



Security Guide



EXECUTIVE
SERIES

CREATED BY
OKI PRINTING SOLUTIONS

PREFACE

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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.

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DOCUMENT SECURITY

Document security can be breached in many ways. Some are obvious and can be remedied quite easily;

- > Unattended documents left in a printer's output tray. Even one connected "one-to-one" with a computer.
- > Worse still, unattended documents left in a networked printer's output tray, for all to see!
- > Personnel possessing confidential documents off-site.

Other security risks may not be so obvious.

As printers and multi-function products become more sophisticated so must the security measures to ensure your valuable data is kept secure.

If left unprotected, access to records can be achieved via a networked machine. On-board hard disk drives (HDDs) may contain confidential data such as PIN numbers, personnel names and IP addresses as well as raw text.

Your machine has a number of valuable features which, when enabled, reduce the risk of security breaches.

The following chapters guide you through the initial set up and also explain how you use the secure printing features.

GLOSSARY

IP	Internet Protocol
HDD	Hard Disk Drive
MAC Address	Media Access Control Address
PIN	Personal Identification Number
SSL	Secure Sockets Layer
TLS	Transport Layer Security

SETTING THE SECURITY

Although, in most cases, it is possible to program your machine via the operator panel, the most effective way is via the web page.

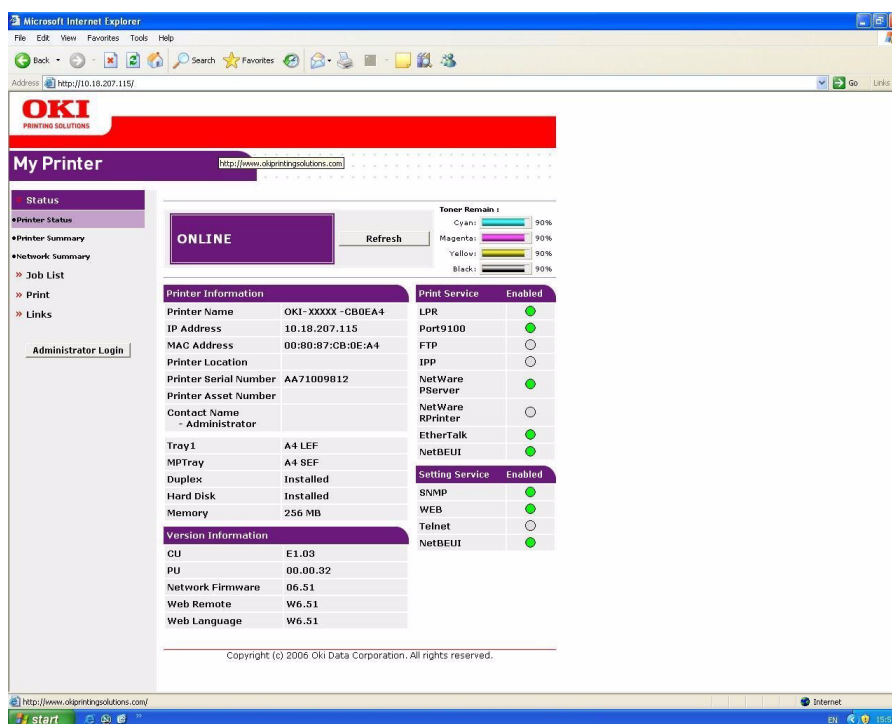
NOTE

Example screenshots are used throughout this manual and as such may not represent the screens displayed for your machine. Some of the features shown on the example screenshots may not be available on your machine.

ACCESSING THE WEB PAGE

Type the IP address of the machine in the URL field of your browser and then press **Enter**. The machine web page appears. For example:

http://10.18.207.15



ADJUSTING THE SECURITY SETTINGS

You must log on as the administrator to adjust the security settings.

NOTE

The Administrative Settings are blocked by a password. The factory settings are:

Username: **admin**

Password: **last 6 digits of the MAC address**

Note: Entries are case sensitive.

It is recommended that the system administrator creates a new password, refer to ["Password configuration" on page 14](#).

1. Click **Administrator Login**.
2. Enter the correct user name and password.
3. Click **Login**.

The initial administration entry screen is displayed.

Microsoft Internet Explorer

Address: http://10.10.207.115/setupfrm.htm

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My Printer

Setup Printer

This is the first login to the printer web page.
If you would like to perform basic setup of the device, please complete the fields, and press "OK". Otherwise press "SKIP".

Printer Identification

Printer Name OKI-XXXXX-CB0EA4 (Max:31characters)
This is the device's identity on the network (sysName, and Printer Name).

The Printer Name can be applied to the following by checking the boxes:

☐ NetWare Print Server Name
☐ NetWare Printer Name
☐ EtherTalk

Short Printer Name XXXXX-CB0EA4 (Max:15characters)
This is Printer Name for WINS and NetBEUI. A maximum of 15 characters can be used (alpha/numeric characters and "-" are acceptable.)

Printer Location (Max:255 characters)

Printer Asset Number (Max:8 characters)

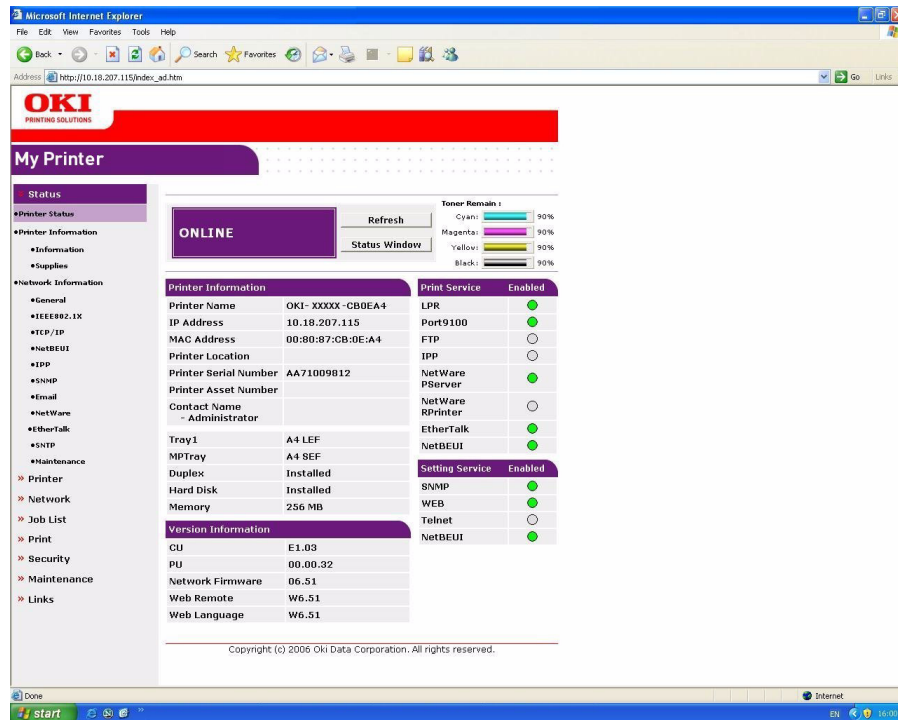
Contact Name - Administrator (Max:255 characters)

Protocol

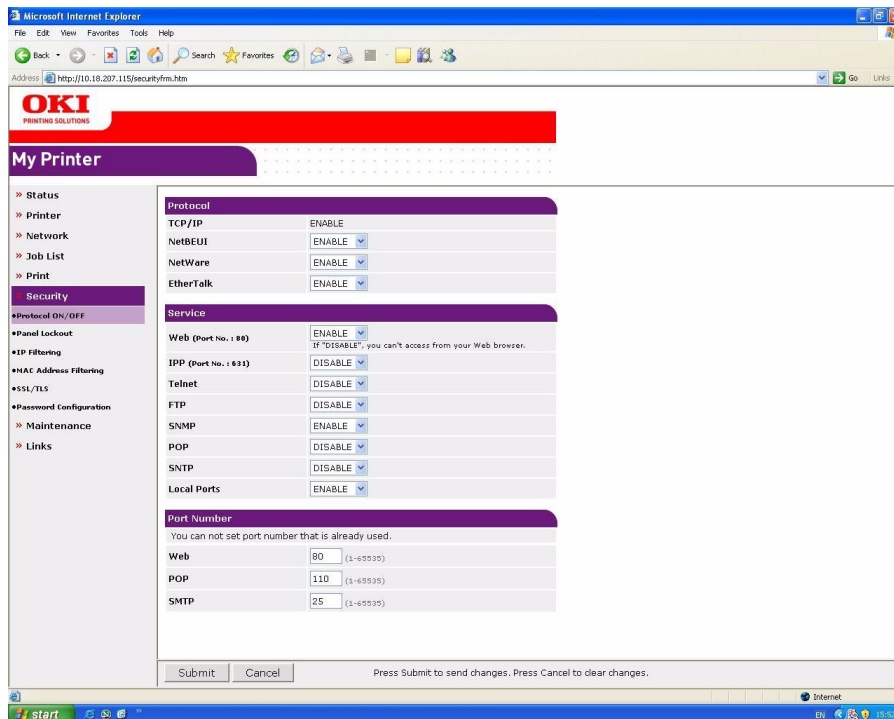
TCP/IP	ENABLE
NetBEUI	ENABLE
NetWare	ENABLE
EtherTalk	ENABLE

OK SKIP ☐ Do not show this page again.

4. Click **Skip** to navigate to the main menu page.



5. From the left hand menu select **Security**.



Refer to the following chapters for instructions on how to set your security preferences.

NOTE

High level instructions are given, for more details refer to the information on screen.

PROTOCOL ON/OFF

To set up the security protocol:

1. From the left hand panel select **Protocol ON/OFF**.

The screenshot shows a web browser window displaying the OKI printer's security configuration page. The page is titled "My Printer" and has a left-hand navigation menu with options: Status, Printer, Network, Job List, Print, Security, Protocol ON/OFF, Panel Lockout, IP Filtering, MAC Address Filtering, SSL/TLS, Password Configuration, Maintenance, and Links. The "Security" section is expanded, and "Protocol ON/OFF" is selected. The main content area is divided into three sections: "Protocol", "Service", and "Port Number".

Protocol	
TCP/IP	ENABLE
NetBEUI	ENABLE
NetWare	ENABLE
EtherTalk	ENABLE

Service	
Web (Port No. : 80)	ENABLE
If "DISABLE", you can't access from your Web browser.	
IPP (Port No. : 631)	DISABLE
Telnet	DISABLE
FTP	DISABLE
SNMP	ENABLE
POP	DISABLE
SMTP	DISABLE
Local Ports	ENABLE

Port Number	
You can not set port number that is already used.	
Web	80 (1-65535)
POP	110 (1-65535)
SMTP	25 (1-65535)

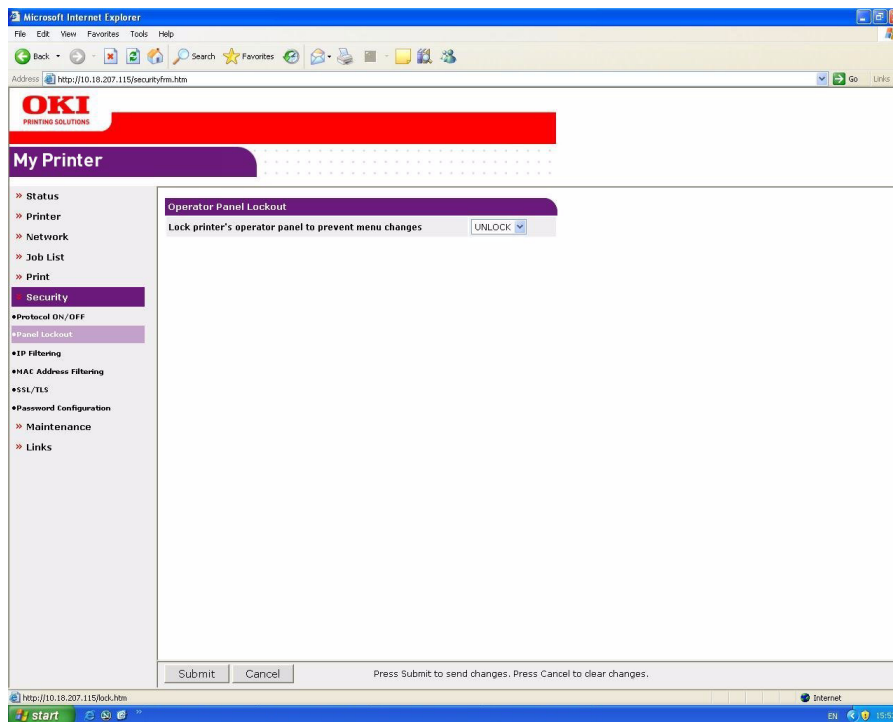
At the bottom of the page, there are "Submit" and "Cancel" buttons, and a note: "Press Submit to send changes. Press Cancel to clear changes."

2. From the drop down menus select **ENABLE** / **DISABLE** as appropriate.
3. Input the port numbers as appropriate.
4. Click **Submit** to save the changes or **Cancel** to exit.

PANEL LOCKOUT

To activate the lockout facility on the printer control panel:

1. From the left hand panel select **Panel Lockout**.



2. From the drop down menu select **LOCK**.
3. Click **Submit** to save the changes or **Cancel** to exit.

IP FILTERING

To enable IP filtering:

1. From the left hand panel select **IP Filtering**.

Microsoft Internet Explorer

Address: http://10.18.207.115/security.htm

OKI
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My Printer

- » Status
- » Printer
- » Network
- » Job List
- » Print
- Security**
- » Protocol ON/OFF
- » Panel Lockout
- » IP Filtering
- » NAC Address Filtering
- » SSL/TLS
- » Password Configuration
- » Maintenance
- » Links

IP Filtering

STEP1. Select IP Filtering Settings.

IP Filtering: **DISABLE**

CAUTION!! If you set IP Filtering to ENABLE, you can access the printer only from hosts at IP Addresses set in STEP2.

STEP2. Set IP Address range.

Enter the ranges of the host IP Addresses and permissions to print to, or configure the printer.
Complete / valid IP Addresses only. Value of 0.0.0.0 is an invalid address.
Priorities can be given to determine precedence when overlapping ranges of addresses are used.

Admin IP Address, if set in STEP 3, overrides all configuration settings in this section.

Priority	Address Range No.	IP Address Range		Printing	Config
		Start Address	End Address		
Low	1	0.0.0.0	0.0.0.0	☒	☒
	2	0.0.0.0	0.0.0.0	☐	☐
	3	0.0.0.0	0.0.0.0	☐	☐
	4	0.0.0.0	0.0.0.0	☐	☐
	5	0.0.0.0	0.0.0.0	☐	☐
	6	0.0.0.0	0.0.0.0	☐	☐
	7	0.0.0.0	0.0.0.0	☐	☐
	8	0.0.0.0	0.0.0.0	☐	☐
	9	0.0.0.0	0.0.0.0	☐	☐
High	10	0.0.0.0	0.0.0.0	☐	☐

Address Range Bar Display/Refresh:

Settings and Address Range Bar Color relation

Press Submit to send changes. Press Cancel to clear changes.

2. From the drop down menu select **ENABLE**.
3. Input the range of host IP addresses and set permissions in the main table.
4. Click **Submit** to save the changes or **Cancel** to exit.

MAC ADDRESS FILTERING

To enable MAC address filtering:

1. From the left hand panel select **MAC Address Filtering**.

Microsoft Internet Explorer

Address: http://10.18.207.115/securityfrm.htm

OKI
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My Printer

- » Status
- » Printer
- » Network
- » Job List
- » Print
- Security**
 - Protocol On/Off
 - Panel Lockout
 - IP Filtering
 - MAC Address Filtering**
 - SSL/TLS
 - Password Configuration
 - » Maintenance
 - » Links

MAC Address Filtering

STEP1. Select MAC Address Filtering Settings

DISABLE

MAC Address Filtering

CAUTION!! If you set MAC Address Filtering to ENABLE, you will only be able to access the printer from devices with MAC Addresses set in STEP2 and STEP3.

STEP2. Set Filtering MAC Address

Communication from the following MAC Addresses

ACCEPT

	MAC Address		MAC Address
1	00:00:00:00:00:00	26	00:00:00:00:00:00
2	00:00:00:00:00:00	27	00:00:00:00:00:00
3	00:00:00:00:00:00	28	00:00:00:00:00:00
4	00:00:00:00:00:00	29	00:00:00:00:00:00
5	00:00:00:00:00:00	30	00:00:00:00:00:00
6	00:00:00:00:00:00	31	00:00:00:00:00:00
7	00:00:00:00:00:00	32	00:00:00:00:00:00
8	00:00:00:00:00:00	33	00:00:00:00:00:00
9	00:00:00:00:00:00	34	00:00:00:00:00:00
10	00:00:00:00:00:00	35	00:00:00:00:00:00
11	00:00:00:00:00:00	36	00:00:00:00:00:00
12	00:00:00:00:00:00	37	00:00:00:00:00:00
13	00:00:00:00:00:00	38	00:00:00:00:00:00
14	00:00:00:00:00:00	39	00:00:00:00:00:00
15	00:00:00:00:00:00	40	00:00:00:00:00:00

Submit Cancel

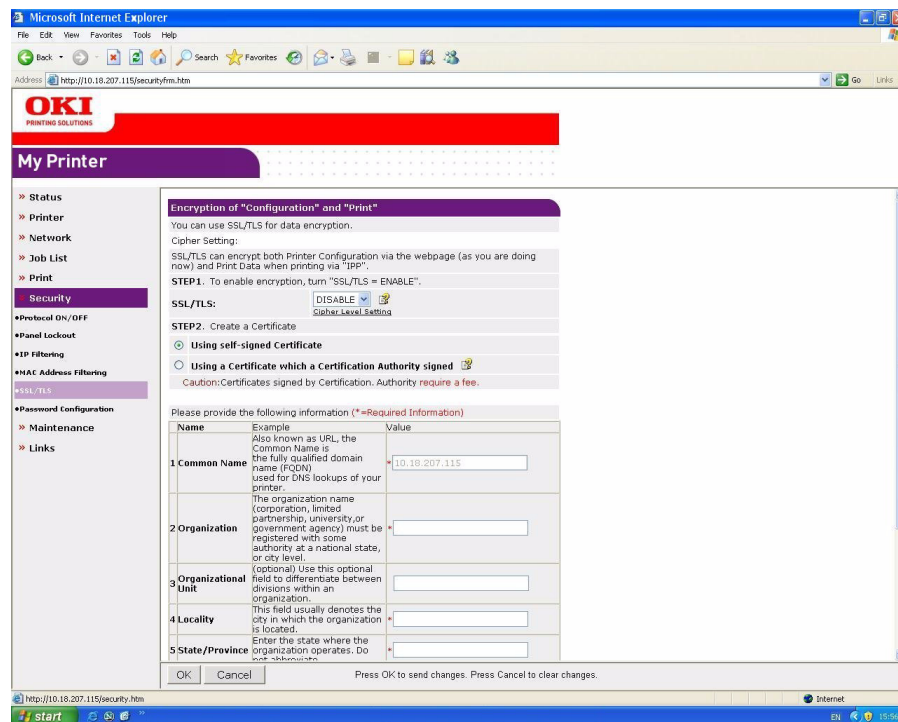
Press Submit to send changes. Press Cancel to clear changes.

2. From the drop down menu select **ENABLE**.
3. From the second drop down menu select **ACCEPT**.
4. Input the MAC addresses in the main table.
5. Click **Submit** to save the changes or **Cancel** to exit.

SSL/TLS

To enable SSL/TLS encryption:

1. From the left hand panel select **SSL/TLS**.



2. From the drop down menu select **ENABLE**.

NOTE

Click icon for an explanation of the options available.

3. Click the **Cipher Level Setting** link.
4. Select the level setting from the drop down menu options:
 - > Strong
 - > Standard
 - > Weak
5. Click **OK** to confirm.
6. Select the required option from Step 2: **Create a Certificate**.

NOTE

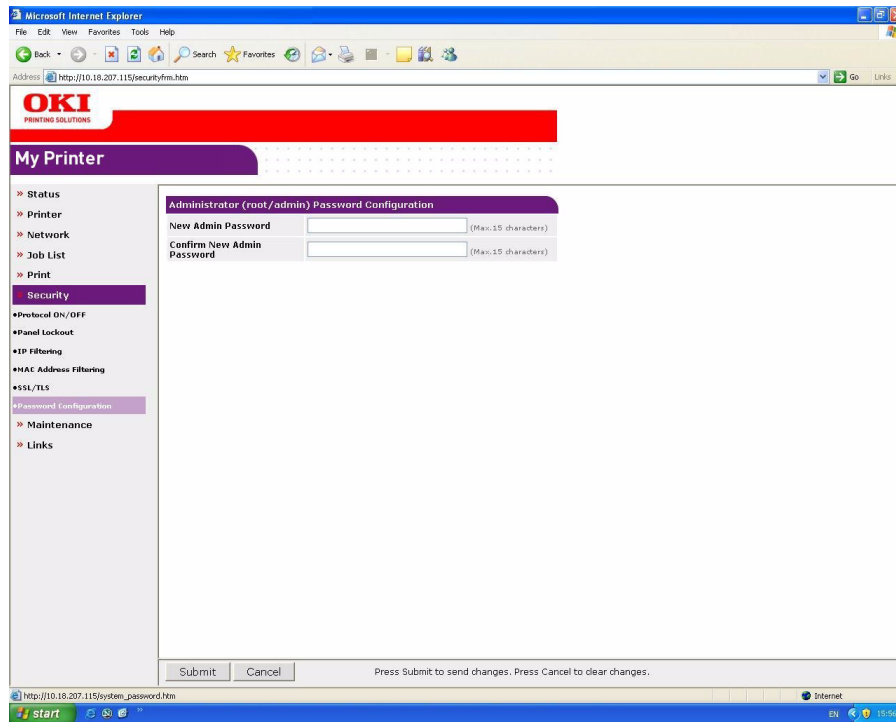
Click icon for an explanation of the options available.

7. Input the required information into the main table.
8. If required, update the following information:
 - > Key Exchange Method
 - > Key Size
9. Click **OK** to save the changes or **Cancel** to exit.

PASSWORD CONFIGURATION

To change the administrator password:

1. From the left hand panel select **Password Configuration**.



2. Enter your new password.
3. Enter your new password again to confirm.

NOTE
Maximum 15 characters.

4. Click **Submit** to save the changes or **Cancel** to exit.

USING THE PRINTER SECURITY FEATURES

NOTE

Example screenshots are used throughout this manual and as such may not represent the screens displayed for your machine. Some of the features shown on the example screenshots may not be available on your machine.

SECURE PRINTING

Secure printing allows you to print confidential documents on machines that are shared with other users in a network environment.

The document does not print until a PIN (Personal Identification Number) is entered through the control panel. You must go to the machine and enter the PIN.

This feature requires the hard disk drive option to be fitted to your machine and enabled in the printer driver.

If there is not enough hard disk space for the spooled data, a "Disk Full" message displays, and only one copy prints.

NOTE

1. *The secure printing feature may not be available from within some PC applications.*

2. *The secure printing feature is not supported in the Mac environment.*

If your application software has a collate print option, turn it off otherwise secure printing will not work.

There are three parts in secure printing:

- > "Sending the document" on page 16
 - > "Printing the document" on page 17
 - > "Deleting a secure print document" on page 18
-

NOTE

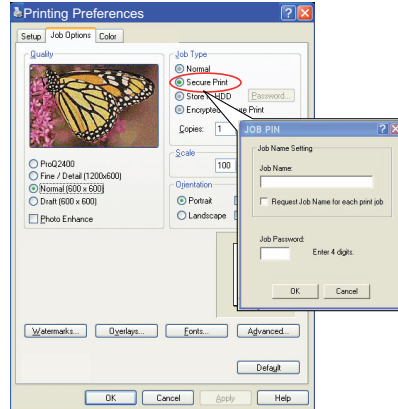
The menu buttons on your machine's control panel vary depending on the model.

*For illustration purposes we will demonstrate the Printing and Deleting procedures using the +/- and **Enter** buttons; your machine may have **Up/Down** and **Return** arrow buttons instead however the procedure is identical.*

*If your machine has a touch screen and numerical keypad buttons, the principle is basically the same; press the **Print** button to access the print menu options. There are on-screen instructions to guide you through the process.*

SENDING THE DOCUMENT

1. If using the PCL driver, in the **Setup** tab choose any saved driver settings you wish to use.
2. In the driver's **Job Options** tab, click **Secure Print**.
The Job PIN (Personal Identification Number) window opens.



3. If the PIN window does not open, click the **PIN** button.
4. In the Job PIN window, enter a **name** for this print job.
The name may be up to 16 alpha-numeric characters. If you have more than one print job stored on the machine when you come to print, you will need a distinctive name to distinguish each of your print jobs.
5. If you would like a prompt at the machine for the job name, click the **Request...** check box below the name entry.
6. Enter a number from 0000 to 9999 in the **PIN** box.
Your PIN must be unique on this machine. Each user should be allocated a PIN by the system administrator.
7. Click **OK** to accept your changes.
8. Click **OK** to close the **Printer Properties** window.
9. Print your document.
The print job will be sent to the machine, but will not print at this time.

PRINTING THE DOCUMENT

NOTE

The menu buttons on your machine's control panel will vary depending on the model.

*For illustration purposes we will demonstrate the following procedure using the **+/-** and **Enter** buttons; your machine may have **Up/Down** and **Return** arrow buttons instead however the procedure is identical.*

*If your machine has a touch screen and numerical keypad buttons, the principle is basically the same; press the **Print** button to access the print menu options. There are on-screen instructions to guide you through the process.*

Your secure print job is printed using the control panel on the front of the machine.

1. When the machine is idle, use the **+/-** buttons to select the **PRINT JOB** menu, then press **ENTER**.
2. Select **ENCRYPTED/STORED JOB**.
3. Use the **+/-** buttons to enter your PIN. Press **ENTER** after each digit.
If you have more than one stored document, a list appears in the display.
4. Use the **+/-** buttons to select the name of the print job you wish to print, and press **ENTER** to select it.
5. If necessary, use the **+/-** buttons to highlight the **PRINT** option.
6. Press **ENTER** to confirm you wish to print the document.
7. Use the **+/-** buttons to select the number of collated copies you require.
8. Press **ENTER** to print your document.

When all required copies have been printed your document is automatically deleted from the machines hard disk.

NOTE

It is also possible to print and delete secure documents remotely from your PC using the Storage Device Manager utility.

DELETING A SECURE PRINT DOCUMENT

NOTE

The menu buttons on your machine's control panel will vary depending on the model.

*For illustration purposes we will demonstrate the following procedure using the +/- and **Enter** buttons; your machine may have **Up/Down** and **Return** arrow buttons instead however the procedure is identical.*

*If your machine has a touch screen and numerical keypad buttons, the principle is basically the same; press the **Print** button to access the print menu options. There are on-screen instructions to guide you through the process.*

If you change your mind about printing a secure document, you can delete it from the machine's hard disk without printing it first.

- 1.** Follow steps [1](#) to [4](#) in the above procedure for printing the document.
- 2.** Use the +/- buttons to highlight the **DELETE** option and press **ENTER**.
- 3.** If necessary, use the +/- buttons to highlight the **YES** choice, and press **ENTER** to confirm the deletion.

Your document is deleted from the machine's hard disk without printing.

STORE TO HARD DISK

This feature allows print jobs to be created on the PC and stored on the machine's hard disk for printing on demand. This is good for forms, generic memos, letterhead, stationery, etc.

If you use this feature for standard forms, for example, you can walk up to the machine at any time and print off your forms without having to re-send them from the PC.

This feature works in exactly the same way as the secure printing feature described earlier in this chapter, and is available only in the Windows PostScript and PCL drivers. The difference with job spooling is that the document is not automatically deleted from the machine's hard disk after printing. It remains there for future use until you delete it from the Printer Control Panel or from your PC with the Storage Device Manager utility.

NOTE

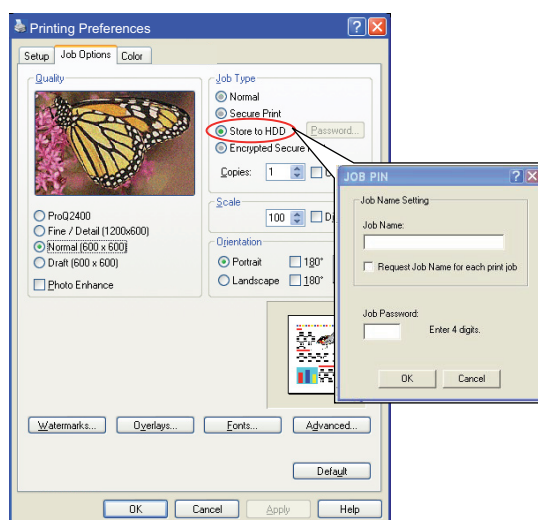
If this choice does not appear in the driver screens, or if it is greyed out, check to ensure that the hard disk is enabled in the printer driver.

Like the secure printing feature, there are three activities in job spooling:

- > Sending the document
- > Printing the document
- > Deleting a stored document

SENDING THE DOCUMENT

Follow the same procedures as described in the section ["Sending the document" on page 16](#) for sending a secure document, except that on the **Job Options** tab in step 2, click **Store to HDD**.



PRINTING THE DOCUMENT

Follow the same procedures as described in ["Printing the document" on page 17](#) for printing a secure document. In this case the document will not be deleted from the hard disk after it has been printed.

DELETING A STORED DOCUMENT

Follow the procedure as described in ["Deleting a secure print document" on page 18](#) for deleting a secure print document.

Like secure print documents, any other documents stored on the machine's hard disk can also be deleted remotely from the PC using the Storage Device Manager utility.

ENCRYPTED SECURE PRINTING

Security over the network is an increasing concern for some organisations. Encrypted secure printing allows you to send, store and print confidential documents on machines that are shared with other users in a network environment.

Encrypting your documents before sending them to your machine will prevent unauthorised personnel accessing confidential or sensitive information.

Print jobs are encrypted immediately before transmission to the machine, where they are stored in an encrypted format on the hard disk drive. The documents will remain stored and unprinted until an authorised user authenticates the print job; decryption only happens when the job is actually printing.

This feature requires the hard disk drive to be installed in your machine and enabled in the printer driver.

NOTE

1. The secure printing feature may not be available from within some PC applications.
 2. The secure printing feature is not supported in the Mac environment.
-

If your application software has a collate print option, turn it off otherwise encrypted printing may not work.

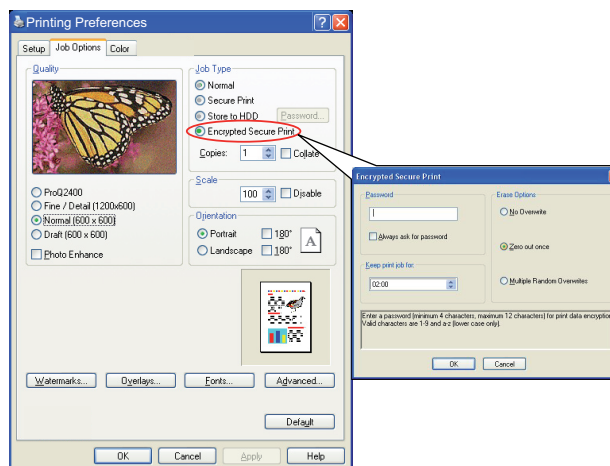
As deletion is automatic, there are only two activities in encrypted secure printing:

- > Sending the document
- > Printing the document

SENDING THE DOCUMENT

1. If using the PCL driver, in the **Setup** tab choose any saved driver settings you wish to use.
2. In the driver's **Job Options** tab, click **Encrypted Secure Print**.

The Encrypted Secure Print window opens.



3. In the Encrypted Secure Print window, enter a **Password** for this print job:
The password must be between 4 and 12 alpha-numeric characters. Numbers 1 to 9 and letters a to z are all valid.
4. If you would like a prompt at the machine for the job password, click the **Always ask for password** checkbox below the password entry.

5. Select the required erase option for your print job:
 - > **No overwrite:** simply erases a print job without overwriting the job with data. This erase method poses a risk as the print job can be reconstructed.
 - > **Zero out once:** erases a print job after overwriting it with data once. This erase method is safer than the "No overwrite" option. However it still poses a risk of the print job being reconstructed.
 - > **Multiple Random Overwrites:** erases a print job after overwriting it with data three times. This is the safest method of erasing a print job. However it takes longer to complete the job.
6. Select the **Auto Erase Time-out** period.

Specify a period of time (hours:minutes) during which the print job is stored in the machine's HDD. When this period expires, the print job is automatically erased from the HDD.
7. Click **OK** to accept your changes.
8. Click **OK** to close the Printer Properties window.
9. Print your document.

PRINTING THE DOCUMENT

Follow the same procedures as described in the section ["Printing the document" on page 17](#) for printing a secure document.

In this case you will enter your password, and the document will be erased from the hard disk depending on the options you specified in Sending the document, step 5 ["Select the required erase option for your print job:" on page 21](#) when sending the document to print.

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