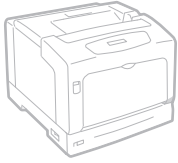**Xerox Phaser 7100**
Color Printer
Imprimante couleur

Xerox® Phaser® 7100

System Administrator Guide
Guide de l'administrateur système

Italiano   Guida per l'amministratore del sistema
Deutsch   Systemhandbuch
Español   Guía del administrador del sistema
Português   Guia de Administração do Sistema
Русский   Руководство системного администратора

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Introduction 1

This chapter includes:

Overview

This guide is designed for a system administrator with network administrator rights who has knowledge of networking concepts as well as experience creating and managing network user accounts.

This guide will help you install, configure, and manage the printer on a network.

Notes:

- Network features are not available if you are connected through USB.
- Embedded fax features are not available for all printer models.

Configuration Steps

When configuring the printer for the first time, Xerox suggests that you follow these steps in this order:

1. Connect an Ethernet cable from your printer to the network.
2. Confirm that your printer is recognized on your network. By default, the printer is configured to receive an IP address from a DHCP server over a TCP/IP network. If you have another type of network, or want to assign a static IP address, see Configuring TCP/IP Settings in CentreWare Internet Services on page 21.
3. Provide basic information such as your location, time zone, and date and time preferences, by completing the Installation Wizard.
4. Print a Configuration Report listing the current configuration of the printer. Review the report and locate the IP address of the printer. For details, see Accessing the Configuration Report on page 14.
5. Open a Web browser and type the IP address of your printer to access CentreWare Internet Services. CentreWare Internet Services is administration and configuration software installed on the embedded Web server of the printer. For details, see Accessing CentreWare Internet Services on page 14.

   Note: Most configuration settings can be accessed by selecting the Properties tab in CentreWare Internet Services. If your printer is locked, you must log in as the system administrator. For details, see Accessing CentreWare Internet Services on page 14.

6. Configure Authentication. For details, see Setting up Access Rights on page 44.
7. Configure Security. For details, see Security on page 43.
8. Enable services in CentreWare Internet Services. For details, see Enabling Services and Options on page 16.
9. Configure Print features. For details, see Printing on page 57.
10. Configure Accounting. For details, see Accounting on page 67.

More Information

See the following links for more information about your printer.

Information	Source
Installation Guide	Packaged with printer
Quick Use Guide	Packaged with printer and www.xerox.com/office/7100docs
User Guide (PDF)	*Software and Documentation Disc* www.xerox.com/office/7100docs
Recommended Media List	www.xerox.com/paper (United States) www.xerox.com/europaper (Europe)
Online Support Assistant	www.xerox.com/office/7100support
Technical Support	www.xerox.com/office/7100support
Information pages	Print from the control panel menu

Initial Setup

2

This chapter includes:

Physical Connection

To connect your printer:

1. Connect the power cable to the printer, and plug it into an electrical outlet.
2. Connect one end of a Category 5 or better Ethernet cable to the Ethernet port in the back of the printer. Connect the other end of the cable to a correctly configured network port.
3. Turn the printer on.

Initial Setup at the Control Panel

The Installation Wizard

The first time the printer is turned on, the Installation Wizard starts. The wizard prompts you with a series of questions to help you configure basic settings for your printer.

Configuration Report

After you complete the installation wizard, you can print a Configuration Report. The Configuration Report lists the current settings of the printer. For details, see Accessing the Configuration Report on page 14.

System Administrator Access at the Control Panel

To configure the printer from the control panel, press the **Menu** button, then navigate to the **Admin Menu**. If the printer is locked, log in as the system administrator.

To log in as a system administrator:
1. At the printer control panel, press **Menu**.
2. Use the arrow buttons to type the administrator passcode, then press **OK**.

Locking or Unlocking the Printer

To lock or unlock the printer:
1. At the control panel, press **Menu**.
2. Navigate to **Admin Menu** > **System Settings** > **Panel Settings**.
3. Navigate to **Panel Lock** > **On**, then press **OK**.
4. When prompted, use the arrow buttons to change and revalidate the Passcode, then press **OK**.
5. Navigate to **Max Login Attempts**, then select **Limited** or **Unlimited**.
6. If Limited is selected, navigate to Login Attempts, then use the arrow buttons to select the number of attempts allowed.

Assigning a Network Address

By default, the printer automatically acquires a network address from a DHCP server. To assign a static IP address, configure DNS server settings, or configure other TCP/IP settings. For details, see Configuring TCP/IP Settings at the Control Panel on page 20.

Connecting to a Wireless Network

You can connect the printer to a wireless network using the optional Wireless Network Adapter. For installation help, see the instructions packaged with the adapter.

Initial Setup in CentreWare Internet Services

CentreWare Internet Services is an application on the embedded Web server of the printer. This application allows you to configure and administer the printer from a Web browser on any computer.

Accessing CentreWare Internet Services

Before you begin:
- TCP/IP and HTTP must be enabled to access CentreWare Internet Services. If you disable either of these services, you must enable them at the printer before accessing CentreWare Internet Services.
- Refer to the Configuration Report to determine your printer IP address.

To access CentreWare Internet Services:

At your computer, open a Web browser, type the printer IP address in the address field, then press **Enter** or **Return**.

Note: If your printer is locked, type the system administrator user name and password to access the Properties tab. The administrator user name is **admin** and the default password is **1111**.

Changing the System Administrator Password

Xerox recommends that you change the default system administrator password after configuring the printer for security. Store the password in a secure location.

To change the administrator password:
1. In CentreWare Internet Services, click **Properties > Security > System Administrator Settings**.
2. Select **Enabled** next to **Set System Administrator's Login ID**.
3. Type the login ID next to **Administrator's Login ID**.
4. Type the new password next to **Administrator's Passcode**.
5. Retype the password to verify.
6. Set the maximum number of login attempts between 0 and 10, as needed. Type 0 to allow an unlimited number of login attempts.
7. Click **Apply**.

Accessing the Configuration Report

The Configuration Report lists the current settings of the printer. By default, a Configuration Report prints at startup.

Printing the Configuration Report

1. At the printer control panel, press **Menu**.
2. Navigate to **Print Reports**, then press **OK**.

3. Navigate to **Configuration**, then press **OK**.
4. To print the report, at the prompt, press **OK**.

Using the Configuration Overview Page

The Configuration Overview page provides shortcuts to commonly accessed pages under the Properties tab.

To access the Configuration Overview page, click **Properties > Configuration Overview**.

Assigning a Name and Location to the Printer

The Description page provides a place to assign a name and location to the printer for future reference.

To assign a name and location:
1. In CentreWare Internet Services, click **Properties > Description**.
2. Type a name for the printer next to **Machine Name**.
3. Type the location of the printer next to **Location**.
4. Type the printer email address, administrator contact information, and comments in the provided fields, as needed.
5. Click **Apply**.

Enabling Services and Options

Some services and options must be enabled before they can be used. To enable these special services and options, use either the control panel or CentreWare Internet Services.

Enabling Services and Options in CentreWare Internet Services

1.   In CentreWare Internet Services, click **Properties > Security > Feature Enablement**.
2.   Type **Unique Function Code**.
3.   Click **Apply**.
4.   In **Status**, select **Reboot Machine**.

Network Configuration 3

This chapter includes:

TCP/IP

Transmission Control Protocol (TCP) and Internet Protocol (IP) are two protocols within the Internet Protocol Suite. IP manages the transmission of messages from one computer to another and TCP manages the actual end-to-end connections.

Note: You can configure IPv4 settings at the printer control panel or through CentreWare Internet Services. You can only configure IPv6 through CentreWare Internet Services.

Enabling TCP/IP

Note: By default, TCP/IP is enabled. If you disable TCP/IP, you must enable it at the printer control panel before you accessing CentreWare Internet Services.

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Network / Port > TCP/IP Settings > IP Mode**.
4. Select **IPv4 Mode**, **IPv6**, or **Dual Stack** to enable both IPv4 and IPv6, then press **OK**.

Configuring TCP/IP Settings at the Control Panel

Manually Configuring an IPv4 Network Address

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Network / Port > TCP/IP**.
4. Navigate to **IPv4 Settings**, then press **OK**.
5. Navigate to **Get IP Address > Static**, then press **OK**.
6. Navigate to **IPv4 - IP Address**.
7. Use the arrow buttons to type the static IP address, then press **OK**.
8. Navigate to **IPv4 - Subnet Mask**.
9. Use the arrow buttons to type the subnet mask, then press **OK**.
10. Navigate to **IPv4 - Gateway Address**.
11. Use the arrow keys to type the gateway mask, then press **OK**.

Manually Configuring an IPv6 Network Address

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Network / Port > TCP/IP > IP Mode**.
4. Navigate to **IPv6 Settings**.
5. Press **Enabled**, then press **OK**.

Configuring IPv4 Dynamic Address Settings

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Network / Port > TCP/IP**.
4. Navigate to **IPv4 Settings > Get IP Address**.
5. Select **DHCP**, **DHCP/Autonet**, **BOOTP**, or **RARP**, then press **OK**.

Configuring DNS/DDNS Settings

Domain Name System (DNS) and Dynamic Domain Name System (DDNS) is a system that maps host names to IP addresses.

1. At the printer control panel, press **Menu.**
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Network / Port > DNS Server**.
4. To allow your DHCP server to provide the DNS server address, press **Get IP Address from DHCP**. Press **Enabled**, then press **OK**.
5. Navigate to **IPv4 DNS Server Settings**, or **IPv6 DNS Server Settings**, then press **OK**.
6. To manually provide the DNS server address, press **Server IP Address**. Use the arrow keys to type the DNS server address, then press **OK**.

Configuring TCP/IP Settings in CentreWare Internet Services

If your printer has a valid network address, you can configure TCP/IP settings in CentreWare Internet Services.

Configuring Settings for IPv4

IPv4 can be used in addition to or in place of IPv6. If both protocols are disabled, you cannot access CentreWare Internet Services.

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > TCP/IP**.

   Note: IPv4 is enabled by default.

⚠️ **CAUTION:** If both IPv4 and IPv6 are disabled, you cannot access CentreWare Internet Services. You must re-enable TCP/IP at the printer control panel before you can access CentreWare Internet Services. Disabling TCP/IP or changing the IP address also disables any dependant protocols.

2. Type a unique **Host Name** for your printer.

3. Select the desired method for obtaining a dynamic IP address from the **IP Address Resolution** drop-down menu, or select **Static** to define a static IP address.

    Notes:

    - If you select **Static**, type the **IP Address**, **Subnet Mask**, and **Gateway Address** in the appropriate fields.
    - If you select BOOTP or DHCP, you cannot change the IP address, Subnet Mask, or default gateway.
    - If RARP address resolution mode is selected, you cannot change the IP address.

4. Type a valid **Domain Name**.

DNS Configuration for IPv4

1. Select **Enabled** next to Obtain DNS Server Address Automatically to allow your DHCP server to provide the DNS server address. Clear the check box to manually provide the DNS server address, and type an IP address for the **Preferred DNS Server**, **Alternate DNS Server 1**, and **Alternate DNS Server 2** in the appropriate fields.

    Note: If DHCP or BOOTP is the IP Address Resolution setting, you cannot change the Domain Name, Primary DNS Server, Alternate DNS Server 1, and Alternate DNS Server 2 settings.

2. Select **Enabled** next to Dynamic DNS Registration (DDNS) to register the host name of the printer in the DNS server. Select **Overwrite** if you want to overwrite existing entries in the DNS server.

    Note: If your DNS Server does not support dynamic updates, you do not need to enable DDNS.

3. Select **Enabled** next to Generate Domain Search List Automatically if you want the printer to generate a list of search domains. Type the domain names if the option is disabled.

4. Type the time allowed (1–60) in the space next to **Connection Time-Out**, until the printer stops attempting to connect to the server.

5. To set the printer to release its IP address when it restarts, next to Release Current IP Address When the Host is Powered Off, select **Enabled**.

Zero-Configuration Networking

1. If the printer cannot connect to a DHCP server to obtain an IP address, select **Self Assigned Address** to allow the printer to assign itself a Link-Local address. Link-Local addresses are between 169.254.0.0 and 169.254.255.255.

2. Click **Apply**.

Configuring Settings for IPv6

IPv6 hosts can be automatically configured when connected to a routed IPv6 network by using the Internet Control Message Protocol Version 6 (ICMPv6). ICMPv6 performs error reporting for IP along with other diagnostic functions. When first connected to a network, a host sends a link-local multicast router solicitation request for its configuration parameters. If configured correctly, routers respond to this request with a router advertisement packet containing network-layer configuration parameters.

    Note: IPv6 is optional and may be used in addition to or in place of IPv4. If both protocols are disabled, you cannot access CentreWare Internet Services.

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **TCP/IP**.

2. Under **IP Mode**, select **IPv6**, or select **Dual Stack** to use both IPv4 and IPv6.

By default, IPv6 is disabled.

⚠ **CAUTION:** If both IPv4 and IPv6 are disabled, you cannot access CentreWare Internet Services. You must re-enable TCP/IP at the printer control panel before you can access CentreWare Internet Services. Disabling TCP/IP or changing the IP address also disables any dependant protocols.

Notes:

- The host name is the same for IPv4 and IPv6. If you change the host name for IPv6, the host name changes for IPv4 as well.
- Enabling or disabling IPv6 will restart the printer when you click **Apply**.

3. To manually assign an address, select **Enabled** next to Enable Manual Address.

    Type the **IP Address** and **Gateway Address**.

4. To allow your DHCP server to assign an IP address to the printer, select **Enabled** next to Get IP Address from DHCP.

5. Type the required **Domain Name**.

DNS Configuration for IPv6

1. To allow the DHCP server to provide the DNS server address, select **Enabled** next to Obtain IPv6 DNS Server Address Automatically.

2. Type an IP address for **Preferred DNS Server**, **Alternate DNS Server 1**, and **Alternate DNS Server 2**.

3. Select **Enabled** next to Dynamic DNS Registration. To replace the existing DNS entry, select **Overwrite**.

4. Select **Enabled** next to Generate Domain Search List Automatically, if you want the domain name to be searched automatically.

5. Type **Domain Name** 1, 2 and 3.

6. Type the number of seconds until **Connection Time-Out**.

SNMP

Simple Network Management Protocol (SNMP) is used in network management systems to monitor network-attached devices for conditions that require administrative attention. This protocol consists of a set of standards for network management including an application layer, a database schema, and a set of data objects. Agents, or software modules, reside in the SNMPv3 engine of the printer. A manager is an SNMPv3 management application, such as OpenView, that is used to monitor and configure devices on the network. The agent responds to read (GET) and write (SET) requests from the manager and can also generate alert messages, or Traps, based on certain events.

SNMP settings can be configured in CentreWare Internet Services. You can also enable or disable Authentication Failure Generic Traps on the printer. SNMPv3 can be enabled to create an encrypted channel for secure printer management.

Enabling SNMP

1. In CentreWare Internet Services, click **Properties > Connectivity > Port Settings**.
2. Select **Enabled** next to **SNMP**.

Configuring SNMP

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > SNMP Configuration**.
2. Under **SNMP Properties**, select **Enable SNMP v1/v2c Protocols** or **Enable SNMP v3 Protocol**, then click **Apply**.

    Note: You must click **Apply** to save your settings or the protocol will remain disabled.

3. Under **Authentication Failure Generic Traps**, select **Enabled** for the printer to generate a trap for every SNMP request that is received by the printer and contains an invalid community name.
4. Click **Apply**. For details, see SNMP Advanced Settings on page 25.

Editing SNMP v1/v2c Properties

Note: Xerox recommends that you change the SNMP v1/v2c public and private community names from the default values for security purposes.

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > SNMP Configuration**.
2. Under **SNMP Properties**, click **Edit SNMP v1/v2c Properties**.
3. Type a name up to 256 characters for the **Community Name (Read Only)** or use the default value of **public**. GET returns the password for the SNMP GET requests to the printer. Applications that obtain information from the printer by using SNMP, such as CentreWare Internet Services, use this password.

4. Type a name up to 256 characters for the **Community Name (Read / Write)** or use the default value of private. SET returns the password for the SNMP SET requests to the printer. Applications that set information on the printer by using SNMP, use this password

⚠ **CAUTION:** Any changes made to GET or SET community names for this printer require corresponding changes to GET or SET community names for each application that uses SNMP to communicate with this printer.

5. Type a name up to 256 characters for the default **Trap Community Name** or use the default value of **SNMP_TRAP**.

   Note: The Default Trap Community Name is used to specify the default community name for all traps generated by this printer. The Default Trap Community Name can be overridden by the Trap Community Name specified for each individual trap destination address. The Trap Community Name of one address may not be the same for another address.

6. Type the **System Administrator's Login ID**.
7. Click **Apply**.

Editing SNMP v3 Settings

Note: Before SNMPv3 can be enabled, a digital certificate must be installed on the printer and SSL must be enabled. For details, see Installing a Digital Certificate on page 48.

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **SNMP**.
2. Under **SNMP Properties**, click **Edit SNMP v3 Properties**.
3. To create the administrator account, click **Account Enabled** under Administrator Account.
4. Type an **Authentication Password** then confirm it. This password is used to generate a key used for authentication.

   Note: The password must be at least eight characters in length and can include any characters except control characters.

5. Type a **Privacy Password** and confirm it.

   The Privacy password is used for encryption of SNMPv3 data. The passphrase used to encrypt the data needs to match with the Server.

6. Under **Print Drivers/Remote Clients Account**, click **Account Enabled**.
7. Click **Apply**.

SNMP Advanced Settings

Adding IP Trap Destination Addresses

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **SNMP**.
2. Click **Advanced** at the bottom of the page.
3. Under **Trap Destination Addresses**, click **Add UDP IPv4 Address** or **Add UDP IPv6 Address**.

4. Type the IP address of the host running the SNMP manager application to be used to receive traps.

    Note: Port 162/UDP is the default port for traps. You can select v1 or v2c based on what the trap receiving system supports.

5. Under **Traps**, select the type of **Traps to be Received** by the SNMP manager.

6. Click **Apply**.

Adding IPX Trap Destination Addresses

Internetwork Packet eXchange (IPX) is a routing protocol used by Novell environments.

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **SNMP**.

2. Click **Advanced** at the bottom of the page.

3. Under **Trap Destination Addresses**, click **Add IPX Address**.

4. Type the 8-digit hexadecimal number that identifies the **IPX External Network** host configured to receive the trap.

5. Type the 48-bit **Physical MAC Address** of the computer that is running the SNNP manager application that is configured to receive the trap.

6. Type the **IPX Socket Number** of the computer running the SNMP manager application configured to receive the packets.

7. Select the SNMP version, **SNMP v1** or **SNMP v2c**, based on the trap receiving system.

8. Under **Traps**, select the type of **Traps to be Received** by the SNMP manager.

SSDP

Simple Service Discovery Protocol (SSDP) provides processes to allow network clients with little or no static configuration to discover network services. SSDP provides multicast discovery, server-based notification, and discovery routing options.

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols**.
2. Click **SSDP**.
3. Select **Enabled (UPnP)** next to SSDP Port Status.
4. Type the number of minutes between 60 and 4320 minutes for **Valid Advertising Period**.
5. Type a number between 1 and 10 for **Maximum TTL**.
6. Click **Apply** to save the new settings or click **Undo** to retain the previous settings.

Microsoft Networking

Enabling Microsoft Networking

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Port Settings**.
2. Select **Enabled** next to SMB.
3. To enable these protocols, select **TCP/IP** or **NetBEUI**.
4. Click **Apply**.

Configuring Microsoft Networking

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **Microsoft Networking**.
2. Select a transport protocol from the **Transport** drop-down list.
3. Set the maximum number of connections. Default is five.
4. Type the workgroup name in the **Workgroup** field.
5. Type the host name in the **SMB Host Name** field.
6. Select **Enabled** next to TBCP Filter, if your SMB server supports unicode.
7. Select **Enabled** next to Unicode Support, if your SMB server supports unicode.
8. Select **Enabled** next to Auto Master Mode, if your SMB server supports it.
9. To encrypt user passwords for remote authentication using SMB, select **Enabled** next to Password Encryption.

Configuring WINS

When running WINS, the printer registers its IP address and NetBIOS host name with a WINS server. WINS allows users to communicate with the printer by only using the host name, removing a significant overhead from the systems administrators.

To configure primary and secondary WINS servers:

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **Microsoft Networking**.
2. To allow the DHCP server to provide your WINS server address to the printer, select **DHCP** next to Obtain WINS Server Address Automatically.
3. To provide the WINS server address manually, type it in the **Primary Server IP Address field**.
4. Type the secondary WINS server address in the **Secondary Server IP Address** field as needed.
5. Click **Apply**.

LPD

The Line Printer Daemon (LPD) protocol is used to provide printer spooling and network print server functionality for operating systems such as HP-UX, Linux, and MAC OS X.

Note: For information on setting up print queues on your client system, refer to your client system's documentation.

Enabling LPD

1. In CentreWare Internet Services, click **Properties > Connectivity > Port Settings**.
2. Select **Enabled** next to LPD.

Note: Disabling LPD will affect clients printing to the printer over TCP/IP using the LPR printing port.

Configuring LPD

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > LPD**.
2. Type an LPD **Port Number** between **1 and 65535**, or use the default port number of 515.
3. Type the **Connection Time-Out**.
4. Type the **Maximum Number of Sessions**.
5. If required, select **Enabled** next to TCP-MSS Mode.

Note: TCP-MSS settings are common to LPD and Port 9100.

6. If TCP-MSS mode is enabled, under **IPv4**, type the IP addresses for **Subnet 1**, **2**, and **3**.
7. Click **Apply**.

Raw TCP/IP Printing

Raw TCP/IP is a printing method used to open a TCP socket-level connection over Port 9100, to stream a print-ready file to the printer input buffer. The connection is then closed either after sensing an End Of Job character in the PDL or after expiration of a preset timeout value. Port 9100 does not require an LPR request from the computer or the use of an LPD running on the printer. Port 9100 is selected in Windows as the Standard TCP/IP port.

Enabling Port 9100

Note: TCP/IP must be enabled before Port 9100 is enabled.

1.   In CentreWare Internet Services, click **Connectivity > Port Settings**.
2.   Select **Enabled** next to Port 9100.

Configuring Port 9100

1.   In CentreWare Internet Services, click **Properties > Connectivity > Protocols > Port 9100**.
2.   If required, select **Enabled** next to **TCP-MSS Mode**.

Note: TCP-MSS settings are common to LPD and Port 9100.

3.   If TCP-MSS mode is enabled, under **IPv4**, type the IP addresses for **Subnet 1**, **2**, and **3**.
4.   Ensure that the TCP Port Number is set to 9100.
5.   Set the **End of Job Timeout** to the desired number of seconds between 2 and 65535 before processing a job with an **End of Job** character. The default time is 60 seconds.
6.   Click **Apply**.

SMTP

Configuring SMTP Server Settings

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **SMTP Server**.
2. Under **Required Information**, select the method to be used to locate an SMTP server.
   - To allow DNS to automatically find an SMTP server on the network, select **From DNS**.
   - To map to a specific SMTP server, select **STATIC**.

   Note: If you select **From DNS**, ensure that DNS is configured for either IPv4 or IPv6 before you can define the SMTP server. For details, see Configuring DNS/DDNS Settings on page 21.
3. Type the SMTP server IP address or host name.
4. Type the port numbers between 1 and 65535 for sending and receiving email. The default port number is 25.
5. Select **Disabled**, **STARTTLS (If Available)**, **STARTTLS**, or **SSL / TLS** next to SMTP - SSL / TLS Communication.
6. Type the specific email address assigned to this printer by the SMTP server in the **Machine's E-mail Address** field.

Optional Information

1. To improve the transmission speed, you can set messages to be fragmented between 2 and 500 times. Select **Enabled** next to Split Send and type the number of fragments in the **Maximum Split Count** field.
2. If you enable Split Send, you can select how the email jobs should be split. Under **Split Send Method**, select one of the following:
   - **Split into Pages**: If you select this option, the mail client will not reassemble the job on receipt.
   - **Split by Data Size**: If you select this option, the mail client is required to reassemble the job on receipt.
3. To define a maximum message size for messages with attachments, type a value between 512 KB and 20480 KB next to **Maximum Data Size per Email**. The default size is 10240 KB.
4. To set a maximum job size, type a value between 512 KB and 2000000 KB next to **Maximum Total Data Size**.
5. Under **Login Credentials for the Machine to Access the SMTP Server to send automated emails** select **POP before SMTP** or **SMTP AUTH** to have the printer authenticate itself by using the Login Name and Password set up on this page. If you select **None**, the printer will not provide authentication credentials to the SMTP server.
6. If authentication is enabled and the printer requires users to log in before they can access email, select **Remotely Authenticated User** under **Login Credentials for Sending Emails** to use the credentials of the user to access the SMTP server.
7. Click **Apply**.

LDAP

Lightweight Directory Access Protocol (LDAP) is a protocol used to process queries and updates to an information directory, also known as an LDAP directory, stored on an external server. LDAP directories are heavily optimized for read performance. Use this page to define how the printer retrieves user information from an LDAP directory.

Configuring LDAP/LDAPS Server Settings

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **LDAP** > **LDAP Server**.
2. Under **Server Information**, type the appropriately formatted main and backup LDAP server addresses and port numbers. The default port number is 389.

Optional Information

1. Type the search directory root path in the **Search Directory Root** field by using the Base DN format.

   Note: For details on Base DN formatting, refer to the *RFC 2849 - LDAP Data Interchange Format (LDIF) Technical Specification* on the IETF website.
2. Type **Login Name** and **Password**, as needed. Retype the password to confirm.
3. If the primary LDAP server is connected to additional servers, select **LDAP Referrals** to include those LDAP servers in your searches.
4. Type the maximum number of consecutive LDAP referrals in the **LDAP Referral Hop Limit** field.
5. Click **Apply**.

Defining User Mappings

LDAP servers provide different results to search queries depending on how user data is mapped. Editing the mapping allows you to fine-tune server search results.

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **LDAP** > **LDAP User Mappings**.
2. To send a test query, under **Search**, type the name of the user you want to search for in the **User Name** field, then click **Search**.

   If a match occurs, the user information is displayed.
3. Use the drop-down menus under **Imported Heading** to remap fields as needed.

   Note: Headings are defined by the LDAP server's schema.

Configure Authentication for LDAP

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **LDAP** > **LDAP Authentication**.
2. Select **Direct Authentication** or **Authentication of User Attributes** next to Authentication Method.

3. Type **Network User ID Attributes**.
4. Type **Attributes of Smart Card**.
5. Click **Apply**.

Configuring Authorization Access for LDAP

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **LDAP** > **LDAP Authorization Access**.
2. Type the access information of the system administrator next to **System Administrator Access**.
3. Type the access information of the accounting administrator next to **Accounting Administrator Access**.
4. Click **Apply**.

Configuring Filters for LDAP

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **LDAP** > **Custom Filters**.
2. In the **User ID Query Filter** field, type the LDAP search string or filter that you wish to apply. The filter defines a series of conditions that the LDAP search must fulfill in order to return the information you want.

   Note: The search string should be formatted as LDAP objects inside of parentheses. For example, to find the user with a sAMAccountName of Bob, type **(objectClass=user) (sAMAccountName=Bob)**.
3. Click **Apply**.

POP3

Post Office Protocol, version 3 (POP3) allows email clients to retrieve email from remote servers over TCP/IP on network port 110.

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **POP3 Setup**.
2. Type the appropriately formatted address and port number. The default port number is 110.
3. Select **APOP Authentication** next to POP Receive Password Encryption.
4. Type the **Login Name** assigned to the printer that will be used to log in to the POP3 server.
5. Type a password. Retype the password to confirm.
6. Type the number of minutes between 1 and 120 for **Polling Interval**. The default value is 10 minutes.
7. Click **Apply**.

HTTP

Hypertext Transfer Protocol (HTTP) is a request-response standard protocol between clients and servers. Clients making HTTP requests are referred to as User Agents (UAs), and servers responding to these requests for resources such as HTML pages, are referred to as origin servers. There can be any number of intermediaries, such as tunnels, proxies, or gateways between UAs and origin servers.

Enabling HTTP

By default, HTTP is enabled. If you disable HTTP, you will need to enable it at the printer before you can access CentreWare Internet Services.

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Network Port**, then press **OK**.
4. Navigate to **Internet Services**, then press **Port Status**.
5. Press **Enabled**, then press **OK**.

Configuring HTTP Settings

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > HTTP**.
2. Change the maximum number of sessions if required. The default is 5.
3. Select **Enabled** next to CSRF Protection.
4. Type the **Port Number** if required. The default is 80.
5. Select **Enabled** next to Secure HTTP (SSL) to encrypt HTTP communication between the printer and client computers using CentreWare Internet Services. This includes data sent using IPSec, SNMP, and Audit Log. A digital certificate must also be installed on the printer. For details, see Installing a Digital Certificate on page 48.
6. Type the **Secure HTTP Port Number** if required. HTTP traffic will be routed to this port when SSL is enabled.

   The default port number is 443.
7. Type the time until **Connection Time-Out** as needed.
8. Click **Apply**.

Proxy Server

A proxy server acts as a go-between for clients seeking services and servers that provide them. The proxy server filters client requests and if the requests conform to the proxy server's filtering rules, grants the request and allows the connection.

A proxy server has two main purposes:

- Keeps any devices behind it anonymous for security purposes.
- Decreases the amount of time needed to access a resource by caching content, such as websites from a Web server.

1. In CentreWare Internet Services, click **Properties** > **Connectivity** > **Protocols** > **Proxy Server**.
2. Under **General**, next to Use Proxy Server, select **Enabled**.
3. Select **Same Proxy for All Protocols** next to Proxy Setup to use the same proxy settings for HTTP and HTTPS or select **Different Proxy for each Protocol**.
4. Under **Addresses to Bypass Proxy Server**, type any Web addresses or domains that you want to bypass the proxy server, such as your company's intranet site.
5. Under **HTTP Server**, type the **Server Name** and **Port Number**. The default port number is 8080.
6. Select **Enabled** next to Authentication, if your proxy server is configured to require authentication, then type a Login Name and Password. Retype the password to confirm.
7. Click **Apply**.

   Note: Proxy server settings are also used for Smart eSolutions.

IPP

Internet Printing Protocol (IPP) is used for remote printing and managing print jobs.

Enabling IPP

1. In CentreWare Internet Services, click **Properties > Connectivity > Port Settings**.
2. Select **Enabled** next to IPP.
3. Click **Apply**.

Configuring IPP

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > IPP**.
2. Next to **Add Port Number**, type the port number to be used by the printer. The default port number is 80.
3. Select **Enabled** next to TBCP Filter.
4. To allow only one specific user to control or delete any print job, select **Enabled** next to **Administrator Mode**.
5. Type the **Connection Time-Out**.
   The default time is 60 seconds.
6. Click **Apply**.

UPnP Discovery

The Universal Plug and Play discovery protocol is used to identify the available network devices and establish network services.

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols**.
2. Click **UPnP Discovery**.
3. Select **Enabled** next to UPnP Port Status.
4. Next to **Port Number**, type a value between 1 and 65535. The default value is 180.
5. Click **Apply** to save the new settings or click **Undo** to retain the previous settings.

Bonjour

To view the Host Name and Printer Name automatically assigned to this machine under Bonjour, do the following:

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols**.
2. Click **Bonjour**.

   Note: If Bonjour is not displayed in the Properties tab, click **Port Settings** and check **Bonjour**. Click **Apply**. If Bonjour is not available in the Port Settings list, click **TCP/IP** in the Protocols folder, and scroll to the bottom of the displayed page to Zero-Configuration networking.

3. Under **Bonjour Port Status**, select **Enabled**.
4. Make a note of the **Host Name** and **Printer Name** for reference in working with other Bonjour (zero-configuration) connected computers.

   Note: You can change these names, however the Host Name must be unique on the network. The automatically generated Host Name should assure its uniqueness. The Host Name has a 32-character limit, and the Printer Name has a 62-character limit. If you change either name, be sure to click Apply. You can reboot the printer remotely using the **Reboot Machine** button, which is available on the Status tab of CentreWare Internet Services.

WSD

Web Services for Devices (WSD) is the technology from Microsoft that provides a standard method for discovering and using network connected devices. It is supported by Windows Vista and Windows Server 2008. WSD is one of the several supported communication protocols.

Before you begin, ensure that the printer and client computers are on the same IP subnet.

Enabling WSD

1. In CentreWare Internet Services, click **Properties > Connectivity > Port Settings**.
2. Select **Enabled** next to WSD.
3. Click **Apply**.

Configuring WSD

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > WSD**.
2. Edit the following settings if required:
   - **Port Number**. The default number is 80.
   - **Data Receive Time-Out** in seconds. The default number is 30
   - **Notification Delivery Time-Out** in seconds. Default is 8.
   - **Maximum TTL**. The default value is 1.
   - **Maximum Number of Subscribers**. The default value is 50.
3. Select **Enabled** for TBCP Filter.
4. Click **Apply**.

SOAP

Simple Object Access Protocol is used to exchange structured information for applying Web Services in computer networks.

Configuring SOAP

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > SOAP**.
2. Select **Enabled** to enable the port status.
3. Type the **Port Number**. The default port number is 80.
4. Click **Apply**.

Security

4

This chapter includes:

See also: www.xerox.com/security

Setting up Access Rights

Overview

You can control access to the printer's services and features by setting up authentication, authorization, and personalization.

Authentication

Authentication is the process of confirming the identity of a user by comparing information provided by the user, such as their user name and password, against another source of user information such as an LDAP directory. Users can be authenticated when accessing the control panel or when accessing CentreWare Internet Services.

There are several ways to authenticate a user:

- **Local**: If you have a limited number of users, or do not have access to an LDAP network directory, you can add user information, such as user names and passwords, to the internal database of the printer. You can then specify tools and feature access for all users. Users are authenticated and authorized when they log in through the control panel.
- **Network**: The printer retrieves user information from a network directory to authenticate and authorize users when they log in through the control panel. The printer can use the LDAP protocol to communicate with the authentication server.

Authorization

Authorization is the process of defining the services and features that users are allowed to access. For example, you can configure the printer to allow a user to copy, but not email. There are two types of authorization:

- **Locally on the Device (Internal Database)**: User login information is stored locally in the internal User Information Database of the printer.
- **Remotely on the Network**: User login information is stored externally in a network database such as an LDAP directory.

Personalization

Personalization is the process of customizing services for a specific user. If your network is connected to an LDAP server, the printer can look up the home directory and email address of a user when using the Scan to Home, or Email scanning features.

Note: Personalization is available only when the printer is configured to use network authentication.

Local Authentication

Setting Up Local Authentication

To configure local authentication:

1. In CentreWare Internet Services, click **Properties > Security > Authentication Configuration**.
2. On the **Authentication Configuration** page, next to **Login Type**, select **Login to Local Accounts**.
3. To allow users without accounts to access the printer, select **Enabled** next to **Non-account Print**.
4. Click **Apply**, then click **Reboot Machine**.

To restrict or allow access to tools and features, see Digital Certificates on page 48.

User Information

Before you can define access rights for users, user information must be defined. You can add to or edit the internal User Information Database of the printer with user information, or you can specify a network database or LDAP server containing user information.

Adding User Information to the Local Database

1. In CentreWare Internet Services, click **Properties > Security > Authentication Configuration**.
2. At the bottom of the page, click **Next**.
3. On the **Authentication Configuration > Step 2 of 2** page, under **Authentication Configuration**, type the number of the account that you want to edit, then click **Edit**.
4. Type the user's **Name**, **ID**, and **Passcode**. Retype the passcode to verify.
5. Under **Feature Access**, select the features that the user is allowed to access.
6. Under **Impression/Limits**, type the values in the **Color Print Limit** and **Black and White Print Limit** field.
7. Under **User Role**, select one of the following:
   - **System Administrator**: The authenticated user in this role is allowed to access all services and settings.
   - **Account Administrator**: The authenticated user in this role is allowed to access accounting settings and other services and settings that are locked.
   - **User**: The authenticated user in this role is allowed to access services and features defined by the system administrator.

   Note: Users who are not authenticated cannot access features that are locked.
8. To add a user to an Authorization Group, select the group from the drop-down list.
9. Click **Apply** to accept the changes or **Undo** to retain the previous settings.

Specifying Login Requirements

You can specify password requirements if desired.

1. In CentreWare Internet Services, click **Properties > Security > User Details Setup**.
2. If you want the printer control panel to display text other than **UserID**, type the text in the **Alternative Name for User ID** field.

3. To display user ID characters as asterisks at the control panel, select **Hide** next to **Mask User ID**.

4. Type the number of allowed login attempts (1–600) next to **Failed Access Log**. Type 0 to allow an unlimited number of login attempts. If the maximum number of allowed attempts is exceeded, the printer is locked and must be restarted.

5. To allow users to log in without case sensitivity, select **Non-Case Sensitive** next to User ID for Login.

6. To specify the **Minimum Passcode Length** type the number of digits (4–12). Type **0** if you do not want to specify a minimum passcode length.

7. Click **Apply** to accept the changes or **Undo** to retain the previous settings.

Network Authentication

If you have an LDAP server connected to your network, you can configure the printer to retrieve user information from the LDAP directory when authenticating a user at the control panel. For details on configuring LDAP settings, see LDAP on page 32.

Setting up Network Authentication

1. In CentreWare Internet Services, click **Properties > Security > Authentication Configuration**.

2. On the **Authentication Configuration** page, next to **Login Type**, select **Login to Remote Accounts**.

3. To allow users without accounts to access the printer, select **Enabled** next to **Non-account Print**.

4. To allow a guest user to access the printer, select **On** next to **Guest User**. Type the **Guest Password**, then retype the password to verify.

5. Click **Apply**, then click **Reboot Machine**.

6. After the printer restarts, refresh your browser and navigate back to the **Authentication Configuration > Step 1 of 2** page, then click **Next** at the bottom of the page.

7. Click **Configure** next to **Authentication System**.

8. On the **Authentication System** page, select your **Authentication System** from the drop-down list.

9. Type **Server Response Time-Out** and **Search Time-Out**.

10. Select **Enabled** next to **Assign UPN (User Principal Name)**, if required.

11. Click **Apply** to accept the changes or **Undo** to retain the previous settings.

12. Click **Reboot Machine**.

Configuring Authentication Server Settings for LDAP

1. In CentreWare Internet Services, click **Properties > Connectivity > Protocols > LDAP > LDAP Authentication**.

2. Select **Direct Authentication**, or **Authentication of User Attributes** next to **Authentication Method**.

   Direct Authentication uses the user name and password provided by the user for authentication with the LDAP server. Authentication of User Attributes allows you to specify what is provided by the user (Attribute of Typed User Name) and what is used by the printer (Attribute of the Login User Name) to authenticate the user.

3. Type **Network User ID Attribute**.

4. Type **Attribute of Smart Card**.
5. Click **Apply**.

Digital Certificates

A digital certificate must be installed on the printer before you can enable secure HTTP (SSL). A digital certificate is the data used to verify the identity of the holder or sender of the certificate. A certificate includes the following data:

- Information about the person, organization, or computer that the certificate is issued to, including the name, location, email address and other contact information.
- Serial number of the certificate
- Expiration date of the certificate
- Name of the certificate authority (CA) that issued the certificate
- A public key
- Digital signature of a CA

Installing a Digital Certificate

There are three ways to install a certificate on the printer:

- Create a Self-Signed Certificate. The printer creates its own certificate, signs it, and creates a public key to be used for encryption.
- Create a request to have a certificate authority, or a server functioning as a certificate authority sign a certificate and then upload the certificate to the printer. An example of a server functioning as a CA is Windows Server running Certificate Services.
- Install a certificate created by a trusted intermediate or root CA. For details, see Managing Certificates on page 49.

  Note: Installing a self-signed certificate is less secure than installing a certificate signed by a trusted CA. However, if you do not have a server functioning as a certificate authority, the self signed certificate is your only option.

Creating a Self-Signed Certificate

1. In CentreWare Internet Services, click **Properties** > **Security** > **Machine Digital Certificate Management**.
2. Click **Create New Certificate**.
3. Select **Self Signed Certificate**.
4. Click **Continue**.
5. Select **Digital Signature Algorithms** from the drop-down menu.
6. Select the **Public Key Size** and type the name of the **Issuer**.
7. Type the number of days between 1 and 9999 or until the certificate expires next to **Days of Validity**.
8. Click **Apply**.

Creating a Request

1. In CentreWare Internet Services, click **Properties > Security > Machine Digital Certificate Management**.
2. Click **Create New Certificate**.
3. Select **Certificate Signing Request (CSR)**.
4. Fill out the form with your 2-Letter Country Code, State/Province Name, Locality Name, Organization Name, Organization Unit, and Email Address.
5. Click **Apply**.
6. Values from the form are used to generate a Certificate Signing Request.
7. When the process is complete, you are prompted to save the Certificate Signing Request. Right-click the link and save the **csr.pem** file on your computer.
8. Email the file to be signed by a trusted certificate authority.

Uploading a Certificate

When the signed certificate is received from a trusted certificate authority, you can upload the certificate to the printer. You can also upload certificates, root certificates, and intermediate CA certificates to establish a complete chain of trust.

1. In CentreWare Internet Services, click **Properties > Security > Machine Digital Certificate Management**.
2. Click **Upload Signed Certificate**.
3. If the certificate is password protected, type the **Password**, and retype to verify.
4. Click **Browse** or **Choose File**, navigate to the signed certificate in the **.crt** format, then click **Open** or **Choose**.
5. Click **Import**.

    Note: The signed certificate must match the CSR created by the printer.

Managing Certificates

To see information about the certificates installed on the printer or specify the certificate to use for SSL and IPsec:

1. In CentreWare Internet Services, click **Properties > Security > Certificate Management**.
2. Select a certificate **Category**, **Certificate Purpose**, and **Certificate Order**.
3. Click **Display the list**.
4. Select a certificate from the list and click **Certificate Details**.
5. To set the certificate as the primary certificate, click **Use this certificate**. If **Use this certificate** is not available, then the selected certificate has expired, or is not valid. All certificates in the certification path (chain of trust) must be installed on the printer and be valid.
6. Click **Delete** to remove the certificate, or **Export** to save the certificate to your computer.

Secure HTTP and SSL/TLS

You can encrypt all data sent over HTTP by establishing an encrypted SSL connection. You can enable SSL encryption for the following services:

- Configuring the printer in CentreWare Internet Services
- Printing from CentreWare Internet Services
- Printing using IPP
- Network accounting

Before you begin:

- Install a digital certificate. For details, see Installing a Digital Certificate on page 48.
- Ensure that the date and time configured on the printer is correct. This information is used to set the start time for self signed certificates.

Configuring Secure HTTP and SSL/TLS Settings

Notes:

- A digital certificate must be installed on the printer before you can enable Secure HTTP. For details, see Installing a Digital Certificate on page 48.
- If Secure HTTP is enabled, to access CentreWare Internet Services, all pages will contain **https://** in the URL for the website.

1. In CentreWare Internet Services, click **Properties** > **Security** > **SSL/TLS Settings**.
2. Select **Enabled** next to **HTTP - SSL/TLS Communication**.
3. Type the port number to be used for HTTP SSL/TLS.
4. To use SSL/TLS for LDAP communication, select **Enabled** next to LDAP - SSL/TLS Communication.
5. To use SSL/TLS for SMTP communication, select **Enabled** next to SMTP - SSL/TLS Communication.
6. To use SSL/TLS for SMTP communication, next to SMTP - SSL/TLS Communication, select a method that your server supports.

   Note: If you are unsure what method your server supports, select STARTTTLS (if available). If you select STARTTLS (if available), the printer attempts to use STARTTLS. If your server does not support STARTTLS, SMTP communication is not encrypted.

7. Select **Enabled** next to Verify Remote Server Certificate if necessary.
8. Click **Apply** to accept the changes or **Undo** to retain the previous settings.

IPsec

Internet Protocol Security (IPsec) is a group of protocols used to secure Internet Protocol communications by authenticating and encrypting each IP data packet. IPsec allows you to control IP communication by creating protocol groups, policies, and actions for the following:

- DHCP v4/v6 (TCP and UDP)
- DNS (TCP and UDP)
- FTP (TCP)
- HTTP (Scan Out, TCP port 80)
- HTTPS (Scan Out, TCP port 443)
- HTTPS (Web Server, TCP port 443)
- ICMP v4/v6
- IPP (TCP port 631)

- LPR Print (TCP port 515)
- Port 9100 Print (TCP port 9100)
- SMTP (TCP/UDP port 25)
- SNMP (TCP/UDP port 161)
- SNMP Traps (TCP/UDP port 162)
- WS-Discovery (UDP port 3702)
- Up to 10 additional services

Configuring IPSec

Note: Secure HTTP (SSL) must be enabled with an installed digital certificate before you can enable IPsec.

1. In CentreWare Internet Services, click **Properties > Security > IPSec**.
2. Select **Enabled** next to **Protocol**.
3. Select **IKE Authentication Method**, **Preshared Key**, or **Digital Signature**.
4. If you select **Preshared Key**, type the **Shared Key**, then retype the key to verify.
5. Type the **IKE SA Life Time** (5–28800 minutes).
6. Type the **IPSec SA Life Time** (300–172800 minutes).
7. Select the **DH Group** type.
8. Select **G1** or **G2** from the **DH Group** drop-down menu.
9. Enable **PFS** as needed.
10. Type the **Specific Destination IPv4 Address**.
11. Type the **Specific Destination IPv6 Address**.
12. To restrict the printer from communicating with devices that are not using IPSec, select **Disabled** next to **Communicate with Non-IP Sec Device**.
13. Click **Apply** to accept the changes or **Undo** to retain the previous settings.

802.1X

802.1X is an Institute for Electrical and Electronics Engineers (IEEE) standard that defines a method for port-based network access control or authentication. In an 802.1X secured network, the printer must be authenticated by a central authority, typically a RADIUS server, before it can access the physical network.

You can enable and configure the printer to be used in an 802.1X secured network.

Before you begin:

- Ensure the 802.1X authentication server and authentication switch are available on the network.
- Determine the supported authentication method.
- Create a user name and password on your authentication server.
- Ensure that the printer can be offline for several minutes. Changing and applying 802.1X settings causes the printer to restart.

Configuring 802.1X

1. Click **Properties > Security > IEEE 802.1X**.
2. Select **Enabled** next to **Enable IEE E 802.1x**.
3. Under **Authentication Method**, select the method used on your network. Options are:
    - **EAP-MD5**
    - **EAP-MS-CHAPv2**
    - **PEAP/MS-CHAPv2**
    - **EAP-TLS**: This method is available if the printer is configured to use EAP-TLS. For details, see Configuring the Printer for 802.1X using EAP-TLS Authentication on page 52.
4. Type **Login Name (Device Name)** required by your authentication switch and server.
5. Type **Password**, then retype to verify.
6. Select **Enabled** next to **Certificate Validation** if necessary.
7. Click **Apply** to accept the changes or **Undo** to retain the previous settings.

Configuring the Printer for 802.1X using EAP-TLS Authentication

1. Create a self-signed certificate. For details, see Creating a Self-Signed Certificate on page 48.
2. Enable SSL. For details, see Secure HTTP and SSL/TLS on page 50.
3. Click **Properties > Security > Machine Digital Certificate Management**.
4. Upload a PKI client certificate from a trusted CA. For details, see Uploading a Certificate on page 49.
5. Click **Properties > Security > Certification Management**.
6. Next to Certificate Purpose, select **SSL Client**.
7. Click **Display List**.
8. Select the check box next to the certificate you want to use.
9. Click **Certificate Details**.

10. Click **Use this Certificate**.

11. Click **Reboot Machine**. You can now select EAP-TLS as the 802.1X authentication method. For details, see Configuring 802.1X on page 52.

Overwriting Image Data

To ensure that the image data on the printer's hard drive cannot be accessed, you can delete and overwrite image data. Image data is any and all in-process or temporary user data on the hard drive, such as current jobs, queued jobs, temporary scan files, but not saved jobs or folders. By default, the printer deletes and overwrites each job three times after it finishes processing.

> Note: Install the Productivity Kit to use this feature.

Immediate Job Overwrite

Immediate Job Overwrite prompts the printer to overwrite each job immediately after it finishes processing.

Enabling Immediate Image Overwrite

1. In CentreWare Internet Services, click **Properties > Security**.
2. Click **On Demand Overwrite**.
3. Click **Immediate**.
4. For **Number of Overwrites**, select **Off**, **1 Overwrite**, or **3 Overwrites**.
5. Click **Apply**.

Enabling Immediate Image Overwrite at the Control Panel

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu > System Settings > Overwrite HD**.
3. Under **Number of Overwrites**, select **Off**, **1 Overwrite**, or **3 Overwrites**.

IP Filtering

You can prevent unauthorized network access by only allowing data to be transmitted to and from specific IP addresses and ports.

Creating an IP Filter Rule

1. In CentreWare Internet Services, click **Properties > Security > IP Filtering**.
2. Under **IPv4 Filtering** or **IPv6 Filtering**, select **Enabled**.
3. Click **Add** under **IPv4 Filtering** or **IPv6 Filtering**.
4. Type the **Source IP Address**. This is the IP address of the computer or device that you want to allow.
5. Type a number for the **Source IP Mask** that will use this rule. The allowable range from 0 to 32 corresponds to the 32-bit binary number comprising IP addresses. For example, the number 8 represents Class A address (mask of 255.0.0.0). The number 16 represents a Class B address (mask of 255.255.0.0). The number 24 represents a Class C address (mask of 255.255.255.0).
6. Refresh the browser and navigate back to the IP Filtering page. Under **IP Filter Rule List**, select the rule that you just created.
7. Select your rule in the list, then click **Apply**.
8. Click **Edit** or **Delete** to edit or delete an existing rule.

Restricting Access to Job Information

You can control how job information is displayed at the control panel when users press the Job Status button.

Hiding or Password Protecting Completed Job Information

1. In CentreWare Internet Services, click **Properties** > **Security** > **Job Status Default** > **Completed Jobs View**.
2. Select **Require Login to View Jobs** or **No Job Viewing** next to **Completed Jobs View**. This prevents the users from seeing the completed job information.
3. Select **All Jobs** or **Jobs Run By Login User Only** next to **Access To**, if you have selected Require Login to View Jobs, next.
4. Select **Yes** or **No** next to **Hide Job Details**.
5. Click **Apply**.

Hiding Active Job Information

1. In CentreWare Internet Services, click **Properties** > **Security** > **Job Status Default** > **Active Jobs View**.
2. Select **Yes** or **No** next to **Hide Job Details**.
3. Click **Apply**.

Printing 5

This chapter includes:

Selecting Print Mode Options

You can specify the print mode to be used on the printer for individual protocol types.

1. In CentreWare Internet Services, click **Properties** > **Services** > **Printing** > **Print Mode**.
2. Under **Print Mode**, select **Auto**, **PostScript 3**, **HP-GL/2**, **PLCL 6/5e**, or **TIFF/JPEG**.
3. Select **PJL** as needed.

Managing Banner Sheet Printing Options

You can set the printer to print a Banner Sheet with each print job. The banner sheet contains information about the user and job name. This option can be set in the print driver, in CentreWare Internet Services, or at the printer control panel.

Note: Banner sheet printing must be enabled in the print driver. This type of printing must also be enabled at the control panel or in CentreWare Internet Services, otherwise the banner sheet will not be printed.

Enabling Banner Sheet Printing in CentreWare Internet Services

1. In CentreWare Internet Services, click **Properties** > **Services** > **Printing** > **Print Mode**.
2. Under **Banner Sheet**, next to **Sensing Separator Page**, select **Enable**.
3. Next to Banner Sheet select **Start Sheet**, **End Sheet**, or select **Start Sheet and End Sheet**.
4. Select the tray that you want the sheet to be printed to.
5. To allow banner sheet printing to be enabled or disabled from the print driver, select **Enabled** next to **Allow Print Driver to Override**.
6. Click **Apply**.

Enabling Banner Sheet Printing at the Control Panel

1. At the printer control panel, press the **Menu** button.
2. Navigate to **Admin Menu** > **System Settings** > **Banner Settings** > **Banner Sheet**.
3. Navigate to **Start Sheet**, **End Sheet**, or **Start Sheet and End Sheet**, then press **OK**.
4. Press **Driver Settings** to allow banner sheet printing to be to be enabled or disabled from the print driver, then press **OK**.

Print Service Settings

Allocating Memory

You can improve performance by allocating memory away from the ports that are not being used, or by allocating more memory to more heavily used ports.

To allocate memory for print settings in control panel:
1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu > Allocate Memory**.
3. Specify the amount of memory allocated to the following print settings as necessary.
    *   **HP-GL/2 Auto Layout Memory**
    *   **Job Ticket Memory**
    *   **Receiving Buffer USB, LPD, SMB, IPP, Port 9100**

To allocate memory for print settings in CentreWare Internet Services:
1. In CentreWare Internet Services, click **Properties > General Setup > Memory Settings**.
2. Under **Memory Settings**, specify memory allocation and spooling behavior.
3. Click **Apply**.

Configuring Print Service Settings

To configure print service settings:
1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **System Settings** to do the following:
    *   **Print Area**: Press **Extended** to print beyond the standard page margins.
    *   **2-Sided Printing**: Set 2-sided or 1-sided printing as required. This feature requires duplex unit.
    *   **Resume Job After Print Error**: Press **Auto Resume** to automatically cancel a print job when an error occurs. Press **Resume by User** to display the control panel prompt requiring a user to cancel the job manually.
    *   **When Paper Jam Occurs**: Press **Clear Jam to Resume** to continue printing a job after clearing a paper jam, or press **Delete Job** to cancel the print job.
    *   **Banner Sheet**: Select **Start Sheet** to print an identifying page before each print job, select **End Sheet** to print an identifying page after each print job, or select **Start Sheet & End Sheet** to print both.
    *   **Banner Sheet Tray**: Select the tray to be used for printing banner sheets.
    *   **Secure Print**: Set Enabled to secure print your files. Secure Print requires authentication when you request for a print job.
    *   **Print Order**: Set the print order as **Oldest Date First** or **Newest Data First**.
4. Navigate to **Printer Setting > Printer User ID** to print User ID on the page. Select **Top Left**, **Top Right**, **Bottom Left**, or **Bottom Right**.
    The User ID must be specified in the user's print driver.

Adjusting Image Quality

To configure image quality for print settings:

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Image Quality** to do the following:
   - **Adjust Gradation**: Use the arrow keys to adjust the gradation for Text or Photo.
   - **Adjust Color Registration**: Use the arrow keys to adjust color registration. You can automatically or manually register the colors.
   - **Adjust Paper Registration**: Specify the requirements for Tray 1, 2, 3, 4, and Bypass Tray.
   - **Voltage Offset**: Set the Voltage Offset between 1 and 5 for Plain, Bond, Recycled, Heavyweight, Cardstock, Glossy, Glossy Card, Postcard, or Envelop print options.
   - **Fuser Temperature**: Set the Fuser Temperature between 1 and 5 for Plain, Bond, Recycled, Heavyweight, Cardstock, Glossy, Glossy Card, Postcard, or Envelop print options
   - **Altitude Adjustment**: Select the appropriate option to adjust the altitude of the printer.

Configuring Init/Delete Data

To configure Init/Delete Data settings:

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Init/Delete Data** to do the following:
   - **NVM**: Press **OK** to initialize.
   - **Hard Disk**: Press **OK** to initialize.
   - **Initialize Certificates**: Press **OK** to initialize the certificates.
   - **Print Meter**: Press **OK** to initialize.
   - **Delete Form/Macro**: Press **OK** to delete the forms and macros.
   - **Delete Font**: Press **OK** to delete font. This feature requires Hard Disk.
   - **Secure Print Jobs**: Select the **User ID** to initiate secure print jobs.

Secure Print

Supported by the printer's print driver, or CentreWare Internet Services Print tab, this feature directs the printing of confidential documents, or documents which should not be seen by third parties, to a User Account on the printer. The user can then access the Account, with a numeric password, at the printer, and privately print out the stored documents.

Secure Print allows you to associate a 1–12 digit passcode number with a print job when sending it to the printer. The job is held at the printer until the same passcode is entered at the control panel.

Using Secure Print from the Print Driver

To use the Secure Print:
1. Open a document to print from the computer.
2. Select **Print** in your software application, select **Printer > Properties**.
3. Select the **Advanced** tab, then click **Paper / Output** under **Document Options**.
4. Select **Secure Print** as the **Job Type**.
5. Select **OK** to close the **Properties** page, then click **Print**.

To release a Secure Print job for printing:
> Notes:
> - If the control panel is dark, press the **Power Saver** button.
> - Use the arrow buttons to navigate through the menus.

1. At the control panel, press **Menu**.
2. Navigate to **Secure Print**, then press **OK**.
3. Navigate to your directory under Select User ID, then press the **Right** arrow.
4. Use the arrow buttons to enter your passcode, then press **OK**.
5. Navigate to the desired print job, then press the **Right** arrow.
6. Navigate to **Print & Delete** or **Print & Save**, then press **OK**.
7. To increase or decrease the Quantity, press the arrow buttons, then press **OK**.
8. To print the job, press **OK**.

Using Secure Print from CentreWare Internet Services

1. In CentreWare Internet Services, click **Print**.
2. Under **Delivery**, select the **Secure Print** radio button.
3. Type a **User ID**.
4. Next to **Enter Passcode**, type the passcode and retype to confirm.
5. Under **File Name**, click the **Browse** button to locate your print ready file.
6. Click **Submit Job**.
   Go to the printer and navigate through the options to release the Secure Print job for printing.

UNIX, Linux, and AS/400 Printing

UNIX-based printing uses LPD/LPR port 515 or port 9100 to provide printer spooling and network print server functionality. Xerox$^®$ printers can communicate using either protocol.

Xerox Services for UNIX Systems (XSUS)

XSUS is an application that allows you to manage and print to multiple printers in the UNIX and Linux environments. With XSUS you can:
- Configure and check the status of network connected printers.
- Set up a printer on your network as well as monitor the operation of the printer once installed.
- Perform maintenance checks and view the supplies status at any time.
- Provide a common look-and-feel across multiple suppliers of UNIX and Linux operating systems.

Supported Printing Models

- **Workstation-to-printer (Peer-to-Peer)**: Print jobs are processed and spooled locally on your computer, then sent directly to the printer. XSUS must be installed on each computer.
- **Workstation-to-Server (Client-Server)**: Print jobs are processed and spooled on your computer and then sent to the printer. This model requires XSUS to be installed on both the server and the computer.
- **Server Based**: Print jobs are sent unprocessed from your computer and are spooled on the server and then sent to the printer. This model requires XSUS to be installed on the server only. Individual computers can print to the printer by setting up a generic LP or LPR queue pointing to the queue on the print server.
- **Network Information Service (NIS) Based**: NIS uses a printer configuration map on the server. When new printer queues are added to a print server, only the configuration file in the master NIS server must be updated. NIS clients can then print to any of the queues listed on the server map without setting up local queues.

    Note: Consult your UNIX or Linux operating system manual for more information on how to set up NIS-based printing.

Installing XSUS

Before you begin:

Note: You must have root or superuser privileges to install XSUS.

Download the latest UNIX, Linux, or Sun Solaris software from the Support page of the Xerox website. This includes the following two **.tgz** files:

- **Printer Model Package file**, which contains **.ppd** files for all printer models. The file name is **PrinterPkgXPXX_20xx_xx_xx.tgz**.
- **Printer Driver** for your operating system. The available files are:
  - XeroxAIXpowerpcxpxx_x.xx.xx.tgz for the IBM RS6000 family.
  - XeroxHPUXXPXX_x.xx.xx.tgz to support HP workstations.
  - XeroxLinuxi386XPXX_x.xx.xx.tgz to support Linux environments.
  - XeroxSolarisXPXX_x.xx.xx.tgz for Sun Solaris systems.

Download the Files

1. Set up a temporary directory to download the files.
2. Download the print driver and Printer Model Package **.tgz** files to the temporary directory.
3. At the UNIX command line, type **gzip -dfv {filename.tgz}** then press **Return** or **Enter**. The **{filename}** must include a **.tgz** extension.
4. Type **tar -xvf {filename.tgz}** then press **Return** or **Enter**.
5. The files are expanded and two directories are created with names that match the print driver and Printer Model Package **.tgz** file names.

   Note: The expansion steps must be done for both **.tgz** files.

Perform the Installation Procedure

1. Change to the directory created by the expansion of the Code **.tgz** file.
2. On the command line, type **./setup** then press **Return** or **Enter**.
3. Change to the directory created by the expansion of the Printer Definition **.tgz** file.
4. Type **./setup** then press **Return** or **Enter**.

The installation creates a Xerox directory in **/usr** or **/opt** depending on your operating system.

Launch XSUS

To launch XSUS from a terminal window prompt as root, type **xpadmin**, then press **Enter** or **Return**.

Note: XSUS automatically detects whether the X server of your system is able to run in graphical mode or not and starts accordingly.

For more information on managing printers and queues through XSUS, see the XSUS Administrator Online Help.

Printing from a Linux Workstation

Ensure that CUPS is installed and running on your workstation. The instructions for installing and building CUPS are contained in the CUPS Software Administrators Manual, written and copyrighted by Easy Software Products.

Note: For complete information on CUPS printing capabilities, see the CUPS Software Users Manual available at www.cups.org/documentation.php.

Installing the Xerox PPD on the workstation

The Xerox PPD for CUPS is available on the Xerox website. Download the file and follow the instructions that come with it.
1. Download the latest UNIX **.ppd** from the Support page of the Xerox website.
2. Copy the **.ppd** on your CUPS ppd/Xerox folder on your workstation. If you are unsure of the location of the folder, use the **Find** command to locate the **.ppd** files.

Adding the Xerox® Printer
1. Verify that the CUPS daemon is running.
2. Open a Web browser and type **http://localhost:631/admin**, then click **Enter** or **Return**.
3. In **User ID**, type root. For password, type the root **password**.
4. Click **Add Printer** and follow the onscreen prompts to add the printer to the CUPS printer list.

Printing with CUPS

CUPS supports the use of both the System V (lp) and Berkeley (lpr) printing commands.
1. To print to a specific printer in System V, type: **lp -dprinter filename**, then click **Enter**.
2. To print to a specific printer in Berkeley, type: **lpr -Pprinter filename**, then click **Enter**.

AS/400

Xerox provides Work Station Customization Object (WSCO) files to support AS/400 or Iseries, V5R2 or later. The WSCO is a file that provides printer-specific PCL codes that the host print transform uses to select the correct tray, 2-sided option, font size and type, and orientation.

The XTOOLSxxxx library provides a source WSCO for each supported Xerox® printer. You need to download and install the library once.

Notes:
- The host print transform only works on files that are of the type AFPDS and SCS. PIDS formatted printer files must be recreated as type AFPDS to use the WSCO for printing.
- You must have IOSYSCFG permissions to create a device description or a remote queue.
- For details on AS/400, refer the *IBM AS/400 Printing V, (Red Book)*, available on the IBM website.

Installing the WSCO and Setting up Print Queues

For detailed instructions on installing the library and setting up print queues, refer to the installation instructions that are included with the library.

Accounting

6

This chapter includes:

Local Accounting

Local Accounting tracks the number of print jobs for each user that logs in to the printer. You can then generate reports listing usage data for individual users and groups.

Note: You must set a System Administrator Password before setting up accounting.

Configuring Local Accounting

1. In CentreWare Internet Services, click **Properties > Accounting > Accounting Configuration**.
2. Next to **Accounting Type**, select **Local Accounting**.
3. Next to **Color Tracking Only**, select Enabled if you only want to track color impressions.
4. Click **Apply**.
5. Click **Reboot Machine**.
6. Refresh your browser and navigate back to the **Accounting Configuration** page.
7. Click **Next**.
8. To set up an account, next to **Account Number**, type the number of the account you want to edit (1-1000), and click **Edit**.
9. Type a **User ID** and a **Name** for the new user.

   Note: Each User ID and Name must be unique.

10. Under **Feature Access**, select the features that the user is allowed to access.
11. Under **Impressions / Limits**, type the maximum number of impressions or sent images that the user can produce. The maximum number of impressions or images sent is 9999999.

    - **Color Printed Impressions** includes all color documents printed from a computer using the print driver.
    - **Black Printed Impressions** includes all black and white documents printed from a computer using the print driver.

   Note: Cover sheets and banner sheets are counted as impressions.

12. Under **User Role**, select **System Administrator**, **Account Administrator**, or **User**.
13. To add the user to a group, next to **Add This User to Authorization Group**, select the group.
14. Click **Apply**.

Resetting Access and Usage Limits for All Users

1. In CentreWare Internet Services, click **Properties > Accounting > Accounting Configuration**.
2. Click **Next**.
3. Next to **All User Accounts**, click **Edit**.
4. Select **Reset** next to **Reset All Feature Access**, **Reset Total Impressions** or **Reset All Account Limits** as necessary.
5. Click **Apply**.

Xerox Standard Accounting

Xerox Standard Accounting (XSA) tracks the number of print jobs for each user. You can set limits to restrict the total number of jobs by type that a user can produce. You can then generate reports listing usage data for individual users and groups.

When XSA is enabled, users must log in to the printer before accessing services. They must also provide their account details in the print driver before printing documents from a computer.

Note: If XSA is enabled, you cannot enable other accounting modes.

You can create a maximum of:
- 2499 unique XSA user IDs
- 500 General Accounts
- 499 Group Accounts

All user IDs must be assigned to one or more group accounts.

Note: XSA settings and account data are stored in the printer. Xerox recommends that you back-up settings using the Cloning feature. If XSA settings are lost or deleted, you can restore them using the cloning backup file. For details, see Cloning on page 84.

Before you begin, install Print Drivers on all client computers.

Configuring Xerox Standard Accounting

1. In CentreWare Internet Services, click **Properties > Accounting > Accounting Configuration**.
2. Next to **Accounting Type**, select **Xerox Standard Accounting**.
3. Select **Enabled** next to the features that you want to track.
4. Next to **Color Tracking Only**, select **Enabled** if you only want to track color impressions.
5. Click **Apply**.
6. Click **Reboot Machine**.
7. Refresh your browser and navigate back to the **Accounting Configuration** page.
8. Click **Next**.

Creating a Group Account

You must create a group account before creating new user accounts.
1. In CentreWare Internet Services, click **Properties > Accounting > Xerox Standard Accounting > Group Accounts**.
2. Under **Group Accounts**, type an **Account ID** using up to 12 digits, then type an **Account Name** using up to 32 alphanumeric characters for the new group account.

Note: Each Account ID and Account Name must be unique.

3. Click **Add Account**, then click **OK**.

Creating a New User Account and Setting Usage Limits

Note: You must create a group account before you can create and add user accounts.

1. In CentreWare Internet Services, click **Properties** > **Accounting** > **Xerox Standard Accounting** > **Manage Accounting**.
2. Click **Add New User**.
3. Type a **User ID** and a **Name** using up to 32 alphanumeric characters, for the new user.

   Note: Each User ID and Name must be unique.

4. Under **Usage Limits**, type the maximum number of impressions or sent images that the user can produce. The maximum number of impressions or images sent is 16,000,000.
   - **Black Printed Impressions** includes all black and white documents printed from a computer using the print driver.

   Note: Cover sheets and banner sheets are counted as impressions.

   - **Color Printed Impressions** includes all color documents printed from a computer using the print driver.
5. Click **Apply**.

Maximum Usage Limits

Once a user reaches the maximum usage limit set for them, they are no longer able to use that feature until you reset their limit.

If the user exceeds their limit while a job is in process, the printer tracks the number of impressions generated over their limit and subtracts them from the user's limit once it is reset.

If the user's limit is reached before a print job is completed, an error report prints notifying the user that their limit has been reached. The job is deleted from the print queue, and any sheets remaining in the paper path will finish printing.

Resetting Usage Limits

1. In CentreWare Internet Services, click **Properties > Accounting > Xerox Standard Accounting > Report and Reset**.
2. To reset all usage data to 0, click **Reset Usage Data**.
3. Click **OK** to acknowledge the confirmation message.

⚠️ **CAUTION:** The following step will delete all the XSA accounts on the printer.

4. Click **Reset to Default** if you want to delete all user, group, and general accounts.
5. Click **OK** to acknowledge the warning message.

Printing a Report

You can print a report that lists the numbers of impressions recorded for each user and each account.

To print a report:
1. In CentreWare Internet Services, click **Properties > Accounting > Xerox Standard Accounting > Report and Reset**.
2. Click **Generate Report**.
3. Click the **Report and Reset** link again.
4. Right-click the **Right-click to download** link and save the **.csv** file to your computer.

Network Accounting

Network Accounting allows you to manage printer usage with detailed cost analysis capabilities. Print jobs are tracked at the printer and stored in a job log. All jobs require authentication of User ID and Account ID, which are logged with the job details in the job log. The user is prompted for accounting information when submitting a job to the printer.

The job log information can be compiled at the accounting server and formatted into reports.

Before you begin:
- Install and configure Xerox certified network accounting software on your network. Refer to the manufacturer's instructions for help.
- Test communication between the accounting server and the printer. To do this, open a Web browser, type the IP Address of the printer in the address bar, then press Enter. The printer's CentreWare Internet Services home page should display.
- Install print drivers on all user computers if you want to track print jobs.

Enabling and Configuring Network Accounting

1. In CentreWare Internet Services, click **Properties** > **Accounting** > **Accounting Configuration**.
2. Next to **Accounting Type**, select **Network Accounting**.
3. Next to **Verify User Details for Printer**, select **Yes** to authenticate users at the control panel. Local authentication must be configured. For details, see Local Accounting on page 68.
4. Next to **Customize User Prompts**, select how you want to prompt users for their credentials.
5. Next to **Color Tracking Only**, select **Enabled** if you only want to track color impressions.
6. Click **Apply**.
7. Click **Reboot Machine**.
8. Configure Network Authentication if it is not configured. For details, see Network Accounting on page 72.

Configuring Accounting Login Screen Settings

1. In CentreWare Internet Services, click **Properties** > **Accounting** > **Accounting Login Screen Settings**.
2. Type the text next to **Alternative Name for User ID**. This text that will appear on the control panel to prompt a user for their user name.
3. To display user ID characters as asterisks, select **Hide** next to **Mask User ID**.
4. Click **Apply**.

Enabling Accounting in Print Drivers

Jobs sent from a user's computer can only be counted if accounting is enabled in the print driver.

Enabling Accounting in a Windows Print Driver

1. From the **Start** menu select **Printers and Faxes**.
2. Right-click the printer in the list, and select **Properties** > **Configuration** > **Accounting**.
3. From the **Accounting System** drop-down menu, select **None**, **Local Accounting**, **Xerox Standard Accounting or Auditron**, or **Xerox Network Accounting**.
4. Select **Always Prompt** if you want users to type their User ID and Account ID each time they print a job. If you do not want users to log in, select **Do Not Prompt** and type the user's information in the **Default User ID** and **Default Account ID** fields.
5. Select **Mask User ID** and **Mask Account ID** to show characters as asterisks when an ID is typed.
6. Select **Remember Last Entered Codes** to show the last entered code when a user is prompted for their Account ID.
7. If you want to specify the default User ID and Account ID, select **Accounting codes Setup**, and type them in the **User ID**, and **Account ID** fields, then select the default account type.
8. Click **OK**.
9. Click **OK** to exit.

Enabling Accounting in an Apple Macintosh Print Driver

1. Open a document and select **File**, then select **Print**.
2. Select the Xerox® printer.
3. Select **Xerox Features**, then select the **Advanced** button.
4. Select **Accounting** from the drop-down menu.
5. From the **Accounting System** drop-down menu, select **None**, **Local Accounting**, **Xerox Standard Accounting or Auditron**, or **Xerox Network Accounting**.
6. Select **Always Prompt** if you want users to type their User ID and Account ID every time they print a job.
7. Select **Mask User ID** and **Mask Account ID** to show characters as asterisks when an ID is typed.
8. If you want to specify the default User ID and Account ID, select **Use Default Accounting Codes**, type these in the **Default User ID**, and **Default Account ID** fields, then select the default account type.
9. To save the settings, click the **Presets** menu and select **Save As**.
10. Type a name for the preset.
11. Click **OK**.

    Note: Users must select this preset each time they print using the print driver.

Administrator Tools

7

This chapter includes:

Monitoring Alerts and Status

You can configure alert and status notices to be automatically sent as an email message to one or more recipients.

Setting Up Machine Status Alerts

To set up machine status alerts for email recipients:
1. In CentreWare Internet Services, click **Properties** > **General Setup** > **Alert Notification** > **Email Notification for Machine Status**.
2. Under **Send Notice**, select the machine status to send email notification immediately or at regular intervals.
3. Under **Mail Notice Status Settings**, set the appropriate mail status notification for each recipient.
4. Under **Notice Frequency Settings**, select how often the email must be sent.
5. Click **Apply**.

Setting Up Billing Meter Read Alerts

To set up billing meter read alerts for email recipients:
1. In CentreWare Internet Services, click **Properties** > **General Setup** > **Alert Notification** > **Billing Meter Read Alerts**.
2. Under **Billing Administrator Email Addresses**, type the email addresses of the administrator(s).
3. Under **Send Alert**, set alerts to report billing meter reads and registration cancellation to the Xerox server.
4. Click **Apply**.

Setting Up Supplies Data Alerts

To set up supplies data alerts for email recipients:
1. In CentreWare Internet Services, click **Properties** > **General Setup** > **Alert Notification** > **Supplies Data Sent Alerts**.
2. Under **Supplies Administrator Email Addresses**, type the email addresses of the email recipients, separated by commas.
3. Under **Send Alert**, select the appropriate checkbox to send email alerts when billing meter reads are reported, or when registration with the Xerox Communication Server is canceled.
4. Click **Apply**.

Configuring Stored File Settings

Note: Install the Productivity Kit to use this feature.

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **System Settings**, then press **Stored Jobs**.
4. Change the following settings as necessary:
   - **Stored Job Expiration Date**: Press **On** and select the date for how long print jobs stored on the printer are kept before being deleted.
   - **Keep for (Days)**: Press **Number of Days** and use the arrow keys to specify the number of days to keep the jobs.
   - **Delete at (Time)**: Use the arrow keys to specify the time to delete the stored jobs.
   - **Keep for Hours**: Use the arrow keys to specify the number of hours to keep the jobs.
   - **Upon Power Off/On, select Delete Jobs**: Press **Delete Jobs** to delete jobs every time the printer is turned off.

Energy Saving Settings

1. In CentreWare Internet Services, click **Properties** > **General Setup** > **Energy Saver Settings**.
2. Next to **Time to Low Power Mode**, type the number of minutes (1–240) for which the printer can be inactive until going into Low Power Mode.
3. Next to **Time to Sleep Mode**, type the number of minutes (1–240) for which the printer can be inactive until going into Sleep Mode.
4. Click **Apply**.

System Settings

Setting Default System Settings

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu** > **System Settings** to set the default system settings.
3. Change the following settings as necessary:
   - **Start up page**: Select Print to print the start up page every time you request a print job.
   - **Alert Tone**: Set the alert tone as **Soft**, **Normal**, **Loud**, or **Off**.
   - **Auto Clear**: Set the system to display when a certain amount of inactive time, in minutes, has passed.
   - **Dew Prevention**: Set **Enabled** to prevent dew formation.
   - **Set Jobs View**: Specify the types of jobs that display when the Job Status button is pressed.
4. Press **OK**.

Setting the Paper Size Preference at the Control Panel

1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu** > **System Settings** > **mm/inches**.
3. To display paper sizes in inches or metric, specify the measurement for the units.
4. Press **OK**.

Taking the Printer Offline

To prevent the printer from sending or receiving jobs over the network at any given time, you can take the printer offline. This allows you to perform printer maintenance, without any jobs being sent to the printer. When the printer is offline, any services, such as Network Scanning, are unavailable.

To take the printer offline, press the **Online/Offline** button on the control panel.

Note: Taking the printer offline does not turn the printer off.

Restarting the Printer in CentreWare Internet Services

1. In CentreWare Internet Services, click **Status**.
2. At the bottom of the **General** section, click **Reboot Machine** then click **OK**.

Note: Restarting the printer can take up to five minutes. During this time, network access is not available.

Smart eSolutions and Billing Information

Smart eSolutions

Smart eSolutions is a suite of features that simplifies printer ownership and administration. It provides free services to enable administration of metered billing and supplies replenishment plans for printers on a network. The suite provides the following:

- **MeterAssistant®**: MeterAssistant® automatically submits meter reads to Xerox from network printers. This eliminates the need to collect and report meter read information manually.
- **SuppliesAssistant®**: SuppliesAssistant® proactively manages ink supplies for network equipment, and monitors actual usage.
- **MaintenanceAssistant®**: MaintenanceAssistant® provides options for troubleshooting your printer. You can send detailed diagnostic information to Xerox, start online troubleshooting sessions with Xerox, and download usage information to your computer in the **.csv** format.

    Note: For more information on Smart eSolutions, see www.xerox.com/smartesolutions.

There are three ways to register the printer for Smart eSolutions:

- **Automatic registration**: Automatic registration is available as a standard feature on many WorkCentre/WorkCentre Pro printers.
- **Smart eSolutions Windows Client**: The windows client is an option for small and medium sized businesses. To download the Windows client, see www.xerox.com/smartesolutions.
- **CentreWare Web**: CentreWare Web is a Web browser-based software tool that installs, configures, manages, monitors, and reports on network printers and multifunction printers on your network regardless of the manufacturer. It is well suited for large enterprise businesses. For more information, see www.xerox.com/centrewareweb.

    Notes:

    - Once you install the software, MeterAssistant® is automatically enabled.
    - Smart eSolutions is not available in all countries. Refer to your Xerox representative for further information.

Before you begin:

- Create an account on Xerox.com to receive your meter read information. To create a new account see www.xerox.com/meterreads.
- Ensure that SNMP and TCP/IP are enabled.
- Ensure that the HTTP Proxy Server is configured.
- Configure Billing Meter Read Alerts. For details, see Setting Up Billing Meter Read Alerts on page 76.
- Configure Supplies Data Sent Alerts. For details, see Setting Up Supplies Data Alerts on page 76.

Enable Smart eSolutions

1. In CentreWare Internet Services, click **General Setup > Smart eSolutions > Registration**.
2. If the HTTP Proxy Server is not configured, click Enable Proxy Server. For details, see Proxy Server on page 36.
3. Click **Register with Xerox Communication Server**.
4. On the **Xerox Communication Server** page, next to **Server Communication**, select **Enabled**.
5. Next to **Transmission Time**, type the time of the day when you want the printer to perform its daily communication with Xerox.
6. Click **Apply**.
7. To test the connection, click **Test Communication Now**.

   Note: If you have not registered the printer for Smart eSolutions, this button is disabled.

MeterAssistant®

To view the last transmission of Billing Meter information for your printer:

1. In CentreWare Internet Services, click **Status > Smart eSolutions > Meter Assistant**.
2. To configure meter email alerts, see Setting Up Billing Meter Read Alerts on page 76.

SuppliesAssistant®

To view the current status of supplies:

1. In CentreWare Internet Services, click **Properties > General Setup > Smart eSolutions > SuppliesAssistant**.
2. Printer supplies list with their current % Life Remaining.
3. If Supplies Assistant email alerts are required, see Setting Up Supplies Data Alerts on page 76.

Maintenance Assistant®

1. In CentreWare Internet Services, click **Status > Smart eSolutions > Maintenance Assistant**.
2. To send diagnostic information to Xerox, click **Send Diagnostic Information to Xerox**.

   Note: If the button is unavailable, register the printer for Smart eSolutions.

3. To send diagnostic information to Xerox and start an online troubleshooting session, click **Start an Online Troubleshooting Session at www.xerox.com**.

   Note: If the button is unavailable, register the printer for Smart eSolutions.

View Usage and Billing Information

Usage Counters

The Usage Counters page displays the total number of pages printed or generated by the printer.

1. In CentreWare Internet Services, click **Status > Billing and Counters > Usage Counters**.

   The entire detailed list of pages printed or generated by the printer is displayed.

2. Click **Refresh** to update the page.

Billing Information

The Billing Information page displays the count of pages printed or generated in black and white or color for billing purposes.

1. In CentreWare Internet Services, click **Status > Billing and Counters > Billing Information**.

   The list of pages printed or generated by the printer is displayed.

2. Click **Refresh** to update the page.

Cloning

Note: Install the Productivity Kit to use this feature.

This feature allows you to save your printer settings in a clone file. You can use the clone file to copy your printer settings to another printer, or use it to back up and restore settings on your own printer.

Note: If you are using the clone file to copy your printer settings to another printer, both printers must be the same model, and must have the same version of software.

To determine the software version of your printer:

1. In CentreWare Internet Services, click **Properties > General Setup > Configuration Report**.
2. Scroll down to **Software Versions**.

Saving Your Printer Settings to a Clone File

1. In CentreWare Internet Services, click **Properties > General Setup > Cloning**.
2. Under **Create Clone File,** select the feature settings that you want to save.
    All features are selected by default.
3. To view the specific parameters that can be cloned for any of the features, click **View Feature Details**.
4. Click **Clone**.
    The Cloning page is displayed.
5. On the Cloning page, under Create Clone File, right-click **Cloning.dat** and save it to your computer.
    Note: The default name for the file is **Cloning.dat**. If you rename the file, use **.dat** as the file extension.

Installing a Clone File

Note: This procedure will restart the printer and will be unavailable over the network for several minutes.

1. In CentreWare Internet Services, click **Properties > General Setup > Cloning**.
2. Under **Install Clone File**, click **Browse** and navigate to your clone file.
3. Click **Install**.

Font Management Utility

The CentreWare Font Management Utility allows you to manage fonts on one or more printers on your network.

> Note: The Xerox CentreWare Font Management utility is available on the Xerox website at www.xerox.com/office/P7100drivers.

You use the utility to download soft fonts, such as your company's branded fonts or unicode fonts needed to support multiple languages, to your printer. You then can add, delete or export the fonts to a file. You can add or delete printers in the printer list to display only those printers you want to manage.

Customizing Printer Contact Information

The support page in CentreWare Internet Services displays the contact information about service and supplies as well as for about the system administrator. You can customize this information to display your company's contact information for the printer users.

To add your custom information:

1. In CentreWare Internet Services, click the **Support** tab.
2. Click **Change Settings**.
3. Update the fields with the desired information and click **Apply**.

Updating the Printer Software

When Xerox releases a new version of the printer software or firmware, you can update your printer to incorporate the new fixes and improvements.

Updating the Software

Before you begin
- Determine the current software version of your printer.
- Download the latest software update file in the **.bin** format from the drivers and downloads page for your printer.
- Download the Phaser 7100 Firmware Upgrade Utility from www.support.xerox.com when the Productivity Kit is not available. For more information, refer to the Readme associated with the utility.

  Note: Install the **Productivity Kit** to use the software upgrade option in CentreWare Internet Services.

To determine the currently installed software version:
1. In CentreWare Internet Services, click **Properties** > **General Setup** > **Configuration**.
2. Scroll down to **Software** to verify the software version.

To update the software using control panel:
1. At the printer control panel, press **Menu**.
2. Navigate to **Admin Menu** > **System Settings** > **Software Download**.
3. Select **Enabled**, then press **OK**.

To update the software using CentreWare Internet Services:
1. In CentreWare Internet Services, click **Properties** > **Services** > **Machine Software** > **Upgrades**.
2. Under **Upgrades** select **Enabled**.
3. Click **Apply**.
4. Refresh the browser and navigate to **Properties** > **Services** > **Machine Software** > **Manual Upgrade**.
5. Under **Manual Upgrade**, click **Browse** to locate and select the software upgrade file in **.bin** format.
6. Click **Open**.
7. Click **Install Software**.

   The file is sent to the printer. Once the software is installed, the printer restarts.
8. Check the configuration report to verify that the software is updated.

Date and Time Settings

When the printer is first set up, you are asked to set the date and time. If you want to change the date and time after the initial setup, use the control panel to change the settings.

To change date and time settings:
1. At the printer control panel, press the **Menu** button.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **System Settings** > **Machine Clock**, then press **OK.**
4. Change the following settings as necessary:
   - **Date**: Set the date.
   - **Time**: Set the time using a 12–hour or 24–hour format.
   - **AutoClear**: Specify the amount of inactive time before the control panel resets to the default screen. To set the default screen, see System Settings on page 79.
   - **Delay Print**: Set the time period to start the next print job after you operate the control panel.
   - **Energy Saver Timers**: Set the energy saver to low power and sleep mode duration.
   - **Time Zone**: Set the time difference from GMT.
   - **Daylight Savings**: Set the daylight savings time, if necessary. During daylight savings, the printer automatically increments the clock forward by one hour.

Synchronizing the Time Using SNTP

The Simple Network Time Protocol (SNTP) synchronizes the internal clock of the printer over a network connection at system startup and at regular intervals.
1. At the printer control panel, press the **Menu** button.
2. Navigate to **Admin Menu**, then press **OK**.
3. Navigate to **Network Port** > **SNTP Settings**.
4. Navigate to **NTP Synchronize**.
5. Select **On**, then press **OK**.
6. Navigate to **NTP IP Address**, then press **>**.
7. Navigate to **Connection Interval**, and specify how often the printer synchronizes the time with the NTP server.
8. Use the arrow keys to enter the IP address of your NTP server.
9. Press **OK**.

Watermarks and Annotations

A watermark inhibits the replication of a document by adding text or a background pattern to the printed page. You can configure watermarks to print dates, unique IDs, background patterns, or default text. In addition, you can set watermarks to print according to the job type.

Annotations are customizable text strings printed on a document, and are similar to watermarks. If you want to create a custom annotation not found in the default selections, you can set a text string and then apply one of the four preset templates to the text string. When annotations are enabled, they are printed according to the layout template associated with the job type.

> Note: Install the Productivity Kit required for using this feature.

Watermarks

To set up the watermark appearance and enable a forced watermark:
1. In CentreWare Internet Services, click **Properties > Security > Watermark > Watermark**.
2. Under **Watermark**, specify the following:
   - Select the date format and watermark appearance.
   - Enable the forced watermark by job type, if necessary.
3. Click **Apply**.

Secure Watermarks

This procedure enables the System Administrator to set parameters on this or another identical model machine, for the inclusion of a Secure Watermark as the background on which documents are printed.

You must purchase the Security option to enable this feature. Contact your Xerox representative to purchase the option.

Secure Watermark configuration items include:
- Default Watermark Effect
- Default Watermark
- Font Size
- Background Pattern
- Date Format
- Font Color
- Density
- Watermark / Background Contrast
- Force Watermark – Copy Job
- Force Watermark – Client Print
- Force Watermark – Print Stored File
- Force Watermark – Media Print
- Custom Watermark 1

- Custom Watermark 2
- Custom Watermark 3

Configuring Secure Watermark in CentreWare Internet Services

1. In CentreWare Internet Services, click **Properties > Security > Watermark > Secure Watermark**.
2. Under **Digital Codes Settings**, type appropriate values for Decoding Passcode and Custom Digital Watermark.
3. Under **Force Secure Watermark**, select **ON** to enable the forced secure watermark job type and report, if necessary.
4. Under **Secure Watermark Defaults**, select **ON** to enable the protection code.
5. Under **Secure Watermark Effect**, specify the watermark effects.

Create Secure Watermark

1. In CentreWare Internet Services, click **Properties > Security > Watermark > Secure Watermark**.
2. Under **Secure Watermark Effect**, select the **Create Watermark** button.
3. Type a name for **Custom Secure Watermark 1**, **2**, and **3**.
4. Click **Apply**.

   Note: After the settings are saved, you can select the custom secure watermark from the **Default Secure Watermark** menu under **Secure Water Effect**.

Universal Unique ID

To print the Universal Unique ID number in the watermark:

1. In CentreWare Internet Services, click **Properties > Security > Watermark > Universal Unique ID**.
2. Under **Universal Unique ID**, set where you want the unique ID to print on the page.
3. Click **Apply**.

Forced Annotations

Forced annotations allow you to create text strings for custom watermarks. You can create up to eight strings with a maximum of 32 characters. Once the string is created, you can apply a layout template to the watermark.

To create text strings:

1. In CentreWare Internet Services, click **Properties > Security > Force Annotation > Create Text String**.
2. Under **Create Text String**, type up to eight watermark text strings.
3. Click **Apply**.

To apply layouts to text strings:

1. In CentreWare Internet Services, click **Properties > Security > Force Annotation > Apply Layout Template to Copy/Print Jobs**.
2. Under **Apply Layout Template to Copy / Print Jobs**, click **Change Settings** to apply the template to the watermark string by using one of the available types of print jobs.

3. Next to **Apply Layout Template**, select **Enabled** to apply the layout template.
4. Under **Layout Template List**, select one of the preset templates from the list.
5. Click **Apply**.