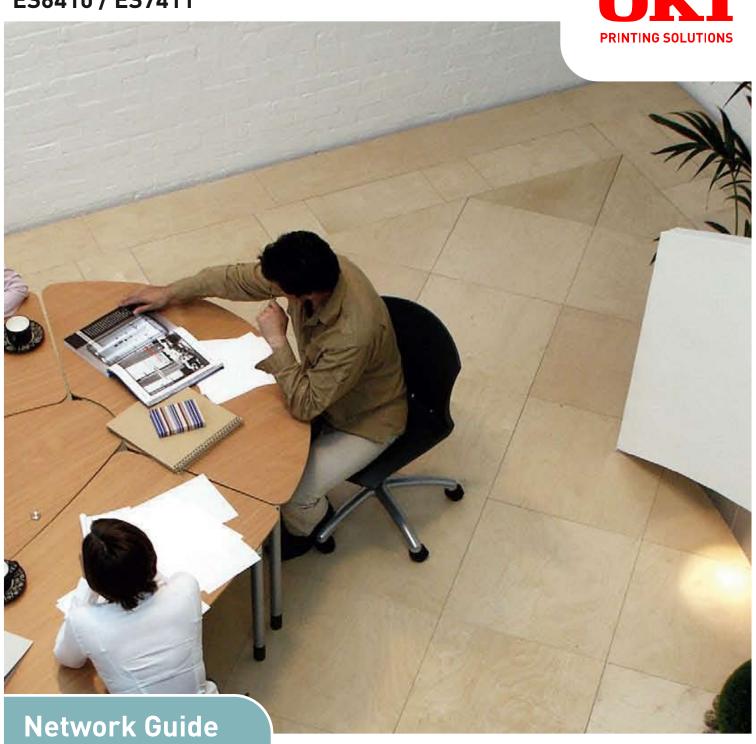
ES6410 / ES7411









PREFACE

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. The manufacturer assumes no responsibility for the results of errors beyond its control. The manufacturer 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 the manufacturer.

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:

http://www.okiexecutiveseries.com

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CONTENTS

Preface	2
Contents	3
Notes, cautions and warnings	5
Network configuration	6
Introduction	
Specification	
Configuration settings	
Configuration utilities	
Using Quick Setup	
Using AdminManager	
Installation	
Interface	
Device setup	
IP address setup	
Option menu.	
Help menu	
Using a web browser	
Microsoft internet explorer	
Default user name and password	
Adjusting printer settings	
Using TELNET	
Example TELNET configuration	
Using SNMP	
Management utility — PrintSuperVision	
Printing utility — Oki LPR	
System requirements	
Installing the Oki LPR utility	
Uninstallation	
Microsoft windows	.31
Overview	31
Installing a network printer	31
Using the Oki Driver Installer	31
Using the Add Printer Wizard	
Network printer IP address configuration	
NetBEUI protocol	
Network printer settings	
Windows XP	
Windows Vista	
Printer driver configuration	
Mac OS X	
Overview	
Setting up a network printer	
Printer setup utility	
Installing the printer setup utility	
The printer setup utility interface	
menu options	
Connecting to your printer	
Snow Leopard (10.6) and Leopard (10.5)	
Tiger (10.4)	
Panther (10.3)	
IP connection	
Configuring printer hardware options	
Printing the configuration page	. 47

Troubleshooting
TCP/IP
Computer cannot find the network interface card
Cannot print with lpr and ftp48
Incorrect user name on the banner page
NetBEUI
The network interface card is not identified49
Error writing to Prn1
Web browser
Microsoft internet explorer
Mozilla firefox

NOTES, CAUTIONS AND WARNINGS

NOTE

A note provides additional information to supplement the main text.

CAUTION!

A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

WARNING!

A warning provides additional information which, if ignored, may result in a risk of personal injury.

NETWORK CONFIGURATION

INTRODUCTION

Your machine incorporates a fast 100BASE-TX/10BASE-T network interface. This guide explains the functionality of the built in network interface. Access for interconnection is provided via an interface panel at the rear of the machine.

This network interface supports IEEE802.2, IEEE802.3, Ethernet-II and SNAP, and can detect those frame types automatically.

Also, the interface supports major protocols such as TCP/IP, IPX/SPX (NetWare) and NetBEUI.

This guide details the network interface specification and several software utilities.

You should set the emulation in the printer menu settings to Auto or PS before printing the configuration map.

NOTE

Not all utilities, features or protocols are supported by every operating system. Please check with your support website for latest information.

SPECIFICATION

Frame Types IEEE 802.2

IEEE 802.3

Ethernet-II, SNAP, AUTO

Network Interface 100BASE-TX

10BASE-T

Network Protocols TCP/IP V4, V6

IEEE 802.1x

Network layer: ARP, IP, ICMP Session layer: TCP, UDP

Application layer: LPR, FTP, TELNET, HTTP, IPP, BOOTP, DHCP, SNMP, DNS, SMTP, POP3, SLP,

Bonjour

IPX/SPX (NetWare)

Remote printer mode (up to eight file servers

and 32 queues)

Print server mode over IPX/SPX (up to eight

print servers)

Encrypted password supported in print server

mode EtherTalk NetBEUI NetBIOS, WINS SSL/TLS

IPSec

Functions Self-diagnostic test printing

Banner supported

Monitoring and configuration by Web browser

Printer status notification by E-Mail

NOTE

Not all utilities, features or protocols are supported by every operating system. Please check with your support website for latest information.

CONFIGURATION SETTINGS

With the machine power switched on, print out the configuration map:

- 1. Press the **Enter** button.
- 2. Press the **Menu down** button then the **Enter** button to select the Print Information menu.
- **3.** Select Configuration with the **Enter** button.
- 4. Press the **Enter** button once more to execute the Configuration menu.
- **5.** When the Configuration map is printed, press **On Line** to exit the menu system.

On the first page of the Network Information that is printed out, under the heading "General Information" the MAC Address is given. For example:

MAC ADDRESS 00808784E3F1

The Ethernet address is therefore: 00:80:87:84:E3:F1

CONFIGURATION UTILITIES

You can configure the network interface (NIC) by using one of the following methods:

UTILITY	FEATURES	SYSTEM REQUIREMENTS
Quick Setup	Configure the NIC 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: Windows 2000 Windows XP Home/Professional Windows XP Professional x64 Edition Windows Server 2003 Windows Server 2003 x64 Edition Windows Server 2008 Windows Server 2008 Windows Server 2008 x64 Edition Windows Vista 32-bit Windows Vista 64-bit (TCP/IP protocol or IPX/SPX protocol should be installed) Mac: Mac OS X 10.3.9 or greater
Admin Manager	Configure the NIC in detail.	
Web Browser	Configure the NIC and printer by using a Web browser such as Microsoft Internet Explorer or Mozilla Firefox.	Microsoft Internet Explorer or similar. Operating system that supports Web browser.
Telnet	Configure the NIC using TELNET.	Third-party vendor developed TELNET client package.
SNMP	The machine and network card can be controlled using third-party vendor developed SNMP application.	Third-party vendor developed SNMP application.

USING QUICK SETUP

Quick Setup utility allows you to configure the network interface 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 a supported Windows operating system (see above), running TCP/IP or IPX/SPX (NetWare).

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 on the same segment as the printer.

- Insert the DVD-ROM into the DVD-ROM drive. The Setup Utility starts automatically.
 If it does not start, double-click \setup.exe (in the root directory) on the
 DVD-ROM.
- 2. If you agree to the User Licence Agreement, click **Next**.
- **3.** Select the appropriate language.
- 4. Navigate to and select **Network Card Setup**.

- 5. Select Install Network Card Setup link.
- **6.** Select your language.
- 7. Select **Oki Device Quick Setup** and follow the on-screen instructions.



- **8.** When the settings are correct, click **Execute**. The new settings are transmitted to the network card but it still operates with pre-transmission settings.
- **9.** Click **Finish** to validate the new settings.
- **10.** Switch the printer off for 15 seconds and on again.

USING ADMINMANAGER

NOTE

Not all utilities, features or protocols are supported by every operating system. Please check with your support website for latest information.

AdminManager is a powerful Microsoft Windows-based utility to configure all network interface functions easily and intuitively via a graphical user interface.

Configuration requires a PC with a supported Windows operating system (see page 8), running TCP/IP or IPX/SPX (NetWare).

This utility can only be used on a PC that can be connected to the network with TCP/IP or IPX/SPX and must be used on a PC that is located on the same segment as the printer.

INSTALLATION

- 1. Insert the DVD-ROM into the DVD-ROM drive. The Setup Utility starts automatically. If it does not start, double-click \setup.exe (in the root directory) on the DVD-ROM.
- **2.** Select the appropriate language.
- 3. Navigate to and select **Network Card Setup**.
- 4. Select Install Network Card Setup link.
- **5.** Select your language.

6. Select Oki Device Standard Setup.



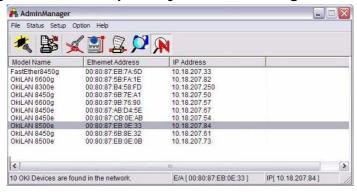
7. If you want to install AdminManager on to your local drive, select **Install and Execute**. Otherwise, select **Execute from CD-ROM**. Follow the on-screen instructions.



8. To run AdminManager, check **Yes** for **Do you wish to execute AdminManager?** and click **Finish**. Otherwise check **No** and click **Finish**.

INTERFACE

Select Start > Programs>Oki Setup Utility > Admin Manager.



MENU	ITEM	FUNCTION	
File	Search	Search printers in your network and list all printers.	
Status	System Status	Displays current NIC configuration. Configuration data can be saved as log file. 1	
	List of Configuration Items	Displays current NIC configuration. Configuration data can be saved as log file. Configuration	
Setup	Oki Device Setup	Configure the network interface (NIC).	
	Setup by HTTP	Launch the default browser in your environment to access the selected printer's web page.	
	Setup by TELNET	Launch TELNET application in your environment to access the selected printer's TELNET port.	
	Create NetWare Queue	Create a NetWare queue. Note: Only visible when using Netware.	
	Delete NetWare Object	Delete NetWare object. Note: Only visible when using Netware.	
	Reset	Reset the selected network interface card.	
	Test Print	Print self-diagnostic test pages.	
	IP Address Setup	Set static IP address of network interface card manually.	

DEVICE SETUP

NOTE

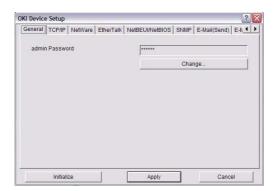
Not all utilities, features or protocols are supported by every product. Please check with your support website for latest information.

Device Setup allows you to configure the network interface. Type the admin password (default value is *aaaaaa*) to configure. Remember that the password is case sensitive. Device Setup contains details for the following tabs:

- > General
- > TCP/IP
- > NetWare
- > EtherTalk
- > NetBEUI/NetBIOS
- > SNMP
- > E-Mail(Send)
- > E-Mail(Receive)
- > SNTP
- > Maintenance
- > SSL/TLS
- > IEEE 802.1x

The following section explains each tab's functionality.

General Tab

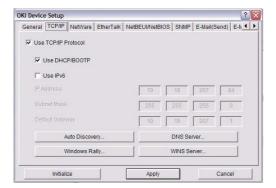


This allows you to set or change the root password used for Admin Manager, TELNET and FTP.



ITEM	EXPLANATION
Change root password	You can set/change the root password for AdminManager, TELNET and FTP.

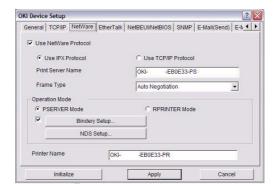
TCP/IP Tab



This allows you to configure TCP/IP related items.

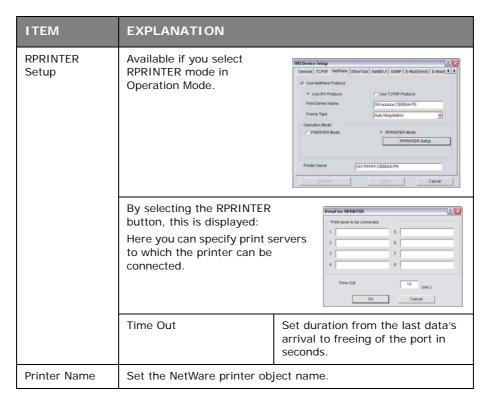
ITEM	EXPLANATION		
Use TCP/IP	Set TCP/IP protocol as enabled/disabled.		
Protocol	Use DHCP/BOOTP	Check this item if IP address, subnet mask, default gateway and IP addresses for DNS primary server and secondary servers are retrieved from the DHCP or BOOTP server. Otherwise, leave unchecked.	
	Use IPv6	Enables IPv6.	
	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	Configure items related to Network PnP Use to select Network PnP and Bonjour, and to set device name.		
DNS Server	Set IP addresses for DNS primary and secondary servers.	Primary Server Primary Server Primary Server 10 18 207 11 Secondary Server 0 0 0 0 Cancel	
Windows Rally	Use WSD Print Use LLTD check to enable/disable.	Windows Rally Setup IF Use WSD Pints F Use LLTD OK Cancel	
WINS Server	Set IP addresses for WIN primary and secondary servers and to enter scol ID.	Primary Server 0 0 0	

NetWare Tab

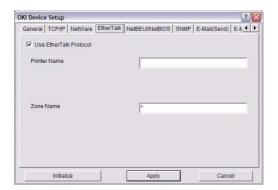


This is where you can configure NetWare related items.

ITEM	EXPLANATION		
Use NetWare Protocol	Set NetWare protocol as enabled/disabled.		
Use IPX Protocol / Use TCP/IP Protocol	Set protocol to use.		
Print Server Name	Set Print Server name.		
Frame Type	Set primary NetWare frame	type.	
Operation Mode	Set NetWare mode.		
Check box beside Bindery Setup	Check if you want to use the Bindery mode and Bindery Setup button becomes available. If it is unchecked, the button is greyed out.		
Bindery Setup	Configure items related to Bindery mode. In this dialogue box, the following items can be configured: **Bindery Mede Setup** **Total Secret be connected** 1		
	Password	Set password for Print Server.	
	Job Polling Time	Set print job polling interval in seconds.	
NDS Setup	Set NDS tree and context we Print Server was created.	NOS Tree NOS Confeet OK Cuncel	



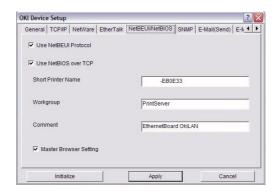
EtherTalk Tab



This allows you to configure EtherTalk related items.

ITEM	EXPLANATION	
Use EtherTalk Protocol	Set EtherTalk protocol to enabled/disabled.	
Printer Name	Set EtherTalk Printer object name.	
Zone Name	Set the zone name to which the printer belongs.	

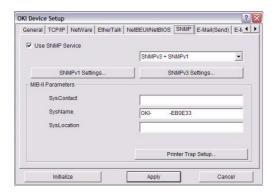
NetBEUI/NetBIOS Tab



This allows you to configure NetBEUI/NetBIOS related items.

ITEM	EXPLANATION	
Use NetBEUI Protocol	Set NetBEUI protocol to enabled/disabled.	
Use NetBIOS over TCP	Set NetBIOS over TCP to enabled/disabled.	
Short Printer Name	Set a name for the printer.	
Workgroup	Set a work group name to which the printer belongs.	
Comment	Set the comments for the printer (optional).	

SNMP Tab

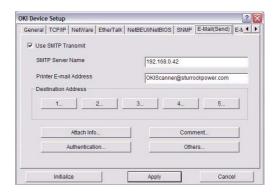


This allows you to configure SNMP related items.

ITEM	EXPLANATION		
Use SNMP Service	ENABLE or DISABLE the SNMP protocol.		
SNMPV1+V3	Select from the drop-down box which (or both) of these to use.		
SNMPV1 Settings	SNMP Read & Write Community.	Enables these passwords to be changed.	
SNMPV3 Settings	Enables Authorisation and Privacy (Encryption) setup to be done.		
SysContact	Set SysContact (printer manager) name.		
SysName	Set SysName (printer model name).		
SysLocation	Set SysLocation (the location where the printer is installed).		

ITEM	EXPLANATION		
Printer Trap Setup	By selecting the but following dialogue be displayed: In the dialogue box, following items can configured:	the	Printer Trap
	Printer Trap Community Name	This community name is assigned to outgoing printer status traps such as off-line, paper out, etc.	
	TCP#1-5	packet will be	- ·
	IPX	to which a Tr	dress and network address rap packet will be sent. ue box, the following items gured:

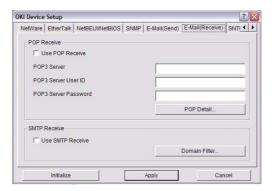
E-Mail (Send) Tab



ITEM	EXPLANATION		
Use SMTP Transmit	Check to enable SMTP.		
SMTP Server Name	Enter name of the SMTP server.		
Printer E-Mail Address	Enter the printers e-mail address.		
Destination	Set the following parameters:		
Address 1 - 5	Destination Address	Set E-Mail address to which email should be sent.	
	Notify Mode	Select PERIOD or EVENT.	
When PERIOD is se	elected:		
Check time		Used to set the interval at which the selected events are checked. An email will be sent at the specified interval for each event selected.	
Period mode		Set ENABLE (ON)/DISABLE (OFF) for the events listed.	
When EVENT is sele	When EVENT is selected:		
	Event Mode	Select: ENABLE (ON), DISABLE (OFF) or IMMEDIATE (NOWAIT) for the listed events. If ENABLE (ON) is selected, the check interval can be set (in hours and intervals of 15 mins).	
Attach Info	Select whichever information is to be included in the e-mail.		
Comment	Set up to four lines of text to be included with the e-mail as comments.		
Authentication	Used to set the following security information:		
	SMTP Authentication Method	Check to Enable SMTP authentication.	
	User ID	Set the User ID for Authentication.	
	User Password	Set the User Password for Authentication.	

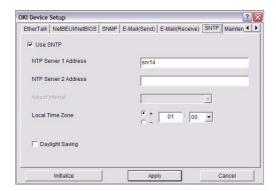
ITEM	EXPLANATION		
Others	Set the following:		
	SMTP Port Number	Set the SMTP port number (default is 25).	
	Reply to address	Set the E-mail address used for the [Reply to] field in the mail header.	

E-mail (Receive) Tab



ITEM	COMMENTS		
Use POP Receive	Enable/disable receiving E-Mail via POP3.		
POP3 Server	Set the IP addr	ess or host name of the POP3 server.	
POP3 Server UserID	Set User ID for	POP3 server.	
POP3 Server Password	Set a password for	or the POP3 server.	
POP Detail	Set the following:		
	Use APOP	Select if you want to use APOP.	
	POP3 Port 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.		

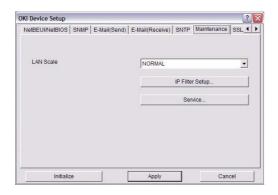
SNTP Tab



In this Tab, you can configure SNTP related items.

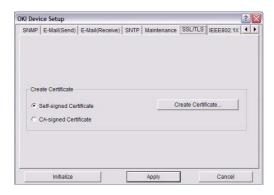
ITEM	COMMENTS
Use SNTP	Enable/disable SNTP (Simple Network Time Protocol).
NTP Server 1 Address	Set the IP address or host name for NTP Server 1.
NTP Server 2 Address	Set the IP address or host name for NTP Server 2.
Adjust Interval	Set the interval for sending time update requests to the server. Select 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



ITEM	COMMENTS			
LAN Scale	Select NORMAL (the default) or SMALL. Note: For small scale networks (with no routing), choose the SMALL setting. For more complex networks choose NORMAL.			
IP Filter Setup	The following items can be configured:			
	Use IP FIIter	Enable/disable IP Filtering. Default is disabled.		
	Admin IP Address	Set the administrator IP address.		
	IP Address Range Set up to 10 IP Filter address ranges: IP Filter Range 1 through IP 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.			
Service	The following features can be selected by clicking their check box. Use TCP/IP Protocol Use NetBEUI Protocol Use NetBIOS over TCP Use NetWare Protocol Use EtherTalk Protocol Use FTP Service Use Telnet Service Use Web Service Use IPP Service Use SNMP Service Use SMTP Transmit Use POP3 Protocol Use SNTP Use encrypted communication for configuration data			

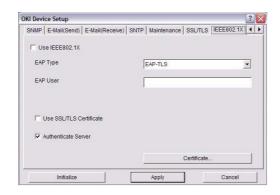
SSL/TLS Tab



ITEM	COMMENTS		
Encryption Strength	Set the strength of encryption: Strong = highest security, slowest speed Standard = medium security, medium speed Weak = least security, fastest speed		
Self-signed Certificate	For IPP encryption within an organisation's internal network (intranet).		
Create Certificate	When Self-signed Certificate is selected, the following items are configured:		
	Common Name		
	Organisation Enter the name of your organization.		
	Organisation 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 organisation is located.		
	Country/Region Enter the country or region where the organisation is located.		
	Key Exchange Select RSA (the default) or Diffie-Hellman(DSS).		
	Key size	Select 512, 1024 (the default), or 2048 bits.	
	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.		
Create Certificate	When CA-signed Certificate is selected, the following items are configured:		
	Common Name	The printer's IP Address appears here.	
	Organisation Enter the name of your organisation.		
	Organisation 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 organisation is located.		
	Country/Region Enter the country or region where the organisation is located.		
	Key Exchange Method	Select RSA (the default) or Diffie-Hellman(DSS).	
	Key size Select 1024 (the default) or 204		

IEEE802.1X Tab



ITEM	COMMENTS		
Use IEEE802.1X	Enable/disable.		
EAP Type	The following Extensible Authentication Protocols can be configured:		
	EAP-TLS Selects Extensible Authentication Protocol - TLS.		
	PEAP Selects Protected Extensible Authentication Protocol.		
EAP User	Enter EAP User name.		
Use SSL/TLS Certificate	Enable SSL/TLS certification.		
Authenticate server	Enable Server Authentication.		
Certificate	Client certificate File: (User can specify). Password: (User can specify). Options to Import, Delete, View.		
	CA certificate	File: (User can specify). Password: (User can specify). Options to Import, Delete, View.	

IP ADDRESS SETUP

If you only use TCP/IP and the printer has not yet been configured, occasionally it may not be displayed on AdminManager. You can configure the IP address of the printer by this function.

- 1. Select IP Address Setup from the Setup menu.
- 2. Set Ethernet Address and IP Address then select OK.



The Ethernet Address (MAC address) is displayed on the configuration map, refer to "Configuration settings" on page 7.

OPTION MENU

In the **Option** menu, the following item can be selected:

ITEM	EXPLANATION		
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 us to search/configure network interface cal	•	
Environment Setup	TCP/IP Tab Set broadcast addresses that are used to search printers using the TCP/IP protocol. If Use TCP/IP protocol is unchecked, the search will not be carried out using TCP/IP.	Environment Subay To CPP Inserting COMP Treason So Use To Provided Set Broads of Address Add OK Carrier	
	NetWare Tab Set network addresses that are used to search printers via NetWare protocol. If there any many NetWare file servers on your network, specify the network address to which the network card belongs. If Use NetWare protocol is unchecked, the search will not be carried out using NetWare, but if Auto Search is selected, AdminManager will sthat AdminManager can detect.	Total Auditor (State) Total Auditor (State) P Use informations P Auto informations P Auto informations P Auto informations Control Cont	
	SNMP Tab Obtain the printer name via SNMP - Select. Enter Community name. Add and Delete.	Tonic second Setup Typing Medicine (IMM* Treads SO Cotion the profes runs of BMM* Community Name Add Indice	
	TimeOut Tab Search Every: Set response waiting time from a network card in seconds. Time Out: Set time out between AdminManager and the network interface card in seconds. Retry: Set how many times the retry will be carried out between AdminManager and the network interface.	Enforcement Setup Total Indexes (Sear Tresout 64 Tresout Feat Sear Sear Sear Sear Sear Sear Sear Sear	

HELP MENU

In the Help menu, **About** is available as well as revision information for **AdminManager**.

USING A WEB BROWSER

If the printer is connected to the network using TCP/IP, its settings and the printer menu settings can be configured using a Web browser. Refer to the relevant manuals for details of how to launch and use the browser.

MICROSOFT INTERNET EXPLORER

- 1. Select Internet Options in the Tools menu.
- 2. Click on the General tab and click Settings in Temporary Internet files.
- 3. Select Every visit to the page in Check for newer versions of stored pages.

DEFAULT USER NAME AND PASSWORD

To apply configuration changes using a Web browser, you will be prompted for a username and password. The username is *admin* and the default password is *aaaaaa*.

The admin password can be changed to allow you to configure the printer by using a Web browser/TELNET/AdminManager. To change the password, select **Password Configuration** in the Maintenance tab and follow the on-screen instructions.

ADJUSTING PRINTER SETTINGS

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

- 1. Configure the IP Address, Subnet Mask and Gateway for the network card. Launch the Web browser, enter the IP Address of the network interface card in **Address** (Location/Position) and press the **Enter** key.
- **2.** Select a tab and items to be changed in the left frame. You need to log in as *admin* to be able to configure all items. Non-admin users cannot configure all items.

USING TELNET

CAUTION!

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

EXAMPLE TELNET CONFIGURATION

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. 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.

2. Login to the network card using TELNET.

Example

For IP address 172.168.20.127

```
telnet 172.168.20.127
```

You should see a sequence similar to the following example:

```
Trying 172.168.20.127
Connected to 172.168.20.127
Escape character is '^]'.
EthernetBoard 8450e TELNET server (Ver 01.01).
login: admin
'admin' user needs password to login.
password:
User 'admin' logged in.
No. MENU (level.1)
_____
1:Status / Information
2:Device Config
3:Network Config
4:Security Config
5:Maintenance
99:Exit setup
Please select (1-99)?
```

3. Enter the number of the item to be changed.

The details window for that item displays.

- **4.** When the configuration is complete, select **Exit Setup** to save your change. To exit without saving your modification, select **Quit**.
- **5.** Turn the machine off and on again.

NOTE

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

USING SNMP

NOTE

Not all utilities, features or protocols are supported by every product. Please check with your support website for latest information.

The machine and network card can be managed via a standard SNMP management station. The network card supports SNMPv1, MIB-II, Oki Data Private MIB and SNMP V3. In order for the machine to be managed correctly from an SNMP management station, the Oki Data Private MIB needs to be added to that management station. Please refer to the SNMP manager documentation for information on how to do this.

NOTE

The Oki Data Private MIB file can be found in the \Misc\ASN folder on the DVD-ROM or support website. Please refer to the readme file for further information.

The printer's trap address can be set in five places using TCP/IP and in one place with IPX. Printer trap settings can be made with TELNET and a Web browser.

MANAGEMENT UTILITY — PRINTSUPERVISION

NOTE

Not all utilities, features or protocols are supported by every product. Please check with your support website for latest information.

PrintSuperVision is a Windows server application designed for managing and monitoring printing devices connected to a network. The core application is server-based and is accessible from any browser enabled device connected to the network.

For full details of how to install and use PrintSuperVision, please refer to the PrintSuperVision Configuration Guide which is available on the support website.

PRINTING UTILITY — OKI LPR

NOTE

Not all utilities, features or protocols are supported by every product. Please check with your support website for latest information.

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

The utility is for those Oki printers which support TCP/IP and redirects printing data to the Ipr port of the specified IP address.

It is an alternative method of connecting printers instead of using the Microsoft TCP/IP port.

SYSTEM REQUIREMENTS

Operating Systems with TCP/IP support and Oki printers that support TCP/IP.

INSTALLING THE OKI LPR UTILITY

NOTE

Some Operating Systems require administrator privileges in order to make changes.

- 1. Set up the printer driver by designating the output destination to Local Printer (LPT1:). For information on setting up your printer driver, see the Printing Guide.
- 2. Insert the DVD-ROM into the DVD-ROM drive. The Setup Utility starts automatically. If it does not start, double-click **setup.exe** on the DVD-ROM.
- 3. Select Software Utilities.
- 4. Select Install OkiLPR.
- **5.** Follow the on-screen instructions.
- **6.** Click **Next** when the **Welcome** screen is displayed.
- 7. Verify **Destination Folder** and **Spool Folder** and click **Next**.
- 8. Check **Register in Startup** if you want automatic startup as Windows boots up. Check **Launch as minimized** if you want to startup in the Icon state and click **Next**.
- **9.** Verify the program folder name and click **Next**. The installation starts.
- 10. When the installation ends, the **Setup complete** screen is displayed. Check **Yes**, **I** want to launch Oki LPR Utility now and click **Finish**. Check **Yes**, **I** want to view the **ReadMe File** if you want to read **Readme**. The OkiLPR utility will start.
- **11.** You may be asked whether it is OK to change write permissions for the spool directory. Click **Yes** to allow the utility to be correctly installed.
- 12. Select Add Printer on the Remote Print menu.
- **13.** Click **Discover...** to search for the IP address of a suitable printer on your network.
- **14.** Highlight the printer you will use and click **OK**.
- **15.** If your printer is not discovered, click **Cancel** and you can type the IP address directly at **IP Address:**.
- **16.** Enter an IP address at **IP Address** and click **OK**. A printer is added to the main window.

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

UNINSTALLATION

- 1. Stop the OkiLPR Utility.
- Select Start > Programs>Okidata>OkiLPR Utility > Uninstall OkiLPR Utility.
 You may find this under Start > All Programs in Windows XP.
- 3. Click **Yes** when the Confirm File Deletion dialogue is displayed. Deletion of the OkiLPR utility starts.
- **4.** When the deletion has finished, the Uninstall Complete screen is displayed. Click **OK**.

If a file that has been added after installation exists in the folder to install the OkiLPR utility or the folder to spool, you cannot delete the folder. Delete any unwanted files before running Uninstall OkiLPR Utility.

MICROSOFT WINDOWS

OVERVIEW

This chapter provides guidelines on how to print over the network from various Microsoft Windows platforms. 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.

NOTE

Not all utilities, features or protocols are supported by every operating system. Please check with your support website for latest information.

INSTALLING A NETWORK PRINTER

There are two ways to set up a Network Printer:

- > Install automatically, using the Oki Driver Installer
- > Install it yourself using the Add Printer Wizard

USING THE OKI DRIVER INSTALLER

The Oki Driver Installer program searches for compatible printers on the Network, then installs and configures the printer drivers with the correct port settings automatically.

Using the Oki Driver Installer program, you can install to the following connected printer types:

- 1. Locally connected printers
 - > USB port
 - > Parallel port (if available)
- 2. Networked printers
 - > Directly connected (peer-to-peer) printers via TCP/IP

The Microsoft standard TCP/IP is installed and configured to use Port 9100 with the printer's IP address.

> Printers not directly connected, but shared via a PC (Client Server)

Why use the Oki Driver Installer?

- > Automatically discovers printers on the Network (TCP/IP)
- > Installs driver and correctly assigns the appropriate port and IP address
- > Allows easy configuration and sharing of the printer with other Network users
- Automatically configures the printer driver with the appropriate hardware device options such as a storage device, additional paper trays, etc. (via the Oki Network Extension software)

USING THE ADD PRINTER WIZARD

Method summary:

The following table shows the different ways to connect to the printer (port types).

	WINDOWS 2000	WINDOWS XP	WINDOWS VISTA	WINDOWS SERVER 2008
Windows standard TCP/IP	YES	YES	YES	YES
Oki LPR	YES	YES	NO	NO
IPP	YES	YES	YES	YES
NetBEUI	YES	YES	NO	NO

About the different methods

Windows standard TCP/IP port

The standard TCP/IP port simplifies connecting to remote printers using the TCP/IP protocol. A computer that acts as a print server must run the TCP/IP protocol in order to print.

Can be configured to use either LPR or RAW (e.g. Port9100).

OkiLPR

Used to connect your printer over TCP/IP using an LPR port.

OkiLPR also includes useful tools enabling you to download PS and PRN files directly to your printer and automatically redirect jobs to other printers on the network.

IPP

The IPP (Internet Printing Protocol) defines a standard protocol for printing as well as managing print jobs, media, resolution, etc.

NetBEUI

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

NETWORK PRINTER IP ADDRESS CONFIGURATION

Use the Standard Set-up Utility to configure the IP Address, Subnet Mask and Gateway.

NOTE

It will not be necessary for printers connected to a network using DCHP to use this setup method.

Some steps may not display depending on the network protocols installed.

- 1. Connect the machine to the network and turn on.
- 2. Insert the DVD-ROM into the DVD-ROM drive. The Setup Utility starts automatically. If it does not start, double-click \setup.exe (in the root directory) on the DVD-ROM.
- 3. If you agree to the User Licence Agreement, click **Next**.
- **4.** Select the appropriate language.
- 5. Navigate to and select **Network Card Setup**.
- 6. Select the Install Network Card Setup link.
- **7.** Select your language.
- 8. Select **Oki Device Quick Setup** and follow the on-screen instructions.



9. Select the appropriate network card, using the Ethernet address to identify it, and click **Next**.

The Ethernet Address (MAC address) is displayed on the configuration map, refer to "Configuration settings" on page 7.

Using TCP/IP protocol

When using Ipr in UNIX and other TCP/IP environments, please select **Yes**. To use in a TCP/IP environment, an IP address should be assigned to the Ethernet card.

If **Yes** has been selected and TCP/IP is the only working protocol and the IP address has not already been assigned, you can either obtain an IP address automatically or assign an IP address.

When **Obtain an IP address automatically** is selected, the device IP address will be automatically assigned by the DHCP server. In an environment without a DHCP server, please assign the IP address manually.

If you are *manually* assigning an IP address, you need to enter:

- > An IP address
- > Subnet mask
- > Gateway address

10. Click Next.

Using Bonjour protocol

Bonjour is the preferred protocol for printing data from the Macintosh environment.

Using NetBEUI protocol

Using NetBEUI makes it easy to manage your Oki product and print within the network environment of Windows.

- **11.** When the settings are correct, click **Execute**. The new settings are transmitted to the network card but it still operates with pre-transmission settings.
- **12.** Click **Finish** to validate the new settings.
- **13.** Switch the printer off for 15 seconds and on again.

Now that both Windows and the printer have been configured to use TCP/IP, the next step is to configure Windows to print to the network printer.

NETBEUI PROTOCOL

NETWORK PRINTER SETTINGS

There are two configurable items under NetBEUI within the printer. These can be configured using the standard set-up utility described in "Device setup" on page 12.

COMPUTER NAME	NAME ASSIGNED TO THE PRINTER
Workgroup	PrintServer ^a
Comment	User definable description

a. Although the workgroup name can be changed, it is recommended that it remains as PrintServer.

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

Please ensure the NetBEUI protocol has been installed in Windows. This can be confirmed by checking the network settings. If NetBEUI has not been installed please refer to the section below.

The relevant Windows installation CD-ROM may be required and you should follow the onscreen dialogue box prompts.

WINDOWS XP

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

- 1. In the Start menu, select Settings > Control Panel.
- 2. Double-click on **Network Connections**.
- 3. Right-click the adapter you wish to add NetBEUI to and then click **Properties**.
- 4. On the **General** tab, select **Install**.
- 5. Select **Protocol** and then **Add**.
- **6.** Select **Have Disk** and insert your Windows XP CD-ROM, open the *Valueadd\msft\net\netbeui* folder, select the *Netnbf.inf* file and then click **Open**.

Now the printer has been configured and NetBEUI has been installed, you can configure Windows to print over the network.

WINDOWS VISTA

NetBEUI is not supported by Windows Vista.

PRINTER DRIVER CONFIGURATION

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

Computer Name: OL07DB85 Workgroup: PrintServer

Comment: Ethernet Board 8450e

- 1. Set up the printer driver as the default local printer.
- 2. In the Start menu, select Settings > Printers.
- 3. Select the relevant printer driver, then **Properties**.
- 4. Click on the **Details** tab in the printer driver.
- 5. Select Add Port.
- 6. Select **Network** and click **Browse**.
- 7. Double-click Entire Network, PrintServer and OL07DB85.
- 8. Select Prn1 and click OK.
- 9. Check that **Network** is selected and click **OK**.
- **10.** Select **Apply** and **OK** to close Properties.

Printing can be carried out using your 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 Networks 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.

MAC OS X

OVERVIEW

This section of the guide is for administrators and it should be read in conjunction with the relevant Mac OS X manual. Please ensure your Mac has the latest OS X updates installed.

To get the best results from your printer, install the Postscript Printer Description (PPD) file supplied with your printer and use this to customise the Apple PostScript driver that is built in to the OS X. Features provided by the PPD file include:

- > Supported paper types
- Paper trays
- > Printer resolution
- Printer colour matching

NOTE

The PPD file must be installed using the Oki Driver Installer to ensure that all essential files are copied.

SETTING UP A NETWORK PRINTER

- 1. If the printer does not already have an IP address, use the Printer Setup Utility to assign an IP address. See "The printer setup utility interface" on page 37.
 - To do this, you will need to know the printer's MAC address. This can be found on the print server's network summary printout. See "Configuration settings" on page 7.
- 2. Install the printer driver software. This copies the printer driver files to the correct location on your Mac OS X system.
- **3.** Make a connection to the printer by USB, TCP/IP, Rendezvous or AppleTalk. See "Connecting to your printer" on page 43.
- **4.** If required, enable hardware device options such as additional paper trays or a storage device. See "Configuring printer hardware options" on page 47.

PRINTER SETUP UTILITY

The Printer Setup Utility is a powerful MacOS-based utility for configuring all print server functions using a graphical user interface.

INSTALLING THE PRINTER SETUP UTILITY

- 1. Insert the DVD into the DVD-ROM drive.
- 2. Open the Printer Setup Utility folder and double-click Installer.



3. Select the destination directory, then click **Next**.



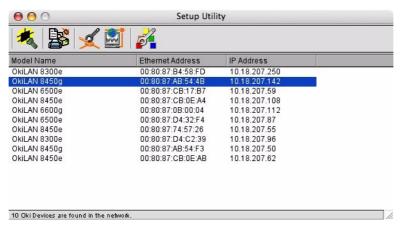
4. Ensure the Yes option is selected to activate the utility, then click Finish.



THE PRINTER SETUP UTILITY INTERFACE

The Printer Setup Utility auto-discovers Oki compatible network cards.

1. Select the correct printer NIC to configure and choose **Setup menu > Oki Device Setup**.



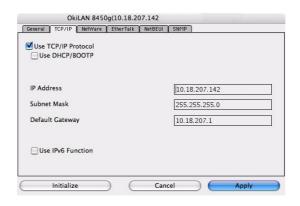
2. At the prompt, enter the Admin password.



NOTE

The default admin password is aaaaaa.

- 3. Select the TCP/IP tab and assign your machine's IP address.
- 4. Click Apply.



MENU OPTIONS

Discover Printers

Locates and lists all printers in your network which have an Oki compatible network card installed.

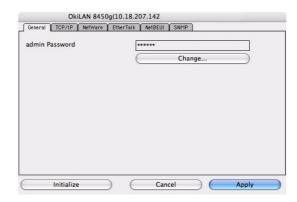
System status

Displays the network card summary details.

Oki device setup

Use this to configure the network card settings (requires Admin password).

General Tab



The General tab allows you to change the admin password.

- 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 aaaaaa.

- 3. Click OK.
- 4. Click Apply.

TCP/IP Tab

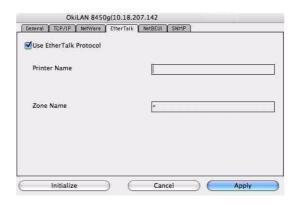


ITEM	COMMENTS
Use TCP/IP Protocol	Enable/disable TCP/IP protocol.
Use DHCP/BOOTP	Click to select this item if the IP address, subnet mask, default gateway and IP addresses for DNS primary server and secondary servers are retrieved from the DHCP or BOOTP server.
IP Address	Set the IP address of the selected 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.
Use IPv6 Function	Use to enable/disable IPv6.

Netware Tab

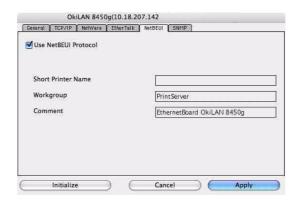
ITEM	COMMENTS	
Use NetWare Protocol	Enable/disable NetWare protocol.	
Print Server Name	Set a Print Server name.	
Frame Type	Set the primary NetWare frame type.	
Operation Mode	Select the NetWare mod PSERVER Mode (the defa RPRINTER Mode	
Bindery Setup	Configure Bindery mode items, including:	
	File Server to be connected.	Specify 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.	
Printer Name	Set the NetWare printer object name.	

EtherTalk Tab



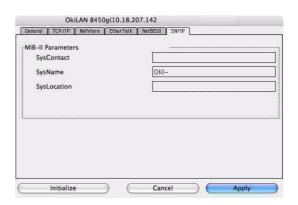
ITEM	COMMENTS
Use EtherTalk Protocol	Enable/disable EtherTalk protocol.
Printer Name	Set the EtherTalk Printer object name.
Zone Name	Set the name of the zone to which the print server belongs.

NetBEUI Tab



ITEM	COMMENTS
Use NetBEUI Protocol	Enable/disable NetBEUI protocol.
Short Printer Name	Set a 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



ITEM	COMMENTS
SysContact	Set the printer manager name.
SysName	Set the printer model name.
SysLocation	Set the location where the printer is installed.

Configuration via HTTP

Displays the printer web page.

Environment setup

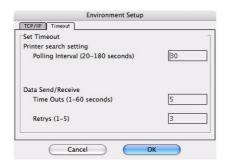
Use this to configure the utility preferences for broadcast addresses for TCP/IP protocol and Time $\mbox{Out}.$

TCP/IP Tab



ITEM	COMMENTS
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.

Timeout Tab



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.

CONNECTING TO YOUR PRINTER

If you have not already done so, run the Oki software installer before following the steps below.

SNOW LEOPARD (10.6) AND LEOPARD (10.5)

USB

- 1. Choose Apple Menu > System Preferences > Print & Fax.
- 2. If the printer is already in the list of printers, click "-" to remove it.

NOTE

This is necessary as Leopard may not be using the correct printer driver files.

- **3.** Click "+" to add a new printer.
- 4. Ensure the Default tab is selected and select your printer from the list.
 - > Your printer is displayed as type **USB** in the list of available printers.
 - > Ensure that the **Print Using:** selection matches your printer. If **Generic PostScript Printer** is displayed, select a driver that matches.
- 5. Click Add.
- **6.** Click **Configure...** and ensure the hardware options displayed match your printer.

NOTE

Hardware options are not configured automatically.

The printer is added to the list of printers.

7. Restart your computer.

Bonjour

- 1. Choose Apple Menu > System Preferences > Print & Fax.
- 2. Click "+".
- 3. Select your printer model from the Default Browser.
- 4. Click Add....
- **5.** Depending on the connection type, you may be prompted to configure any additional printer hardware options. If your printer has options such as a storage device or second tray, switch on the relevant options.

AppleTalk (Leopard only)

NOTE

AppleTalk is not supported in Snow Leopard.

- 1. Choose Apple Menu > System Preferences > Print & Fax.
- 2. Click "+".
- 3. Select your printer model from the Default Browser.
- 4. Click Add....
- **5.** Depending on the connection type, you may be prompted to configure any additional printer hardware options. If your printer has options such as a storage device or second tray, switch on the relevant options.

TCP/IP Connection

- 1. Choose Apple Menu > System Preferences > Print & Fax.
- 2. Click "+".
- 3. Click the **IP Printer** button.
- **4.** From the Protocol menu, choose **Line Printer Daemon LPD**.
- **5.** Enter the printer's IP address in **Address**.

To find the printer's IP address, you can print a configuration page from the printer's operator panel. Refer to "Configuration settings" on page 7.

- **6.** Check the correct PPD file for your printer is selected in the Print Using menu.
- 7. Click Add.
- **8.** You will be prompted to configure any additional printer hardware options. If your printer has options such as a storage device or second tray, switch on the relevant options.

TIGER (10.4)

Bonjour, AppleTalk or USB

- Launch Printer Setup Utility
 This is located in the Applications > Utilities folder.
- 2. Click Add....
- 3. Select your printer model from the Default Browser.



- 4. Click Add.
- **5.** Depending on the connection type, you may be prompted to configure any additional printer hardware options. If your printer has options such as a storage device or second tray, switch on the relevant options.
- 6. Quit Printer Setup Utility.

TCP/IP Connection

- Launch Printer Setup Utility
 This is located in the Applications > Utilities folder.
- 2. Click Add....
- 3. Click the IP Printer button.
- **4.** From the Protocol menu, choose **Line Printer Daemon LPD**.

5. Enter the printer's IP address in **Address**.



To find the printer's IP address, you can print a configuration page from the printer's operator panel. Refer to "Configuration settings" on page 7.

- **6.** Check the correct PPD file for your printer is selected in the Print Using menu.
- 7. Click Add....
- **8.** You will be prompted to configure any additional printer hardware options. If your printer has options such as a storage device or second tray, switch on the relevant options.
- 9. Click Continue.
- 10. Quit Printer Setup Utility.

PANTHER (10.3)

Rendezvous

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and relaunch the utility before continuing.

If you have not already done so, run the Oki software installer before following the steps below.

- Start the Printer Setup Utility.
 This is located in the **Applications > Utilities** folder.
- 2. Click Add....
- **3.** From the pop-up menu, choose **Rendezvous**.
- **4.** Select the printer you wish to connect to.
- 5. Click Add.
- 6. Click the Printer Setup Utility menu, and choose Quit Printer Setup Utility.

After adding the printer, you should configure printer hardware options. Refer to "Configuring printer hardware options" on page 47.

IP CONNECTION

If you have not already done so, run the Oki software installer before following the steps below.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and relaunch the utility before continuing.

- 2. Click Add....
- 3. Click the pop-up menu and choose IP Printing.
- 4. Click the **Printer Type** menu and choose **LPD/LPR**.
- **5.** Enter the printer's IP address.

To find the printer's IP address, you can print a configuration page from the printer's operator panel. Refer to the User's Guide for details.

The Configuration pages are printed. The printer's IP address is shown under the Network section on the first sheet.

- 6. Enter the queue name. If you do not know the queue name, leave it as **Use Default**Queue on Server.
- 7. Click the pop-up menu and choose your printer model.
- 8. Click Add.
- 9. Click the Printer Setup Utility menu, and choose Quit Printer Setup Utility.

After adding the printer, you should configure printer hardware options. Refer to "Configuring printer hardware options" on page 47.

AppleTalk connection

If you have not already done so, run the Oki software installer before following the steps below.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

- 2. Click Add....
- **3.** From the pop-up menu, choose **AppleTalk**.
- **4.** Select the printer you wish to connect to.
- 5. Click Add.
- 6. Click the Printer Setup Utility menu, and choose Quit Printer Setup Utility.

USB connection

If you have not already done so, run the Oki software installer before following the steps below.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

NOTE

If your printer is already listed, your Mac may already have discovered the printer before you installed the Oki software. In this case, the printer may be using the incorrect PPD file or may not have the correct hardware options configured. You should delete the printer, quit Printer Setup Utility, and relaunch the utility before continuing.

- 2. Click Add Printer....
- 3. From the pop-up menu, choose USB.
- **4.** Choose a printer to connect to.
- 5. Click Add.
- Click the Printer Setup Utility menu, and choose Quit Printer Setup Utility.

CONFIGURING PRINTER HARDWARE OPTIONS

NOTE

Applies to IP and Rendezvous network connections only.

If you have added additional hardware, for example additional paper trays, to your printer these must be enabled in the printer driver.

1. Start the Printer Setup Utility.

This is located in the **Applications > Utilities** folder.

- **2.** Ensure that your printer model is selected.
- 3. Click the **Printers** menu, and choose **Show Info**.
- 4. From the popup menu, select Installable Options.
- 5. Select any options appropriate to your hardware, and click **Apply Changes**.

PRINTING THE CONFIGURATION PAGE

The printer's configuration page reports information that is required for Mac OS X configuration. Refer to "Configuration settings" on page 7 for details on how to print a configuration page.

The first six characters of the Ethernet address are the same for all network cards. The last six characters of the Ethernet address are unique to each card.

NOTE

Not all utilities are supported by every operating system. Please check with your support website for latest information.

TROUBLESHOOTING

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.

TCP/IP

COMPUTER CANNOT FIND THE NETWORK INTERFACE CARD

Turn the printer off for 15 seconds and then on again.

Confirm the network interface is enabled on the printer.

Check there is a response to the PING command.

Check that the network cable is correctly connected and that the green LED close to the printer's network interface is lit. If not, change the cable and try again.

Run the self-diagnostic test.

Check the IP Address, Subnet Mask and Gateway are correct.

Check that the TCP/IP protocol is set to Enable.

Reset the network interface card to 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 for 15 seconds and then on again.

Check there is a response to the *ping* command.

Check the network cable is correctly connected.

Change the cable and try again.

Check the host name and IP address are configured in the workstation.

Check the printer port name is configured in the workstation.

There are three port names: *Ip, euc* and *sjis*. Use *Ip* by default as *euc* and *sjis* are specific to PostScript printers.

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.

NETBEUI

THE NETWORK INTERFACE CARD IS NOT IDENTIFIED

Turn the printer off for 15 seconds and then on again.

Check the network cable is correctly connected.

Change the cable and try again.

Check Microsoft Network Client and NetBEUI have been added to the network section of the Windows Control Panel.

Check the NetBEUI protocol is set to Enable.

Check the factory setting of the workgroup name is **PrintServer** and the computer name is ML+ the last six characters of the MAC address.

Check the computer name of the NIC is different from the computer name on the network.

ERROR WRITING TO PRN1

Check 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.

WEB BROWSER

To prevent your web browser caching the printer web pages, carry out the following steps as appropriate for your web browser.

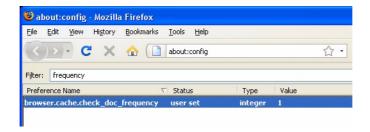
MICROSOFT INTERNET EXPLORER

- 1. Select Tools > Internet Options.
- 2. Select the General tab and, in Temporary Internet files, click Settings.
- 3. Under Check for newer versions of stored pages, select Every visit to the page.
- 4. Click OK.



MOZILLA FIREFOX

- 1. In the Firefox address bar, type about:config.
- 2. In the Filter field, type frequency.
- 3. Double click on the entry browser.cache.check_doc_frequency.
- **4.** Change the Value to **1**.
 - > 0: Check once per browser session
 - > 1: Check every time I view the page
 - > 2: Never check (always use cached page)
 - > 3 (default): Check when the page is out of date (automatically determined)
- 5. Click OK.



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