

MULTIFUNCTIONAL DIGITAL SYSTEMS

Network Administration Guide

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Preface

Thank you for purchasing TOSHIBA Multifunctional Digital Systems or Multifunctional Digital Color Systems. This Network Administration Guide explains the instructions for administrators to set up and manage the Multifunctional Digital Systems or Multifunctional Digital Color Systems. Read this guide before using to your Multifunctional Digital Systems or Multifunctional Digital Color Systems. Keep this guide within easy reach, and use it to configure an environment that makes best use of the e-STUDIO's functions.

About This Guide

This manual describes about the setting up network servers for e-STUDIO's network functions. For information about initial setup for the Multifunctional Digital Systems or Multifunctional Digital Color Systems, see the *Quick Start Guide*.

Conventions

- The term "this equipment" in this manual refers to the TOSHIBA Multifunctional Digital Systems or Multifunctional Digital Color Systems.
- The term "e-Filing" in this manual is an abbreviation of "electronic filing".

Lineup of Our Manuals

Thank you for purchasing the TOSHIBA Multifunctional Digital Systems or Multifunctional Digital Color Systems.

We have provided you with these manuals for the operation of this equipment. Select and read the manual best suited to your needs.



Quick Start Guide

This Quick Start Guide describes the initial setup method of this equipment and accessories of this product such as operator's manuals and CD-ROMs.



Operator's Manual for Basic Functions

This Operator's Manual for Basic Functions describes how to use the basic functions of this equipment mainly focusing on the copying function

Also this manual contains safety precautions for users to be observed. Be sure to read it first carefully.



User Functions Guide

This User Functions Guide describes the functions and settings under the [USER FUNCTIONS] button on the control panel of this equipment.



Color Guide (only for the color model)

This color Guide simply explains the functions such as "copy density adjustment", "color adjustment", "copy editing", "image editing" and "image processing" in color. This guide also includes the basic knowledge of color.

Other guides are provided by the User Documentation CD-ROM in PDF files:



TopAccess Guide

This TopAccess Guide explains how to operate and set up the network functions such as the network scanning function and job management, using the TopAccess (Web-based utility) from client computers.



Network Administration Guide

This Network Administration Guide explains the guidelines for setting up network servers to provide various network services, and troubleshooting for network administrators.



Printing Guide

This Printing Guide explains how to install the client software for printing from Microsoft Windows, Apple Mac OS, and UNIX computers, and print to the equipment.



Scanning Guide

This Scanning Guide explains how to operate the scanning function of this equipment.



e-Filing Guide

This e-Filing Guide explains how to operate the e-Filing function using the TWAIN driver, File Downloader and e-Filing web utility.



Network Fax Guide

This Network Fax Guide explains how to use the network fax function that enable users to operate fax and internet fax sending from a client computer via network.



User Management Guide

This User Management Guide describes how to manage this equipment using the functions of "Department Management", "User Management Setting" and "User Authentication for Scan to E-mail".

To read manuals in PDF (Portable Document Format) files

Viewing and printing this operator's manual in PDF files require that you install Adobe Reader or Adobe Acrobat Reader on your PC. If Adobe Reader or Adobe Acrobat Reader is not installed on your PC, download and install it from the website of Adobe Systems Incorporated.

Precautions in this manual

To ensure correct and safe use of this equipment, this operator's manual describes safety precautions according to the three levels shown below.

You should fully understand the meaning and importance of these items before reading this manual.



Indicates a potentially hazardous situation which, if not avoided, could result in death, serious injury, or serious damage, or fire in the equipment or surrounding assets.



Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, partial damage of the equipment or surrounding assets, or loss of data.



Indicates a procedure you should follow to ensure the optimal performance of the equipment and problem-free copying.

Other than the above, this manual also describes information that may be useful for the operation of this equipment with the following signage:



Describes handy information that is useful to know when operating the equipment.



Pages describing items related to what you are currently doing. See these pages as required.

black and white model e-STUDIO202L/232/282

> e-STUDIO203L/233/283 e-STUDIO352/452 e-STUDIO353/453

e-STUDIO520/600/720/850 e-STUDIO523/603/723/853

color model e-STUDIO281c/351c/451c

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Setting up Network Server

This section describes the instructions on how to set up the network servers.

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About Network Server Setup

This chapter describes environments that typically include one or more network servers (Novell NetWare servers and Windows print servers) that will share printing to this equipment. It describes setting up servers that use IPX/SPX or TCP/IP protocols for communicating with this equipment. In addition, it includes some guidelines for setting up the DNS server and mail server to enable the Scan to Internet Fax and Email features, and for setting up the LDAP service using the Kerberos Network Authentication Service.

Setting up Windows Print Server

If a Windows NT 4.0, Windows 2000, Windows XP, Windows Vista, and Windows Server 2003 computer is connected to this equipment using TCP/IP, it can print directly to this equipment. If the computer shares the printer over the network, it is acting as a print server for Windows clients. The client machines print to this equipment by printing to the Windows print server. Printing can then be monitored and controlled at the Windows print server machine.

The Windows print server can also use AppleTalk protocols for printing to this equipment as an alternative to TCP/IP. When creating a printer to share with AppleTalk users, do not "capture" the printer. Capturing the printer forces all users to print to the server rather than directly to the printer. If you capture the printer, this equipment print connections will not appear in the Mac OS Chooser.

Configuring the Windows Print Server

To configure a Windows print server to communicate with this equipment, follow these general steps. More detail is provided in subsequent sections.

- Load the TCP/IP network protocol on the server and configure it with an IP address, subnet mask, and gateway.
- Make sure the Microsoft TCP/IP printing service is installed, and that the computer is using Raw TCP or LPR printing.
- On the Windows print server, install the appropriate printer drivers (if necessary) and share the printer on the network.
 - P.13 "Installing the Printer Drivers as Shared Printers"
- Configure clients for printing to the printer shared by the Windows print server.
 - P.14 "Setting up the Clients"

Installing the Printer Drivers as Shared Printers

First, install the Windows printer drivers. The installation instructions in the *Printing Guide* can be used for every computer that will print directly and independently to this equipment. However, if you are an administrator running Windows NT 4.0 Server, Windows NT 4.0 Workstation, Windows 2000 Professional, Windows XP Professional, Windows Vista, or Windows Server 2003, you can also create a printer and share it with clients on the network. When a printer is shared, clients who are not able or are not given permission to establish an independent network connection to this equipment can print through the server.

If you have not installed the printer files on the Windows print server computer, do so now following the instructions for Raw TCP or LPR printing in the **Printing Guide**. Then, or if you have already installed the printer files on the computer you are using as a Windows print server, see your Windows documentation for information about sharing the printer.

In addition, the printer files for every Windows version can be installed to the shared printer so that Windows clients can use the shared printer as a Point and Print printer, which enables clients to download the appropriate printer driver from the shared printer.

Notes

- When installing the printer driver to Windows NT 4.0 clients from the Windows NT 4.0 print server, please check the "Always spool RAW datatype" box on the Print Processor dialog box (displayed by clicking the [Print Processor...] button on the General tab of printer properties dialog box of the shared printer on the Windows NT 4.0 print server).
- When installing the Windows 2000 PCL printer driver to the Windows 2000 server, you must clear the "Enable advanced printing features" check box on the Advanced tab of the printer properties dialog box.

Setting up the Clients

Each client of a Windows print server is already using a network protocol to communicate with the server. Each client can print to this equipment if the printer has been shared by a Windows print server. In that case the client does not have to use the same network protocol to connect to the Windows print server as the server uses to communicate with the equipment.

To set up printing on client computers, connect to the print server and select the shared printer. Right-click the printer and select [Open]. When prompted, click [Yes] to have Windows set up the printer.

After clients have selected the printer, they can choose it from the Print Setup, Page Setup, or Print dialog box of their application. Clients can change printing options for their own job, but printer properties are grayed and not available for changing. When a client prints a document, the job is transmitted to the Windows print server, and from there to this equipment.

The job is listed in the Print Manager on the client computer, and the administrator can track it in the Print Manager on the Windows print server.

Setting up NetWare Print Server

This equipment supports the following Novell printing services:

- NetWare 5.1/6.0/6.5 bindery emulation mode
- NetWare 5.1/6.0/6.5 NDS mode (over IPX/SPX only)
- NetWare 5.1/6.0/6.5 NDPS mode
- NetWare 6.0/6.5 iPrint mode

This chapter provides an overview of how to set up this equipment as a Novell Network Printer, Print Server, or NDPS Printer Agent. For more detailed information, refer to your Novell documentation.

Setting up the NetWare in Bindery Mode

You can connect only one directory tree to this equipment. If you need to connect additional Net-Ware 5.1/6.0/6.5 servers, do so by using bindery emulation, which causes the 5.1/6.0/6.5 server to behave like, and be accepted as, a NetWare 3.x server.

Note

The file server selected must not be in the same tree as that selected in NDS Setup.

In order to set up the NetWare 5.1/6.0/6.5 server in bindery emulation mode for printing to this equipment, the network administrator must do the following:

- Edit the network startup file to set the bindery context.
 - P.15 "Editing the Network Startup File"
- Configure the print queues, print server, and printer on the file server.
 - P.16 "Setting up the NetWare File Server"

Editing the Network Startup File

The following procedures explain how to edit the bindery contexts in the network startup file.

Editing the bindery context

- 1 On NetWare file server, enter "load install" and press the [Enter] key.
- 9 Select [NCF Files Options] from the menu.
- 3 Select [Edit AUTOEXEC.NCF] from the menu.
- Search for the file to see if you have a statement similar to the following included:

SET BINDERY CONTEXT=0U=ENG

- If the statement above can be found in the file, the server has a bindery. If this is not
 found, enter the statement above and save the file.
- 5 Restart the NetWare file server.

Setting up the NetWare File Server

The following explains how to set up a NetWare 4.x file server with bindery emulation so that network users can print to this equipment from their computers, and this equipment can obtain print jobs from the NetWare server.

For NetWare 5.1/6.0/6.5 in emulation, the NetWare print server and print queue for this equipment are created and configured from NetWare Print Console (PCONSOLE), a NetWare utility that is stored in NetWare's PUBLIC directory.

Setting up the bindery with PCONSOLE

- 1 Start PCONSOLE at the DOS prompt on the computer.
- 2 Select [Print Queue] from the Available Options menu and press the [Enter] key.
 - · The Print Queues window appears.
- 3 Press the [Insert] key and enter the print queue name and press the [Enter] key.
- ⚠ Press the [Esc] key to close the Print Queues window.
- 5 Select [Print Server] from the Available Options menu and press the [Enter] key.
- When the message is displayed, press the [Enter] key.
 - · The Print Servers window appears.
- Press the [Insert] key and enter a print server name and press the [Enter] key.
 - The print server name must be "MFP [NIC Serial Number]". You can find the Unit Serial Number of the equipment on the NIC Configuration list can be printed from the control panel.
- 8 Select a created print server name from the Print Servers window and press the [Enter] key.
 - · The Print Server Information menu appears.
- 9 Select [Printers] from the Print Server Information menu and press the [Enter] key.
 - · The Defined Printers window appears.
- 10 Press the [Insert] key and enter a printer name and press the [Enter] key.
- Select a created printer name from the Defined Printers window and press the [Enter] key.
- 12 Highlight the Printer Type field and press the [Enter] key.
 - The Printer Type menu appears.
- Select "Other/Unknown" and press the [Enter] key.
- 11 Highlight the Print queue assigned field and press the [Enter] key.
 - The NetWare Server\Print Queue window appears.

- 15 Press the [Insert] key and select the created queue from the Available Print Queues menu and press the [Enter] key.
 - Up to 10 gueues can be selected. If you created several gueues, repeat the operation to add all gueues that are required.
- 16 When more than one queue is added, you must enter the priority value.
- Press the [Esc] key until the Save Changes menu appears.
- 18 Select "Yes" and press the [Enter] key.

Setting up the NetWare in NDS Mode

The following explains how to set up a NetWare 5.1/6.0/6.5 file server with NDS so that network users can print to this equipment from their computers, and this equipment can obtain print jobs from the NetWare server. More detail is provided in your NetWare documentation.

Setting up the NDS with NetWare Administrator

- In NetWare Administrator, select the container object to create the printer and click the [Object] menu and select [Create].
 - · The New Object dialog box appears.
- 2 In the Class of new object list, select "Print Queue" and click [OK].
 - · The Create Print Queue dialog box appears.
- 3 Select "Directory Service Queue" and enter the name of the print queue in the Print Queue name field.
- ▲ Click the browse button at the next to the Print Queue Volume field.
 - The Select Object dialog box appears.
- 5 Select the volume to create a print queue and click [OK].
- Click [Create].
 - The print queue is created.
- Click the [Object] menu and select [Create].
 - The New Object dialog box appears.
- 8 In the Class of new object list, select "Printer" and click [OK].
 - · The Create Printer dialog box appears.
- **Q** Enter the printer name, check the "Define additional properties" option and click [Create].
- 1) Display the Assignments window and click [Add].
 - · The Select Object dialog box appears.
- Select a created queue and click [OK].
- 12 Display the Configuration window, select "Other/Unknown" at the Printer Type drop down box and click [OK].
 - · The printer is created.

- 13 Click the [Object] menu and select [Create].
 - · The New Object dialog box appears.
- ▲ In the Class of new object list, select "Print Server" and click [OK].
 - · The Create Print Server dialog box appears.
- 15 Enter the print server name, check the "Define additional properties" option and click [Create].
 - The print server name must be "MFP_[NIC Serial Number]". You can find the Unit Serial Number of the equipment on the NIC Configuration list can be printed from the control panel.
- 16 Display the Assignments window and click [Add].
 - · The Select Object dialog box appears.
- 7 Select a created printer and click [OK].
- **R** Click [OK] to close Assignments window for the print server.
 - The print server is created.

Setting up the NetWare in NDPS Mode

This equipment supports printing over NetWare 5.1/6.0/6.5 networks running either the TCP/IP protocols or the IPX protocol. For pure IP printing, this equipment takes advantage of features in NDPS (Novell Distributed Print Services).

An administrator can use either Novell Printer Gateway or TOSHIBA NDPS Gateway to set up the NetWare server in NDPS mode.

- P.18 "Setting up NDPS Using Novell Printer Gateway"
- P.23 "Setting up NDPS Using TOSHIBA NDPS Gateway"

Note

Setting up a NetWare environment correctly requires the presence and active cooperation of the Novell network administrator. You must have administrator privileges on the network to create new NDPS objects.

Setting up NDPS Using Novell Printer Gateway

NDPS is not like the earlier queue-based versions of NetWare printing. Instead, you use an NDPS Manager and a Printer Agent, which control the tasks previously handled by a print queue, print server, and spooler. You can also make the printer driver available for clients to download from Windows client computers.

Before configuring the NetWare file server in NDPS mode, please confirm followings:

- For NetWare 5.1, the Support Pack 8 and Novell Gateway version 2.1.6 or later with ndps3sp2c are installed.
- For NetWare 6.5, the Support Pack 5 and Novell Gateway version 3.00 or later with ndps3sp2c are installed.
- Make sure you have a valid IP address for this equipment and for any computers that will print to it (when used in the TCP/IP network).
- In the equipment setup, enable TCP/IP and enter the IP address, Subnet mask, and Gateway address for this equipment (when used in the TCP/IP network).

Setting up the NDPS with NetWare Administrator

- 1 In NetWare Administrator, select the container object to create the printer and click the [Object] menu and select [Create].
 - The New Object dialog box appears.
- Select "NDPS Broker" and click [OK].
 - The Create NDPS Broker Object dialog box appears.

Tip

If the NetWare file server has been installed as supporting the NDPS service, the NDPS Broker is created as default. In this case, you can use the default NDPS Broker.

- 3 Specify the "NDPS Broker Name" and "RMS Volume" options, and click [Create].
 - · The NDPS Broker is created.
- ⚠ Click the [Object] menu and select [Create].
 - The New Object dialog box appears.
- 5 Select "NDPS Manager" and click [OK].
 - The Create NDPS Manager Object dialog box appears.
- 6 Specify the "NDPS Manager Name", "Resident Server", and "Database Volume" option, and click [Create].
 - · The NDPS Manager is created.
- 7 After creating the NDPS Broker and NDPS Manager, please load the NDPS Broker and NDPS Manager by entering the following commands in the Console screen of the NetWare server.

```
load broker [Created NDPS Broker Name]
load NDPSM [Created NDPS Manager Name]
```

- **8** Double-click the NDPS Broker object that you created.
 - · The NDPS Broker dialog box appears.
- **9** Click [Resource Management (RMS)].
- 10 Click [Add Resources...].
 - The Manage Resources dialog box appears.

Note

If the [Add Resources...] button is disabled, make sure that the broker is loaded. This button will be enabled only when the broker is loaded.

- 11 Select the applicable OS icon in the "Resource Types" list, and click [Add...].
 - The Add Resources dialog box appears.

12 Click [Browse].

· The Select Printer Driver dialog box appears.

Note

The [Browse] button may not be available according to the Support Pack version. If the [Browse] button is disabled, specify "/DISABLETLSMGR" option when starting the nwadmin32.exe.

13 Insert the Client Utilities CD-ROM into the CD-ROM drive.

· When inserting the Client Utilities CD-ROM, the installer may automatically start. Click [Cancel] to exit the installer and continue the operation.

14 Locate the directory where the printer driver for your Windows version is located, select the INF file.

- When you want to install the PCL5c printer driver for Windows 98/Me, locate "[CD-ROM drive]:\Client\Drivers\9X ME\PCL5c\<language>".*
- When you want to install the PCL6 printer driver for Windows 98/Me, locate "[CD-ROM drive]:\Client\Drivers\9X ME\PCL6\<language>".
- When you want to install the PSL3 printer driver for Windows 98/Me, locate "[CD-ROM drive]:\Client\Drivers\9X ME\PS\<language>".
- When you want to install the PCL5c printer driver for Windows NT 4.0, locate "[CD-ROM drive]:\Client\Drivers\NT\PCL5c\<language>".*
- . When you want to install the PCL6 printer driver for Windows NT 4.0, locate "[CD-ROM drive]:\Client\Drivers\NT\PCL6\<language>".
- When you want to install the PSL3 printer driver for Windows NT 4.0, locate "[CD-ROM drive]:\Client\Drivers\NT\PS\<language>".
- When you want to install the PCL5c printer driver for Windows 2000/XP/Vista/Server 2003, locate "[CD-ROM drive]:\Client\Drivers\W2K XP VISTA\PCL5c\<language>".*
- When you want to install the PCL6 printer driver for Windows 2000/XP/Vista/Server 2003, locate "[CD-ROM drive]:\Client\Drivers\W2K_XP_VISTA\PCL6\<language>".
- When you want to install the PSL3 printer driver for Windows 2000/XP/Vista/Server 2003, locate "[CD-ROM drive]:\Client\Drivers\W2K XP VISTA\PS\<language>".

Note

- When you want to install the PCL6 printer driver, locate "[CD-ROM drive]:\Client\Drivers\XP VISTA X64\PCL6\<language>".
- When you want to install the PCL5c printer driver, locate "[CD-ROM drive]:\Client\Drivers\XP VISTA X64\PCL5c\<language>".*
- When you want to install the PSL3 printer driver, locate "[CD-ROM drive]:\Client\Drivers\XP VISTA X64\PS\<language>".
- Only applicable to the color model.

15 Click [OK].

· Returns to the Add Resources dialog box.

16 Click [OK].

· Returns to the Manage Resources dialog box.

17 Repeat the procedure from Step 10 to Step 15 to add all printer drivers for the applicable OS.

- 18 Click [OK] to close the Manage Resources dialog box.
 - · Returns to the NDPS Broker dialog box.

- 19 Click [OK] to close the NDPS Broker dialog box.
- 20 Click the [Object] menu and select [Create].
 - The New Object dialog box appears.
- Select "NDPS Printer" and click [OK].
 - · The Create NDPS Printer Object dialog box appears.
- 22 Specify the "NDPS Printer Name" option, select "Create a New Printer Agent", and click [Create].
 - The Create Printer Agent dialog box appears.

Note

When setting up the NDPS in the iPrint mode, do not enter more than 7 characters for the "NDPS Printer Name" option. If you enter more than 7 characters for the "NDPS Printer Name" option, the default watermarks will not be registered when installing the printer drivers in Windows 98/Me.

- 23 Specify the "Printer Agent (PA) Name" and "NDPS Manager Name" option. Then select "Novell Printer Gateway" in the "Gateway" Types" list and click [OK].
 - · The Warning dialog box appears.
- 24 Click [OK].
 - When it finishes initializing, the Information dialog box appears.
- 25 Click [OK].
 - The Configure Novell PDS for Printer Agent dialog box appears.
- 26 Select "((NONE))" in the "Printer Type" list and select "Novell Port Handler" in the "Port Handler Type" list. Then click [OK].
 - The Configure Port Handler for Printer Agent dialog box appears.
- 27 Continue the procedure according to which connection type to be used.
 - P.21 "Configuring the LPR connection in the TCP/IP network"
 - P.22 "Configuring the queue based connection in the IPX/SPX network"

Configuring the LPR connection in the TCP/IP network

- In the Configure Port Handler for Printer Agent dialog box, select "Novell LPR Printer Gateway (SNMP)" (or "Remote (LPR on IP)") and click [Next].
- 2 Enter the IP address of this equipment in the "Host Address" field, and click [Finish].
 - · It takes about 60 seconds to load the Printer Agent. After it finishes loading the Printer Agent, the Select Printer Drivers dialog box appears.
- 3 Select the printer drivers to be installed in the "Printer Drivers" list at each OS tab, and click [Continue].
 - The Information dialog box appears.

- ▲ Click [OK].
 - It takes about 60 seconds to complete the creation of the NDPS Printer object.
- 5 Double-click the NDPS Printer object that you created.
 - · The NDPS Printer dialog box appears.
- **Click [NDPS Remote Printer Management].**
- Check the "Install to workstation in this container" and click [Update].
- **R** Click [OK] to close the NDPS Printer dialog box.

Configuring the queue based connection in the IPX/SPX network

- In the Configure Port Handler for Printer Agent dialog box, select "Forward Jobs to a Queue" and click [Next].
- 2 Enter the NDS queue name in the "Queue Name" field and the user name in the "Queue User Name" field. Then click [Finish].
 - The Select Printer Drivers dialog box appears.

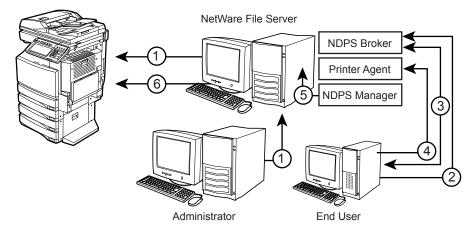
Note

The NDS queue must be created.

- 3 Select the printer drivers to be installed in the "Printer Drivers" list at each OS tab, and click [Continue].
 - · The Information dialog box appears.
- ▲ Click [OK].
 - It takes about 60 seconds to complete the creation of the NDPS Printer object.
- 5 Double-click the NDPS Printer object that you created.
 - · The NDPS Printer dialog box appears.
- Click [NDPS Remote Printer Management].
- Check the "Install to workstation in this container" and click [Update].
- **Q** Click [OK] to close the NDPS Printer dialog box.

Setting up NDPS Using TOSHIBA NDPS Gateway

The TOSHIBA NDPS Gateway mechanism employs several components, notably the NDPS Manager, NDPS Broker, and NDPS Printer Agent. The following figure illustrates the communication flow between these objects.



- The e-STUDIO352/452 is used in the illustration above. It may be different with your system.
 - The NetWare printer can be discovered in two ways:
 - The printer is automatically discovered by the TOSHIBA NDPS Gateway. You add it manually to the NDPS Manager, which resides on the same NetWare file server as the TOSHIBA NDPS Gateway.
 - 2 When an end-user attempts to add a NDPS printer, the client queries the NDPS Brokers to identify all available NDPS printers.
 - The NDPS Broker responds with a list of NDPS Printer Agents. The user selects a Printer Agent and the TOSHIBA NDPS Gateway downloads the appropriate driver to the user's desktop.
 - ⚠ When the client workstation is ready to print, it sends the print job to the Printer Agent, which is a virtual printer image created in the NDPS network.
 - 5 The NDPS Manager then passes the print jobs to the TOSHIBA NDPS Gateway.
 - The TOSHIBA NDPS Gateway issues the printing commands to the printer.

Installing the TOSHIBA NDPS Gateway

Considerations and Limitations

- The TOSHIBA NDPS Gateway can be installed in servers running NetWare 5.1 with service pack 3A (3.0.1) or higher or NetWare 6.0/6.5. A self-extracting executable file contains both the TOSHIBA NDPS Gateway and a NetWare Admin Snap-in component that are necessary to support NDPS printing on the equipment.
- The NDPS Manager can drive several Gateways simultaneously. The TOSHIBA NDPS Gateway does not interfere with other manufacturer's Gateways.
- The TOSHIBA NDPS Gateway supports multiple printers; one printer can also be split between several Gateways to balance the work load.
- Both NDPS and non-NDPS users can share the same printer.
- The TOSHIBA NDPS Gateway supports network configurations that are based on both a server and the Windows operating system.

Prerequisites

Install NDPS in the NetWare servers. NDPS comes with NetWare 5.1, but it is not installed automatically. The NDPS install program extends the NDS schema for three NDS objects:

- NDPS Manager
- NDPS Broker
- · NDPS Printer Agent

Installing the TOSHIBA NDPS Gateway

- Insert the Client Utilities CD-ROM into the CD-ROM drive on the administrative workstation.
- 2 Copy "tndps.exe", the self extracting executable file from the CD-ROM to the workstation. Double-click the file to launch the InstallShield setup program.
- 3 Follow the Setup Wizard's prompt to supply the server volume or Browse to select a mapped drive.
- Click [Next] to proceed with installation. When the NDPS Gateway and NetWare snap-in components have been installed, you can configure the equipment as an NDPS object.

Setting up the equipment as an NDPS Object

Considerations and Limitations

This equipment should be automatically discovered by the TOSHIBA NDPS Gateway. If not, manually create a new NDPS Printer Agent. (P.25 "Create a Printer Agent")

Prerequisites

- 1 Load "NWADMN32.EXE" on the administrator workstation to launch the NetWare administration program.
- 2 Determine the Tree or Context under which to install the NDPS printer agent.
- Werify that both a NDPS Manager and Broker object exist at this level. If not, create them.
- Add drivers to the NDPS Broker. They can then be selected from the drivers list and associated with the Printer Agent.

Add Drivers to the NDPS Broker

- **1** Launch NWAdmin.
- **9** Double-click the Broker icon.
- Click [Resource Management (RMS)].
- ✓ Click [Add Resources].
- 5 Select the applicable system: the Windows 98/Me/2000, Windows NT or Windows XP operating system. Click [Add].
- 6 Click [Browse] to locate the driver's .inf file on either the distribution CD-ROM or a shared network location.
- 7 Click [OK].

Now, when you create a Printer Agent, you can associate the drivers by selecting them from the list of drivers managed by the broker.

Create a Printer Agent

- 1 Right-click anywhere within the Parent Level (Tree or Context under which the NDPS Printer Agent is to be installed) and then choose [Create].
 - · The New Object dialog box appears.
- **2** From the "Class of New Object" list box, select "NDPS Printer" and click [OK].
 - The Create NDPS Printer dialog box appears.
- 3 Enter the NDPS Printer Name, then click [Create].
 - The Create Printer Agent dialog box appears.

- 4 Enter the NDPS Manager name or click [Browse] to locate it.
- 5 Select "TOSHIBA NDPS Gateway Configuration" in the "Gateway types" list, then click [OK].
 - · The Gateway Configuration dialog box appears.
- 6 Select the NDPS Gateway Printing Mechanism and click [Next].

The configuration dialog that appears depends on the printing mechanism you choose. A description of the configuration settings for each option follows. When you finish configuring the Printer Agent, proceed to "Select Drivers" on page 27.

- P.26 "LPR on IP"
- P.26 "Queue-Based (NDS Printer Agent)"

LPR on IP

If you select the LPR Gateway configuration option, the Remote-LPR Printer Configuration dialog box opens:

- Enter the IP Address of the equipment and then click [Finish].
- To confirm your choice, click [Yes]. When the update is complete, you can proceed to "Select Drivers" on page 27.

Queue-Based (NDS Printer Agent)

If you select the Queue-based (NDS Printer Agent) option, the Configure Printer Agent dialog box opens:

Either type in the Advertising Print Server name, or click [Search] to automatically locate print server information and choose a device name from the drop-down list.

Once a server is selected, the remaining fields are populated with the associated data.

7 Check the "Manual Configuration" checkbox to edit the default data or if the device is not automatically located.

IPX Address — Enter the 8 digit IPX Network Address (NET) of the Novell network in the first field, and enter the MAC Address of the device in the second field.

Print Server Name — Enter the Novell Network Print Server Name of the device.

Password — Enter the password for the Novell Network Print Server if required.

Printer Name — Enter the "<Novell Network Print Server Name of the device>_PTR".

NDS Volume for the Print Queue — Enter the

"<Novell Server Name> <Volume>.<Context>" of the object.

- 3 Click [Finish].
- To confirm your choice, click [Yes].

When the update is complete, proceed to "Select Drivers" on page 27.

Select Drivers

After you create a Printer Agent, configure the options. When the update completes, the Select Printer Drivers dialog box opens:

- Select the appropriate operating system tab.
- 2 Select the printer drivers to be automatically downloaded to users' workstations when they select the new Printer Agent.
- 3 Select all desired drivers and then click [Continue]. A message box opens, listing the selected drivers:
- ⚠ Click [OK] if the selections are correct or click [Cancel] to return to the Select Printer Drivers dialog and modify your selections.

NDPS Printer Agent setup is complete. The new Printer Agent now appears in the list of NDPS objects.

- Removing NDPS Components
 - Use the NWADMIN utility to delete all TOSHIBA NDPS printer and print agents you created.
 - 2 Delete the following files using either Windows Explorer or MS-DOS operating system commands. Check that the files are not in use before deleting them.

SYS:\SYSTEM\TAGATE.NLM

SYS:\SYSTEM\TAPAP.NLM

SYS:\SYSTEM\TACON.NLM

SYS:\SYSTEM\TALIB.NLM

SYS:\SYSTEM\TACFG.PD0

SYS:\SYSTEM\NLS\4\TAGATE.MSG

SYS:\SYSTEM\NLS\4\TACON.MSG

SYS:\SYSTEM\NLS\4\TALIB.MSG

SYS:\SYSTEM\NLS\4\TACFG.MSG

SYS:\SYSTEM\NLS\4\TAPAP.MSG

SYS:\SYSTEM\NLS\4\TACFG.HLP

SYS:\SYSTEM\NLS\4\TACON.HLP

SYS:\SYSTEM\NLS\4\TALIB.HLP

SYS:\PUBLIC\WIN32\TASNAPIN.PC2

SYS:\PUBLIC\WIN32\TACFG.PD2

SYS:\PUBLIC\WIN32\TOSHIBA.INI

SYS:\PUBLIC\WIN32\TASNMP.DLL

SYS:\PUBLIC\WIN32\NLS\ENGLISH\TARES.DLL

SYS:\PUBLIC\WIN32\NLS\ENGLISH\TACFGRES.DLL

SYS:\PUBLIC\WIN32\NLS\ENGLISH\SC2 MSG.DLL

SYS:\PUBLIC\WIN32\NLS\ENGLISH\HLP25632.DLL

SYS:\PUBLIC\WIN32\NLS\ENGLISH\ROBOEX32.DLL

SYS:\PUBLIC\WIN32\NLS\ENGLISH\SC3_MSG.DLL

Setting up the NetWare in iPrint Mode

This equipment also supports the Novell iPrint.

Using the iPrint system, you can set up the printer that can be accessed using URL from client computers. The iPrint system is based on the NDPS architecture so that you must have NDPS installed and configured in the NetWare 6.0/6.5 server.

Before configuring the NetWare file server in NDPS mode, please confirm followings:

- The NDPS Broker, NDPS Manager, and NDPS Printer must be created.
 - P.19 "Setting up the NDPS with NetWare Administrator"
- The Novell iManager must be installed. For more information to install the Novell iManager, please see the documentation for the Novell iManager that is provided by Novell, Inc.

In order to set up the iPrint system, the network administrator must do the following:

- 1. Installing iPrint
 - P.28 "Installing iPrint"
- 2. Enabling the DNS on the Printer Services Manager
 - P.28 "Enabling DNS on the Printer Services Manager"
- 3. Enabling iPrint service
 - P.29 "Enabling iPrint Service"

Installing iPrint

- Click [Novell] in the GUI screen of NetWare and select [Install].
- Click [Add].



If the iPrint/NDPS is displayed in the list, iPrint has already been installed during the installation of NetWare. In that case, you do not have to operate the installation for iPrint.

- 3 Insert the NetWare Operating System CD-ROM into your CD-ROM drive.
- ▲ Select the "PRODUCT.NI" file that is located in the root of the CD-ROM, and click [OK].
- Follow the prompts to install iPrint/NDPS.

Enabling DNS on the Printer Services Manager

Before enabling DNS for the Printer Services Manager, you should add the DNS name for the Printer Services Manager to the DNS server.

After you add the DNS to the DNS server, follow the steps below to enable the DNS on the Printer Services Manager.

At the server console, enter the following syntax.

NDPSM <NDPS Manager Name> /dnsname=<NDPS Manager DNS Name>

Enabling iPrint Service

After enabling DNS on the Printer Services Manager, enable the iPrint Service using the iManager.

Notes

- To do this, iManager must be installed on your NetWare server. For information about installing iManager, see the documentation for iManager that is provided by Novell, Inc.
- You must use a supported browser to access iManager. The supported browsers vary depending on the version of iManager that you installed.

For iManager 1.5.2

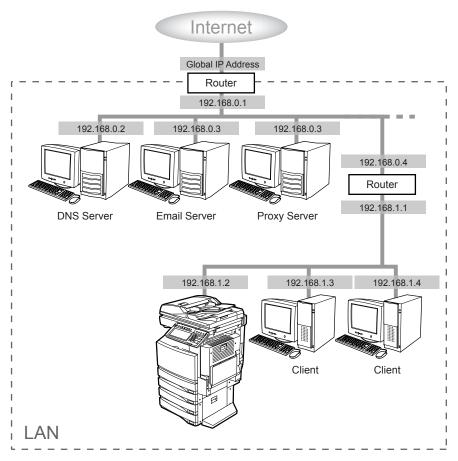
- Microsoft Internet Explorer 5.5 or later (Recommended)
- Netscape 6.2 or later

For iManager 2.0.x

- Microsoft Internet Explorer 6 SP1 or later (Recommended)
- Netscape 7.1 or later
- Mozilla 1.4 or later
- 1 Enter the URL "https://<IP address>:2200" in the address bar of your browser, and click the iManager link for the NetWare server under eDirectory iManager.
- **9** Enter the user name and password to log in to iManager.
- 3 Click [iPrint Management] in the Contents Panel and click [Manage Printer].
- ✓ Select the printer that you created for the equipment.
- 5 Click [Client Support] and click [IPP Support].
- 6 Check the "Enable IPP Access" check box.
- 7 If you want to secure printing, check the "Require Security" check box.
 - When the "Require Security" option is enabled, users must be authenticated to eDirectory using the user name and password.
- 8 Click [Apply] and [OK] to save settings.
 - · The IPPSRVR.NLM is automatically loaded.

Setting up DNS and Mail Servers

This section describes how to set up the DNS server and Mail server for the Internet connection. The figure illustrates a general network environment for Internet connection from a local area network.



The e-STUDIO352/452 is used in the illustration above. It may be different with your system. As shown in the figure above, a local area network usually consists of several segments: one connects to the router directly (and is assigned a Global IP address) and others are for client computers.

To enable Internet access from the local area network, the router must be assigned a Global IP Address. In the above figure, the Private IP addresses have been assigned to all devices in the local area network, and the router maps between the Private IP addresses and Global IP Addresses using the NAT, Network Address Translation. This gives clients and servers access to the Internet through the router.

Regarding the security, it is preferred to place this equipment in a different segment from the router that connects to the Internet.

Also, in order to enable Internet communication from the device in the local area network, the Domain Name Service is used. In the Internet, the DNS server specifies the domain name related to the global IP address of the servers. To recognize the domain names in the Internet, the domain names must be registered in both the DNS server in the Internet, which is managed by the public DNS organization, and the DNS server in the local area network where the remote devices are actually located. To configure the DNS server in your local area network, create following records in the DNS server:

- DNS zone name (i.e. "ifax.com")
- Host name of the DNS server (i.e. "nshost")
- NS record to specify the DNS server in your zone (i.e. "nshost.ifax.com")

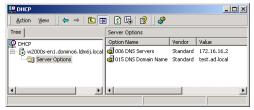
To send the Internet Fax and Email documents from this equipment, and receiving the Internet Faxes from the Internet, you must configure the DNS server and mail servers properly.

Tips for configuring the DNS server and mail servers for this equipment features are described in the following sections:

- P.32 "Tips of Setting up the DNS and Mail Servers for Email"
- P.32 "Tips of Setting up the DNS and Mail Servers for Internet Fax"
- P.32 "Tips of Setting up the DNS and Mail Servers for Offramp Gateway"

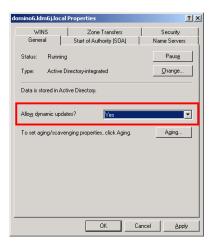
Notes

 When using DDNS and the IP address is assigned using DHCP, enable "006 DNS Servers" and "015 DNS Domain Name" in the DHCP Server's Scope Options or Server Options.

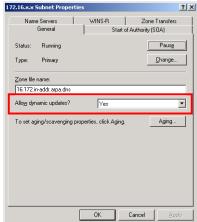


When using DDNS, make sure the "Allow dynamic updates?" option is set to "Yes" (for Windows 2000 Server) or "Nonsecure and Secure" (for Windows Server 2003) for the Forward Lookup Zones and Reversed Lookup Zones. If setting of Windows Server 2003 is "Secure" mode or "None" for this DDNS function, you need to set the correct primary login name and primary password for update the DNS server by DDNS, or add the equipment's host name manually in the Forward and Reversed Lookup Zone.

Windows 2000 Server



Windows Server 2003



Tips of Setting up the DNS and Mail Servers for Email

The Email transmission from this equipment works same as sending an Email message from a client computer. To do this, you configure the DNS servers and mail servers.

Because the Email is one way transmission forwarding to the Internet, only the SMTP server is required for the transmission. To enable sending a Scan to Email document to the Internet, the DNS server should be configured to enable accessing the Internet using the DNS service.

Tips of Setting up the DNS and Mail Servers for Internet Fax

The Internet Fax transmission enables sending an Internet Fax and receiving an Internet Fax from other Internet Fax devices.

Because the Internet Fax transmission is same as the Email transmission, you are ready to use this feature if you have already configured the Email system in your network.

In order to configure the Email system, you must have the DNS, SMTP, and POP3 servers. In the DNS server, you must additionally create the MX record of the server that the SMTP server is activated (i.e. "mxhost.ifax.com"), and the host name of the server to add the host name of the SMTP server (i.e. "mxhost"). This enables to receive all Emails that are sent to "@ifax.com" to the SMTP server and stored in the mailboxes. Then this equipment requests to the POP3 server to retrieve new Internet Faxes from the mailbox.

Tips of Setting up the DNS and Mail Servers for Offramp Gateway

When you enable the Offramp Gateway transmission, this equipment must be configured to receive Emails in the SMTP transmission.

However this equipment does not have full SMTP server functionality so it cannot retrieve Emails from the Internet by itself. For this equipment to receive Emails in SMTP transmission from the Internet, the Emails must be retrieved by the another SMTP server first and then routed to this equipment.

In order to enable the transmission, you must additionally create the MX record of the server that the SMTP server is activated (i.e. "mxhost.ifax.com"), and the host name of the server to add the host name of the SMTP server (i.e. "mxhost"). In addition, create the host name of this equipment (i.e. "mfp00c67861"). Then, you must configure the SMTP server to route Emails, whose domain name is "mfp00c67861.ifax.com," to this equipment so that this equipment can receive Emails using the SMTP protocol.

Setting up LDAP Authentication Service

When you want to enable the LDAP Authentication with Kerberos, you have to configure the network as described below:

- · Configure DNS Forward and Reverse Lookup Zones.
- If you want to use LDAP Authentication with Kerberos to Windows server, it is necessary to configure Kerberos.
- · Synchronize the time of the equipment and the LDAP server.
- Configure LDAP, DNS, and DDNS Sessions on the equipment.
- · Configure Directory Service on the equipment.

This section describes how to set up the LDAP service for a Windows based domain controller environment.

When LDAP Authentication fails

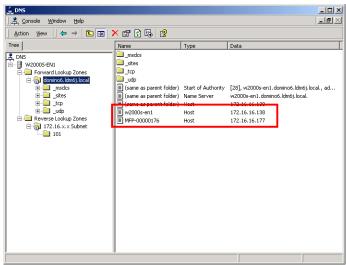
When the LDAP Authentication fails, please check the followings:

- Make sure that the date and time of the equipment and the LDAP server is synchronized.
- · Make sure that the Forward and Reverse Lookup Zones are correctly set.
- · Make sure that the Kerberos Principal Name is correctly set.
- Make sure that the LDAP Service in TopAccess is correctly set.
- Make sure that the option of DHCP server "015 Domain Name Server" is set correctly.

Configuring DNS Forward and Reverse Lookup Zones

For the LDAP Authentication environments:

- 1. Make sure Active Directory is installed in Windows 2000 Server or Windows Server 2003.
- 2. Enter the host name, domain name, and IP address of the Active Directory Server and this equipment in the Forward Lookup Zones of the DNS Client.



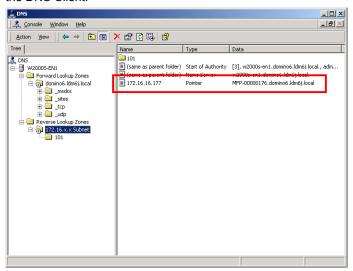
- The server settings in the example above have the following setup:

IP Address: 172.16.16.138
Host Name: w2000s-en1
Domain Name: domino6.ldmj6.local

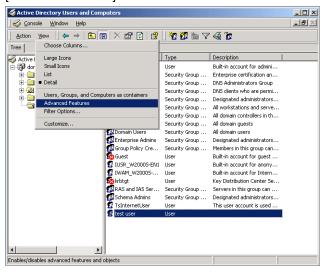
The MFP settings in the example above have the following setup:

IP Address: 172.16.16.177
Host Name: MFP-00000176
Domain Name: domino6.ldmj6.local

3. Enter the IP address and domain name of the equipment in the Reverse Lookup Zones of the DNS Client.

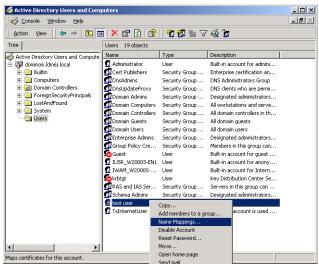


- 4. It is necessary to enter "user name" +@+"domain name" into the User field in the Active Directory as registration of the Kerberos Principal Name.
 - Run the Active Directory Users and Computers and click the [View] icon and select [Advanced Features].

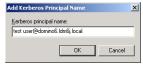


 Right-click a user that you want to enable the Kerberos authentication, and select [Name Mappings...].

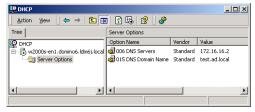
The [Name Mappings...] command does not displayed if you do not select [Advanced Features] in the [View] icon.



- Enter "user name" + @ + "domain name" in the field. For "user name", enter the full name of the selected user.

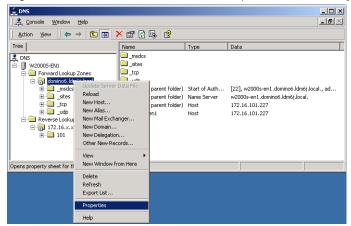


When the IP address is assigned using DHCP, enable "006 DNS Servers" and "015 DNS Domain Name" in the DHCP Server's Scope Options or Server Options.



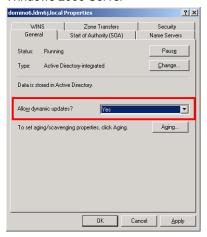
6. Make sure that the Dynamic update is enabled from DDNS for the Forward Lookup Zones.





Make sure the "Allow dynamic updates?" option is set to "Yes" (for Windows 2000 Server) or "Nonsecure and Secure" (for Windows Server 2003).

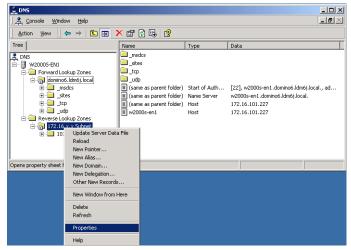
Windows 2000 Server



Note

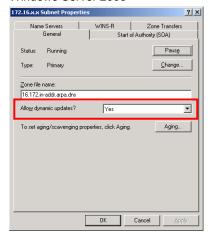
If setting of Windows Server 2003 is "Secure" mode or "None" for this DDNS function, you need to set the correct primary login name and primary password for update the DNS server by DDNS, or add the equipment's host name manually in the Forward Lookup Zone.

- 7. Make sure that the Dynamic update from DDNS for the Reverse Lookup Zones.
 - Right-click the domain in the Forward Lookup Zones and select [Properties].



- Make sure the "Allow dynamic updates?" option is set to "Yes" (for Windows 2000 Server) or "Nonsecure and Secure" (for Windows Server 2003).

Windows Server 2003



Note

If setting of Windows Server 2003 is "Secure" mode or "None" for this DDNS function, you need to set the correct primary login name and primary password for update the DNS server by DDNS, or add the equipment's host name manually in the Reversed Lookup Zone.

Configuring the Equipment Using TopAccess

From TopAccess, you must configure the Date & Time, LDAP Session, DNS Session, DDNS Session and others.

1. Set the same time and date as the LDAP Server in the [Administration] -> [Setup] -> [General] page.

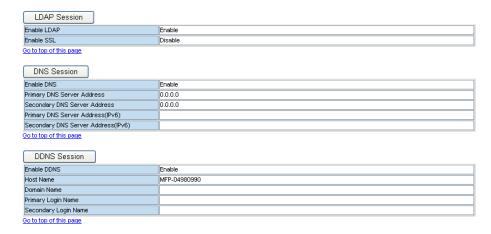


2. Set the LDAP Session, DNS Session, and DDNS Session in the [Administration] -> [Setup] -> [Network] page.

[LDAP Session] Set to Enable.

[DNS Session] Set to Enable and specify the DNS server address.

[DDNS Session] Set to Enable and specify the host name and domain name.



- 3. Configure the following settings as required.
 - The directory service needs to be registered in the [Administration] -> [Maintenance] -> [Directory Services].
 - When you configure the User Authentication for Scan to Email to obtain the From Address from the directory service, the correct LDAP attribute for "user name" must be specified. For example, the attribute of "user name" is typically "cn" for Windows 2000 Server and Windows Server 2003, and it is typically "uid" for the Novell Directory Service.

Troubleshooting

This section describes the troubleshooting for this equipment.

Troubleshooting Overview	40
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Cannot Ping the Device	
Cannot Print From Client	
Network or Touch Panel Display Disabled After LDAP Search	
LDAP Authentication Takes a Long Time	
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Common Errors	49
Device Status Indicators	
TopAccess Error Messages	52
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Cannot See This Equipment	56
Cannot Print To This Equipment	

This chapter is the place to start if you are experiencing difficulties installing or using this equipment. Because the system integrates hardware, network, and software components, errors occur. And variations between network configurations and user setup further complicate the troubleshooting process.

The purpose of this chapter is to help you locate the origin of an error if it is not immediately apparent, and then direct you to subsequent chapters for instructions on resolving the issue. Checklists provided in this chapter help you identify the subsystem most likely to be responsible for the error condition.

Note

Troubleshooting client software and output errors are not described in this manual, the following manuals can assist you in those efforts:

- Output Errors: Printing Guide
- Printer Driver Installation Error Messages: Printing Guide
- Printer Driver General Errors: **Printing Guide**
- TopAccess Error Condition: TopAccess Guide
- TWAIN Driver and File Downloader Error: e-Filing Guide
- N/W-Fax Driver Error: Network Fax Guide
- Address Book Viewer Error: Network Fax Guide

Network Connectivity Problems

Problem Description

The many variables within a network environment make installing an integrated device challenging. The easiest environment in which to install the controller is over TCP/IP using a DHCP server to dynamically assign and resolve IP addresses between devices.

Using default configuration settings also assures an easier implementation. However, you may be required to customize the settings to accommodate your particular environment.

Some common network configuration options are shown below, along with the steps required to

configure this equipment. If you perform all the steps in the applicable checklist and still cannot print satisfactorily to this equipment, contact your service technician or service representative.

Note

You can change network protocol settings using the Touch Panel Display or TopAccess (Administration page).

SMB/Point&Print Printing in a Windows Operating System Environment:

			· ·	
No	Check	Yes	No	For Instruction, Go To
1	Are the IP Address properties correctly set?	Next Step	⇧	Setup the IP address correctly.
2	Is the Microsoft Computer Name (Device Name) unique?	Next Step	仓	Setup the device name correctly.
3	Is the Workgroup name valid and correctly entered?	Next Step	廿	Setup the workgroup correctly.
4	Is the WINS server address correctly set?	Next Step	₽	Setup the WINS server address correctly, or enter "0.0.0.0" for the WINS server address to disable the WINS service.
5	If the client computers are located in different segments, is the WINS service correctly provided?	Next Step	₽	Setup the WINS server and enable it on this equipment to allow users access from different segment.
6	Can you see this equipment in Windows Network Neighborhood?	Next Step	₽	Refer to following section to troubleshoot the condition. P.56 "Cannot See This Equipment"
7	Were the proper printer drivers installed?	Next Step	₽	See the Printing Guide to install proper printer drivers.
8	Is the driver's port name valid?	Next Step	☆	See the Printing Guide to configure proper port.
9	Can you print to this equipment?	End	⇧	Refer to following section to troubleshoot the condition. P.58 "Cannot Print To This Equipment"

Raw TCP or LPR Printing in a Windows Operating System Environment:

No	Check	Yes	No	For Instruction, Go To
1	Are the IP Address properties correctly set?	Next Step	₽	Setup the IP address correctly.
2	Is the Raw TCP Printing correctly set?	Next Step	⇒	Setup the Raw TCP print service correctly.
3	Is the LPR/LPD Printing correctly set?	Next Step	⇒	Setup the LPD print service correctly.
4	Were the proper printer drivers installed?	Next Step	⇒	See the Printing Guide to install proper printer drivers.
5	Is the Raw TCP or LPR port configured with correct IP address?	Next Step	₽	See the Printing Guide to configure the proper port.
6	Can you print to this equipment?	End	₽	Refer to following section to troubleshoot the condition. P.58 "Cannot Print To This Equipment"

IPP Printing in a Windows Operating System Environment:

No	Check	Yes	No	For Instruction, Go To
1	Are the IP Address properties correctly set?	Next Step	₽	Setup the IP address correctly.
2	Is the HTTP Server on this equipment enabled?	Next Step	⇒	Enable the HTTP server in the HTTP Network Service.
3	Is the IPP Printing correctly set?	Next Step	₽	Setup the IPP print service correctly.
4	Were the proper printer drivers installed?	Next Step	⇒	See the Printing Guide to install proper printer drivers.
5	Is the IPP port configured with correct URL?	Next Step	⇒	See the Printing Guide to configure proper port.
6	Can you print to this equipment?	End	₽	Refer to following section to troubleshoot the condition. P.58 "Cannot Print To This Equipment"

Novell Printing in a NetWare Environment:

No	Check	Yes	No	For Instruction, Go To
1	Are the IPX/SPX protocol enabled? Is the correct frame type selected?	Next Step	₽	Setup the IPX/SPX correctly.
2	If applicable, did you suc- cessfully set up queue- based printing?	Next Step	₽	Setup the NetWare server properly.
3	Did you configure this equipment for NetWare connection?	Next Step	₽	Setup the NetWare network settings correctly.
4	Did you configure this equipment for Novell print service?	Next Step	₽	Setup the Novell print service correctly.
5	Were the proper printer drivers installed?	Next Step	⇧	See the Printing Guide to install proper printer drivers.
6	Is the IPP port configured with correct URL?	Next Step	₽	See the Printing Guide to configure the proper port.
7	Can you see this equipment in Windows Network Neighborhood?	Next Step	₽	Check that the SMB protocol is enabled in client computers.
8	Can you print to this equipment?	End	⇒	Refer to following section to troubleshoot the condition. P.58 "Cannot Print To This Equipment"

Macintosh Environment:

No	Check	Yes	No	For Instruction, Go To
1	Is AppleTalk enabled on this equipment?	Next Step	⇧	Enable the AppleTalk.
2	Are the IP Address properties correctly set?	Next Step	⇧	Setup the IP address correctly.
3	Is this equipment available in the Chooser when you click the LaserWriter 8 printer icon?	Next Step	₽	Make sure the AppleTalk zone is supported by the Macintosh client.
4	Can you access any other network device from the Macintosh computer?	Next Step	↔	Refer to your Macintosh networking documentation or contact Macintosh technical support.
5	Can another Macintosh computer on the network print to this equipment? If so, compare the settings to determine which need to be changed to support printing from this machine.	End	⇔	Refer to your Macintosh networking documentation or contact Macintosh technical support.

UNIX Environment:

No	Check	Yes	No	For Instruction, Go To
1	Are the IP Address properties correctly set?	Next Step	Ŷ	Setup the IP address correctly.
2	Is the LPR/LPD Printing correctly set?	Next Step	⇧	Setup the LPD print service correctly.
3	Did you successfully install the UNIX filters?	Next Step	⇧	See the Printing Guide to install UNIX filters.
4	Did you successfully create and set up the print queue?	Next Step	⇧	See the Printing Guide to configure the print queue.
5	Can you print to this equipment using LPD as root?	Next Step	≎	Setup UNIX access for this equipment to enable other users to print from the Bourne shell. Refer to your UNIX documentation for more information.
6	Can you ping this equipment from your computer?	Next Step	₽	Try remote ping from another server. If you can reach this equipment from that server, check for conflicts between this equipment and your current network segment.
7	Is the LP Daemon functioning?	Next Step	₽	Reload Daemon or restart the system.
8	Can you print to this equipment?	End	₽	Contact your service representative.

Cannot Discover Device

Problem Description

This equipment is discovered automatically using SNMP.

When TWAIN driver, File Downloader, and Address Book Viewer cannot automatically discover this equipment over the network, the most likely cause is limitations of the protocols on the supporting computers. In some cases, you need to add or update network components.

The following checklist helps you identify the source of the error and directs you where you can find more information about resolving it. If the problem persists after you have followed all of the steps, contact a authorized dealer for further assistance.

No	Check	Yes	No	For Instruction, Go To
1	Is the SNMP enabled on this equipment? Is "public" is specify for the Read Community? Is "private" is specify for the Read Write Community?	Next Step	₽	Enable the SNMP (MIB) and confirm the Read Community and Read Write Community setting.

No	Check	Yes	No	For Instruction, Go To
2	Confirm that the protocol suite installed on the client computer has been updated with the latest software for the given operating system. If your network only supports the IPX/SPX protocol, make sure that the most current version of Novell Client software is installed.	Next Step	₽	See the vendor's Web site for information about product updates and technical supports.
3	Print a NIC Configuration page from this equipment. Does this equipment support the same protocol as the network?	Next Step	≎	Configure the proper protocol.
4	Change the protocol settings from TopAccess, if necessary, and reboot the equipment for the changes to take effect. Repeat step 2. Was the device discovered?	End	Next Step	
5	Check the NIC Configuration page. Are the IP Address and subnet mask settings correct?	Next Step	₽	Setup the TCP/IP settings correctly.
6	Check the router to make sure it is not filtering out this equipment packets. Is the router processing equip- ment packets correctly?	Next Step	⇔	Adjust the router settings.
7	Can another computer within the same network segment discover this equipment?	Next Step	₽	Refer to following section to troubleshoot the condition. P.40 "Network Connectivity Problems"
8	Check the NIC Configuration page. Is the Unit Serial Number part of the device name?	Next Step	₽	Contact your service representative.
9	Check link activities on the port being used by this equipment and the integrity of the network cable, hub, or switch that connects this equipment to the network. Replace any network components that you can tell or suspect are faulty.	End	₽	

Cannot Ping the Device

Problem Description

If this equipment does not respond when you ping it, there is a problem either with the network configuration or with device operation.

The following checklist helps you identify the source of the error and directs you where you can find more information about resolving it. If the problem persists after you have followed all of the steps, contact your service technician or service representative.

No	Check	Yes	No	For Instruction, Go To
1	Confirm that the TCP/IP protocol suite is installed on the client computer.	Next Step	₽	The networking section of your operating system documentation.
2	Look at the NIC configura- tion page and confirm the TCP/IP settings are correct. Is the IP Address entered and valid? Are the Gateway and Subnet settings cor- rect?	Next Step	≎	Enter the correct TCP/IP settings.
3	Reboot this equipment. Check the NIC Configura- tion page that prints out. Are the TCP/IP settings correct?	Next Step	₽	The settings are not binding, contact your service representative.
4	Try to ping this equipment again. Did this equipment respond to the ping?	End	Next Step	
5	Can you ping this equipment from any other computer within the same network? If not, this equipment might have an IP Address that is out of range or invalid.	Next Step	₽	Contact your local network specialist for a valid IP address for this equipment.
6	Can you ping to another computer within the same network?	Next Step	₽	Check the computer's protocol settings to make sure the gateway and subnet settings are correct.
7	If you have customized the device name, you can check if the NIC is functional by restoring the default settings. When this equipment automatically reboots and a NIC Configuration page prints, does the device name include the NIC's Unit Serial Number?	Next Step ↓	₽	The NIC is faulty or improperly installed. Contact your service representative.

No	Check	Yes	No	For Instruction, Go To
8	Check link activities on the port being used by the equipment and also the integrity of the network cable, Hub, or Switch that is connecting the equipment to the network. Replace any network components that you suspect are faulty. Can you ping this equipment now?	End	⇔	Contact your service representative.

Cannot Print From Client

Problem Description

After following the instructions in this guide to install and configure your hardware, network, and client software, you are still unable to print from a client computer to this equipment. This problem can arise as the result of a hardware malfunction, a network communication or configuration problem, or incorrect client setup or driver properties.

The following checklist will help you identify the source of the errors and direct you to information resolving the issue. If a problem persists after you have followed all of the steps, contact your service technician or service representative.

No	Check	Yes	No	For Instruction, Go To	
1	Is the copier functioning normally? Do copy jobs output properly?	Next Step	☆	Check the device status displayed in the Device tab page of TopAccess.	
2	Check the Device page of TopAccess. Are the options specified for the job supported by the hardware configuration? If not, delete the job, install the required components, and try again.	Next Step ↓	₽	Contact your service representative.	
3	Can you print jobs from other client computers?	Next Step ↓	₽	Refer to following section to troubleshoot the condition. P.58 "Cannot Print To This Equipment"	
4	At this point, the problem you have identified is most likely related to a client-side error. Refer to the <i>Printing Guide</i> to troubleshoot the error condition.				

Network or Touch Panel Display Disabled After LDAP Search

Problem Description

After performing the LDAP search, the network or Touch Panel Display will be disabled.

No	Check	Yes	No	For Instruction, Go To
1	Is the LDAP server correctly running?	Next Step	⇧	Check the LDAP server is correctly running.
2	Is the LDAP server setting correctly set?	End	₽	Enter the correct LDAP setting. Especially re-enter the correct password carefully because it dis- plays with asterisks.

LDAP Authentication Takes a Long Time

Problem Description

It takes a long time to perform the LDAP authentication on the touch panel.

No	Check	Yes	No	For Instruction, Go To
1	Is the LDAP server correctly running?	Next Step	₽	Check the LDAP server is correctly running.
2	Is the LDAP server setting correctly set?	End	₽	Enter the correct LDAP setting. Especially re-enter the correct password carefully because it dis- plays with asterisks.

Troubleshooting Hardware Errors

The topics in this chapter cover errors or faults that affect normal copier or controller operation. This includes, but is not limited to, the following conditions:

- Faulty or improperly installed system board, cables, and connectors.
- Faulty or malfunctioning copier components, such as standard or optional finishing units, the Auto Duplexer Unit (ADU), or the Large Capacity Feeder (LCF).
- · Corrupt or outdated system software or copier firmware.

Note

Resolving copier operation problems falls outside the scope of this guide, but this chapter will assist you in interpreting error messages and then identifying the source of a problem. If you determine that the problem is related to copier operation, refer to the *Operator's Manual for Basic Functions*.

This chapter also covers how to use the administration utility, TopAccess, to diagnose and resolve hardware-related errors. For more information about resolving error messages displayed on the Touch Panel Display, refer to the *Operator's Manual for Basic Functions* or the Touch Panel Display online Help.

Common Errors

Startup Page Does Not Print

Problem Description

If a startup page does not print when you power on this equipment, even though the print startup page is enabled, there is a hardware error. Contact your service technician or service representative.

Print Jobs Not Output

Problem Description

Most often, this problem is the result of a software error, such as incorrectly set driver property. However, if you cannot output print jobs from any computer, the cause is probably a hardware error.

Note

Refer to the *Printing Guide* for more information on resolving output errors caused by incorrect software settings.

The following checklist will help you identify the source of the error and direct you to information resolving the issue. If the problem persists after you have followed all of the steps, contact your service technician or service representative.

No	Check	Yes	No	For Instruction, Go To
1	Is printing prohibited from all connected client computers?	Next Step ↓	₽	Refer to the following section to troubleshoot the condition. P.40 "Troubleshooting Overview"

No	Check	Yes	No	For Instruction, Go To
2	Is the job visible from TopAccess or other print monitoring utility, such as PCONSOLE or Print Man- ager?	Next Step	₽	Refer to the following section to troubleshoot the condition. P.56 "Troubleshooting Network Errors"
3	Are you able to identify the problem from the error message and resolve it?	End	⇒	Refer to the <i>Operator's Manual for Basic Functions</i> to trouble-shoot the condition.

Device Status Indicators

Copier Maintenance Calls

You can use TopAccess to check if this equipment requires maintenance. The Device Summary window includes a device icon that displays visual Device Status Indicators in the event of a device malfunction.

Printer Error 1



The above printer error icon indicates that non-recommended toner is used. For information on resolving the error condition, refer to "REPLACE TONER CARTRIDGE SYMBOL" in *Operator's Manual for Basic Functions*.

Printer Frror 2



The above printer error icon indicates:

- You need to remove paper from standard output tray.
- You need to remove paper from Job Separator.*1
- You need to remove paper from Finisher tray.
- You need to remove staples jammed in the Finisher. For information on resolving the error condition, refer to "Examine stapler" in *Operator's Manual for Basic Functions*.
- You need to clear hole punches from Finisher. For information on resolving the error condition, refer to "READY (HOLE PUNCH DUST BIN IS FULL)" in *Operator's Manual for Basic Functions*.
- Non-recommended toner is being used. For information on resolving the error condition, refer to "REPLACE TONER CARTRIDGE SYMBOL" in *Operator's Manual for Basic Functions*.
- You need to remove excess staples from the Saddle Stitch Finisher.
- You performed saddle stitch printing using mixed paper sizes.
- Cannot load paper from the LCF.
- Cannot output to inner trav.
- * Not applicable to the e-STUDIO520/600/720/850 and e-STUDIO523/603/723/853.
- · Cover Open



The Cover Open error icon indicates that you need to close the cover.

· Drawer Open



The Drawer Open error icon shows which drawer is open: upper, middle, or lower. You must close the specified drawer to resume printing and copying functions.

Toner Empty



The Toner Empty icon indicates that the toner is empty.

The color of the Toner Empty icon varies depending on which toner cartridge is empty*2:

- Black Black Toner Empty
- Cyan Cyan Toner Empty
- Magenta Magenta Toner Empty
- Yellow Yellow Toner Empty
- * Only applicable to the Multifunctional Digital Color Systems.

For information on resolving the error condition, refer to "REPLACE TONER CARTRIDGE SYMBOL" in *Operator's Manual for Basic Functions*.

Toner Full



The Toner Full error icon indicates you need to replace the toner container. For information on resolving the error condition, refer to "REPLACE TONER BAG SYMBOL" in *Operator's Manual for Basic Functions*.

· Paper Empty



The Out of Paper error icon shows which drawer is empty: upper, middle, or lower. A paper out condition does not necessarily terminate a print or copy job. If Auto-select options are configured, printing and copying may continue by drawing paper from a different drawer. Refer to the TopAccess online Help for instructions on setting up Auto-Select mode. For information on resolving the error condition, refer to "Drawer Display on the Touch Panel" in *Operator's Manual for Basic Functions*.

Paper Jam



The Device Status icon varies depending on where a paper jam occurred in the copier. This graphic illustrates the possible locations. For information on resolving the error condition, refer to "CLEAR PAPER SYMBOL" in *Operator's Manual for Basic Functions*.

· Staple Empty



The Add Staples error icon indicates you need to add staples to the finisher. For information on resolving the error condition, refer to "Check staple cartridge in the Saddle Stitch Unit" in *Operator's Manual for Basic Functions*.

Serviceman Calls



The Service Call error icon indicates that a call for service is needed. Contact your service representative.

TopAccess Error Messages

Message Log

Note

The error messages displayed in the Touch Panel Display are described in the Operator's Manual for Basic Functions.

TopAccess Message	Corrective Action
Front Cover Open - Please Close Cover.	Close the Front Cover.
Paper Feeding Cover Open - Please Close Cover.	Close the Paper Feeding Cover.
Transfer/Transport unit Open - Please Close Cover.	Close the Transfer/Transport unit.
Large Capacity Feeder Cover Open - Please Close Cover.	Close the Large Capacity Feeder Cover.
Drawer Open - Please Close Cover.	Close the drawer.
Automatic Duplexing Unit Cover Open - Please Close Cover.	Close the Automatic Duplexing Unit Cover.
Relay Unit Cover Open - Please Close Cover.	Close the Relay Unit Cover.
Finisher Joint Cover Open - Please Close Cover.	Close the Finisher Joint Cover.
Staple Door Open - Please Close Cover.	Close the Staple Door.
Lower Tray Delivery Cover Open - Please Close Cover.	Close the Lower Tray Delivery Cover.
Lower Tray Front Cover Open - Please Close Cover.	Close the Lower Tray Front Cover.
Punch Unit Front Cover Open - Please Close Cover.	Close the Punch Unit Front Cover.
Hole Punch Unit Open - Please Close Cover.	Close the Hole Punch Unit.
Paper Jam in Auto Duplexer Unit - Please Clear Paper Path	Refer to HELP on the Touch Panel Display to remove jammed paper.
Paper Jam in Printer - Please Clear Paper Path	Refer to HELP on the Touch Panel Display to remove jammed paper.
Paper Ejection Jam - Please Clear Paper Path	Refer to HELP on the Touch Panel Display to remove jammed paper.

TopAccess Message	Corrective Action
Paper Insertion Jam - Please Clear Paper Path	Refer to HELP on the Touch Panel Display to remove jammed paper.
Staple Jam in Finisher - Please Clear Staple	Remove jammed staples from the Finisher. Refer to the <i>Operator's Manual for Basic Functions</i> for instruction.
Staple Jam in Saddle Stitch Finisher - Please Clear Staple	Remove jammed staples from the Saddle Stitch Finisher. Refer to the <i>Operator's Manual for Basic Functions</i> for instruction.
Hole Punch Jam in Finisher - Please Clear Hole Punch	Clear hole punches from the Finisher. Refer to the Operator's Manual for Basic Functions for instruction.
Used Toner Container Full - Please Replace.	Replace the toner container. Refer to the <i>Operator's Manual for Basic Functions</i> for instruction.
Toner Not Recognized - Please Check Toner.	Check and adjust the toner bottle.
Black Toner Empty - Please Refill.	Replace the black toner. Refer to the <i>Operator's Manual for Basic Functions</i> for instruction.
Cyan Toner Empty - Please Refill.*	Replace the cyan toner. Refer to the <i>User Functions Guide</i> for instruction.
Magenta Toner Empty - Please Refill.*	Replace the magenta toner. Refer to the <i>User Functions Guide</i> for instruction.
Yellow Toner Empty - Please Refill.*	Replace the yellow toner. Refer to the <i>User Functions Guide</i> for instruction.
Automatic Document Feeder Error - Please Contact Service Technician.	Contact your service representative.
Alignment Error in Automatic Document Feeder - Please Contact Service Technician.	Contact your service representative.
Motor Error in Automatic Document Feeder - Please Contact Service Technician.	Contact your service representative.
I/F Error in Automatic Document Feeder - Please Contact Service Technician.	Contact your service representative.
Fatal Error - Please Contact Service Technician.	Contact your service representative.
Main Motor Error - Please Contact Service Technician.	Contact your service representative.
Printer Output Error - Please Contact Service Technician.	Contact your service representative.
Printer Input Error - Please Contact Service Technician.	Contact your service representative.
Expired scan documents deleted from share folder.	Expired documents are deleted automatically from the "SCAN" folder in the "SHARE_FILE" folder.
Expired Sent Fax documents deleted from share folder.	Expired documents are deleted automatically from the "TXFAX" folder in the "SHARE_FILE" folder.
Expired Received Fax documents deleted from share folder.	Expired documents are deleted automatically from the "RXFAX" folder in the "SHARE_FILE" folder.

TopAccess Message	Corrective Action
Scanned documents in shared folder deleted upon user's request.	Documents in the "SCAN" folder have been deleted by a users
Sent Fax documents in shared folder deleted upon user's request.	Documents in the "TXFAX" folder have been deleted by a user.
Received Fax documents in shared folder deleted upon user's request.	Documents in the "RXFAX" folder have been deleted by a user.
Failed to delete file.	The file cannot be deleted from the shared folder.
Failed to acquire resource.	The file cannot be acquired from the shared folder.
Document(s) expire(s) in a few days.	There are documents to be deleted in a few days in e-Filing.
Hard Disk space for Electronic Filing nearly full.	The hard disk has a few disk space available. Delete unnecessary documents to maintain the hard disk space.
Power failure occurred during e-Filing restoring.	The document could not be stored in e-Filing because of the power failure.
SMTP Destination Error has been detected in the received mail. This mail was deleted.	This equipment cannot received the Email that does not contain the sender's Email address. Ask the sender to send the Email again with entering the sender's Email address.
OffRamp Destination limitation Error has been detected in the received mail.	This equipment cannot perform the Offramp transmission to more than 40 destinations. Ask the sender to send the Offramp document separately for every 40 destinations.
Fax Unit Error has been occurred in the received mail.	This equipment cannot perform the Offramp transmission without the optional Fax unit.
POP3 Connection Error has been occurred in the received mail.	Make sure the POP3 server is properly running. Make sure correct IP address of the POP3 server is assigned.
POP3 Connection Timeout Error has been occurred in the received mail.	Make sure that the network cable is correctly connected. Make sure the POP3 server is properly running.
POP3 Login Error has been occurred in the received mail.	Make sure the correct login name and password is specified.
POP3 Login Error occurred in the received mail	Make sure that the POP3 login type (Auto, POP3, APOP) is set correctly.
File I/O Error has been occurred in this mail. The mail could not be received until File I/O is recovered.	Turn OFF then ON the power and confirm if the equipment can receive the Internet Fax. If the Internet Fax document cannot be received, confirm that any files other than TIFF and text files are attached in the Internet Fax.
Hard Disk space for File Share nearly full.	The hard disk has a few disk space available. Delete unnecessary documents to maintain the hard disk space.
Domain - General Failure during Authentication	Please verify the Network Settings again and retry connecting to the domain controller.

TopAccess Message	Corrective Action
Domain - Invalid Username or Password	Please recheck the username and password and Please confirm if the Caps Lock key is switched on by accident.
Domain - Server not present in Network	The server is not on network or it could not be located. Also please check the DNS and DDNS settings on TopAccess.
Domain - User account is disabled on Server	Please confirm the User attributes on the server. This can be verified in -> Active Directory Users and Computers.
Domain - User account has expired and cannot be used for logon	Please change the account expiration date and retry again. The expiration date can be modified from Active Directory Users and Computers.
Domain - User account is locked and cannot be used for logon	The lockout duration could be specified in account lockout security policy. If so please retry after the lockout duration.
Domain - Invalid logon hours for the User	The Administrator has set restrictions on the logon hours. The logon hours can be modified from Active Directory Users and Computers.
Active Directory Domain - Clock Skew error due to difference in Time between Server and MFP	The clocks need to be synchronized. Please confirm if SNTP is configured correctly on the equipment.
Active Directory Domain - Kerberos Ticket has expired and cannot be used for Authentication	Please confirm the validity period of the ticket set by the Kerberos server. Please retry again after the fresh ticket is issued.
Active Directory Domain - Verification of the Ticket has failed	Please verify the username and password and retry again. If the problem persists please contact the Administrator.
Active Directory Domain-The Domain specified could not be found	Please enter the correct domain name in network settings. If the problem persists please contact the Administrator for the correct realm name for your server.
Information Failed User Authentication	Check DomainName/UserName/Password
SNTP Server - Connect Error has occurred	The equipment could not connect to the SNTP Server. Please confirm the SNTP settings.

Only applicable to the e-STUDIO352/452, e-STUDIO353/453.

Troubleshooting Network Errors

If you cannot print to this equipment from a network-connected computer, and you have ruled out both faulty and malfunctioning hardware and incorrectly installed or configured software as the cause, the problem is most likely to be network related.

This chapter describes the most common network configuration problems and provides steps to resolving them. If the problem persists after you have followed all of the steps, contact your service technician or service representative.

Cannot See This Equipment

Problem Description

After configuring this equipment, you cannot see it on the network. This could be the result of configuration conflicts within this equipment, but is more likely to be caused by network configuration errors.

The following checklist helps you identify the source of the error and directs you where you can find more information about resolving it. If the problem persists after you have followed all of the steps, contact your service technician or service representative.

No	Check	Yes	No	For Instruction, Go To
1	Did a startup page print out? If not, wait until the communication comes online. Examine the protocol settings that print out on the startup page. Are they correct?	Next Step	₽	Setup the proper protocols.
2	Print out a configuration page. Make sure there are not any discrepancies or inconsistencies between the current network settings and your network environment. Change the network settings, if necessary. Use the Find Computer utility from your Windows computer to locate this equipment by its device name. Can you find this equipment?	Next Step ↓	₽	Setup the proper protocol if required. Once you find this equipment, configure the port that it is mapped correctly to the device.
3	Can you locate other computers that are in the same network as this equipment?	Next Step	₽	Check the network settings on the client computer to make sure they are compatible with the network settings on this equipment.
4	Check link LED activity on the hub and/or NIC of this equipment and the client machine. Do the hardware components appear to be functioning properly?	Next Step ↓	≎	Contact your TOSHIBA service representative.

No	Check	Yes	No	For Instruction, Go To
5	Make sure that the device name for this equipment is unique and verify that the WINS and/or DNS server database are not causing potential naming conflicts with the network settings on this equipment. If necessary, change the network settings on this equipment. After the communication comes back online, can you see this equipment in the network?	End	Next Step ↓	Setup the NetBIOS name of the device correctly.
6	If the network environment is using complex subnet or supernet structures, is the IP address used by this equipment within the network structures range of valid addresses?	End	⇒	Please contact your local network support specialist for further assistance.

Cannot Print To This Equipment

Problem Description

You are unable to print to this equipment. Before troubleshooting the network problems, please see the following section to narrow the problem down to a network-related issue.

P.47 "Cannot Print From Client"

For example, network printing services have not been set up correctly, or this equipment has not been properly configured to operate in your network environment.

The following checklist will help you identify the source of the error and direct you to information resolving the issue. If the problem persists after you have followed all of the steps, contact your service technician or service representative.

No	Check	Yes	No	For Instruction, Go To
1	Have you set the protocol settings so they are compatible with your network and client protocol settings?	Next Step	₽	Setup the proper protocol.
2	Have you set up the appropriate type(s) of print services should be supported?	Next Step	₽	Check the settings required for your printing environment.
3	If you are using Novell print services, did you set up the Novell side of network print- ing, such as creating print servers and attaching the print queue?	Next Step	₽	Setup the NetWare server.
4	If you set up Novell print services, can you see the print job using PCONSOLE or NWAdmin?	Next Step	₽	Refer to your Novell PCONSOLE or NWAdmin user documentation for help with using these utilities.
5	Have you checked the gate- way and subnet settings to make sure this equipment is part of the same network Gateway as the client from which you are trying to print?	Next Step	₽	Setup the TCP/IP correctly.
6	Are other services and communications performed over the network behaving in the normal and expected manner?	End	⇧	Refer to your network documentation or use a network diagnostic utility to research a network problem.

Appendix

This section shows the default settings of this equipment.

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Default Setting List

This chapter describes the default settings of this equipment.

Default Settings for General Setting

Device Information

Department Code	.OFF
Department Code Enforcement	.OFF
e-Filing	. Enable
Queue name	. print
Location	. Undefined
Contact Information	. Undefined
Service Phone Number	. Undefined
Administrative Message	. Undefined
Administrator's Password	. Undefined

Energy Save

Auto Clear	45 seconds
Auto Power Save	15 minutes
Auto Power Off	60 minutes

Time Stamp

Year/Date/Time	Defined appropriately
Time Zone	Defined appropriately
Date Format	MM/DD/YY

Daylight Saving

Switch Automatically	. Disable
Offset	. +1 hour
Dates	Undefined

Web General Setting

Web Language	English
Session Timer	10 minutes

Default Settings for Network Setting

TCP/IP

Address Mode	. Disable . Undefined . Undefined	
IP Filtering		End Address
Filter 1		0.0.0.0
Filter 2	.0.0.0.0	0.0.0.0
Filter 3	.0.0.0.0	0.0.0.0
Filter 4	.0.0.0.0	0.0.0.0
Filter 5	.0.0.0.0	0.0.0.0
Filter 6	.0.0.0.0	0.0.0.0
Filter 7	.0.0.0.0	0.0.0.0
Filter 8	.0.0.0.0	0.0.0.0
Filter 9	.0.0.0.0	0.0.0.0
Filter 10	.0.0.0.0	0.0.0.0

IPv6

Enable IPv6	Disable
LLMNR	Disable
Address Mode	Dynamic
Link Local Address	Undefined
IP Address	Undefined
Prefix Length	0
Gateway	Undefined
Use DHCPv6 Server for options	
Use Stateless Address	Enable
Keep Configuration	Disable
Use Stateless Address (Use DHCP6 Server for IP A	ddress (M flag))Disable
Use Stateless Address (Use DHCP6 Server for option	ons (O flag))Disable
IP Address 1	Undefined
Prefix Length 1	0
IP Address 2	Undefined
Prefix Length 2	0
IP Address 3	
Prefix Length 3	0
IP Address 4	
Prefix Length 4	0
IP Address 5	Undefined
Prefix Length 5	0
IP Address 6	
Prefix Length 6	0
IP Address 7	Undefined
Prefix Length 7	0

Use Stateful Address (Use DHCP6 Server for IP Address)Undefined Use Stateful Address (Use DHCP6 Server for options)Disable

IPX/SPX

Enable IPX/SPX	Enable
Frame Type	Auto Sense
Actual Frame	Undefined

AppleTalk

Enable AppleTalk	. Enable
Device Name	. MFP_[NIC Serial Number]
Desired Zone	*

Bonjour

Enable Bonjour	. Enable
Link-Local Host Name	
Service Name	
	TOSHIBA e-STUDIO351c-[serial]
	TOSHIBA e-STUDIO451c-[serial]
	TOSHIBA e-STUDIO520-[serial]
	TOSHIBA e-STUDIO523-[serial]
	TOSHIBA e-STUDIO600-[serial]
	TOSHIBA e-STUDIO603-[serial]
	TOSHIBA e-STUDIO720-[serial]
	TOSHIBA e-STUDIO723-[serial]
	TOSHIBA e-STUDIO850-[serial]
	TOSHIBA e-STUDIO853-[serial]
	TOSHIBA e-STUDIO452-[serial]
	TOSHIBA e-STUDIO453-[serial]
	TOSHIBA e-STUDIO352-[serial]
	TOSHIBA e-STUDIO353-[serial]
	TOSHIBA e-STUDIO282-[serial]
	TOSHIBA e-STUDIO283-[serial]
	TOSHIBA e-STUDIO232-[serial]
	TOSHIBA e-STUDIO233-[serial]
	TOSHIBA e-STUDIO202L-[serial]

TOSHIBA e-STUDIO203L-[serial]

LDAP Session

Enable LDAP	Enable
Enable SSL	Disable

DNS Session

Enable DNS	Enable
Primary DNS Server Address	0.0.0.0
Secondary DNS Server Address	0.0.0.0
Primary DNS Server Address (IPv6)	Undefined
Secondary DNS Server Address (IPv6)	Undefined

DDNS Session

Enable DDNS	Enable
Host Name	MFP-[NIC Serial Number]
Domain Name	Undefined

SMB Session

SMB Server Protocol	. Enable
NetBIOS Name	. MFP-[NIC Serial Number]
Work Group	. workgroup
Domain	. Undefined
Primary Domain Controller	. Undefined
Backup Domain Controller	. Undefined
Logon User Name	. Undefined
Password	. Undefined
Primary WINS Server	. Undefined
Secondary WINS Server	. Undefined
SMB Signing of SMB Server	. If client agrees
SMB Signing of SMB Client	. If server agrees

NetWare Session

Enable Bindery	Enable
Enable NDS	Enable
Context	Undefined
Tree	Undefined
Search root	Undefined

LLTD

Enable LLTD	Enable
Device name	Undefined

HTTP Network Service

Enable HTTP Server	Enable
Enable SSL	Enable
Primary Port Number	80
Secondary Port Number	8080
SSL Port Number	10443

SMTP Client

Enable SMTP Client	Enable
Enable SSL	Disable
SSL/TLS	Undefined
SMTP Server Address	Undefined
POP Before SMTP	Disable
Authentication	Disable
Login Name	Undefined
Password	Undefined
Maximum Email / Internet Fax Size	30MB
Port Number	.25

SMTP Server

Enable SMTP Server	Enable
Port Number	25
Email Address	Undefined
Enable OffRamp Gateway	Disable
OffRamp Security	Enable
OffRamp Print	Fnable

POP3 Network Service

Enable POP3 Client	.Enable
Enable SSL	. Disable
POP3 Server Address	. Undefined
Authentication	. Disable
Type POP3 Login	. Auto
Account Name	. Undefined
Password	. Undefined
Scan Rate	.5 minutes
Port Number	. 110
SSL Port Number	. 995

SNTP Service

Enable SNTP	. Disable
Primary SNTP Address	Undefined
Secondary SNTP Address	Undefined
Scan Rate	24 hours
Port Number	. 123

FTP Client

Default Port Number21

FTP Server

Enable FTP Server	Enable
Enable SSL	Disable
Default Port Number	21
SSI Port Number	990

SNMP Network Service

Enable SNMP	Enable
Read Community	public
Read Write Community	private
Enable Authentication Trap	Enable
Enable Alerts Trap	Enable
IP Trap Address1	0.0.0.0
IP Trap Address2	0.0.0.0
IP Trap Address3	0.0.0.0
IP Trap Address4	0.0.0.0
IP Trap Address5	
IP Trap Address6	0.0.0.0
IP Trap Address7	0.0.0.0
IP Trap Address8	0.0.0.0
IP Trap Address9	
IP Trap Address10	0.0.0.0
IP Trap Community	public
IPX Trap Address	Undefined

Security Service

Certificate for Wireless LAN	Not Installed
Server Certificate	Not Installed
CA Certificate	Not Installed

Default Settings for Copier Setting

Color Mode*1	Black
Original Mode for Color*1	Text/Photo
Original Mode (for Black*1)	Text/Photo
Exposure for Color*1	Manual
Exposure (for Black*1)	Auto
Bypass Feed	Plain
BOOK > 2	Open from left
Magazine Sort	Open from left
2in1/4in1	Write Laterally
Maximum Copies	9999 (999 ^{*1})
Auto 2-sided Mode	
Sorter Mode Priority	No-Sort
* Only applicable to the colon woodel	

^{*} Only applicable to the color model.

Default Settings for Fax Setting (Optional)

Terminal ID Number	Undefined
Fax Number	Undefined
Line2 Number*NOTE	Undefined
Monitor Volume	.4 (Max. 7)
Completion Volume	5 (Max. 7)
Reception Mode	Auto
Dial Type	
Dial Type (Line2)*NOTE	
Line-2 Mode*NOTE	.Tx/Rx
Resolution	Standard
Original Mode	
Exposure	Auto
TTI	ON
RTI	OFF
ECM	ON
Discard	ON
Reduction	
Duplex Print	OFF
Rotate Sort	OFF
Recovery Transmit	OFF
Journal Auto Print	
Memory Transmission Report	
Multi Transmission Report	
Polling Report	
Relay Originator	Always (Print 1st Page Image)

Note

"Line2 Number", "Dial Type (Line2)", and "Line-2 Mode" is available only when optional Line2 board is installed on the Fax unit.

Default Settings for Save as file Setting

Local Storage Path	FILE SHARE
Storage Maintenance	Delete documents after 30 days
Destination	. Do not allow any network folder to be
	used as a destination
Remote 1	. Disabled
Remote 2	. Disabled
N/W-Fax Destination	. Do not allow any network folder to be
	used as a destination
N/W-Fax Folder	. Disabled

Default Settings for Email Setting

From Address	Undefined
From Name	Undefined
File Format	PDF(Multi)
Fragment Message Size	No Fragmentation
Default Body Strings	Undefined

Default Settings for Internet Fax Setting

From Address	Undefined
From Name	Undefined
Fragment Page Size	No Fragmentation
Default Body Strings	Undefined
Body Strings Transmission	Enable

Default Settings for Printer Setting

General Setting

Number of days to save Private,	
Proof and Invalid Job	. 14 days
LT<>A4/LD<>A3	. Enable
Print Startup Page	. Disable

Default Raw Job Setting

Raw Jobs - Duplex Printing	. Disable
Raw Jobs - Default Paper Size	. A4/Letter
Raw Jobs - Default Paper Type	. Plain
Raw Jobs - Default Orientation	. Portrait
Raw Jobs - Default Stapling	. OFF
Raw Jobs - Default Output Tray	. Inner Tray
PCL Form Line	. 12.0
PCL Font Pitch	. 10.0
PCL Font Point Size	. 12.0
PCL Font Number	. 0
PCL Line Termination	. Auto
Symbol set	. Roman-8
Paper Source	. Auto
Do not Print Blank Pages	

Raw Job Setting

Raw Job Setting......Disable

Default Settings for Print Service

Raw TCP Print

Enable Raw TCP	. Enable
Port Number	.9100
Enable Raw bi-directional	Disable

LPD Print

Enable LPD	.Enable
Port Number	.515
Banners	OFF

IPP Print

Enable IPP	Enable
Port80 Enable	Enable
Port Number	631
URL	http:// <ip address="">:631/Print</ip>
Enable SSL	Disable
SSL Port Number	443
SSL URL	https:// <ip address="">:443/Print</ip>
Administrator's Name	admin
Administrator's Password	123456
Authentication	Disable
User Name	user
Password	password

FTP Print

Enable FTP Printing	Enable
Port Number	21
Print User Name	Print
Print Password	Undefined

NetWare Print

Login Name	MFP [NIC Serial Number]
Password	
Print Queue Scan Rate	5 seconds

Email Print

Enable Print Header	Disable
Enable Print Message Body	Enable
Maximum Email Body Print	5
Enable Print Email Error	Enable
Enable Email Error Forward	Disable
Email Error Transfer Address	Undefined
Enable Partial Email	Enable
Partial wait time	24 hours
MDN Reply	Disable

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E-STUDIO203L/233/283
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E-STUDIO353/453
E-STUDIO520/600/720/850
E-STUDIO523/603/723/853
E-STUDIO281c/351c/451c

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