Canon

Network Multi–PDL Printer Unit–M2

Configuration Guide

PS

Please read this guide before operating this equipment.
After you finish reading this guide, store it in a safe place for future reference.

ENG

Network Multi-PDL Printer Unit-M2

CONFIGURATION GUIDE

INCLUDES FIERY® SOFTWARE

Canon

About the Documentation

This manual is part of a set of Canon Network Multi-PDL Printer Unit-M2™ documentation that includes the following manuals for users and system administrators:

- The *Quick Start Guide* summarizes the steps for configuring the iR-M2 and printing. It also describes how to access the online documentation.
- The *User Software Installation Guide* describes how to install software from the User Software CD to enable users to print to the iR-M2, and also describes setting up printing connections to the iR-M2.
- The *Configuration Guide* explains basic configuration and administration of the iR-M2 for the supported platforms and network environments. It also includes guidelines for setting up UNIX, Windows NT 4.0/2000, and Novell NetWare servers to provide printing services to users.
- The *Printing Guide* describes the printing features of the iR-M2 for users who send jobs from their computers.
- The *Job Management Guide* explains the functions of the job management utilities, including Command WorkStation™, and how you can use them to manage jobs and maintain quality. This manual is intended for an operator or administrator, or a user with the necessary access privileges, who needs to monitor and manage job flow, and troubleshoot problems that may arise.
- The *PCL Printer Driver Guide* describes how to install software from the PCL User Software CD; it also describes how to print jobs with the PCL printer driver.
- *Release Notes* provide last-minute product information and workarounds for some of the problems you may encounter.

Part number: 45030012

FCC Information

WARNING: FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Class B Declaration of Conformity

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

Industry Canada Class B Notice

This Class B digital apparatus complies with Canadian ICES-003.

Avis de Conformation Classe B de l'Industrie Canada

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

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This equipment has been tested concerning compliance with the relevant RFI protection requirements both individually and on system level (to simulate normal operation conditions). However, it is possible that these RFI Requirements are not met under certain unfavorable conditions in other installations. It is the user who is responsible for compliance of his particular installation.

Dieses Gerät wurde sowohl einzeln als auch in einer Anlage, die einen normalen Anwendungsfall nachbildet, auf die Einhaltung der Funkentstörbestimmungen geprüft. Es ist jedoch möglich, dass die Funkentstörbestimmungen unter ungünstigen Umständen bei anderen Gerätekombinationen nicht eingehalten werden. Für die Einhaltung der Funkentstörbestimmungen einer gesamten Anlage, in der dieses Gerät betrieben wird, ist der Betreiber verantwortlich.

Compliance with applicable regulations depends on the use of shielded cables. It is the user who is responsible for procuring the appropriate cables.

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Contents

Chapter 5: Setting up the iR-M2 from a Windows Computer

Chapter 6: Configuring Fiery WebTools

Chapter 7: Administering the iR-M2

Appendix A: Token Ring Network Option

Appendix B: Troubleshooting

Index

Introduction

This manual is intended for anyone who is responsible for integrating the Canon Network Multi-PDL Printer Unit-M2™ into a business environment that includes networked personal computers. After setting up the Network Multi-PDL Printer Unit-M2 and client workstations, individual users can print to the Network Multi-PDL Printer Unit-M2 as a high-performance printer.

This manual describes how to set up network servers and clients to use the Network Multi-PDL Printer Unit-M2 and how to install user software and set up printing from Microsoft Windows and Apple Mac OS computers. For general information on using the copier/printer, your computer, your application software, or your network, see the manuals that accompany those products.

NOTE: The term "iR-M2" is used in this manual to refer to the Network Multi-PDL Printer Unit-M2. The name "Aero" is used in illustrations to represent the iR-M2. The term "Windows 9x" is used in this manual to represent Windows 95 and Windows 98. The term "Windows" is used to refer to Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP, wherever appropriate.

The iR-M2 supports the Canon iR 8500/7200/105/85 series of copiers/printers.

The iR-M2 includes support for the Fiery WebTools™ and software for Command WorkStation, which allow an operator to manage all jobs sent to the iR-M2. Although it may not be the case at all sites, the documentation for this product assumes the presence of an operator who controls and manages jobs sent by users from remote workstations.

Any additional connectivity or administrative features specific to the copier/printer are described in the *Printing Guide* or the *Release Notes.*

About this manual

This manual covers the following topics:

- Basic configuration of the iR-M2 to support printing over AppleTalk, TCP/IP, and IPX (Novell) networks
- Administering network printing

- Configuring Novell and Microsoft Windows NT 4.0/2000 servers and UNIX systems to provide iR-M2 printing services
- Using the iR-M2 in mixed network environments
- Setting up the parallel port connection
- Setting up a Token Ring connection

NOTE: The network guidelines in this book are not intended to replace the services of an experienced network engineer.

This manual is organized as follows:

- Chapter 1 illustrates the supported network configurations and shows the network connectors on the iR-M2.
- Chapter 2 provides guidelines for setting up Windows network servers and UNIX systems for printing to the iR-M2 and for using Fiery WebTools.
- Chapter 3 describes how to prepare for iR-M2 Setup, including planning system security through access levels.
- Chapter 4 describes iR-M2 configuration (Setup) from the Control Panel.
- Chapter 5 describes iR-M2 Setup from a Windows computer.
- Chapter 6 describes setting up the iR-M2 for WebTools
- Chapter 7 summarizes some administrative features of iR-M2 software that are available for IPX/SPX, TCP/IP, and AppleTalk networks, and offers troubleshooting hints.
- Appendix A describes the Token Ring option.
- Appendix B describes issues that may occur in setting up the iR-M2 and offers solutions.

NOTE: Administrator features described in other manuals are summarized on page 7-1.

Chapter 1: Connecting to the Network

This chapter summarizes the stages in setting up the iR-M2, and includes diagrams that refer you to other chapters or other manuals for completing your installation. Check those references to find the information you need quickly.

iR-M2 on the network

When the iR-M2 is connected to a network, it behaves as a networked PostScript or PCL printer. The built-in Ethernet interface on the iR-M2 supports the following network protocols:

- AppleTalk
- TCP/IP (the lpd, nbt, and http protocols)

  TCP/IP stands for Transmission Control Protocol/Internet Protocol. The lpd protocol is the standard TCP/IP printing protocol. The nbt protocol supports Windows (SMB) printing. The port 9100 is the printer server port number to publish print connections between the print server and a remote computer. The http protocol is commonly used for Web pages on the Internet and on intranets. The http protocol also supports IPP printing.

  In addition, the DHCP, BOOTP, and RARP protocols are used for assigning IP addresses automatically. These are not shown in the diagrams in this chapter. For more information, see "TCP/IP Setup options" on page 4-21.

- IPX/SPX (Novell)

  IPX/SPX stands for Internetwork Packet Exchange/Sequenced Packet Exchange.

These protocols (rules that enable computers on a network to communicate with each other) are supported on Mac OS, Windows, and UNIX platforms and can run concurrently on the same cable. Workstations that use other protocols can print through a server that uses one of the protocols mentioned, or they can print to the iR-M2 parallel port. A Token Ring option is also available. This option supports the TCP/IP and IPX/SPX protocols. The iR-M2 is auto-sensing, and can handle all of these connections simultaneously.

When you add the iR-M2 to a network, it is assumed that a network administrator has already installed a network cabling system and connected workstations and servers.

Stages of installation on the network

Installation can be performed by a network or printing administrator. The stages of a successful installation are:

- **Physically connecting the iR-M2 to a functioning network**

  Prepare a network node for the iR-M2—obtain cable, route it to the location where the iR-M2 will be installed (near the copier/printer), and attach the cable to the network interface of the iR-M2. For details, see page 3-8.

  NOTE: If you plan to run Command WorkStation software, you will need to install the software and connect the Command WorkStation computer to the network along with the iR-M2. For more information, see the *User Software Installation Guide*.

- **Configuring the network server**

  When network servers are required, you need to configure those servers to provide client access to the iR-M2 as a PCL or PostScript printer. For information on configuring network servers in Windows and UNIX network environments, see Chapter 2.

- **Setting up the iR-M2**

  Configure the iR-M2 for your particular printing and network environment. First read Chapter 2, and then see subsequent chapters for details.

- **Preparing client workstations for printing**

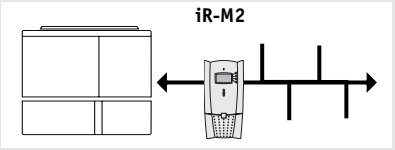
  Install the files needed for printing, install additional user software, and connect the client to the iR-M2 over the network. These steps are described in the *User Software Installation Guide*, and some information is also provided in Chapter 2.

- **Administering the iR-M2**

  Monitor and maintain system performance and troubleshoot problems that arise. For details, see Chapter 7 of this manual and the *Job Management Guide*.

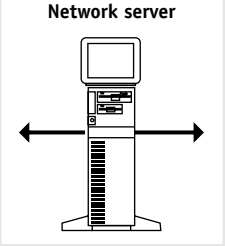
Summary of iR-M2 network installation

CONNECTION



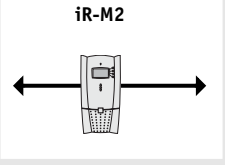
Prepare a network node. Connect the iR-M2 to the copier/printer and the network. If you use a computer running Command WorkStation software, connect it to the network.

SERVER CONFIGURATION



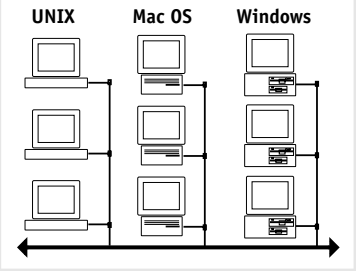
Configure UNIX, Windows NT 4.0/2000, and IPX (Novell) servers to specify iR-M2 print queues and iR-M2 users.

iR-M2 SETUP



On the iR-M2 Control Panel, configure, at a minimum, the Server Setup, Network Setup, and Printer Setup. Configure the remaining Setups.

CLIENT SETUP



At each computer from which users print to the iR-M2:

- Install the appropriate printer files and connect to one or more queues.
- Install Fiery® utilities and an Internet browser for those computers that will use them.
- Verify the iR-M2 in the list of printers and run a test print.

iR-M2 available on the network

Quick path to installation

The diagrams on the following pages show typical systems you can use to print and run Fiery software from remote workstations. Find the page with your preferred platform and network type, and then look up the setup procedures referenced in the "Key to setup" in the upper-left corner of each diagram.

The diagrams describe devices that use the supported networking protocols. They are logical diagrams and are not intended to describe the physical arrangement (topology) of devices on the network. A variety of physical arrangements is possible with each logical arrangement. For example, twisted pair Ethernet networks commonly use a star configuration around a hub, rather than a bus arrangement. The design of physical networks is beyond the scope of this manual.

If your network uses more than one protocol or more than one type of workstation, combine the setups listed for each component of your system. Multiple protocols (shown in the diagrams as parallel lines) can run on the same cable. A solid connection from the iR-M2 with an arrow indicates that other supported network types can be operational at the same time.

A Token Ring card is required for connection to a Token Ring network. For more information, see Appendix A.

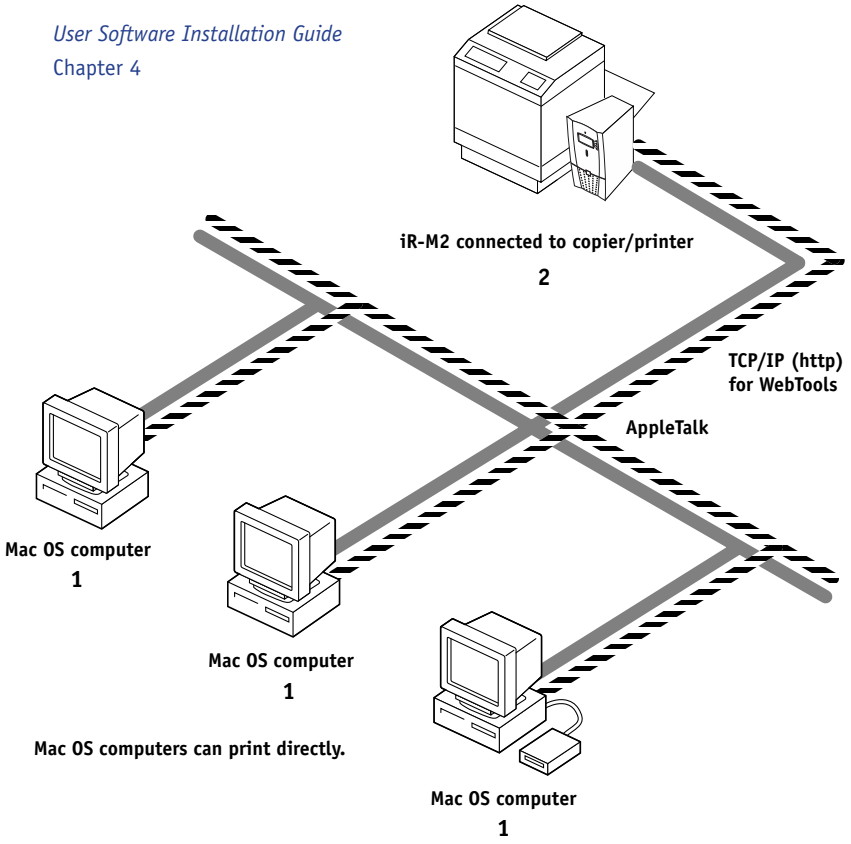
NOTE: The IPX/SPX and TCP/IP functionality outlined in this section is available on both Ethernet and Token Ring networks. AppleTalk is supported on Ethernet only.

The protocols used in these diagrams are indicated as follows:

Mac OS environment with AppleTalk

Key to setup:

1 Mac OS computer	*User Software Installation Guide*
2 Fiery Setup	Chapter 4



Printing on this network

Mac OS computers can print directly using the AppleTalk protocol.

For using Fiery Utilities

Fiery utilities can be used with the AppleTalk protocol.

For using WebTools

A Mac OS computer with TCP/IP (http) loaded.

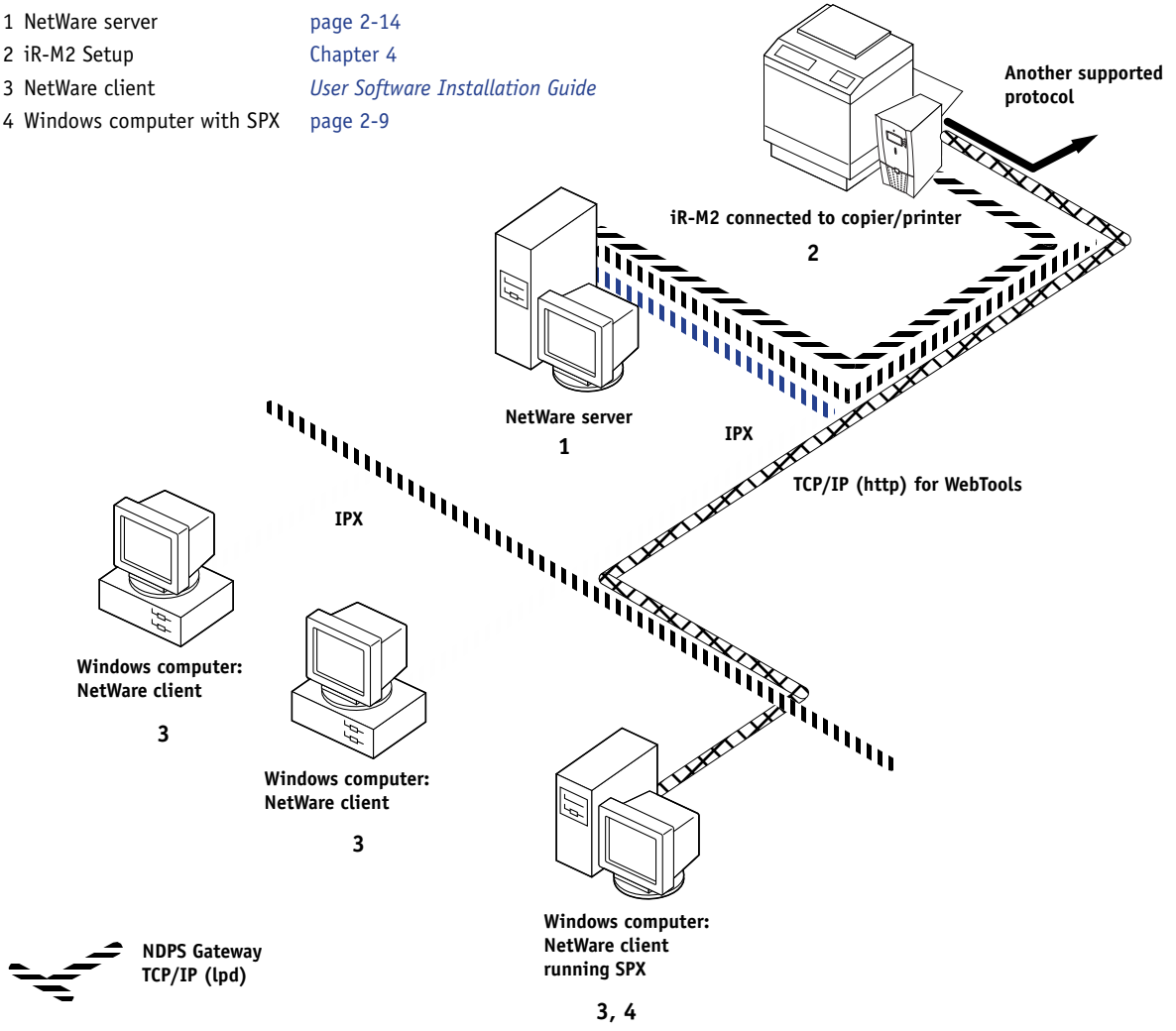
AppleTalk protocol

TCP/IP

Windows computers in a Novell environment

Key to setup:

1 NetWare server	page 2-14
2 iR-M2 Setup	Chapter 4
3 NetWare client	*User Software Installation Guide*
4 Windows computer with SPX	page 2-9



Printing on this network

All Windows computers can print through the NetWare server.

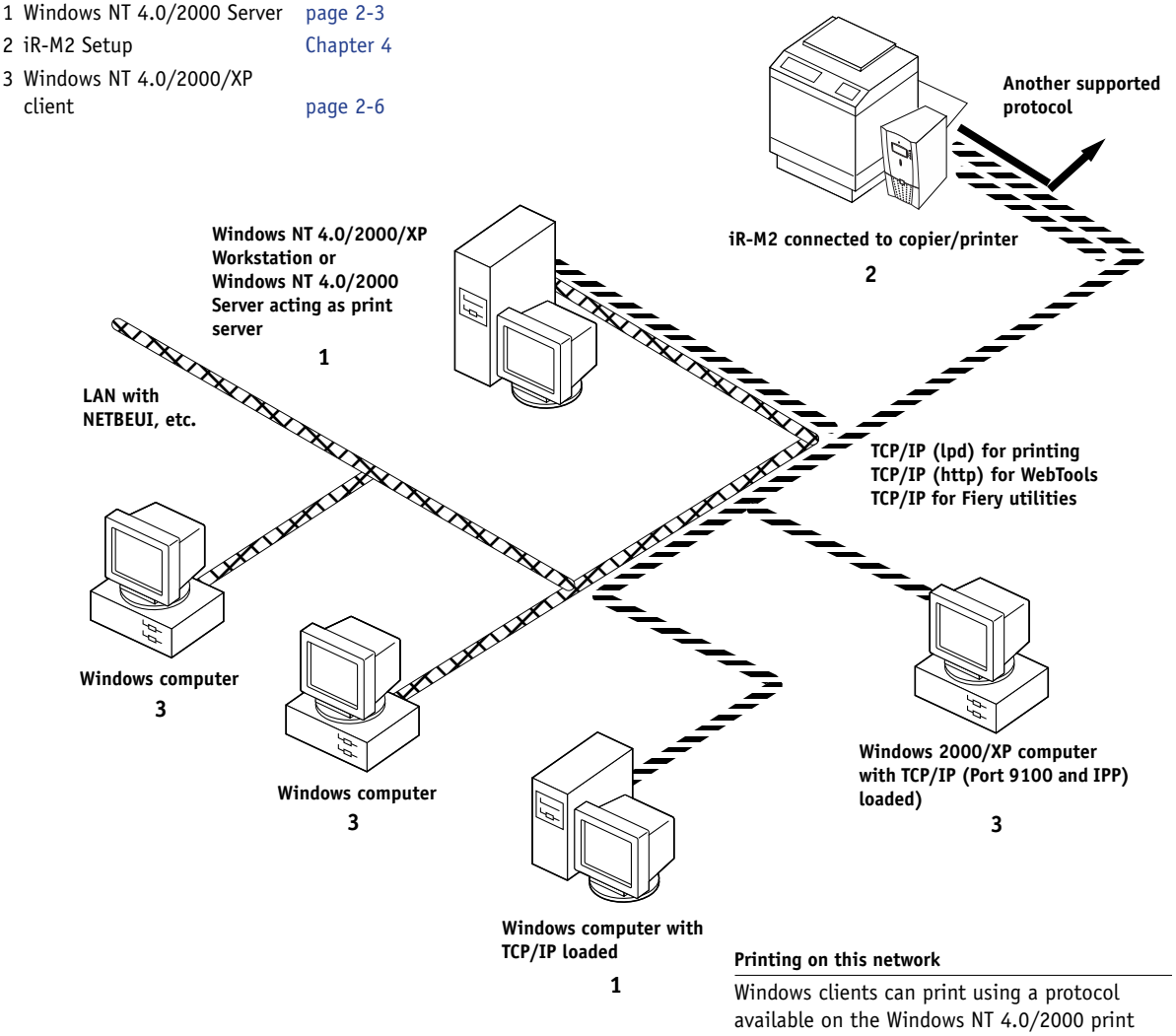
For using WebTools

A Windows computer with TCP/IP (http) loaded.

Windows NT 4.0/2000 Server environment

Key to setup:

1 Windows NT 4.0/2000 Server page 2-3
2 iR-M2 Setup Chapter 4
3 Windows NT 4.0/2000/XP client page 2-6



Printing on this network

Windows clients can print using a protocol available on the Windows NT 4.0/2000 print server.

Windows computers can print using TCP/IP with the lpd protocol.

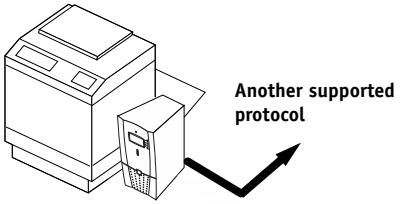
For running Fiery utilities and WebTools

A Windows computer with TCP/IP loaded.

Windows computers using Windows printing

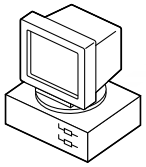
Key to setup:

1 Windows computer — *User Software Installation Guide*
2 iR-M2 Setup — Chapter 4



iR-M2 connected to copier/printer

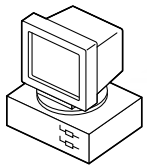
2



Windows computer

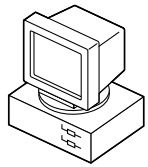
1

TCP/IP (nbt)



Windows computer

1



Windows computer

1

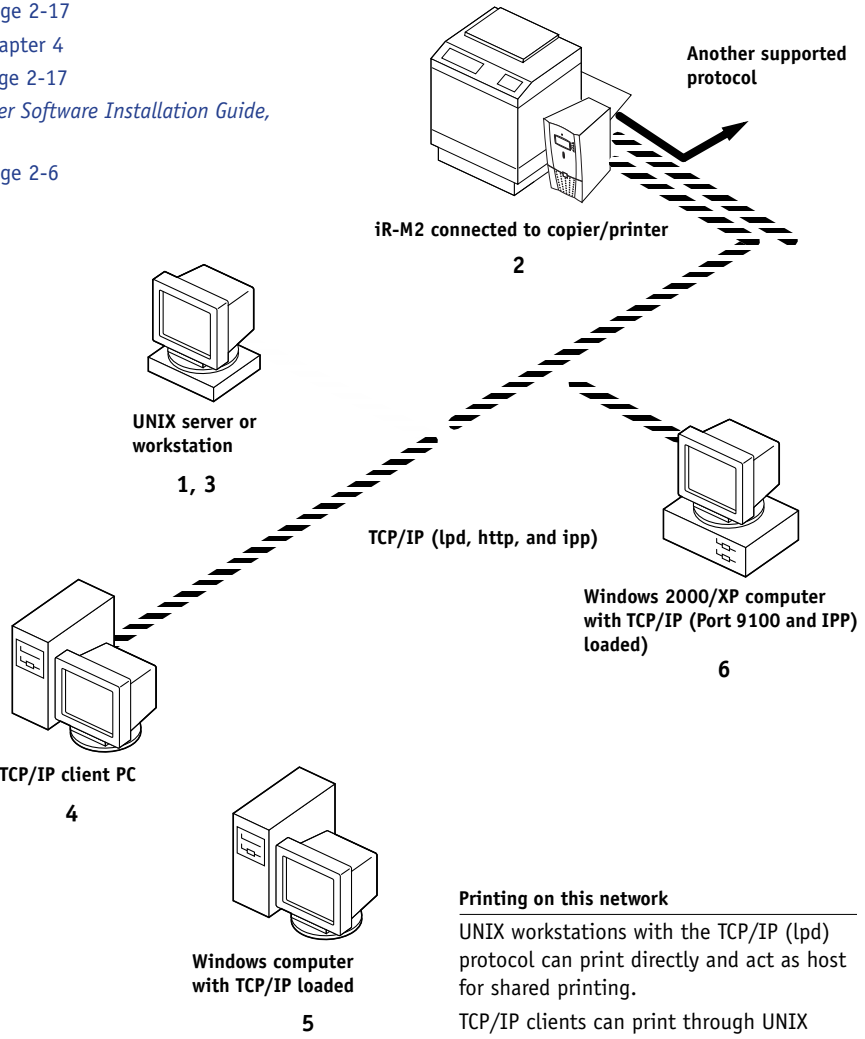
TCP/IP (nbt) protocol

For Windows printing
Windows (SMB) printing enabled on the iR-M2.
Windows NetBios and TCP/IP enabled on the computer.

UNIX workstations and Windows computers on a TCP/IP network

Key to setup:

1 UNIX server/host	page 2-17
2 iR-M2 Setup	Chapter 4
3 UNIX workstation	page 2-17
4 TCP/IP client	*User Software Installation Guide*, page 2-17
5 Windows NT 4.0 client	page 2-6



Printing on this network

UNIX workstations with the TCP/IP (lpd) protocol can print directly and act as host for shared printing.

TCP/IP clients can print through UNIX server or directly; requires TCP/IP and the lpr print service loaded.

For running Fiery utilities and WebTools

Windows computers with TCP/IP loaded can use these applications.

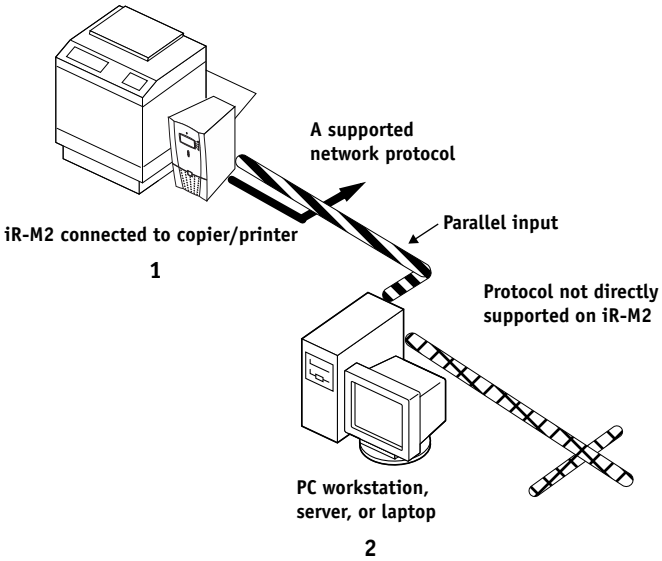
TCP/IP (lpd) protocol

iR-M2 parallel port connection

Key to setup:

1 iR-M2 Setup	Chapter 4
2 Windows computer	*Printing Guide*

With the parallel port enabled, the iR-M2 can accept and print jobs sent to its parallel port.



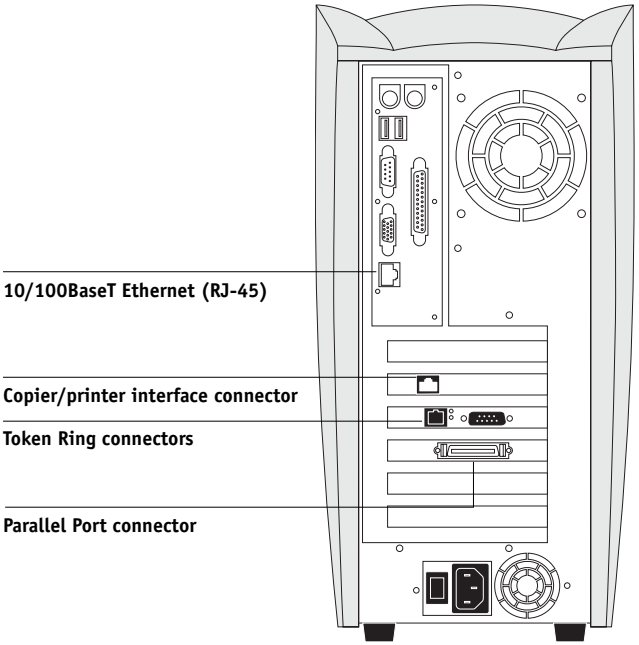

Parallel

Connecting network cable to the iR-M2

In this section, the back panel of the iR-M2 is illustrated, followed by information for connecting to the Ethernet board. For information about connecting to a Token Ring network, see Appendix A.

Turn off the iR-M2 before attaching it to any network device. If the iR-M2 has just finished processing, wait five seconds after the system reaches the Idle state before using the power switch to turn it off. For the proper shutdown procedure, see page 7-9.

Back view of the iR-M2



Ethernet connection

For Ethernet connections, the iR-M2 supports Shielded Twisted Pair (STP) cabling, defined as Category 5 for use with 100BaseT; or as Category 3, Category 4, or Category 5 for use with 10BaseT. The cable uses an 8-pin RJ-45 connector that plugs into the RJ-45 socket on the iR-M2.

NOTE: The 100BaseT type supported by the iR-M2 is 100BaseTX, also known as Fast Ethernet. If an Ethernet hub is used, it must be a 100BaseTX hub. The term "100BaseT" is used to refer to 100BaseTX.

TO CONNECT TO THE ETHERNET BOARD

- **Connect the network cable to the RJ-45 connector on the back of the iR-M2.**

  You must use a Category 5 unshielded twisted pair cable network cable for 100BaseT.

Token Ring connection

For Token Ring connections, the iR-M2 supports Shielded Twisted Pair (STP) with a DB-9 connector.

If the Token Ring option is installed, you cannot enable both Ethernet and Token Ring simultaneously. For more information, see Appendix A.

TO CONNECT TO THE TOKEN RING BOARD

- **Connect the network cable to the proper connector on the back of the iR-M2.**

  For more information on Token Ring, see Appendix A.

Parallel cable connection

In addition to receiving print jobs over Ethernet and Token Ring, the iR-M2 can accept print jobs from a Windows computer through its high-speed parallel port. This connection is advantageous for portable computers and workstations on dedicated networks using protocols other than AppleTalk, TCP/IP, or IPX.

The parallel port connection can be active at the same time as the network ports.

NOTE: To print via a parallel port connection, you need the Parallel Interface Adapter iP-A1 (optional). For more information, ask your service representative/technician.

TO USE PARALLEL CABLE

1. **With the iR-M2 and the Windows computer turned off, attach the parallel cable to the parallel port of the iR-M2.**

   For the location of the parallel port, see the illustration on page 1-11.

2. **Connect the other end of the cable to the parallel port on the Windows computer.**

3. **Turn on the computer and the iR-M2.**

4. **Proceed to Setup.**

   To print to the parallel port, you need to set up the parallel port connection. See "Parallel Port Setup options" on page 4-19.

Chapter 2: Setting up Network Servers

This chapter describes environments that typically include one or more network servers—Novell NetWare servers and Windows NT 4.0/2000 servers—that share printing to the iR-M2. It describes setting up servers that use IPX/SPX or TCP/IP protocols for communicating with the iR-M2. In addition, it includes guidelines for setting up direct communication from Windows NT 4.0/2000/XP workstations or UNIX workstations, where a network server is optional. This chapter also outlines the requirements for users to print to the iR-M2 and run Fiery utilities and WebTools.

The iR-M2 can accept jobs concurrently from NetWare, Windows NT 4.0/2000 servers, as well as jobs sent directly from Windows NT 4.0/2000/XP or UNIX workstations. Because AppleShare servers require no special configuration, they are not discussed in this chapter, except for use in a Windows NT 4.0/2000 environment (see "iR-M2 on a TCP/IP network with Windows NT 4.0/2000/XP" in the following section).

NOTE: The iR-M2 does not support the Windows 2000 Active Directory service.

If your network is based on Windows NT 4.0/2000, proceed to the following section. For information on UNIX workstations, proceed to page 2-17.

iR-M2 on a TCP/IP network with Windows NT 4.0/2000/XP

When a Windows NT 4.0/2000/XP computer is configured to connect to the iR-M2 using TCP/IP, it can print directly to the iR-M2. If the computer shares the printer over the network, it is acting as a print server to Windows NT 4.0/2000/XP and Windows 9x/Me clients. Client computers print to the iR-M2 by printing to the Windows NT 4.0/2000 print server. You can then monitor and control printing at the Windows NT 4.0/2000 server computer.

Typical system combinations are:

- Print server running Windows NT 4.0/2000 Server; clients running Windows NT 4.0/2000/XP Workstation and Windows 9x/Me
- Print server running Windows NT 4.0/2000/XP Workstation and clients running Windows 9x/Me

With TCP/IP protocols loaded, you can run Fiery utilities and WebTools from a Windows computer.

Tips for experts—Windows NT 4.0/2000/XP with TCP/IP

Setting up printing from Windows NT 4.0/2000/XP using TCP/IP protocols is similar to setting up UNIX workstations with TCP/IP. When TCP/IP network connections are made from Windows NT 4.0/2000/XP workstations, note the following:

- **Make sure you have a valid IP address for the iR-M2 and any workstations that will print to it or run the Fiery utilities.**
- **In iR-M2 Setup, enable TCP/IP and enter the IP address, subnet mask, and gateway address for the iR-M2.**

  You can enter these addresses manually or use DHCP, RARP, or BOOTP protocols to assign them dynamically.
- **Make sure the iR-M2 name and address are listed in a domain name server (DNS) or hosts name database used by your system.**
- **Make sure the system host table includes the correct internal name for the iR-M2 as a remote printer.**

  For more information, see page 2-18.
- **For Windows NT 4.0/2000/XP, install the appropriate printer driver files (PCL or PostScript) on the Windows NT 4.0/2000 server.**

  For more information, see the *User Software Installation Guide*.
- **Repeat the installation for all users who print to the iR-M2.**

  Each server and workstation running the Fiery utilities with TCP/IP also needs the TCP/IP protocol and the Fiery utility software.

Configuring a Windows NT 4.0/2000 server to communicate with the iR-M2

To configure a Windows NT 4.0/2000 server to communicate with the iR-M2, follow these general steps. More detail is provided in subsequent sections in this chapter and in your Microsoft documentation.

- Load the TCP/IP network protocol on the server and configure it with an IP address, subnet mask, and gateway.
- Enter the host name of the iR-M2 in the host database used by your system (see page 2-4).
- Perform iR-M2 Setup.
- On the Windows NT 4.0/2000 server, create a printer for each iR-M2 print connection, install the appropriate printer drivers, and (optionally) share the printer on the network (see page 2-5).
- Enter the host name and remote printer name of the iR-M2 in the printer connection. For more information, see page 2-18.
- If the Windows NT 4.0/2000 server is also a workstation, install Fiery utilities (see the *User Software Installation Guide*).

Adding the iR-M2 to the TCP/IP network

If your TCP/IP network consists of Windows NT 4.0/2000 servers, and Windows NT 4.0/2000/XP clients, follow the procedures in this section. If the network also includes UNIX workstations, also see the procedures on page 2-17.

TO ADD THE iR-M2 TO A TCP/IP NETWORK WITH A WINDOWS NT 4.0/2000 SERVER

1. **Register the IP address of the iR-M2 in the host name database used by your system.**

   For installations that do not have a network administrator or central host name database, add the iR-M2 to the hosts file on the Windows NT 4.0/2000 server. Also add it to the hosts file on any workstations that have TCP/IP loaded and will use the Fiery utilities.

   The Windows NT 4.0/2000 hosts file provides compatibility with the UNIX hosts file. The hosts file is used as a local Domain Name Services (DNS) equivalent. It has the same format as the /etc/hosts file on UNIX servers. The format of the hosts entry is:

   IP Address<TAB>host name<TAB>#comments

   where <TAB> indicates that you press the Tab key.

   To determine the IP address and server name of your system, print a Configuration page (see page 7-7).

   NOTE: If the iR-M2 has already been defined in an /etc/hosts file or equivalent host name database on a UNIX workstation on your network, we recommend you use the same host name here as you used for the name of the remote printer in the /etc/printcap file.

2. **Perform iR-M2 Setup to support TCP/IP printing.**

   Enter the options in Protocol Setup (IP address of the iR-M2, subnet mask, and gateway address).

Installing the iR-M2 as a shared printer

The first step in creating a printer is installing the printer driver files, which give your applications access to printer features. You can use the installation instructions in the *User Software Installation Guide* for every workstation that will print directly and independently to the iR-M2. However, if you are an administrator running a Windows NT 4.0/2000 server or Windows NT 4.0/2000/XP computer, you can also create a printer and share it with clients on the network. This allows clients who do not have permission to establish an independent network connection to the iR-M2 to print through the server.

You can specify sharing of the printer during installation of the iR-M2 printer files. If you have not yet installed the iR-M2 printer files on the Windows NT 4.0/2000 print server computer, do so now, following the instructions in the *User Software Installation Guide*. During installation, enter the information necessary to share the iR-M2.

If you have already installed the iR-M2 printer files on the computer you are using as an NT 4.0/2000 print server, see your Windows documentation for information about sharing the iR-M2.

If more than one iR-M2 print connection is published (for example, if both the Print queue and the Hold queue are published), you may want to create a printer for each print connection, so you and other users can print to each connection directly. When prompted to specify the printer name, enter a name that indicates the iR-M2 print connection.

Configuring clients of a Windows NT 4.0/2000 server

Each client of a Windows NT 4.0/2000 server is already using a network protocol to communicate with the server. Each client can print to the iR-M2 if it has been shared by a Windows NT 4.0/2000 server, or Windows NT 4.0/2000/XP computer. In that case, the client does not have to use the same network protocol to connect to the Windows NT 4.0/2000 server as the server uses to communicate with the iR-M2.

TO CONNECT AND PRINT TO THE iR-M2 SHARED BY A WINDOWS NT 4.0/2000 SERVER

- **For Windows 9x/Me clients: Before printing, double-click the Windows NT 4.0/2000 server icon in the Network Neighborhood window, and then double-click the printer name.**

  You are prompted to set up the printer. When you choose to set it up, the Add Printer Wizard dialog box appears. Follow the procedures in the *User Software Installation Guide*.

- **For Windows NT 4.0 Workstation clients: Before printing, connect to the print server computer and select the iR-M2. Right-click and choose the Open command.**

  When prompted, click Yes to have Windows set up the printer.

- **For Windows 2000/XP clients: Before printing, install the printer driver with the User Software CD and configure the port.**

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 appear dimmed, and unavailable for changing. When a client chooses Print, the job is transmitted to the Windows NT 4.0/2000 print server, and from there to the selected print connection on the iR-M2. The job is listed in the Print Manager on the client workstation, and the administrator can track it in the iR-M2 window in the Print Manager on the Windows NT 4.0/2000 print server.

Configuring Windows computers without a Windows NT 4.0 server

If your network does not have a Windows NT 4.0/2000 server, Windows 9x/Me and Windows NT 4.0/2000/XP workstations can still print to the iR-M2. This method of printing is called Windows, or SMB printing. In this type of network environment, computers running Windows 9x/Me and Windows NT 4.0/2000/XP Workstations operate in a peer-to-peer environment and communicate directly with the iR-M2 when users send print jobs.

Many of the same prerequisites for setting up printing through a Windows NT 4.0/2000 server also apply to setting up Windows printing where a server is not present. The prerequisites are summarized in the following list, and you can find more detail in your Microsoft documentation.

- **Print a Configuration page (see page 7-7).**

  Use the information on this page to determine the current iR-M2 settings.

- **Load the TCP/IP network protocol on the computer (for Windows 9x/Me, load File and printer sharing for Microsoft Network. For Windows 2000/XP load Client for Microsoft Networks).**

- **Verify the Workgroup name of the computer in the Windows Network control panel.**

  Make sure the Workgroup name is the same as the one listed in iR-M2 Setup.

- **For Windows 9x/Me, in the File and printer sharing for Microsoft Network Properties dialog box, specify Automatic or Enabled for Browse Master, and select Yes for LM Announce.**

- **For Windows 2000/XP, in the Client for Microsoft Networks Properties dialog box, configure the computer to allow file sharing, and then restart the computer.**

- **Ping the iR-M2 to verify TCP/IP communication is successful (see page 2-19).**

iR-M2 on a NetWare network

The NetWise™ features built into the iR-M2 support the following network operating environments:

- NetWare —NDS (Novell Directory Services)
- Servers running NetWare in bindery emulation mode

The term “Netware” is used to refer to Netware 4.x, 5.x, and 6.x.

For Ethernet-based networks, the IPX/SPX protocol is supported. For Token Ring-based NetWare networks, both IPX/SPX and TCP/IP are supported.

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 NDS or bindery objects.

The term “bindery server” is used to refer to a Novell file server running NetWare in emulation mode. The term “NDS” is used to describe components of a NetWare operating system running NetWare in native mode.

NetWare clients print to the iR-M2 through the Novell network server. Server setup and client network setup are outlined in this chapter, client printing setup is described in the *User Software Installation Guide*, and printing is described in the *Printing Guide*.

The iR-M2 can receive print jobs from NetWare clients over Ethernet or Token Ring network topologies. (For information on the Token Ring option, see Appendix A.) During iR-M2 Setup, you select the frame type or types that will be used for communication between the iR-M2 and network servers. Frame type refers to the format of a communications packet; frame types are specified in a startup file when the NetWare server (or any other workstation) loads its network drivers.

Tips for experts—IPX networks

Setting up the iR-M2 is similar to setting up any other PostScript printer on the network.

The iR-M2 with IPX connections has the following characteristics:

- **A minimum connection to the iR-M2 consists of a NetWare file server, a NetWare print server, and a NetWare queue.**
- **A single directory tree and up to eight bindery servers can be configured simultaneously.**

  This limit is the same regardless of whether the iR-M2 is connected to the network via Ethernet, via Token Ring, or both.
- **The iR-M2 looks for print jobs on one NetWare print server per bindery server.**
- **Each print server can store jobs for any print connection on the iR-M2.**

Overview of IPX printing to the iR-M2

NetWare file servers support the creation of print queues, which are storage areas for print jobs. When a client on a remote computer decides to print, the job is directed to a print queue on the NetWare file server and spooled to the NetWare server disk, freeing up the client workstation.

You must give the NetWare queue names a specific extension corresponding to the iR-M2 print connection, as follows:

_print
_hold
_direct

NOTE: These extension names must be in English and in all lowercase letters.

You do not need to rerun Setup when you add or remove a NetWare queue; however, you should restart the iR-M2 after you create or remove a queue.

When the iR-M2 is configured to connect to a NetWare server, it polls the NetWare server for jobs in each of its queues. If jobs are found, they are automatically transferred over the network to the matching connection on the iR-M2. For example, jobs from the NetWare queue with the _print extension are sent to the iR-M2 Print queue. While a job is processed and printed, a record of the job is being created. You can access the Job Log containing these records at any time.

Configuring a NetWare server for printing

The following sections explain how to set up a NetWare file server so networked users can print to the iR-M2 from their workstations, and the iR-M2 can obtain print jobs from the NetWare server.

For *each* NetWare file server that you configure, follow these general steps. More detail is provided in subsequent sections and in your NetWare documentation.

- Make sure the server is connected to a functioning IPX network.
- Log in as the Supervisor on a PC connected to the NetWare file server.
- For NetWare installations, set up an NDS connection (see page 2-12).
- For NetWare in emulation mode, set the bindery context (see page 2-12).
- For NetWare in bindery emulation, set up a file server, print server, and print queue for the iR-M2 (see page 2-13).

With bindery services, you can route all iR-M2 print jobs through the same NetWare file server, or you can configure more than one file server to handle iR-M2 jobs.

The functions you perform on the Novell server, the iR-M2, and the client workstation are summarized in the following tables. The first table applies to NDS connections, and the second to bindery connections. Complete the operations in the left column, then the center column, then the right column.

Configuring an NDS connection

Abbreviations:

FS = file server

PS = print server

PQ = print queue (on the NetWare server)

On NDS FS	In Setup from iR-M2 Control Panel, Command WorkStation or WebSetup	On client workstation
In NETADMIN: Create NDS PQs Create NDS printer and assign PQs Create PS and assign the printer Configure users of the PQs	**Port Setup** Ethernet Setup **Protocol Setup** IPX/SPX Setup—select frame types **Service Setup** PServer Setup and NDS Setup Select Root Browse to select PS Specify PQ search root (optional) Set Polling Interval	Install user software. For printing: Connect client to PQs that you set up on the NetWare FS (associated with the PS selected in NDS Setup). For running Fiery utilities: Configure the connection to the iR-M2.

Configuring a bindery connection

On Bindery FS	In Setup from iR-M2 Control Panel, Command WorkStation or WebSetup	On client workstation
In PCONSOLE: Select NetWare FS (up to 8) For each FS: Configure PS Configure PQ Configure users of the PQ	**Port Setup** Ethernet Setup **Protocol Setup** IPX/SPX Setup—select frame types **Service Setup** PServer Setup and Bindery Setup Add FS (up to 8) Set Polling Interval	Install user software. For printing: Connect client to PQs that you set up on the NetWare FS (associated with the PS selected in Bindery Setup). For running Fiery utilities: Configure the connection to the iR-M2.

Setting up an NDS connection

In NDS, all NetWare entities (objects) are organized in a hierarchical tree structure. Objects have a name, properties, and a context that defines the location of the object in the directory tree. For the iR-M2, you are mainly concerned with defining a printer, a print server object, and one or more print queue objects. Objects are created in NetWare administrator programs such as PCONSOLE, NETADMIN, or NetWare Administrator.

The top-level tree object is known as the [Root] object. The name of the [Root] object is also the name of the tree. Below the [Root] are other objects: either containers (which consist of other objects) or leaf objects (which do not contain other objects). Access to objects is controlled by rights that are defined as properties of each object. Rights are established by network administrators.

Setting the NetWare bindery context

You can connect only one directory tree to the iR-M2. If you need to connect additional NetWare servers, you can do so by using bindery emulation. You can connect up to eight bindery servers to the iR-M2.

NOTE: The file server you select must not be in the same tree as the one you selected in NDS Setup.

In order to set up the NetWare server in bindery emulation mode for printing to the iR-M2, the network administrator must do the following:

- Determine the Directory Services path to the container in which the print server and the print queue for the iR-M2 will be created.

  The container defines the “bindery context” for your network structure.

- Edit the network startup file to set the bindery context.
- Activate the new bindery context.

Setting up a NetWare print queue for bindery

For NetWare in emulation mode, the NetWare print server and print queue for the iR-M2 are created and configured from NetWare Print Console (PCONSOLE), a NetWare utility that is stored in the NetWare PUBLIC directory.

As with NDS, you can create several NetWare entities on a Novell server, and then you can select them in Network Setup (see page 4-31).

Setting up NetWare Windows clients for printing

Before setting up client workstations for printing, perform Network Setup (see page 4-15), and verify that the settings reflect the entities you created in the NetWare administrator utilities (see page 2-10).

NOTE: For printing to the iR-M2, connect all Windows clients to a NetWare server and permit them to connect to the Netware print server or servers on which you defined a NetWare print queue for the iR-M2.

After the Novell server and the iR-M2 have been set up, client setup consists of:

- Installing the networking protocol, binding it to the network adapter card, and permitting the client to log in to the NetWare file server.

  On Windows 9x/Me workstations, load both the IPX/SPX-compatible protocol and the Client for NetWare Networks from the Network Control Panel.

  On Windows NT 4.0/2000/XP workstations, install Client Services for NetWare. Use the CSNW option in the Control Panel to set printing options and specify a preferred NetWare server.

- Setting up the iR-M2 as a PostScript or PCL printer by installing a PostScript printer driver and the iR-M2 PPD (PostScript printer description) or PDD (PCL's equivalent of a PPD).

- Adding a network port and connecting the workstation to one or more NetWare queues that have been defined for the iR-M2.

- Installing iR-M2 software.

  For details, see the *User Software Installation Guide*.

iR-M2 on a NetWare network with NDPS

The iR-M2 supports printing over a NetWare 5.x or later network running either the TCP/IP protocols or the IPX protocol. For pure IP printing, the iR-M2 takes advantage of features in NDPS (Novell Distributed Print Services). For IPX printing, the iR-M2 supports the PServer service in Bindery emulation or through NDS (Novell Directory Services). For more information on IPX-based printing, see "iR-M2 on a NetWare network" on page 2-8.

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 NDS or bindery objects.

NDPS is not like 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 9x/Me and Windows NT 4.0/2000/XP computers.

The iR-M2 can receive print jobs from NetWare clients over Ethernet or Token Ring network topologies. (For information on the Token Ring option, see Appendix A.) During iR-M2 Setup, you select the frame type or types that will be used for communication between the iR-M2 and network servers. Frame type refers to the format of a communications packet; frame types are specified in a startup file when the NetWare server (or any other workstation) loads its network drivers.

Tips for experts—NetWare networks

Setting up the iR-M2 in an NDPS environment is similar to setting up any other PostScript printer on the network. Refer to the following information when setting up the iR-M2 in such an environment:

- **Make sure you have a valid IP address for the iR-M2 and for any workstations that will print to it or run Fiery utilities.**
- **In iR-M2 Setup, enable TCP/IP and enter the IP address, subnet mask, and gateway address for iR-M2. You can enter these manually or use DHCP, RARP, or BOOTP protocols to assign the addresses dynamically.**
- **Bidirectional communication features in NDPS are not supported on the iR-M2.**

Configuring a NetWare server for printing with NDPS

Before you begin

The following procedure assumes NDPS has been installed during NetWare installation and that a Broker is running on the server. Unless you have manually unloaded the Broker, it loads and runs when you install NDPS. Make sure you are using the latest NetWare service pack and Novell gateway. Finally, create an NDPS Manager. For more information, see your NetWare documentation.

In iR-M2 Setup, make sure you have enabled TCP/IP (page 4-21) and LPD printing (page 4-31) on the iR-M2. You can ping the iR-M2 (page 2-19) to verify that TCP/IP communication is successful.

Setting up the iR-M2 printer driver

You first need to create a directory forWindows NT 4.0/2000/XP or a folder for Windows 9x/Me in the NetWare server for NDPS to install the corresponding printer driver files from the User Software CD.

TO SET UP THE PRINTER DRIVER FOR WINDOWS NT 4.0/2000/XP

1. **Log on to the Novell file server as a superuser or Administrator.**
2. **In the SYS:ndps\resdir\Prndrv\NT4/2000/XP directory, create a directory called Fiery.**
3. **From the User Software CD, copy the contents of the ENGLISH\INSTALRS\PS_DRVR\WIN_NT/2000/XP folder to the Fiery directory.**

TO SET UP THE PRINTER DRIVER FOR WINDOWS 9X/ME

1. **Log on to the Novell file server as a superuser or Administrator.**
2. **In the SYS:ndps\resdir\Prndrv\Win9x/Me directory, create a folder called Fiery.**
3. **From the User Software CD, copy the contents of the ENGLISH\INSTALRS\PS_DRVR\WIN_9x/Me folder to the Fiery directory.**

Setting up the iR-M2 on a NetWare network

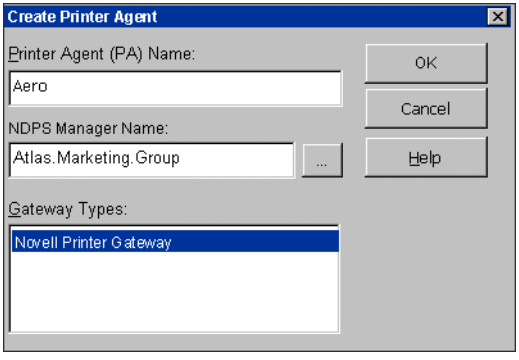
Depending on the security needs at your organization, you can set up the iR-M2 as a Public Access printer or a Controlled Access printer. The following procedure describes setting up a Public Access printer. You can then convert the printer to Controlled Access if necessary. For more information, see your NetWare documentation.

NOTE: The iPrint feature of NetWare 6.x is not supported.

TO SET UP THE IR-M2 AS A PUBLIC ACCESS PRINTER

1. **In NetWare Administrator, double-click the NDPS Manager object you created.**
2. **In the Details window for the NDPS Manager object, click Printer Agent List.**

   The list of Printer Agents appears.
3. **Click New.**
4. **In the Printer Agent (PA) Name field, enter a name.**



5. **Under Gateway Types, select Novell Printer Gateway, and click OK.**
6. **In the Configure Novell PDS for Printer Agent dialog box, select "((NONE))", and click OK.**
7. **In the Configure Port Handler dialog box, choose "Remote LPR on IP" as the connection type, and click Next.**
8. **For Host Address, enter the IP address of the iR-M2.**

9. **For Printer Name, enter the name of the iR-M2 print connection you want users to print to, and click Finish.**

   This name must be either print or hold.

10. **In the Select Printer Drivers dialog box, select the printer driver for Windows 9x/Me and the driver for Windows NT 4.0/2000/XP.**

11. **Click Continue, and then click OK.**

iR-M2 on a network with UNIX workstations

When a UNIX workstation is configured with the lpd protocol and connected to the iR-M2 over a TCP/IP network, it can print directly to the iR-M2.

Setting up UNIX workstations requires an administrator with root privileges. After the initial configuration, UNIX users simply submit print jobs to a named printer.

The job management tools, along with the other Fiery utilities and WebTools, are unavailable on the UNIX platform. A Windows or Mac OS computer on the same network as the UNIX computer that is set up to use TCP/IP for printing to the iR-M2 can use the job management tools to manage print jobs that originate from all workstations on the network.

Tips for experts—UNIX workstations

Setting up the iR-M2 in a UNIX environment has the same requirements as setting up any printer or new device:

- **A distinct IP address is required for the iR-M2 as well as for each workstation on the network.**
- **A name must be selected for the iR-M2 that goes with the IP address.**
- **The IP address of the iR-M2 must be registered for the network in a host database, and also on the iR-M2 itself.**
- **At least one print connection (Print or Hold) must be published.**

The following information applies especially to the iR-M2:

- **The iR-M2 is a printer controller that understands lpd protocols.**
- **The iR-M2 has a remote printer name you must use in order to communicate with it successfully.**

  For details, see the following section.

Important note about the remote printer name

Whichever UNIX system you use, the name used for the remote printer (or rp in the /etc/printcap file) in configuring the iR-M2 must be one of the following:

```
print
hold
```

The remote printer name is also used when setting up your Windows NT 4.0/2000/XP Workstation or Windows NT 4.0/2000 Server to connect to the iR-M2 over TCP/IP. Enter the remote printer name when you set up your Windows NT 4.0/2000 printer, as the "Name of printer or print queue on that (lpd host) server" in the Add LPR Compatible Printer dialog box.

For the Windows 2000/XP printer driver, enter the remote printer name for Queue Name under LPR Settings in the Configure Standard TCP/IP Port Monitor dialog box.

Setting up the iR-M2 on TCP/IP networks

Every machine (host) on a TCP/IP network, including the iR-M2, must have a unique 32-bit internet address (IP address). Contact your network administrator to obtain an address for the iR-M2. Workstations on a TCP/IP network can print directly to the iR-M2 as a remote printer, or can print to a Windows NT 4.0/2000 server or UNIX workstation acting as a print server. Since the iR-M2 spools jobs and acts as a print server, there is no advantage in placing another print server between a workstation and the iR-M2. If you choose to do so, however, there is no difference in setup except that a client machine does not have its own spooling area.

To set up iR-M2 printing on UNIX systems

1. **Specify the appropriate settings in iR-M2 Server Setup.**

   To access iR-M2 Setup, see page 4-9.

2. **Specify the appropriate settings in iR-M2 Network Setup.**

   Enter a valid IP address, subnet mask, and gateway address for the iR-M2.

3. **Specify the appropriate settings in iR-M2 Printer Setup.**

   Publish the Print queue and/or Hold queue.

To set up TCP/IP for communication with the iR-M2

1. **A superuser (with root login) must add the iR-M2 to the network's IP host table or other system database of network printers.**

2. **In the file or utility used by your network, specify the remote printer name, the print server protocol, the queue, and the spool file for the iR-M2 name you assigned.**

3. **Make the iR-M2 available as a printer to other network users.**

4. **To verify the TCP/IP connection, ping the IP address or the host name. From any computer on the network, at the command prompt, type:**

   ping <IP address>

   Type the iR-M2 IP address assigned in iR-M2 Network Setup.

   After the iR-M2 is set up as a network printer, you can also ping the name you gave to the iR-M2:

   ping <hostname>

   The server should respond with a message such as

   Reply from <IP address> ...

   Some systems will respond with a continuous display of output from the IP address. To stop the output, type Control-C. You can use the ping command at any time.

TO PRINT TO THE IR-M2

- **On a UNIX system running SunOS 4.x or other BSD-based variant, use the lpr command to send a job to the iR-M2.**
- **On a UNIX system running Solaris 2.x or any System V implementation of UNIX, use the lp command to send a job to the iR-M2.**
- **Windows NT 4.0/2000/XP users with the TCP/IP protocol loaded can send print jobs to the iR-M2 from their applications or from a command prompt.**

  When Windows NT 4.0/2000/XP users print from applications, they can set print options with the driver but not from the UNIX command line.

Managing print jobs

UNIX network administrators can use UNIX utilities for viewing the list of jobs, and for printing and removing jobs that are spooled on UNIX servers. If the network includes a Windows workstation that has TCP/IP protocols loaded, you can use Command WorkStation or Fiery Downloader™ to download fonts and files.

You can also use the job management tools to manage jobs from remote workstations. For more information, see the *Job Management Guide*.

Even without the Fiery utilities, you can:

- Set up the iR-M2 to print a log of printed jobs automatically after every 55 jobs (see Job Log Setup on page 4-55).
- Print a Job Log manually at any time from the Command WorkStation Functions menu (see the *Job Management Guide*).

Chapter 3: Preparing for iR-M2 Setup

To prepare for printing at your site, you must do some initial iR-M2 configuration, or Setup, to specify the network environment and the kind of printing you will do. Before you perform Setup, you must decide the levels of access you will implement for your site. Administrators and operators must also understand how iR-M2 system software is structured in order to configure and use the iR-M2 system correctly.

Levels of access and control

When you configure the iR-M2 during Setup, you (as system administrator) implement a particular level of control by enabling or not enabling print connections, passwords, and access to WebTools. The level of control you implement can range from minimum to moderate to maximum—or none at all.

- Minimum control might be appropriate for a small site where anyone on the local network can control all printing and iR-M2 functions. Although there may be an administrator or operator charged with certain duties, all users have equal access to the system and job management tools.
- Maximum control might be appropriate for a high-volume printing environment where an administrator or operator controls the job flow and all printing; jobs sent by users are spooled (stored) to the iR-M2 disk until the operator decides it is time to print them. In addition, only the administrator and operator have access to job management tools. We recommended this level of control.

NOTE: The term "job management tools" is used in this manual to refer to Command WorkStation, and Fiery WebSpooler™.

iR-M2 print connections

The iR-M2 supports three print connections: Hold queue, Print queue, and Direct connection. These print connections can be enabled, or "published," to users on the network when you configure Printer Setup. All published connections are constantly checked for the presence of jobs. The Print queue and Direct connection give remote users more direct access to the iR-M2 than the Hold queue. Therefore, do not publish the Print queue and the Direct connection in environments where maximum control is desired.

In addition, you can enable the Printed queue, which is a storage area for the most recent jobs from the Print queue. The Printed queue makes it convenient to reprint those jobs. In Setup, you can enable the Printed queue and specify the maximum number of jobs retained in the queue (see page 4-14). Reprinting jobs in the Printed queue requires the job management tools.

To use the Fiery utilities and WebTools, you must enable at least one of the print connections.

Hold queue

Jobs sent to the Hold queue are spooled to the iR-M2 hard disk for printing at a later time or for reprinting. Because the Hold queue is a storage place, jobs sent to it cannot proceed through the printing process until the operator intervenes using the job management tools (see the *Job Management Guide*).

Print queue

This is the standard iR-M2 queue. Jobs sent to the Print queue are processed and printed in the order they are received. Jobs prioritized by an operator with the job management tools and jobs sent via the Direct connection can take priority over jobs sent to the Print queue.

Direct connection

The Direct connection transmits jobs directly to the iR-M2, but only when the iR-M2 is Idle. If the iR-M2 is busy, the job remains at the user workstation until the iR-M2 is ready. The job is then processed as soon as the previous job is finished and before the next queued job is processed.

Jobs sent to the Direct connection are not stored on the iR-M2 hard disk, and cannot be selected for reprinting, moving, or deletion. Therefore, the Direct connection provides a measure of security for sensitive files. Jobs sent to the Direct connection *do* appear in the Job Log, for accounting purposes.

NOTE: To download fonts to the iR-M2, you must publish the Direct connection.

Passwords

You can implement passwords as a means of controlling access to iR-M2 functions. The iR-M2 allows you to set the following passwords in Setup:

- Administrator—from the Control Panel or Command WorkStation
- Operator—from Command WorkStation or WebSetup

NOTE: By default, *no* passwords are set on the iR-M2. If you do not specifically set passwords, all users will have administrator privileges, which include access to important functions such as Setup (including setting passwords), and job control. We *strongly recommend* that you set *at least* an Administrator password to protect the iR-M2 from random or accidental changes to Setup.

Administrator privileges

Administrator control, which confers control of Setup, is the highest level of control, since the person who has access to Setup can control the printing and job management environment. Administrator privileges include publishing print connections, setting passwords, deleting fonts, controlling print jobs from the job management tools, overriding job settings, clearing the iR-M2 of all job data, and setting default values for print options.

When performing a function from the iR-M2 Control Panel that prompts you for the Administrator password, you must enter it promptly. Otherwise, the iR-M2 Control Panel returns to Idle, and you must start over again.

Operator privileges

Operator control includes control of print jobs from the job management tools, including the ability to override job settings.

Guest privileges (no password)

No password is needed for a user to log in as a Guest from the job management tools. A Guest can view the status of active jobs but cannot make changes to jobs or to the iR-M2 state.

WebTools

The iR-M2 can support Internet or intranet access with WebTools from Windows computers. To enable use of WebTools, you must do the following in Setup:

- Enable TCP/IP.
- Set an IP address, subnet mask, and gateway address for the iR-M2.
- Enable Web Services.

For more information, see Chapter 6.

You can set passwords to control access to WebTools features. If you do not specifically set these passwords, all users have access to all WebTools functions (see page 3-3). WebTools include Status™, WebSpooler, WebLink™, and WebSetup™.

Status

The Status WebTool provides you with current information on the jobs processing and printing on the iR-M2. It is not affected by passwords. For more information, see the *Printing Guide*.

WebSpooler

The WebSpooler interface is very similar to that of Command WorkStation. It allows remote users to preview, manipulate, reorder, reprint, and delete jobs currently spooling, processing, or printing on the iR-M2. It also allows the administrator and operator to edit and merge jobs (Thumbnails A and B) and view, print, or delete the Job Log.

WebSpooler access can be controlled by setting an Operator password in Setup. If you set a password, only users with that password can manipulate jobs from WebSpooler. A user who does not have the password can still log in to WebSpooler as a Guest with view-only access (see page 3-3). For more information, see the *Job Management Guide*.

WebLink

WebLink provides all users with a link to an address on the Internet. To change the WebLink Internet address, see page 6-3. This function requires the Administrator password, if one has been set (see "Passwords" on page 3-3).

NOTE: If you do not set the Administrator password, any user can change the WebLink address, which affects all users. For this reason, we *strongly recommend* that you set an Administrator password.

WebSetup

WebSetup allows you to view and modify iR-M2 Setup options from a remote workstation. For more information, see Chapter 5.

NOTE: WebSetup is supported on Windows computers only.

Control level scenarios

Typical scenarios of access and control, ranging from minimum control to maximum control, are described in this section. Choose the scenario that best matches your site requirements, and then refer to the corresponding number in the table for guidance on how to configure your system for those requirements.

NOTE: We *strongly recommend* that you set *at least* an Administrator password to prevent unauthorized changes to system settings.

1. **No designated administrator or operator (Minimum control—*not recommended*)**

   All users have equal access to all system functions including Setup, clearing the iR-M2, deleting printer fonts, setting the WebLink address, printing to all iR-M2 print connections, and managing all jobs from the job management tools.

2. **An administrator but no operator**

   Only an administrator can perform Setup, and other administrator functions, but all other system functions are accessible to all users, including printing to all iR-M2 print connections, and managing all jobs from the job management tools.

3. **An administrator and an operator**

   Only an administrator can perform Setup, and other administrator functions, and only an operator or administrator can control jobs from the job management tools. Users can print to all iR-M2 print connections.

4. **An administrator and an operator; no WebTool access**

   Only an administrator can perform Setup, and other administrator functions, and only an operator or administrator can control jobs from the job management tools; users can print to the Hold queue and Print queue, but not to the Direct connection; the operator controls all job flow, but jobs sent to the Print queue may not require operator intervention; no access to WebTools.

5. **An administrator and an operator; operator controls all jobs; no WebTool access (Maximum control)**

   Only an administrator can perform Setup, and other administrator functions, and only an operator or administrator can control jobs from the job management tools; users can print only to the Hold queue; the administrator and the operator have complete control of job flow; no access to WebTools.

Use these settings in Setup	1 (Minimum)	2	3	4	5 (Maximum)
Enable Direct connection	√	√	√		
Enable Print queue	√	√	√	√	
Enable Web Services	√	√	√		
Set an Administrator Password (*strongly recommended*)		√	√	√	√
Set an Operator password			√	√	√

About Setup

Setup configures the iR-M2 to communicate with other devices and manage print jobs. You must perform Setup the first time you turn on the iR-M2 after new system software is loaded, or any time Server software is reinstalled. An initial Setup using default settings is adequate for allowing users to print to the iR-M2 and use the WebTools. When your network or user printing environment changes, you can change Setup options accordingly.

The first time you perform Setup, you must use the iR-M2 Control Panel. Configure, at a minimum, Server Setup, Network Setup, and Printer Setup, in that sequence. After the initial Setup, you can change Setup options from the Control Panel (page 4-3) or Command WorkStation (page 5-1). Most Setup options can be set using any of these methods.

If you do not configure the remaining Setups, the iR-M2 uses default settings. You need to make settings appropriate for the printing environment at your site.

Network server setup requirements

For Token Ring, Novell, and Windows NT 4.0/2000 (using TCP/IP) networks, you must configure the network servers for printing to the iR-M2 *before* you configure iR-M2 network settings in Setup. For chapter references to information about network server Setup, see the diagrams in Chapter 1.

To configure network settings in Setup, you must have a live network connection, so the iR-M2 can query the network for zones, servers, and server-based queues.

Whenever the configuration of the iR-M2, the copier/printer, or the network itself changes at your site, you can alter individual settings to correspond to the changed environment. Changing network or port settings may require that you make changes to other Setup options, as well.

NOTE: You must configure the iR-M2 with the correct Windows NT/2000 domain name. This is especially important for Windows printing, also known as SMB printing.

NOTE: The iR-M2 does not support the Windows 2000 Active Directory Service. When you use the iR-M2 in a Windows 2000 server environment, assign the iR-M2 to a Domain or Workgroup.

Ensuring the copier/printer connection

Complete the following steps *before* you configure the iR-M2 and the workstations that will print to the iR-M2. A service technician will have performed some initial installation.

TO PREPARE FOR iR-M2 CONFIGURATION

1. **Print a copier/printer Test Page to verify the copier/printer is functioning normally.**
2. **Turn off the copier/printer and connect the interface cable from the copier/printer to the iR-M2.**
3. **To confirm this connection, turn on the copier/printer and the iR-M2, and print a Test Page from the iR-M2 Control Panel.**

   To print a Test Page, press the Menu button on the Control Panel to display the Functions menu. Choose Print Pages, and then choose Test Page.
4. **With both the copier/printer and the iR-M2 turned off, connect the network cable to the iR-M2, as described in Chapter 1.**

   The network should already be installed and operational.
5. **Turn on the copier/printer and then the iR-M2.**
6. **Proceed to iR-M2 Setup, described in Chapter 4.**

Chapter 4: Performing Setup from the Control Panel

Setup is required the first time the iR-M2 is turned on after new system software is loaded. In this initial Setup, you (or the service technician who loads the software) choose the language to use for iR-M2 Control Panel menus and messages. If you do not configure a particular Setup option, the iR-M2 uses default settings. Make sure the settings are appropriate for the printing environment at your site.

iR-M2 Setup from the Control Panel

Setup performed from the Control Panel configures the iR-M2 to communicate with other devices and manage print jobs sent to it.

Setup provides these groups of options:

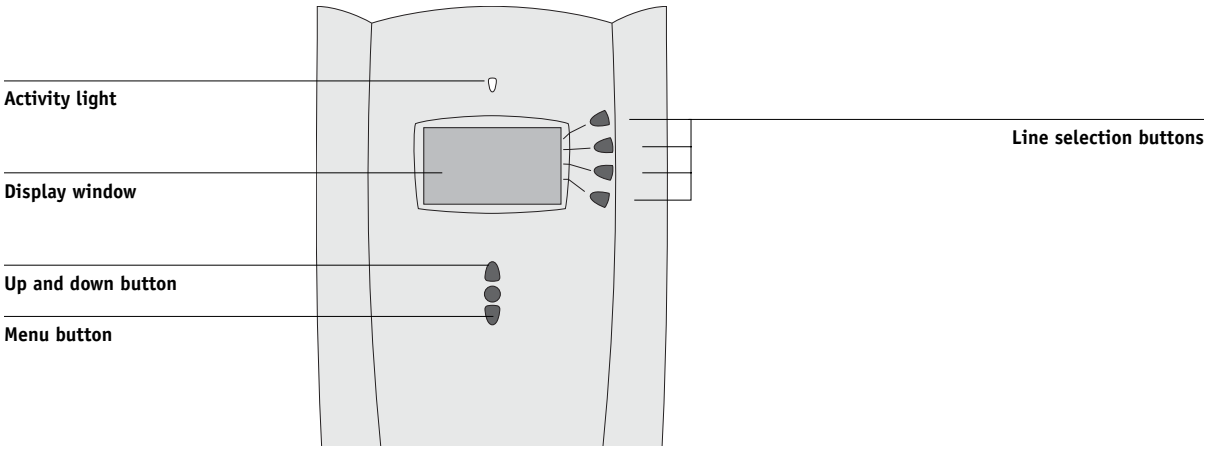
- Server Setup to specify system options
- Network Setup to specify all the active network systems that transmit print jobs to the iR-M2
- Printer Setup to specify how print jobs and queues are managed
- PS Setup to specify PostScript settings
- PCL Setup to specify PCL settings
- Print Form Setup to specify for printed output
- Job Log Setup to specify how the iR-M2 handles its log of printed jobs

The Change Password option in the Setup menu allows you to create and change the Administrator password on the iR-M2.

The Control Panel on the front of the iR-M2 allows you to set options and view information about jobs printed to the iR-M2. It comprises the following parts:

- Activity light—indicates normal or problem activity
- Line selection buttons—select a setting and proceed to the next option
- Display window—shows status information and options for setting up the iR-M2
- Up and down arrow buttons—scroll menus, options, and settings
- Menu button—cancels without saving changes; also toggles to the Functions menu

iR-M2 Control Panel



iR-M2 Control Panel

Use the iR-M2 Control Panel to view status information, print special pages, and set up printing. While most elements in the Control Panel display have counterparts in Command WorkStation, you can view current functions on the Control Panel even when Command WorkStation is not connected to the server or is not running.

The Control Panel is located on the front of the iR-M2.

Safety warnings

The iR-M2 display window is a liquid crystal display (LCD) made of glass, and it can break. Do not subject it to strong shocks.

If the display window breaks and the liquid crystal material leaks out, do not inhale, ingest, or touch it. If the material gets on your skin or clothing, wash it off with soap and water immediately.

Do not touch or put pressure on the display window. This will change the color of the window.

Activity light

The activity light indicates the current iR-M2 activity. If the light is:

Solid red	An error has occurred, causing the iR-M2 to be disabled.
Flashing red	An error has occurred, causing printing to be disabled, but the iR-M2 is capable of processing.
Solid green	The iR-M2 is idle.
Flashing green	The iR-M2 is processing or printing a job, or communicating with a remote computer.
No light	The iR-M2 is off or starting up.

Buttons

Line selection buttons	Use these buttons to select the command displayed on the corresponding line of the display window. When a button is active, a special character (>) appears in the display window next to the button.
Up and down arrow buttons	Use these buttons to scroll to different screens in multi-screen lists, select Setup options from a list of available options, and scroll through alphanumeric characters.
Menu button	Press this button to view other screens. Under normal operation, the Control Panel displays the Info, RIP, or Print Status screen with information about the status of the iR-M2. If you press the Menu button, the Functions menu is displayed and you can perform additional operations (see page 4-7). If a job is processing or printing, press the Menu button to cycle among the active screens.
Power button	Press this button to turn the iR-M2 on and off.
Reset button	Press this button to restart the iR-M2 after you have chosen Shut Down System from the Shut Down menu.

Display window

The display window provides information about the status of the iR-M2, displays menu information, and allows you to view and edit information in the Setup menus.

The status area at the bottom of the display window displays the screen name and highlights one of the icons to indicate what the iR-M2 is doing. Only the icons for the screens currently available appear. The Menu button cycles through the active screens.

The screens are:

Alert Status — If there is a problem with processing a job or printing functions, an error message appears on the Control Panel. For information on error messages, see Appendix B.

Print Status — When the iR-M2 is printing a job, the Print Status screen appears. This screen displays the following:

Cancel Job—Press the top line selection button to cancel the job currently printing.

User name—The name of the user who sent the job currently processing.

Pages/Total—The number of copies of the current job printed and the total number of copies of the job requested.

RIP Status — When the iR-M2 is processing a job, the RIP Status screen appears. This screen displays the following:

Cancel Job—Press the top line selection button to cancel the job currently processing. The iR-M2 cancels the job before printing begins.

Job name—The name of the document currently processing.

User name—The name of the user who sent the job currently processing.

Kilobytes—The size (in kilobytes) of the job processed so far.

NOTE: This number is always displayed in kilobytes; for example, 10MB is displayed as 10000KB.

Info Status

When the iR-M2 is not processing or printing a job, it displays information about the current server and software:

Server Name—The iR-M2 name, as it is configured in Setup.

Status—The current status of the iR-M2. The iR-M2 status can be: Idle, Initializing, Busy, Processing, or Printing.

Megabytes—The space (in megabytes) available on the iR-M2 hard disk, for example, 756MB.

Version—The system software version running on the iR-M2.

Functions

You can press the Menu button to display the Functions menu. Use the up and down arrow buttons to scroll through the list. Press the line selection button to the right of a command to select that command. For more information, see page 4-7.

Network

The Network icon appears at the lower left of any of the other screens when a job is being sent to the iR-M2 over the network or through the parallel port. The Network icon also appears, together with a flashing green activity light, when a remote utility is running.

Functions menu

The Functions menu provides many of the options available from Command WorkStation. Choose the following commands from this menu:

Print Pages

Print special pages from the iR-M2. You can print the following pages from the submenu that appears:

PS Test Page/PCL Test Page—A Test Page allows you to confirm that the iR-M2 is properly connected to the copier/printer. Settings on the Test Page may include: Server Name, Printer Model, and date and time the Test Page was printed.

Configuration—Prints the Configuration page, which gives the current server and device configuration. This page lists general information about the hardware and software configuration of the iR-M2, the current options for all Setup settings, and the Ethernet and Token Ring addresses of the iR-M2.

Job Log—Prints a log of the last 55 jobs. For information on the fields in the Job Log and on printing it in other forms, see the *Job Management Guide*.

Control Panel Map—Prints the Control Panel Map, which is an overview of the screens you can access from the Control Panel.

PS Font List/PCL Font List—Prints a list of all fonts currently on the iR-M2 hard disk.

Suspend Printing	Suspend communication between the iR-M2 and the copier/printer. You *must* suspend printing if you want to interrupt the current iR-M2 job and use the copier/printer to make copies or print another job first. Jobs continue to process on the iR-M2. After you make the copies, chose Resume Printing to continue printing jobs from the iR-M2.
Resume Printing	Resume communication between the copier/printer and the iR-M2 after you have finished making copies or printing other jobs.
Shut Down	Shut down all iR-M2 activity in the correct manner and then restart. Use this option instead of the power switch on the back of the iR-M2. The following options are available from the submenu that appears: Restart Server—Restarts the server without shutting down the iR-M2 hard disk. Shut Down System—Shuts down the iR-M2 hard disk. Reboot System—Restarts the system after shutting down the iR-M2 hard disk.
Clear Server	Clear all jobs in all server queues, as well as all jobs archived on the iR-M2 hard disk, the index of archived jobs (in the Archive window), all EFI Fiery FreeForm masters, and the index of FreeForm masters (in the FreeForm window). Consult with your administrator or operator before choosing Clear Server. If an Administrator password has been set, you must enter it to access Clear Server.
Factory Defaults	Return the iR-M2 to its default factory settings. It also clears all queued jobs from the iR-M2.
Run Setup	Enter the Setup menu and change Setup option settings.

Accessing Setup options

To access Setup when the iR-M2 is at Idle

1. **Make sure the information screen on the Control Panel reads Idle.**

   If Printing or RIPping appears, the iR-M2 is processing, and you must wait until the system finishes and reaches the Idle state.

2. **Press the Menu button on the Control Panel to go to the Functions menu.**

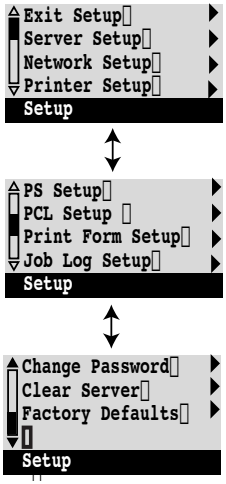
3. **Scroll down with the down arrow button and press the line selection button next to Run Setup.**

   If an Administrator password has been set on the iR-M2, you are prompted to enter it before you can perform Setup (see page 7-2).

4. **When prompted, confirm your choice to proceed to Setup.**

5. **Press the line selection button to choose a Setup menu or command.**

   Use the down arrow button to view the remaining screens of the main Setup menu.



6. **Perform Server Setup, Network Setup, and Printer Setup, in that order.**

   This is the minimum required for initial Setup. Later, you can complete the remaining Setups, either from the Control Panel or a Windows computer.

7. **Set an Administrator password to protect your Setup from unauthorized changes.**

   Review the settings described in this chapter.

About the Control Panel Setup interface

When you perform Setup from the Control Panel, you can select one menu after another and enter information about your iR-M2 and your network and printing environment.

In each Setup screen, the last line of the display window shows the name of the current Setup menu. Most of the menus you see are shown on the Control Panel Map, a flowchart you can print from the Control Panel.

To print the Control Panel Map

1. **At the Control Panel, press the Menu button to access the Functions menu.**
2. **Press the button next to Print Pages.**

   The display window displays the first four types of pages you can print. To see the remaining types of pages, press the down arrow button.
3. **Press the button for Control Panel Map.**

Types of Setup screens

There are two types of Setup options:

Multiple choice questions

You are given choices (for example, Yes or No, or a list of options from which to choose). Only one choice is displayed at a time, in highlighted text. The currently selected (or default) value appears first.

Use the up and down arrow buttons to scroll through the choices, and choose OK when the correct information is displayed.

Information entry options

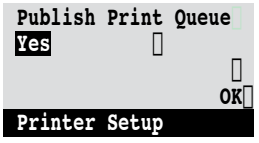
You must specify the information for your site (the printer name or IP address). Use the up and down arrow buttons to scroll through the alphanumeric symbols to make your selection.

The cursor position is highlighted, and two of the line selection buttons become left and right arrow buttons. Arrows appear on the display window next to the corresponding buttons. Use these buttons to move between positions for entering information.

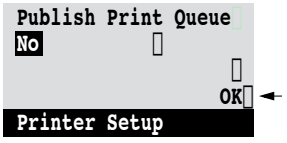
NOTE: When you enter text, enter it from left to right, as the left arrow button acts as a Delete key as well as a cursor-moving key. This is indicated in the display window by the Delete symbol (⌫).

The following section provides three specific examples of these types of Setup options.

Example: Multiple choice



Press the up or down arrow buttons to display the other option or options.



When the setting you want appears, press the button beside OK to continue.

Example: Information entry with fields

From the starting position, press the right arrow button to move the cursor to the right

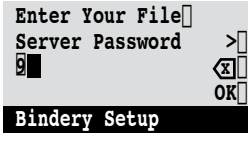
The next field is selected. Press the up or down arrow buttons to change the number.

When the correct number is displayed, press the right arrow button to move to the third field. Press the left arrow button to go back and edit, or press OK to select the choice and continue.

Example: Information entry with individual characters

From the starting position, press the up or down arrow buttons to enter the first character.

When the correct character appears, press the right arrow button to move the cursor to the next position.



Press the up or down arrow buttons to enter a character in the second position.
The Delete button erases the current character and moves the cursor to the left.
Pressing OK enters what is currently displayed.

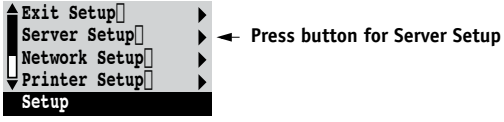
NOTE: If you make a mistake during Setup, you can always use the Menu button to cancel without saving changes. Pressing the Menu button cancels what you are doing in the current screen to bring you to the next higher-level menu. You may need to press

Menu more than once to return to the top level for the particular Setup in which you are working. Once at the top level, you can enter a Setup menu again, or exit without making changes.

When you have entered the settings, you need to save the changes. You are usually prompted to do so. If you choose Yes, your settings overwrite previous settings. If you choose No, your previous settings are retained. If necessary, the iR-M2 restarts after you exit from the Setup menu.

Server Setup options

The Server Setup menu lets you specify system information that pertains to the iR-M2 and all users. To access the menu, follow the instructions on page 4-9.



When you choose Server Setup, the options appear in sequence, as follows. Default values, where applicable, appear in square brackets. Words shown in italics indicate that a product- or site-specific value is displayed.

Server Name
Default server name

Enter a name for the iR-M2 (up to 15 characters long). This name appears in the Chooser on an AppleTalk network.

NOTE: Do not use the device name (iR-M2) as the server name. Also, if you have more than one iR-M2, do not give them the same name. Windows NT 4.0 is not designed to handle two computers with the same name in the same workgroup or domain.

System Date

Enter the correct system date in the standard form for your use. The date appears on the Job Log.

System Time

Enter the correct system time. Enter the time based on the 24-hour clock in the form HH:MM (Hours:Minutes). The time appears on the Job Log.

Print Start Page
Yes/No [No]

Specify whether the iR-M2 should print a start page every time it restarts. The start page displays information about the iR-M2, including the server name, current date and time, amount of memory installed in the iR-M2, network protocols enabled, and connections published.

Use Character Set
Macintosh/DOS/Windows [Windows]

Specify whether the Control Panel and Command WorkStation should use the Macintosh, DOS, or Windows character set for displaying file names. This is important if file names include accented or composite characters (such as é or æ).

For mixed-platform networks, choose the option that gives the best overall representation of the special characters you use.

Enable Printed Queue
Yes/No [Yes]

Specify whether to enable the Printed queue, which creates a storage location on the iR-M2 disk for recent jobs that were printed from the Print queue. Users with Administrator or Operator access to the job management tools can reprint jobs from the Printed queue without resending them to the iR-M2. If you select No, jobs are deleted from the iR-M2 disk immediately after they are printed.

Jobs Saved in Printed Queue
1-99 [10]

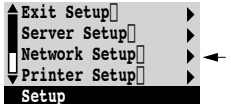
This option appears only if Enable Printed Queue is set to Yes. Specify the number of jobs to be stored in the Printed queue. Jobs in the Printed queue take up space on the iR-M2 hard disk. If disk space is low, use a smaller value for saved jobs.

Save Changes
Yes/No [Yes]

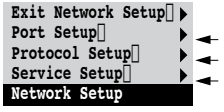
Select Yes to activate any changes made in the Server Setup; select No to return to the main Setup menu without making any changes.

Network Setup options

When you perform network Setup, you configure the iR-M2 to receive print jobs over the network systems that are used at your site.



In the Setup menu, choose Network Setup, where you specify network addresses and names to be used by workstations, servers, and the iR-M2 when they communicate with each other.



The Network Setup menu includes three submenus that allow you to choose port types, protocols, and network services. You must perform Port Setup and enable at least one port.

For each item you enable, you are prompted to enter settings for that item. Default values, where applicable, appear in this manual with square brackets.

You should display and select options only for the network systems that are currently used at your site. If your network requirements change, you can change Network Setup at any time.

If the iR-M2 is configured to enable more than one protocol, it automatically switches to the correct protocol when it receives a print job. When the parallel port and one or two network ports are enabled, print jobs can be received over all of those ports at the same time.

The available network types, and the Setup areas that pertain to them, are summarized in the following table.

For this Network or Connection Type	Use this Port Setup	Use this Protocol Setup	Use this Service Setup
AppleTalk over Ethernet	Ethernet Setup	AppleTalk Setup	AppleTalk printing (PAP) is enabled automatically.
TCP/IP over Ethernet	Ethernet Setup	TCP/IP Setup: Ethernet Setup	LPD Setup Web Services Setup Windows Setup Port 9100 Setup (Windows 2000/XP) IPP Setup (Windows 9x/Me/2000/XP)
IPX/SPX over Ethernet	Ethernet Setup	IPX/SPX Setup	PServer Setup (NDS, Bindery, or both)
Parallel	Parallel Port Setup	—	—

If the Token Ring option is installed, you have these additional options:

For this Network or Connection Type	Use this Port Setup	Use this Protocol Setup	Use this Service Setup
TCP/IP over Token Ring	Token Ring Setup	TCP/IP Setup: Token Ring Setup	LPD Setup Web Services Setup Windows Setup Port 9100 Setup (Windows 2000/XP) IPP Setup (Windows 9x/Me/2000/XP)
IPX/SPX over Token Ring	Token Ring Setup	IPX/SPX Setup	PServer Setup (NDS, Bindery, or both)

To access Network Setup options

1. **Confirm that the network cable is connected to the iR-M2.**

   During Network Setup, the iR-M2 queries the network for zones, servers, and server-based queues. If you perform Network Setup without a connected and functioning network, default settings are used that may not meet your needs.

2. **Choose Network Setup from the main Setup menu.**

3. **Choose Port Setup from the Network Setup menu.**

4. **To use Ethernet, choose Ethernet Setup from the Port Setup menu, and enter the appropriate settings.**

5. **If the Token Ring option is installed, choose Token Ring Setup and enter the appropriate settings.**

6. **To print to the parallel port, choose Parallel Port Setup from the Port Setup menu, and enter the appropriate settings.**

   Note: After setting Enable Parallel Port to Yes, select the print connection to use for parallel port printing in Printer Setup>Parallel Connection. Otherwise you cannot print via the parallel connection.

7. **When you have finished entering port settings, choose Exit Port Setup, and then choose Protocol Setup.**

8. **Enter the appropriate settings for the protocol or protocols you will use.**

9. **When you have finished entering protocol settings, choose Exit Protocol Setup, and then choose Service Setup.**

10. **Enter the appropriate settings for the services you will use.**

    The options are described in detail in the following pages.

4

TO EXIT NETWORK SETUP

1. **When you have finished entering service settings, choose Exit Network Setup.**
2. **Choose Yes when prompted to save changes.**
3. **From the main Setup menu, choose another Setup or choose Exit Setup.**

Port Setup options

You can enable Ethernet and parallel communication simultaneously. If the Token Ring option is installed, you can also enable Token Ring. To configure the iR-M2, choose each port type you use and enter the settings for that port. Since network setups are nested, the names of higher-level menus are shown in this chapter to the left of each menu heading.

Network Setup ▶
Port Setup ▶

Ethernet Setup

Enable Ethernet
Yes/No [Yes]

Select Yes if you have Ethernet cabling connected to the iR-M2.

Ethernet Speed
Auto Detect/100 Mbps/10 Mbps [Auto Detect]

Select Auto Detect if your network environment is mixed or if you do not know the network speed. If you know the speed of the network to which the iR-M2 is attached (10 Mbps or 100 Mbps), select it.

Network Setup ▶
Port Setup ▶

Token Ring Setup

Enable Token Ring
Yes/No [No]

Select Yes if the iR-M2 is to be connected to a Token Ring network.

Token Ring Speed
Auto Detect/16 Mbps/4 Mbps [Auto Detect]

Select Auto Detect if your network environment is mixed, or select the speed (4 Mbps or 16 Mbps) of the network to which the iR-M2 is attached.

Maximum Frame Size
(bytes)
4202/2154/1130/632 [4202]

Select the maximum frame size recommended by the network administrator at your site. If you are uncertain of the setting to use, select the default value (4202).

Enable Source Routing
Yes/No [No]

Select Yes if your network supports source routing.

Parallel Port Setup options

You must enable the parallel port in order to enter the Parallel Port Setup options and print to the parallel port.

Network Setup ▶
Port Setup ▶

Parallel Port Setup

Enable Parallel Port
Yes/No [No]

Select Yes if you want to print through the parallel port. You can connect a single Windows computer to the parallel port and print directly to the iR-M2.

NOTE: Enabling the parallel port does not conflict with using Ethernet or Token Ring communication with the iR-M2.

NOTE: After setting Enable Parallel Port to Yes, select the print connection to use for parallel port printing in Printer Setup>Parallel Connection. Otherwise you cannot print via the parallel connection.

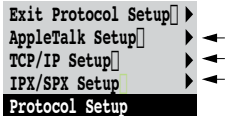
Port Timeout in Seconds
5–60 [10]

This option appears only if Enable Parallel Port is set to Yes. Your setting determines how long (in seconds) the iR-M2 waits without receiving data from the parallel port before deciding that the current job is complete. Until the timeout, the iR-M2 cannot receive new jobs through the parallel port, but it can continue to receive network print jobs.

Ignore EOF Character
Yes/No [No]

This option appears only if Enable Parallel Port is set to Yes. This option specifies that the iR-M2 should ignore end-of-file (EOF) messages in a file. This option must be set to Yes to print PostScript files in binary format (not ASCII); under normal circumstances, it should be set to No. When this option is set to Yes, the iR-M2 uses the parallel port timeout value to determine when the end of the file has been reached. If you experience printing problems, set this option to No.

Protocol Setup options



Network Setup ▶
Protocol Setup ▶

To configure the iR-M2, choose each protocol and enter the settings for that protocol. You can enable AppleTalk, TCP/IP, and IPX/SPX communication simultaneously.

AppleTalk Setup

Enable AppleTalk
Yes/No [Yes]

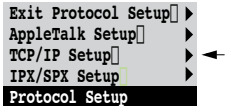
Select Yes if you have an AppleTalk network connected to the iR-M2. This setting enables the iR-M2 to communicate over AppleTalk networks.

AppleTalk Zone
List of zones

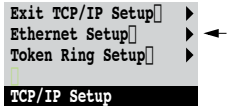
The iR-M2 searches the network for AppleTalk zones in your network segment. Scroll through the list to select the AppleTalk zone in which you want the iR-M2 to appear. If your segment has only one zone, the iR-M2 is assigned to that zone automatically.

The message "No AppleTalk zone found" may mean your network has no zones, or the network cable is not connected (see Appendix B). Choose OK to dismiss the message.

TCP/IP Setup options



To configure the iR-M2 for TCP/IP, choose TCP/IP Setup.



Choose Ethernet Setup and enter the appropriate settings. Choose each network type you use (Ethernet and/or Token Ring) and enter the appropriate settings. Token Ring Setup appears as an option only if you have enabled Token Ring in Port Setup.

NOTE: If TCP/IP is running on *both* an Ethernet and a Token Ring network, it is assumed that the two networks are already routed to each other. The iR-M2 does not function as a router.

NOTE: Concurrent use of Ethernet and Token Ring is not supported on the iR-M2.

When you set an IP address, subnet mask, or gateway address for the iR-M2 during Setup, you can allow the iR-M2 to get these addresses automatically from a DHCP, BOOTP, or RARP server. First, turn on or restart the iR-M2 and allow it to reach Idle. Make sure the DHCP, BOOTP, or RARP server is running and then perform iR-M2 Setup.

TCP/IP Setup with Ethernet

Network Setup ▶
Protocol Setup ▶
TCP/IP Setup ▶

Ethernet Setup

Enable TCP/IP for Ethernet
Yes/No [Yes]

Select Yes if you have a TCP/IP network connected to the iR-M2 over Ethernet cabling.

If you use Token Ring, enabling TCP/IP for Token Ring is required for enabling WebTools.

NOTE: If you are using TCP/IP for printing from Windows computers, enabling TCP/IP here also enables you to use Fiery utilities from Windows computers using TCP/IP protocols.

Enable Auto IP Configuration
Yes/No [Yes]

Select Yes to allow the iR-M2 to obtain its Ethernet IP address by searching the network. Depending on your network and the protocol you select in the following option (DHCP, BOOTP, or RARP), the IP address can change. Select No to assign the iR-M2 a static IP address. If you select No, you proceed to the IP Address option, where you manually set the IP address.

Select protocol
DHCP/BOOTP/RARP [DHCP]

This option appears only if you answered Yes to Enable Auto IP Configuration. Select the protocol over which the iR-M2 should search for its IP address. Both DHCP and BOOTP allow the iR-M2 to obtain the Ethernet IP address and Subnet Mask automatically. RARP obtains only the Ethernet IP address.

Depending on your network, the iR-M2 might be assigned a different address after you restart the iR-M2. With the DHCP setting, the iR-M2 can be assigned a different address even if it is not restarted. Make sure the network is already configured properly for the protocol you select.

Get Gateway Address Automatically
Yes/No [Yes]

Use this option to assign the gateway address automatically for printing with TCP/IP. This option appears only if you selected DHCP or BOOTP as the protocol in the previous option.

If you select a DHCP or BOOTP protocol and later change it to RARP, you must return to Setup and set this option to No. You can then set the address manually. RARP does not support automatic assignment of the gateway address.

IP Address
[127.0.0.1]

Enter the iR-M2 IP address for Ethernet. This IP address, unlike an IP address set automatically, remains the same if you restart the iR-M2. You must change the default to a valid address for your network. For information about setting up printing with TCP/IP, see Chapter 2.

Subnet Mask
This option lets you modify the subnet mask for printing with TCP/IP over Ethernet. To set the subnet mask, enter one of the following values:

- 255.0.0.0 if the IP address starts with a number less than 128
- 255.255.0.0 if the IP address starts with a number from 128 through 191
- 255.255.255.0 if the IP address starts with a number greater than 191

NOTE: Confirm the subnet mask setting with your network administrator before proceeding. In some cases, the required setting may be different from that listed.

Gateway Address
[127.0.0.1]

This option appears only if you answered No to Get Gateway Address Automatically, or if you selected RARP as the protocol.

Use this option to set the gateway address for printing with TCP/IP. If your network uses a gateway, you must change the default to a correct gateway address for your network.

TCP/IP Setup with Token Ring

Enable TCP/IP for Token Ring, and enter the IP address and subnet mask. If your TCP/IP network has a gateway and users outside the gateway plan to print to the iR-M2 using TCP/IP, enter the gateway address.

Network Setup ▶
Protocol Setup ▶
TCP/IP Setup ▶

Token Ring Setup

Enable TCP/IP for Token Ring
Yes/No [Yes]

Select Yes if you have a TCP/IP network connected to the iR-M2 over Token Ring.

If you use Token Ring, you must enable TCP/IP for Token Ring in order to enable WebTools.

NOTE: If you are using TCP/IP for printing from Windows computers, enabling TCP/IP here also lets you use the Fiery utilities from Windows computers using TCP/IP protocols.

Enable Auto IP Configuration
Yes/No [Yes]

Select Yes to allow the iR-M2 to obtain its Token Ring IP address. Depending on your network and the protocol you select in the following option (DHCP or BOOTP), the IP address can change. Select No to assign the iR-M2 a static IP address that will not change. If you select No, proceed to the IP Address option, where you manually set the IP address.

Select protocol
DHCP/BOOTP [DHCP]

This option appears only if you answered Yes to Enable Auto IP Configuration. Select the protocol over which the iR-M2 should search for its IP address. Both DHCP and BOOTP allow the iR-M2 to obtain the Token Ring IP address and Subnet Mask automatically.

Depending on your network, the iR-M2 might be assigned a different address after you reboot the iR-M2. With the DHCP setting, the iR-M2 can be assigned a different address even if it is not rebooted.

Make sure the network is already configured properly for the protocol you select.

Get Gateway Address Automatically
Yes/No [Yes]

Use this option to get the gateway address automatically for printing with TCP/IP. This option appears only if you selected DHCP or BOOTP as the protocol in the previous option.

If you select a DHCP or BOOTP protocol and later change it to RARP, you must return to Setup and set this option to No. You can then set the address manually. RARP does not support automatic assignment of the gateway address.

IP Address
[127.0.0.1]

Enter the iR-M2 IP address for Token Ring. This IP address, unlike an IP address set automatically, remains the same if you restart the iR-M2. You must change the default to a valid address for your network. For information about setting up printing with TCP/IP, see Chapter 2.

Subnet Mask
[255.255.255.0]

This option lets you modify the subnet mask for printing with TCP/IP over Token Ring. To set the subnet mask, enter one of the following values:

- 255.0.0.0 if the IP address starts with a number less than 128
- 255.255.0.0 if the IP address starts with a number from 128 through 191
- 255.255.255.0 if the IP address starts with a number greater than 191

NOTE: Confirm the subnet mask setting with your network administrator before proceeding. In some cases, the required setting may be different from that listed.

Gateway Address
[127.0.0.1]

This option appears only if you answered No to Get Gateway Address Automatically.

Use this option to set the gateway address for printing with TCP/IP. If your network uses a gateway, you must change the default to a correct gateway address for your network.

DNS Setup

The iR-M2 supports the copiers/printers features called “Sending Methods” or “Remote/Cascade Copying.” You can send jobs to the copiers/printers and specify your choice of settings for these features at the copiers/printers Touch Panel Display.

You first need to set up this option to use these features.

Enable DNS
No/Yes [No]

Select Yes if you have a DNS server connected to your network.

Get DNS address automatically
No/Yes [No]

Select Yes to allow the iR-M2 to obtain its DNS IP address by automatically. Select No to assign the iR-M2 a static IP address, which will not change. If you select No, you proceed to the Primary DNS server IP address option, where you manually set the IP address.

NOTE: Confirm the DNS server IP address assigned to the copier/printer in your network in advance.

Primary DNS server IP address
[255.255.255.255]

Enter the DNS server IP address assigned to the copier/printer on the network.

Domain Name

Enter the domain name of your DNS server.

Host Name

Enter the host name of your DNS server.

Choose Exit Setup from the main Setup menu when you have finished making Setup changes. The iR-M2 will restart. All changes will be saved on restart.

NOTE: If you want to use sending or remote/cascade copying functions, you may also need to change the WINS name server settings specified in the Windows Setup>Service Setup>Network Setup. However, setting up the WINS name server is outside the scope of this document. For more information on setting up a WINS name server, contact your network administrator.

NOTE: After setting up the DNS Setup options and WINS name server settings, turn off and on the copier/printer for the settings to take effect. Make sure the status message on the iR-M2 Control Panel reads Idle when turning off the copier/printer.

Refer to the corresponding copier/printer documentation for more information on how to use these features.

NOTE: You can send your print job to a Windows server or an FTP server only. Select Windows (SMB) for a Windows server or FTP for an FTP server from the Protocol drop-down list on the Send screen. When selecting FTP, enter 21 for the port number.

Port Setup

Use Port Setup to control packets received from a specified port.

NOTE: If all ports are closed, no port will respond to a port scanned from an external network.

Network Setup ▶
Protocol Setup ▶
TCP/IP Setup ▶
Port Setup ▶

Port Setup

Port Setup allows you to close unnecessary ports and help reject inbound access from the network.

NOTE: All ports not listed in the following setup options are closed.

Supported protocols are listed after the port number in parenthesis.

SMTP Setup

Enable 25 (SMTP)
No/Yes [Yes]

Select Yes to enable the 25 (smtp) port.

SNMP Setup

Enable 161-162 (SNMP)
No/Yes [Yes]

Select Yes to enable the 161-162 (snmp) ports.

NOTE: If port 161 and 162 (SNMP) are closed, the SNMP communication over TCP/IP is disabled, but SNMP communication over IPX is possible.

LPD Setup

Enable 515 (LPD Fiery Tools)
No/Yes [Yes]

Select Yes to enable the 515 (lpd) port (Command WorkStation and WebTools).

EFI Ports Setup

Enable EFI Ports
No/Yes [Yes]

Select Yes to enable EFI ports 8021-8022 (Fiery utilities and printer driver Two-Way communication feature).

Canon Ports Setup

Enable Canon Ports
No/Yes [Yes]

Closing this port will control access to the copier/printer network functions, as well as to the printer driver functions, while the iR-M2 performs basic printing.

We recommend that the port be opened for uncontrolled access to the copier/printer network functions.

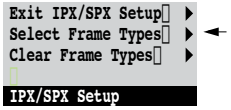
IPX/SPX Setup options

To specify the frame types the iR-M2 uses for IPX/SPX protocols, choose IPX/SPX Setup from the Protocol Setup menu. You must choose at least one frame type to enable IPX/SPX protocols. The iR-M2 supports the following frame types for IPX/SPX:

- For Ethernet—Ethernet 802.2, Ethernet 802.3, Ethernet II, and Ethernet SNAP
- For Token Ring—Token Ring and Token Ring SNAP

For protocols other than IPX/SPX, the frame type is automatically enabled and does not require setup, as follows:

With this protocol	And these printing services	This frame type is automatically enabled
AppleTalk	PAP (Printer Access Protocol)	Ethernet SNAP
TCP/IP with Ethernet	LPD (Line Printer Daemon)	Ethernet II
TCP/IP with Token Ring	LPD (Line Printer Daemon)	Token Ring SNAP

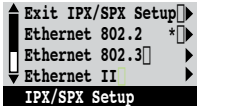


Select Frame Types

Enable IPX Auto Frame Type
Yes/No [No]

Specify whether the iR-M2 should try to bind to all available frame types automatically. The iR-M2 does so whether or not all frame types are appropriate. To determine the frame types that were successfully bound, save your changes, exit Setup, restart the iR-M2, and print a Configuration page. The Configuration page lists only one of the frame types that were successfully bound.

If you answer No to this option, you can select frame types manually. You must choose at least one frame type to enable IPX/SPX protocols.



The frame selection screen allows you to make multiple selections. Depending on your Port Setup selection, only Ethernet frame types, only Token Ring frame types, or all frame types are displayed.

Press the line selection button beside each frame type used on your IPX/SPX network. An asterisk (*) appears beside each selected frame type. Press the line selection button again to cancel a selected frame type. Use the up and down arrow buttons to scroll to additional frame types. The iR-M2 binds to each frame type as you select it.

When you have selected all the frame types used, choose Exit IPX/SPX Setup.

Clear Frame Types

You can clear all frame types at once by choosing Exit IPX/SPX Setup, choosing IPX/SPX Setup, and then choosing Clear Frame Types.

Service Setup options

PServer is a program in the iR-M2 software that can service the Novell print queues assigned to the Novell print servers you have set up for printing to the iR-M2. When you choose PServer Setup and enable PServer, you can set up NDS (Novell Directory Services), Bindery Services, or both. NDS is used with NetWare; Bindery Services are used with NetWare in bindery emulation mode.

LPD Setup options

Network Setup ▶
Service Setup ▶
LPD Setup ▶

Enable LPD
Yes/No [Yes]

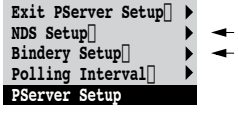
Select Yes to allow lpd printing. For more information, see "Setting up the iR-M2 on TCP/IP networks" on page 2-18.

PServer Setup options

Network Setup ▶
Service Setup ▶
PServer Setup ▶

Enable PServer
Yes/No [No]

Select Yes if you have a Novell network connected to the iR-M2.



Choose NDS Setup if your network uses NetWare in native mode. Choose Bindery Setup if your network uses NetWare in bindery emulation mode.

If your network uses *both* NDS and Bindery, set up NDS first. If you set up NDS after Bindery, you will overwrite Bindery Setup.

If your network uses both NDS and Bindery, and uses NetWare servers in bindery emulation, note that the iR-M2 cannot service NDS and bindery emulation servers on the same NDS tree.

Network Setup ▸
Service Setup ▸
PServer Setup ▸

NDS Setup

Before entering NDS settings, make sure the iR-M2 is connected to the network and that you have configured an NDS directory tree with a Printer, Print Server, and one or more Print Queue objects for iR-M2 jobs (see page 2-13). To perform NDS Setup, you may need permission to browse the NDS tree. If access to the Print Server is restricted, you need a login password.

The main objective of NDS Setup is to specify the Print Server object. In addition, you can indicate the location of the iR-M2 print queues.

NOTE: The terms NetWare server, Novell server, and IPX server are in common use and are used here interchangeably to mean the server on an IPX network running Novell NetWare networking software.

Enable NDS
Yes/No [No]

Select Yes if the NetWare servers you will use to print to the iR-M2 are running NetWare in native mode.

Select NDS Tree
List of trees

Use the up and down arrow buttons to browse the list of NDS trees available to the iR-M2. Choose OK when you have displayed the tree that contains the Printer, Print Server, and Print Queue objects you previously defined for the iR-M2.

Your new NDS tree selection automatically overwrites any previous tree selection. If you change the NDS tree selection and there are also current Bindery settings, you are alerted that they will be deleted. If you continue with NDS Setup, you can replace Bindery settings later. If you do not want to continue, press the Menu button to exit NDS Setup.

Is user login needed to browse NDS tree? Yes/No [No]

Select No if no password is required to browse the tree. You can proceed to navigate to the Print Server object.

Select Yes if network permissions require that you log in to browse the NDS tree and see the Print Server object you want to select. If you select Yes, you are prompted to navigate to the User Login object.

Navigate the NDS tree to the User Login object.

This message is displayed if you selected Yes for the previous option. Choose OK and browse the NDS tree, as described in the following paragraphs.

NDS Tree name Object list, "..."

Browsing to find the User Login object begins with the NDS tree that you selected previously (with Select NDS Tree). Use the up and down arrow buttons to scroll through a list of objects in the tree beneath the [Root] in the hierarchy, or use the navigation symbol ".." to go up one level at a time.

In each subsequent browse screen, the top line represents your current location. The second line contains:

- A list of objects in the current container directly below your current location
- The symbol ".." to go up one level

With an object selected, choose OK to travel down the tree, or choose ".." to go up the tree. When you select an object and choose OK, that object is displayed on the top line, and the second line lists objects directly below it.

Continue to browse the NDS tree until the User Login object is displayed in the second line. Choose OK.

Enter Password

Enter the login password for the NDS tree, using the up and down arrow buttons to select characters, and the left and right arrow buttons to move the cursor. Choose OK.

Navigate the NDS tree to the Print Server.

Choose OK to browse the NDS tree to the Print Server object.

Browsing to find the Print Server object begins with the NDS tree that you selected previously (with Select NDS Tree). In each subsequent browse screen, the top line represents your current location. The second line contains:

- A list of objects in the current container directly below your current location
- The symbol ".." to go up one level

With a container object selected, choose OK to travel down the tree, or choose ".." to go up the tree. When you select an object and choose OK, that object is displayed on the top line, and the second line lists objects directly below it.

When the Print Server is displayed in the second line, choose OK.

Enter Print Server Password

Enter the Print Server password, using the up and down arrow buttons to enter characters, and the left and right arrow buttons to move the cursor. Choose OK. (If no password is required, choose OK.)

Server should look for print queues in: Entire NDS Tree/Specified Subtree [Entire NDS Tree]

By default, the iR-M2 searches the entire NDS tree for iR-M2 print connections. This option lets you restrict the search for iR-M2 print jobs to a subtree (the Print Queue root) in which the iR-M2 print connections have been defined. This makes the search more efficient. Select Entire NDS Tree if the tree is small. Select Specified Subtree to restrict the search and specify the subtree.

If you select Entire NDS Tree, choosing OK returns to PServer Setup. Proceed with Bindery Setup (see page 4-36), set the Polling Interval (see page 4-41), or choose Exit PServer Setup to return to the Service Setup menu.

Browse to the root of the Print Queue Subtree.

This message is displayed if you selected Specified Subtree in the previous option. Choose OK to browse the NDS tree to the Print Queue subtree.

Browsing to find the container object begins with the NDS tree that you selected previously (with Select NDS Tree). In each subsequent browse screen, the top line represents your current container. The second line contains:

- A list of objects directly below your current location
- The symbol ".." to go up one level
- The symbol "." to select the current container object (displayed in the top line) without traveling down the tree

With an object selected, choose OK to travel down the tree, or choose ".." to go up the tree. When you select an object and choose OK, that object is then displayed on the top line, and the second line lists objects contained within.

When the container that contains print queues is displayed in the second line, choose OK. In the next screen, choose "." and choose OK to select the object in the top line.

When the iR-M2 displays the container name, choose OK to return to PServer Setup.

Proceed with Bindery Setup (see page 4-36), set the Polling Interval (see page 4-41), or choose Exit PServer Setup to return to the Service Setup menu when prompted.

Bindery Setup options

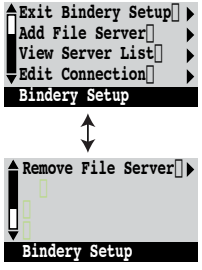
Network Setup ▶
Service Setup ▶
PServer Setup ▶

Bindery Setup

Use Bindery Setup if you have already configured one or more bindery servers (file servers running NetWare in bindery emulation) with a Print Server and a Print Queue for iR-M2 jobs. Before entering bindery settings, be sure the iR-M2 is connected to the network and the NetWare file server is running. If Guest Login is not supported, you need a valid user name and password.

NOTE: The terms NetWare server, Novell server, and IPX file server are in common use and are used here interchangeably to mean the server on an IPX network running Novell NetWare networking software.

Bindery Setup menu



Because you can set up more than one Novell server to handle iR-M2 print jobs, an additional menu is displayed for this purpose. The options are:

- Add File Server—creates a new file server connection to the iR-M2. You can set up a maximum of eight file server connections. After you have finished adding a new server, you return to the Bindery Setup menu, where you can set up another server.
- View Server List—displays the list of file servers that have already been selected to communicate with the iR-M2.
- Edit Connection—lets you change the NetWare Print Server that will print to the iR-M2.
- Remove File Server—lets you disconnect the iR-M2 from a file server to which it is currently connected. Remove a file server when you want to reduce the number of connections to the iR-M2 or reassign the connection to a different NetWare file server.
- Exit Bindery Setup—lets you exit this menu after you have added all servers, viewed a list of file servers, or removed a file server from the list.

NOTE: If you change your mind about any of the menus you have selected, use the Menu button to escape and return to the main Bindery Setup menu. To cancel all changes, exit Network Setup and select No to Save Changes.

Network Setup ▸
Service Setup ▸
PServer Setup ▸
Bindery Setup ▸

Add File Server

This option gives you two ways to add a Novell NetWare file server.

Select File Server
From List/Search by Name [From List]

You may select the file server from a scrollable list, or by a name search. Choose From List if your network does not have a large number of file servers. Choose Search by Name if the number of file servers is so large that scrolling through the list would take a long time.

If you selected **From List**:

Add Server
List of all servers

The iR-M2 obtains a list of NetWare file servers by querying the IPX network. Use the up and down arrow buttons to select a NetWare file server from the list. Choose the server on which you have configured a print server and print queue to handle iR-M2 print jobs.

If you selected **Search by Name**:

Enter First Letters of Server Name

Use the up and down arrow buttons to enter the first letters of the name of the file server you want to use, and then choose OK.

Add Server
List of servers matching the search

This option is displayed if you entered letters to search. Scroll through the list to select the server you want.

Once you have chosen a file server, the iR-M2 immediately tries to log in as a guest without a password. If it succeeds, it skips to the NetWare Print Server option.

If you try to add a file server but all iR-M2 connections are already in use, you are prompted to remove a file server (see "Remove File Server" on page 4-40).

File Server Login
administrator/supervisor/Enter Login Name [supervisor]

This option appears only if a password is required for login, or if there is no guest account, or the guest account is restricted. Choose Enter Login Name to enter your own login name and password or log in as a guest. Choose administrator or supervisor if you have those privileges.

Enter Your Login Name
[guest]

This option and the next appear only if you selected Enter Login Name for the File Server Login. Enter your login name or select guest.

Enter Your File Server Password

Enter the password for logging in to your NetWare file server.

NetWare Print Server
Print Server Name

Select the name of the print server that you configured in the NetWare utility PCONSOLE. This print server will route print jobs to the iR-M2 from computers on IPX networks.

Enter Your Print Server Password

This option appears only if your NetWare print server is set up to require you to log in with a password. Enter your print server password.

Choose Add Server again until you have connected each NetWare file server you have configured for printing to the iR-M2. When you have added all the IPX file servers for your site, choose Exit Bindery Setup.

Network Setup ▸
Service Setup ▸
PServer Setup ▸
Bindery Setup ▸

View Server List

Supported servers

This option allows you to view the list of file servers currently connected to the iR-M2—that is, servers you have added in Bindery Setup. You are notified if there are none. When you choose OK, you return to the Bindery Setup menu.

Network Setup ▸
Service Setup ▸
PServer Setup ▸
Bindery Setup ▸

Edit Connection

On each connected NetWare file server, you have defined a print server to handle iR-M2 print jobs. Choose this option to change the print server assigned to the iR-M2.

Choose File Server
File server name

From the list of connected NetWare file servers, choose the file server whose print server you want to change.

NetWare Print Server
List of print servers on selected file server

Choose the name of the print server you want to use. This is the print server that will route print jobs to the iR-M2 from computers on IPX networks.

If you change your mind, press the Menu button to return to the Bindery Setup menu without making a change.

Enter Your Print Server Password

This option appears only if your NetWare print server is password-protected. Enter your print server password.

The Bindery Setup menu is displayed again. You can edit other connections, choose another Bindery Setup option, or choose Exit Bindery Setup.

Network Setup ▶
Service Setup ▶
PServer Setup ▶
Bindery Setup ▶

Remove File Server

Remove support for
File server name

This option allows you to select a NetWare file server from a list of connected file servers and remove the connection to it. You are notified that you have removed the connection, and the Bindery Setup menu appears. If you change your mind and do not want to remove any of the file servers, press the Menu button.

You can choose another Bindery Setup option (such as adding another file server) or choose Exit Bindery Setup and proceed to set the polling interval.

Network Setup ▶
Service Setup ▶
PServer Setup ▶
Bindery Setup ▶

Exit Bindery Setup

Choose Exit Bindery Setup after you view a list of IPX file servers, remove a file server from the list, or connected all the configured NetWare file servers. After you select Exit Bindery Setup, you return to the PServer Setup menu.

Polling Interval options

Network Setup ▶
Service Setup ▶
PServer Setup ▶

Polling Interval

Whether you use NDS or Bindery services, choose Polling Interval from the main PServer Setup menu. If you do not reset the interval, the default value of 15 seconds is used.

NetWare Server Poll Interval in Seconds
1–3600 [15]

Specify the interval, in seconds, at which the iR-M2 communicates with the Novell print server to see if there are print jobs waiting.

NOTE: If you select a short interval, the amount of network traffic increases. This may slow down other network jobs.

Windows Setup options

For setting up the Windows printing service, these characters are allowed in the text fields: uppercase letters, numerals, space, and the following characters:
- _ . ~ ! @ # $ % ^ & ( ) { } \ ' ,

Network Setup ▶
Service Setup ▶
Windows Setup ▶

Enable Windows Printing
Yes/No [No]

Enabling Windows Printing enables Server Message Block (SMB), the file and printer sharing protocol built into Windows. Enabling SMB allows the iR-M2 to be listed on the network so that Windows clients can print to a particular print connection (Hold, Print, or Direct) on the iR-M2 without any other networking software. For information on setting up a Windows computer for Windows printing, see the *User Software Installation Guide*. Windows printing runs via TCP/IP, so you must configure TCP/IP on the iR-M2 and on all computers that use Windows printing.

Use Automatic Configuration
Yes/No [Yes]

This option appears if you chose DHCP or BOOTP as the protocol for automatically obtaining the IP address of the iR-M2 (see page 4-24).

Choose Yes and the iR-M2 uses a WINS name server and automatically obtains its IP address. Make your choice and proceed to the Server Name option.

Choose No to proceed to the Use WINS Name Server option, where you specify whether to use a WINS name server, and then to the WINS IP Address option, where you specify its IP address.

Use WINS Name Server
Yes/No [No]

Broadcasts from SMB devices cannot pass across a router without a WINS name server. Setting up the WINS name server is outside the scope of this manual. To find out if a name server is available, contact your network administrator.

WINS IP Address
[127.0.0.1]

This option appears only if you choose Yes for WINS Name Server. Change the default address to the correct IP address for the WINS Name Server. Obtain the correct address from your network administrator.

Server Name
Default Name

The server name is the name that will appear on the network for accessing the iR-M2 via SMB. The default name is the same as the server name assigned in Server Setup (see page 4-13).

Server Comments

Server comments (optional) can contain information about the printer. These comments are listed in the iR-M2 Properties in Network Neighborhood and can be up to 15 characters.

Set Domain Name
Select from list/Enter manually [Select from list]

This option provides two ways to specify the workgroup or domain in which you want the iR-M2 to appear.

If you selected **Select from list**:	If you selected **Enter manually**:
Choose Domain ***List of domains***	**Workgroup or Domain**
Select the workgroup or domain from the list.	Enter the name of the workgroup or domain. For more information about entering text and characters, see "Types of Setup screens" on page 4-11.

Web Services Setup

Network Setup ▸
Service Setup ▸
Web Services Setup ▸

Enable Web Services
Yes/No [No]

Select Yes to make the WebTools available to users (see page 6-1).
TCP/IP must be enabled on the iR-M2 and on user workstations. The WebTools include WebSpooler, Status, WebLink, and WebSetup.

A Java-enabled Web browser and a valid IP address are required for each user. For details on browser and computer requirements, see the *Quick Start Guide*.

IPP Setup

Network Setup ▸
Service Setup ▸
IPP Setup ▸

Enable IPP
Yes/No [Yes]

Select Yes to enable printing with the Internet Printing Protocol (IPP). You must enable Web Services. For information on setting up user computers to use IPP printing, see the *User Software Installation Guide*.

Port 9100 Setup

Network Setup ▶
Service Setup ▶
Port 9100 Setup ▶

Enable Port 9100
Yes/No [Yes]

This option enables applications to open a TCP/IP socket to the iR-M2 at Port 9100 to download a print job.

Port 9100 Queue
Direct/Print Queue/Hold Queue [Print Queue]

Specify the iR-M2 print connection for downloading jobs to Port 9100. Only the print connections you have enabled in Printer Setup are available.

SNMP Setup

Network Setup ▶
Service Setup ▶
SNMP Setup ▶

Enable SNMP
Yes/No [No]

This option enables the SNMP communication over a TCP/IP or IPX connection.

SNMP Community Name
[public]

This option appears if you select Yes for Enable SNMP. You can change the SNMP Community Name "public," which is used for reading and writing. Up to 16 ASCII characters including spaces can be used for the community name.

NOTE: A space at the beginning or end of the name is automatically deleted from the name entered. When an invalid character is entered or no name is specified, the default "public" is used for the community name. A name consisting only of spaces is invalid.

Network Setup ▶
Service Setup ▶

Exit Service Setup

This returns you to the main Network Setup menu. Choose Exit Network Setup.

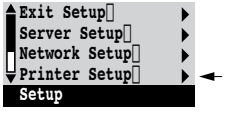
Save Changes
Yes/No [Yes]

Select Yes to activate any changes made in Network Setup; select No to return to the main Setup menu without making any changes.

Printer Setup options

Printer Setup configures the connections and printing behavior associated with a particular printing device. For more information on iR-M2 print connections, see page 3-1.

TO ACCESS PRINTER SETUP OPTIONS



1. **In the main Setup menu, choose Printer Setup.**
2. **Enter the options appropriate to the printing requirements at the site.**
3. **When you have finished, save changes.**

In the list of options that follows, default values, where applicable, appear in square brackets.

NOTE: For users to use the Fiery utilities and WebTools or print to the iR-M2 over a TCP/IP network, you must publish at least the Hold queue or the Print queue.

Publish Direct Connection
Yes/No [Yes]

This option allows users to print (or download) jobs to the iR-M2 without spooling. Jobs printed to the Direct connection are not saved in the Printed queue.

If you plan to download fonts to the iR-M2, you must publish the Direct connection.

Publish Print Queue
Yes/No [Yes]

This option allows users to print (or download) jobs to the Print queue. Jobs that are printed to the Print queue are spooled to the iR-M2 disk and printed on a first-in, first-out basis. Only queues published in the Printer Setup are available to users.

NOTE: To print to the iR-M2 over the parallel port, you must publish a queue or publish the Direct connection.

Publish Hold Queue
Yes/No [Yes]

Use this option to allow users to print (or download) jobs to the Hold queue. Jobs in the Hold queue can only be printed by copying or moving the jobs to the Print queue with the job management tools.

Parallel Connection
Print Queue/Hold Queue/Direct Connection [Print Queue]

Use this option to determine where jobs printed to the parallel port are sent. Only the print connections that you published are displayed.

This option appears only if you selected Yes for the Enable Parallel Port option in Network Setup. If only one of the print connections is published, this option does not appear and parallel port jobs are automatically printed to that connection.

Personality
Auto/PCL/PostScript [Auto]

In PCL or PostScript mode, the iR-M2 is restricted to PCL or PostScript jobs, respectively. Jobs sent to the iR-M2 that do not match the personality selected on the iR-M2 are not printed. In Auto mode, the iR-M2 switches to the appropriate page description language for each job. See "PCL Setup options" on page 4-50 and "PostScript Setup options" on page 4-48 for more information.

Dep. ID Management
Yes/No [Yes]

Select Yes to enable Department ID Management. This allows you to print server information pages, including Configuration, Job Log, PS Test Page/PCL Test Page, and PS Font List/PCL Font List.

Operator Dep. ID

Enter the seven numerals for the Department ID. The ID needs to match the one set from the copier/printer touch panel display.

Operator Password

Enter the seven numerals to set the Department password. The password needs to match the one set from the copier/printer touch panel display.

NOTE: We recommend that Dept. ID Management be set to No when no department ID or password is specified from the copier/printer. You can print server information pages without the department ID or password. Set Dep. ID Management to Yes when the department ID and password are set from the copier/printer.

If the department ID and password are set from the copier/printer and the copier/printer is set so it only accepts printing with the department ID and password, the copier/printer does not allow you to print server information pages without the department ID and password. This function is called Accept Jobs With Unknown ID (the default is On). For more details, see the copier/printer documentation.

Save Changes
Yes/No [Yes]

Select Yes to activate any changes made in the Printer Setup; select No to return to the main Setup menu without making any changes.

PostScript Setup options

PS (PostScript) Setup allows you to set defaults for the iR-M2. Users can override most of these defaults on a job-by-job basis. However, users printing from UNIX or DOS command lines cannot override defaults from their applications. Therefore, you must set defaults in PostScript Setup. For information about these defaults, see the *Printing Guide*.

TO ACCESS POSTSCRIPT SETUP OPTIONS

1. **In the main Setup menu, choose PS Setup.**
2. **Enter the options appropriate to the printing requirements at the site.**
3. **When you have finished, save changes.**

In the list of options that follows, default values, where applicable, appear in square brackets.

Default Paper Sizes
US/Metric [US in North America, Metric elsewhere]

Specify whether to print on US paper sizes (for example, Letter, Legal, 11x17), or Metric paper sizes (for example, A4 or A3) by default. When no page size is defined within a PostScript file, jobs are printed on Letter paper if you selected US; A4 paper if you selected Metric.

Allow Courier Substitution
Yes/No [Yes]

Specify whether to substitute Courier for fonts that are unavailable when you download files to the iR-M2, or when you print a document for which you do not have the corresponding printer font. If this option is set to No, jobs with fonts that are unavailable on the iR-M2 hard disk generate a PostScript error and do not print. This setting does not apply to PDF files; font substitution occurs automatically in PDF files.

Print to PS Error
Yes/No [No]

Specify whether the iR-M2 should print the available portion of a print job when it encounters a PostScript error. Select Yes to print the portion of the job that was processed before the error occurred; select No to cancel the print job entirely when a PostScript error is encountered. Leave this option at No unless you encounter printing problems.

Convert Paper Sizes
No Letter/11x17->A4/A3 A4/A3->Letter/11x17 [No]

Specify whether to convert paper sizes in documents automatically to the default paper sizes specified. For example, if you select Letter/11x17->A4/A3, a letter size document is automatically printed on A4 paper.

NOTE: This option works in conjunction with the Default Paper Sizes option. For example, if Convert Paper Sizes is set to Letter/11x17->A4/A3, and Default Paper Sizes is set to US, then jobs are printed A4/A3 size. This also includes iR-M2 system pages such as the Start Page, Test Page, and Job Log.

Save Changes
Yes/No [Yes]

Select Yes to activate any changes made in PS Setup; select No to return to the main Setup menu without making any changes.

4

PCL Setup options

PCL Setup allows you to set defaults to control printer output. These defaults can be overridden by the user from within an application, but they determine how a job will be printed in the absence of other information.

NOTE: PCL (Printer Control Language) printer drivers are provided with the iR-M2 on the PCL User Software CD.

NOTE: PCL printing is supported for Windows computers only. Mac OS computers must use the PostScript driver.

TO ACCESS PCL SETUP OPTIONS

1. **In the main Setup menu, choose PCL Setup.**
2. **Enter the options appropriate to the printing requirements at the site.**
3. **When you have finished, save changes.**

In the list of options that follows, default values, where applicable, appear in square brackets.

Paper Size
Letter/A4/11x17/A3 [Letter in the United States, A4 elsewhere]

This option sets the size of the print area on the paper, not the size of the paper itself.

Default Orientation
Portrait/Landscape [Portrait]

This option determines whether the text or image will be oriented along the short edge of the paper (portrait) or along the long edge of the paper (landscape).

Form Length (lines)
5-128 [60]

This option sets the number of lines to be printed per page.

Font Size (pt)
[12.00]

When the number selected in Font Number represents a proportionally spaced scalable font, the Font Size option appears, allowing you to determine the point size (height) of the default font.

Font Pitch (char/in)
[10.00]

When the number selected in Font Number represents a fixed pitch scalable font, the Font Pitch option appears, allowing you to determine the width of scalable type. Pitch is measured by characters per inch, so 10-pitch type fits ten characters per inch.

Symbol Set
ASCII/Roman-8/ECMA-94 L1/PC-8... [Roman-8]

This option lets you choose the symbol set that best matches the needs of users printing to the iR-M2.

Font Number
0-999 [0]

The font number designates the default font for the iR-M2.

To determine font numbers, print the internal PCL Font List. The standard fonts are listed in order. The font numbers, however, are not displayed.

Paper Size for System Pages
US/Metric [US in United States, Metric elsewhere]

This option sets the size of the print area on the paper, not the size of the paper itself. System pages are pages that you can print from the Control Panel.

Save Changes
Yes/No [Yes]

Select Yes to activate any changes made in PCL Setup; select No to return to the main Setup menu without making any changes.

4

Print Form Setup options

Print Form Setup allows you to set defaults for printed output. You can override the default settings set at the iR-M2 Control Panel from the printer driver when you print from an application

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TO ACCESS PRINT FORM SETUP OPTIONS

1. **When the iR-M2 displays the Idle screen, press the Menu button on the Control Panel to go to the Functions menu.**
2. **Scroll the menu and press the line selection button to choose Run Setup.**

   If an Administrator password has been set on the iR-M2, you are prompted to enter it before you can perform Setup.
3. **In the main Setup menu, choose Print Form Setup.**
4. **Enter the options appropriate to the printing requirements at the site.**
5. **When you have finished, save changes.**

In the list of options that follows, default values, where applicable, appear in square brackets.

Copies
1-999 [1]

This option sets the default number of copies of a document to print.

Paper Source
Auto/Stack Bypass/Drawer1/Drawer2/Drawer3/Drawer4/Side Paper Deck [Auto]

Auto automatically uses paper from the source matching the user-determined setting. The other settings use paper from the respective sources, provided that these sources are installed on the copier/printer.

Sort Mode
Collate/Group [Collate]

Specify how to output multiple-page or multiple-copy jobs. The Collate setting collates multiple copies. The Group setting groups together all copies of each page. Both Collate and Group deliver the finished copies in the same direction.

You can specify this option when the finisher is attached.

Staple Mode
None/Saddle Stitch/Double Right-Portrait/Double Left-Landscape/ Double Top-L Left-P/Double Top-P Right-L/Corner Upperright-Portrait/ Corner Upperleft-Landscape/Corner Upperleft-P Right-L [None]

This option staples collated copies. Specify where to place the staple on stapled copies. Saddle stitching is used for making booklets. You can specify this option when the finisher is attached. For more information about Stapling settings, see the *Printing Guide*.

Duplex
Off/On [Off]

Duplexing allows printing on both sides of the paper.

Refine
On/Off [On]

Set this option to On to automatically smooths jagged outlines on characters and graphics.

Density
1-9 [5]

The Density option controls the darkness of printing: 1 is the lightest; 9 is the darkest.

Booklet
On/Off [Off]

Use this option to make a booklet from printed output. Letter-size pages from your document are printed in the appropriate location on tabloid-size paper.

Z-Fold
Off/On [Off]

Use this option to have your print job folded. The panels of your job will be folded on top of one another without stressing the folded spine. You can specify this option when the saddle stitch finisher and paper folding unit are attached.

Trimmer
Off/On [On]

Use this option to trim the pages of your booklet so that the edges are even. You can specify this option when the trimmer is attached.

Transparency Interleave
Blank/Printed/None [None]

Use this option to separate multiple transparency sheets with either blank or printed paper pages.

Default Media Type
Any/Plain Paper/Transparency [Any]

Specify the default media type that the copier/printer will print jobs on.

Hole Punch
Off/On [Off]

Select this option to use the hole-punching functionality of the finisher. You can specify this option when the finisher is attached.

Toner Reduction
On/Off [Off]

Use this option to reduce toner usage. This option is especially useful for print jobs with large areas of dark-colored graphics.

Use Cover Inserter
Off/On [Off]

Use this option to insert a cover page for your job. You can specify this option when the document insertion unit and saddle stitch finisher are attached.

Line Control
Off/On [Off]

Select On if you want to smooth edges of text.

Save Changes
Yes/No [Yes]

Select Yes to activate any changes made in Print Form Setup; select No to return to the main Setup menu without making any changes.

Administrative functions in the Setup menu

The remaining choices in the Setup menu are intended to help you manage print jobs but are not required for printing.

- **Job Log Setup** allows you to specify whether the iR-M2 prints and clears its log of printed jobs automatically.
- **Change Password** allows you to create or change an Administrator password on the iR-M2 so that casual users cannot enter the Setup menus and change settings without permission. The Administrator password also controls many functions available from the job management tools.
- **Clear Server** clears all queued print jobs from the server—jobs in the iR-M2 Print, Hold, and Printed queues. Clear Server also clears the Job Log, all jobs archived on the Fiery hard disk, the index of archived jobs, and all FreeForm masters and the index of FreeForm masters.
- **Factory Defaults** clears all queued jobs and resets the iR-M2 Setup options to the factory defaults. Once the iR-M2 is reset, you select the language in which to display Setup menus and system messages.

TO SET JOB LOG OPTIONS

1. **In the main Setup menu, choose Job Log Setup.**
2. **Enter the options, as described in the following section.**
3. **When you have finished, save changes.**

Job Log Setup

The Job Log is a record of all jobs processed or printed on the iR-M2, whether they originate from a user workstation, a networked server, or the iR-M2. The Job Log can be printed from the Control Panel or from the job management tools.

The printed Job Log lists accounting information about each job, including user name, document name, time and date printed, and number of pages.
Windows 9x/Me, Windows NT 4.0 and Mac OS users can enter job-specific notes that appear in the Job Log.

By default, the Job Log is not printed or cleared automatically. You can change these defaults in Job Log Setup. You can also print and clear the Job Log from the job management tools.

NOTE: You need the Administrator password to print or delete the Job Log.

In the list of options that follows, default values, where applicable, appear in square brackets.

Auto Print Job Log Every 55 Jobs
Yes/No [No]

Use this option to specify whether the iR-M2 prints the Job Log after every 55 jobs. Setting the Job Log for automatic printing is useful if accounting for each printed page is important at your site.

Auto Clear Job Log Every 55 Jobs
Yes/No [No]

Use this option to specify whether to clear the Job Log after every 55 jobs. If you do not enable this option, and do not clear the Job Log from the iR-M2 or from a remote workstation, the iR-M2 saves a record of all jobs.

In addition to automatic clearing or manual clearing from a remote workstation, the Job Log (together with all queued jobs) is also cleared when you choose Clear Server from the Functions menu, when system software is reinstalled, or when a new version of system software is installed on the iR-M2.

NOTE: If Auto Print Job Log Every 55 Jobs is set to No, setting this option to Yes has no effect.

Job Log Page Size
Tabloid/A3 Letter/A4 [Tabloid/A3]

Select the paper size for printing the Job Log. Regardless of page size, 55 jobs are listed on a page. The paper size used depends on the Default Paper Sizes setting in PS Setup. If the Default Paper Sizes setting is US, the Job Log is printed on Tabloid or Letter size paper, with Tabloid the default.

Save Changes
Yes/No [Yes]

Select Yes to activate any changes made in Job Log Setup; select No to return to the main Setup menu without making any changes.

Change Password

Change Password enables you to set or change the password for the iR-M2. This password determines whether a user can modify the Setup options.

When the iR-M2 is installed, there is no password. If you do not create an Administrator password, users are not required to enter a password to modify Setup.

If an Administrator password has been set previously, you are required to enter it immediately after start up, when you choose Run Setup. Use the up and down buttons to select the characters, and the left and right arrows to move between them.

TO CHANGE THE iR-M2 PASSWORD

1. **Scroll the main Setup menu and choose Change Password.**
2. **Enter and confirm the password, as described in the following section.**

New Password

The password can be any combination of letters and numbers up to 19 characters. Choose OK when you are done. Be sure to keep track of the password.

NOTE: The only way to remove a password that you cannot remember is to reinstall the system software.

Verify New Password

Enter the new password again, exactly as before, to verify that you have entered it correctly. The new password is effective until you change it again.

Clear Server

Clear Server enables you to clear all queued print jobs from the iR-M2—jobs in the iR-M2 Print, Hold, and Printed queues. The Job Log is cleared at the same time. If you keep Job Logs, be sure to print or export the Job Log before you choose Clear Server.

Scroll the main Setup menu and choose Clear Server. You are asked to confirm your selection. Jobs can also be deleted, individually or as a group, from WebSpooler.

Factory Defaults

Choose Factory Defaults to return the iR-M2 to its default factory settings. It also clears all queued jobs from the iR-M2. The Job Log is cleared at the same time. After the iR-M2 is reset, you select the language in which to display Setup menus and system messages.

Exit Setup

Choose Exit Setup from the first screen of the main Setup menu when you have finished making Setup changes.

The iR-M2 restarts and any changes you saved during the Setup take effect.

Chapter 5: Setting up the iR-M2 from a Windows Computer

After you perform initial Setup (Server, Network, and Printer Setup) from the Control Panel, you can change most Setup options from a Windows computer.

Accessing Setup

In addition to using the Control Panel, you can set up the iR-M2 remotely. Remote Setup is performed from a Windows computer using Command WorkStation or WebSetup.

To use the Setup applications (Command WorkStation or WebSetup), you must enter the iR-M2 Administrator password. This is set either from the local Setup at the Control Panel, or remote Setup from Command WorkStation or WebSetup.

Remote Fiery Setup

You can access remote Setup from Command WorkStation or WebSetup.

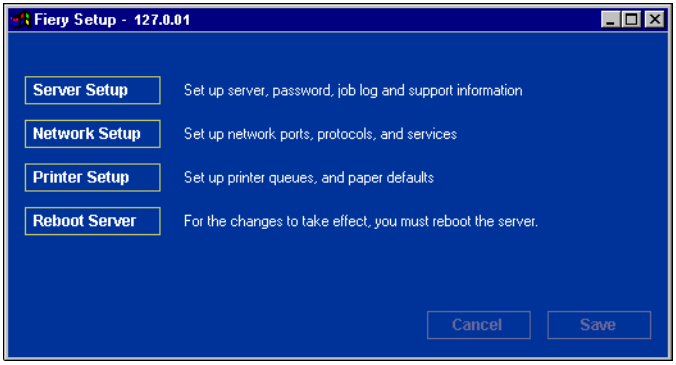
TO ACCESS FIERY WEBSETUP

1. **Start your Internet browser and enter the IP address of the iR-M2.**
2. **Log in as Administrator.**
3. **When the iR-M2 home page appears, click WebSetup.**

TO ACCESS SETUP FROM COMMAND WORKSTATION

1. **Start the Command WorkStation application.**
2. **Log in as Administrator.**
3. **Choose Setup from the Server menu.**

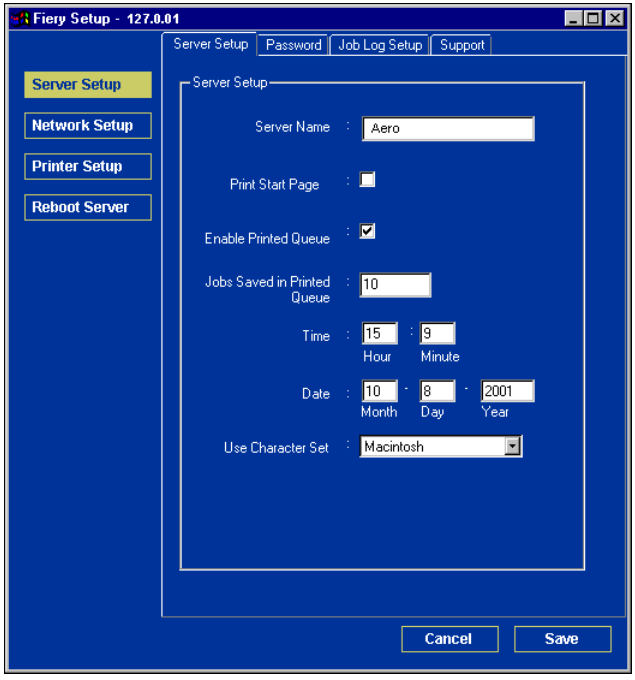
Regardless of how you access Setup remotely, the following window appears.



NOTE: The interface of remote Setup from Command WorkStation and Fiery WebSetup is identical. The remote Setup illustrations in this chapter are from Command WorkStation.

Server Setup options

You can specify iR-M2 system settings that affect all users, such as the name of the iR-M2, system date and time, passwords, and Job Log printing.



Server Name—Specify a name for the iR-M2. This is the name that appears in the Chooser on an AppleTalk network.

NOTE: Do not use the device name (iR-M2) as the server name. If you have more than one iR-M2, do not give them the same name. Windows NT 4.0 does not support more than one computer with the same name in the same workgroup or domain.

Enable Printed Queue—Specify whether to enable the Printed Queue, a storage location on the iR-M2 disk for recently printed jobs. You can reprint jobs from the Printed queue without resending them to the iR-M2. If the Printed queue is not enabled, jobs are deleted from the iR-M2 disk immediately after they are printed.

Jobs Saved in Printed Queue—Specify the number of jobs to be stored in the Printed Queue. Jobs in the Printed queue take up space on the iR-M2 hard disk.

Date and Time—Specify the system time and date, which are recorded on the Job Log.

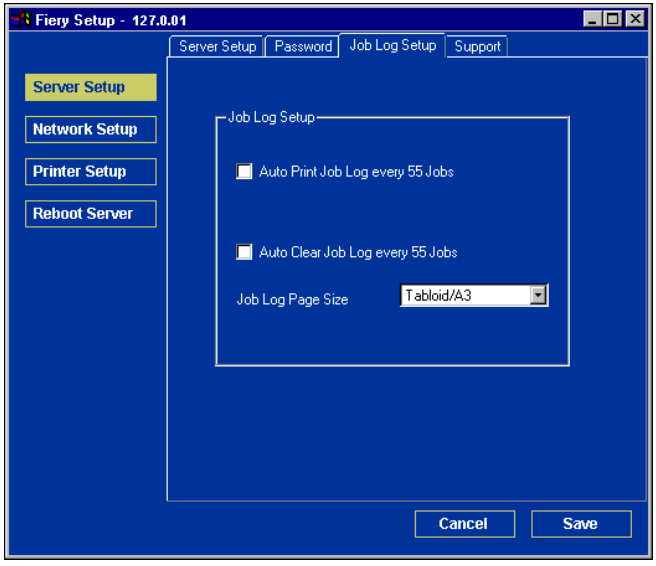
Use Character Set—Specify whether the Control Panel and the job management tools should use the Macintosh, DOS, or Windows character set for displaying file names. This is important if a file name includes accented or composite characters (such as é or æ). For mixed-platform networks, select the setting that gives the best overall representation of the special characters you use.

Print Start Page—Specify whether the iR-M2 should print a start page when it is turned on or restarted. The Start Page displays information about the iR-M2, including server name, current date and time, amount of memory installed, network protocols enabled, and print connections published.

Support—Enter names, phone numbers, and e-mail addresses of contact people at your organization who provide support for the iR-M2 and the copier/printer. In remote Setup, use the Support tab.

Job Log Setup

NOTE: An Administrator password is required to print or delete the Job Log.



Auto Print Job Log Every 55 Jobs—Specify whether the iR-M2 prints the Job Log after every 55 jobs. The Job Log lists the last 55 jobs processed on the iR-M2, with accounting information about each one, including user name, document name, time and date printed, number of pages, and other job information.

Auto Clear Job Log Every 55 Jobs—Specify whether the iR-M2 clears the Job Log after every 55 jobs. If you do not select this option, the iR-M2 saves a file containing a record of all jobs ever printed. Since this file takes up space on the iR-M2 hard disk, clearing the Job Log frees up additional disk space.

You can clear the Job Log manually at any time from the job management tools.

Job Log Page Size—Choose a paper size for the printed Job Log.

Network Setup

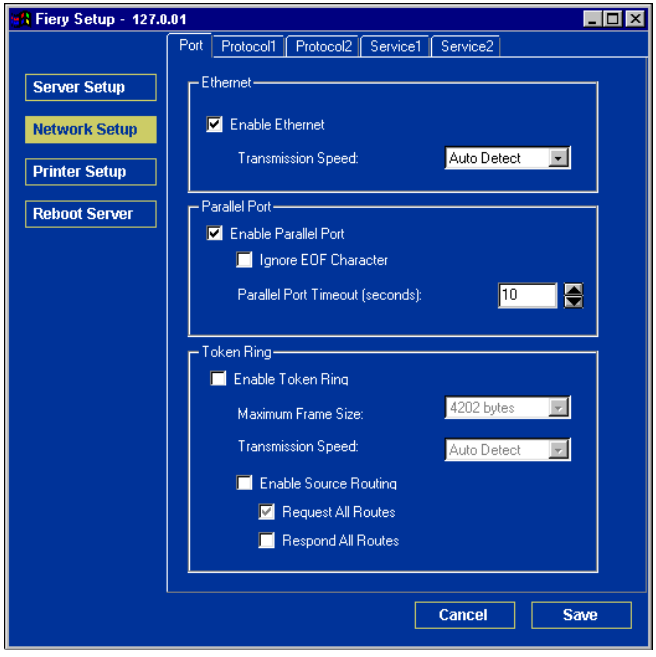
Network Setup configures the iR-M2 to receive print jobs over the networks used at your site. If the iR-M2 is configured to enable more than one protocol, it automatically switches to the correct protocol when it receives a print job. When the parallel port and one or two network ports are enabled, print jobs can be received over all ports at the same time.

You can view and specify the following network settings in Network Setup:

- Adapters and ports—view currently configured network adapters and port settings
- Protocols—including AppleTalk, IPX/SPX, and TCP/IP
- Print Services—including LPD printing (TCP/IP), NetWare printing (PServer), Windows print sharing (SMB), HTTP support (WWW), and Port 9100 printing

Ports

From remote Setup, you can enable Ethernet or Token Ring. You can also enable the parallel port, regardless of the network type you use. These options are described in the following section.



Ethernet (Port Setup)

Enable Ethernet—Select to connect the iR-M2 to an Ethernet network.

Transmission Speed—Choose Auto Detect if your network environment is mixed, or choose the speed of the network to which the iR-M2 is attached (10 Mbps or 100 Mbps).

Parallel Port (Port Setup)

Enable Parallel Port—Specify whether you want to print through the parallel port. You can connect a single Windows computer to the parallel port and print directly to the iR-M2.

NOTE: Enabling the parallel port does not conflict with using Ethernet or Token Ring communication with the iR-M2.

Ignore EOF Character—Available only if Enable Parallel Port is selected, this option specifies that the iR-M2 should ignore end-of-file (EOF) messages. Select this option to print PostScript files in binary format (not ASCII); under normal circumstances, the box should not be selected. When this option is selected, the iR-M2 uses the parallel port timeout value to determine when the end of the file has been reached.

Parallel Port Timeout (seconds)—Available only if Enable Parallel Port is selected, this setting determines how long the iR-M2 waits without receiving data from the parallel port before deciding that the current job is complete. Until the timeout, the iR-M2 cannot receive new jobs through the parallel port, but it can continue to receive network print jobs.

Token Ring (Port Setup)

Enable Token Ring—Select if the iR-M2 is to be connected to a Token Ring network.

Maximum Frame Size—Choose the maximum frame size recommended by the network administrator at your site. If you are uncertain of the setting to use, select the default value (4202).

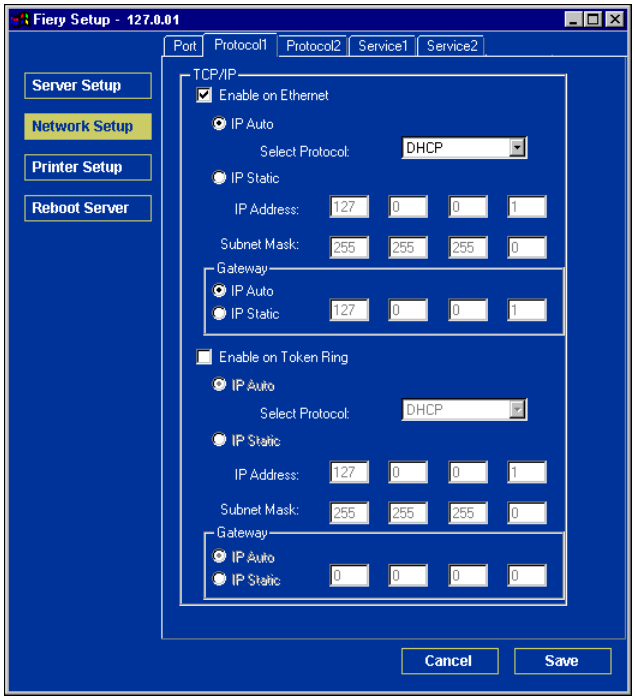
Transmission Speed—Choose Auto Detect if your network environment is mixed, or choose the speed of the network to which the iR-M2 is attached (4 Mbps or 16 Mbps).

Enable Source Routing—Select if your network supports source routing.

Request All Routes—Selecting this option will have no effect.

Respond All Routes—Selecting this option will have no effect.

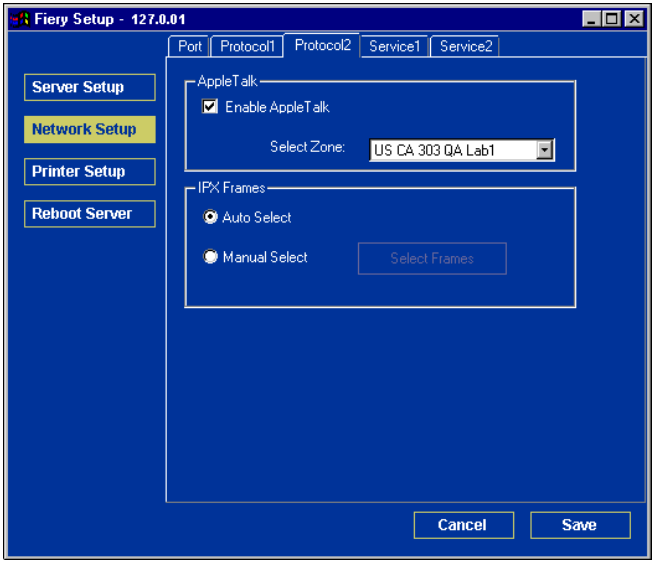
Protocols



You can change AppleTalk, IPX/SPX, and TCP/IP protocol settings for the iR-M2. From remote Setup, you change these settings on the Protocol1 and Protocol2 tabs.

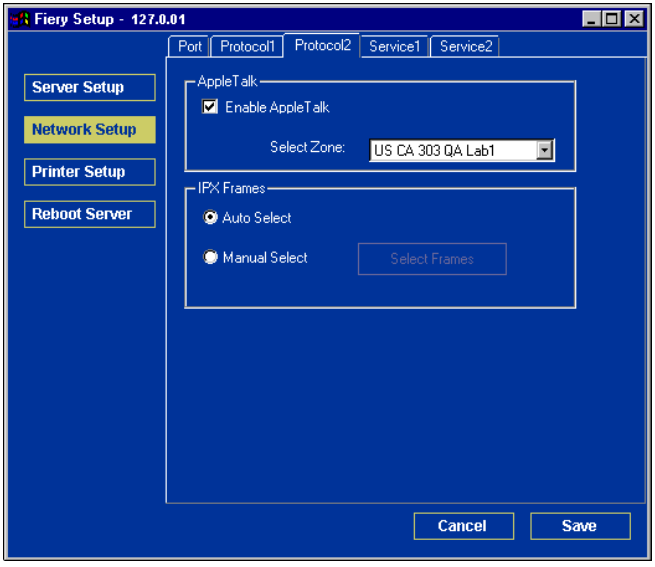
AppleTalk

The current AppleTalk zone is displayed.



IPX/SPX

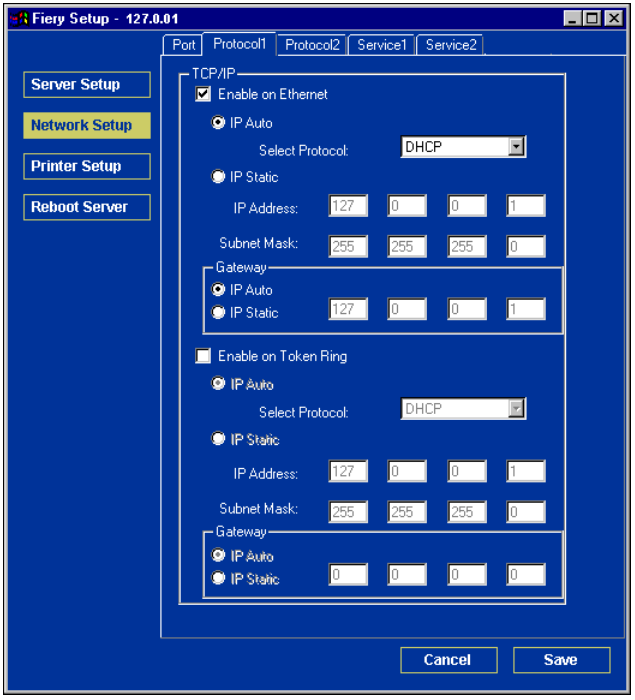
Use this option to specify IPX/SPX frame types.



The iR-M2 supports the following Ethernet frame types for IPX/SPX: Ethernet 802.2, Ethernet 802.3, Ethernet II, and Ethernet SNAP. For Token Ring, the supported frame types are Token Ring and Token Ring SNAP. You can also allow the iR-M2 to select the frame type automatically.

TCP/IP

Specify TCP/IP settings. The current settings for IP address, subnet mask, and default gateway address are displayed. For information about setting up printing with TCP/IP, see Chapter 2.



The iR-M2 requires a unique, valid IP address. You can set a static address or specify that the iR-M2 use DHCP, BOOTP, or RARP to obtain IP addresses automatically.

NOTE: If you specify the DHCP, BOOTP, or RARP protocol, the iR-M2 reboots when you save your changes and exit Setup. Allow the iR-M2 to reboot and return to Idle before printing a Configuration page or proceeding with any other operations.

To set the subnet mask, enter one of the following values:

255.0.0.0 if the IP address starts with a number less than 128

255.255.0.0 if the IP address starts with a number from 128 through 191

255.255.255.0 if the IP address starts with a number greater than 191

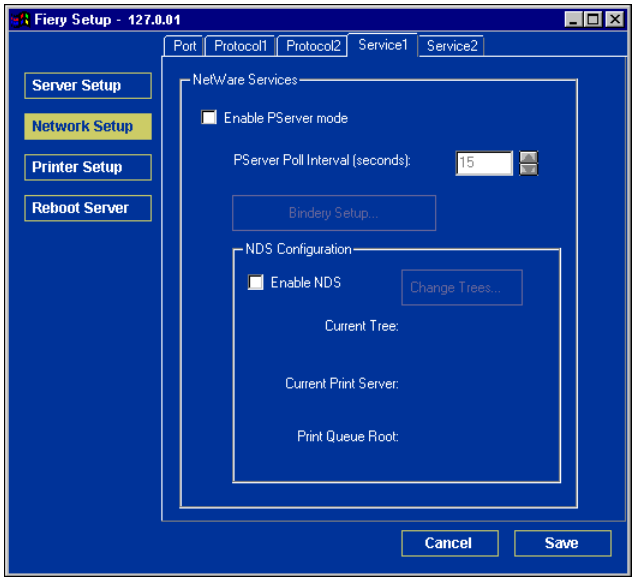
NOTE: Confirm the subnet mask setting with your network administrator before proceeding. In some cases, the required setting may be different from those listed.

If your TCP/IP network has a gateway and users outside the gateway plan to print to the iR-M2 using TCP/IP, enter the gateway address.

In remote Setup, the Token Ring information appears, even if you have not enabled Token Ring on the iR-M2.

NOTE: The iR-M2 stores assigned IP addresses, even if you later disable TCP/IP. If you need to assign the iR-M2 IP address to another device, first set the iR-M2 address to a null address.

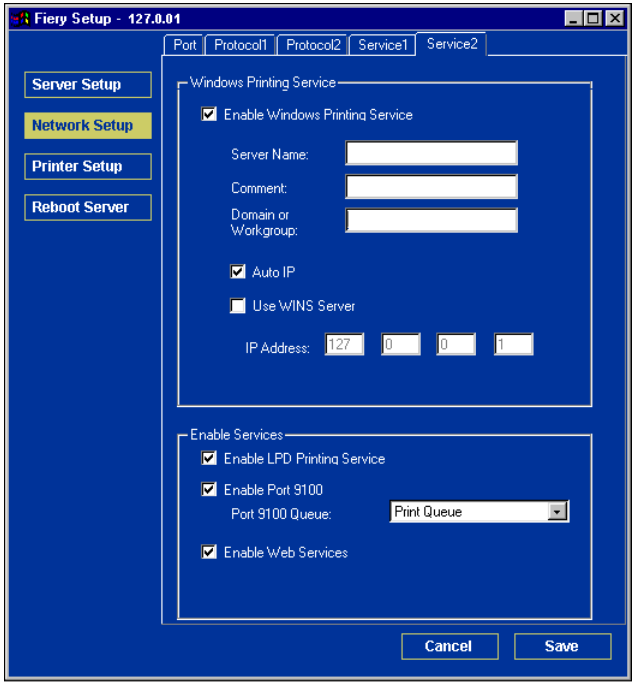
Services



You can configure the following network services:

- LPD Printing (TCP/IP)—enable or disable LPD print services.
- NetWare Printing (PServer)—specify NDS and Bindery services (see page 5-16).
- Windows Print Sharing (SMB)—enable or disable SMB print services.
- HTTP Support (WWW)—enable or disable support for WebTools.
- Port 9100—enable or disable support for Port 9100 printing.

LPD Printing



Enable LPD Print Services—Select to enable LPD printing services.

Enable Web Services—Select to enable web services.

NetWare Printing (PServer) options

The following procedures for setting up NetWare printing depict the windows from remote Setup at the iR-M2.

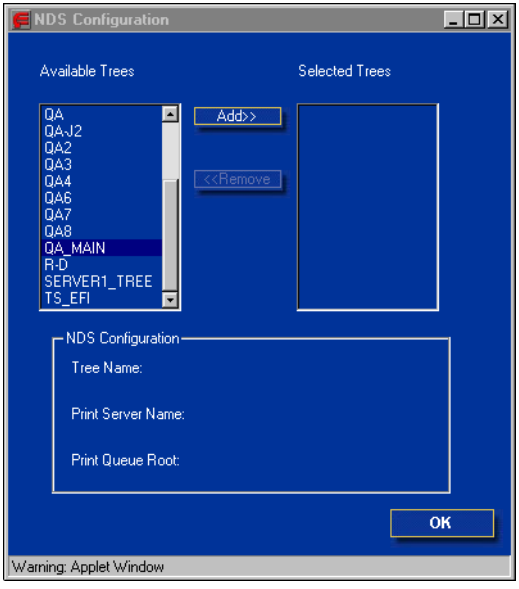
- NDS Setup
- Bindery Setup
- Poll Interval

Setting up the iR-M2 for NDS printing

Only one NDS tree can be connected. The currently selected NDS Tree and Print Server are displayed.

TO SPECIFY THE NDS TREE SETTING FROM REMOTE IR-M2 SETUP

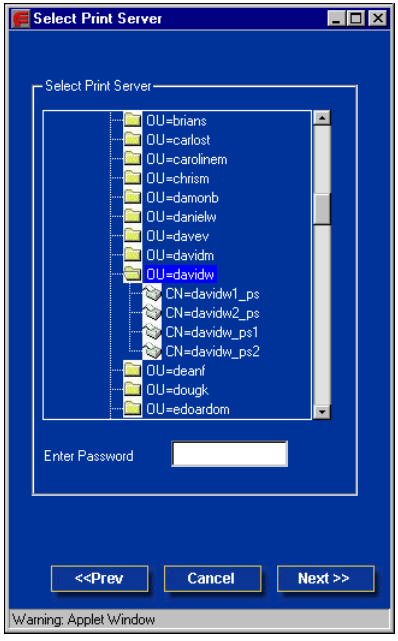
1. **Select Enable NDS and click Change Trees.**
2. **In the NDS Configuration window that appears, double-click an NDS tree in the Available Trees list.**



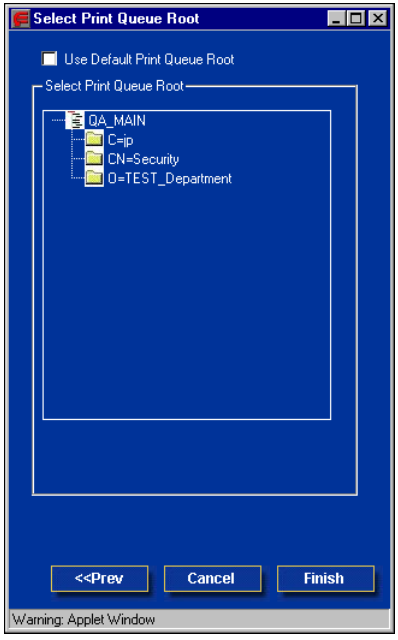
3. **In the Select User Login window, select Use Default User Information or enter your password, and click Next.**

4. **Navigate to the NDS container, select it, and click Next.**

   If necessary, enter the password.

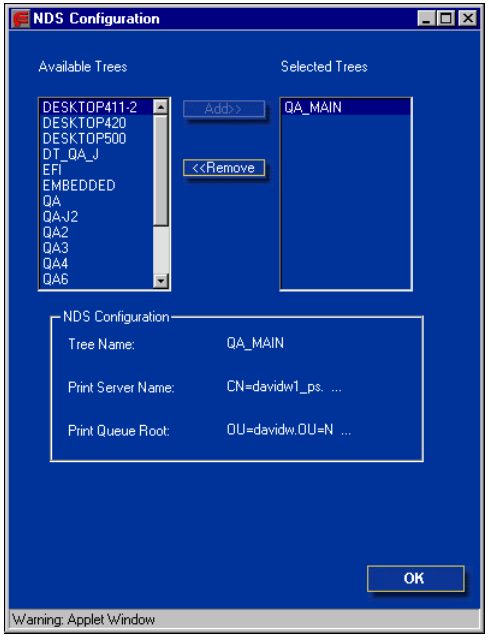


5. **Select Use Default Print Queue Root or navigate to the Print Queue Root and click Finish.**



6. **Click OK.**

The NDS Configuration window appears, displaying information about the print server.

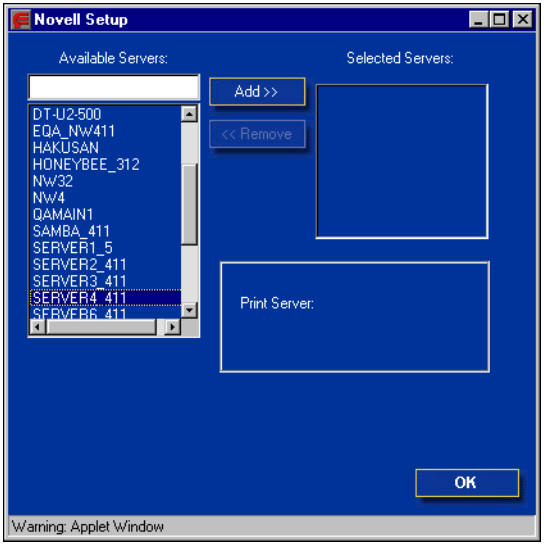


Bindery Setup

Specify Bindery services. The currently connected servers are displayed. A maximum of eight bindery servers can be connected.

TO ADD BINDERY CONNECTIONS FROM REMOTE IR-M2 SETUP

1. **Select Enable PServer mode from the Service1 tab.**
2. **Click Bindery Setup.**
3. **Select a file server from the Available Servers list.**

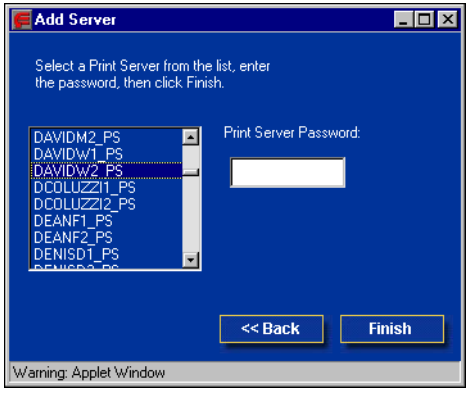


If the File Server User Name and Password dialog box appears, enter the appropriate user name and password to log on to the selected file server.

4. **Select a print server from the list and click Finish.**

   If necessary, enter the appropriate password in the Print Server Password dialog box to log on to the selected file server.

   The name of the newly added server appears in the Selected Servers list.

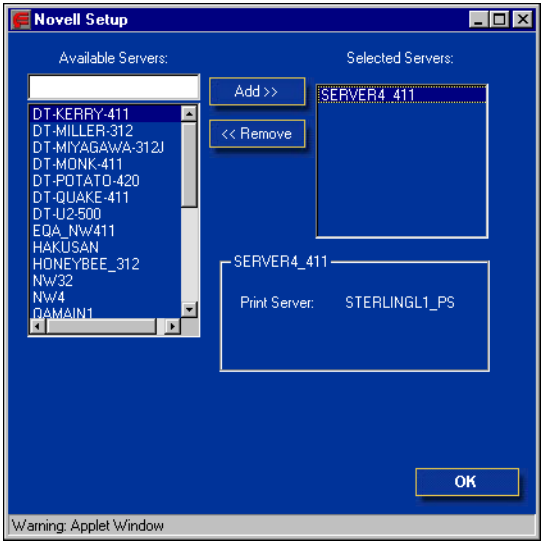


5. **When you finish adding servers, click OK.**

TO REMOVE BINDERY CONNECTIONS FROM REMOTE IR-M2 SETUP

1. **Select Enable PServer mode from the Service1 tab.**
2. **Click Bindery Setup.**

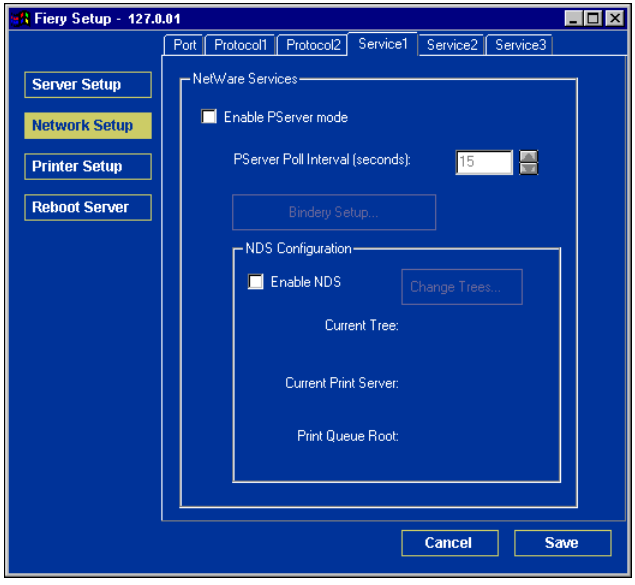
   The Novell Setup dialog box appears.
3. **Make your selection in the Selected Servers list.**



4. **With the file server selected in the Connected Servers list, click Remove.**
5. **Click OK.**

PServer Poll Interval

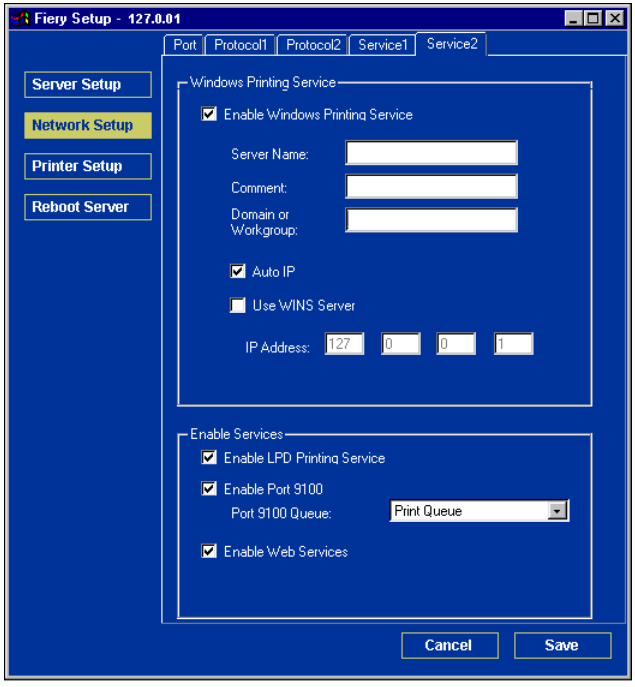
Specify the polling interval (in seconds) for NetWare printing.



Windows Print Sharing with Server Message Block (SMB)

For setting up the Windows printing service, text fields may include uppercase letters, numerals, spaces, and the following characters:
- _ . ~ ! @ # $ % ^ & ( ) { } \ ' , "

NOTE: Lowercase letters are *not* allowed, except in the Comment field.



Enable Windows Printing Service—Select to enable SMB (Server Message Block), the file and printer sharing protocol built into Windows. Enabling SMB lists the iR-M2 on the network so that Windows clients can print to a particular print connection (Hold, Print, or Direct) on the iR-M2 without any other networking software. For information on setting up a Windows client for Windows printing, see the *User Software Installation Guide*.

NOTE: Windows (SMB) printing runs over TCP/IP, so you must configure TCP/IP on the iR-M2 and any computers that use Windows printing.

Server Name—Enter the server name that will appear on the network. It can, but does not have to, be the same name as the server name assigned to the iR-M2 (see page 5-3).

Comment—Enter information about the printer, up to 15 characters. These comments are listed in the Properties of the iR-M2 in Network Neighborhood. Lowercase letters are allowed in this field.

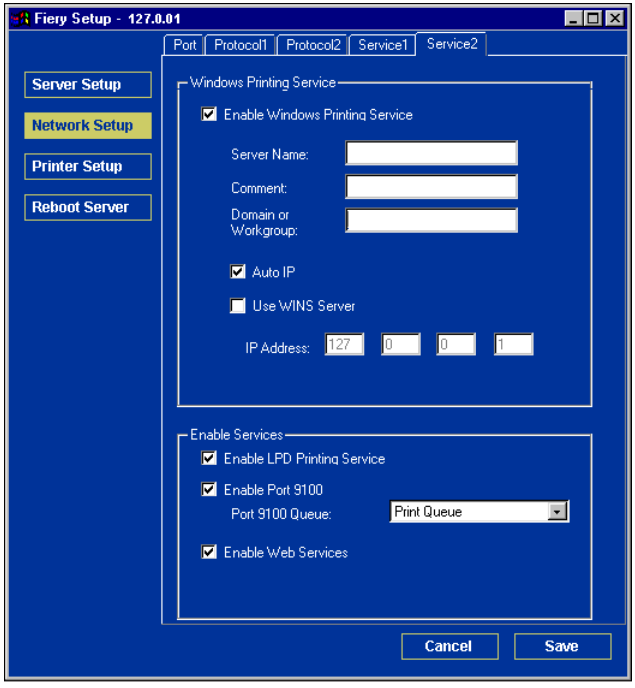
Domain or Workgroup—Enter the workgroup or domain where the iR-M2 should appear.

Auto IP—If you have already enabled IP Auto in Protocol Setup, and selected either DHCP or BOOTP as the protocol for obtaining an IP address, check this option to allow the iR-M2 to obtain the IP address automatically for the WINS Name Server. If you do not check this option, you can use the following options to specify whether to use a WINS Name Server and what its IP address is.

Use WINS Server—Select to use a WINS name server. Broadcasts from SMB devices cannot be routed beyond their original network segment without a WINS name server. Setting up the WINS name server is outside the scope of this manual. To find out if a name server is available, contact your network administrator.

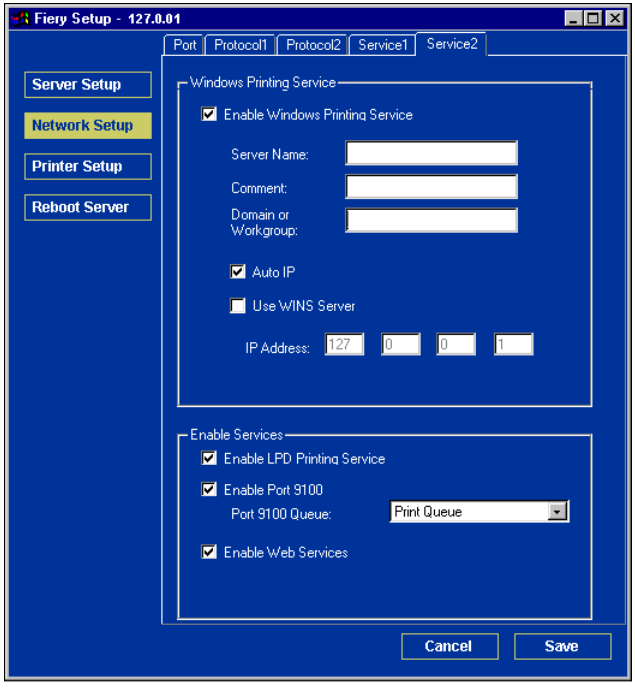
Token Ring WINS Server—Enter the IP address of the Token Ring WINS name server.

HTTP Connection Support (WWW)



Enable Web Services—Select to make the WebTools available to users (see page 6-2). TCP/IP must already be enabled on the iR-M2 and on users' computers. The WebTools include WebSpooler, Status, WebLink, and WebSetup. A Java-enabled Web browser and a valid IP address are required for each user. For details on supported browsers and computer requirements, see the *Quick Start Guide*.

Port 9100 printing



Enable Port 9100—Enables applications to open a TCP/IP socket to the iR-M2 at Port 9100 to download a print job.

Port 9100 Queue—Allows you to attach Port 9100 to any of the published iR-M2 print connections.

Printer Setup options

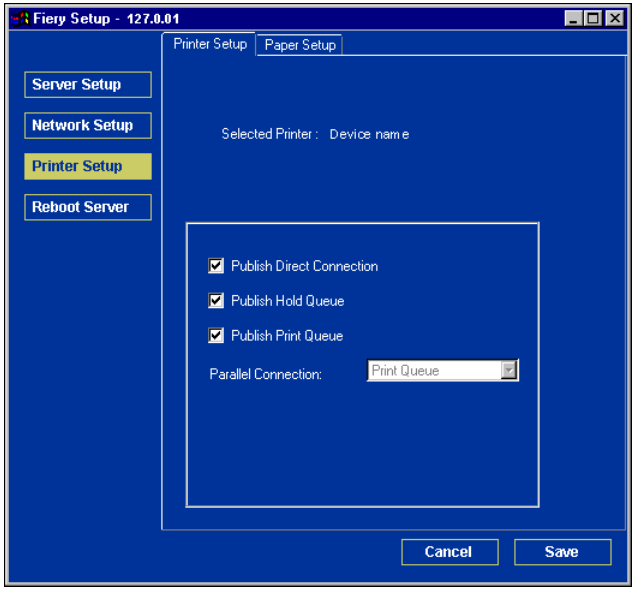
You can specify the following settings in the Printer Setup tab:

- Printer Connections
- PS (PostScript) Setup

NOTE: In the following illustrations, "Device name" represents the model of the copier/printer connected to the iR-M2, which is iR-M2.

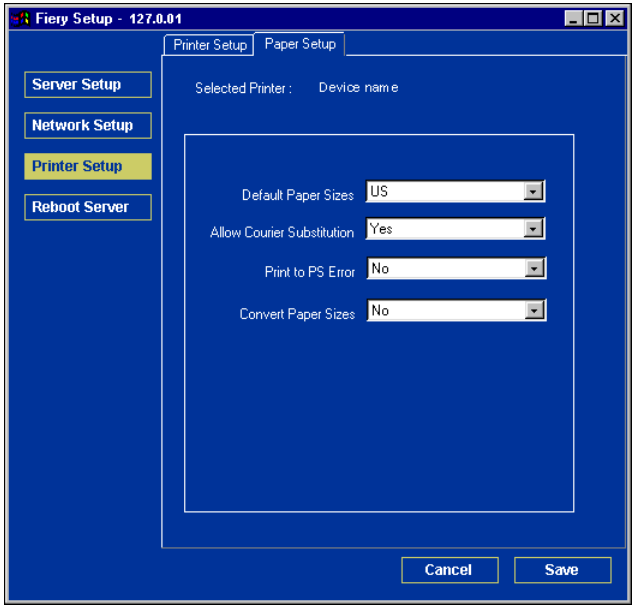
Printer Connections

Specify whether to publish the Print Queue, Hold Queue, or Direct Connection.



PS (PostScript) Setup

NOTE: In the following illustrations, "Device name" represents the model of the copier/printer connected to the iR-M2, which is iR-M2.



Default Paper Sizes—Specify whether to print on US paper sizes (for example, Letter, Legal, Tabloid), or Metric paper sizes (for example, A4 or A3) by default. When no paper size is defined within a PostScript file, jobs are printed on Letter-size paper if you choose US, or A4 paper if you choose Metric.

Allow Courier Substitution—Specify whether to substitute Courier for unavailable fonts. When you choose Off, jobs requiring fonts unavailable on the iR-M2 hard disk generate a PostScript error and do not print. This setting does not apply to PDF files; font substitution occurs automatically for PDF files.

Print to PS Error—Specify whether the iR-M2 should print the available portion of a print job when it encounters a PostScript error. In general, this option should be No.

- When you choose No, the printing of the entire job is canceled when a PostScript error occurs, but the processed portion of the job and the PostScript error information are stored on the iR-M2. You can view the job and the error information from the job management tools.
- When you choose Yes, the portion of the job processed before the error occurred is printed.

Convert Paper Sizes—Specify whether to convert paper sizes in documents automatically to the default paper sizes specified. For example, if you select Letter/11x17->A4/A3, a letter size job is automatically printed on A4 paper. If you select No, the iR-M2 prints the job only if it finds a media source in the size specified by the job.

Exiting Setup

When you have finished specifying Setup options, click OK and close the Setup dialog box. You are notified that the iR-M2 must be restarted for the new settings to take effect. You can restart now or later. If Command WorkStation is running, the connection to the iR-M2 is lost and you must log on again when the server has restarted.

After you have completed Setup and restarted the iR-M2 for the first time, install the user software for printing on remote workstations, as described in the *User Software Installation Guide*. To confirm the network connection and your Setup, print a test job from a remote workstation.

Printing the Configuration page

The Configuration page lists the settings in effect for the current Setup. After you have performed Setup, print a Configuration page to confirm your settings.

The other pages you can print from Command WorkStation include the Test Page, Job Log, and Font List. For information on these iR-M2 pages, see the *Job Management Guide*.

NOTE: An Administrator password is required to print or delete the Job Log.

TO PRINT THE CONFIGURATION PAGE

1. **In Command WorkStation, choose Print Pages from the File menu.**
2. **Click Configuration.**
3. **Click Print.**

   Post the current Configuration page near the server for quick reference. Users need the information on this page, such as the current printer default settings.

Chapter 6: Configuring Fiery WebTools

Fiery WebTools allow you to manage your iR-M2 remotely from the Internet or from your company's intranet. The iR-M2 has its own home page, from which you can select a variety of functions, including Status, WebSetup, WebSpooler, and WebLink.

For more information on using WebTools, see the *Printing Guide*.

Configuring the iR-M2 and clients for WebTools

The WebTools provide access to many iR-M2 functions via the Internet (or intranet), providing additional flexibility in remote management. You can access the WebTools from a Windows or Mac OS computer.

To set up WebTools on the iR-M2

1. **In iR-M2 Network Setup, enable TCP/IP.**
2. **Set a valid, unique IP address for the iR-M2, and then set the subnet mask. Set a gateway address, if required.**
3. **Enable Web Services.**
4. **In iR-M2 Printer Setup, confirm that the Print Queue is published.**

To set up WebTools on a computer

1. **Enable TCP/IP networking.**
2. **Assign the workstation a valid, unique IP address and subnet mask, and a gateway address, if required.**
3. **Install an Internet browser that supports the Java language and frames.**

   Make sure Java is enabled. For more information on supported browsers and WebTools requirements, see the *Quick Start Guide*.

TO ACCESS WEBTOOLS

1. **Start your Internet browser.**
2. **Enter the IP address or DNS name of the iR-M2.**
3. **Press Enter.**

   The iR-M2 home page appears.
4. **Click the name of a particular WebTool.**
5. **Click Configure to enable specific WebTools for users.**

Setting up WebTools

In order for network users to access and use WebTools, you must set certain iR-M2 options in Network Setup and Printer Setup. You also must prepare each user's workstation to communicate with the iR-M2 over the Internet or intranet.

For more information about Network Setup, see Chapter 2.

TO SET UP WEBTOOLS ON THE IR-M2

1. **Set Enable Ethernet to Yes in Network Setup>Port Setup>Ethernet Port Setup.**
2. **Set Enable TCP/IP for Ethernet to Yes in Network Setup>TCP/IP Ethernet Setup.**
3. **Set Enable Web Services to Yes in Network Setup>Network Service Setup>Web Services Setup.**
4. **Exit Network Setup, and choose OK to Save Changes.**
5. **Exit Printer Setup, and choose OK to Save Changes.**

Setting the WebLink destination

You can change the pre-set WebLink destination; this function requires the Administrator password, if one has been set.

TO CHANGE THE WEBLINK DESTINATION

1. **Start your Internet browser.**
2. **Enter the IP address or the DNS name of the iR-M2.**

   The iR-M2 home page appears.
3. **Enter the Administrator password, if required, and click OK.**
4. **Press the Control key (Mac OS) or Ctrl key (Windows) as you click WebLink.**

   The Update WebLink dialog box appears.
5. **Enter the new WebLink address (URL) and click OK.**

Chapter 7: Administering the iR-M2

This chapter provides tips on managing iR-M2 printing.

Administrator functions

Administration features are included with the user software and are built into the iR-M2 itself. The following table describes where to find information on these features (page references refer to this manual).

For these operations	And these tasks	See
Setting up network servers	Setting up servers to manage and share printing services	This manual
Connecting and setting up the iR-M2	Connecting the iR-M2 and performing iR-M2 Setup	This manual
	Setting up the iR-M2 to allow user access to WebTools	This manual *Release Notes*
Setting up the printing environment	Setting printer defaults, including modes, imaging, paper size handling, error handling	Printer Setup, pages 4-45 and 5-29 PS Setup, pages 4-48 and 5-30 *Printing Guide*
Setting up the job environment	Publishing the Direct connection, Print queue, or Hold queue to end users on various platforms	Printer Setup, Chapter 2, pages 4-45 and 5-29
Protecting integrity of users' jobs, maintaining consistency of iR-M2 settings	Setting the Administrator password	Passwords, page 7-2 Chapter 3
Setting up all new users	Setting up printing, including installing PostScript printer drivers and PPD files for the printer Installing optional user software Preparing users to access WebTools	This manual *Release Notes*
Getting users started with printing	Printing to the iR-M2 Setting job-specific options Using Fiery utilities	*Printing Guide* *Job Management Guide*

For these operations	And these tasks	See
Controlling the job flow	Using WebTools, Command WorkStation and Fiery utilities and for managing job priorities, tracking current jobs, canceling jobs, printing jobs in the Hold queue, and reprinting from the Printed or Hold queue	*Printing Guide* *Job Management Guide* *Release Notes*
Job accounting	Viewing, printing, and exporting the Job Log, user notes Setting automatic printing and clearing for the Job Log	*Job Management Guide*
Maintaining optimal iR-M2 performance	Tips Deleting jobs, clearing queues	page 7-8, also *Job Management Guide*
Troubleshooting	Troubleshooting iR-M2 Setup	Appendix B

Setting passwords

You can set or change the Administrator password for the iR-M2. Anyone with the Administrator password can modify the Setup options, and control the flow and order of print jobs with the job management tools.

When the iR-M2 is installed, there is no password. If you do not create an Administrator password, users are not required to enter a password to modify the Setup or use the administrator functions in the job management tools. If an Administrator password has been set previously, you are required to enter it when you run Setup. Use the up and down arrow buttons to select the characters and the left and right arrow buttons to move between them (see "Types of Setup screens" on page 4-11).

Passwords from the Control Panel

For more information on Administrator access privileges, see page 3-3. For information on controlling print jobs with the job management tools, see the *Job Management Guide*.

NOTE: The Operator password can be set and changed only from Command WorkStation.

TO CHANGE THE iR-M2 PASSWORD

1. **Scroll through the main Setup menu and choose Change Password.**
2. **Enter and confirm the password, as described below.**

New Password

Use the up and down arrow buttons to select the characters and the left and right arrow buttons to move between them. Enter characters from left to right, since the left arrow button is also a Delete key. The password can be any combination of letters and numbers up to 19 characters. Choose OK when you are done. Be sure to keep track of the password.

NOTE: The only way to remove a password that you cannot remember is to reinstall the system software.

Verify New Password

Reenter the new password, exactly as you entered it initially. If you make a mistake, you are prompted to enter the password again. The new password is effective after you save changes and restart the iR-M2.

Passwords

You can set, change, and remove passwords for the iR-M2. These passwords, specific to the Server process, have different uses than the Windows NT Administrator and Operator passwords. Keep careful track of the passwords you set for each.

Administrator—Controls access to Setup; Administrator privileges also include Operator privileges.

Operator—Controls access to job management functions via the job management tools.

NOTE: For more information on iR-M2 passwords and the access privileges they allow, see page 3-3.

By default, *no* passwords are set. If you do not specifically set passwords, all users will have access to important functions such as Setup (including setting passwords) and job control. We *strongly recommend* that you set at least an Administrator password to protect the iR-M2 from unauthorized changes to Setup.

TO SET OR CHANGE A PASSWORD

1. **Select the password you want to change.**
2. **Type the password in both the Enter New Password and Verify New Password fields.**

   Passwords are case-sensitive and can be any combination of letters and numbers up to 19 characters. You must enter the password *exactly* the same way both times. The new password remains in effect until you change it.

TO REMOVE A PASSWORD

1. **Select the password you want to delete.**
2. **Delete the asterisks (*) in both the Enter New Password and Verify New Password fields.**

If you forget the Administrator password, contact your authorized service representative to reinstall iR-M2 system software. This clears the Administrator password and allows you to set a new one.

Clearing the iR-M2

The Clear Server command allows you to clear all queued print jobs from the iR-M2—jobs in the iR-M2 Print, Hold, and Printed queues. Jobs can also be deleted, either individually or as a group, using the job management tools. Clear Server also clears all jobs archived on the iR-M2 hard disk, the index of archived jobs, and finally, all FreeForm™ masters and the index of FreeForm masters.

To clear the iR-M2, scroll through the Functions menu and choose Clear Server. You are asked to confirm your selection. If the Administrator password has been set, you are prompted to enter it.

Restoring the iR-M2 to factory defaults

When iR-M2 system software is first installed, a backup copy is made automatically. You can recover the system from this backup without having to reload the software from CDs.

All job data is cleared when you restore the backup. For information about the items that are cleared, see "Clearing the iR-M2" on page 7-5. You must perform Setup again because the iR-M2 is restored with default settings.

TO RESTORE THE iR-M2

1. **Make sure the iR-M2 is Idle.**
2. **Press Menu and choose Shut Down.**
3. **Choose Reboot System.**
4. **Immediately press the top line selection button and hold it down until the diagnostics have finished.**

   For the location of the line selection button, see "iR-M2 Control Panel" on page 4-3. During reboot, a progress bar indicates when the diagnostics have been completed.
5. **Choose Factory Defaults.**

Printing a Configuration page from the Control Panel

The Configuration page lists all the settings in effect in the current Setup. After you have finished running Setup, print a Configuration page to confirm your settings. The Configuration page can also be printed from Command WorkStation (for details, see page 5-32).

After you make changes to Setup and choose Exit Setup, the iR-M2 reboots. This allows the iR-M2 to recognize the new settings and display them properly on the Configuration page. Allow the iR-M2 to restart and return to Idle before printing a Configuration page. In particular, the restart is necessary if you specified the DHCP, BOOTP, or RARP protocol to obtain an IP address automatically for the iR-M2.

Post the current Configuration page near the server for quick reference. Users need the information on this page, such as the current printer default settings.

Other pages you can print from the Control Panel of the iR-M2 or from Command WorkStation include the PCL and PostScript font lists, Job Log, and Control Panel Map. For information on these pages, see the *Job Management Guide*.

NOTE: An Administrator password is required to print the Job Log.

TO PRINT THE CONFIGURATION PAGE

1. **At the Control Panel, press the Menu button to access the Functions menu.**
2. **Choose Print Pages.**
3. **Choose Configuration.**

Maintaining optimal iR-M2 performance

The iR-M2 does not require maintenance. Beyond the obvious requirements of servicing and maintaining the copier/printer and replenishing consumables, you can improve the overall performance of your system by doing the following:

- **Make the best use of your network connections**

  Publish only connections that will be used; the iR-M2 constantly checks all published connections, even if they are inactive. Match the NetWare polling interval and the number of queues or connections to the demand for printing.

  Review the published connections by printing a Configuration page. Eliminate the connections that are not being used. It is easy to re-establish them when needed.

- **Leave less urgent jobs to times when there is less network traffic or printing**

  You can print recurring print jobs or jobs that are not urgent to the Hold queue. At low-traffic times, the administrator or a user of the job management tools with Operator privileges can move (or copy) all the Hold queue jobs to the Print queue for printing.

- **Reduce unnecessary two-way communication**

  Large numbers of users running Fiery utilities, especially with frequent updates, may have a significant effect on iR-M2 performance.

- **Make sure you have adequate disk space on the iR-M2**

  Periodically review the list of jobs in the Hold queue, and the number of jobs being retained in the Printed queue.

  An administrator can print or delete jobs that are in the Printed queue and Hold queue. Consider printing or offloading inactive jobs. If disk space on the iR-M2 is frequently low, you can disable the Printed queue (in Server Setup) and choose not to publish the Hold queue (in Printer Setup).

  To move or remove queued jobs, use the job management tools. When you free up disk space by removing inactive jobs, new jobs are spooled and printed more quickly.

Starting and shutting down the iR-M2

Generally, you can leave the iR-M2 running all the time. This section describes how to shut down and restart the iR-M2 when necessary.

Starting the iR-M2

To start the iR-M2, move the power switch on the back of the iR-M2 to the On position. If the copier/printer is also turned off, turn it on before turning on the iR-M2.

Diagnostic messages appear on the iR-M2 Control Panel. If any diagnostics fail, more information and instructions appear. Contact your service representative if the iR-M2 encounters problems while running the diagnostics. The iR-M2 continues starting up and displays the message Idle when it is ready to receive data.

NOTE: If an Administrator password has been set, you are required to enter it to access Setup.

If you press a button, the following options appear.

Choose	To do this
Exit Setup	Exit the Setup menus; the iR-M2 reboots.
Server Setup	Enter the Server Setup menus.
Network Setup	Enter the Network Setup menus.
Printer Setup	Enter the Printer Setup menus.
PS Setup	Enter the PostScript Setup menu.
PCL Setup	Enter the PCL Setup menu.
Job Log Setup	Enter the Job Log Setup menu.
Change Password	Change the Administrator password.

Restart the iR-M2

Use the following procedure to restart the iR-M2, rather than using the power switch on the back of the iR-M2.

Restart Server restarts the iR-M2 system software without shutting down the iR-M2 operating system.

TO RESTART THE IR-M2

1. **Make sure the iR-M2 is not receiving, processing, or printing a job.**

   Make sure the status message on the Control Panel reads Idle.

2. **Press the Menu button to display the Functions menu.**
3. **Use the down arrow button to scroll to the last screen, and choose Shut Down.**
4. **Use the line selection button to choose Restart Server.**

Reboot the iR-M2

Use the following procedure to reboot the iR-M2.

Reboot System shuts down and restarts the iR-M2 system software and operating system.

TO REBOOT THE IR-M2

1. **Make sure the iR-M2 is not receiving, processing, or printing a job.**

   Make sure the status message on the Control Panel reads Idle.

2. **Press the Menu button to display the Functions menu.**
3. **Use the down arrow button to scroll to the last screen, and choose Shut Down.**
4. **Use the line selection button to choose Reboot System.**

Shutting down the iR-M2

You may need to shut down the iR-M2 for service. When you do so, fonts downloaded to the hard disk are not deleted. Print jobs in the Hold and Printed queues and jobs that have been processed but not printed are not deleted and are available for printing when you restart the iR-M2.

TO SHUT DOWN THE iR-M2

1. **Make sure the iR-M2 is not receiving, processing, or printing a job.**

   Make sure the status message on the Control Panel reads Idle. If a job has just finished processing or printing, wait at least five seconds after the Control Panel status message changes to Idle before proceeding.

   NOTE: If a job from the Print queue is processing, it will continue processing and print after the iR-M2 is restarted; if a job to the Direct connection is processing, it will not finish processing or printing.

2. **Press the Menu button to display the Functions menu.**

3. **Use the down arrow button to scroll to the last screen, and choose Shut Down.**

4. **Use the line selection button to choose Shut Down System.**

   Proceed to the next step when the screen displays the message, "It is now safe to power off the server."

5. **Turn off the iR-M2 by moving the power switch on the back to the Off position.**

   NOTE: After turning off the iR-M2, turn off the copier/printer.

Appendix A: Token Ring Network Option

Token Ring is an alternative network architecture to the Ethernet architecture. Token Ring networks offer a high resistance to failure and are commonly used in large or high-traffic network installations.

Token Ring networks operate by passing a network token around the electronic equivalent of a ring. The token is a data packet that circulates from one network node to another, controlling access to the network. In practice, each workstation is connected to a port on one or more "Multi Station Access Unit" (MAUs) that act as network hubs for the ring connection.

This appendix describes the Token Ring option and cable connections and refers you to the remaining configuration required for printing to the iR-M2.

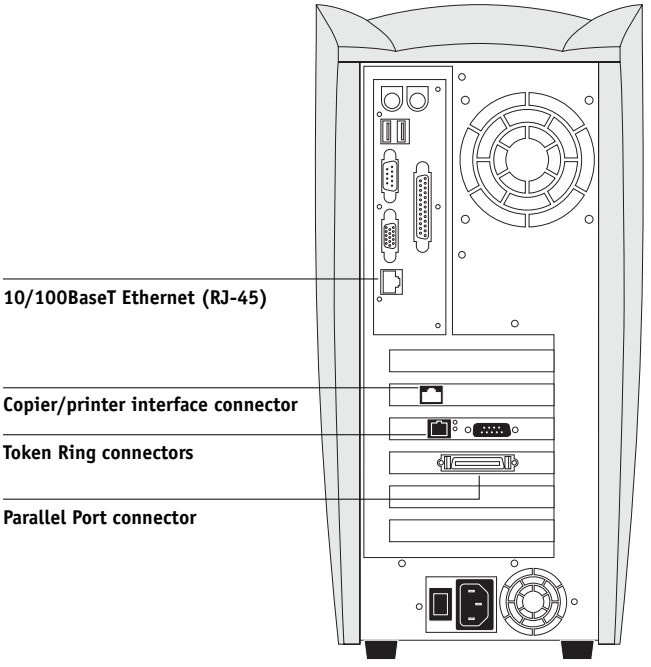
iR-M2 Token Ring option

The iR-M2 supports Token Ring networks that use IPX and TCP/IP protocols. To use the iR-M2 with a Token Ring network, you must install a Token Ring network interface card provided by EFI. You can use the shielded twisted pair (STP) cable.

Connecting Token Ring hardware

The service/support center that installs the iR-M2 typically also installs the Token Ring option at the same time and configures the iR-M2 to enable printing.

Back view of the iR-M2 with the Token Ring option installed



Turn off the iR-M2 before connecting it to any network device.

NOTE: Do not attach cable to both Token Ring connectors.

TO CONNECT CABLE TO THE IR-M2

1. **Turn off the iR-M2.**
2. **Connect the cable from the Token Ring MAU to the iR-M2 Token Ring card.**

   Configure the NetWare, Windows NT/2000, or UNIX server to print to the iR-M2 (see the following two sections), then proceed to page 4-1 for iR-M2 Setup.

IPX/SPX installations

If your network uses IPX/SPX protocols with Token Ring, configure at least one printer, one iR-M2 Print Server, and one iR-M2 Print Queue on the NetWare server as described in "Configuring a NetWare server for printing" on page 2-10. You can configure up to eight bindery servers and one NDS tree connection to the iR-M2. This total is the same whether the iR-M2 is connected by Token Ring, Ethernet, or both. For more information, see "Setting up an NDS connection" on page 2-12.

TCP/IP installations

If your network uses TCP/IP protocols with Token Ring, configure at least one printer and one iR-M2 queue on a Windows NT/2000 server (see "Configuring a Windows NT 4.0/2000 server to communicate with the iR-M2" on page 2-3) or UNIX server (see "Setting up the iR-M2 on TCP/IP networks" on page 2-18).

Setting up Token Ring on the iR-M2

Token Ring Setup on the Control Panel is similar to Ethernet Setup. From Network Setup, perform Port Setup, Protocol Setup, and Service Setup. The setups you need are summarized in the table on page 4-16.

NOTE: Connect the Token Ring cable before doing iR-M2 Network Setup, so that the Token Ring card can configure itself properly.

Setting up NetWare Windows clients

Client setup is exactly the same as for IPX clients using Ethernet. For details, see "Setting up NetWare Windows clients for printing" on page 2-13.

Appendix B: Troubleshooting

This chapter provides troubleshooting tips.

Troubleshooting the iR-M2

Startup diagnostics are described in the *Installation and Service Guide* for service technicians. Contact your authorized service/support center if you see any startup error messages in Command WorkStation or if the iR-M2 does not reach the Idle state.

Troubleshooting during Setup from the Control Panel

The following section explains some error and alert messages you may see during Setup that might not be self-explanatory.

Network Setup messages

After this Setup screen	This message	Means
Enable AppleTalk (Network Setup>Protocol Setup>AppleTalk Setup)	No AppleTalk zone found.	The Ethernet network cable is not attached to the connector on the iR-M2, or the network cable is not plugged into the hub or network. If your AppleTalk network has zones, and you want to specify a zone for the iR-M2, you must connect the network cable to the iR-M2 before performing AppleTalk Setup. Could also mean the AppleTalk network does not have zones. Zones are not required for printing to the iR-M2. Press OK to continue.
Protocol Setup or Service Setup (Network Setup)	You must first enable a network port.	Enable at least one network port (Ethernet or Token Ring) in Port Setup before beginning Protocol Setup or Service Setup.

After this Setup screen	This message	Means
Frame Type selection (Network Setup>Protocol Setup>IPX/SPX Setup)	Invalid frame size.	The network hub is not connected to a Novell computer when the iR-M2 tries to bind.
	Warning! IPX network number is zero.	No other IPX computer can be found on the network, or the network hub is not connected to the network when the iR-M2 tries to bind. When this occurs, the network number defaults to zero.
	Can't detect Token Ring hardware. Token Ring hardware not installed or not functioning.	iR-M2 queries the Token Ring hardware. Error indicates that some components are not installed, are not installed correctly, or not installed in the correct device. An unsupported Token Ring board may be in use. Check with your authorized service/support center.
Token Ring Setup	Can't autodetect the ring speed. No device on ring.	The iR-M2 is trying to detect the current ring speed, but it is the only computer on the Token Ring network. Connect another computer to the Token Ring network first, before connecting the iR-M2.
Enable NDS (Network Setup>Service Setup>PServer Setup>NDS Setup)	No NDS trees found.	No NDS trees were found on the Novell network. Check to see that the frame types on the iR-M2 are properly configured.
Select NDS Tree (Network Setup>Service Setup>PServer Setup> NDS Setup)	Warning! Selecting a new NDS tree deletes Bindery setup.	You have previously connected the iR-M2 to a different NDS tree. NetWise supports only a single NDS tree connection. To avoid a potential conflict with an existing tree connection (for example, if the connection was made through a NetWare server in emulation mode), all bindery settings will be deleted. If you choose OK, and choose Yes in the following message (Delete Bindery setup and continue?), bindery settings are deleted and have to be re-entered in Bindery Setup. To avoid deleting the bindery settings, press the Menu key, or select OK and choose No in the following message (Delete Bindery setup and continue?). Repeat NDS Setup without changing the NDS tree, or exit to Bindery Setup to review your current bindery settings.

After this Setup screen	This message	Means
Navigating NDS tree (Network Setup>Service Setup>PServer Setup> NDS Setup)	___ is empty.	The chosen container contains no sub-containers or objects relevant to the current mode of navigation.
Bindery Setup (Network Setup>Service Setup>PServer Setup> Bindery Setup)	If you also plan to use NDS, set up NDS before Bindery.	No NDS settings are present. You are reminded to perform NDS Setup before Bindery Setup in case your network includes both NDS and bindery servers.
Select File Server From List (Network Setup>Service Setup>PServer Setup> Bindery Setup)	Error. Cannot open bindery connection to NDS server.	Select this server through NDS setup or disable NDS and select it through bindery.
	No NetWare file server found.	No file server was found when iR-M2 queried the network to create a list of supported servers or a list of all servers. Check cable connections and make sure the NetWare server is turned on.
Enter First Letters of Server Name (Network Setup>Service Setup>PServer Setup> Bindery Setup)	File server name not found. Try again?	No file server with those letters was found when iR-M2 queried the network. Check the name of the NetWare file server, check cable connections, and make sure the NetWare server is turned on.
View Server List, Edit Connection (Network Setup>Service Setup>PServer Setup> Bindery Setup)	No file server is selected.	No file server has been added in Bindery Setup.
Add File Server (Network Setup>Service Setup>PServer Setup> Bindery Setup)	All connections used. Remove server?	You have added the maximum number of bindery servers, which is eight. You now have the option of disconnecting one of those servers, so as to add another.

After this Setup screen	This message	Means
Add Server, Enter Your Login Name, Enter Your File Server Password (Network Setup>Service Setup> PServer Setup> Bindery Setup)	No NetWare print server found.	No print server was found when iR-M2 queried the file server you selected. You must configure a print server and a print queue for every NetWare file server that will handle iR-M2 print jobs (see page 2-10).
Any Bindery Setup screen	Novell error code, followed by a message.	Novell NetWare has reported an error. Command WorkStation reports the error number and displays a brief message. For the most common errors (listed in the following table), a screen is displayed that allows you to retry the action that evoked the error, such as adding a server. If that is not possible, you are prompted to notify the Novell administrator, who will need to troubleshoot the network. Consult NetWare Administrator documentation for further explanation of Novell error codes.

In Network Setup, when you configure the IPX (Novell) connection, the iR-M2 queries the network for Novell file servers and trees, and attaches to them temporarily. If a guest login is enabled, it will be used. If not, you are prompted to log in from Command WorkStation.

If the selected NetWare file server or tree does not have a guest account, or if the guest account has expired or been disabled by the NetWare supervisor, you will be prompted to notify the IPX (Novell) administrator. In that case, there are two options:

- Enable a guest account on the NetWare server or tree for the purpose of setup.
- Log in with a different account. At the ENTER LOGIN NAME screen, change the default name (guest) to supervisor or enter another valid login name. When you are prompted for a password, enter the correct password for the account you named.

For any Novell error, make sure:

- Your IPX (Novell) network is connected to the iR-M2.
- The NetWare server you are trying to access is running.
- The Novell network has been configured with at least one print server and queue for the iR-M2.
- You have the appropriate permissions and login information, including user name and password, if required.
- The iR-M2 is configured with the correct frame types for communication with the desired Novell servers.

Novell error messages

Novell error	Cause	Suggested action or exit
220 Guest account not available.	The guest account, which you have chosen for initial login, has expired or has been disabled by the NetWare supervisor.	Enable a guest account on the NetWare server for the purpose of Setup. Alternatively, log in to a different account. In the ENTER LOGIN NAME screen, change the default name (guest) to supervisor or another valid login name. When you are prompted for a password, enter the correct password for the account you named.
222 Unable to log in to server. Password has expired for login name.	The server has connected to a file server, but is unable to log in to the file server or print server because the password has expired for the login account name or the named print server.	Select a different login account or print server. The error screen exits to the File Server Login screen (if login to file server failed) or NetWare Print Server screen (if login to Print Server failed). Pressing the Menu button returns to the PServer Setup screen.

Novell error	Cause	Suggested action or exit
252 Unable to log in to server. Login does not exist.	The server has connected to a file server, but is unable to log in to the server because the selected login account does not exist on the file server.	Select a different login account. The error screen exits to the File Server Login screen. Pressing the Menu button returns to the PServer Setup screen.
255 Unable to connect to file server. File server is down or out of connections.	The Novell file server is down or out of connections. This error occurs while the server is trying to connect to the requested file server.	Select a different file server (or try to get someone else to log off). Pressing the Menu button returns to the PServer Setup screen.
nnn Notify IPX (Novell) Administrator.	Indicates other network errors when the iR-M2 is already connected to a file server. Something unexpected has happened and the user generally cannot recover without intervention of the network administrator. Error #197 indicates that you have exceeded the number of login attempts permitted for this account on the NetWare file server. Error #255 usually indicates a hard failure.	Notify the Novell administrator and report the error number. The error screen exits to the PServer Setup screen.

Runtime error messages

For error messages related to canceling jobs and printing, including the Disk Full message and alerts to load media, see the *Job Management Guide*. These messages are reported by the job management tools.

You can turn on PostScript error reporting as a print option from Mac OS applications.

Check power and cable

This message indicates that the interface cable between the iR-M2 and the copier/printer is not connected, or a print job is ready, but the copier/printer is not turned on.

Printer not found

Most failures to find a printer on the network are due to conflicting or missing name or address settings for the iR-M2. You must enter names in specific places. The required names are:

- TCP/IP host name (also known as the DNS name), which is defined by your organization.

  Enter the host name as the Server Name in iR-M2 Setup.

- Remote printer (internal machine) name. Use one of the following:

  ```
  print
  hold
  ```

If you change the DNS name (also known as the TCP/IP host name) of the iR-M2, you must reconfigure one of the Fiery utilities on each workstation.

See the following table for the appropriate name.

In this location	For this item	IPX/SPX networks	TCP/IP networks	See
Server Setup	Server Name option	Administrator defines name	Administrator defines name	page 4-13
Windows NT hosts file	host name	—	DNS name (TCP/IP host name)	page 2-1
Windows NT setup for TCP/IP	lpd host name	—	DNS name (TCP/IP host name)	page 2-1
	Name of printer on lpd host machine	—	print or hold	
UNIX /etc/printcap file (BSD)	rp line	—	print or hold	page 2-17
Solaris	lpadmin queuename	—	print or hold	
NetWare administration utility	print queues (must be all lowercase and in English)	_direct _print _hold	—	page 2-8
Add New Server dialog box, when configuring a Fiery utility	New Device	Utilities are not supported over IPX/SPX.	iR-M2	*User Software Installation Guide*
	Server Name	Utilities are not supported over IPX/SPX.	DNS name (TCP/IP host name)	

Cannot connect to iR-M2 with Fiery utilities

If users cannot connect to the iR-M2, check the following:

- iR-M2 Setup—the appropriate network protocol must be enabled, with the correct parameters (for example, for TCP/IP, the IP address), and you must publish either the Print queue or Hold queue.

  You can check these settings quickly by printing a Configuration page.

- On the client workstation—the appropriate network protocol(s) must be loaded, and your Windows directory should contain a configured Efinl.ini file.

Cannot connect to the iR-M2 with Command WorkStation

If there is a problem connecting to the iR-M2, an error message is displayed.

The problem can occur when:

- The iR-M2 is initially turned on.
- The iR-M2 restarts.
- You have changed settings affecting the server address and have not reconfigured the connection to the server.

If you see this problem, try the following solutions, in this order:

- A remote workstation running Fiery utilities or WebTools may be interfering by obtaining status information. If possible, close the remote application, and try to connect again.
- Restart the Command WorkStation software and try to connect again.
- Check the configuration of the connection and modify it, if necessary, or delete the Efinl.ini file and start over with the process of configuring the connection as described in the *User Software Installation Guide*.

  For Windows 9x/Me, the Efinl.ini file is located in \WINDOWS.
  For Windows NT 4.0/2000/XP, the Efinl.ini file is located in \WINNT.

- Restart the iR-M2.

For information on other error conditions, see the *Job Management Guide*.

Index

D

E

F

G

H

I

J

L

M

N

O

P

Q

R

S

T

U

V

W