconnecting the power supply.
2. Press and hold the Push button while you connect the AXIS 7000/FX. Keep the Push button pressed until the Status indicator flashes at regular two second intervals.



3. Release the Push button and wait at least two seconds (one flash of the indicators).
4. Press and hold the Push button for at least five seconds until the Status indicator remains constantly lit.
5. The AXIS 7000/FX is now reset to factory default settings.
6. Restart the AXIS 7000/FX by disconnecting and reconnecting the power supply.

Web Browser

Follow these steps to reset to the defaults settings from a Web browser:

1. Start the Web browser.
2. Enter the name or the IP address of the AXIS 7000/FX in the location/address field. The AXIS 7000/FX Home Page is displayed.
3. Click **admin**.
4. Click **Factory Defaults**.
The AXIS 7000/FX will now restart with the factory default settings.

FTP

Follow these steps to restore the default settings using FTP:

1. Log in to the AXIS 7000/FX with the command `ftp <Internet address>`, where `<Internet address>` is the name or IP address assigned to your AXIS 7000/FX.
2. You will be prompted for user id and password. Use the user id `root`, which has the default password `pass` (`root` is the user id with the highest priority).
3. Issue the command `get defaults` to restore the default settings. The unit now restarts automatically.
4. Log out using the command `quit`, `bye` or `exit` depending on your FTP version.

The AXIS 7000/FX will now restart with the factory default settings.

Front Panel Indicator Conditions

The Power LED is hardware controlled and should always remain on when power is connected to the AXIS 7000/FX. The remaining LEDs are all software controlled.

Normal Conditions

This table shows the front panel indicators during normal conditions:

Event	Status LED	Busy LED	Network LED	Remarks
Power up	On	On	On	Initial power to unit
	On	Off	Off	Memory test
	Flash	Off	Off	Self test in progress
	On	Off	Flash	Network LED flashes when network traffic is present
Sending	On	On	Flash	
Idle	On	Off	Flash	Network LED flashes when network traffic is present
Flash loading	Blink	Blink	Blink	During Flash loading, the Network LED blinks quickly

Error Conditions

This table lists a summary of error conditions:

Event	Status LED	Busy LED	Network LED	Remarks
Power up	On	Off	Off	Check SCSI cable to Digital copier/scanner
	Off	Off	Off	Check RJ45 cable to network
Idle	On	Off	Off	Check RJ45 cable to network. If known network traffic, the Network LED should flash.
Error in EEPROM	Blink	Off	Off	Consult Network Administrator
Error in FLASH PROM	Flash	Off	Flash	Consult Network Administrator
Error in SRAM	Flash	Flash	Off	Consult Network Administrator
Error in DRAM/DIMM	Flash	Off	Off	Consult Network Administrator
DRAM/DIMM configuration error	Flash	Flash	Off	Consult Network Administrator
SW-HW combination error	Flash	Flash	Flash	Consult Network Administrator
Illegal serial no.	Flash	Flash	Flash	Consult Network Administrator
Flash load failed	Flash	Off	Off	Consult Network Administrator

Status Indicator Off

The Status indicator remains off if a problem with the scanning device communication has occurred. The AXIS 7000/FX message display may additionally provide error status information.

Network Indicator Off

The Network indicator flashes when there is network traffic. If it remains off and you know there is network activity, check the network connection.

Error and Warning Messages

This table lists the error and warning messages that might appear on the AXIS 7000/FX message display:

Message	Description
Scanner lamp failure	The lamp in the connected scanning device is blown. Refer to your suppliers user documentation for instructions.
Scanner fuse blown	A fuse in the connected scanning device is blown. Refer to your suppliers user documentation for instructions.
Scanner compression unit failure	The image compression unit in the scanning device did not work properly. Contact your equipment supplier.
Scanner hardware failure	The scanning device reports a hardware failure. Contact your equipment supplier.
Scanner firmware failure	The scanning device reports a software failure. Contact your supplier.
SCSI parameter length illegal	The length of the SCSI command is illegal. Contact your AXIS 7000/FX dealer.
Invalid SCSI command	The scanning device does not support the given SCSI command. Contact your AXIS 7000/FX dealer.
Invalid field in SCSI CDB	The SCSI command includes an invalid field. Contact your AXIS 7000/FX dealer.

Message	Description
SCSI command sequence illegal	The scanning device cannot receive the SCSI commands in the order they were sent. Contact your AXIS 7000/FX dealer.
Invalid field in SCSI parameter list	The SCSI parameter block includes one or several invalid fields. Contact your AXIS 7000/FX dealer.
Scanner not ready, please check scanner and restart the scan server	An error has occurred in the scanning device. Check the scanning device and restart the Document Server.
A timeout has occurred on the scanner, the job has been canceled	Please check the scanning device and try again.
Out of memory	The document image contains too much data. Please try another profile.
Out of scanner image memory	The document image contains too much data. Please contact your equipment supplier.
Unresolved name: <server name>	Cannot find the IP address mapped to <server name>.
Not available: <server address>	Cannot establish communication with the server specified in <server address>. Please try again later.
Login failed: <server address>	Incorrect FTP server password specified for the file destination.
Disconnected: <destination>	The connection to the destination specified in <destination> has been lost. The image transfer has been aborted.
No valid mail recipient found	All the selected e-mail destinations were incorrect.
Illegal address <recipient>	Incorrect e-mail address specified for the e-mail destination.
Illegal directory on: <server address>	The directory specified for the file destination does not exist.
Unable to open file on:	Default file name is missing.
Write error on: <server address>	Insufficient access rights to the directory specified for the file destination.
No info file on: <server address>	The information file could not be stored on the FTP server. Possible reasons are lack of memory or naming conflicts. The image file will be removed.

Message	Description
Paper jam	Paper jam in the scanning device. Remove paper to continue sending.
No paper in scanning device	No paper in the sheet feeder. Applies to scanners and digital copiers without a flatbed.
Scanner warming up, please retry	The scanning device lamp must reach the correct temperature and intensity.
Scanner not ready, please check scanner and retry	The scanning device is busy. Please try again. If the error occurs repeatedly, contact your equipment supplier.
The ADF cover is open, please check and retry	Check that the ADF cover is properly closed and try again.
Could not connect to LDAP server	The DNS name or the IP address may be wrong. The server may be unreachable.
The user specified for LDAP is invalid	Invalid user name for the LDAP server. Enter a correct user name.
Invalid LDAP credentials (e.g. invalid user or password)	The LDAP server did not recognize the user with the specified password.
Illegal LDAP filter specified	Invalid LDAP filter. Please enter a new value.
User and password are required to connect to this LDAP server	Please enter your username and password.
User and password can not be used to connect to this LDAP server	This LDAP server does not accept requests with the specified username and password.
No destinations were retrieved	No destinations were retrieved. Change your LDAP settings and try again.
LDAP error! No/several e-mail address(es) were retrieved	The user could not be authenticated by the LDAP server. Change the LDAP settings and try again.
Missing mandatory FTP parameter for external address book	Check the FTP settings for the external address book and try again.
Scanner not connected	Please check the scanning device connection and try again.
Scanner not supported	The attached scanning device is not supported. Digital copying/scanning will not work properly.
Scanning failed	An error occurred whilst sending. Please refer to earlier messages.

Message	Description
Device is busy	Please try again later.
Illegal queue for:	The specified LPD print queue does not exist; check spelling and syntax.
Illegal command for (The printer may be busy):	Incorrect LPD Mode selected for the specified printer destination.
Time synchronization has been established	Time has been set using NTP (Network Time Protocol) to connect to an NTP server.

Displaying the Log File

The AXIS 7000/FX log file automatically logs all events and errors that have occurred since the last restart. You can access the log file using one of these methods:

- Control panel
- Web browser

Control Panel Follow these steps to display the log file from the control panel:

1. Press Menu  and Select  simultaneously to display the **Advanced** menu.
2. Use   to find the **Server log** option.
3. Press Select  to enter the submenu.
4. Use   to scroll through the messages.

Web Browser Follow these steps to display the log file from a Web browser:

1. Start the Web browser.
2. Enter the name or IP address of the AXIS 7000/FX in the location/address field:

Example

```
http://172.16.253.80
```

3. The AXIS 7000/FX Home Page is displayed. Click **admin**.
4. Click **Event Log**.
The event log is displayed.

Appendix B LDAP

This section gives you an introduction to LDAP and how to use it.

Introduction

LDAP (Lightweight Directory Access Protocol) is used to program directory-enabled applications. It is a directory service that allows people to locate other users, resources, services and information. LDAP allows resources and services to be selected with ease and accessed with location-independence.

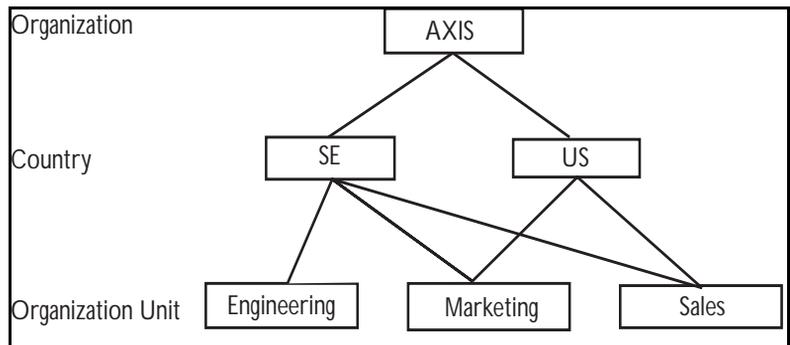
Note:

LDAP works differently depending on the organization and the structure of the system.

Structure Example

A structure can look like this:

Example:



Usual Attribute Types

These are the most typical attribute types (the LDAP server implementation should understand these attribute types):

Attribute Type	Matches
objectClass	Describes the kind of object which the entry represents.
cn	Contains the name of an object. If the object is a person, it is typically the person's full name.
sn	Contains the family name of a person.
c	Contains a two-letter country code.
l	Contains the name of a locality, such as a city, county or other geographic region.
st	Contains the full name of a state or province.
street	Contains the physical address of the object to which the entry corresponds, such as an address for package delivery.
o	Contains the name of an organization.
ou	Contains the name of an organization unit.
title	This attribute contains the title, such as "Vice President", of a person within an organization.

The attribute types are used to create search filters. There are six types of basic search filters and the syntax of the filters is in the <attribute><operator><value> format. Complex search filters can easily be constructed by combining these basic search filters and other complex filters using the Boolean operations AND, OR and NOT. The six basic filter components are presented in the table below:

Filter Type	Format	Example	Matches
Equality	(<attr>=<value>)	(sn=Smith)	Surnames exactly equal to Smith.
Approximate	(<attr>~=<value>)	(sn~=Smitt)	Surnames approximately equal to Smitt (for example, that sounds like Smitt - note the misspelling).
Substring	<attr>=[<leading>]*[<any>]*[<trailing>]	(sn=*smith*)	Surnames containing the string "smith".
		(sn=smith*)	Surnames starting with "smith".
		(sn=*smith)	Surnames ending with "smith".
		(sn=s*mi*th)	Surnames starting with "s", containing "mi" and ending with "th".
Greater than or equal	(<attr>>=<value>)	(sn>=Smith)	Surnames lexicographically greater than or equal to Smith.
Less or equal than	(<attr><=<value>)	(sn<=Smith)	Surnames lexicographically less than or equal to Smith.
Presence	(<attr>=*)	(sn=*)	All surnames.

Using the Boolean operators and a prefix notation, the basic filters can be combined to form more complex ones. The '&' character represents AND, the '|' character represents OR and the '!' character represents NOT. Here are some examples that explain how to do that:

Filter Type	Format	Example	Matches
AND	(&(<filter1>)<filter2>...)	(&(sn=smith)(objectclass=person))	Entries with an object class of person and a surname exactly equal to Smith.
OR	((<filter1>)<filter2>...)	((sn=smith)(cn=*smith))	Entries with a surname exactly equal to Smith or a commonname ending in "smith".
NOT	(!(<filter>))	(!(mail=*))	Entries without a mail attribute.

Note:

It is wise to create filters that sort out unwanted entries based on their object class. For example, in an address book, you might only want to retrieve entries of the "people" class, with the common name "John", leaving out computers called John. This could be achieved with the following filter: (&(objectclass=person)(cn=john))

Note:

The way you construct your filter will have a large impact on how fast the search is conducted. If you create a filter involving structures that the directory server can not evaluate efficiently, performance is likely to suffer. Apart from being familiar with the administrator and/or the inner workings of the server itself, only trial and error can tell you whether your filter is working efficiently or not.

Example searches

Here are some advanced search examples:

Searched	Filter to use
All persons in Sweden.	<code>(&(objectclass=person)(c=SE))</code>
All entries at Axis independent of country, except the ones called Smith.	<code>(&(o=axis)(!(sn=smith)))</code>
All persons at Axis Marketing in Sweden.	<code>(&(objectclass=person)(c=SE)(o=axis)(ou=marketing))</code>
All persons with a common name containing "bert" at Axis Marketing or Sales.	<code>(&(objectclass=person)(cn=*bert*)((ou=marketing)(ou=sales)))</code>

Appendix C The Parameter List

This table below displays the AXIS 7000/FX parameter list. The middle column shows applicable default values, and the right-hand column a brief description of the parameter.

Important! The parameters are case dependent and must be entered exactly as in the table below.

Parameter name	Value	Description
[Server]		
HardwareAddress	= 00:40:8c:18:02:3c	Specifies the AXIS 7000/FX hardware address which is equal to the serial number.
Date	=yyyy-mm-dd	Specifies the date in yyyy-mm-dd format
Time	= hh:mm:ss	Automatically specifies the time zone in which the AXIS 7000 operates using the Network Time Protocol (NTP). Time can also be set manually in hh:mm:ss format using the 24 hour clock. Note: The AXIS 7000 contains a real time clock which means that the time will be kept even if the power is turned off.
FactoryDefaults	= no	Set this parameter to <i>yes</i> to reset to factory default settings. Note that all current settings will be lost.
Restart	= no	Set this parameter to <i>yes</i> to restart the AXIS 7000/FX.
TimeZone	= UTC	Specifies the time zone in which AXIS 7000/FX operates.
TimeSyncSource	= NTP	Specifies the time source for the AXIS 7000/FX. Valid values are <i>NTP</i> , <i>Windows (SMB)</i> or <i>None</i> . Note: To use Microsoft Windows NT Network (SMB) properly WINS must be enabled and the Domain/GroupName parameter must be set to a valid name.
ServerPassword	= pass	Specifies the Server password. The Supervisor/Administrator will be prompted for this password when trying to access the AXIS 7000/FX for administration tasks. The password is used in basically all protocols, i.e. HTTP, SNMP and FTP. Once written to the configuration file, the password will be replaced by *'s, representing each letter of the password.
DefaultProfile	=Text	Specifies the default profile.
DefaultPaperSize	= A4	Specifies the default paper size.

Parameter name	Value	Description
TemporaryDestinations	= yes	Specifies if users are allowed to add temporary e-mail destinations.
TemporaryProfiles	= yes	Specifies if users are allowed to add temporary profiles.
WebScanning	= yes	Specifies if users are allowed to use the Scan Document facility. Scan Document means that the user places a document in the digital copier/scanner, and then displays or saves the image via the AXIS 7000/FX Web browser interface.
SpecifySender	= no	Specifies if users are allowed to specify the sender when scanning from the AXIS 7000/FX control panel.
FrontPanelConfiguration	= yes	Specifies if user may configure network settings from the control panel.
PDFRotation	=no	If enabled, this option allows the user to place the document long-edge first in the document feeder regardless if you are scanning or copying.
[IP]		
InternetAddress	= 0.0.0.0	Specifies the AXIS 7000/FX IP address, which must be a unique and valid address to prevent conflicts with other network devices.
DefaultRouter	= 0.0.0.0	Specifies the IP address for the default router. All traffic directed outside the local network (according to the NetMask) is sent to the default router. Any re-routing via other routers is done automatically. The default 0.0.0.0 indicates that no default router is set.
NetMask	= 0.0.0.0	Specifies the subnet mask used for determining whether the traffic should stay within the network or be sent via a router. For example, the normal class C mask is 255.255.255.0. The default 0.0.0.0 indicates that automatic router sensing is used.
BOOTPEnable	= yes	Enables/Disables BOOTP for setting the IP address.
DHCPEnable	= No	Enables/Disables DHCP for setting the IP address.
RARPEnable	= yes	Enables/Disables RARP for setting the IP address.
DomainName	= company.se	Specifies the name of the domain to which the AXIS 7000/FX belongs. Domain refers to a set of computers on a network that have been assigned a group name. A domain might contain two or more workgroups.

Parameter name	Value	Description
PrimaryDNS	= 0.0.0.0	Specifies the IP address of the primary DNS server. Used e.g. for setting up of destinations with names instead of IP addresses.
SecondaryDNS	= 0.0.0.0	Specifies the IP address of the secondary DNS server, should the primary be unavailable or disconnected.
NTPServer	=0.0.0.0	Specifies the name or IP address of the NTP server used for time synchronization.
ProtectIP	=Off	If enabled, the IP address cannot be changed from the control panel using the Menu button
[HTTP]		
ExternalLink	=www.company.name	Specifies the URL to a customized link, e.g. to your company's web site. The link will be available from the AXIS 7000/FX Web browser interface.
ExternalImage	=	Specifies the URL to the image that will indicate the customized external link.
[SNMP]		
GetCommunityName	= public	Specifies the community that has read only access to all supported SNMP objects except WriteCommunity, SupervisorPassword and ftpPassword. It corresponds to the ReadCommunity SNMP object.
TrapDestination	= 0.0.0.0	Specifies the IP Address which SNMP traps are sent to. It corresponds to the TrapAddress SNMP object. Default is 0.0.0.0, which means that all SNMP traps are disabled.
TrapCommunityName	= public	Specifies the community for all generated SNMP traps. It corresponds to the TrapCommunity SNMP object.
SystemContact	=	Optional entry which should be in plain text and may be used to show the name of the system contact person.
SystemName	=	Optional entry which should be in plain text and may be used to show the name of the system.
SystemLocation	=	Optional entry which should be in plain text and may be used to show the location of the system.
AuthenticationTrap	= disabled	Enables or disables the SNMP authentication failure traps. It corresponds to the snmpenableAuthenTraps (MIB-II) SNMP object.
[Clients]		

Parameter name	Value	Description
InformationLevel	= Basic	Specifies the default amount of information to be transmitted with a scanned image. If not set for a destination, this setting will be used. Valid values are <i>Nothing</i> , <i>Basic</i> or <i>Complete</i> . <i>Basic</i> includes information about the AXIS 7000, the connected digital copier/scanner, the parameter settings used when scanning etc. <i>Complete</i> also includes the image-related profile settings.
FTPDefaultUser	= anonymous	If not set for a destination, this username will be used.
FTPDefaultPassword	= AXIS_7000@any.com	If not set for a destination, this password will be used. This field can also contain the identity of the user transmitting the scanned image. This is useful for administrative purposes.
FTPDefaultFileName	= img%3i.%e	If no file name has been assigned to the transmitted file, this name will be used. In the default file name, <i>img%3i.%e</i> , <i>%3i</i> means a 3-digit number and <i>%e</i> means the file extension, e.g. <i>img001.tif</i>
SMTPReplyAddress	=	Specifies the e-mail address of the person responsible for the administration of the AXIS 7000/FX. Note: Be sure to configure the AXIS 7000 with a valid SMTP reply address.
SMTPSubject	= A scanned image	Specifies the text that will appear on the Subject line of the e-mail containing the scanned image.
URL FTP Server	=	Specifies the IP address of the FTP server on which the scanned image will be stored.
URL FTP User	=	Specifies the user name for logging on the FTP server.
URL FTP Password	=	Specifies the password for logging on to the FTP server
URL Directory	=	Specifies the directory on the FTP server where the image will be stored.
URL	=	Specifies an external URL to the specified directory, e.g. <i>http://www.company.com/documents/filename</i> or <i>ftp://ftp.company.com/documents/filename</i> . This could be necessary when scanning to destinations outside your own company. If left blank, the URL will be constructed from the other fields.
Use URL as default	= no	Specifies the option to send the image as a hyperlink to the location where the image is stored.
[International]		

Parameter name	Value	Description
Language	= U.S. English	Specifies the language used on the AXIS 7000/FX message display. Valid values are U.S. <i>English, German, French, Italian, Swedish and Spanish.</i>
Unit	= cm	Specifies the measurement units used, e.g. for paper sizes. Valid values are <i>inches</i> or <i>cm</i> .
Keyboard Layout	= U.S. English	Specifies the keyboard layout that is compatible with your external keyboard.
[Address Book]		
Retrieve Method	= None	Specifies from where the address book will be retrieved. <i>None, FTP</i> or <i>LDAP</i> .
FTP Server	=	Specifies the name or IP address of the FTP server.
FTP User	=	Specifies the user name for logging on to the FTP server. If left blank, the FTPDefaultUser will be used.
FTP Password	=	Specifies the password for logging on to the FTP server. If left blank, the FTPDefaultPassword will be used.
FTP Directory	=	Specifies the directory on the FTP server where the file is stored.
FTP File Name	=	Specifies the name of the file on the FTP server.
LDAP Server	=	Specifies the name or IP address of the LDAP server.
LDAP Port	=389	Specifies the number of the TCP/IP port.
LDAP User	=	Specify the name for logging on to the LDAP server, e.g.cn=name, o=company name, c=country code. If left blank no authorization will be attempted.
LDAP Password	=	Specify the password for logging on to the LDAP server. If the User Field is left blank, this setting will be ignored.
LDAP Search Base	=	Specifies where to begin the search, e.g. <i>o=companyname, c=countrycode</i>
LDAP Name Field	= cn	Specifies the name of the field that contains the destination name.
LDAP Mail Field	= mail	Specifies the name of the field that contains the e-mail address.
LDAP Filter	=	Specifies an LDAP filter to reduce the length of the destination list, e.g. (<i>givenName=*</i>)
LDAP Reload Interval	=12	Specifies how often the external addresses are to be reloaded. The value is specified in whole hours and the default value is 12 hours.
[SMTP]		

Parameter name	Value	Description
Primary Mail Server	=mail	Specifies the name or IP address of the SMTP mail server that provides the e-mail facilities for the AXIS 7000/FX. If you are using DNS, specify the name. Otherwise, specify the IP address. E.g. <i>mail</i> or <i>mail.domain.com</i> or <i>192.36.253.80</i> .
Secondary Mail Server	=	Specifies the name or IP address of the secondary mail server, should the primary be unavailable or disconnected.
Connection Timeout	=10	Specifies time before connection time-out.
[Authentication]		
Authentication Method	=None	Specifies which authentication method is enabled.
Authentication TimeOut	=60	Specifies the time before automatic logout.
LDAP Server	=	Specifies the name or IP address of the LDAP server
LDAP Port	=389	Specifies the number of the TCP/IP port
LDAP Search Base	=o=company name, c=country code	Specifies where to begin the search
LDAP Name Field	=cn	Specifies the name of the field that contains the destination name
LDAP Mail Field	=mail	Specifies the name of the field that contains the e-mail address
LDAP User ID Field	=uid	Specifies the User ID Field that contains the user ID/user name of the user to be authenticated
[Destinations]		Specifies the available destinations.
Clear List First	=no	
Destinations	= x	Specifies the number of destinations defined in the AXIS 7000/FX.
Destination0	= <i>Destination name</i>	Specifies the name of the destination
[Destination-name]		
Description	=Descriptive name	Specifies the name of the file destination. This is the name that will appear in the destination list on the AXIS 7000/FX message display.
Transfer method	=Scan-to-e-mail (SMTP), Scan-to-e-mail (URL), Scan- to-file (FTP), Scan-to-Print (TCP) and Scan-to-print (LPD)	Specifies how the scanned image should be sent; that is by which protocol.
Destination	=Directory, Port number or Print Queue	Dependent upon the transfer method specified (above), defines either: the E-mail address of the e-mail recipient (SMTP), the directory for Scan-to-file (FTP), port number for Scan-to-print (TCP), or the print queue for scan to print (LPD).
[Destination-name(URL)]		

Parameter name	Value	Description
Description	=name(URL)	Specifies the name of the file destination. This is the name that will appear in the destination list on the AXIS 7000/FX message display.
Transfer method	=Scan-to-URL (SMTP & FTP)	Specifies how the scanned image should be sent; that is by which protocol.
Destination	=name@company.com	Defines the E-mail address of the e-mail recipient (SMTP).
[Destination-printer]		
Description	=printer	Specifies the name of the printer. This is the name that will appear in the destination list on the AXIS 7000/FX message display.
Transfer method	=Scan-to-print (LPD) Scan-to-print (TCP)	Specifies how the scanned image should be sent; that is by which protocol.
Destination	=Printer Queue	Defines the print queue for scan to print (LPD).
Information level	= Nothing, Basic or Complete	Specifies the amount of image information to be included with the image. Prints Date, time information to the destination printer if the value is set to something other than None. See also [Clients] InformationLevel.
Server	=IP address or DNS name	Dependent on the destination type, specifies the IP address of the FTP server on which the scanned image will be stored, or the printer destination.
Resolutions	=75, 100, 150, 200, 300, 600, 1200	Specifies the resolution settings supported by the destination printer.
Paper sizes	=Executive, Letter, Legal, Ledger, A4, A3	Specifies the different paper sizes supported by the destination printer.
Duplex supported	=yes/no	Defines if the printer destination has duplex support; that is, capable of printing on both sides of the paper.
Duplex selection	=SingleSided, DoubleSided, AsScanned	Defines the printing format for the printer destination.
LPD Mode	=SingleDataFile, SplitSourceFile, BufferDataFiles, MultipleDataFiles	Specifies the LPD mode for the printer destination
[Destination-FTP]		
Description	=Scan-FTP	Specifies the name of the FTP server. This is the name that will appear in the destination list on the AXIS 7000/FX message display.
Transfer method	=Scan-to-file (FTP)	Specifies how the scanned image should be sent; that is by which protocol.
Server	=IP address	Specify the name or IP address of the FTP server on which the scanned image will be stored.

Parameter name	Value	Description
Index file	=no	Defines the option to store the sequence number on the FTP server.
[Subjects]		
Clear List First	=no	
Subjects:	=1	
Subject0:	Subject-A Scanned Image	
[Subject-A Scanned Image]		
Description	A Scanned Image	Specifies the text that will be used in the subject field when scanning to e-mail destinations.
[Profiles]		Specifies the available profiles.
Clear List first	= no	
Profiles	= 10	
Profile0	= Profile-Color high	
Profile1	= Profile-Color low	
Profile2	= Profile-Color PDF	
Profile3	= Profile-Gray high	
Profile4	= Profile-Gray low	
Profile5	= Profile-Text	
Profile6	= Profile-Text high	
Profile7	= Profile-Text low	
Profile8	= Profile-Text PDF	
Profile9	= Profile-Text/Photo	
[Profile-Text]		Note that the parameters in this list apply to all profiles parameters.
Description	=Text	Specifies the name of the profile. This is the name that will appear on the AXIS 7000/FX message display.
X-Resolution	= 300	Specifies the resolution to be used for scanning in dots per inch (dpi). Higher-resolution settings produce higher-quality scanning. However, your documents might take longer to scan. The resolutions available depend the capabilities of your digital copier/scanner.
Y-Resolution	= 300	Specifies the resolution to be used for scanning in dots per inch (dpi).
Data type	= Black & White	Specifies data type depending on the material you are scanning and the imaging application you intend to use.
Paper orientation	= Portrait	Specifies how the document should be scanned.
Image compression	=CCITT G.4	Specifies the image compression
File format	=JFIF	Specifies the file format.

Parameter name	Value	Description
Double-sided	= Off	Specifies whether the digital copier/scanner should scan the document on both sides of the paper. This feature is only available for digital copiers/scanners that support duplex scanning.
Document mode	=Multi page	Specifies if several separate images can be scanned and sent in the same file.
Intensity	= 50	Specifies the level of intensity.
Contrast	= 50	Specifies the level of contrast. The contrast is the tonal gradation between the highlights, midtones and shadows in an image.
Quality	=75	Specifies the level of compression.
[Paper sizes]		
Clear List first	= no	
PaperSizes	= 14	Specifies the number of paper sizes defined in the AXIS 7000/FX.
PaperSize0	= PaperSize-A3	
PaperSize1	= PaperSize-A4	
PaperSize2	=PaperSize-A5	
PaperSize3	= PaperSize-B4	
PaperSize4	= PaperSize-B4(JIS)	
PaperSize5	= PaperSize-B5	
PaperSize6	= PaperSize-B5(JIS)	
PaperSize7	= PaperSize-Business Card	
PaperSize8	= PaperSize-Executive	
PaperSize9	= PaperSize-Ledger	
PaperSize10	= PaperSize-Legal	
PaperSize11	= PaperSize-Letter	
PaperSize12	= PaperSize-Photo 3.5"x 5"	
PaperSize13	= PaperSize-Photo 4"x 6"	
[PaperSize-A3]	=	Note that the parameters in this list apply to all paper sizes parameters.
Description	=A3	Specifies the name of the paper size. This is the name that will appear on the AXIS 7000/FX message display.
Width	=11.69 inches	Specifies the width of the paper.
Length	=16.54 inches	Specifies the length of the paper.

Appendix D Updating the Software

The system software for your AXIS 7000/FX is stored in a resident flash memory chip that, like ordinary ROM memory, keeps its contents even when the power is turned off. Flash memory is unique because its contents can be erased and re-written.

This means that new system software can be easily loaded into your AXIS 7000/FX over the network using FTP as soon as it becomes available. Instructions on how to update the system software are provided within this section.

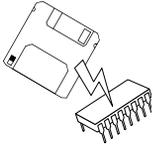
Obtaining the Updated System Software

- Your Dealer Contact your dealer to check if there have been any new issues of the software. You should have your present version numbers ready to compare against the latest software issues from Axis.

- Axis Web Site Check the Axis web site at <http://www.axis.com> where you can download the latest versions of the software.

- Anonymous FTP You can also get files and information through anonymous ftp: log in to <ftp.axis.com> and go to the `/pub/axis/` directory.

Updating the Flash Memory



Before you begin:

To upgrade over the network you will need the following:

- The file with the new AXIS 7000/FX software, where the name file name is in the form product-version.bin, i.e. axis_7000_fx_1_00e.bin for software release 1.00E.
- A computer on the network with TCP/IP and FTP.

Follow these steps to upgrade the AXIS 7000/FX software:

1. Log in to the AXIS 7000/FX with the command `ftp <Internet address>` where `<Internet address>` is the name or Internet address assigned to the AXIS 7000/FX.
2. You will be prompted for user id and password. Use the user id `root` which has the default password `pass`.
3. Issue the command `bin` to change to binary transfer mode.
4. Issue the command `put <software name> flash` where `<software name>` is the name of the new software, e.g. `axis_7000_fx_1_00e.bin`.
5. During the flash load, the AXIS 7000/FX LCD will display the message "Updating server" and a progress bar. Wait for the flash load to finish. This normally takes 1 to 4 minutes. The unit will then automatically restart with the new AXIS 7000/FX software.

Caution

Be careful not to interrupt the file transfer. If the transfer is interrupted, the AXIS 7000/FX may have to be re-initialized by your dealer.

6. Log out using the command `quit`, `bye` or `exit` depending on your FTP version.

Notes:

- If you are using a window-based FTP client application such as `Ws_ftp` or `Fetch`, you must rename the new file `<software file>` to `flash` before downloading.

Appendix E Technical Specifications

Supported Systems	<p>Systems supporting TCP/IP, Line Printer Daemon (LPD), Hypertext Transfer Protocol (HTTP) client (Web browser), and at least one of these protocols:</p> <ul style="list-style-type: none"> • File Transfer Protocol (FTP) server • Simple Mail Transfer Protocol (SMTP) server
Supported Web Browsers	<ul style="list-style-type: none"> • Netscape Navigator 4.0 or higher • Microsoft Internet Explorer 4.0 or higher • HTTP 1.0+ and HTML 3.0+ compatible Web browsers
Supported Protocols	<p>HTTP, IP, FTP, SMTP, TCP, LPD, Raw TCP, ARP, RARP, BOOTP, DHCP, ICMP, SNMP, LDAP, UDP, NTP.</p>
Supported Devices	<p>If supported, the AXIS 7000/FX automatically senses the brand and model of the attached scanner or digital copier, without any user intervention. Digital copiers/scanners with built-in compression provide optimum performance.</p> <ul style="list-style-type: none"> • FUJI XEROX <p>For the most recent list of supported scanners and digital copiers, check the AXIS 7000/FX support pages at http://www.axis.com or contact your local dealer.</p>
Supported Printers	<p>TCP/IP with Raw TCP or LPD printing supported.</p>
Supported LDAP Server Software	<ul style="list-style-type: none"> • Microsoft Exchange 5.0 • Lotus cc:Mail 8.2 • Novell GroupWise 5.2 and 5.5
Supported Image Formats	<ul style="list-style-type: none"> • PCL 5, TIFF 6.0, CCITT G.3 and G.4 for black/white images, PackBits for grayscale images; both single- and multipage TIFF are supported. Uncompressed for all image types. • JPEG File Interchange Format (JFIF) for single-page images. • Adobe PDF 1.2, CCITT G.4 for black/white images, JPEG compression for color and grayscale images; both single- and multipage PDF are supported.

Control Panel	<p>Alphanumeric LCD display with 2 rows by 16 characters, side-scrollable by 40 characters. English, German, French, Spanish, Italian and Swedish text available.</p> <p>4 LED indicators signaling Status, Busy, Network, and Power.</p> <p>7 keys for Menu, Up, Down, Select, Send, Add, and Cancel.</p> <p>Menu for selecting Destination, Profile, Paper size, Subjects, Number of Copies, Double-sided. Multiple selection of destinations is possible.</p> <p>Error log.</p>
Installation	<p>IP address set from control panel, or using ARP, RARP, BOOTP or DHCP. E-mail and file destinations, the destinations established via Web browser, PC compatible keyboard, or downloaded via LDAP or from an FTP server.</p>
Network Management	<p>Configuration and Administration via a Web browser.</p> <p>SNMP MIB-II</p>
Security	<p>Administrator's login for configuration and administration.</p> <p>Administrator specifies which destinations should be accessible and whether users are allowed to add temporary e-mail destinations.</p> <p>Possible to set a default destination (and optionally no other) for fixed application use.</p> <p>LDAP authentication supported.</p>
Number of Destinations	<p>Depending on the length of the addresses, the Administrator can define approximately 1500 destinations within the AXIS 7000/FX; the maximum number is generally limited by the User Storage Area. LDAP destinations are limited only by available RAM memory.</p>
Software Updates	<p>Flash memory allows central and remote updating of the AXIS 7000/FX software over the network using FTP.</p>
Hardware	<p>CPU: 32 bit RISC Controller (AXIS ETRAX100)</p> <p>Flash memory: 2 Mbytes</p> <p>RAM: 16 Mbytes</p>
Logical Connection	<p>IEEE 802.2, IEEE 802.3, SNAP and Ethernet II frame types simultaneously.</p>

Attachments

Network Connectors 10baseT (twisted pair) and 100baseTX for Fast Ethernet.

Accessories SCSI cable: 50 pin high-density shielded (micro-D)

Bracket: Use for mounting AXIS 7000/FX

Power supply 12V DC (36VA), via external power unit (AXIS PS-C) or 12V DC (13,2VA), via external power unit (AXIS PS-E)

Dimensions Height: 1.7 in (4.3 cm)
 Width: 5.9 in (14.9 cm)
 Depth: 8.8 in (22.4 cm)

Weight 1.5 lbs (0.7 kg)

Environmental Temperature: 40-105°F (5-40°C)
 Humidity: 20-80% RHG, noncondensing

Approvals

EMC FCC Subpart B, Class A; CE EN55022/1994, EN 55024/1998.

Safety EN 60950, UL, CSA



All specifications are subject to change without prior notice.

Appendix F Glossary

ADF	Automatic Document Feeder
AIX	Advanced Interactive eXecutive. A version of the UNIX operating system from IBM that runs on various IBM computers including Mainframe systems
ARP	Address Resolution Protocol. A protocol within TCP/IP networks that allows a host to find the physical address of a node on the same network
Bcc	Blind Carbon Copy. Send a copy to the entered Bcc address but do not indicate to the recipient that you have sent this copy.
BOOTP	Boot Protocol. A TCP/IP protocol, which allows an Internet node to discover certain startup information such as its IP address
BSD	Berkeley Software Distribution. The University of California, Berkeley additions to the UNIX operating system
CCITT G.4	The most common format for compressed TIFF files. Used for viewing and archiving of scanned documents
CMIP	Common Management and Information Protocol
DD	Document Description.
DTD	Document Type Definition. A specific definition of the rules and syntax that the DD (Document Description) file must follow
DHCP	Dynamic Host Configuration Protocol. A system based on network interface card addresses, which is used to allocate IP addresses and other configuration information for networked systems
dither	A method to obtain a rasterized effect for pictures, especially scanned photos

- DNS** Domain Name System. A hierarchical naming system that uses a combination of text names separated by periods to create a unique name
- duplex** A scanner/printer with the capability to scan/print both sides of a page simultaneously
- FTP** File Transfer Protocol. The TCP/IP protocol used for transferring files between computers on a network
- HTML** Hypertext Markup Language. A standard hypertext language used to create web pages and other hypertext documents
- HTTP** Hypertext Transfer Protocol. The TCP/IP protocol for web based communication, e.g. Web browsers
- IP** Internet Protocol. The TCP/IP session-layer protocol that regulates packet forwarding by tracking IP addresses, routing outgoing messages, and recognizing incoming messages
- JFIF** JPEG File Interchange Format. Format for storing bitmap images
- JPEG** Joint Photographic Experts Group. Compression type for color and greyscale bitmap images
- LCD** Liquid Crystal Display
- LDAP** Lightweight Directory Access Protocol. A protocol for accessing on-line directory services
- LPD** Line Printer Daemon. A protocol for network printing
- LED** Light Emitting Diode
- Meta** An underlying definition or description
- MIB** Management Information Base. A database of network configuration information used by SNMP and CMIP to monitor or change network settings

- Mini-DIN PS/2** Connector used on a PC to connect a keyboard. If your keyboard has a DIN connector, a DIN to Mini-Din adapter can be used
- MIME** Multipurpose Internet Mail Extension. Enables transmission of e-mail containing non-English characters as well as attachments such as image files
- NIS** Network Information Services. The security and file-access databases on UNIX systems, previously known as Yellow Pages
- NTP** Network Time Protocol. A protocol to get time from a timeserver (NTP-server). To get a time when a message was stored in the event log, a NTP server must be specified
- OCR** Optical Character Recognition. A technology that converts scanned documents into editable and searchable text
- PDF** Portable Document Format. A format for cross-platform distribution of electronic documents. Can be viewed by anyone that has Acrobat Reader from Adobe installed
- RARP** Reverse Address Resolution Protocol. A TCP/IP protocol governing the translation of a Data-Link Control (DLC) address to an IP address
- RISC** Reduced Instruction Set Computing. A processor that recognizes only a limited number of assembly-language instructions
- SCSI** Small Computer System Interface. A high-speed parallel interface, used to connect a computer to peripheral devices using just one port
- SMTP** Simple Mail Transfer Protocol. The TCP/IP protocol for exchanging e-mail
- SNMP** Simple Network Management Protocol. A TCP/IP protocol used to manage and monitor nodes on a network
- TCP** Transmission Control Protocol. The connection-oriented, transport-level protocol used in the TCP/IP suite of protocols
- TIFF** Tagged Image File Format. Format for storing bit-mapped images. Typically used for scanned documents and uncompressed images

- UNIX** A 32-bit multitasking, multiuser operating system originally developed by AT&T
- URL** Uniform Resource Locator. A way of specifying the location of publicly available information on the Internet
- UTC** Universal Time Coordinated
- WINS** Windows Internet Name Service
- XML** Extensible Markup Language. Describes how to define a collection of data. Sometimes referred to as metadata
- YP** Yellow Pages. The security and file-access databases on UNIX systems. These databases are now known as Network Information Services

Index

A

ADF 101, 127
Administration tools 35
Advanced menu 102
AIX systems 29
Archiving 92
ARP 22
 OS/2 28
 UNIX 28
 Windows 27
Assigning an IP address 21
Associating image formats 93
Attachments in e-mails 57
Authentication 9, 34, 37, 52, 79, 81
Authentication settings 52
AXIS Online CD 18
AXIS Product CD 92
Axis WWW Home Page 121

B

Bcc Address 42
BOOTP 22, 30
Busy indicator 98

C

CCIT G.4 70
CCITT G.4 68, 70, 93
Color 68, 70, 87, 92, 93
color 70
Color PDF 89
Configuration 73
 Administration 35
 Destinations 56, 58, 61, 62
 Paper sizes 72
 Profiles 64, 72

Connectors

10baseT 11
SCSI 11, 17
Control panel 13

D

Default router address 22
Default settings 95
Destination settings 56, 58, 61, 62
Destinations 33
DHCP 21, 26
Digital copiers 7
Double-sided 89
Duplex 89

E

E-mail 7, 80
E-mail reply address 42
Error conditions 98
Error log 102
Ethernet 7
External Address Book 50

F

Factory default settings 95
File destinations 58
File formats 70
Fileserver 7
Filter 107
Flash memory 9
Flatbed scanners 7
Front panel indicators 12, 98

G

Grayscale 70, 92

I

- Image editing 92
- Image formats 70
- Image viewers 92
- Indicators
 - Busy 12
 - Network 12, 20
 - Power 12
 - Status 12
- IP address 21
 - ARP 27, 28
 - BOOTP 30
 - control panel 22
 - DHCP 26
 - RARP 29

J

- JPEG 70

L

- LDAP 105
- LDAP server 123
- Log file 102

M

- Measurement units 38
- Message display 13
- multipage image files 82

N

- net mask 23
- Network settings 33
- NTP Server 37

O

- OCR 92

P

- Paper orientation 82
- Paper sizes 72, 89
- Parameter list 111
- PC 7
- PDF 92
- Photo 70, 72
- Picture editing 92
- Power indicator 98
- Power supply 11, 17
- Predefined paper sizes 72
- Predefined profiles 70
- Printers 7
- Profile settings 64, 72
- Profiles 70, 87
- Push button 11, 96

R

- RARP 22, 29
- Resolution 70
- Restoring default settings 95

S

- Scanning parameters 87
- Search filters 107
- Sending to destinations 77
- Sending to e-mail 77
- Sending to file 77
- Sending to Web browser 78, 89
- Send-to-E-mail 77
- Server log 102
- Server password 35

- setting IP address 21
 - ARP 27, 28
 - BOOTP 30
 - control panel 22
 - DHCP 26
 - RARP 29
- Setting up destinations 56, 58, 61, 62
- Setting up paper sizes 72
- Setting up profiles 64, 72
- SMTP 77
- Specifying scanning parameters 87
- Status indicator 98
- Subnet mask 23
- Support services 4
- Supported scanners 123

T

- Temporary e-mail destinations 38, 58
- Temporary profiles 38
- Text profile 70
- TIFF 70
- Time 37

U

- URL for e-mail 57

V

- Viewing image files 91

W

- Wizard 41

