C9600

OKI
PRINTING SOLUTIONS

CONFIGURATION GUIDE

C9600n/C9600dn/C9600hdn/C9600hdtn

C9000 Series

PREFACE

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. Oki assumes no responsibility for the results of errors beyond its control. Oki also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by Oki.

While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy or completeness of the information contained herein.

The most up-to-date drivers and manuals are available from the Oki web site:

http://www.okiprintingsolutions.com

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This product complies with the requirements of the Council Directives 89/336/EEC (EMC), 73/23/EEC (LVD) and 1999/5/EC (R&TTE), as amended where applicable, on the approximation of the laws of the member states relating to Electromagnetic Compatibility, Low Voltage and Radio & Telecommunications Terminal Equipment.

Contents

Note and Important Boxes

NOTE

A note appears like this. A note provides additional information to supplement the main text which helps you to use and understand the product.

Important!

An important message appears like this. An important message provides supplemental information which can prevent potential problems.

Introduction

Important!

The network addresses used in this manual are shown for example only. Network addresses used in your installation must be generated from your network administrator.

The OkiLAN Internal Print Server is a fast 100BASE-TX/10BASE-T network interface.

This network print server supports IEEE 802.2, IEEE 802.3, Ethernet-II and SNAP, and can detect those frame types automatically.

It supports major protocols such as TCP/IP, IPX/SPX (NetWare), EtherTalk (Mac) and NetBEUI (Windows).

The print server has a number of security features, including SSL/TLS, IP Filtering, disabling unused protocols, etc. See Section 3 for more information.

Password protection ensures that the print server is safe from unauthorized changes in settings. You can also restrict access by disabling network services, protocols, and ports you are not using. You can limit access to specific authorized IP addresses as well.

The SMTP feature allows you to have an E-mail sent to designated addresses when certain errors occur.

NOTE

For multiple emulation printers, change the emulation in the Printer Menu settings to Auto or PS before printing the self-diagnostic test and settings.

Sections

This book is divided into the following sections:

Print Server Specifications

CPU	Falcon
Frame types	• IEEE 802.2 • IEEE 802.3 • Ethernet-II, SNAP, AUTO
Network interface	• 100BASE-TX • 10BASE-T
Network protocols	• TCP/IP – Network layer: ARP, RARP, IP, ICMP, PnP – Session layer: TCP, UDP – Application layer: PR, FTP, TELNET, HTTP, IPP, BOOTP, DHCP, SNMP, DNS, SMTP, POP3 • IPX/SPX (NetWare) – Remote printer mode (up to eight file servers and 32 queues) – Print server mode (up to eight print servers) – Encrypted password supported in print server mode – SNMP • EtherTalk:ELAP, AARP, DDP, AEP, NBP, ZIP, RTMP, ATP, PAP • AppleTalk: Rendezvous • NetBEUI: SMB, NetBIOS

Supported Operating Systems	• WIndows – XP – 2000 – NT 4.0 – Me/98 • Novell NetWare – 3.12J, 3.2J – 4.11J – 5.0 – 6.0 • UNIX – Solaris 2.4, 2.6, 7, 8 – SUN OS 4.x.x – HP-UX 9.0.3 – AIX 4.3.1 • Macintosh – OS 10.1, 10.2x, 10.3x
Print Service	• LPR • FTP • Port 9100 • Web Direct Printing • RPRINTER Bindery • RPRINTER NDS • QSERVER Binder • QSERVER NDS
Security Features	• IP FIltering • SSL/TLS • IP Security On/Off
Functions	• Self-diagnostic test printing • Banner supported • Monitoring/configure by Web browser • Printer status notification by E-Mail

Self-Diagnostic Test

With the printer power switched on, press the print server test button for more than three seconds and release. The self-diagnostic test results (normally “OK”) and Network Information configuration settings are printed.

NOTE

If “NG” is displayed for the self- diagnostic test instead of “OK” see page 208.

The printout contains the following network information:

- Printer Information
- General Information
- TCP/IP Configuration
- NetWare Configuration
- EtherTalk Configuration
- NetBEUI Trap Configuration
- Email Configuration
- SNMP Trap Configuration
- IPP Configuration
- Time/SNTP Configuration
- Security
- Maintenance

Available Utilities

You can configure the print server by using one of the following utilities:

Utility	Features	System requirements
Quick Setup (see page 16)	Configure the print server easily and simply without installing any software packages into your system. You can set the following: • Enable/disable TCP/IP, NetWare, EtherTalk, NetBEUI protocols. • Set IP address, Subnet Mask and Gateway for TCP/IP manually or by using DHCP. • Set NetWare Mode and create Queue/Print Server/Printer objects. • Zone name and Port name for EtherTalk.	Windows* • XP • 2000 • NT 4.0 • Me • 95/98 * with TCP/IP protocol or IPX/SPX protocol installed. To create a NetWare queue, NetWare Client 32 or IntranetWare Client should be installed in your system.
Web Browser (see page 18)	Configure the print server and printer by using a Web browser such as Microsoft Internet browser or Netscape Navigator.	Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator Version 6.2 and higher. Operating system that supports the Web browser.

Utility	Features	System requirements
AdminManager (see page 24)	Configure the print server in detail.	Windows* • XP • 2000 • NT 4.0 • Me • 95/98 * with TCP/IP protocol or IPX/SPX protocol installed. To create a NetWare queue, NetWare Client 32 or IntranetWare Client should be installed in your system.
TELNET (see page 57)	Configure the print server using TELNET.	Third-party vendor developed TELNET client package. A TELNET Application is standard in Windows, UNIX and Linux.

Section 1: Configuring The Print Server

This section explains the various ways you can configure your print server.

It consists of the following:

Configuration: Using AdminManager Quick Setup

Introduction

IMPORTANT!

- This utility can only be used on a PC that can be connected to the network with TCP/IP or IPX/SPX.
- This utility must be used on a PC that is located in the same segment as the printer.
- To create a NetWare queue, NetWare Client 32 or IntranetWare Client should be installed in your system.

The AdminManager Quick Setup utility allows you to configure the print server easily and simply without installing any software packages.

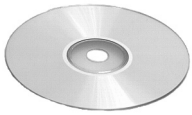
You can configure the following:

- Enable/disable TCP/IP, NetWare, EtherTalk, NetBEUI protocols.
- Set IP address, Subnet Mask and Gateway for TCP/IP manually or by using DHCP.
- Set NetWare mode and create Queue/Print Server/Printer objects.
- Zone name and Port name for EtherTalk.

Configuration requires a PC with one of the following Windows Operating Systems:

- Windows XP
- Windows 2000 Advanced Server/Professional
- Windows Me/98
- Windows NT Server 4.0/Work-station 4.0

Using Quick Setup



1. Insert the Network & Utilities CD into the CD-ROM drive and wait for it to autorun.
   If the installer does not start automatically, click [Start] → [Run] and enter E:\Setup (where E is your CD-ROM drive) in the Open field, then click [OK].
2. Accept the Software License Agreement if you have not previously accepted it, then select [Network Card Standard Setup] and follow the on-screen instructions.

NOTE

The NetWare Client 32 or IntranetWare Client should be installed on the PC used for the creation of network queues.

Installation enables the user to create network queues and perform other functions.

3. When you are done making your selections, review them and if they are correct, click [Execute].
   The new settings are transmitted to the network card, but the network card is still operating with pre-transmission settings.
4. Click [Finish] to validate the new settings.
   The print server reinitializes.

Configuration: Using a Web Browser

If the print server is connected to the network using TCP/IP, its settings and the printer menu settings can be configured using a Web browser such as:

- Microsoft Internet Explorer Version 5.5 and higher

or

- Netscape Navigator version 6.2 and higher

No guarantees are offered for other browsers. Refer to the relevant manuals for details of how to launch and use the browser.

Important!

The network addresses used in this manual are shown as examples only. Network addresses used in your installation must be generated from your network administrator.

To apply configuration changes using a Web browser, you will be prompted for a username and password:

- username = root
- default password = the last six digits of the MAC address.

Launching the Web Browser

NOTE

The following illustrations are from Microsoft Internet Explorer.

1. Have a copy of the self-diagnostic test printout handy (see page 12).

- The MAC address is listed under “General Information.” You will use the last six digits of the MAC Address (minus punctuation marks) as the password when logging in for the first time.
- The IP Address, Subnet Mask and Default Gateway are listed under “TCP/IP Configuration.”

2. Launch the Web browser.
3. Enter the print server’s IP Address:

Internet Explorer

Enter the print server’s IP Address in the [Address] field.

Netscape Navigator

Enter the print server’s IP Address in the [Location/Position] field.

4. Press the ENTER key.
   The Printer Status window appears.

NOTE

You can also launch the web browser from within the AdminManager utility. To do this, highlight the appropriate print server, then click [Setup] → [Setup by HTTP]:

5. To ensure correct operation, change the following browser setting:

Microsoft Internet Explorer

a. In the Tools pull-down menu, select [Internet Options].

b. On the [General] tab, under [Temporary Internet files], click [Settings…].

c. Under [Check for newer versions of stored programs], select [Every visit to the page].

d. Click [OK].

Netscape Navigator

a. In the Edit pull-down menu, select [Settings].

b. Under [Details], click [Cache].

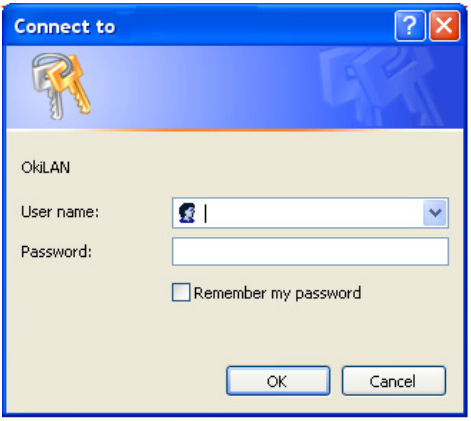
c. Under [Document in cache is compared to document on network], select [Once per session].

NOTE

If you change the window size of the browser immediately after changing the configuration, [Security information] may appear. Uncheck [Display this message next time].

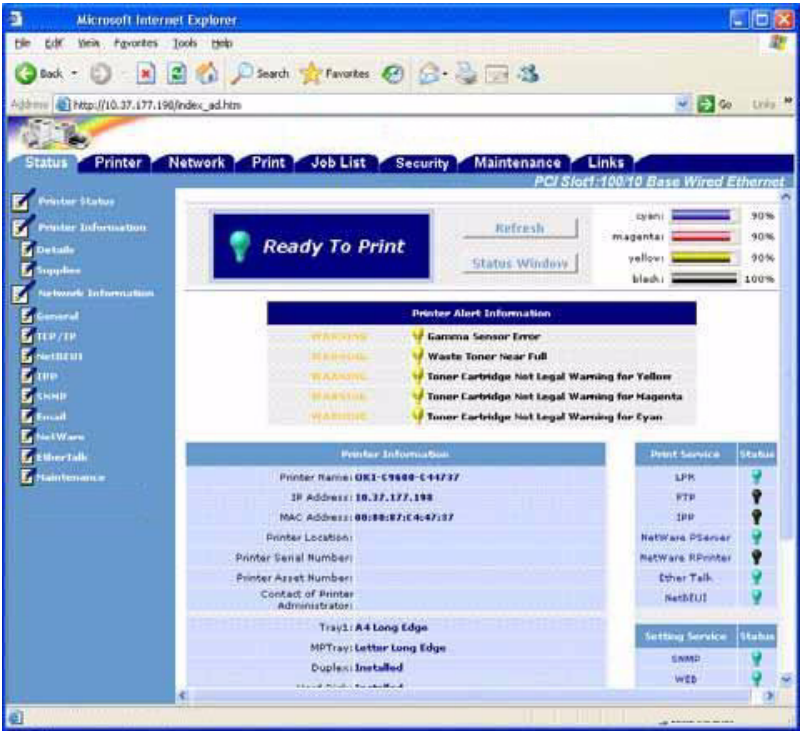
6. Click [OK].
7. Click [Administrator Login].
   The [Connect to] window appears.

8. Enter “root” for the [User Name] and your password—the default is the last six digits of the MAC address—under [Password].



9. Click [OK].

Using the Web Browser



1. Click on a tab to access the settings for a particular category.
2. In the left column, click the category for which you wish to make changes.
3. When you are finished, click [Submit] to send the changes to the print server.

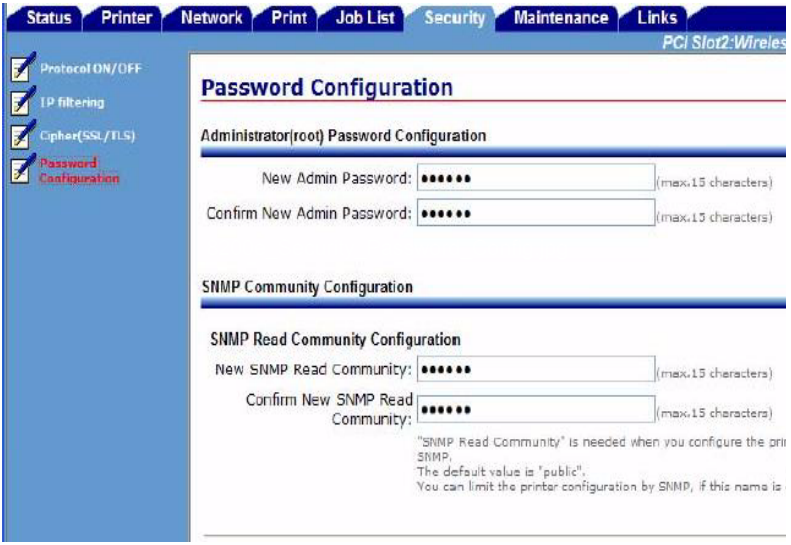
NOTE

For more details on setting non-security type configurable items using the web browser, see “Configurable Items” starting on page 66.

For information on setting up security features using the web browser, see “IPP Encryption” on page 128 and “Web Encryption” on page 139.

Changing the Password

1. Open the browser and enter the IP Address for the print server, then login with your current password.
2. Click [Security] → [Password Configuration].



3. Under [Administrator(root) Password Configuration], enter the new password, then enter it again under [Confirm New Admin Password].
4. Click [Submit].

Configuration: Using AdminManager Standard Setup

AdminManager Standard Setup is a powerful Microsoft Windows-based utility for configuring all print server functions using a graphical user interface.

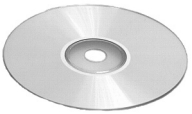
IMPORTANT!

- This utility can only be used on a PC that can be connected to the network with TCP/IP or IPX/SPX.
- This utility must be used on a PC that is located in the same segment as the printer.
- To create a NetWare queue, NetWare Client 32 or IntranetWare Client should be installed in your system.

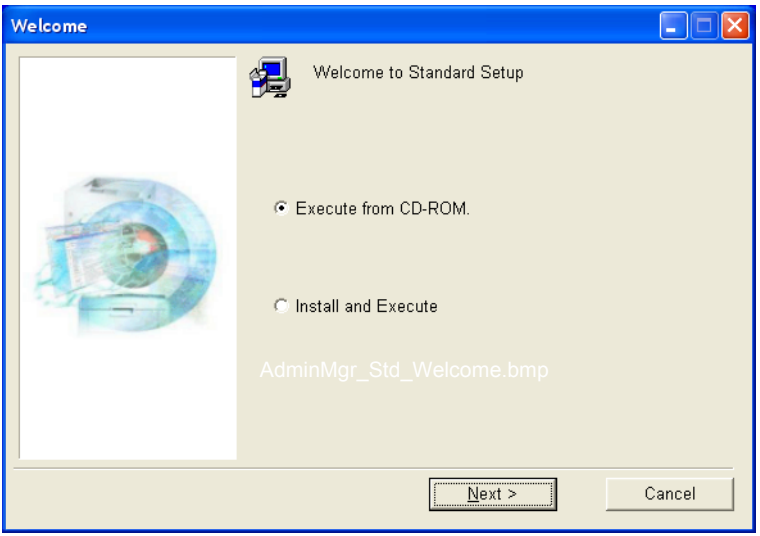
Configuration requires a PC with one of the following Windows Operating Systems:

- Windows XP
- Windows 2000 Advanced Server/Professional
- Windows Me/98
- Windows NT Server 4.0/Work-station 4.0

Installing AdminManager



1. Insert the Network & Utilities CD into the CD-ROM drive and wait for it to autorun.
   If the installer does not start automatically, click [Start] → [Run] and enter E:\Setup (where E is your CD-ROM drive) in the Open field, then click [OK].
2. Accept the Software License Agreement if you have not previously accepted it, then select [Network Card Standard Setup].
3. Click [Oki Device Standard Setup].
   The Welcome window appears.



   Here you can choose:

   – run the utility from the CD [Execute from CD-ROM]
     or
   – load the utility onto your hard drive and run it from there [Install and Execute].

4. Click [Next].

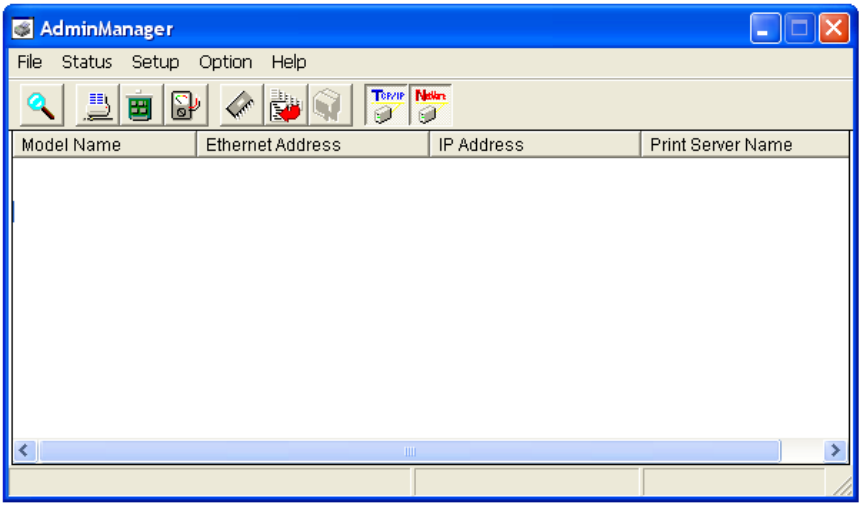
a. **If you selected [Install and Execute]**, follow the on-screen instructions to install AdminManager, then see the “The AdminManager Interface” section below.

b. **If you selected [Execute from CD-ROM]**, see the “The AdminManager Interface” section below.

The AdminManager Interface

NOTE

To open the standard version of AdminManager from your desktop, click [Start] → [Programs] → [OKI Setup Utility] → [Admin Manager].



Pull-Down Menus

File menu

- **Search**
  Locates and lists all printers in your network which have the OkiLAN 8200e installed.
- **Exit**
  Exit the program.

Status Menu

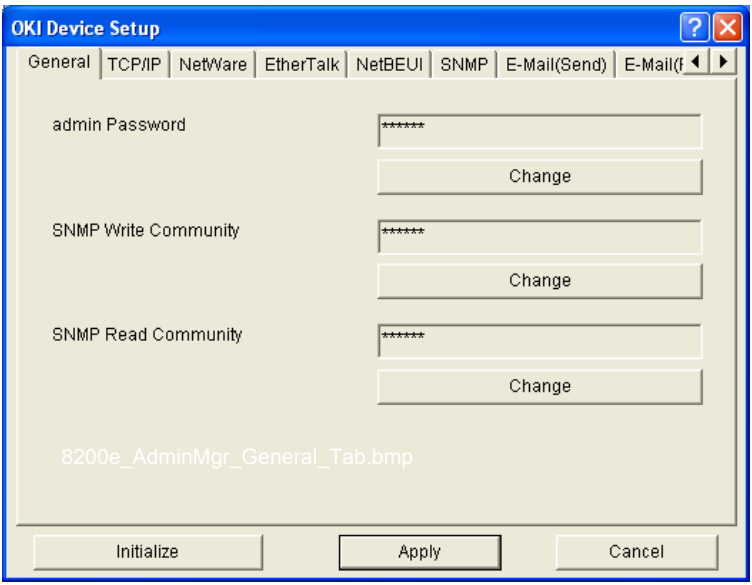
- **Printer Status**
  Displays the current status of the printer.
- **System Status**
  Displays the current network card configuration. The configuration data can be saved as a log file.
- **NetMeter**
  Displays the current network status. For more information, see the NetMeter on-line Help file.
- **List of Configuration Items**
  Displays current configuration. Configuration data can be saved as log file.

Setup Menu

- **Oki Device Setup**
  Use this to configure the print server card.

> **NOTE**
>
> To find corresponding items in the Web Browser and TELNET, see “Summary of Configurable Items” starting on page 16.

General Tab (Oki Device Setup)



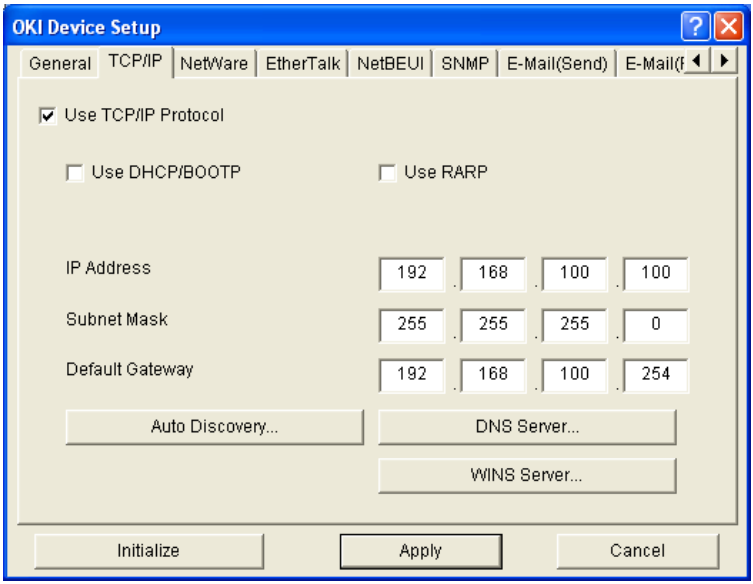
The General tab allows you to change the admin password, SNMP Write Community name and SNMP Read Community name.

1. Click [Change].
2. Enter the current value, then enter the new value and re-enter it under [Confirm …].

> **NOTE**
>
> The default admin password is the last six digits of the MAC Address, minus any punctuation marks. E.g., for a MAC (Ethernet) Address of 00:80:87:A4:55:79, the password would be A45579.

3. Click [OK].

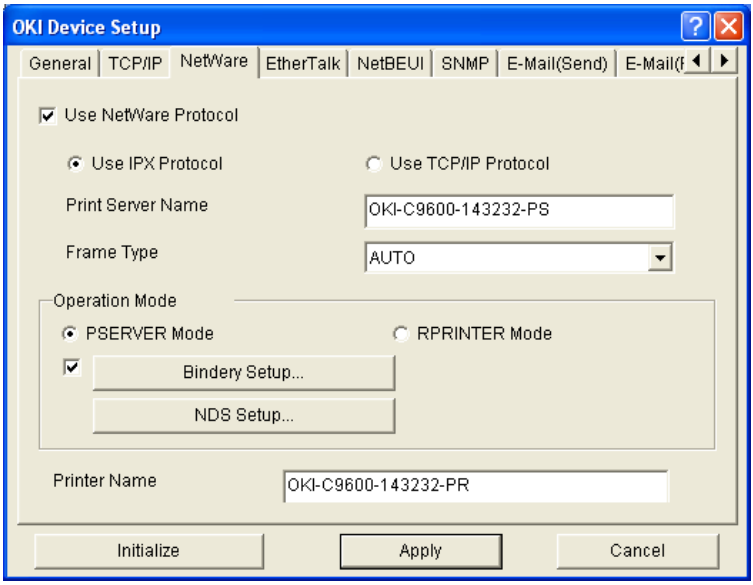
TCP/IP Tab (Oki Device Setup)



Item	Comments
Use TCP/IP Protocol	Enable/disable TCP/IP protocol.
Use DHCP/BOOTP	Click to select this item if the IP address, subnet mask, default gateway and IP addresses for DNS primary server and secondary servers are retrieved from the DHCP or BOOTP server.
Use RARP	Click to select this item if the IP address is retrieved from the RARP server.
IP Address	Set the IP address of the selected network interface card.
Subnet Mask	Set the subnet mask of the selected network interface card.
Default Gateway	Set the default gateway of the selected network interface card.
Auto Discovery…	Use to enable/disable Network PnP and Rendezvous, and to set the Device Name.

Item	Comments
DNS Server…	Set IP addresses for DNS primary and secondary servers.
WINS Server…	Use to set IP addresses for primary and secondary servers, and to enter a Scope ID.

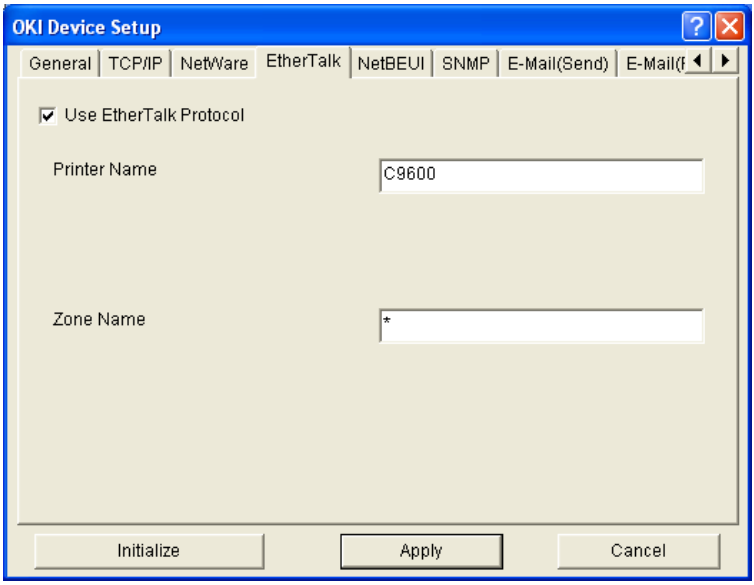
Netware Tab (Oki Device Setup)



Item	Comments
Use NetWare Protocol	Enable/disable NetWare protocol.
Use IPX Protocol	Click to deselect if you do not wish to use IPX.
Use TCP/IP Protocol	Click this to select TCP/IP protocol.
Print Server Name	Set a Print Server name.
Frame Type	Set the primary NetWare frame type.
Operation Mode	Select the NetWare mode: • PSERVER Mode (the default) • RPRINTER Mode
[Bindery Setup] check box.	Click to deselect Bindery. When Bindery Setup is deselected, the [Bindery Setup…] button is greyed out.

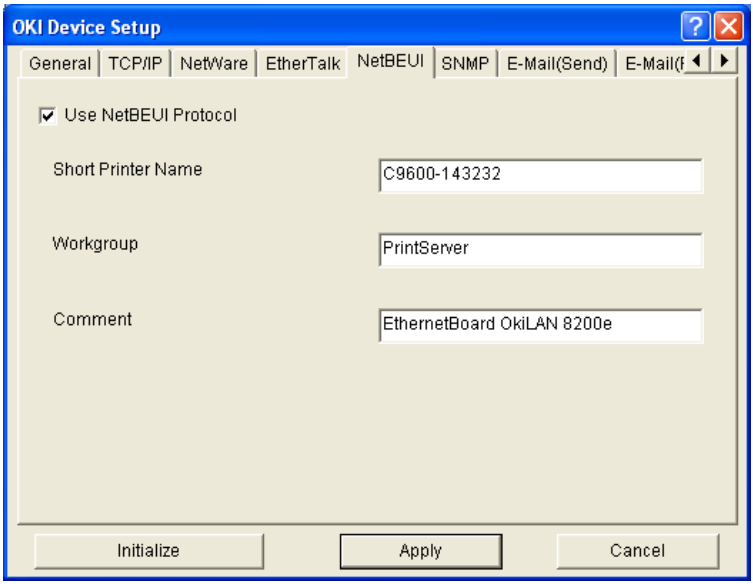
Item	Comments	
Bindery Setup	Configure Bindery mode items, including:	
	File Server to be connected.	Select up to 8 file servers to connect.
	Password.	Set a password for the Print Server.
	Job Polling Time	Set the print job polling interval in seconds.
NDS Setup	Set the NDS Tree and Context where the Print Server was created.	
RPRINTER Setup	Appears if you select RPRINTER mode under Operation Mode. The following can be configured:	
	Print server to be connected.	Select up to 8 file servers to connect.
	Time Out	Set the duration from the last data's arrival to freeing of the port, in seconds.
Printer Name	Set the NetWare printer object name.	

EtherTalk Tab (Oki Device Setup)



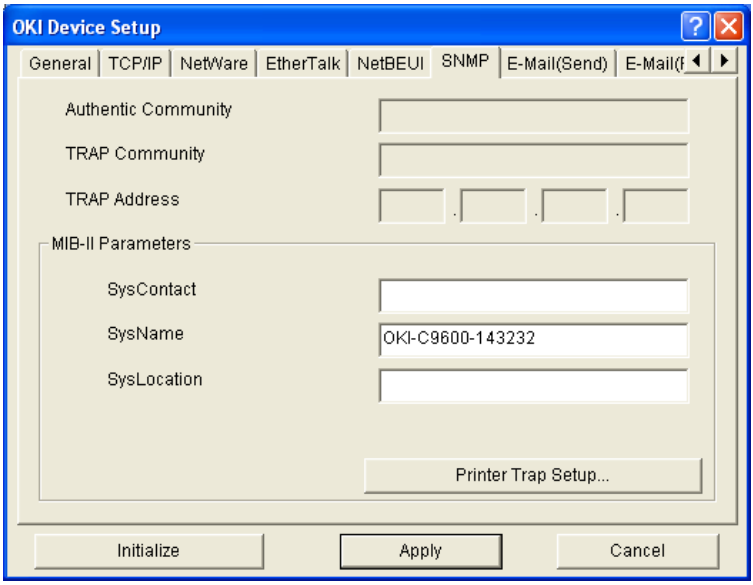
Item	Comments
Use EtherTalk Protocol	Enable/disable EtherTalk protocol.
Printer Name	Set the EtherTalk Printer object name.
Zone Name	Set the name of the zone to which the print server belongs.

NetBEUI Tab (Oki Device Setup)



Item	Comments
Use NetBEUI Protocol	Enable/disable NetBEUI protocol.
Short Printer Name	Set a computer name for the print server.
Workgroup	Set a name for the work group to which the print server belongs.
Comment	Set the comments for the print server.

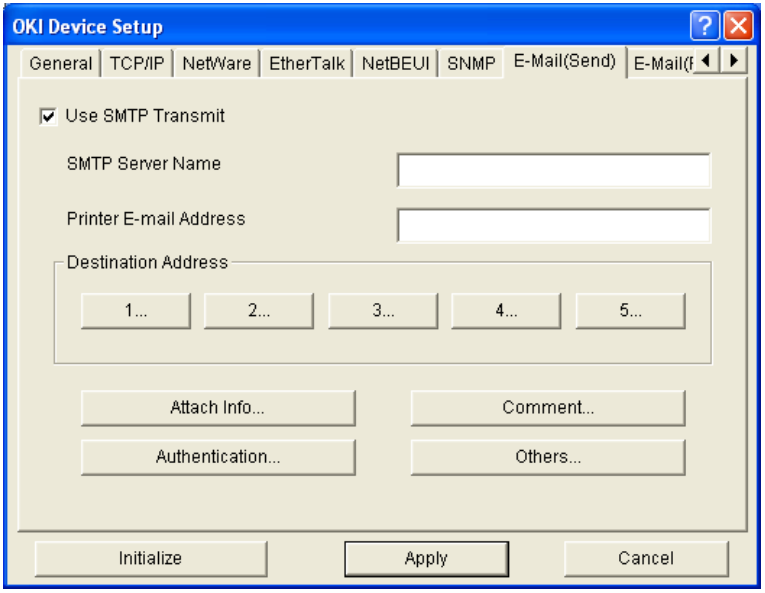
SNMP Tab (Oki Device Setup)



Item	Comments
Authentic Community	This community name is used to check whether or not incoming SNMP requests have the correct community name. The community name is displayed as ****** for security reasons.
TRAP Community	This community name is assigned to outgoing system traps such as cold start, authentication failure, etc.
TRAP Address	Set a destination IP address of a Trap packet. If 0.0.0.0 is set, the Trap is disabled.
SysContact	Set the printer manager name.
SysName	Set the printer model name.
SysLocation	Set the location where the printer is installed.

Item	Comments	
Printer Trap Setup…	The following items can be configured:	
	Printer Trap Community Name	This community name is assigned to outgoing printer status traps such as off-line, paper out, etc.
	TCP #1 through TCP #5	Set up to five IP addresses to which a Trap packet will be sent.
	Detail… [for TCP #1 through TCP #5]	Click to enable sending a Trap packet for any or all of the following selectable conditions: • Printer Reboot • Receive Illegal • Online • Offline • Paper Out • Paper Jam • Cover Open • Printer Error
	IPX	Set node address and network address to which a Trap packet will be sent.
	Detail… [for IPX]	Click to enable sending a Trap packet for any or all of the following selectable conditions: • Printer Reboot • Receive Illegal • Online • Offline • Paper Out • Paper Jam • Cover Open • Printer Error

E-mail(Send) Tab



Item	Comments
Use SMTP Transmit	Enable/disable sending E-mail using SMTP.
SMTP Server Name	Set the host name of the SMTP server.
Printer E-mail Address	Set the E-mail address that is used in the [From] field in the mail header.

Item	Comments	
Destination Address 1… through 5…	Set the following parameters:	
	Destination Address	Set E-mail address to which E-mail should be sent.
	Notify Mode	Select PERIOD or EVENT.
	When PERIOD is selected:	
	Check Time	Used to set the interval at which the selected events are checked. E-mail will be sent at that interval for each selected event which has occurred.
	Period Mode	Set ON/OFF for the following events: • Consumable Warning (toner, image drum or staples are running low) • Consumable Error (toner cartridge is empty, image drum has reached end of life or staples have run out) • Maintenance Warning (belt or fuser is nearing end of life) • Maintenance Error (belt or fuser has reached end of life) • Paper Warning (paper low) • Paper Error (paper out) • Printing Warning (cover open or paper jam) • Printing Error (cover open, paper size mismatch, paper jam) • HDD/Flash Warning (HDD or flash memory full, mass storage error) • Print Result Warning (warning regarding invalid data or recoverable error) • Print Result Error (error regarding invalid data or recoverable error) • Interface Warning (a warning has been issued about an interface) • Interface Error (an error has been issued about an interface) • Other Error (service call request)

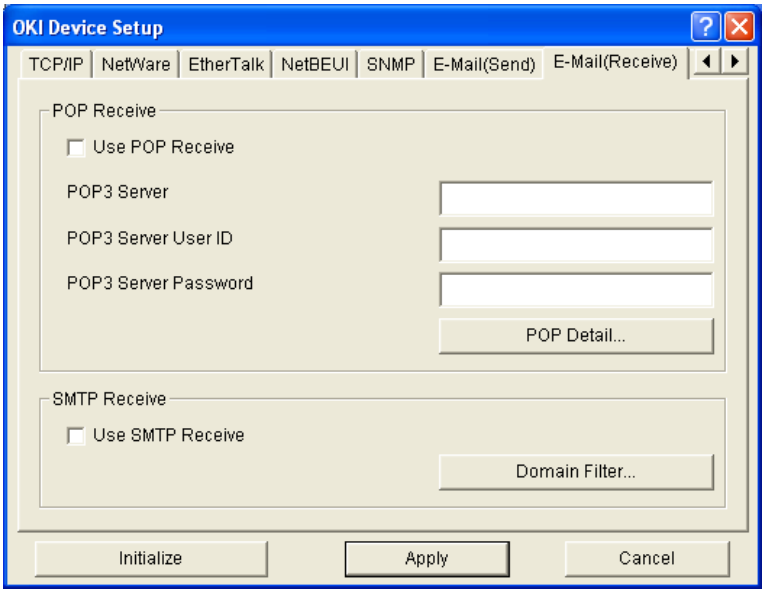
Item	Comments	
	When EVENT is selected	
	Event Mode	Select ON, OFF or NoWait (E-mail is sent as soon as the event occurs) for the following events. If ON is selected, the check interval is settable in hours and/or minutes (0, 15, 30, or 45). See the descriptions for Period Mode above. • Consumable Warning • Consumable Error • Maintenance Warning • Maintenance Error • Paper Warning • Paper Error • Printing Warning • Printing Error • HDD/Flash Warning • Print Result Warning • Print Result Error • Interface Warning • Interface Error • Other Error
Attach Info…	Select whichever of the following information is to be included in the E-mail: • Printer Model • Network Interface • Serial Number • Asset Number • System Name • Printer Location • IP Address • Ethernet Address • Short Printer Name • Printer URL	
Comment…	Set up to four lines of text to be included with the E-mail as comments.	

Item	Comments	
Authentication…	Used to set the following security information:	
	Use SMTP Authentication	Enable/disable SMTP authentication.
	User ID	Set the user ID for authentication.
	User Password	Set a password for authentication.
Others…	Set the following items:	
	SMTP Port Number	Set the port number of SMTP (default is 25).
	Reply-To Address	Set the E-mail address used for the [Reply-To] field in the mail header

E-mail(Receive) Tab (Oki Device Setup)

The print server supports an e-mail reception function (POP3) allowing the printer to print PDF and text files attached to e-mails.

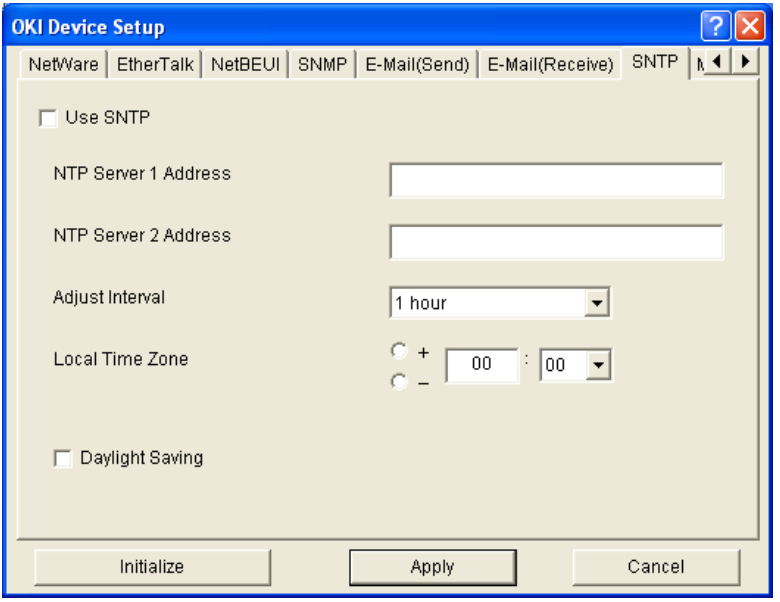
Not all printers support this function. If the POP tab is not displayed, your printer does not support this function.



Item	Comments
Use POP Receive	Enable/disable receiving E-Mail via POP3.
POP3 Server	Set the IP address or host name of the POP3 server.
POP3 Server UserID	Set User ID for POP3 server.
POP3 Server Password	Set a password for the POP3 server.

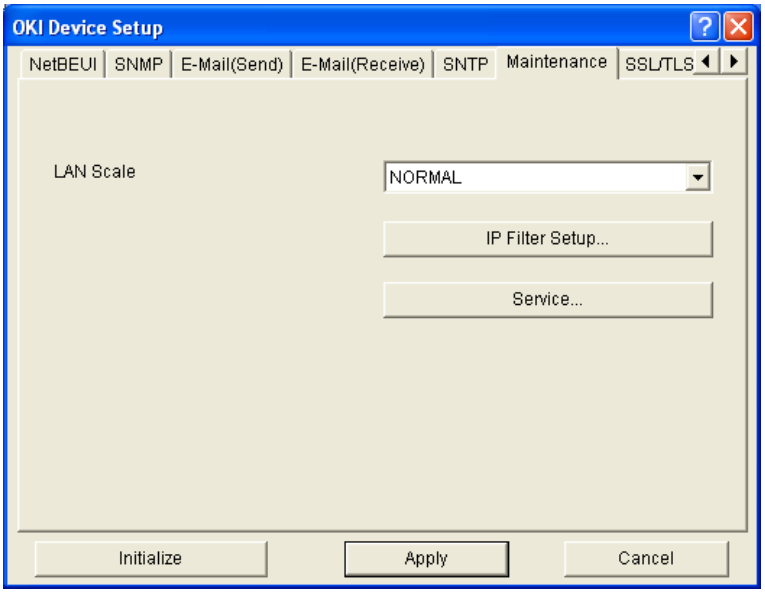
Item	Comments	
POP Detail…	Set the following:	
	Use APOP	Select if you want to use APOP.
	POP3 Port Number	Set the port number for APOP (default is 110).
	Mail Polling Time.	Set interval to retrieve E-Mail(s) from the POP3 server. Selectable values, OFF, 1min, 5min (default), 10min, 30 min, 60 min.
Use SMTP Receive	Enable/disable SMTP receive.	
Domain Filter…	Set the following:	
	Use Domain Filter	Enable/disable domain filtering.
	Filter Policy	Select ACCEPT (the default) or DENY.
	Domain Filter	Define up to five domain filters.

SNTP Tab (Oki Device Setup)



Item	Comments
Use SNTP	Enable/disable SNTP (Simple Network Time Protocol).
NTP Server 1 Address	Set the IP address or host name for NTP Server 1.
NTP Server 2 Address	Set the IP address or host name for NTP Server 2.
Adjust Interval	Set the interval for sending time update requests to the server. Select 1 hour (the default), 12 hours or 24 hours.
Local Time Zone	Set the local time zone from -12:00 to +13:00. Minute interval is selectable from 00 (the default), 15, 30 or 45.
Daylight Saving	When this is selected, one hour is added to the local time.

Maintenance Tab (Oki Device Setup)

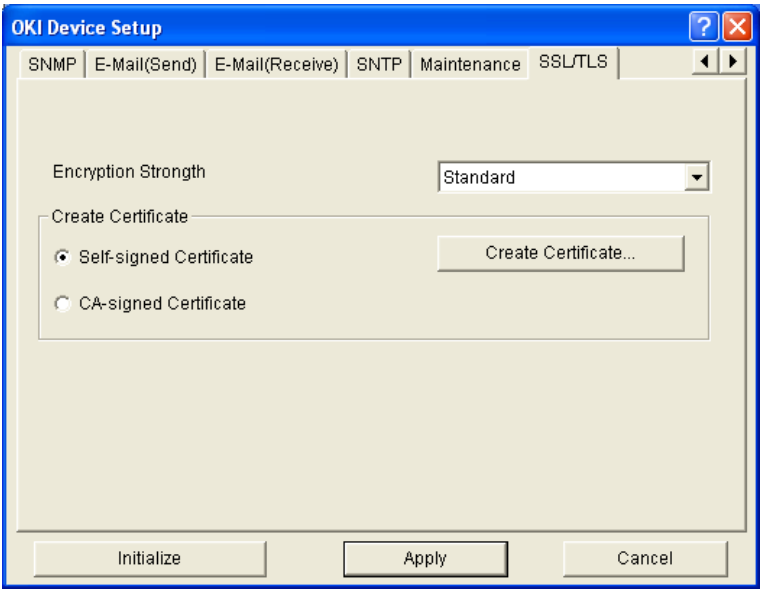


Item	Comments	
LAN Scale	Select NORMAL (the default) or SMALL.	
IP Filter Setup…	The following items can be configured:	
	Use IP FIlter	Enable/disable IP Filtering. Default is disabled.
	Admin IP Address	Enter the printer's IP Address.
	IP Address Range	Set up to 10 IP Filter address ranges: [IP FIlter Range 1] through [IIP Filter Range 10].
	Printing	Enable/disable printing of the specified IP address range. Default is disabled.
	Configuration	Enable/disable changing IP address ranges. Default is disabled.

Item	Comments
Service…	The following features can be selected by clicking their check box. The default setting is indicated in parentheses. • TCP/IP Protocol (enabled) • NetBEUI Protocol (disabled) • NetWare Protocol (disabled) • EtherTalk Protocol (disabled) • FTP Service (enabled) • Telnet Service (enabled) • Web Service (enabled) • SNMP Service (enabled) • POP3 Protocol (disabled)

SSL/TLS Tab (Oki Device Setup)

See “Section 3: Security Features” starting on page 124 for more information.



Item	Comments
Encryption Strength	Set the strength of encryption: • Strong = highest security, slowest speed • Standard = medium security, medium speed • Weak = least security, fastest speed

Item	Comments	
Self-signed Certificate	For IPP encryption within an organization's internal network (intranet). Requires Windows XP or 2000. See page 128 for more information.	
Create Certificate…	When Self-signed Certificate is selected, the following items are configured:	
	Common Name	The printer's IP Address appears here.
	Organization	Enter the name of your organization.
	Organization Unit	Optional. Allows you to enter a subdivision or department name.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the state or province where the organization is located.
	Country/ Region	Enter the country or region where the organization is located.
	Key Exchange Method	Select RSA (the default) or Diffie-Hellman(DSS).
	Key size	Select 512, 1024 (the default), or 2048 bits.
	Term of Validity	Enter a starting and ending date (month/date/year) for which the certificate is valid.

Item	Comments	
CA-signed Certificate…	Used for web encryption to provide security when printing over the internet. Requires an outside certification service which must be purchased separately. See page 139 for more information.	
Create Certificate…	When CA-signed Certificate is selected, the following items are configured:	
	Common Name	The printer's IP Address appears here.
	Organization	Enter the name of your organization.
	Organization Unit	Optional. Allows you to enter a subdivision or department name.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the state or province where the organization is located.
	Country/ Region	Enter the country or region where the organization is located.
	Key Exchange Method	Select RSA (the default) or Diffie-Hellman(DSS).
	Key size	Select 1024 (the default) or 2048 bits.

- **Setup by HTTP**
  Launches the default browser in your environment to access the selected printer's web page.

- **Setup by TELNET**
  Launches the TELNET application in your environment to access the selected printer's TELNET port.

> **NOTE**
>
> The TELNET application is not included as part of the print server package. Install the TELNET package on to your system. For further information, see your Windows manual.

- **Create NetWare Queues**
  Use this to create a NetWare queue on the NetWare server from AdminManager.

  – NetWare Client 32 or IntranetWare Client should be loaded on the PC on which the AdminManager runs. Also the client package should be configured to access NetWare NDS network or bindery network.
  – You should login to NetWare servers as a user who can create objects on the servers. If you want to create a queue with the remote printer mode on NetWare 4.1, you should select NDS mode. You cannot create a queue if Bindery mode is selected.
    1. Select [Create NetWare Queue] from the [Setup] menu.
    2. Click [Next].
    3. Click [NDS mode] or [Bindery] depending on your network environment.

4. Follow the on-screen instructions.

Mode	Location	PSERVER/ RPRINTER	Print Server	Queue	Printer
NDS	Context should be specified.	PSERVER mode	Current Print Server name is used.	Set queue name and its volume for the queue creation.	Current Printer name is used.
		RPRINTER mode	Select existing Print Server.	Set queue name and its volume for the queue creation.	Current Printer name is used.
Bindery	File server should be specified.	PSERVER mode only	Current Print Server name is used.	Set queue name for the queue creation.	Current Printer name is used.

5. Confirm your configuration. If it is correct, select [Execute].
6. Select [Finish] button. If necessary, select [Setup] → [OKI Device Setup] and continue your configuration.

- **Delete NetWare Object**
  Use this to delete a NetWare queue/print server/printer from the NetWare server by AdminManager.

  NetWare Client 32 or IntranetWare Client should be loaded on to the PC on which the AdminManager runs. Also, the client package should be configured to access NetWare NDS network or bindery network. You should login to NetWare servers as a user who can delete objects on the servers.

  1. Select [Delete NetWare Object] from [Setup] menu.
  2. Select an object you want to delete and click [Delete].

3. When done, click [Quit]

- **Reset**
  Resets the selected network interface card.

- **Test Print**
  Prints the self-diagnostic test pages (see page 12).

- **IP Address Setup**
  Sets the static IP address of the network interface card manually. If you only use TCP/IP and the print server has not yet been configured, occasionally it may not be displayed on AdminManager. You can configure the IP address of the print server by this function.

1. Enter the [Ethernet Address] (MAC Address) and the [IP Address], then click [OK].

NOTE

The Ethernet (MAC) Address is displayed under "General Information" on the self-diagnostic test printout (see page 12).

2. AdminManager asks whether you want to initialize the network interface card or not. Select [Yes].

NOTE

Even if you select [No] here, the IP address that you set can be used after turning the printer OFF and ON. The requirement to turn your printer OFF and ON is dependent on the network interface card.

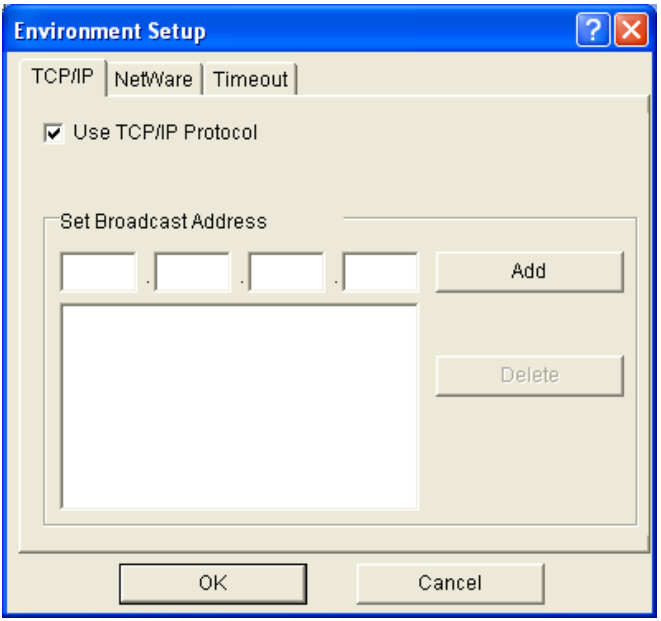
Option Menu

- **Use TCP/IP Protocol**
  If this item is selected, AdminManager uses TCP/IP protocol to search/configure network interface cards.

- **Use IPX/SPX Protocol**
  If this item is selected, AdminManager uses IPX/SPX protocol to search/configure network interface cards.

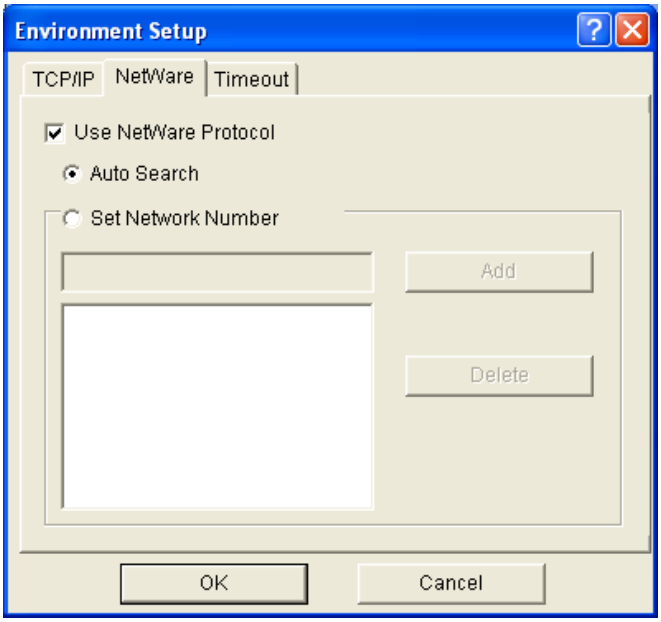
- **Environment Setup**
  Set environment items such as broadcast addresses for TCP/IP protocol, network addresses for NetWare protocol and Time Out.

TCP/IP Tab (Environmental Setup)



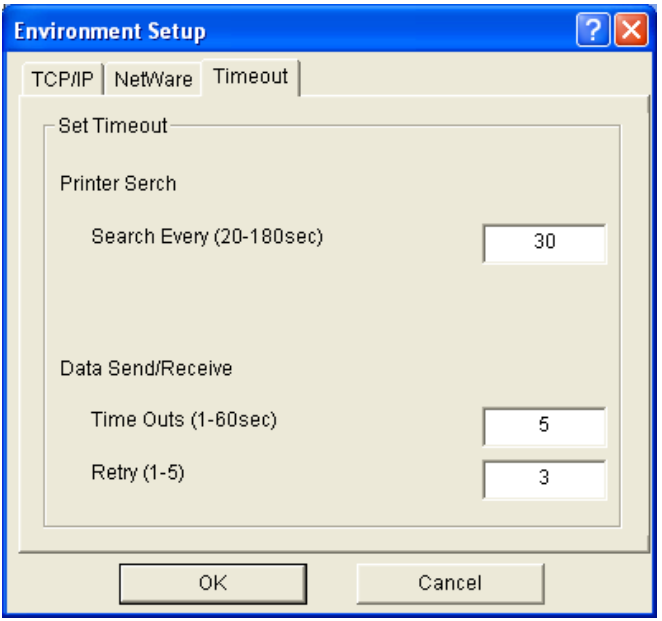
Item	Comments
Use TCPP/IP Protocol	Enable/disable TCP/IP protocol. The default is enabled. If disabled, the search will not be carried out using TCP/IP.
Set Broadcast Address	Set broadcast addresses that are used to search Oki network interface cards using the TCP/IP protocol.
Add	Click [Add] to add the address to the list in the box.
Delete	Select an address in the box, then click [Delete] to remove it.

NetWare Tab (Environmental Setup)



Item	Comments
Use NetWare Protocol	Enable/disable NetWare protocol. The default is enabled. If disabled, the search will not be carried out using NetWare.
Auto Search	If [Auto Search] is selected (the default), AdminManager will search all networks that it can detect.
Set Network Number	Set network addresses that are used to search Oki network interface cards via NetWare protocol. If there any many NetWare file servers on your network, specify the network address to which the network card belongs.
Add	Click to add the network number you have entered to the list box.
Delete	Select a network number in the list box, then click [Delete] to remove it.

Timeout Tab (Environmental Setup)



Item	Comments
Set Timeout: Printer Search	[Search Every (20-180sec)] Set the response waiting time from the network card in seconds. Default is 30 seconds.
Set Timeout: Data Send/Receive	[Time Outs (1-60sec)] Set time out between AdminManager and the network interface card in seconds. Default is 5 *seconds*. [Retry (1-5)] Sets how many times AdminManager will retry to transmit/receive data to/from the network interface card. Default is 3 retries.

Help Menu

- **About**
  Provides software Version and copyright information.

Configuration: Using TELNET

Important!

Please ensure that a valid IP address for you network environment is used. Use of an incorrect IP address can cause serious problems on your network.

Example TELNET Configuration, Sun Solaris 2.4

TELNET requires the print server to have a valid IP address configured. *If the NIC already has an IP address configured, skip steps 1 to 3 below*.

NOTE

The method of configuring commands may differ between workstations. Refer to the workstation's manual.

1. Login as [root].
   If you do not have Superuser rights, the network manager should run the configuration.

2. Set a temporary IP Address on the NIC using the ARP command.

Example

For IP address 172.168.20.127 and network card address 00:80:92:01:00:D2:

```
# arp –s 172.168.20.127 00:80:92:01:00:D2 temp
```

NOTE

The Ethernet address (MAC address) is displayed during the self-diagnostic test (see page 9). A temporary address does not need to be set if an IP address has already been set.

3. Use the PING command to confirm the connection with the network card.

Example

For IP address 172.168.20.127:

```
# ping 172.168.20.127
```

If there is no reply, there is a problem with the configuration of the IP address (the IP address has been already set manually or by the DHCP/RARP server), or with the network. Reset the network interface card settings to the default and try to set a temporary IP address. If you still have the problem after resetting the network interface card, consult the network manager.

4. Login to the network card using TELNET.

Example

For IP address 172.168.20.127

```
$ telnet 172.168.20.127
```

You should see the following sequence of responses:

```
Trying 172.168.20.127
Connected to 172.168.20.127
Escape character is '^]'.
EthernetBoard OkiLAN PRINTER".
login: root
'root' user needs password to login.
password:
User 'root' logged in.
No. Message Value (level.1)
-----------------------------------
 1:Setup TCP/IP
 2:Setup SNMP
 3:Setup NetWare
 4:Setup EtherTalk
 5:Setup NetBEUI
 6:Setup printer port
 7:Display Status
 8:Setup printer trap
 9:Setup SMTP (E-Mail)
97:Reset to factory set
98:Quit setup
99:Exit setup
Please select (1-99)?
```

5. Enter the number of the item to be changed (see "TELNET Hierarchical Structure Table" on page 60).
   The details window for that item displays.
6. When the configuration is complete, click [Exit Setup] to save your change. To exit without saving your modification, select [Quit].

7. Turn the printer off and on again.

NOTE

The network card continues to use pre-transmission settings until the printer is turned off and back on again.

TELNET Hierarchical Structure Table

For information on how to set the various reference numbers using AdminManager or Web browser, see the "Summary of Non-Security Configurable Items" table starting on page 66.

Level1	Level2	Level3	Ref No.
Setup TCP/IP	TCP/IP protocol	—	TCPIP-1
	IP address	—	TCPIP-2
	Subnet	—	TCPIP-3
	Gateway	—	TCPIP-4
	RARP protocol	—	TCPIP-5
	DHCP/BOOTP protocol	—	TCPIP-6
	DNS server(Pri.)	—	TCPIP-7
	DNS server(Sec.)	—	TCPIP-8
	Root password	—	TCPIP-9
	99: Back to prior menu	—	—
2: Setup SNMP	Authentic community	—	SNMP-1
	Trap community	—	SNMP-2
	Trap address	—	SNMP-3
	SysContact	—	SNMP-4
	SysName	—	SNMP-5
	SysLocation	—	SNMP-6
	DefaultTTL	—	SNMP-7
	EnableAuthenTrap	—	SNMP-8
	99: Back to prior menu	—	—

Level1	Level2	Level3	Ref No.
3: Setup NetWare	NetWare protocol	—	NetWare-1
	Packet type	—	NetWare-2
	NetWare mode	—	NetWare-3
	Setup PSERVER mode	FSERVER name 1	NetWare-3
		FSERVER name 2	NetWare-4
		FSERVER name 3	NetWare-4
		FSERVER name 4	NetWare-4
		FSERVER name 5	NetWare-4
		FSERVER name 6	NetWare-4
		FSERVER name 7	NetWare-4
		FSERVER name 8	NetWare-4
		Machine name	NetWare-5
		Password	NetWare-6
		Job polling interval	NetWare-7
		Bindery mode	NetWare-8
		NDS tree	NetWare-9
		NDS context	NetWare-10
		99: Back to prior menu	—
3:Setup Netware	5: Setup RPRINTER mode	PSERVER name 1	NetWare-11
		PSERVER name 2	NetWare-11
		PSERVER name 3	NetWare-11
		PSERVER name 4	NetWare-11
		PSERVER name 5	NetWare-11
		PSERVER name 6	NetWare-11
		PSERVER name 7	NetWare-11
		PSERVER name 8	NetWare-11
		Job timeout	NetWare-12
		99:Back to prior menu	—
	99: Back to prior menu	—	—
4: Setup EtherTalk	EtherTalk protocol	—	EtherTalk-1
	Zone name	—	EtherTalk-2
	99: Back to prior menu	—	—

Level1	Level2	Level3	Ref No.
5: Setup NetBEUI	NetBEUI protocol	—	NetBEUI-1
	Computer name	—	NetBEUI-2
	Workgroup name	—	NetBEUI-3
	Comment	—	NetBEUI-4
	99: Back to prior menu	—	—
6: Setup printer port	NetWare port name	—	Port-1
	EtherTalk port name	—	Port-2
	BOJ string	—	Port-3
	EOJ string	—	Port-4
	BOJ string(KANJI)	—	Port-5
	EOJ string(KANJI)	—	Port-6
	Printer type	—	Port-7
	TAB size (char.)	—	Port-8
	Page width (char.)	—	Port-9
	Page length(line)	—	Port-10
	lpr/ftp banner	—	Port-11
	99: Back to prior menu	—	—
7: Display status	prn1	—	STATUS-1
	system	—	STATUS-2

Level1	Level2	Level3	Ref No.
8: Setup printer trap	Prn-Trap community	—	Trap-1
	Setup TCP#1 trap Setup TCP#2 trap Setup TCP#3 trap Setup TCP#4 trap	TCP#1—5 Trap enable	Trap-2
		On-line trap	Trap-3
		Off-line trap	Trap-4
		Paper Out trap	Trap-5
		Paper Jam trap	Trap-6
		Cover Open trap	Trap-7
		Printer Error trap	Trap-8
		TCP#1—5 Trap address	Trap-9
		99: Back to prior menu	—
	7: Setup IPX trap	IPX Trap enable	Trap-10
		On-line trap	Trap-11
		Off-line trap	Trap-12
		Paper Out trap	Trap-13
		Paper Jam trap	Trap-14
		Cover Open trap	Trap-15
		Printer Error trap	Trap-16
		IPX Trap address	Trap-17
		IPX Trap net	Trap-18
		99: Back to prior menu	—
	99: Back to prior menu	—	—

Level1	Level2	Level3	Ref No.
9: Setup SMTP (E-Mail)	SMTP Transmit	—	SMTP-1
	SMTP Receive	—	SMTP-2
	SMTP server name	—	SMTP-3
	SMTP port number	—	SMTP-4
	E-Mail address	—	SMTP-5
	Reply-to address	—	SMTP-6
	Event to address 1 Event to address 2 Event to address 3 Event to address 4 Event to address 5	To Address 1—5	SMTP-7
		Re-send Interval	SMTP-8
		Off-Line	SMTP-9
		Consumable Message	SMTP-10
		Toner Low/Out	SMTP-11
		Paper Low/Out	SMTP-12
		Paper Jam	SMTP-13
		Cover Open	SMTP-14
		Stacker Error	SMTP-15
		Mass Storage Error	SMTP-16
		Recoverable Error	SMTP-17
		Service Call Req.	SMTP-18
		Finisher	SMTP-19
		99: Back to prior menu	—
9: Setup SMTP(E-Mail)	12: Signature line 1 13: Signature line 2 14: Signature line 3 15: Signature line 4	—	SMTP-20
	99: Back to prior menu	—	—
10: Setup POP (E-Mail)	POP3 protocol	—	POP-1
	POP3 server	—	POP-2
	POP port number	—	POP-3
	POP3 server UserID	—	POP-4
	POP3 server Password	—	POP-5
	Use APOP	—	POP-6
	Retrieve every (min.)	—	POP-7
	99: Back to prior menu	—	—

Level1	Level2	Level3	Ref No.
97: Reset to factory set	—	—	ETC-1
98: Quit setup	—	—	—
99: Exit setup	—	—	—

Configuration: Configurable Items

Summary of Non-Security Configurable Items

NOTE

Configurable items vary between printers.

Default values are underlined.

For information on configuring the print server's security features, see "Section 3: Security Features" on page 124.

TCP/IP

NOTE

The default setting is underlined.

TCPIP-1

Enable/disable TCP/IP Protocol.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [Use TCP/IP Protocol]
Web Browser TCP/IP protocol cannot be disabled using Web Browser.
TELNET [Setup TCP/IP] → [TCP/IP protocol]

TCPIP-2

Set IP Address, 0.0.0.0 to 255.255.255.255.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [IP Address]
Web Browser [Network] → [TCP/IP] → [Change Settings] → [STEP1] → [Set IP address manually] → [IP Address]
TELNET [Setup TCP/IP] → [IP address]

TCPIP-3

Set Subnet Mask, 0.0.0.0 to 255.255.255.255.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [Subnet Mask]
Web Browser [Network] → [TCP/IP] → [Change Settings] → [Set IP address manually] → [Subnet Mask]
TELNET [Setup TCP/IP] → [Subnet mask]

TCPIP-4

Set Gateway (the default route), 0.0.0.0 to 255.255.255.255.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [Default Gateway]
Web Browser [Network] → [TCP/IP] → [Change Settings] → [Set IP address manually] → [Default Gateway]
TELNET [Setup TCP/IP] → [Gateway address]

TCPIP-5

Enable/disable RARP.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [Use RARP]
Web Browser [Network] → [TCP/IP] → [STEP1] → [Obtain IP address automatically] → [Detail settings] → [RARP]
TELNET [Setup TCP/IP] → [RARP protocol]

TCPIP-6

Enable/disable DHCP.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [Use DHCP/BOOTP]
Web Browser [Network] → [TCP/IP] → [STEP1] → [Obtain IP address automatically] → [Detail settings] → [DHCP/BOOTP]
TELNET [Setup TCP/IP] → [DHCP/BOOTP protocol]

TCPIP-7

Set IP Address for Primary DNS Server, 0.0.0.0 to 255.255.255.255.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [DNS Server…] → [Primary Server]
Web Browser [Network] → [TCP/IP] → [STEP2 (OPTIONAL)Change other TCP/IP settings] → [DNS Server] → [DNS Server(Primary)]
TELNET [Setup TCP/IP] → [DNS server(Pri.)

TCPIP-8

Set IP Address for Secondary DNS Server, 0.0.0.0 to 255.255.255.255.

AdminManager [Setup] → [OKI Device Setup] → [TCP/IP] → [DNS Server…] → [Secondary Server]
Web Browser [Network] → [TCP/IP] → [STEP2 (OPTIONAL)Change other TCP/IP settings] → [DNS Server] → [DNS Server(Secondary)]
TELNET [Setup TCP/IP] → [DNS server(Sec.)]

TCPIP-9

Set the root password. Up to seven alphanumeric characters. Default is null.

AdminManager Not available.
Web Browser [Security] → [Password Configuration] → [Administrator(root) Password Configuration] → [New Admin Password]
TELNET [Setup TCP/IP] → [root password]

SNMP

NOTE

The default setting is underlined.

SNMP-1

Community name used to check incoming SNMP requests. Displayed as asterisks (***) for security reasons. Up to 15 alphanumeric characters. Default is public.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Authentic Community]
Web Browser Not available.
TELNET [Setup SNMP] → [Authentic Community]

SNMP-2

Community name assigned to outgoing system traps such as cold start, authentication failure, etc. Up to 15 alphanumeric characters. Default is public.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [TRAP Community]
Web Browser [Network] → [SNMP Trap] → [STEP1] → [Printer Trap Community Name]
TELNET [Setup SNMP] → [Trap Community]

SNMP-3

Destination IP address of Trap packet. Range 0.0.0.0 (Trap disabled) to 255.255.255.255.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [TRAP Address]
Web Browser [Network] → [SNMP Trap] → [STEP2] → [Address 1 [2, 3, etc.]]
TELNET [Setup SNMP] → [Trap address]

SNMP-4

Set the System Contact (printer manager) name. Up to 255 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [MIB-II Parameters] → [SysContact]
Web Browser Not available.
TELNET [Setup SNMP] → [SysContact]

SNMP-5

Set the SysName (printer model name). Up to 255 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [MIB-II Parameters] → [SysName]
Web Browser Not available.
TELNET [Setup SNMP] → [SysName]

SNMP-6

Set the SysLocation (the place where the printer is installed). Up to 255 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [MIB-II Parameters] → [SysLocation]
Web Browser Not available.
TELNET [Setup SNMP] → [SysLocation]

SNMP-7

Set TTL (time to Live), 0 to 255.

AdminManager Not available.
Web Browser Not available.
[Setup SNMP] → [Default TTL]**TELNET**

SNMP-8

Set the Authentic Trap, 1 (enabled)/ 2 (disabled).

AdminManager Not available.
Web Browser Not available.
TELNET [Setup SNMP] → [Enable Authen Trap]

NetWare

NOTE

The default setting is underlined.

NetWare-1

Enable/disable NetWare Protocol.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Use NetWare Protocol]
Web Browser [Security] → [Protocol ON/OFF] → [NetWare] *or* [Network] → [General Network Settings] → [Protocol Options] → [NetWare]
TELNET [Setup NetWare] → [NetWare Protocol]

NetWare-2

Set the primary NetWare packed type. Select ETHER-II, 802.3, 802.2, SNAP, or AUTO.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Frame Type]
Web Browser [Network] → [NetWare] → [To STEP2] → [STEP2] → [Frame Type]
TELNET [Setup NetWare] → [Packet Type]

NetWare-3

Set the NetWare mode as RPRINTER or PSERVER.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Operation Mode]
Web Browser [Network] → [NetWare] → [STEP1. Select NetWare Mode]
TELNET [Setup NetWare] → [NetWare Mode]

NetWare-4

Set up to eight file servers to connect for Print Server. Up to 47 alphanumeric characters per name. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Bindery Setup]
Web Browser [Network] → [NetWare] → [STEP1. Select Netware Mode] → [Print Mode = Print Server: NDS/Bindery] → [To STEP2] → [STEP4. Bindery Mode Settings] → [File Server Names]
TELNET [Setup NetWare] → [Setup PSERVER mode] → [PSERVER name 1-8]

NetWare-5

Sets Print Server name. Up to 31 alphanumeric characters per name. Default includes the last six digits of the MAC address.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Print Server Name]
Web Browser [Network] → [NetWare] → [Print Mode = Print Server] → [To STEP2] → [STEP2. Common Settings(Bindery&NDS)] → [Print Server Name]
TELNET [Setup NetWare] → [Setup PSERVER mode] → [Machine name]

NetWare-6

Set the password for the Print Server. Up to 31 alphanumeric characters per password. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Bindery Setup] → [Password]
Web Browser [Network] → [NetWare] → [To STEP2] → [STEP4. Bindery Mode Settings] → [Password for File Servers]
TELNET [Setup NetWare] → [Setup PSERVER mode] → [Password]

NetWare-7

Set the print job polling interval for Print Server. Range 2 to 255 seconds. Default is 4 seconds.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Bindery Setup] → [Job Polling Time]
Web Browser [Network] → [NetWare] → [To STEP2] → [STEP4. Bindery Mode Settings] → [Job Polling Rate]
TELNET [Setup NetWare] → [Setup PSERVER mode] → [Job Polling Interval]

NetWare-8

Enable/Disable Bindery mode. Change to Disable if you use the print server as PSERVER on NDS.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Check box beside Bindery Setup]
Web Browser [Network] → [NetWare] → [STEP1 Select NetWare Mode] → [Print Mode = Print Server: NDS/Bindery]
TELNET [Setup NetWare] → [Setup PSERVER mode] → [Bindery mode]

NetWare-9

Set the NDS Tree name. Up to 31 alphanumeric characters per name. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Deselect Bindery Setup…] → [NDS Setup…] → [NDS Tree]
Web Browser [Network] → [NetWare] → [To STEP2] → [STEP5. NDS Settings] → [Tree]
TELNET [Setup NetWare] → [Setup PSERVER mode] → [NDS tree]

NetWare-10

Set the NDS context for the Print Server. Up to 77 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Deselect Bindery Setup…] → [NDS Setup…] → [NDS Context]
Web Browser [Network] → [NetWare] → [To STEP2] → [STEP5. NDS Settings] → [Context]
TELNET [Setup NetWare] → [Setup PSERVER mode] → [NDS context]

NetWare-11

Set up to eight print servers to connect. Up to 47 alphanumeric characters per server. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Select RPRINTER Mode] → [RPRINTER Setup…]
Web Browser [Network] → [NetWare] → [STEP1. Select NetWare Mode] → [Remote Printer] → [To STEP2] → [STEP4. Bindery Mode Settings]
TELNET [Setup NetWare] → [SET PRINTER mode] → [PSERVE name 1-8]

NetWare-12

Set the timeout: (duration from the last data's arrival to freeing the port) for Remote Printer. Range 4 to 255 seconds. Default is 10 seconds.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Select RPRINTER Mode] → [RPRINTER Setup…] → [Time Out]
Web Browser [Network] → [NetWare] → [STEP1. Select NetWare Mode] → [Remote Printer] → [To STEP2] → [NetWare Settings] → [Job Timeout]
TELNET [Setup NetWare] → [SET PRINTER mode] → [Job timeout]

EtherTalk

NOTE

The default setting is underlined.

EtherTalk-1

Enable/Disable EtherTalk.

AdminManager [Setup] → [OKI Device Setup] → [EtherTalk] → [Use EtherTalk Protocol]
Web Browser [Security] → [Protocol ON/OFF] → [EtherTalk] *or* [Network] → [General Network Settings] → [Protocol Options] → [EtherTalk]
TELNET [Setup EtherTalk] → [EtherTalk protocol]

EtherTalk-2

Set the Zone Name to which the print server belongs. Up to 32 alphanumeric characters. Default is *.

AdminManager [Setup] → [OKI Device Setup] → [EtherTalk] → [Zone Name]
Web Browser [Network] → [EtherTalk] → [EtherTalk Zone Name]
TELNET [Setup EtherTalk] → [Zone name]

NetBEUI

NOTE

The default setting is underlined.

NetBEUI-1

Enable/Disable NetBEUI.

AdminManager [Setup] → [OKI Device Setup] → [NetBEUI] → [Use NetBEUI Protocol]
Web Browser [Security] → [Protocol ON/OFF] → [NetBEUI] *or* [Network] → [General Network Settings] → [Protocol Options] → [NetBEUI]
TELNET [Setup NetBEUI] → [NetBEUI protocol]

NetBEUI-2

Set a computer name for the print server. Up to 15 alphanumeric characters. Default is OL + last six digits of the MAC address.

AdminManager [Setup] → [OKI Device Setup] → [NetBEUI] → [Short Printer Name]
Web Browser [Network] → [NetBEUI] → [Short Printer Name]
TELNET [Setup NetBEUI] → [Computer name]

NetBEUI-3

Set a workgroup name to which the print server belongs. Up to 15 alphanumeric characters per name, Default is PrintServer.

AdminManager [Setup] → [OKI Device Setup] → [NetBEUI] → [Workgroup]
Web Browser [Network] → [NetBEUI] → [Workgroup Name]
TELNET [Setup NetBEUI] → [Workgroup name]

NetBEUI-4

Sets comments for the print server. Up to 48 alphanumeric characters can be used. Default is EthernetBoard OkiLAN 8200e.

AdminManager [Setup] → [OKI Device Setup] → [NetBEUI] → [Comment]
Web Browser [Network] → [NetBEUI] → [Comment]
TELNET [Setup NetBEUI] → [Comment]

Port

NOTE

The default setting is underlined.

Port-1

Set the NetWare printer object name. Up to 31 alphanumeric characters. Default is OL + last six digits of the MAC address + -prn1.

AdminManager [Setup] → [OKI Device Setup] → [NetWare] → [Print Server Name]
Web Browser *For Print Server (NDS/Bindery, IPX):* [Network] → [NetWare] → [STEP1. Select NetWare Mode] → [Print Server [middle selection]] → [To STEP2] → [STEP2. Common Settings/ BIndery&NDS] → [Printer Name] *For Remote Printer* [Network] → [NetWare] → [STEP1. Select NetWare Mode] → [Remote Printer] → [To STEP2] → [STEP2. Detail Settings] → [NetWare Settings] → [Printer Name] *For Print Server (NDS only, IP)* [Network] → [NetWare] → [STEP1. Select NetWare Mode] → [Print Server [top selection]] → [To STEP2] → [STEP2. Detail Settings] → [NetWare Settings] → [Printer Name]
TELNET [Setup printer port] → [NetWare port name]

Port-2

Set the EtherTalk printer object name, up to 32 alphanumeric characters. Default is the printer name on which the print server is installed.

AdminManager [Setup] → [OKI Device Setup] → [EtherTalk] → [Printer Name]
Web Browser [Network] → [EtherTalk] → [EtherTalk Printer Name]
TELNET [Setup printer port] → [EtherTalk port name]

Port-3

Set an appropriate command sequence to be sent to the connected printer *before* printing a job. Combination of alphanumeric characters and the following control characters, up to a maximum of 31 characters:

- \b Backspace (0x08)
- \t Tab (0x09)
- \n Line feed (0x0a)
- \v Vertical tab (0x0b)
- \f Page feed (0x0c)
- \r Carriage return (0x0d)
- \xnn Hex code [nn] (0xnn)
- \] Double quote (0x22)
- \\ Back slash (0x5c).

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [BOJ string]

Port-4

Set an appropriate command sequence to be sent to the connected printer *after* printing a job. Combination of alphanumeric characters and the following control characters, up to a maximum of 31 characters:

- \b Backspace (0x08)
- \t Tab (0x09)
- \n Linefeed (0x0a)
- \v Vertical tab (0x0b)
- \f Page feed (0x0c)
- \r Carriage return (0x0d)
- \xnn Hex code [nn] (0xnn)
- \] Double quote (0x22)
- \\ Back slash (0x5c).

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [EOJ string]

Port-5

Set an appropriate command sequence to be sent to the connected printer *before* printing a job when data is sent to the sjis/euc logical printer/directory. Combination of alphanumeric characters and the following control characters, up to a maximum of 31 characters:

- \b Backspace (0x08)
- \t Tab (0x09)
- \n Linefeed (0x0a)
- \v Vertical tab (0x0b)
- \f Page feed (0x0c)
- \r Carriage return (0x0d)
- \xnn Hex code [nn] (0xnn)

- \] Double quote (0x22)
- \\ Back slash (0x5c).

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [BOJ string(KANJI)]

Port-6

Set an appropriate command sequence to be sent to the connected printer *after* printing a job when data is sent to the sjis/euc logical printer/directory. Combination of alphanumeric characters and the following control characters, up to a maximum of 31 characters:

- \b Backspace (0x08)
- \t Tab (0x09)
- \n Linefeed (0x0a)
- \v Vertical tab (0x0b)
- \f Page feed (0x0c)
- \r Carriage return (0x0d)
- \xnn Hex code [nn] (0xnn)
- \] Double quote (0x22)
- \\ Back slash (0x5c).

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [EOJ string(KANJI)]

Port-7

Set a printer type when data is sent to the sjis/euc logical printer/directory. Default is PS.

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [Printer type]

Port-8

Set the number of tabs when data is sent to the sjis/euc logical printer/directory. Range 0 to 16. Default is 8. When 0 is selected, there are no tabs.

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [TAB size (char.)]

Port-9

Set page width when data is sent to the sjis/euc printer/directory. Range 0 to 255 characters. Default is 78 characters. If the width of

one line exceeds this value, a CR and LF are inserted automatically. When 0 is selected, there is no limitation of the line width.

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [Page width (char.)]

Port-10

Set page length when data is sent to the sjis/euc printer/directory. Range 0 to 255 lines. Default is 66 lines. If the number of lines exceeds this value, a FF is inserted automatically. When 0 is selected, there is no limitation of the page length.

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [Page width (char.)]

Port-11

Set banner printing for LPR/FTP enabled/disabled.

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup printer port] → [lpr/ftp banner]

Status

NOTE

The default setting is underlined.

Status-1

Display the logical port status.

AdminManager [Status] → [Printer Status]
Web Browser [Status] → [Printer Status]
TELNET [Display status] → [prn1]

Status-2

Display the system status.

AdminManager [Status] → [System Status]
Web Browser [Network] → [Summary]
TELNET [Display status] → [system]

Trap

NOTE

The default setting is underlined.

Trap-1

Sets community name assigned to outgoing printer status traps such as off-line, paper out, etc. Up to 77 alphanumeric characters. Default is public.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [Printer Trap Community Name]
Web Browser [Network] → [SNMP Trap] → [Printer Trap Settings] → {STEP1. Set Printer Trap Community Name} → [Printer Trap Community Name]
TELNET [Setup printer trap] → [Prn-Trap community]

Trap-2

Enable/disable sending a trap packet for each destination. Five IP address destinations and one IPX destination can be set up.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5] → [Detail …] → [Trap Enable]
[Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [TCP#1–5 Trap enable]

Trap-3

Enable/disable sending a trap when the printer goes on-line.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5] → [Detail …] → [Trap Enable] → [On-line]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Online]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [On-line trap]

Trap-4

Enable/disable sending a trap when the printer goes off-line.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5] → [Detail …] → [Trap Enable] → [Offline]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Offline]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [Off-line trap]

Trap-5

Enable/disable sending a trap when the paper is out.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5] → [Detail …] → [Trap Enable] → [Paper Out]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Paper Out]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [Paper Out trap]

Trap-6

Enable/disable sending a trap when the paper jam occurs.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5] → [Detail …] → [Trap Enable] → [Paper Jam]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Paper Jam]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [Paper Jam trap]

Trap-7

Enable/disable sending a trap when the printer cover is opened.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5] → [Detail …] → [Trap Enable] → [Cover Open]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Cover Open]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [Cover Open trap]

Trap-8

Enable/disable sending a trap when an error occurs.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5] → [Detail …] → [Trap Enable] → [Printer Error]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Printer Error]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [Printer Error trap]

Trap-9

Set up to five IP addresses to which a trap packet is sent. 0.0.0.0 to 255.255.255.255.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [TCP #!–5]
Web Browser [Network] → [SNMP Trap] → [STEP2. Set Printer Trap Address] → [Address 1 [2, 3, 4, 5]]
TELNET [Setup printer trap] → [Setup TCP#1–5 trap] → [TCP#1–5 Trap address]

Trap-10

Enable/disable sending a trap packet for each of the five destinations.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX] → [Detail …] → [Trap Enable]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments]
TELNET [Setup printer trap] → [Setup IPX trap] → [IPX Trap enable]

Trap-11

Enable/disable sending a trap when the printer is set to on-line.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX] → [Detail …] → [Trap Enable] → [On-line]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Online]
TELNET [Setup printer trap] → [Setup IPX trap] → [On-line trap]

Trap-12

Enable/disable sending a trap when the printer is set to off-line.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Off-line]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Offline]
TELNET [Setup printer trap] → [Setup IPX trap] → [Off-line trap]

Trap-13

Enable/disable sending a trap when paper is out.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX] → [Detail …] → [Trap Enable] → [Paper Out]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Paper Out]
TELNET [Setup printer trap] → [Setup IPX trap] → [Paper Out trap]

Trap-14

Enable/disable sending a trap when a paper jam occurs.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX] → [Detail …] → [Trap Enable] → [Paper Jam]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Paper Jam]
TELNET [Setup printer trap] → [Setup IPX trap] → [Paper Jam trap]

Trap-15

Enable/disable sending a trap when the printer cover is opened.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX] → [Detail …] → [Trap Enable] → [Cover Open]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Cover Open]
TELNET [Setup printer trap] → [Setup IPX trap] → [Cover open trap]

Trap-16

Enable/disable sending a trap when a printer error occurs.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX] → [Detail …] → [Trap Enable] → [Printer Error]
Web Browser [Network] → [SNMP Trap] → [STEP3. Set Printer Trap Assignments] → [Printer Error]
TELNET [Setup printer trap] → [Setup IPX trap] → [Printer Error trap]

Trap-17

Set the node address to which a trap packet is sent. Any address. Default is 00000000000.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX]
Web Browser [Network] → [SNMP Trap] → [STEP2. Set Printer Trap Address] → [IPX]
TELNET [Setup printer trap] → [Setup IPX trap] → [IPX Trap address]

Trap-18

Set the network address to which a trap packet is sent. Any address. Default is 00000000000.

AdminManager [Setup] → [OKI Device Setup] → [SNMP] → [Printer Trap Setup …] → [IPX]
Web Browser [Network] → [SNMP Trap] → [STEP2. Set Printer Trap Address] → [IPX]
TELNET [Setup printer trap] → [Setup IPX trap] → [IPX Trap net]

SMTP

NOTE

The default setting is underlined.

SMTP-1

Enable/disable receiving E-mail via SMTP.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [Use SMTP Receive]
Web Browser [Network] → [Email] → [Receive Settings] → [SMTP] → [To STEP2] → [Domain FIlter]
TELNET [Setup SMTP (E-mail)] → [SMTP Transmit]

SMTP-2

Enable/disable sending E-mail via SMTP.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Use SMTP Transmit]
Web Browser [Network] → [Email] → [Send Settings] → [Step1. SMTP transmit settings] → [SMTP Transmit]
TELNET [Setup SMTP (E-mail)] → [SMTP Receive]

SMTP-3

Set the IP address or host name of the SMTP server. Address: 0.0.0.0 to 255.255.255.255. Host Name = up to 64 characters: default is null.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Send)] → [SMTP Server Name]
Web Browser [Network] → [Email] → [Send Settings] → [Step2. Send address settings] → [SMTP Server Name]
TELNET [Setup SMTP (E-mail)] → [SMTP server name]

SMTP-4

Set the SMTP port number. Range 1 to 65535. Default is 25.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Others] → [SMTP Port Number]
Web Browser [Network] → [Email] → [Send Settings] → [STEP3] → [>>More] → [Security Settings] → [SMTP Port Number]
TELNET [Setup SMTP (E-mail)] → [SMTP port number]

SMTP-5

Set the E-mail address used for the [From] field in the mail header. Up to 78 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Printer E-mail Address]
Web Browser [Network] → [Email] → [Send Settings] → [STEP2] → [Printer Email Address]
TELNET [Setup SMTP (E-mail)] → [E-mail address]

SMTP-6

Set the E-mail address used for the [Reply-To] field in the mail header. Up to 78 alphanumeric characters per address. Default is null.

AdminManager [Setup] → [OKI Device Setup] → → [E-mail(Send)] → [Others] → [Reply-To Address]
Web Browser [Network] → [Email] → [Send Settings] → [STEP3] → [>>More] → [Others] → [Reply-To-Address]
TELNET [Setup SMTP (E-mail)] → [Reply-To address]

SMTP-7

Set up to five E-mail addresses to which E-mail is sent. Up to 78 alphanumeric characters per address. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Destination Address]
Web Browser [Network] → [Email] → [Alert Settings] → [Setting Events …] → [address 1: –5:]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [To Address 1–5]

SMTP-8

Set the interval at which the print server checks the specified event(s). Select disable, 30 min, 60 min, or 24 hour. Disable = an E-mail is sent immediately when the specified event occurs.

AdminManager To Disable (selected by specific event): [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Mode = NoWait] To Enable: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Notify Mode = PERIOD] → [Check Time]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Re-send Interval]

SMTP-9

Enable/disable sending an E-mail when the printer is off-line.

AdminManager Not applicable.
Web Browser Not applicable.
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Off Line]

SMTP-10

Enable/disable sending an E-mail when the printer needs maintenance.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Maintenance Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Maintenance Error = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Maintenance Unit]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Consumable Message]

SMTP-11

Enable/disable sending an E-mail when the toner is low or out.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Consumable Warning = ON or NoWait] *OR* (Consumable Error = ON or No Wait' By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Consumable Warning = ON] *OR* (Consumable Error = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Consumable]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Toner Low/Out]

SMTP-12

Enable/disable sending an E-mail when the paper is low or out.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Paper Warning = ON or NoWait] *OR* [Paper Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Paper Warning = ON or NoWait] *OR* [Paper Error = ON or NoWait]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Paper Supply]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Paper Low/Out]

SMTP-13

Enable/disable sending an E-mail whena paper jam occurs.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Printing Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Printing Error = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Printing Paper]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Paper Jam]

SMTP-14

Enable/disable sending an E-mail when the printer cover is opened.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Printing Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Printing Error = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Printing Paper]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Cover Open]

SMTP-15

Enable/disable sending an E-mail when a stacker error occurs.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Printing Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Printing Error = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Printing Paper]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Stacker Error]

SMTP-16

Enable/disable sending an E-mail when a mass storage error occurs.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [HDD/Flash Memory = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [HDD/Flash Memory = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [HDD / /Flash]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Mass Storage Error]

SMTP-17

Enable/disable sending an E-mail when a recoverable error occurs.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Print Result Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Print Result Error = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Print Result]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Recoverable Error]

SMTP-18

Enable/disable sending an E-mail when a service call request occurs.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Other Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Notify Mode = PERIOD] → [Other Error = ON]
Web Browser [Network] → [Email] → [Alert Settings] → [View a Summary …] → [Table below] → [Other]
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Service Call Req.]

SMTP-19

.Enable/disable sending an E-mail when a finisher error occurs.

AdminManager By EVENT: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Notify Mode = EVENT] → [Event Mode] → [Printing Error = ON or NoWait] By PERIOD: [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Destination Address] → [1…–5…] → [Period Mode = PERIOD] → [Printing Error = ON]
Web Browser Not applicable.
TELNET [Setup SMTP (E-mail)] → [Event to address 1–5] → [Finisher]

SMTP-20

Set up to four signature lines to be added to the bottom of an E-mail. Up to 63 alphanumeric characters Default is null.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Send)] → [Comment …]
Web Browser [Network] → [Email] → [Send Settings] → [STEP3] → [>>More] → [Configure attached information] → [Comment:]
TELNET [Setup SMTP (E-mail)] → [Signature line 1–4]

POP

NOTE

The default setting is underlined.

POP-1

Enable/disable retrieving E-mail via POP3.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [Use POP Receive]
Web Browser [Network] → [Email] → [Receive Settings] → [POP3]
TELNET [Setup POP (E-mail)] → [POP3 protocol]

POP-2

Set the IP address or host name of the POP3 server.Up to 63 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [POP3 Server]
Web Browser [Network] → [Email] → [Receive Settings] → [Select POP3] → [To STEP2] → [STEP1] → [POP Server Name]
TELNET [Setup POP (E-mail)] → [POP3 server]

POP-3

Set the port number of POP. Range 1 to 65536. Default is 110.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [POP Detail…] → [POP3 Port Number]
Web Browser [Network] → [Email] → [Receive Settings] → [Select POP3] → [To STEP2] → [STEP2] → [>>More] → [Security settings] → [POP Port Number]
TELNET [Setup POP (E-mail)] → [POP3 port number]

POP-4

Set the user ID for the POP3 server. Up to 16 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [POP3 Server User ID]
Web Browser [Network] → [Email] → [Receive Settings] → [Select POP3] → [To STEP2] → [STEP1] → [POP Account]
TELNET [Setup POP (E-mail)] → [POP3 server UserID]

POP-5

Set the password for the POP3 server. Up to 16 alphanumeric characters. Default is null.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [POP3 Server Password]
Web Browser [Network] → [Email] → [Receive Settings] → [Select POP3] → [To STEP2] → [STEP1] → [POP Password]
TELNET [Setup POP (E-mail)] → [POP3 server Password]

POP-6

Enable/disable APOP.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [POP Detail…] → [Use APOP]
Web Browser [Network] → [Email] → [Receive Settings] → [Select POP3] → [To STEP2] → [STEP2] → [>>More] → [Security settings] → [APOP Support]
TELNET [Setup POP (E-mail)] → [User APOP]

POP-7

Set the the interval to retrieve E-mails from the POP3 server. Off, 1 min, 5 min, 10 min, 30 min, 60 min.

AdminManager [Setup] → [OKI Device Setup] → [E-mail(Receive)] → [POP Detail…] → [Mail Polling Time]
Web Browser [Network] → [Email] → [Receive Settings] → [POP3] → [To STEP2] → [STEP2] → [>>More] → [Others] → [POP Receive Interval]
TELNET [Setup POP (E-mail)] → [Retrieve every(min.)]

ETC

NOTE

The default setting is underlined.

ETC-1

Reset the print server to the factory defaults.

AdminManager [Setup] → [Reset]
Web Browser [Maintenance] → [Reset / Restore] → [Reset Printer]
TELNET [Reset to factory set]

ETC-2

Display printer serial number.

AdminManager Not applicable.
Web Browser [Network] → [General Network Settings] → [Summary] → [Network Summary]
TELNET Not applicable.

ETC-3

Set a printer asset number. Up to 8 alphanumeric characters. Default is null.

AdminManager Not applicable.
Web Browser [Printer] → [General Printer Settings] → [Printer identify] → [Printer Asset Number]
TELNET Not applicable.

Section 2: Utilities

This section covers the following:

- **PrintSuperVision Management Utility (page 115)**
- **Oki LPR Printing Utility (page 120)**

Utilities: PrintSuperVision Management Utility

PrintSuperVision is a web-based application for managing printing devices connected to a network. It consists of two parts:

- **A web application** based on Microsoft web server (Internet Information Server, IIS or Personal WEB Server, PWS), that provides the user interface.
- **A monitoring program** (PrintSuperVisor) that runs all the time, collecting data and saving it in a database for statistical reports and sending E-mail alerts based on the saved configuration.

PrintSuperVision's Main Functions

- Maintaining the list of printing devices and organizing them in logical groups.
- Initially discovering and configuring printers connected to the network.
- Locating printers visually on maps.
- Monitoring devices over time and saving data for statistical reports.
- Sending email alerts when selected events occur that affect the functionality of printers.
- Creating statistical reports about usage of printers.
- Tracking maintenance data related to printers.
- Integrating with Oki Data's on-line web support.

System Requirements

Windows

The main PrintSuperVision application can be installed in any of the following Windows systems.

Operating System	Service Pack	Option Pack	IIS (Internet Information Server) PWS (Personal Web Server)
Windows XP Home/Professional	None, 1a or 2	—	IIS installed as an option. Available on the Windows XP CD
Windows 2000 Professional	1.0	—	Internet Service Manager included in the OS
Windows 2000 Server/Advanced Server	1.0	—	Internet Service Manager included in the OS

Supported Browsers

- Internet Explorer (IE) 5.5 and above.
- Netscape Navigator 6.2 and above.
- Opera 6.0 and above.

The PrintSuperVision application can be accessed from any Windows, Macintosh, Unix, or Linux desktop that supports any of these browsers.

Internet Explorer

- PrintSuperVision works best when used with Internet Explorer.

Netscape Navigator

- When using the Netscape browser, do not select the option [Images off].
- The hyperlinks may not work properly.
- Some versions of Netscape browser do not display the frames properly, and the [Back] button may not work correctly.

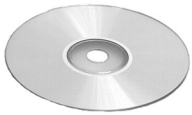
Supported Printers

PrintSuperVision provides general management information for Oki and non-Oki printers connected to the network.

For Oki printers using OkiLAN print servers, additional details, reports and added features are available.

While the printer properties are displayed in PrintSuperVision, only a few of the printer settings can be set. For setting any other printer settings, a hyperlink to the printer's web page is provided in PrintSuperVision.

Installing PrintSuperVision



NOTE

Installation requires administrator privileges.

1. Insert the Network & Utilities CD into the CD-ROM drive and wait for it to autorun.
   If the installer does not start automatically, click [Start] → [Run] and enter E:\Setup (where E is your CD-ROM drive) in the Open field, then click [OK].
2. Accept the Software License Agreement if you have not previously accepted it and select [Software Utilities].
3. Click [Install Printer SuperVision.NET] to begin installation.
4. Follow the on-screen instructions.
   - In the "Edit Data" window, you can specify a port number for PrintSuperVision (the default is 80).
   - When the installation ends, the "Setup complete" window appears.

5. Click [Finish].

Running PrintSuperVision

To run PrintSuperVision Server:

- Click [Start] → [Programs] → [PrintSuperVision] → [PrintSuperVision]

  or

- Double-click the [PrintSuperVision] icon on the desktop for the PrintSuperVision server.

To run PrintSuperVision Client

1. Open your web browser.
2. Enter the address
   http://[fill in the server IP address or host name]/PrintSuperVision.
3. Or, If you changed the port number, enter the address with the port number included, e.g.:

   ```
   http://172.168.20.127/PrintSuperVision:8080.
   ```

Help

PrintSuperVision has an on-line help facility.

Uninstalling PrintSuperVision

To uninstall PrintSuperVision, either use the utility's uninstall program or use the Windows Add/Remove Programs feature.

The PrintSuperVision Uninstall Program

To run the uninstall program:

- Click
  [Start] → [Programs] → [PrintSuperVision] → [Uninstall PrintSuperVision]

The Windows Add/Remove Program

To run the Windows Add/Remove Program:

1. Click [Start] → [Settings] → [Control Panel].
2. Double click [Add or Remove Programs].
3. Scroll to [PrintSuperVision], and select it.
4. Click [Add/Remove].
5. When the uninstallation is complete, close [Add/Remove Programs].

In some cases, an empty [*Okidata/*PrintSuperVision*/*] directory may be left behind. If so, you need to delete the directory manually.

Utilities:
Oki LPR Printing Utility

The Oki LPR Utility is a utility that allows sending data to printers connected to the network via TCP/IP.

The utility redirects printing data to the lpr port of the specified IP address.

System Requirements

Oki LPR works with the following WIndows Operating Systems, with TCP/IP protocol installed:

- XP
- 2000
- Me
- 98
- NT4.0

Installing Oki LPR

OkiLPR is installed automatically for a network printer when the driver is installed. Installation consists of two steps:

- Step 1: Install the Utility
- Step 2: Add the Printer to the Utility

Step1: Install The Utility

Important!

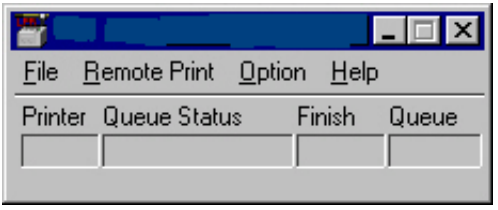
- Installation on Windows XP, 2000 and NT4.0 requires administrator privileges.
- TCP/IP protocol must be installed in your Windows system. To install the TCP/IP protocol into your Windows system consult your Windows manual.

1. Insert the 9600 Drivers CD into the CD-ROM drive and wait for it to autorun.
   If the installer does not start automatically, click [Start] → [Run] and enter E:\Setup (where E is your CD-ROM drive) in the Open field, then click [OK].
2. Accept the Software License Agreement if you have not previously accepted it and select [Software Utilities]
3. Click [Install LPR] to begin installation.
4. Verify the [Destination Folder] and [Spool Folder], and click [Next].
5. Select the startup method you wish to use to launch the utility when Windows boots:
   - To automatically launch the program in an open window, select [Register in Startup].
   - To automatically launch the program minimized as an icon, select [Launch as minimized]. To open the “Oki LP UTILITY” window, click the icon.
6. Click [Next].
7. Verify the program folder name and click [Next].
   The installation starts.

8. When the installation ends, the “Setup complete” window appears.

> **NOTE**
>
> If you wish to view the readme file, click [Yes, I want to view the ReadMe File] before proceeding.

9. Check [Yes, I want to launch Oki LPR Utility now].
10. Click [Finish].
    The utility starts.



Step 2: Add The Printer to the Utility

1. With the utility open, click the [Remote Print] pull-down menu and select [Add Printer].
2. Fill in the [IP address] field:
   - If you know the IP address, simply type it in.
   - If you don’t know the IP address, click [Discover] and wait while the program searches the network for the printer. When the “Discovery” window appears, click the printer in the box, then click [OK].
3. Click [OK].
   The printer is added to the main window.

Using Oki LPR

Refer to the on-line Help for information on how to use the utility.

Uninstalling the Utility

Important!

If a file that has been added after installation exists in the folder to install the utility or the folder to spool, you cannot delete the folder.

Delete any unwanted files before running [Uninstall Oki LPR Utility].

1. Exit the utility: right-click the Oki LPR icon in the system tray and click [Exit].
2. Select [Start] → [Programs] → [Okidata] → [Oki LPR Utility] → [Uninstall Oki LPR Utility].
3. Click [Yes] when the “Confirm File Deletion” window appears. *Deletion of the OKI LPR utility starts.*
4. When the “Uninstall Complete” window appears, click [OK].

Section 3: Security Features

This section covers the following:

Security Features: Overview

This section covers the security features provided with the print server, including:

- **SSL/TLS**
- **Disabling unused protocols**

In addition, you can enable

- IP Filtering (see page 45)
- E-mail Domain Filtering for Domains 1 through 5 (see page 98).

SSL/TLS

Your print server incorporates both SSL (Secure Sockets Layer) Version 3.0 and TLS (Transport Layer Security) Version 1.0 to encrypt communications between computers and your printer.

Two types of encryption are available:

IPP Encryption

- For printing via internal networks
- Uses Self-Signed Certificate
- For Windows XP and 2000 only

Web Encryption

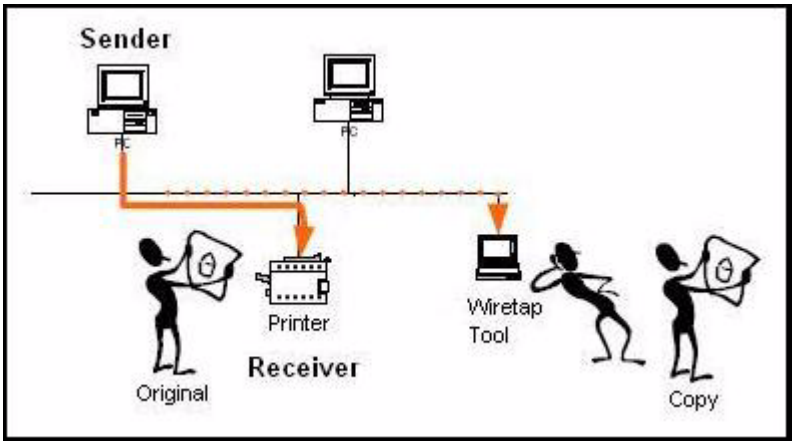
- For printing over the internet
- Uses certificate signed by an external Certification Authority service (This service is not provided as part of the OkiLAN 8200e print server.)

- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.

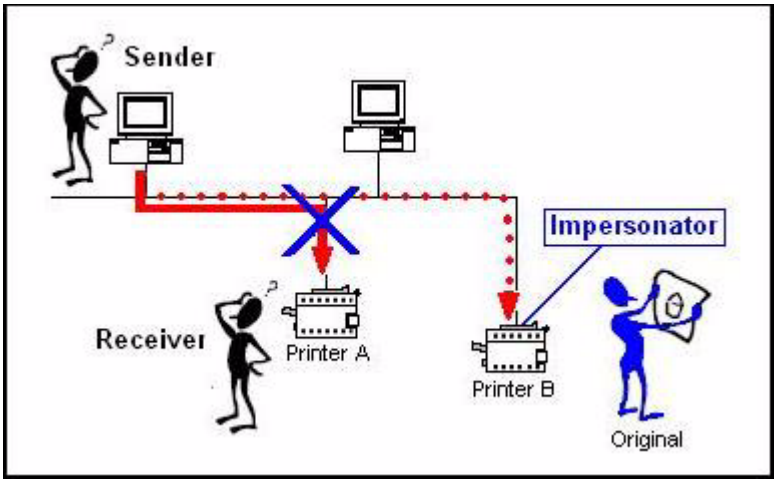
> **NOTE**
>
> Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

Web Encryption Prevents

- Wiretapping



- Spoofing (impersonating)



Summary of SSL/TLS Encryption Functions

Item	Specifications	Default
Security Type	• SSL Version 3.0 • TLS Version 1.0b	NA[a]
Key Exchange (Public Key Size)	• RSA (512, 1024, or 2048 bits) • DH (512, 1024, or 2048 bits)	RSA, 1024 bits
Encryption Algorithm (Symmetric Key Size)	• RC4 (40 or 128 bits) • DES (40 or 56 bits) • 3DES (168 bits) • AES (128 or 256 bits)	NA[a]
Hash Method	• MD5 • SHA-1	SHA-1
Authentication Method	One-way authentication (PC → Printer)	NA[a]
Certificate	• Self-Signed Certificate • Certificate signed by a Certificate Authority	Self- Signed

a.NA = Not applicable.

Unused Protocols

Protocols which are not used by your system can be turned off to prevent unauthorized access through them.

Security Features: IPP Encryption

Setting Up IPP Encryption

Process Summary

Step 1: Create the Self-Signed Certificate

Step 2: Enable IPP Printing at the client stations

Step 1: Create the Self-Signed Certificate

NOTE

A self-signed certificate certifies that the printer to be connected exists at the specified IP Address and contains the specified certificate information. If the printer's IP Address changes, the certificate will be invalid and will have to be redefined by the administrator.

Using the Web Browser

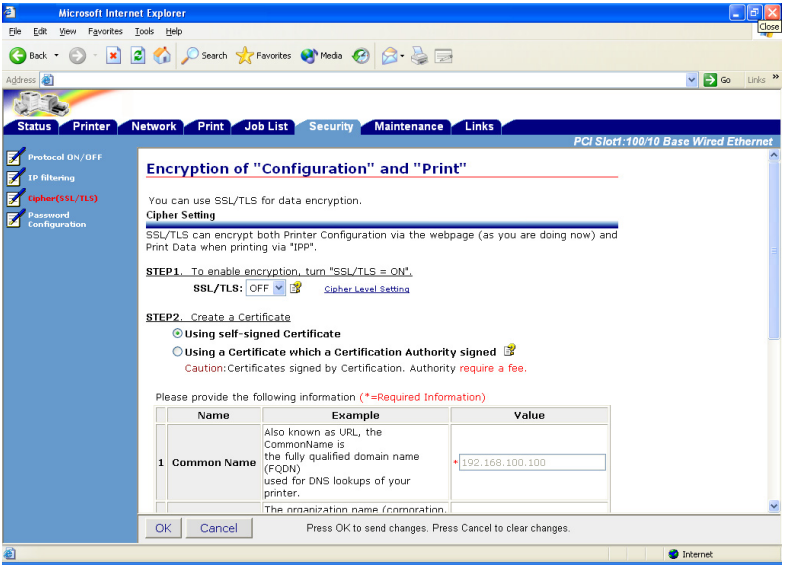
- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.

NOTE

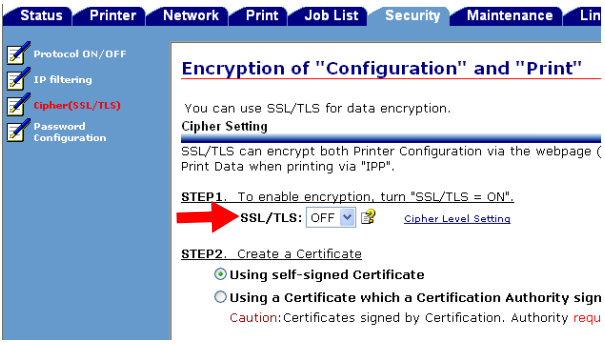
Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

1. Open the web browser.

2. Type in the printer's IP Address (refer to the self-diagnostic printout–see page 12) and press ENTER.
3. Click [Administrator Login], then enter
   – your [User name]
   (the default is root)
   – [Password]
   (the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Security] tab.
5. On the left side, click [Cipher (SSL/TLS)].
   The "Encryption of Configuration and Print" window appears.



6. Change [SSL/TLS] to ON.

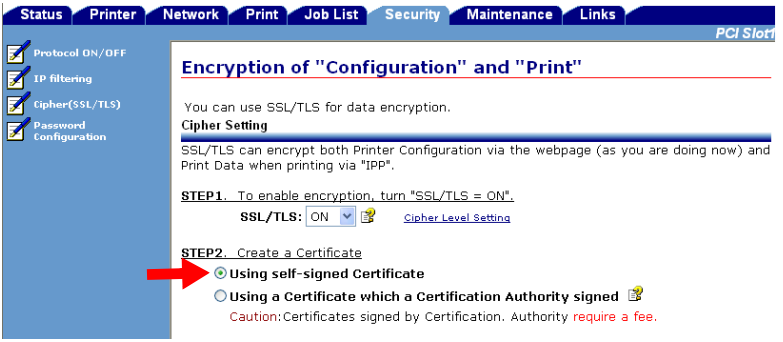


7. To change the cipher strength setting, click [Cipher Level Settings] and make your selection, then click [OK].

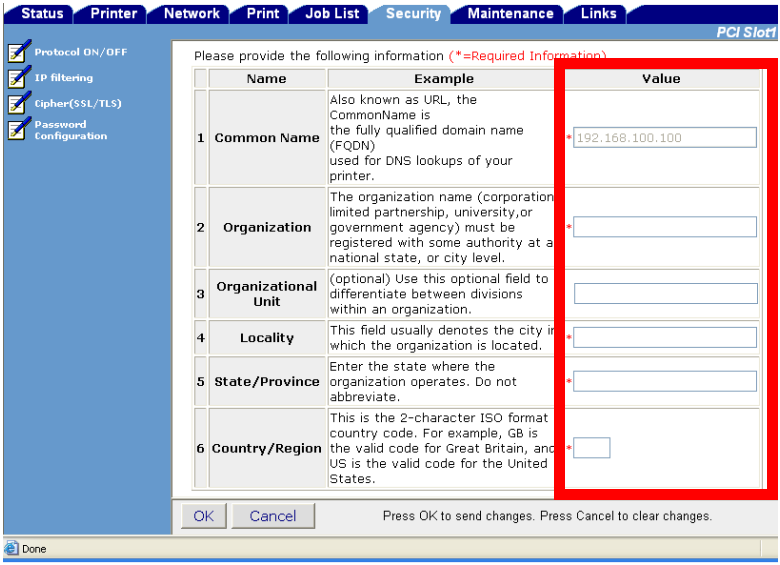
NOTE

The default setting is Standard. Changing the setting to Strong will increase security, but slow down the speed. Changing the setting to Weak gives the fastest speed, but provides the least security.

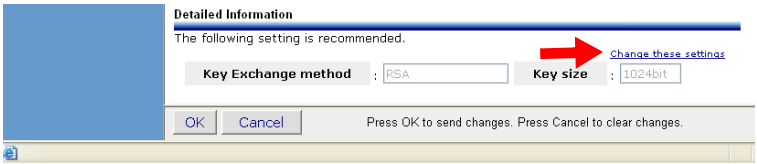
8. Make sure [Using self-signed Certificate] is selected (the default).



9. Scroll down and under the [Value] column enter the information to be included in the certificate:



a. To change the Key Exchange method or the size of the Public Key to be attached with the certificate, scroll down to the bottom and click [Change these settings].



b. Select the desired method and key size, then click [OK].

10. When done, click [OK] to send the setting to the print server.
A Value List window appears.

11. Check the settings. If they are correct, click [OK]. If you need to make changes, click [Cancel], make any needed changes and click [OK] to send the revised information to the print server.

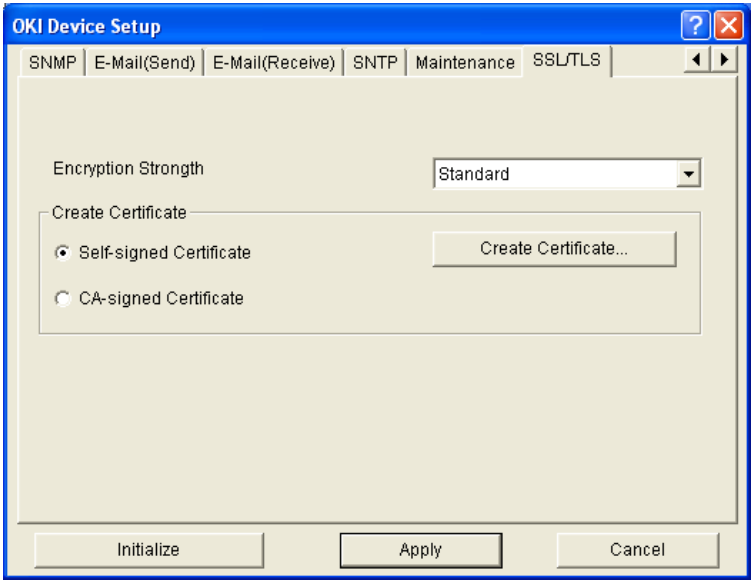
12. Click [OK].
The "Security Alert" window appears.

13. Click [Yes].
    The "Connect to" window appears.
14. Enter your User Name and Password, then click [OK].
    The "Encryption Status" window appears.
15. Check the settings, then click [Submit].

Using AdminManager

1. Launch the AdminManager utility:
   - From the Drivers CD supplied with your printer: [Next] → select language → [Custom Install] → [Network Software] → [Installation/ Config] → [Admin Mgr / Quick Setup] → select language → [OKI Device Standard Setup] → [Execute from CD-ROM].
   - From your desktop (if you installed the utility from the CD): [Start] → [Programs] → [OKI Setup Utility] → [Admin Manager].
2. Click the printer to configure from the list.
3. Click [Setup] → [OKI Device Setup].
   The "Password" window appears.
4. Enter your password, then click [OK].

5. Click the [SSL/TLS] tab.



Item	Comments
Encryption Strength	Set the strength of the encryption. Switching to Strong provides greater security, but slower speed. Switching to Weak provides the fastest speed, but the least security.
Self-signed Certificate	The default type of certificate.

Item	Comments	
Create Certificate…	With self-signed certificate selected, set the following.	
	Common Name	Enter the IP Address for the printer.
	Organization	Enter a name for the organization.
	Organizational Unit	Optional. Enter a name to differentiate between divisions within an organization.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the name of the state or Province where the organization is located.
	Country/Region	Enter the name of the country or region where the organization is located.
	Key Exchange method.	Select RSA or DH. The default RSA ia recommended.
	Key size	Select 512, 1024 or 2048 bits. The default, 1024 bits, is recommended.
	Term of Validity	Set a month/date/year and time range for which the certificate is valid
CA-signed Certificate	Used to set up a CA certificate for internet printing. See page 143 for more information.	

6. With [Self-signed Certificate] selected (the default), click [Create Certificate…].
7. Enter the appropriate information then click [OK].
   A window appears listing the settings you have made.

8. Review the information entered, then click [OK] to accept it.
9. Wait for the following window to appear:

10. Click [OK].
    The SSL/TLS tab window appears.
11. Click [Apply].
    A window appears containing a summary of your certification selection.
12. Click [OK].

13. Click [Yes].
    The print server reboots with the new certification settings engaged.

Step 2: Enable IPP Printing at Client Stations

NOTE

Client stations must have Windows XP or 2000 to use IPP Encryption printing.

Using the Web Browser

- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.

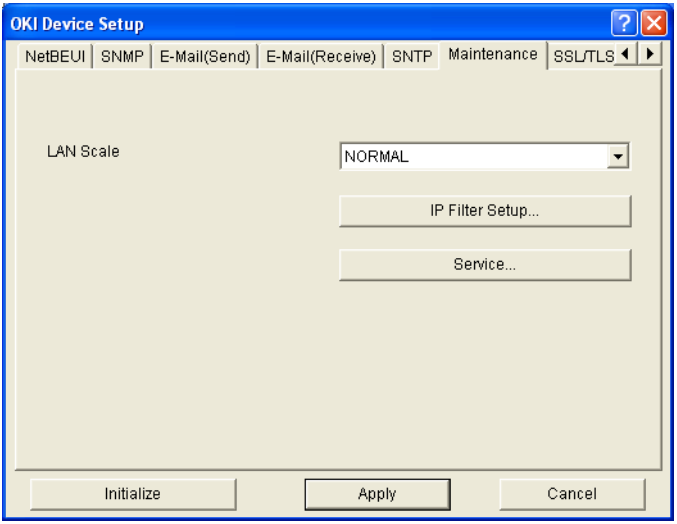
NOTE

Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

1. Open the web browser.
2. Type in the printer's IP Address (refer to the self-diagnostic printout–see page 12) and press ENTER.
3. Click [Administrator Login], then enter
   - your [User name]
     (the default is root)
   - your [Password]
     (the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Network] tab.
5. On the left side, click [IPP], then [Settings].
6. Select ENABLE for [IPP].
7. Click [Submit]

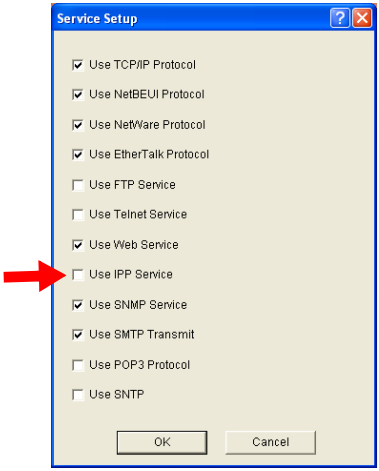
Using AdminManager

1. Launch the AdminManager utility:
   - From the Drivers CD supplied with your printer: [Next] → select language → [Custom Install] → [Network Software] → [Installation/ Config] → [Admin Mgr / Quick Setup] → select language → [OKI Device Standard Setup] → [Execute from CD-ROM].
   - From your desktop (if you installed the utility from the CD): [Start] → [Programs] → [OKI Setup Utility] → [Admin Manager].
2. Click the printer to configure from the list.
3. Click [Setup] → [OKI Device Setup].
   The Password window appears.
4. Enter your password, then click [OK].
5. Click the [Maintenance] tab.



6. Click [Service…].

7. Click the box beside [Use IPP Service] to select it, then click [OK].



8. Click [Apply].
   A window appears containing a summary of your certification selection.
9. Click [OK].

10. Click [Yes].
    The print server reboots with the new certification settings engaged.

Printing Using IPP Encryption

1. Open the file to be printed in your application.
2. Click [File] → [Print].
3. Select the created IPP encrypted printer (e.g., Model 1234 on https://155.37.177.60) from the [Select Printer] list, then click [Print].

Security Features: Web Encryption

Important!

CA (Certification Authority) encryption requires an outside certification service. It can take about 2 weeks to get a certificate issued. The certificate is guaranteed by the CA service.

The issue time, price and available services depend on the CA you choose.

Setting Up Web Encryption

Process Summary

Step 1: Apply to a CA service for a certificate.

Step 2: Install the certificate on the print server.

Step 1: Apply for a CA Certificate

Using Web Browser

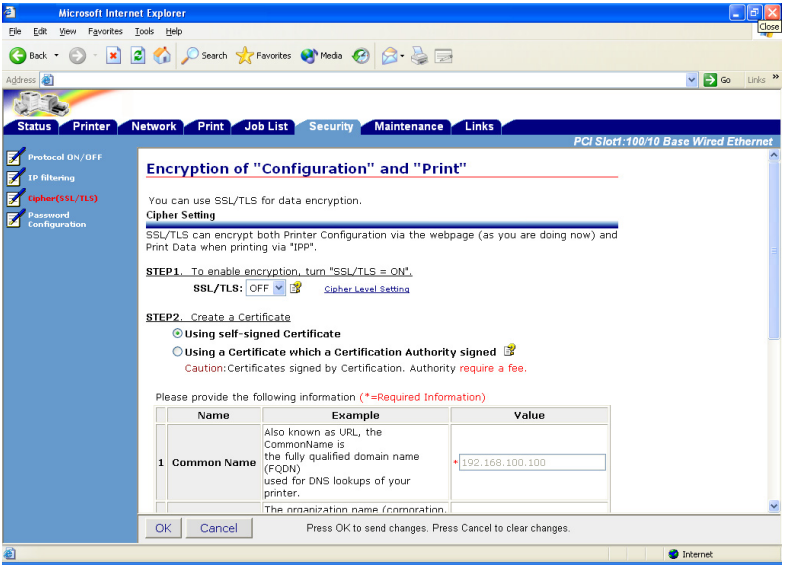
- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.

NOTE

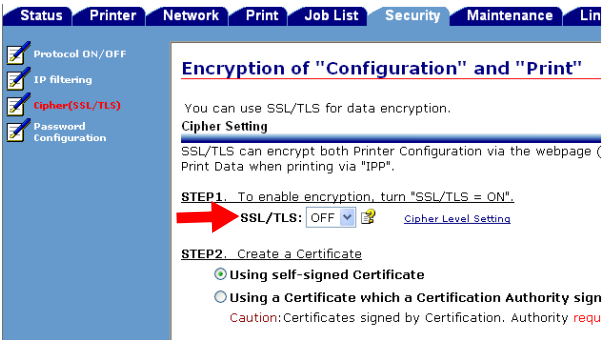
Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

1. Open the web browser.

2. Type in the printer's IP Address (refer to the self-diagnostic printout–see page 12) and press ENTER.
3. Click [Administrator Login], then enter
   – your [User name]
   (the default is root)
   – [Password]
   (the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Security] tab.
5. On the left side, click [Cipher (SSL/TLS)].
   The "Encryption of Configuration and Print" window appears.



6. Change [SSL/TLS] to ON.



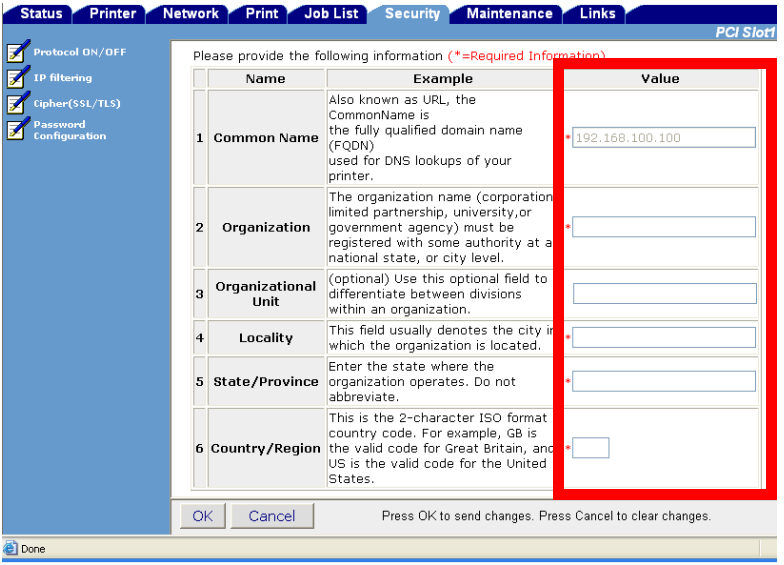
7. To change the cipher strength setting, click [Cipher Level Settings] and make your selection, then click [OK].

NOTE

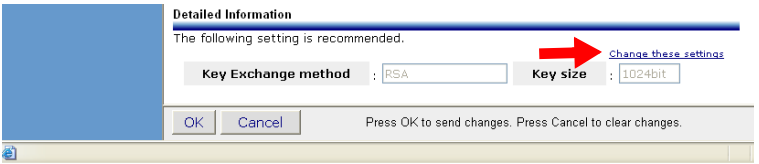
The default setting is Standard. Changing the setting to Strong will increase security, but slow down the speed. Changing the setting to Weak gives the fastest speed, but provides the least security.

8. Click [Using a Certificate which a Certification Authority signed].

9. Scroll down and type in the information to be used in the certification:



a. To change the Key Exchange method or the size of the Public Key to be attached with the certificate, scroll down to the bottom and click [Change these settings].



b. Select the desired method and key size, then click [OK].

10. Click [OK].
The "Value List" window appears.

11. Check the settings, then click [OK].

12. Wait for the “Send the CSR to a Certification Authority” window to appear.

13. Copy the text in the box starting with “BEGIN CERTIFICATE SIGNING REQUEST” and ending with “END CERTIFICATE SIGNING REQUEST”, and submit it to your selected Certification Authority service, following their instructions.

14. Click [OK].

> **Important!**
>
> It can take about 2 weeks to get a certificate issued.
>
> **While you are waiting to receive your completed certificate, do not make any changes to the print server settings** as this can invalidate the certificate!

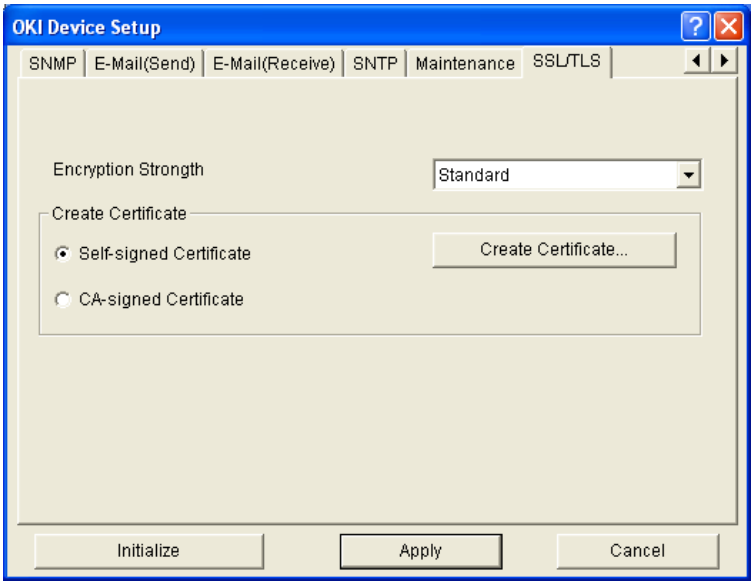
Using AdminManager

1. Launch the AdminManager utility:
   – From the Drivers CD supplied with your printer:
   [Next] → select language → [Custom

Install] → [Network Software] → [Installation/ Config] → [Admin Mgr / Quick Setup] → select language → [OKI Device Standard Setup] → [Execute from CD-ROM].

– From your desktop (if you installed the utility from the CD): [Start] → [Programs] → [OKI Setup Utility] → [Admin Manager].

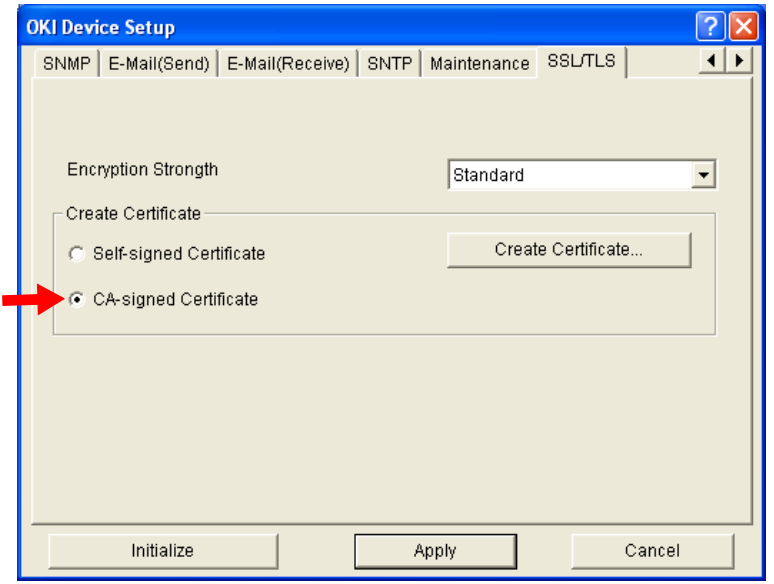
2. Click the printer to configure from the list.
3. Click [Setup] → [OKI Device Setup].
   The Password window appears.
4. Enter your password, then click [OK].
5. Click the [SSL/TLS] tab.



Item	Comments
Encryption Strength	Set the strength of the encryption. Switching to Strong provides greater security, but slower speed. Switching to Weak provides the fastest speed, but the least security.

Item	Comments	
Self-signed Certificate	The default type of certificate.	
CA-signed Certificate	Click to set up a CA certificate for internet printing.	
Create Certificate…	Click to set up the CA certificate, including	
	Common Name	Enter the IP Address for the printer.
	Organization	Enter a name for the organization.
	Organizational Unit	Optional. Enter a name to differentiate between divisions within an organization.
	Locality	Enter the name of the city where the organization is located.
	State/Province	Enter the name of the state or Province where the organization is located.
	Country/Region	Enter the name of the country or region where the organization is located.
	Key Exchange method	Select RSA or DH. The default RSA ia recommended.
	Key size	Select 512, 1024 or 2048 bits. The default, 1024 bits, is recommended.

6. Click [CA-signed Certificate], then click [Create Certificate].



7. Enter the appropriate information then click [OK].
   A window appears listing the settings you have made.
8. Review the information entered, then click [OK] to accept it.
9. Wait for the “View the CSR data” window to appear.
10. Copy the text in the box starting with “BEGIN CERTIFICATE SIGNING REQUEST” and ending with “END CERTIFICATE SIGNING REQUEST”, and submit it to your selected Certification Authority service, following their instructions.
11. Click [OK].

Important!

It can take about 2 weeks to get a certificate issued.

While you are waiting to receive your completed certificate, do not make any changes to the print server settings as this can invalidate the certificate.

Step 2: Install the Certificate

Once you receive your certificate from the CA, you must install it, using either the web browser or the AdminManager utility. Keep the certificate text handy as you will be prompted to copy and paste it into the program.

IMPORTANT!

You can install only one certificate to one printer. If the issued CA certificate is an intermediate certificate, install it on the client PC.

Using Web Browser

- Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.

NOTE

Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

1. Open the web browser.
2. Type in the printer's IP Address (refer to the self-diagnostic printout–see page 12) and press ENTER.
3. Click [Administrator Login], then enter
   – your [User name]
   (the default is root)
   – [Password]
   (the default is the last six digits of the MAC [Ethernet] Address, minus any punctuation).
4. Click the [Security] tab.
5. On the left side, click [Cipher (SSL/TLS)].
6. Copy the certificate text sent by the CA service, starting with "BEGIN CERTIFICATE" and ending with "END

CERFTIFICATE”, and paste it into the “Paste your signed certificate(PEM) …” box.

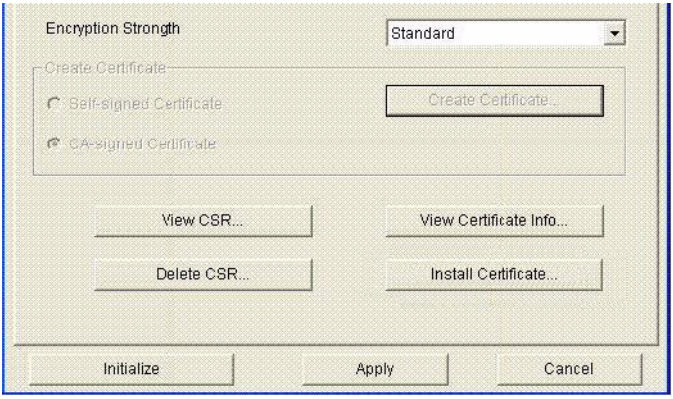
7. Click [Submit].
   The “Security Alert” window appears.
8. Click [Yes], then enter your User name and Password and click [OK].
9. Check the Security tab window to ensure that the certificate installation is competed and that SSL/TLS is turned on.

Using AdminManager

1. Launch the AdminManager utility:
   – From the Drivers CD supplied with your printer:
   [Next] → select language → [Custom Install] → [Network Software] → [Installation/ Config] → [Admin Mgr / Quick Setup] → select language → [OKI Device Standard Setup] → [Execute from CD-ROM].

– From your desktop (if you installed the utility from the CD): [Start] → [Programs] → [OKI Setup Utility] → [Admin Manager].

2. Click the printer to configure from the list.
3. Click [Setup] → [OKI Device Setup].
   The Password window appears.
4. Enter your password, then click [OK].
5. Click the [SSL/TLS] tab.



6. Click [Install Certificate…].

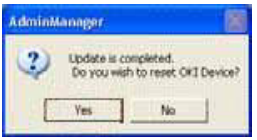
7. Copy the certificate text sent by the CA service, starting with “BEGIN CERTIFICATE” and ending with “END CERFTIFICATE”, and paste it into the box, then click [Install].

8. Wait until the completion acknowledgement window appears, then click [OK].

The SSL/TLS tab windows appears.

9. Click [Apply].
A window appears summarizing the changes.

10. Click [OK].



11. Click [Yes].
    The print server reboots with the new certification settings engaged.

Printing Using Web Encryption

NOTE

Requires Microsoft Internet Explorer Version 5.5 and higher or Netscape Navigator version 6.2 and higher.

Other browsers which support SSL/TLS may work, but no guarantees are offered for them.

To make connection with the encrypted printer:

1. Open your web browser.
2. Enter the printer's IP address as follows (be sure to include the s after "http".:

   Internet Explorer

   In the [Address] field, enter
   `https://<Printer's IP Address>`.

   Netscape Navigator

   In the [Location/Position] field, enter
   `https://<Printer's IP Address>`.

3. Press ENTER.

Security Features: Unused Protocols

Disabling Unused Protocols

Disabling unused protocols prevents access to the print server through those protocols.

The easiest way to disable unused protocols is to use the Web Browser.

1. Open the web browser.
2. Enter the print server's IP Address:

   Internet Explorer

   Enter the print server's IP Address in the [Address] field.

   Netscape Navigator

   Enter the print server's IP Address in the [Location/Position] field.

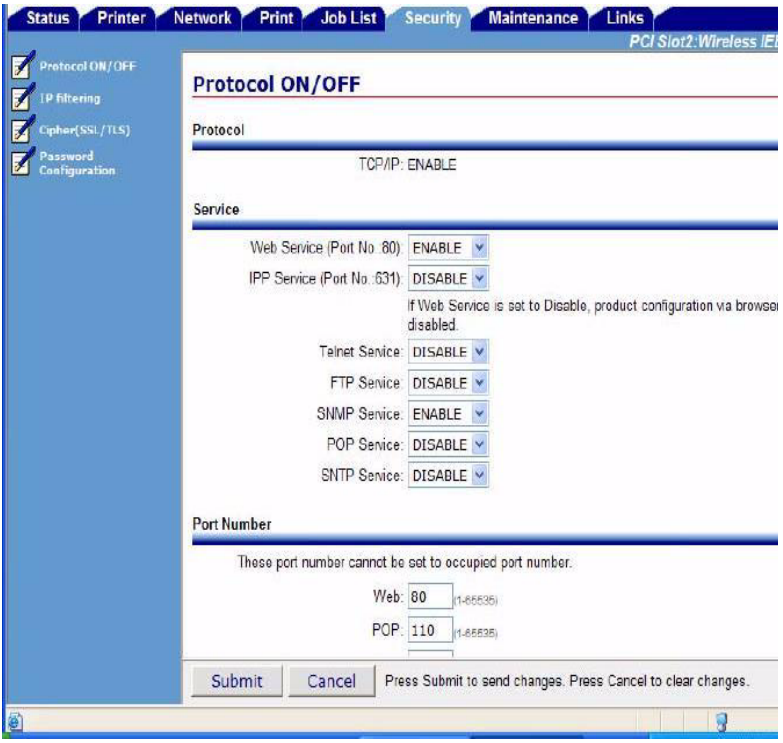
3. Press the ENTER key.
   The Printer Status window appears.

   NOTE

   You can also launch the web browser from within the AdminManager utility. To do this, highlight the appropriate print server, then click [Setup] → [Setup by HTTP]:

4. Click the [Security] tab.

5. The “Protocol ON/OFF” window opens.



6. Here you can set the various available protocols to ENABLE or DISABLE.
7. When done, click [Submit].

Section 4: Printing from Micosoft Windows

This section provides guidelines on how to print over the network from various Microsoft Windows operating systems. There are numerous ways of printing from Windows and the exact set-up will vary depending upon your environment. There are also numerous versions of Windows, which can be configured as either a client, server or both.

Although there are many variants of Windows, the principles of network printing are the same. Microsoft provides on-line help with all of their operating systems and this is a good reference point for the exact details of each configuration option within Windows

This section consists of the following:

NOTE

For information on IPX (Novell NetWare), see “Section 5: Printing from Novell NetWare” starting on page 154.

Printing from Windows: Overview

This chapter provides guidelines on how to print over the network from various Microsoft Windows operating systems. There are numerous ways of printing from Windows and the exact set-up will vary depending upon your environment. There are also numerous versions of Windows, which can be configured as either a client, server or both.

Although there are many variants of Windows, the principles of network printing are the same. Microsoft provides on-line help with all of their operating systems and this is a good reference point for the exact details of each configuration option within Windows.

The network printer supports the following protocols that can be used in conjunction with the Windows operating system:

- TCP/IP
- NetBEUI
- IPX (Novell NetWare)

Printing from Windows: Using TCP/IP Protocol

Installation Overview

There are a number of options available when printing using TCP/IP for Windows.

Windows Version	Method
XP 2000	OKI LPR Utility Microsoft LPR[a] Port 9100[a] IPP[a]
Me 98	OKI LPR Utility
NT 4.0	OKI LPR Utility Microsoft LPR[a]

a. These functions are built into Windows and are displayed as options when using the Add Printer Wizard.

Although there are some differences in configuration options between the various Windows platforms, the procedure for printing using TCP/IP is the same.

Step 1: Ensure that the TCP/IP protocol has been installed in Windows. This can be confirmed by checking the network settings from within the Control Panel. If TCP/IP has not been installed refer to “Installing TCP/IP Protocol” on page 157.

Step 2: If not already done, a suitable IP address, Subnet Mask and Gateway address should be configured. The current addresses appear under “TCP/IP Configuration” on the Self-Diagnostic test printout (see page 12). It is vital that the IP address entered is unique and valid. Entering

an incorrect IP address may cause severe network problems. Please check the address with the network administrator. To change the addresses, see “Configuring the IP Address, Subnet Mask and Gateway” on page 159.

Step 3: Configure WIndows to print to the network printer. See **“Configuring Windows to Print to the Network Printer” on page 161**.

NOTE

If your network environment uses domain names, DNS should be enabled and configured on your system. However, this step is not essential to enable network printing.

Step 4: Restart your computer.

Installing TCP/IP Protocol

If TCP/IP protocol is not already installed on your computer, follow the instructions below to install it.

Installing TCP/IP Protocol Windows XP

NOTE

The Windows XP installation CD-ROM may be required to complete the installation.

1. Click [Start] → [Control Panel].
2. Click [Network and Internet Connection] → [Network Connection].
3. Double-click [Local Area Connection] and click [Properties] in the “Location Area Connection Status” window.
4. If the [Internet Protocol (TCP/IP)] is not listed, click [Install].

5. In the "Select Network Component Type" window, click [Protocol] → [Add].
6. In the "Select Network Protocol" window, click [Internet Protocol (TCP/IP)] → [OK].
7. Follow the on-screen instructions to finish the installation.

Installing TCP/IP Protocol Windows 2000

1. Click [Start] → [Settings] → [Network and Dial-up Connections].
2. Double-click the [Local Area Connection] icon
3. In the "Local Area Connection Status" window, click [Properties].
4. In the "Local Area Connection Properties" window, click [Install].
5. In the "Select Network Component Type" window, click [Protocol] → [Add].
6. In the "Select Network Protocol" window, click [TCP/IP Protocol] → [OK].
7. Click [Close].
8. Click [Close].

Installing TCP/IP Protocol Windows NT 4.0

NOTE

The Windows NT 4.0 installation CD-ROM may be required to complete the installation.

1. Click [Start] → [Settings] → [Control Panel].
2. Double-click the [Network] icon.
3. In the" Network" window, click the [Protocols] tab.

4. If the [TCP/IP Protocol] is not listed, click [Add].
5. In the "Select Network Protocol" window, click [TCP/IP Protocol] → [OK].
6. Follow the on-screen instructions to finish the installation.

Installing TCP/IP Protocol Windows Me/98

NOTE

The Windows installation CD-ROM may be required to complete the installation.

1. Click the [Start] → [Settings] → [Control Panel].
2. Double-click the [Network] icon.
3. In the “Network” window, click [Configuration Panel].
4. If the [Client for Microsoft Networks] is not listed, click [Add].
5. In the "Select Network Component Type" window, click [Protocol] → [Add].
6. In the "Select Network Protocol" window, click [Microsoft] from the list of manufacturers, then click [TCP/IP] from the list of network protocols.
7. Click [OK].
8. Follow the on-screen instructions to finish the installation.

Configuring the IP Address, Subnet Mask and Gateway

First, Generate a Self-Diagnostic Test Printout

With the printer connected to the network and switched on, press the Test button on the print server for more than three seconds.

The IP Address, Subnet Mask and Default Gateway appear under “TCP/IP Configuration” on the first page.

If these settings need to be changed, you can do so as follows.

Using Web Browser

1. Open your web browser, then type the printer’s IP address in the URL area and press ENTER.
2. Click [Administrator Login] and enter your [User name] and [Password].

> **NOTE**
>
> If you are not the administrator, you will need your administrator to help you with this.

3. Click the [Network] tab.
4. On the left side, click [TCP/IP].
5. Under [Step 2], click [Set IIP Address manually].
6. When done making changes, click [OK].
7. Click [Submit] to send the changes to the print server.

Using AdminManager

1. Launch the AdminManager utility.
   - If you installed the utility on your computer, click [Start] → [Programs] → [Okidata] → [Oki Setup Utility] → [AdminManager].
   - To run it off the Drivers CD, see “Installing AdminManager” on page 25.
2. Select the appropriate network card, using the Ethernet (MAC) address to identify it, and click [Setup] → [Oki Device Setup].
3. Click the [TCP/IP] tab and enter the values for the [IP Address], [Subnet Mask] and [Default Gateway].

4. Click [Apply].
5. Close the AdminManager utility.

Configuring Windows to Print to the Network Printer

Configuring Windows for Printing Windows XP

Windows XP requires administrator privileges.

With Windows XP, there are four options for printing using TCP/IP.

- Oki LPR
- Microsoft LPR*
- Port 9100
- IPP

* In order to use Microsoft LPR, it must first be installed on your system.

Oki LPR

Please follow the procedure described under “Installing Oki LPR” on page 120.

Microsoft LPR

1. Click [Start] → [Settings] → [Control Panel] → [Printers and Other Hardware].
2. Click [Printers and Faxes].
3. Click [Add Printer], then click [Next].
4. Click [Local printer attached to this computer].
5. Clear the [Automatically detect and install my Plug and Play printer] check box, then click [Next].
6. Click [Create a New Port] and [Type Standard TCP/IP Port].

7. Click [Next].
   "Welcome to the Add Standard TCP/IP Printer Port Wizard" appears.
8. Click [Next] and enter [Printer name or IP address], for example: *172.168.1.31.* If the example IP address is entered, the Port Name will default to *IP_172.168.1.31.*
9. Click [Next].
   The "Additional Port Information Required" windows appears.
10. Under [Device Type], click [Custom] → [Settings].
11. Ensure [Protocol] is set to [LPR].
12. Ensure [Queue Name] is lp and [SNMP Status Enabled] is deselected.
13. Click [OK].
14. Follow the on-screen instructions to finish the installation.

Port 9100

1. Click [Start] → [Settings] → [Control Panel] → [Printers and Other Hardware].
2. Click [Printers and Faxes].
3. Click [Add Printer] → [Next].
4. Click [Local printer attached to this computer], clear the [Automatically detect and install my Plug and Play printer] check box.
5. Click [Next].
6. Click [Create a New Port] and click [Type Standard TCP/IP Port].
7. Click [Next].
   The "Welcome to the Add Standard TCP/IP Printer Port Wizard" appears.
8. Click [Next] and enter [Printer name or IP address], for example: *172.168.1.31.* If the example IP address is entered, the Port Name will default to *IP_172.168.1.31.*

9. Click [Next].
   The "Additional Port Information Required" windows appears.
10. Under [Device Type], click [Custom] → [Settings].
11. Ensure [Protocol] is set to [Raw].
12. Ensure [Port Number] is 9100 and [SNMP Status Enabled] is deselected.
13. Click [OK].
14. Follow the on-screen instructions to finish the installation.

IPP

1. Click [Start] → [Settings] → [Control Panel] → [Printers and Other Hardware].
2. Click [Printers and Faxes].
3. Click [Add Printer] → [Next].
4. Click [A network printer, or a printer attached to another computer].
5. Click [Next].
6. Click [Connect to a printer on the Internet or on a home or office network] and type the printer URL in the text box, e.g. *http://172.168.1.31/ipp/lp.*
7. Click [Next].
8. Install the printer driver

Configuring Windows for Printing Windows 2000

Windows 2000 requires administrator privileges.

With Windows 2000, there are four options for printing using TCP/IP.

- Oki LPR
- Microsoft LPR
- Port 9100
- IPP

Oki LPR

Please follow the procedure described under “Installing Oki LPR” on page 120.

Microsoft LPR

NOTE

In order to use Microsoft LPR, it must first be installed on your system.

1. Click [Start] → [Settings] → [Control Panel and Printers].
2. Open the [Printers] folder.
3. Double-click [Add Printer].
4. Click [Next].
5. Click [Local Printer] and clear the [Automatically detect my printer] check box
6. Click [Next].
7. Click [Create a new port] and then [LPR Port].
8. Click [Next] and provide the following information:
   a. In [Name or address of server providing LPD] enter the host name or Internet Protocol (IP) address of the host for the printer you are adding.
   b. In [Name of printer or print queue on that server] type lp.
9. Follow the on-screen instructions to finish the installation.

Port 9100

1. Click [Start] → [Settings] → [Control Panel].
2. Open the [Printers] folder.
3. Double-click [Add Printer].
4. Click [Next].

5. Click [Local Printer] and clear the [Automatically detect my printer] check box.
6. Click [Next].
7. Click [Create a New Port] → [Standard TCP/IP Port].
8. Click [Next].
   The "Welcome to the Add Standard TCP/IP Printer Port Wizard" appears.
9. Click [Next] and enter [Printer name] or IP address, for example: *172.168.1.31*. If the example IP address is entered, the Port Name will default to I*P_172.168.1.31.*
10. Click [Next]. Additional port information will be required.
11. Under [Device Type], click [Custom] → [Settings].
12. Ensure [Protocol] is set to [Raw].
13. Ensure [Port Number] is 9100 and [SNMP Status Enabled] is deselected.
14. Click [OK].
15. Follow the on-screen instructions to finish the installation.

IPP

1. Click [Start] → [Settings] → [Control Panel and Printers].
2. Open the [Printers Folder].
3. Double-click [Add Printer].
4. Click [Next].
5. Click [Network Printer].
6. Click [Next].
7. Type the printer URL in the text box labelled [Connect to a printer in the Internet or your Intranet], e.g. *http://172.168.1.31/ipp/lp*.
8. Click [Next].
9. Install the printer driver.

Configuring Windows for Printing Windows NT 4.0

NT 4.0 requires administrator privileges.

With Windows NT 4.0, you have two options for printing using TCP/IP. They are:

- Oki LPR
- Microsoft LPR

Oki LPR

Please follow the procedure described under “Installing Oki LPR” on page 120.

Microsoft LPR

NOTE

In order to use Microsoft LPR, it must first be installed on your system.

1. Click [Start] → [Settings] → [Control Panel] → [Printers].
2. Click [Add Printer].
3. Click [My Computer] → [Next].
4. Click [Add Port].
5. Click [LPR Port] → [OK].
6. In [Name or address of server providing lpd], type the host name or IP address of the host for the printer you are adding.
7. In [Name of printer or print queue on that server], type the logical printer name "lp" and then click [OK].
8. Follow the on-screen instructions to finish the installation.

Configuring Windows for Printing Windows Me/98

When printing using TCP/IP, the *Oki LPR* utility is the only option to use.

See “Installing Oki LPR” on page 120.

Printing from Windows: Using NetBEUI Protocol

NetBEUI (NetBios Extended User Interface) is a protocol that was designed for use on small workgroups or LANs. Within Windows, NetBEUI is used for file and printer sharing between computers. It provides a simple method of printing, but the protocol does have limitations and is not as robust as TCP/IP or IPX. Typically it is employed in small business networks or home networks.

Installation Overview

There are three configurable items under NetBEUI within the printer. These can be configured using the AdminManager utility (see page 35).

Computer Name:	Name assigned to the print server.
Workgroup:	Name for the work group to which the print server belongs. The default is PrintServer.[1]
Comment:	User definable. The default is EthernetBoard OkiLAN 8200e.

[1] Although the workgroup name can be changed, it is recommended that it remain PrintServer.

Although there are some differences in configuration options between the various Windows platforms, the procedure for printing using NetBEUI is the same.

Step 1: Ensure that the NetBEUI protocol has been installed in Windows. This can be confirmed by checking the network settings. If NetBEUI has not been installed, see “Installing NetBEUI Protocol” on page 169. The relevant Windows installation CD may be required.

Step 2: Configure WIndows to print to the Network Printer. See “Configuring Windows to Print to the Network Printer.” on page 171.

Step 3: Restart your computer.

Installing NetBEUI Protocol

Installing NetBEUI Protocol Windows XP

Although you can install the NetBEUI protocol into Windows XP, it is not supported. You should be able to use NetBEUI on LAN connections although you will not be able to use this on Remote Access Service Connections.

1. Click [Start] → [Settings] → [Control Panel].
2. Double-click [Network Connections].
3. Right-click the adapter to which you wish to add NetBEUI.
4. Click [Properties].
5. On the [General] tab, click [Install].
6. Click [Protocol] → [Add].
7. Click [Have Disk] and insert your Windows XP CD.
8. Open the *Valueadd\msft\net\netbeui* folder, click the *Netnbf.inf* file and then click [Open].

Installing NetBEUI Protocol Windows 2000

1. Click [Start] → [Settings] → [Network and Dial-up Connections].
2. Double-click the [Local Area Connection] icon.
3. Click [Properties].
   The "Local Area Connection Properties" window appears.
4. If [NetBEUI Protocol] is not listed, click [Install].
5. Click [Protocol] → [Add].
   The "Select Network Protocol" window appears.
6. Click [NetBEUI Protocol] → [OK].
7. Click [Close].
8. Click [Close].

Installing NetBEUI Protocol Windows NT 4.0

1. Click [Start] → [Settings] → [Control Panel].
2. Double-click the [Network] icon.
3. Click the [Protocols] tab.
4. If the [NetBEUI Protocol] is not listed, click [Add].
5. In the "Select Network Protocol" window, click [NetBEUI Protocol.
6. Click [OK].

Installing NetBEUI Protocol Windows Me/98

NOTE

The Windows installation CD-ROM may be required to complete the installation.

1. Click [Start] → [Settings] → [Control Panel].
2. Double-click the [Network] icon.
3. Click [Configuration Panel].
4. If “Client for Microsoft Networks” is not listed, click [Add].
   The "Select Network Component Type” window appears.
5. Click [Protocol] → [Add].
   The "Select Network Protocol” window appears.
6. Click [Microsoft] in the list of manufacturers, then select [NetBEUI] from the list of [Network Protocols].
7. Click [OK].
8. Follow the on-screen instructions to finish the installation.

Configuring Windows to Print to the Network Printer.

In the following example, the printer has been configured as follows:

Computer Name:	OL07DB85
Workgroup:	PrintServer
Comment:	EthernetBoard OkiLAN

1. Set up the printer driver as the default local printer.
2. Click [Start] → [Settings] → [Printers].
3. Select the relevant printer driver, then click [Properties].
4. Click the [Details] tab.
5. Click [Add Port] → [Network] → [Browse].
6. Double-click [Entire Network] → [PrintServer] → [*OL07DB85*].
7. Click [*Prn1*].
8. Click OK.
9. Check that [Network] is selected, click [OK].

10. Click [Apply] → [OK] to close [Properties].

NOTES

- Printing can be carried out using the application software.
- The Master Browser function manages machine information from the same Workgroup, and replies to summary requests from other workgroups.
- The Master Browser function operates only if the Workgroup name is PrintServer.
- The Master Browser function can only manage this network card. If the PrintServer name is put into another Workgroup, the network card will not be able to find it on the network.
- A maximum of eight Ethernets can be managed by the Master Browser function.
- Printing cannot be carried out and an error message appears when jobs from other users (including other protocols) are being printed.

Section 5: Printing from Novell NetWare

This section consists of the following:

Printing from Novell NetWare: Overview

The print server supports the Novell NetWare environment.

It is necessary to have NetWare Administrator or Supervisor rights to change the configuration. This guide is for NetWare administrators. It should be read in conjunction with the relevant Novell NetWare manual. The latest Novell service packs and Novell client versions should be installed.

Supported Versions and Modes

NetWare 6	Bindery, NDS, NDPS and iPrint
NetWare 5+	Bindery, NDS and NDPS
NetWare 4.1+	Bindery and NDS
NetWare 3.11 +	Bindery

Remote Printer Mode

Remote Printer Mode requires a connection to be made to a workstation running Pserver. Print jobs are received from the file server via the NetWare print server. The network interface card emulates the workstation on which the NetWare Rprinter operates. Remote Printer Mode adds additional traffic to the network and is slower than Print Server Mode but does not require any additional licenses.

Print Server Mode (Recommended)

In Print Server Mode, the file server is logged in and the printer queue is repeatedly polled to determine whether a print job exists. The NetWare print server or workstation where Pserver runs is emulated. This enables high speed printing without applying a load

to the network. Print Server Mode requires a single user NetWare license.

iPrint

iPrint mode is supported by the OkiLAN 8200e. See your Novell NetWare user manuals for informaiton on using iPrint.

Printing from Novell Netware: Setup

First, Print the Self-Diagnostic Test

The print server's self-diagnostic printout provides information that is required for NetWare configuration.

To generate the printout, press the Test button on the print server for more than three seconds and release.

The Ethernet address (MAC Address) is found under "TCP/IP Configuration" on the first page.

The first six digits of the Ethernet address are the same for all OkiLAN print servers. The last six digits of the Ethernet address are unique to each card.

Next, Create and Set Up NetWare Printer Objects

Use *NWAdmin32* or the *Pconsole* utility to create and set up NetWare printer objects. Please refer to the Novell documentation for instructions on how to achieve this.

Then, Configure the Print Server

See "Section 1: Configuring The Print Server" on page 15 for instructions.

Section 6: Printing Using UNIX

The print server supports many protocols such as LPD, FTP, TELNET, SNMP and IPP, and works within the UNIX environment.

This section consists of the following:

Printing from UNIX: Overview

The print server supports many protocols such as LPD, FTP, TELNET, SNMP and IPP, and works within the UNIX environment.

To use the network card within the UNIX environment, the following steps are required:

Step 1: Configure the print server card.

Step 2: Configure the UNIX operating system.

Step 3: Use one of the print commands to send the job to the printer.

Printing from UNIX: Configuring the Print Server

The first step in installing the network card under UNIX is to set up the IP address, Subnet Mask and Gateway. This section explains one way to set them up from a UNIX workstation.

- The network addresses used in this manual are shown as examples only. Network addresses used in your installation must be generated for your own network.
- Log in as [root] to change the configuration of the Print Server. By default, there is no root password.

Important!

If an incorrect IP address, Subnet Mask or Gateway is entered, the network may go down or other damage may occur. Check the address with your network manager.

The following explanation uses Sun Solaris 2.8 (Solaris 8) as an example. The actual commands may differ between versions of UNIX, so refer to the workstation manuals for more information.

1. Log in as root to the workstation.
   If you do not have superuser rights, the network manger should conduct the configuration.
2. If the print server does not have an IP addresses already assigned, use the arp command to set a temporary IP address.

Example

For IP address 172.68.20.127 and network card address 00:80:92:01:00:D2:

```
# arp -s 172.168.20.127 00:80:92:01:00:D2 temp
```

The MAC (Ethernet) address 00:80:92:01:00:D2 in the above example can be determined from the network card self-diagnostic test which can be printed by pressing the Test button on the network card for three seconds and then releasing it.

3. Use the ping command to confirm the connection with the network interface card.

Example

For IP address 172.168.20.127

```
# ping 172.168.20.127
```

If there is no reply, there is a problem with the configuration of the IP address (the IP address has been already set manually or by the DHCP/RARP server), or with the network. Reset the network interface card settings to default and try to set temporary IP address.

If you still have the problem after resetting the network interface card, consult the network manager.

4. Log in to the network interface card using TELNET.

Example

Logging in to IP address 172.168.20.127:

```
#telnet 172.168.20.127
Trying 172.168.20.127
Connected to 172.168.20.127
Escape character is '^]'.
EthernetBoard OkiLAN
login: root
'root' user needs password to login.
password: <CR>
User 'root' logged in.
No. Message Value (level .1)
1 : Setup TCP/ IP
2 : Setup SNMP
3 : Setup NetWare
4 : Setup EtherTalk
5 : Setup NetBEUI
6 : Setup printer port
7 : Display Status
8 : Setup printer trap
9 : Setup SMTP Email
97 : Reset to factory set
98 : Quit setup
99 : Exit setup
Please select (1- 99)?
```

5. Type 1 and press the ENTER key. Perform the following settings:

```
Please select (1- 99)? 1
No. Message Value
1 : TCP/ IP protocol : ENABLE
2 : IP address : 172.168.20.127
3 : Subnet Mask : 255.255.255.0
4 : Gateway address : 172.168.20.1
5 : RARP protocol : DISABLE
6 : DHCP/ BOOTP protocol: DISABLE
7 : root password : " "
99 : Back to prior menu
Please select (1- 99)?
```

6. Log out from the network interface card.
7. Turn the printer off and on again to validate the settings.

Printing from UNIX: Configuring the Operating System

This section explains how to configure a printer for major UNIX operating systems.

Sun OS 4.x.x (BSD) Configuration

Check the IP Address, Subnet Mask and Gateway

If an incorrect IP Address, Subnet Mask or Gateway is entered, the network may go down or other damage may occur. Check the address with the network manager and confirm that the IP address of the printer has been set.

Example Configuration

The following explanation uses Sun OS 4.1.3 and an Oki printer as examples. The absolute path of commands and the configuration method may differ between OS versions, so refer to the workstation manuals for more information.

1. Log in as [root] to the workstation.
   If you do not have superuser rights, the network manager should conduct the configuration.
2. Register the IP address of the network card and the host name in the */etc/hosts* file.

Example

For IP address 172.168.20.127 and host name PRINTER:

```
172.168.20.127 PRINTER
```

3. Use the ping command to confirm connection with the network card.

Example

For host name PRINTER:

```
# ping PRINTER
```

If there is no reply, then there is a problem with the configuration of the IP address (the IP address has been already set manually or by the DHCP/RARP server) or with the network. Reset the network interface card settings to their defaults and then try to set a temporary IP address. If you still have the problem after resetting the network interface card, consult the network manager.

4. Register the printer in the */etc/printcap* file.

Example:

For host name PRINTER, to create a queue called PRINTER_lp:

```
PRINTER_lp: \
:lp=:rm=C7400:rp=lp:\
:sd=/usr/spool/PRINTER_lp:\
:lf=/usr/spool/PRINTER_lp/PRINTER_lp_errs:
```

`PRINTER_lp`: The name of the printer queue

`lp:` The name of the device used to connect to the printer. Does not need to be specified for a remote machine.

`rm:` The name of the host of the remote printer. This should be the same as the name added to the */etc/hosts* file.

`rp:` The name of the printer on the remote printer. It should be `lp`.

`sd:` The spool directory. Give the absolute path.

`lf:` The error log file. Give the absolute path.

5. Create the spool directory and error log file.

Example

For spool Directory PRINTER_lp and Error Log file PRINTER_lp_errs

```
# mkdir /usr/spool/PRINTER_lp
#touch/usr/spool/PRINTER_lp/PRINTER _lp_errs
# chown –R daemon /usr/spool/PRINTER_lp
# chgrp –R # daemon /usr/spool/PRINTER_lp
```

6. Check that lpd (printer daemon) is activated.

```
# ps aux | grep lpd
```

7. If lpd is not running, start it by logging in as superuser and executing

```
# /usr/lib/lpd &
```

Sun Solaris 2.x Configuration

NOTE

Admintool is normally used to register remote printers on Open Windows. However, it cannot be used here, because the data recipient and queue have the same name.

The procedure below must be used for registering a remote printer.

NOTE

If Solaris 2.x is connected to the remote printer for a long period according to the system specifications, errors and forced disconnection may occur. Therefore, if paper tearing, off-line and other errors result in waiting time, printing may have to be aborted.

Check the IP Address

If an incorrect IP Address is entered, the network may go down or other damage may occur. Check the address with the network manager and confirm that the IP address of the printer has been set.

Example Configuration

The following explanation uses Sun Solaris 2.8 (known as Solaris 8) and an Oki printer as examples. The absolute path and method of configuring commands may differ in other versions of the OS. Refer to the workstation manual for more details.

1. Confirm that the IP address of the printer has been set.
2. Log in as [root] to the workstation. If you do not have superuser rights, the network manager should conduct the configuration.
3. Register the IP address of the network card and the host name in the /etc/hosts file.

   Example

   For IP Address 172.168.20.127 and host name PRINTER

   ```
   172.168.20.127PRINTER
   ```

4. Use the ping command to confirm connection with the network card.

   Example

   For host name PRINTER

   ```
   # ping PRINTER
   ```

   If there is no reply, there is a problem with the configuration of the IP address (the IP address has been already set manually or by the DHCP/RARP server), or with the network.

   Reset the network interface card settings to default and try to set temporary IP address. Consult the network manager if this doesn't solve the problem..

5. Register the network card as a remote printer server.

Example

For host name PRINTER

a. Stop the print scheduler.

```
# usr/sbin/lpshut
```

b. Create the printer queue.

```
# /usr/sbin/lpadmin -p PRINTER_lp -v /dev/null \
m netstandard -o dest=PRINTER:lp
-o protocol=bsd
```

c. Set the queue to accept PostScript print jobs.

```
# /usr/sbin/lpadmin -p PRINTER_lp -I postscript
```

d. Start the print scheduler.

```
# /usr/sbin/lpsched
```

e. Activate the print queue.

```
# /usr/sbin/accept PRINTER_lp
```

f. Enable the print queue

```
# /bin/enable PRINTER_lp
```

NOTE

To customize output, e.g. to add additional commands at the start of each print job, you can edit a copy of the netstandard model file then add it using the lpadmin command.

Example

For printer PRINTER_lp, with model file called PRINTER0_model

```
# /usr/sbin/lpshut
# /usr/sbin/lpadmin -p PRINTER_lp -m
PRINTER_model
# /usr/sbin/lpsched
```

HP-UX 10.x Configuration

Check the IP Address, Subnet Mask and Gateway

If an incorrect IP Address, Subnet Mask or Gateway is entered, the network may go down or other damage may occur. Check the address with the network manager and confirm that the IP address of the printer has been set.

Example Configuration

The following example uses HP-UX10.20 and an Oki printer as examples. The absolute path and method of configuring commands may differ in other versions of the OS. Refer to the workstation manual for more details.

1. Log in as [root] to the workstation.
   If you do not have superuser rights, the network manager should conduct the configuration.
2. Register the IP Address of the network card and the host name in the /etc/hosts file.

   Example

   For IP Address 172.168.20.127 and host name PRINTER

   ```
   172.168.20.127 PRINTER
   ```

3. Use the ping command to confirm connection with the network card.

   Example

   For host name PRINTER

   ```
   # ping PRINTER
   ```

If there is no reply, there is a problem with the configuration of the IP address (the IP address has been already set manually or by the DHCP/RARP server), or with the network. Reset the network interface card settings to default and try to set a temporary IP address. If you still have the problem after resetting the network interface card, consult the network manager.

4. If remote spooling is not already enabled on the HP-UX machine, carry out the following configuration.

   a. Stop the printer spooler.

      ```
      # /usr/sbin/lpshut
      ```

   b. Add the following line to the */etc/inetd.conf* file and register the remote spooler.

      ```
      printer stream tcp nowait root /usr/sbin/
      rlpdameon –I
      ```

   c. Restart inetd.

      ```
      # /etc/inetd –c
      ```

   d. Register the remote printer.

      ```
      # /usr/sbin/lpadmin -pPRINTER_lp -v /dev/null
      -mrmodel \-ormPRINTER -orplp -ocmrcmodel
      -osmrsmodel -ob3
      ```

   e. Activate the print queue.

      ```
      # /usr/sbin/accept PRINTER_lp
      ```

   f. Enable the print queue.

      ```
      # /bin/enable PRINTER_lp
      ```

   g. Enable the printer spooler.

      ```
      # /usr/sbin/lpsched
      ```

To customize output, for example, to add additional commands at the start of each print job, you can edit a copy of the /usr/spool/lp/model/rmodel model file then add it using the lpadmin command.

Example

For printer PRINTER_lp, with model file called PRINTER_model:

```
# /usr/sbin/lpshut
# /usr/sbin/lpadmin -pPRINTER_lp -mPRINTER_model
# /usr/sbin/lpsched
```

AIX 4.1.5 Configuration

The following explanation uses AIX 4.1.5 and an Oki printer as examples. The absolute path of commands and the method of configuring may differ with the OS version. Refer to the workstation's manual.

If an incorrect IP address is entered, the network may go down or other damage may occur. Configure after consulting the network manager.

1. Log in as [root]
   If you do not have superuser rights, the network manager should conduct the configuration.
2. Register the IP address and the host name in the /etc/hosts file.

Example

For IP Address 172.168.29.127 and host name okiprinter

```
172.168.20.127 PRINTER
```

3. Use the ping command to confirm connection with the network card.

   Example

   For host name okiprinter

   ```
   # ping PRINTER
   ```

   If there is no reply, there is a problem with the configuration of the IP address (the IP address has been already set manually or by the DHCP/RARP server), or with the network. Reset the network interface card settings to default and try to set a temporary IP address. If you still have the problem after resetting the network interface card, consult the network manager.

4. Register the host that was previously registered as the print server.

   Example

   For the Oki printer registered as the print server

   a. Add the print server.

   ```
   # ruser -a -p printer
   ```

   b. Activate the remote printer daemon.

   ```
   # startsrc -s lpd
   # mkitab 'lpd:2:once:startsrc -s lpd'
   ```

   c. Add the print queue using the smit command: activate the smit command and convert to the item [Add print queue].

   ```
   # smit mkrque
   ```

5. Select [remote] (the printer connected to the remote host) from [Type of connection].
6. Select [Standard procedure] from [Type of remote print].

7. Carry out the following settings in [Add a standard remote print queue]. If the configuration differs from below, configure according to environment.

Example

Direct output port *lp* with print queue printer_lp and print server printer

```
Queue to be added“printer_lp”
Host name of the
remote server“printer”
Queue name of the
remote server“lp”
Type of print spooler
of the remote server“BSD”
Description of printer name
of the remote server“Optional comment”
```

Printing from UNIX: LPD and FTP

LPD (Line Printer Daemon) Printing

LPD is the most common protocol for printing with TCP/IP to a network printer. Refer to the workstation's manual for details of the lpr and lp commands.

The following explanation uses:

- print file = test.prn
- printer name = PRINTER_lp

Logical printers

The print server includes three logical printers.

Logical printer	Used for
lp	Printing a file created using the printer driver.
sjis	Printing a text file of Shift JIS Kanji code. Post Script only.
euc	Printing a text file of the EUC Kanji code. PostScriipt only.

LPD Printing: BSD-Based UNIX

Printing

Print using the lpr command:

```
# lpr -PCprinter_lp test.prn
```

Deleting

To delete a print job, use the lprm command.

Example

To delete a print job (Job ID 123) on the okiprinter_lp

```
# lprm –PCprinter_lp 123
```

Printer Status

Verify the printer status using the lpq command.

- The result of lpq may not be displayed correctly depending on the UNIX operating system specification.
- While the short format of lpq is a UNIX-compatible format, the long format is unique to the OkiLAN print server.

  Example of the short format: `# lpq –PCprinter_lp`

  Example of the long format: `# lpq –l -PCprinter_lp`

LPD Printing: System V-based UNIX

Printing

Print using the *lp* command:

```
# lp –d Cprinter_lp test.prn
```

Deleting

Delete a print job using the cancel command.

Example

To delete a print job (Job ID 456) in the printer_lp

```
# cancel Cprinter_lp  -456
```

Printer Status

Verify the printer status using the lpstat command:

```
# lpstat -pCprinter_lp
```

NOTE

The result of lpstat may not be displayed correctly depending on UNIX operating system specification (e.g. Solaris 2.x).

FTP (File Transfer Protocol) Printing

FTP is used for transferring a file with TCP/IP. If the print data is sent to a logical printer via FTP, it is printed.

Refer to the workstation's manual for details of the ftp command.

The following explanation uses:

- print file = test.prn
- printer name = okiprinter_lp

Logical Directories

The print server includes three logical directories.

Logical directory	Used for
lp	Printing a file created using the printer driver.
sjis	Printing a text file of Shift JIS Kanji code. PostScript only.
euc	Printing a text file of the EUC Kanji code. PostScript only.

NOTE

You cannot send data to the root directory.

Printing Example

1. Login to the network interface card.

   When printing with ftp, use any values for name and password. However, if the user name is [root], the password set under TELNET or the utility are required. See the appropriate section for details.

Example

Logging in with host name printer (or IP address 172.168.20.127).

```
# ftp printer (or ftp 172.168.20.127
Connected to Cprinter
220 EthernetBoard OkiLAN Ver 1.1.0 FTP Server
Name (Cprinter:root) : root
331 Password required.
Password:<CR>
230 User Logged in
ftp>
```

NOTE

The network card logical directory structure is hierarchal. You must now move to the logical directory since it is not possible to output print data to the root directory.

2. Move to the preferable logical directory using the cd command.

Example

Moving to the lp directory and confirming the current directory.

```
ftp> cd /lp
250 Command OK.
ftp> pwd
257 "/lp" is current directory
ftp>
```

3. Configure the transfer mode.

   There are two types of transfer mode:

   – BINARY mode, in which the file contents are output as it is and
   – ASCII mode, which converts the LF code to the CR+LF code.

   If a binary file converted by the printer driver is transferred, the transfer mode has to be BINARY mode.

Example

Changing transfer mode to binary mode and verifying the current mode

```
ftp> type binary
200 Type set to I.
ftp> type
Using binary mode to transfer files.
ftp>
```

4. Transfer the print data to the network card using the put command. Two methods of file transfer using the put command are available, as shown in the following examples.

   Example Method 1

   Transferring print data test.prn

   ```
   ftp> put test.prn
   ```

   Example Method 2

   Transferring print data specified by absolute path/users/test/test.prn

   ```
   ftp> put /users/test/test.prn /lp
   ```

5. Logout from the network card using the *quit* command:

   ```
   ftp> quit
   ```

Viewing Status

Three states can be verified using the quote command stat:

- IP address
- login user name
- transfer mode.

In addition, printer status can be verified by specifying the directory after the stat (lp, sjis, euc).

Example

Displaying network card status.

```
ftp> quote stat
211-FTP server status:
Connected to: 172.168.20.10.000.00
User logged in: root
Transfer type: BINARY
Data connection: Closed.
211 End of status.
ftp>
```

Example

Displaying the network card status (directory name: lp).

```
ftp> quote stat /lp
211-FTP directory status:
Ready
211 End of status
ftp>
```

Section 7: Printing Using Macintosh

The print server supports the Apple Macintosh AppleTalk environment.

This section consists of the following:

Printing from Macintosh: Overview

The print server supports the Apple Macintosh AppleTalk environment. This guide is for administrators and it should be read in conjunction with the relevant Macintosh manual. The latest Macintosh service packs should be installed.

Supported Versions

Macintosh operating systems

- OS 9.1+
- OS 10.1
- 10.2x
- 10.3x

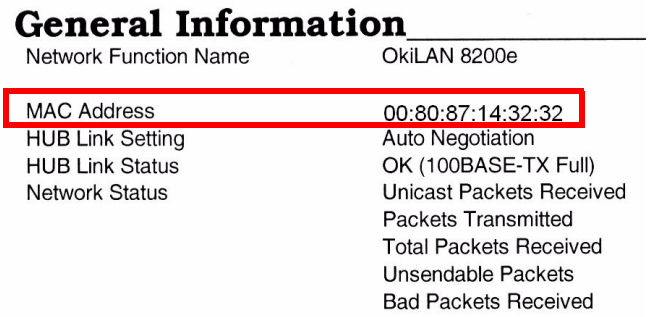
are supported, *except the original version Mac OS X*.

Printing from Macintosh: Self-Diagnostic Test Printout

The printer server's self-diagnostic test reports the printer's MAC Address (Ethernet address), required for Macintosh configuration.

1. Turn the printer on.
2. Press the print server Test button for more than three seconds and release.

The MAC Address appears on the first page under "General Information."



General Information

Network Function Name	OkiLAN 8200e
MAC Address	00:80:87:14:32:32
HUB Link Setting	Auto Negotiation
HUB Link Status	OK (100BASE-TX Full)
Network Status	Unicast Packets Received
	Packets Transmitted
	Total Packets Received
	Unsendable Packets
	Bad Packets Received

The first six digits of the MAC Address are the same for all OkiLAN print servers.

The last six digits of the MAC Address are unique to each OkiLAN and are required to set up the print server for Macintosh.

Printing from Macintosh: Installing the Driver

MAC OS 9.1+

1. Place the Drivers CD, supplied with your printer, in the CD-ROM drive.
2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.
5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.
9. Select the installation type:
   - To install the driver and all utilities, use the default [Custom Easy Install], and click [Install].
   - To install the driver only—or the driver plus your selection of utilities—select [Custom Install] in the drop-down list. Click the boxes beside the items you wish to install, then click [Install].
10. Click [Quit].

MAC OS 10.1

1. Place the Drivers CD, supplied with your printer, in the CD-ROM drive.
2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.

5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.
9. Select [MAC OS X.1-X.2x Drivers] from the drop-down list, then click [Install].
10. Once the driver is installed, if you wish to install the PS Gamma Adjuster utility as well, select it from the drop-down list, then click [Install].
11. Click [Quit].

MAC OS 10.2x

1. Place the Drivers CD, supplied with your printer, in the CD-ROM drive.
2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.
5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.
9. Select [MAC OS X.1-X.2x Drivers] from the drop-down list, then click [Install].
10. Once the driver is installed, if you wish to install the Profile Assistant (and/or Print Job Accounting) utility as well, select it from the drop-down list, then click [Install].
11. Click [Quit].

MAC OS 10.3x

1. Place the Drivers CD, supplied with your printer, in the CD-ROM drive.

2. Double-click the icon that appears on the desktop.
3. Open the [MAC] folder.
4. Open the [Driver Installer] folder.
5. Open the folder for your language.
6. Double-click the [MAC Installer] icon.
7. Click [Continue].
8. Click [Accept] to accept the Software License Agreement.
9. Select [MAC OS X.3x Driver] from the drop-down list, then click [Install].
10. Once the driver is installed, if you wish to install the Profile Assistant utility as well, select it from the drop-down list, then click [Install].
11. Click [Quit].

Printing from Macintosh: Setting Up the Printer

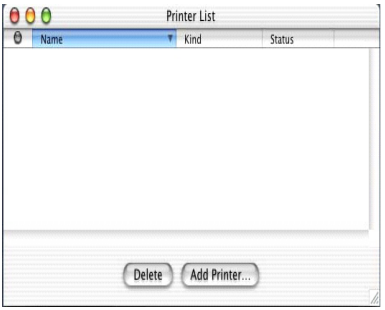
OS 9.1+

Create the Desktop Printer.

1. Activate Chooser from the Apple menu.
2. Select your model/Appletalk and highlight the printer name (print server ID#).

OS 10.1 and Above

In Mac OS 10 you use the Print Center to setup network printers.



1. Run the Print Server.
2. Click [Add Printer.]
3. Select [Appletalk].
4. From the [Printer Model] drop down menu, select your printer model.
5. Click [Add].
6. Quit the Print Center.

Section 8: Troubleshooting

Important!

The network addresses used in this manual are shown for example only. Network addresses used in your installation must be generated from your own network.

Troubleshooting: Self-Diagnostic Test

Printer does not print.

Ensure the printer emulation is set to PS (if available) or Automatic.

NG is printed in the Self-diagnostic test.

- Confirm that the NIC is installed correctly and turn the printer off and on again.
- Ensure the network cable is correctly connected.
- Connect to a different network segment, rerun the test and see if this fixes the problem.

EEPROM Check registers NG.

- Confirm that the NIC is installed correctly and turn the printer off and on again.
- Initialize the NIC.

Troubleshooting: TCP/IP

Printer cannot find the network interface card.

- Turn the printer off and on again.
- Confirm that the network interface is enabled on the printer.
- Make sure there is a response to the interface card command.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- Run the Self-diagnostic test (with printer on, press and hold the Test button on the print server for 3 seconds, then release it).
- Make sure that the IP Address, Subnet Mask and Gateway are correct.
- Make sure that the TCP/IP protocol is set to Enable.
- Reset the network interface card to the factory default settings.
- If DHCP, BOOTP and RARP are not used, ensure they have been set to Disable.

Cannot print with lpr and ftp.

- Turn the printer off and on again.
- Make sure there is a response to the ping command.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- Make sure the host name and IP address are configured in the workstation.
- Make sure the printer port name is configured in the workstation.
- There are three port names: lp, euc and sjis. Use lp by default as euc and sjis are specific to printers with PostScript available.

Incorrect User name on the banner page.

- If printing with lpr, the User name printed is unknown and the Filename printed is the Spool file name.
- If printing with FTP, the User name printed is the User name entered during FTP login and the File name printed is the Transmitted file name. If the Print Directory name is indicated in the put command, the File name is not printed. The Printer name printed is the Logical Directory name.

Troubleshooting: Novell NetWare

Important!

The network addresses used in this manual are shown for example only. Network addresses used in your installation must be generated from your own network.

Printer cannot find the network print server.

- Turn the printer off and on again.
- Confirm that the network interface is enabled on the printer.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- If the NetWare protocol is disabled, set it to Enable.
- Reset the network interface card to factory default settings.

The network print server is identified by the setup utility but not by the NetWare server.

- Start up the NetWare server and check the NIC configuration.
- Make sure the NSAP packet on the NetWare server is not set to Disable.
- Make sure the correct print server is operating on the file server.
- Make sure the Print Server name operating on the File Server and the Print Server name set in the NIC are the same.
- Make sure the Printer name displayed in the Print Server monitor of the File Server and the NetWare Port name set in the NIC are the same. If there are multiple network interface cards, configure the NetWare Port names to be different.

Problems with Print Server mode

- Make sure the File Server name set in the NIC and on the File Server are the same.
- Make sure the Printer name set in the File Server and the NetWare Port name set in the NIC are the same. If there are multiple NICs, configure the NetWare Port names to be different.
- Make sure the NetWare login password is correct.
- Make sure the Machine name is the same as the Print Server name set in the File Server.

Printer does not print.

- Make sure the network cable is correctly connected.
- Change the cable and try again.
- Turn the printer off and on again.
- Make sure the NIC is connected to the File Server.
- Make sure the printer driver has been mapped to the correct NetWare queue.

PostScript error occurs if a banner page is printed.

A PostScript banner page cannot be printed in NetWare 3.12 Remote Printer mode. If a PostScript printer is used and a banner page is printed, “PostScript error” displays. Turn the banner output Off in the client’s printer settings.

Troubleshooting: EtherTalk

Not identified by the Chooser and the Setup Utility.

- Turn the printer off and on again.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- If the network resides in a Zone, make sure the correct Zone name is selected in the Chooser.
- Make sure the Zone name in the utility related to the NIC is the same as the Zone name set in NIC.
- Make sure AppleTalk, which is displayed at the right bottom of the Chooser, is set to Enable. (In some OS versions Network is used instead of AppleTalk.)
- Make sure Ethernet is selected in AppleTalk. (In some OS versions Network is used instead of AppleTalk.)
- Make sure the print driver is selected in the Chooser.
- Make sure the EtherTalk protocol is set to Enable.
- Print the NIC settings (see page 12) and confirm that the EtherTalk Port name is not blank.

Troubleshooting: NetBEUI

The network interface card is not identified.

- Turn the printer off and on again.
- Make sure the network cable is correctly connected.
- Change the cable and try again.
- Make sure that [Microsoft network client] and [NetBEUI] have been added to the network section of the control panel.
- Make sure the NetBEUI protocol is set to Enable.
- Make sure the factory setting of the workgroup name is PrintServer and the computer name is ML+ the last six digits of the MAC address.
- Make sure the computer name of the NIC is different from the computer name on the network.

Error writing to Prn1.

- Make sure the printer is online.
- If there is an error message indicating the paper has run out, add more paper and cancel the error.
- Check whether another user is printing. Print after the other user has finished.

Troubleshooting: Security

Connection Error in Web Browser

Try connecting the printer using http://<IP address of the printer>.

Problem	Solution
If the printer setup page appears:	
The certificate was not created.	Log in as an administrator, then click [Security] → [Cipher (SSL/TLS]. If the "Encryption of Configuration and Print" window appears, the printer's certificate has not been created. Create a certificate using a web browser or the AdminManager utility. See page 139 for more information.
The certificate is created, but SSL/TLS is turned off.	Change the setting for SSL/TSL to ON. *Using the web browser:* 1. Open the browser and type in the print server's IP Address, then press the ENTER key. 2. Login. 3. On the [Security] tab, click [Cipher (SSL/TLS)] 4. Change the setting to [SSL/TLS] to ON and click [Submit]. *Using AdminManager:* 1. Launch the AdminManager utility and login. 2. Click the printer in the list, then click [Setup] → [OKI Device Setup]. 3. Enter your password, click [OK]. 4. Click the [SSL/TLS] tab. 5. Make sure the box next to [Use Cipher(SSL/TLS)] is checked. 6. Close the utility.

Problem	Solution
If the printer setup page does <u>not</u> appear:	
The browser version is old.	Make sure you are using either • Internet Explorer 5.5 or higher (open the browser, then select [About Internet Explorer] in the [Help] menu) or • Netscape Navigator version 6 or higher (open the browser, then select [About Netscape] in the [Help] menu).
The encryption strength is set to [Strong].	• Use Internet Explorer 5.5 or higher or Netscape Navigator 6.2 or higher as your browser. • Change the encryption strength of the printer to Weak. *Using the web browser:* 1. Open the browser and type in the print server's IP Address, then press the ENTER key. 2. Login. 3. On the [Security] tab, click [Cipher (SSL/TLS)] → [Cipher Level Settings] 4. Change the setting to [Weak] and click [OK]. 5. Close the web browser. *Using AdminManager:* 1. Launch the AdminManager utility and login. 2. Click the printer in the list, then click [Setup] → [OKI Device Setup]. 3. Enter your password, click [OK]. 4. Click the [SSL/TLS] tab. 5. Change [Encryption Strength] to [Weak] and click [Apply]. 6. Close the utility.
The browser you are using does not support the selected key exchange method.	• Switch to a browser that supports the key exchange method (e.g., Internet Explorer 5.5 or higher, Netscape Navigator 6.2 or higher). • Change the key exchange method

Cannot Print

Try connecting the printer using http://<IP address of the printer>.

Problem	Solution
If the printer setup page appears:	
The certificate was not created.	Log in as an administrator, then click [Security] → [Cipher (SSL/TLS]. If the “Encryption of Configuration and Print” window appears, the printer’s certificate has not been created. Create a certificate using a web browser or the AdminManager utility. See page 139 for more information.
The certificate was created, but SSL/TLS is not engaged.	Enable SSL/TLS. *Using the web browser:* 1. Open the browser and type in the print server’s IP Address, then press the ENTER key. 2. Login. 3. On the [Security] tab, click [Cipher (SSL/TLS)] 4. Change the setting to [SSL/TLS] to ON and click [Submit]. 5. Close the web browser. *Using AdminManager:* 1. Launch the AdminManager utility and login. 2. Click the printer in the list, then click [Setup] → [OKI Device Setup]. 3. Enter your password, click [OK]. 4. Click the [SSL/TLS] tab. 5. Make sure the box next to [Use Cipher(SSL/TLS)] is checked. 6. Close the utility.

Problem	Solution
If the printer setup page does <u>not</u> appear:	
IPP is not enabled.	Enable IPP. See page 136.
The browser version is old.	Make sure you are using either • Internet Explorer 5.5 or higher (open the browser, then select [About Internet Explorer] in the [Help] menu) or • Netscape Navigator version 6 or higher (open the browser, then select [About Netscape] in the [Help] menu).
The encryption strength is set to [Strong].	• Use Internet Explorer 5.5 or higher or Netscape Navigator 6.2 or higher as your browser. • Change the encryption strength of the printer to Weak. *Using the web browser:* 1. Open the browser and type in the print server's IP Address, then press the ENTER key. 2. Login. 3. On the [Security] tab, click [Cipher (SSL/TLS)] → [Cipher Level Settings] 4. Change the setting to [Weak] and click [OK]. 5. Close the web browser. *Using AdminManager:* 1. Launch the AdminManager utility and login. 2. Click the printer in the list, then click [Setup] → [OKI Device Setup]. 3. Enter your password, click [OK]. 4. Click the [SSL/TLS] tab. 5. Change [Encryption Strength] to [Weak] and click [Apply]. 6. Close the utility.

Problem	Solution
The browser you are using does not support the selected key exchange method.	• Switch to a browser that supports the key exchange method (e.g., Internet Explorer 5.5 or higher, Netscape Navigator 6.2 or higher). • Delete the current certificate and recreate it with a different key exchange method. *Using the web browser:* 1. Open the browser and type in the print server's IP Address, then press the ENTER key. 2. Login. 3. On the [Security] tab, click [Cipher (SSL/TLS)]. 4. Click [Delete Certificate]. 5. Follow the procedure starting on page 128 to recreate the certificate. 6. Close the web browser. *Using AdminManager:* 1. Launch the AdminManager utility and login. 2. Click the printer in the list, then click [Setup] → [OKI Device Setup]. 3. Enter your password, click [OK]. 4. Click the [SSL/TLS] tab. 5. Click [Delete Certificate]. 6. Follow the procedure starting on page 132 to recreate the certificate. 7. Close the utility.
The operating system does not support IPP printing.	IPP works only with Windows XP or 2000. Earlier versions of Windows do not support IPP.

Cannot Install the CA Certificate

Important!

- Do not change any settings for the print server during the CA certificate process (from creating the CSR to installing the certificate). *Any changes invalidate the issued certificate and may result in additional charges for a new certificate.*
- If changes are made in the print server settings *after a certificate has been installed*, a “Security Warning” window appears.
- If the IP Address is changed after a CA certificate is installed, the certificate becomes invalid. This may result in additional charges for a new certificate, depending on the policy of the CA service used.

Problem	Solution
The IP Address for the print server has changed.	Change the IP Address back to the one in the CSR, then install the CA certificate.
The print server was initialized after the CSR (Certificate Signing Request) was sent to the CA service.	You must start the CSR process all over again, recreating and re-sending the CSR to the CA service. This may result in additional charges for a new certificate, depending on the policy of the CA service used.
The CSR has been deleted from the print server while application for a CA certificate is pending.	You must start the CSR process all over again, recreating and re-sending the CSR to the CA service. This may result in additional charges for a new certificate, depending on the policy of the CA service used.
An intermediate certificate has been installed on the print server.	The print server supports only one certificate. If your CA service requires both an intermediate and an SSL server certificate, install the intermediate certificate on a client PC. Then delete the intermediate certificate from the printer using the web browser or the AdminManager utility, and install the SSL server certificate on the print server.

Appendix: The Printer Menu

Menu Basics

Top Level Functions

The top-level Functions menus are:

- Configuration (refer to Appendix B in the User's Guide)
- Print Information (refer to Appendix B in the User's Guide)
- Print Secure Job (refer to Appendix B in the User's Guide)
- Menus (refer to Appendix B in the User's Guide)
- Admin Setup: password protected (see page 231)
- Calibration (see page 247)
- Print Statistics: password protected (see page 249)

Special Menu

- Boot Menu (see page 250)

Printer Menu Overview

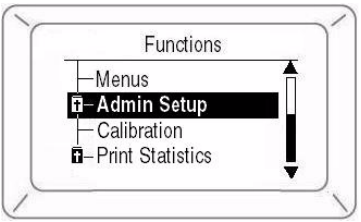
The following tables summarise the Admin Setup, Calibration, Print Statistics and BootMenu trees.

The remainder of the menus above are described in Appendix B of the on-line printer User's Guide.

Table Conventions Used

- The menu trees are given to the lowest menu item level. Typically, this can be a parameter that can be set by selecting from a range of values provided or a command that can be executed to display or print a status or setting value.
- Emboldened values are the defaults.
- Certain menus and items associated with, for example, the Finisher appear only if the associated hardware is installed or under certain conditions, as specified.

Functions Menu Tree: Admin Setup, Calibration, Print Statistics



Function	Submenu 1	Submenu 2
Admin Setup (password protected)	Password (see page 231)	–
	NetworkSetup (see page 231)	Slot1:100/10 Base TCP/IP NetBEUI NetWare EtherTalk Frame Type IP Address Set IP Address Subnet Mask Gateway Address Factory Defaults Web Telnet FTP SNMP Network Scale Hub Link Setting
		Slot2:Wireless: appears only if the optional wireless card is installed. See the documentation supplied with the wireless card for more information.

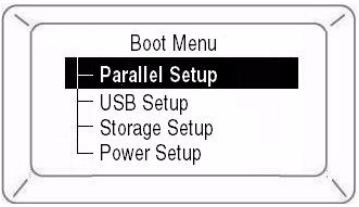
Function	Submenu 1	Submenu 2
Admin Setup (cont.)	Print Setup (see page 234)	Personality Copies Duplex Binding Job Offset Output Bin Finisher Setup Media Check Transparency Detect Resolution Toner Save Mode Mono-print speed Default Orientation Form Length Edit Size X Dimension Y Dimension
	PS Setup (see page 236)	Network Protocol Parallel Protocol USB Protocol IEEE 1394 Protocol
	PCL Setup (see page 237)	Font Source Font Number Font Pitch Font Height Symbol Set A4 Print Width White Page Skip CR Function LF Fuction Print Margin True Black Pen-width Adjust Tray ID#

Function	Submenu 1	Submenu 2
Admin Setup (cont.)	IBM PPR Setup (see page 239)	Character Pitch Font Condense Character Set Symbol Set Letter O Style Zero Character Line Pitch White Page Skip CR Function LF Function Line Length FormLength TOF Position Left Margin Fit to Letter Text Height Cont Paper Mode
	Epson FX Setup (see page 241)	Character Pitch Character Set Symbol Set Letter O Style Zero Character Line Pitch White Page Skip CR Function Line Length Form Length TOF Position Left Margin Fit to Letter Text Height Cont Paper Mode

Function	Submenu 1	Submenu 2
Admin Setup (cont.)	Colour Setup (see page 244)	Ink Simulation UCR CMY 100% Density CMYK ConversionResource Save
	Memory Setup (see page 245)	Receive Buffer Size Resource Save
	Flash Memory Setup (see page 246)	Initialize Resize PS Area
	HDD Setup (see page 246)	Initialize Resize Partition Format Partition
	System Setup (see page 246)	Near Life LED
	Change Password	New Password Verify Password
	Settings (see page 247)	Reset Settings Save Settings Restore Settings
Calibration (see page 247)	Auto Density Mode	–
	Adjust Density	–
	Adjust Registration	–
	Priont Tuning Pattern	–
	Cyan Tuning	Highlight Mid-Tone Dark
	Magenta Tuning	Highlight Mid-Tone Dark
	Yellow Tuning	Highlight Mid-Tone Dark
	Black Tuning	Highlight Mid-Tone Dark

Function	Submenu 1	Submenu 2
Print Statistics (see page 249)	Statistics Log	–

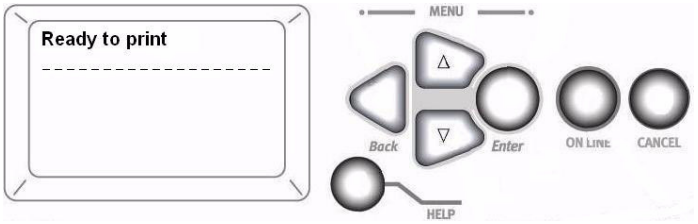
Boot Menu Tree



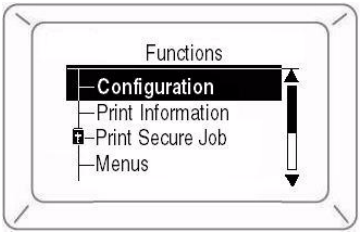
Category	Item
Parallel Setup (see page 251)	Parallel Bi-Direction ECP Ack Width ACK Busy Timing I-Prime Offline Receive
USB Setup (see page 252)	USB Speed Soft Reset Offline Receive Serial Number
Storage Setup (see page 252)	Check File System Check All Sectors Enable HDD Enable Initialization
Power Setup (see page 253)	Peak Power Control Power Save

Printer Menu
Making Changes in the Menu

Making Changes in the Function Menu

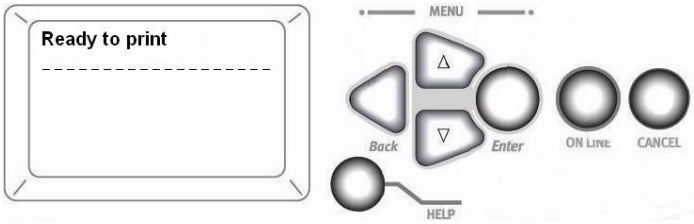


1. Ensure that the display panel indicates that the printer is ready to print.
2. Press the **Enter** button to switch to the Menu mode.

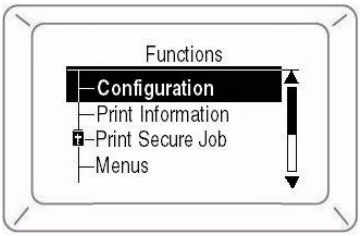


3. Press the ∇ button to scroll down to the Function you wish to change, then press the **Enter** button.
4. Continue to use the ∇, ∆ and **Enter** buttons in a similar manner to drill down to the item you wish to change.
5. Use the ∇ and ∇ buttons to scroll down to the setting you wish to engage, then press Enter.
   An Asterisk (*) appears next to the new setting.
6. Press the **Online** button to exit menu mode and return to the Ready to print status.

Example: Enabling FTP



1. Ensure that the display panel indicates that the printer is ready to print.
2. Press the **Enter** button to switch to the Menu mode.

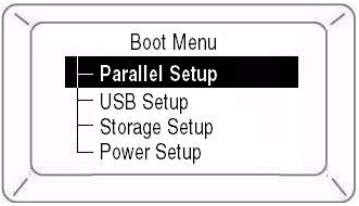


3. With [Configuration] highlighted, press the **Enter** button to select this menu.
4. Press the ∇ or ∇ buttons repeatedly until [Admin Setup] is highlighted.
5. Press the **Enter** button to select this item.
6. Press the ∇ or ∇ buttons to enter the first digit of the password, then press the **Enter** button.
7. Repeat the previous step for each digit of the password.
8. Press the **Enter** button to go into the [Admin Setup] menu.
9. With [Network Setup] highlighted, press the Enter **button**.
10. With [Slot1:100/10 Base] highlighted, press the **Enter** button.
11. Press the ∇ or ∇ buttons repeatedly until [FTP] is highlighted.
12. Use the ∇ or ∇ buttons to highlight [Enable].
13. Press the **Enter** button to engage the setting.
    An Asterisk (*) appears next to the new setting.

14. Press the **Online** button to exit menu mode and return to the Ready to print status.

Making Changes in the Boot Menu

1. Turn the printer OFF.
2. Press and hold the **Enter** button while turning the printer back on: *be sure to keep pressing the **Enter** button until [Initializing] appears on the display*.



3. Use the ∇ and Δ buttons to scroll to an entry and the **Enter** button to select the entry, until you reach the item you wish to change.
4. Use the ∇ and ∇ buttons to scroll down to the setting you wish to engage, then press the **Enter** button.
   An Asterisk (*) appears next to the new setting.
5. Press the **Online** button to exit menu mode and return to the Ready to print status.

Printer Menu Functions List

Admin Setup

Password

Item	Value	Description
Enter password	nnnn	Enter a password to enter the Administrator menu. The default password is **0000** (four zeroes).

Network Setup

Slot1:100/10 Base

Item	Value	Description
TCP/IP	**Enable** Disable	Enables/Disables the TCP/IP protocol.
NetBEUI	**Enable** Disable	Enables/Disables the NETBEUI protocol.
NetWare	**Enable** Disable	Enables/Disables the NetWare protocol.
EtherTalk	**Enable** Disable	Enables/Disables the EtherTalk protocol.
Frame Type	**Auto** 802.2 802.3 Ethernet II SNAP	Sets the frame type (NetWare).

Item	Value	Description
IP Address Set	Auto **Manual**	Sets IP address setup method (TCP/IP).
IP Address	xxx.xxx.xxx.xxx	Sets the IP address (TCP/IP).
Subnet Mask	255.255.255.0	Sets the Subnet Mask (TCP/IP).
Gateway Address	xxx.xxx.xxx.xxx	Sets the Gateway (default router) address (TCP/IP).
Factory Defaults?	Execute	Specifies whether to initialize the network menu.
Web	**Enable** Disable	Enables/Disables the Web/IPP (TCP/IP).
Telnet	Enable **Disable**	Enables/Disables Telnet (TCP/IP).
FTP	Enable **Disable**	Enables/Disables FTP (TCP/IP).
SNMP	**Enable** Disable	Enables/Disables SNMP of FTP (TCP/IP or NetWare).
Network Scale	**Normal** Small	Normal: Can work effectively even when connected to a HUB that has a spanning tree feature. However, printer start up time gets longer when computers are connected to two or three small LANs. Small: Computers can cover from two or three small LANs to a large LAN, but it may not work effectively when it is connected to a HUB with a spanning tree feature.

Item	Value	Description
Hub Link Setting	**Auto Negotiate** 100Base-TX Full 100Base-TX Half 10Base-T Full 10Base-T Half	Sets the hub linking method.

Slot2:Wireless

Appears in the Network Setup menu only if the optional wireless nework card is installed.

See the documentation supplied with the wireless card for more information on menu settings for this option.

Print Setup

Item	Value	Description
Personality	**Auto** PostScript PCL IBM PPR EPSON FX	Selects a printer language.
Copies	**1** ~ 999	Sets number of copies. Disabled for local print, except for demo data.
Duplex	ON **OFF**	Specifies duplex printing.
Binding	**LongEdge** ShortEdge	Specifies how to bind duplex printing.
Job offset	**ON** OFF	Enables/Disables Job offset.
Output bin	**Facedown** Faceup	Specifies where to eject prints.
	Facedown **Finisher**	Specifies where to eject prints when a Finisher is installed.
Finisher Setup This appears only if the optional finisher is installed. See the documentation supplied with the finisher for information on setting it up.		
Media check	**Enable** Disable	Enables/Disables whether the printer checks that paper size required by the print data matches that of the tray. Only standard sizes can be checked.
Transparency detect	**Auto** Disable	Enables/Disables the automatic detection of transparencies. (Use it while detecting sensor mistakes).
Resolution	600dpi **600x1200dpi** 600dpi multi-level	Sets the resolution.

Item	Value	Description
Toner save mode	ON **OFF**	Sets toner saving mode.
Mono-print speed	**Auto** Colour speed Normal speed	Sets the monochrome print speed. Auto: prints at most appropriate speed for page. Colour speed: always prints at colour speed. Normal speed**:** always prints at monochrome speed.
Default orientation	**Portrait** Landscape	Sets printing orientation (only for PCL, IBMPPR, EPSONFX). Invalid for PS.
Form length	5 ~ **60** (L) ~ **64** (A) ~ 128 lines	Sets the number of lines printable on one page (only for PCL). Invalid for PS. The emboldened default values given are for Letter (L) and A4 (A). In practice, the values change corresponding to the size of paper in the tray.
Edit size	**Cassette size** Letter short edge Letter long edge Executive Legal 14 Legal 13.5 Legal 13 Tabloid Extra, Tabloid A3 Nobi, A3 wide, A3 A4 short edge A4 long edge A5, 6, B4 B5 short edge B5 long edge Custom Com-9 Envelope Com-10 Envelope Monarch Envelope DL Envelope Postcard Double postcard C5, C4 Index card	Specifies the size of an area to draw when there is no specification of a size by predefined paper edit size command from a host PC (only valid for PCL). Invalid for PS.

Item	Value	Description
X dimension	3.0 ~ **8.5** ~ 12.9 inch (76 ~ 328 mm)	Sets default Custom paper width, perpendicular to the direction of motion of paper.
Y dimension	3.5 ~ **11** ~ 47.2 inch (90 ~ 1200 mm)	Sets default Custom paper length, in the same direction as the direction of motion of paper.

PS Setup

Item	Value	Description
Network protocol	ASCII **RAW**	Specifies PS transmission protocol for network data. It does not appear for Non-PS type.
Parallel protocol	**ASCII** RAW	Specifies PS transmission protocol for Centronics data. It does not appear for Non-PS type.
USB protocol	ASCII **RAW**	Specifies PS transmission protocol for USB data. It does not appear for Non-PS type.

PCL Setup

Item	Value	Description
Font source	**Resident** DIMMO Downloaded	Specifies the location of the PCL default font. DIMM0: displayed only when Font DIMM ROM specially prepared fonts are in the slot. DOWNLOADED: displayed when software font is downloaded to RAM as permanent designation. Fonts downloaded to Flash and HDD by PJL command are not displayed in this menu.
Font Number	**10** C1 S1	Sets the PCL font number.
Font pitch	0.44 ~ **10.00** ~ 99.99 CPI	Sets the width of the PCL default fonts.
Font height	4.00 ~**12.00** ~ 999.75 point	Sets the height of the PCL default font.
Symbol set	**PC-8**, PC-8 Dan/Nor PC-8, TK, PC-775, PC-850, PC-852, C-855, PC-857 TK, PC-858, PC-864L/A, PC-866, PC-869, PC-1004, Pi Font, Plska Mazvia, PS Math, PS Text, Roman-8, Roman-9, Roman Ext, Serbo Croat1, Serbo Croat2, Spanish Ukrainian, VN Int'l, VN Math, VN US, Win 3.0, Win 3.1 Blt, Win 3.1 Cyr, Win 3.1 Grk, Win 3.1 Heb, Win 3.1 L1, Win 3.1 L2, Win 3.1 L5, Wingdings Dingbats MS Symbol, OCR-A, OCR-B, HP ZIP, USPSFIM, USPSSTP, USPSZIP, Bulgarian, CWI Hung DeskTop German, Greek-437, Greek-437 Cy Greek-737, Greek-928, Hebrew NC Hebrew OC, IBM-437, IBM-850, IBM-860, IBM-863, IBM-865, ISO Dutch, ISO L1, ISO L2, ISO L5, ISO L6, ISO L9, ISO Swedish1, ISO Swedish2, ISO Swedish3, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa Kamenicky Legal, Math-8, MC Text, MS Publish, PC Ext D/N, PC Ext US, PC Set1, PC Set2 D/N , PC Set2 US, WIN3.1J	

Item	Value	Description
A4 print width	**78 column** 80 column	Sets line width subject to Auto LF with A4 paper in PCL.
White page skip	**OFF** ON	Sets to eject a page with non-print data (blank page) on receipt of the FF command (0CH) in PCL. Set to OFF for ejection.
CR function	**CR** CR+LF	Sets the operation on receipt of a CR code in PCL. (NL means new line).
LF function	**LF** LF+CR	Sets the operation on receipt of a LF code in PCL. (NL means new line).
Print margin	**Normal** 1/5 inch 1/6 inch	Sets the margin for paper printable area.
True black	**OFF** ON	Sets use in PCL of Composite Black (mixed colour of CMKY) or Pure Black (only K) for black (100%). **OFF**: Sets Composite Black. **ON**: Sets Pure Black. Invalid for PS.
Pen Width Adjust	**ON** OFF	The thinnest line width in PCL, a 1-dot line, may look broken. ON: when the thinnest line width is specified, line width is emphasized to look wider. OFF: the line appears as specified.

PCL Setup (continued)

Item	Submenu Item	Value	Description
Tray ID#	Tray2 Tray3 Tray4 Tray5	1 ~ **5** ~ 59 1 ~ **20** ~ 59 1 ~ **21** ~ 59 1 ~ **22** ~ 59	Sets the number to specify Tray2, Tray3, Tray4, and Tray5 for the paper feed destination command in PCL5e emulation.
	MP Tray	1 ~ **4** ~ 59	Sets the number to specify MP Tray for the paper feed destination command in PCL5e emulation.

IBM PPR Setup

Item	Value	Description
Character pitch	**10CPI** 12CPI 17CPI 20CPI Proportional	Sets the character pitch.
Font condense	**12 to 20CPI** 12 to 12CPI	Sets the 12CPI pitch for Condensed printing mode.
Character set	**SET-2** SET-1	Sets the character set to be used.

Item	Value	Description
Symbol set	**IBM-437**, IBM-850, IBM-860, IBM-863, IBM-865, PC Set1, PC Ext US, PC Ext D/N, PC Set2 US, PC Set2 D/N, Roman-8, ISO L1, PC-8, PC-8 Dan/Nor, PC-850, Legal, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC ISO-15 Ita. ISO-16 Por. ISO-17 Spa. ISO-21 Ge. ISO-25 Fre. ISO-57 Chi. ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, German, Spanish, ISO Dutch, Roman Ext, ISO Swedish1, ISO Swedish2, ISO Swedish3, VN Math, VN Int'l, VN US, PS Math, PS Tex, Math-8, Pi Font, MS Publish, Win 3.0, DeskTop, Win 3.1 L1, MC Text, PC-852, Win 3.1 L5, Win 3.1 L2, CWI Hung, PC-857 TK, ISO L2, ISO L5, PC-8 TK, Kamenicky, Hebrew NC, Hebrew OC, Plska Mazvia, ISO L6, Win 3.1 Heb, Win 3.1 Cyr, PC-866, Win 3.1 Grk, PC-869, PC-855, Greek-437, Greek-437 Cy, Greek-737, Greek-928, Serbo Croat2, Ukrainian, Bulgarian, PC-1004, Win 3.1 Blt, PC-775, Serbo Croat1, PC-858, Roman-9, ISO L9	
Letter O style	Enable **Disable**	Sets the letter O style.
Zero character	**Normal** Slashed	Sets the 0 style.
Line pitch	**6LPI** 8LPI	Sets the line pitch.
White page skip	**OFF** ON	Sets whether a blank sheet is ejected.
CR function	**CR** CR+LF	Sets the action when the CR code is received.
LF function	**LF** LF+CR	Sets the action when the LF code is received.
Line length	**80 column** 136 column	Sets the number of characters per line.
Form length	**11 inch** 11.7 inch 12 inch	Sets the paper length.

Item	Value	Description
TOF position	**0.0 inch** 0.1 ~ 1.0 inch	Sets the print position from the top edge of the paper.
Left margin	**0.0 inch** 0.1 ~ 1.0 inch	Sets the print position from the left edge of the paper.
Fit to letter	**Enable** Disable	Sets the print mode that fits print data equivalent to 11 inch (66 lines) into Letter size printable area.
Text height	**Same** Diff	Sets character height. Same: same height, regardless of CPI. Diff: character heights vary according to CPI.
Cont paper mode	ON **OFF**	Sets the edit direction of paper supported by A3 printer to landscape.

Epson FX Setup

Item	Value	Description
Character pitch	**10CPI** 12CPI 17CPI 20CPI Proportional	Sets the character pitch.
Character set	**SET-2** SET-1	Sets the character set to be used.

Item	Value	Description
Symbol set	**IBM-437**, IBM-850, IBM-860, IBM-863, IBM-865, PC Set1, PC Ext US, PC Ext D/N, PC Set2 US, PC Set2 D/N, Roman-8, ISO L1, PC-8, PC-8 Dan/Nor, PC-850, Legal, ISO-2 IRV, ISO-4 UK, ISO-6 ASC, ISO-10 S/F, ISO-11 Swe, ISO-14 JASC, ISO-15 Ita, ISO-16 Por, ISO-17 Spa, ISO-21 Ger, ISO-25 Fre, ISO-57 Chi, ISO-60 Nor, ISO-61 Nor, ISO-69 Fre, ISO-84 Por, ISO-85 Spa, German, Spanish, ISO Dutch, Roman Ext, ISO Swedish1, ISO Swedish2, ISO Swedish3, VN Math, VN Int'l, VN US, PS Math, PS Text, Math-8, Pi Font, MS Publish, Win 3.0, DeskTop, Win 3.1 L1, MC Text, PC-852, Win 3.1 L5, Win 3.1 L2, CWI Hung, PC-857 TK, ISO L2, ISO L5, PC-8 TK, Kamenicky, Hebrew NC, Hebrew OC, Plska Mazvia, ISO L6, Win 3.1 Heb, Win 3.1 Cyr, PC-866, Win 3.1 Grk, PC-869, PC-855, Greek-437, Greek-437 Cy, Greek-737, Greek-928, Serbo Croat2, Ukrainian, Bulgarian, PC-1004, Win 3.1 Blt, PC-775, Serbo Croat1, PC-858, Roman-9, ISO L9	
Letter O style	Enable **Disable**	Sets the letter O style.
Zero character	**Normal** Slashed	Sets the 0 style.
Line pitch	**6LPI** 8LPI	Sets the line pitch.
White page skip	**OFF** ON	Sets whether a blank sheet is ejected.
CR function	**CR** CR+LF	Sets the action when the CR code is received.
Line length	**80 column** 136 column	Sets the number of characters per line.
Form length	**11 inch** 11.7 inch 12 inch	Sets the paper length.
TOF position	**0.0 inch** 0.1 ~ 1.0 inch	Sets the print position from the top edge of the paper.
Left margin	**0.0 inch** 0.1 ~ 1.0 inch	Sets the print position from the left edge of the paper.

Item	Value	Description
Fit to letter	**Enable** Disable	Sets the print mode that fits print data equivalent to 11 inch (66 lines) into Letter size printable area.
Text height	**Same** Diff	Sets character height. Same: same height, regardless of CPI. Diff: character heights vary according to CPI.
Cont paper mode	ON **OFF**	Sets the edit direction of paper supported by A3 printer to landscape.

Colour Setup

Item	Value	Description
Ink simulation	**OFF** SWOP Euroscale Japan	Simulates a standard printing colour by the printer. The function is valid only for jobs using PS languages.
UCR	**Low** Medium High	Sets toner layer thickness. (Medium or Low may help reduce any paper curl that occurs.)
CMY 100% density	Enable **Disable**	Enable/disable 100% output against CMY100% TRC compensation. Ordinarily, the TRC compensation function produces appropriate print density, so 100% output is not always enabled. Selecting ENABLE will enable 100% output in individual colour. The actual print, including the TRC compensation function is limited to an appropriate area. This function is for a special purpose such as specification in CMYK colour diminution of PS.
CMYK conversion	**ON** OFF	Set to OFF to simplify the conversion process of CMYK data and reduce the processing time. This setting is ignored when the Ink Simulation function is used.

Memory Setup

Item	Value	Description
Receive buffer size	**Auto** 0.5 MB 1 MB 2 MB 4 MB 8 MB 16 MB 32 MB	Sets the size of the receive buffer.
Resource save	Auto **OFF** 0.5 MB 1 MB 2 MB 4 MB 8 MB 16 MB 32 MB	Sets the size of the resource saving area.

Flash Memory Setup

Item	Value	Description
Initialize	Execute	Initializes resident flash memory.
Resize PS area	nn% [n.n MB] **30% [1.1megabyte]**	Sets the size of the PS area in resident flash memory.

HDD Setup

Item	Submenu Item	Value	Description
Initialize	Execute		Initializes the HDD to the factory default state.
Resize partition	PCL Common PS	nn% mm% ll%	Sets partition size.
Format partition	PCL Common PS		Sets the format of a specified partition.

System Setup

Item	Value	Description
Near life LED	**Enable** Disable	Enables the Attention LED to be turned on when a warning for NEAR LIFE of a toner, a drum, a fuser, or a belt occurs.

Change Password

Item	Value	Description
New password	nnnn	Sets a new password to enter Admin Setup.
Verify password	nnnn	Lets a user verify the new password to be used to enter Admin Setup.

Settings

Item	Value	Description
Reset settings	Execute	Resets EEPROM of the CU. Returns a user's menu setup to the factory default state.
Save settings	Execute	Saves the current menu settings.

Calibration Menu

Item	Value or Submenu Entrty	Value	Description
Auto density mode	**ON** OFF	–	Sets whether density adjustment and TRC compensation is automatically performed. ON**:** density adjustment is automatically run under the printer specified conditions and reflected in TRC compensation. OFF**:** the printer does not carry out density adjustment automatically.
Adjust density	Execute	–	When Execute is selected, the printer carries out density compensation immediately and reflects it in TRC compensation. Density adjustment must be carried out when the printer is idling.
Adjust registration	Execute	–	When Execute is selected, the printer carries out registration adjustment automatically. Registration adjustment must be carried out when the printer is idling.

Item	Value or Submenu Entrty	Value	Description
Print tuning pattern	Execute	–	Allows you to print a pattern to help you adjust TRC manually. (Normally, TRC is automatically adjusted to the recommended levels through density adjustment and TRC compensation.)
Cyan Tuning Magenta Tuning Yellow Tuning Black Tuning	Highlight	**0** +1 +2 +3 -3 -2 -1	Adjusts highlight (light area) of Cyan, Magenta, Yellow, or Black TRC. Plus indicates adjustment towards darker and minus towards lighter.
	Mid-Tone	**0** +1 +2 +3 -3 -2 -1	Adjusts mid tone of Cyan, Magenta, Yellow, or Black TRC. Plus indicates adjustment towards darker and minus towards lighter.
	Dark	**0** +1 +2 +3 -3 -2 -1	Adjusts dark (dense area) of Cyan, Magenta, Yellow, or Black TRC. Plus indicates adjustment towards darker and minus towards lighter.

Print Statistics Menu

Item	Value	Description
Password entry	nnnn	Enter password. The default password is **0000** (four zeroes). When there is no support for the print statistics function, Print Statistics is not displayed.
Statistics log	Enable **Disable**	Enables/Disables the print statistics function.

Printer Menu
Boot Menu

To access the Boot Menu:

1. Turn the printer off.
2. Press and hold the ENTER key while turning the priner back on: *be sure to continue holding the Enter key until “Initializing” appears on the display.*

Parallel Setup

Item	Value	Description
Parallel	**Enable** Disable	Enables/Disables the Centronics interface.
Bi-Direction	**Enable** Disable	Enables/Disables the bi-directional Centronics interface.
ECP	**Enable** Disable	Enables/Disables the ECP mode.
Ack Width	**Narrow** Medium Wide	Sets the ACK width for compatible reception. Narrow = 0.5µs Medium = 1.0µs Wide = 3.0µs
Ack/Busy Timing	**Ack in Busy** Ack while Busy	Sets the order to output the BUSY signal and ACK signal for compatible reception.
I-Prime	3 microseconds 50 microseconds **Disable**	Sets the time to enable/disable the I-PRIME signal.
Offline Receive	Enable **Disable**	Enables/disables a function that maintains the receive-possible state without changing an interface signal even though an alarm occurs. When this is set to Enable, the interface keeps the receive-possible state even when you press the Off-line operating panel switch. The interface sends the BUSY signal only when the reception buffer is full or a service call occurs. This menu is not displayed on a Non-PS machine.

USB Setup

Item	Value	Description
USB	**Enable** Disable	Enables/Disables the USB interface.
Speed	**480Mbps** 12Mbps	Sets the maximum USB interface transfer speed.
Soft Reset	Enable **Disable**	Enables/Disables the Soft Reset command.
Offline Receive	Enable **Disable**	Enables/disables a function that maintains the receive-possible state without changing an interface signal even though an alarm occurs. When this is set to Enable, the interface keeps the receive-possible state even when you press the Off-line operating panel switch. The interface sends the BUSY signal only when the reception buffer is full or a service call occurs. This menu is not displayed on a Non-PS machine.
Serial Number	**Enable** Disable	Enables/Disables the USB serial number, used to identify a USB device to which a PC is connected.

Storage Setup

Item	Value	Description
Check File System	**Off** HDD	Resolves any mismatch between actual memory and displayed memory available in a file system and performs administration data (FAT information) recovery. Performs these by file system. This function takes several tens of seconds to complete. HDD: Performs recovery only for an HDD.

Item	Value	Description
Check All Sectors	**No** Yes	Performs recovery of a defective HDD sector information and a file system mismatch as mentioned above. It takes 30 to 40 minutes to complete this function for an HDD of 10GB.
Enable HDD	No **Yes**	Even if a machine is inoperable at installation because an HDD has been damaged, you can make the machine operable by setting to NO to signify that no HDD is attached, regardless of the existence of an HDD. While NO is set, access to an HDD results in FAIL because the HDD is regarded as not attached even if the HDD is operating normally.
Enable Initialization	No **Yes**	Prevents a setup change accompanying initialization of Block Device (HDD, FLASH).

Power Setup

Item	Value	Description
Peak Power Control	**Normal** Low	The fuser of the printer has two lamps. When the lamps turn on, the printer's power draw increases dramatically. Normal: Both lamps light at the same time. When this happens, the printer's power draw increases dramatically. Low: The lamps do NOT light at the same time. The printer's electrical draw increases, but not as dramatically.
Power Save	**Enable** Disable	Enables/Disables the power save mode.

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