Wireless network setup(Optional)

 | • If you want to add wireless feature to the machine, check the option lists and contact the purchasing point to order (see "Available accessories" on page 61). When you purchase a Wireless/NFC kit (Wireless LAN Option), install the kit by following the steps described in the Wireless Kit (Wireless LAN Option) Guide which is enclosed in the kit. After installing the Wireless/NFC kit (Wireless LAN Option), set the machine to use this feature.
• Make sure your machine supports wireless networking. Wireless networking may not be available depending on the model (see "Features by model" on page 7).

Wireless network name and network password

Wireless networks require higher security, so when an access point is first set up, a network name (SSID), the type of security used, and a Network Password are created for the network. Ask your network administrator about this information before proceeding with the machine installation.

Introducing wireless set up methods

You can set wireless settings either from the machine or the computer. Choose the setting method from the below table.

 | • Some wireless network installation types may not be available depending on the model or country.
• If problems occur during wireless set up or driver installation, refer to the troubleshooting chapter (see "Troubleshooting for wireless network" on page 168).
• It is strongly recommended that you set the password on Access Points. If you do not set the password on Access Points, they might be exposed to illegal access from unknown machines including PCs, smart phones and printers. Refer to the Access Point user' guide for password settings.

Connecting Type		Description & Reference
With Access Point		• See "Setting up on the display / touch screen" on page 155. • For Windows user, see "Setting up via USB cable (recommended)" on page 159. • For Mac user, see "Setting up via USB cable (recommended)" on page 161. • See "Using a network cable" on page 164.
Without Access Point	Using Wi-Fi Direct	See "Setting the Wi-Fi Direct for mobile printing" on page 166.

Wireless network setup(Optional)

Setting up on the display / touch screen

Before starting, you will need to know the network name (SSID) of your wireless network and the network key if it is encrypted. This information was set when the access point (or wireless router) was installed. If you do not know about your wireless environment, please ask the person who set up your network.

Connecting to a network

 | After completing the wireless network connection, you need to install a machine driver to print from an application (see "Installing driver over the network" on page 142).

1 Select **Menu**( ) > **Network** > **Wi-Fi** > **Wi-Fi Settings**. on the control panel.

OR

For the model with a touch screen, press   (**Setup**) > **Network** > **Next** > **Wi-Fi** > **Wi-Fi Settings**.

2 Select the setup method you want.

- **Search List** (recommended)**:** The machine will display a list of available networks from which to choose. After a network is chosen then printer will prompt for the corresponding security key.

- **Custom:** In this mode, users can give or edit manually their own SSID, or choose the security option in detail.

Re-connecting to the network

When the wireless connection is lost, the machine automatically tries to re-connect to the access point (or wireless router) with the previously used wireless connection settings and address.

 | In the following cases, the machine automatically re-connects to the wireless network:

- The machine is turned off and on again.

- The access point (or wireless router) is turned off and on again.

Wireless network setup(Optional)

Canceling the connection process

To cancel the wireless network connection when the machine is connecting to

the wireless network, press and release ⊗ (**Stop**) on the control panel. **You
need to wait 2 minutes to re-connect to the wireless network.**

Wireless network setup(Optional)

Using Wi-Fi Protected Setup™ (WPS)

If your machine and an access point (or wireless router) support Wi-Fi Protected Setup™ (WPS), you can easily set up the secured wireless connection.

> • If you want to use the wireless network using the infrastructure mode, make sure that the network cable is disconnected from the machine. Using the **WPS (PBC)** or entering the PIN from the computer to connect to the access point (or wireless router) varies depending on the access point (or wireless router) you are using. Refer to the user's guide of the access point (or wireless router) you are using.
> • When using the WPS button to set the wireless network, security settings may change. To prevent this, lock the WPS option for the current wireless security settings. The option name may differ depending on the access point (or wireless router) you are using.

Items to prepare

• Check if the access point (or wireless router) supports Wi-Fi Protected Setup™ (WPS).

• Check if your machine supports Wi-Fi Protected Setup™ (WPS).

• Networked computer (PIN mode only)

Choosing your type

There are two methods available to connect your machine to a wireless network using WPS.

• The **Push Button Configuration (PBC)** method allows you to connect your machine to a wireless network by enabling WPS in your machine and pressing the WPS (PBC) button on a WPS-supported access point (or wireless router).

• The **Personal Identification Number (PIN)** method helps you connect your machine to a wireless network by entering the supplied PIN information on a WPS-supported access point (or wireless router).

Factory default in your machine is **PBC** mode, which is recommended for a typical wireless network environment.

Connecting in PBC mode

1 Select **Menu**( ) > **Network** > **Wi-Fi** > **WPS** on the control panel.

OR

For the model with a touch screen, press (**Setup**) > **Network** > **Next** > **Wi-Fi** > **WPS**.

2 Press **Connect via PBC**.

3 Touch **OK** when the confirmation window appears.

Information window appears showing 2 minutes connection processing time.

Wireless network setup(Optional)

4 Touch the **WPS (PBC)** button on the access point (or wireless router).

The messages are displayed on the display screen in the order below:

a Connecting: The machine is connecting to the access point (or wireless router).

b Connected: When the machine is successfully connected to the wireless network, the WPS LED light stays on.

c AP SSID: After completing the wireless network connection process, the AP's SSID information appears on the display.

5 Insert the supplied software CD into your CD-ROM drive, and follow the instructions in the window to set up the wireless network.

Connecting in PIN mode

1 Select **Menu**( ) > **Network** > **Wi-Fi** > **WPS** on the control panel.

OR

For the model with a touch screen, press (**Setup**) > **Network** > **Next** > **Wi-Fi** > **WPS**.

2 Press **Connect via PIN**.

3 Touch **OK** when the confirmation window appears.

4 The eight-digit PIN appears on the display.

You need to enter the eight-digit PIN within two minutes on the computer that is connected to the access point (or wireless router).

The messages are displayed on the display screen in the order below:

a Connecting: The machine is connecting to the wireless network.

b Connected: When the machine is successfully connected to the wireless network, the WPS LED light stays on.

c AP SSID: After completing the wireless network connection process, the AP's SSID information appears on the display.

5 Insert the supplied software CD into your CD-ROM drive, and follow the instructions in the window to set up the wireless network.

Setup using Windows

 Shortcut to the **Samsung Easy Wireless Setup** program without the CD: If you have installed the printer driver once, you can access the **Samsung Easy Wireless Setup** program without the CD (see "Accessing management tools" on page 236).

Wireless network setup(Optional)

Setting up via USB cable (recommended)

Items to prepare

- Access point

- Network-connected computer

- Software CD that was provided with your machine

- A machine installed with a wireless network interface

- USB cable

Creating the infrastructure network

1 Check whether the USB cable is connected to the machine.

2 Turn on your computer, access point, and machine.

3 Insert the supplied software CD into your CD-ROM drive.

If the installation window does not appear, click **Start** > **All programs** > **Accessories** > **Run**.

X:**Setup.exe** replacing "X" with the letter, which represents your CD-ROM drive and click **OK**.

- For Windows 8,

  If the installation window does not appear, from **Charms**, select **Search** > **Apps** and search for **Run**. Type in X:\\Setup.exe, replacing "X" with the letter that represents your CD-ROM drive and click **OK**.

  If "**Tap to choose what happens with this disc.**" pop-up window appears, click the window and select **Run Setup.exe**.

4 Review and accept the installation agreements in the installation window. Then, click **Next**.

5 Select **Wireless** on the **Printer Connection Type** screen. Then, click **Next**.

Wireless network setup(Optional)

6 On the **Are you setting up your printer for the first time?** screen, select **Yes, I will set up my printer's wireless network.** Then, click **Next**.

If your printer is already connected on the network, select **No, my printer is already connected to my network.**

7 After searching, the window shows the wireless network devices. Select the name (SSID) of the access point you want to use and click **Next**.

> If you cannot find the network name you want to choose, or if you want to set the wireless configuration manually, click **Advanced Setting**.
>
> - **Enter the wireless Network Name:** Enter the SSID of the access point (SSID is case-sensitive).
> - **Operation Mode:** Select **Infrastructure**.
> - **Authentication:** Select an authentication type.
>   **Open System:** Authentication is not used, and encryption may or may not be used, depending on the need for data security.
>   **Shared Key:** Authentication is used. A device that has a proper WEP key can access the network.
>   **WPA Personal or WPA2 Personal:** Select this option to authenticate the print server based on a WPA Pre-Shared Key. This uses a shared secret key (generally called Pre Shared Key pass phrase), which is manually configured on the access point and each of its clients.
> - **Encryption:** Select the encryption (None, WEP64, WEP128, TKIP, AES).
> - **Network Password:** Enter the encryption network password value.

- **Confirm Network Password:** Confirm the encryption network password value.
- **WEP Key Index:** If you are using WEP Encryption, select the appropriate **WEP Key Index**.

> The wireless network security window appears when the access point has security settings.
>
> Enter the Network Password of the access point (or router).

8 When the network connection window appears, disconnect the network cable. Then, click **Next**. The network cable connection can interfere with searching for wireless devices.

9 If your printer supports Wi-Fi Direct and this function is disabled, its corresponding screen will appears.

If you want to enable Wi-Fi Direct, check the checkbox, and click **Next**. If not, click just **Next**.
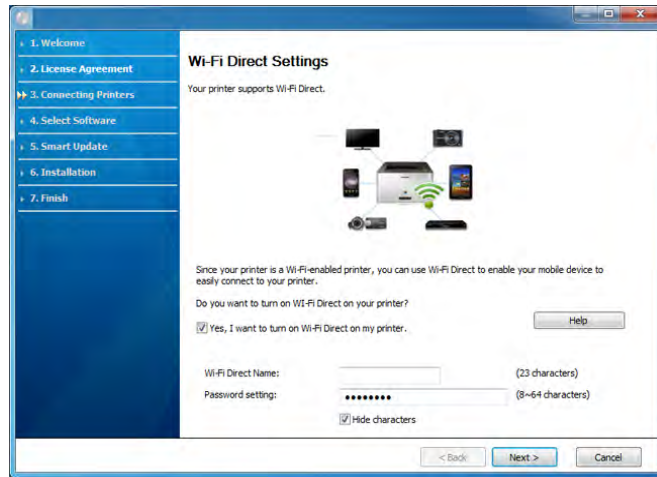
> • Can start to build Wi-Fi Direct by using **Samsung Easy Printer Manager** (see "Setting up Wi-Fi Direct" on page 166).
>
> • **Wi-Fi Direct Name**: The default Wi-Fi Direct Name is the model name and the maximum length is 22 characters.
>
> • **Password setting** is the numeric string, and the size is 8 ~ 64 characters.

10 When the wireless network set up is completed, disconnect the USB cable between the computer and machine. Click **Next**.

11 Follow the instructions in the installation window.

Setup using Mac

Items to prepare

• Access point

• Network-connected computer

• Software CD that was provided with your machine

• A machine installed with a wireless network interface

• USB cable

Setting up via USB cable (recommended)

1 Make sure that the machine is connected to your computer andpowered on.

2 Insert the supplied software CD into your CD-ROM drive.

3 Double-click the CD-ROM icon that appears on your Mac desktop.

- For Mac OS X 10.8, double-click the CD-ROM that appears on **Finder**.

4 Double-click the **MAC_Installer** folder > **Installer OS X** icon.

5 Click **Continue**.

6 Read the license agreement and click **Continue**.

7 Click **Agree** to agree to the license agreement.

8 Click **Install**. All components necessary for machine operations will be installed.

If you click **Customize**, you can choose individual components to install.

9 Enter the password and click **OK** (or **Install Software**).

10 Select **Configuration of Wireless network** on the **Printer Connection Type** and click **Continue**.

11 After searching, the window shows the wireless network devices. Select the name (SSID) of the access point you want to use and click **Next**.

When you set the wireless configuration manually, click **Advanced Setting**.

- **Enter the wireless Network Name:** Enter the SSID of the access point (SSID is case-sensitive).

- **Operation Mode:** Select **Infrastructure**.

• **Authentication:** Select an authentication type.

Open System: Authentication is not used, and encryption may or may not be used, depending on the need for data security.

Shared Key: Authentication is used. A device that has a proper WEP key can access the network.

WPA Personal or WPA2 Personal: Select this option to authenticate the print server based on the WPA Pre-Shared Key. This uses a shared secret key (generally called Pre Shared Key pass phrase) that is manually configured on the access point and each of its clients.

• **Encryption:** Select the encryption. (None, WEP64, WEP128, TKIP, AES)

• **Network Password:** Enter the encryption network password value.

• **Confirm Network Password:** Confirm the encryption network password value.

• **WEP Key Index:** If you are using WEP Encryption, select the appropriate **WEP Key Index**.

The wireless network security window appears when the access point has security enabled.

Enter the Network Password of the access point (or router).

12 If your printer supports Wi-Fi Direct and this function is disabled, its corresponding screen will appears.

If you want to enable Wi-Fi Direct, check the checkbox, and click **Next**. If not, click just **Next**.

> • Can start to build Wi-Fi Direct by using Samsung Easy Printer Manager (see "Setting up Wi-Fi Direct" on page 166).
>
> • **Wi-Fi Direct Name**: The default Wi-Fi Direct Name is the model name and the maximum length is 22 characters.
>
> • **Password setting** is the numeric string, and the size is 8 ~ 64 characters.

13 When the wireless network settings are completed, disconnect the USB cable between the computer and machine.

14 Wireless network set up is completed. After the installation is finished, click **Quit**.

Wireless network setup(Optional)

Using a network cable

> Machines that do not support the network port will not be able to use this feature (see "Rear view" on page 18).

Your machine is a network compatible machine. To enable your machine to work with your network, you will need to perform some configuration procedures.

> • After completing the wireless network connection, you need to install a machine driver to print from an application (see "Installing driver over the network" on page 142).
>
> • See your network administrator, or the person that set up your wireless network, for information about your network configuration.

Items to prepare

• Access point

• Network-connected computer

• Software CD that was provided with your machine

• A machine installed with a wireless network interface

• Network cable

Printing a network configuration report

You can identify the network settings of your machine by printing a network configuration report.

See "Printing a network configuration report" on page 139.

IP setting using SetIP Program (Windows)

This program is used to manually set the network IP address of your machine using its MAC address to communicate with the machine. The MAC address is the hardware serial number of the network interface and can be found in the **Network Configuration Report**.

See "Setting IP address" on page 139.

Configuring the machine's wireless network

Before starting you will need to know the network name (SSID) of your wireless network and the network key if it is encrypted. This information was set when the access point (or wireless router) was installed. If you do not know about your wireless environment, please ask the person who set up your network.

To configure wireless parameters, you can use **SyncThru™ Web Service**.

Wireless network setup(Optional)

Using SyncThru™ Web Service

Before starting wireless parameter configuration, check the cable connection status.

1 Check whether or not the network cable is connected to the machine. If not, connect the machine with a standard network cable.

2 Start a web browser such as Internet Explorer, Safari, or Firefox and enter your machine's new IP address in the browser window.

For example,

> http://192.168.1.133/

3 Click **Login** on the upper right of the SyncThru™ Web Service website.

4 Type in the **ID** and **Password** then click **Login**. We recommend you to change the default password for security reasons.

• *ID: admin*

• *Password: sec00000*

5 When the **SyncThru™ Web Service** window opens, click **Network Settings**.

6 Click **Wi-Fi** > **Wizard**.

7 Select the one **Network Name(SSID)** in the list.

8 Click **Next**.

If the wireless security setting window appears, enter the registered password (network password) and click **Next**.

9 The confirmation window appears, please check your wireless setup. If the setup is right, click **Apply**.

> ⚠ Disconnect the network cable (standard or network). Your machine should then start communicating wirelessly with the network.

Turning the Wi-Fi network on/off

> 🖉 If your machine has a display, you can also turn on/off the Wi-Fi from the machine's control panel using the **Network** menu.

1 Check whether the network cable is connected to the machine. If not, connect the machine with a standard network cable.

2 Start a web browser such as Internet Explorer, Safari, or Firefox and enter your machine's new IP address in the browser window.

For example,

> http://192.168.1.133/

Wireless network setup(Optional)

3 Click **Login** on the upper right of the SyncThru™ Web Service website.

4 Type in the **ID** and **Password**, then click **Login**. We recommend you to change the default password for security reasons.

- **ID: admin**

- **Password: sec00000**

5 When the **SyncThru™ Web Service** window opens, click **Network Settings**.

6 Click **Wi-Fi**.

7 You can turn the Wi-Fi network on/off.

Setting the Wi-Fi Direct for mobile printing

Wi-Fi Direct is an easy-to-setup peer-to-peer connection method between the Wi-Fi Direct certified printer and a mobile device that provides a secure connection and better throughput than ad hoc mode.

With Wi-Fi Direct, you can connect your printer to a Wi-Fi Direct network while concurrently connecting to an access point. You can also use a wired network and a Wi-Fi Direct network simultaneously so multiple users can access and print documents both from Wi-Fi Direct and from a wired network.

- You cannot connect your mobile device to the internet through the printer's Wi-Fi Direct.

- The supported protocol list may differ from your model, Wi-Fi Direct networks do NOT support IPv6, network filtering, IPSec, WINS, and SLP services.

- The maximum number of devices that can be connected via Wi-Fi Direct is 4.

Setting up Wi-Fi Direct

You can enable Wi-Fi Direct feature by one of the following methods.

From the USB cable-connected computer

After the driver installation is complete, Samsung Easy Printer Manager can be used to change Wi-Fi Direct settings.

 Samsung Easy Printer Manager is Available for Windows and Mac OS users only.

Wireless network setup(Optional)

From the **Start** menu, select **Programs** or **All Programs** > **Samsung Printers** > Samsung Easy Printer Manager > **Device Settings** > **Network**.

- **Wi-Fi Direct On/Off**: Select **On** to enable.

- **Device Name**: Enter the printer's name for searching for your printer on a wireless network. By default, the device name is the model name.

- **IP Address**: Enter the IP address of the printer. This IP address is used only for the local network and not for the infrastructure wired or wireless network. We recommend using the default local IP address (the default local IP address of the printer for Wi-Fi Direct is 192.168.3.1)

- **Group Owner**: Activate this option to assign the printer the Wi-Fi Direct group's owner. The **Group Owner** acts similar to a wireless access point. We recommend activating this option.

- **Network Password**: If your printer is a **Group Owner**, a **Network Password** is required for other mobile devices to connect to your printer. You can configure a network password yourself, or can remember the given Network Password that is randomly generated by default.

From the machine

1 Select **Menu**( ) > **Network** > **Wi-Fi** > **Wi-Fi Direct** on the control panel.

OR

For the model with a touch screen, press   (**Setup**) > **Network** > **Next** > **Wi-Fi** > **Wi-Fi Direct**.

2 Enable **Wi-Fi Direct** and set other options.

From the network-connected computer

If your printer is using a network cable or a wireless access point, you can enable and configure Wi-Fi Direct from SyncThru™ Web Service.

1 Access **SyncThru™ Web Service** and select **Settings** > **Network Settings** > **Wi-Fi** > **Wi-Fi Direct™**.

2 Enable **Wi-Fi Direct™** and set other options.

Setting up the mobile device

- After setting up Wi-Fi Direct from the printer, refer to the user manual of the mobile device you are using to set its Wi-Fi Direct.

- After setting up Wi-Fi Direct, you need to download the mobile printing application (For example: Samsung Mobile printer) to print from your smartphone.

Wireless network setup(Optional)

| • When you have found the printer you want to connect to from your mobile device, select the printer and the printer's LED will blink. Press the WPS button on the printer and it will be connected to your mobile device.

• If your mobile device does not support Wi-Fi Direct, you need to enter the "Network Key" of a printer instead of pushing the WPS button. |

10 Troubleshooting for wireless network

Problems during setup or driver installation

Printers Not Found

• Your machine may not be turned on. Turn on your computer and the machine.

• USB cable is not connected between your computer and machine. Connect the machine to your computer using the USB cable.

• The machine does not support wireless networking. Check the machine's user's guide included on the software CD supplied with your machine and prepare a wireless network machine.

Connecting Failure - SSID Not Found

• The machine is unable to find the network name (SSID) you have selected or entered. Check the network name (SSID) on your access point and try connecting again.

• Your access point is not turned on. Turn on your access point.

Wireless network setup(Optional)

Connecting Failure - Invalid Security

- Security is not configured correctly. Check the configured security on your access point and machine.

Connecting Failure - General Connection Error

- Your computer is not receiving a signal from your machine. Check the USB cable and your machine's power.

Connecting Failure - Connected Wired Network

- Your machine is connected with a wired network cable. Remove the wired network cable from your machine.

Connecting Failure - Assigning the IP address

- Cycle the power for the access point (or wireless router) and machine.

PC Connection Error

- The configured network address is unable to connect between your computer and machine.
  - For a DHCP network environment

    The machine receives the IP address automatically (DHCP) when computer is configured to DHCP.

> 📝 If the printing job is not working in DHCP mode, the problem may be caused by the automatically changed IP address. Compare the IP address between

the product's IP address and the printer port's IP address.

How to compare:

1 Print the network information report of your printer, and then check the IP address (see "Printing a network configuration report" on page 139).

2 Check the printer port's IP address from your computer.

  a Click the Windows **Start** menu.

- For Windows 8, from the **Charms**, select **Search** > **Settings**.

  b For Windows XP/Server 2003, select **Printer and Faxes**.

- For Windows Server 2008/Vista, select **Control Panel** > **Hardware and Sound** > **Printers**.
- For Windows Server 2008 R2, select **Control Panel** > **Hardware** > **Devices and Printers**.
- For Windows 7/ Windows 8, select **Control Panel** > **Devices and Printers**.

  c Right-click your machine.

  d For Windows XP/2003/2008/Vista, press **Properties**.

For Windows 7/ Windows 8 or Windows Server 2008 R2, from context menus, select the **Printer properties**.

If **Printer properties** item has ► mark, you can select other printer drivers connected with selected printer.

  e Click **Port** tab.

  f Click **Configure Port..** button.

  g Check if **Printer Name** or **IP Address:** is the IP address on the network configuration Sheet.

3 Change the printer port's IP address if it is different from the network information report's.

If you want to use the software installation CD to change the port IP, connect to a network printer. Then reconnect the IP address.

Wireless network setup(Optional)

- For a Static network environment

  The machine uses the static address when the computer is configured to static address.

  For example,

  If the computer's network information is as shown below:

  - IP address: 169.254.133.42
  - Subnet Mask: 255.255.0.0

  Then the machine's network information should be as below:

  - IP address: 169.254.133.**43**
  - Subnet Mask: 255.255.0.0 (Use the computer's subnet mask.)
  - Gateway: 169.254.133.**1**

Other problems

If problems occur while using the machine on a network, check the following:

> For information on the access point (or wireless router), refer to its own user's guide.

- Your computer, access point (or wireless router), or machine may not be turned on.

- Check the wireless reception around the machine. If the router is far from the machine or there is an obstacle, you might have difficulty receiving the signal.

- Cycle the power for the access point (or wireless router), machine, and computer. Sometimes cycling the power can recover network communication.

- Check whether firewall software (V3 or Norton) is blocking the communication.

  If the computer and the machine are connected on the same network and it cannot be found when searching, firewall software might be blocking the communication. Refer to the user's guide for the software to turn it off and try searching for the machine again.

- Check whether the machine's IP address is allocated correctly. You can check the IP address by printing the network configuration report.

- Check whether the access point (or wireless router) has a configured security (password). If it has a password, refer to the access point (or wireless router) administrator.

- Check the machine's IP address. Reinstall the machine driver and change the settings to connect to the machine on the network. Due to the characteristics of DHCP, the allocated IP address could change if the machine is not used for a long time or if the access point has been reset.

  Register the product's MAC address when you configure the DHCP server on the access point (or wireless router). Then you can always use the IP address that is set with the MAC address. You can identify the Mac address of your machine by printing a network configuration report (see "Printing a network configuration report" on page 139).

- Check the wireless environment. You might not be able to connect to the network in the infrastructure environment where you need to type in a user's information before connecting to the access point (or wireless router).

Wireless network setup(Optional)

- This machine only supports IEEE 802.11 b/g/n and Wi-Fi. Other wireless communication types (e.g., Bluetooth) are not supported.

- The machine is within the range of the wireless network.

- The machine is located away from obstacles that could block the wireless signal.

  Remove any large metal objects between the access point (or wireless router) and the machine.

  Make sure the machine and wireless access point (or wireless router) are not separated by poles, walls, or support columns containing metal or concrete.

- The machine is located away from other electronic devices that may interfere with the wireless signal.

  Many devices can interfere with the wireless signal, including a microwave oven and some Bluetooth devices.

- Whenever the configuration of your access point (or wireless router) changes, you must do the product's wireless network setup again.

- The maximum number of devices that can be connected via Wi-Fi Direct is 4.

Using the NFC feature (Optional)

 If you want to add NFC feature to the machine, check the option lists and contact the purchasing point to order (see "Available accessories" on page 61). When you purchase a Wireless/NFC Kit (Wireless LAN Option), install the kit by following the steps described in the Wireless/NFC Kit (Wireless LAN Option) guide which is enclosed in the kit. After installing the Wireless Kit (Wireless LAN Option), set the machine to use this feature.

The NFC (Near Field Communication) printer allows you to directly print from your mobile device just by holding your mobile device over the NFC tag on Wireless/NFC Kit (Wireless LAN Option). It does not require installing print driver or connecting to an access point. You just need NFC supported mobile device. In order to use this feature, mobile apps needs to be installed on your mobile device. The default in your machine is NFC on.

 • Depending on the material of the mobile device cover, NFC recognition may not work properly.

 • Depending on the mobile device you are using, the transmission speed may differ.

 • This feature is available only for the model with a NFC tag (see "Machine overview" on page 16).

 • Using a cover or a battery other than the ones that came with the mobile device, or a metal cover/sticker can block NFC.

 • If NFC devices keep failing to communicate,

 - Remove the case or cover from the mobile device, then try again.

 - Reinstall the battery from the mobile device, then try again.

Requirements

• NFC and Wi-Fi Direct enabled, supported mobile apps installed mobile device with Android OS 4.0 or higher.

 Only Android OS 4.1 or higher will automatically enable the Wi-Fi Direct feature on your mobile device when you enable the NFC feature. We recommend you to upgrade your mobile device to Android OS 4.1 or higher to use the NFC feature.

• Wi-Fi Direct feature enabled printer (see "Setting up Wi-Fi Direct" on page 166).

Related Apps

There are some apps that can be used with the NFC feature. The apps can be downloaded from the Google Play Store.

• **Samsung Mobile Print:** Enables users to print, scan(Only users with multi-functional printers), or fax(Only users with multi-functional printers) photos, documents, and web pages directly from your smartphone or tablet (see "Using the Samsung Mobile Print App" on page 178).

• **Samsung Mobile Print Pro:** Helps users to get an authentication easily. This app provides one way of getting a user authentication using your mobile device (see "Using the Samsung Mobile Print Pro App" on page 173).

Using the NFC feature (Optional)

- **Samsung Mobile Print Manager:** Enables users to use cloning and wireless setup features using your mobile device (see "Using the Samsung Mobile Print Manager App" on page 175).

Using the Samsung Mobile Print Pro App

You can use it to get an authentication/registration from the **Samsung Mobile Print Pro** app.

Authentication from the mobile device

1 Open **Samsung Mobile Print Pro** app.

> If you do not have **Samsung Mobile Print Pro** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

2 Type in the **ID** and **Password**.

If necessary, type in the ID and Password to log in. If it's your first time logging into the printer, type in the below default ID and password. We recommend you to change the default password for security reasons.

- **ID: admin**

- **Password: sec00000**

3 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag($\boxed{\text{NFC}}$) on your printer.

Wait few seconds for the mobile device to connect to the printer.

> For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

Using the NFC feature (Optional)

Registration from the mobile device

1 Open **Samsung Mobile Print Pro** app.

> If you do not have **Samsung Mobile Print Pro** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

**2** Press the [ ] icon on the **Samsung Mobile Print Pro** screen.

3 Select **On** from the **Phone login set as default** menu.

4 Mobile device ID appears on the **Samsung Mobile Print Pro** screen.

Press **Registration**.

5 Type in the **ID** , **Password**, **Domain** and **Passcode**, then click **OK**.

> Passcode is for when the administrator chooses **Two-Factor Authentication** method. You need to enter a passcode for authentication. Password and passcode should be different. You can select **Two-Factor Authentication** from the SyncThru™ Web Service, select **Security** > **User Access Control** > **Authentication** > **Authentication Method** > **Options** button > **Login Method** > **Two-Factor Authentication**.

6 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag([NFC]) on your printer.

Wait few seconds for the mobile device to connect to the printer.

> For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

7 Registration complete message appears on the printer's touch screen.

Using the NFC feature (Optional)

Using the Samsung Mobile Print Manager App

If you have more than one printer and need to set the same settings on each printer, you can easily do it using the **Samsung Mobile Print Manager** app. Touch your cellphone on the NFC tag on your printer to copy the settings and tap on the printer you want to set the setting.

Exporting(Copying the setting to your mobile device)

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer (see "Setting the Wi-Fi Direct for mobile printing" on page 166).

2 Open **Samsung Mobile Print Manager** from your mobile device.

> 📝 If you do not have **Samsung Mobile Print Manager** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

3 Press **Export**.

4 Type in the **ID** and **Password**, then click **OK**.

If necessary, type in the ID and Password to log in. If it's your first time logging into the printer, type in the below default ID and password. We recommend you to change the default password for security reasons.

• **ID: admin**

• **Password: sec00000**

5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag( ) on your printer.

Wait few seconds for the mobile device to connect t7o the printer.
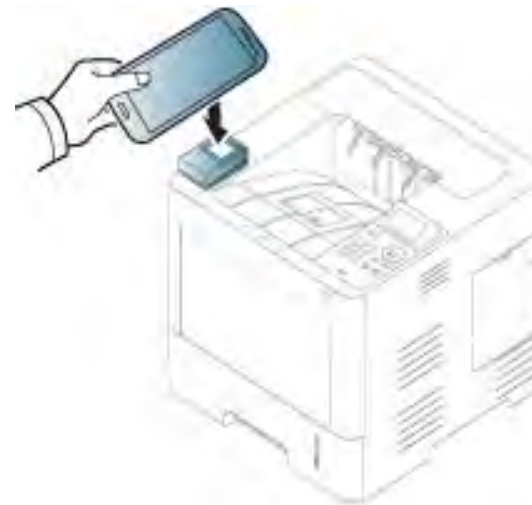
Using the NFC feature (Optional)

> • For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC tag on your mobile device before tagging.
> • While cloning, the machine is locked.

6 Select the settings you want to apply and press **OK**.

7 Follow the instruction on the mobile device's screen.

Importing (Applying the settings to the machine)

1 Check that NFC and Wi-Fi Direct enabled features are on your mobile device and Wi-Fi Direct feature is enabled on your printer (see "Setting the Wi-Fi Direct for mobile printing" on page 166).

2 Open **Samsung Mobile Print Manager** from your mobile device.

> If you do not have **Samsung Mobile Print Manager** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

3 Press **Import**.

4 Type in the **ID** and **Password**, then click **OK**.

If necessary, type in the ID and Password to log in. If it's your first time logging into the printer, type in the below default ID and password. We recommend you to change the default password for security reasons.

- **ID: admin**

- **Password: sec00000**

5 Select the settings you want to copy.

6 Follow the instruction on the mobile device's screen.

7 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag(NFC) on your printer.
Wait few seconds for the mobile device to connect to the printer.

Using the NFC feature (Optional)

> • For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.
> • While cloning, the machine is locked.

Wireless Setup

You can copy wireless setting from your phone to your printer by touching your mobile device on the NFC tag on your printer.

> Wi-Fi setting on your mobile device should be set before using this feature.

1 Open **Samsung Mobile Print Manager** from your mobile device.

> If you do not have **Samsung Mobile Print Manager** installed on your cellphone, go to the application store (Samsung Apps, Play Store) on your mobile device, and just search for download the app and try again.

2 Mobile device **Samsung Mobile Print Pro** screen appears.

Press **Wi-Fi Setup**.

3 Type in the **ID** and **Password**, then click **OK**.

If necessary, type in the ID and Password to log in. If it's your first time logging into the printer, type in the below default ID and password. We recommend you to change the default password for security reasons.

• **ID: admin**

• **Password: sec00000**

4 If the access point (or wireless router) is connected to the connection confirmation window appears, then click **OK**.If the access point (or wireless router) not connection, select the desired access point (or wireless router) and click **OK**, then click **OK**.

5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag(![NFC]) on your printer.

Wait few seconds for the mobile device to connect to the printer.

Using the NFC feature (Optional)

 For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

6 Follow the instruction on the mobile device's screen.

Using the Samsung Mobile Print App

Samsung Mobile Print is a free application that enables users to print, scan(Only users with multi-functional printers), or fax(Only users with multi-functional printers) photos, documents, and web pages directly from your smartphone or tablet.

Printing

1 Check that NFC and Wi-Fi Direct features are enabled on your mobile device and Wi-Fi Direct feature is enabled on your printer.

2 Open **Samsung Mobile Print** app.

 If you do not have **Samsung Mobile Print** installed on your cellphone, go to the application store (Samsung Apps, Play Store, App Store) on your mobile device, and just search for download the app and try again.

3 Select print mode.

4 Select the content you want to print.

If necessary, change the print option by pressing the icon.

5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag(NFC) on your printer.

Wait a few seconds for the mobile device to send a job to the printer.

 For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

6 The printer starts printing.

Using the NFC feature (Optional)

Registering Google Cloud Printer

1 Check that NFC and Wi-Fi Direct features are enabled on your mobile device and Wi-Fi Direct feature is enabled on your printer (see "Setting the Wi-Fi Direct for mobile printing" on page 166).

2 Open **Samsung Mobile Print** app.

> If you do not have **Samsung Mobile Print** installed on your cellphone, go to the application store (Samsung Apps, Play Store, App Store) on your mobile device, and just search for download the app and try again.

3 Select device status icon.

4 Select **Google Cloud Print** > **Register Google Cloud Printer**.

5 Tag your mobile device (usually located on the back of the mobile device) over the NFC tag( ) on your printer.

Wait a few seconds for the mobile device to connect to the printer.

> For some mobile devices, NFC tag might not be located at the back of the mobile device. Check the location of the NFC antenna on your mobile device before tagging.

6 Confirm your printer in pop-up window.

Now your printer is registered with Google Cloud Print™ service.

Supported Mobile Apps

Available Apps

- **Samsung Mobile Print: Samsung Mobile Print** is a free application that enables users to print, scan(Only users with multi-functional printers), or fax(Only users with multi-functional printers) photos, documents, and web pages directly from your smartphone or tablet. **Samsung Mobile Print** is not only compatible with your Android and iOS smart phones but also with your iPod Touch and tablet PC. It connects your mobile device to a network connected Samsung printer or to a wireless printer through a Wi-Fi access point. Installing a new driver or configuring network settings isn't necessary – just simply install the **Samsung Mobile Print** application, and it will automatically detect compatible Samsung printers. Besides printing photos, web pages, and PDFs, scanning is also supported. If you have a Samsung multifunction, scan any document into a JPG, PDF, or PNG format for quick and easy viewing on your mobile device (see "Using the Samsung Mobile Print App" on page 178).

- **Samsung Mobile Print Pro:** Helps users to get an authentication easily. This app provides one way of getting a user authentication using your mobile device (see "Using the Samsung Mobile Print Pro App" on page 173).

- **Samusng Mobile Print Manager:** Enables users to use cloning and wireless setup features using your mobile device (see "Using the Samsung Mobile Print Manager App" on page 175, "Wireless Setup" on page 177).

Downloading Apps

To download apps, go to the application store (Play Store, App Store) on your mobile device, and just search for "**Samsung Mobile Print /Samsung Mobile Print Pro/Samusng Mobile Print Manager**." You can also visit iTunes for Apple devices on your computer.

- **Samsung Mobile Print**
  - **Android:** Search for **Samsung Mobile Print** from Play Store, and then download the app.
  - **iOS:** Search for **Samsung Mobile Print** from App Store, and then download the app.

- **Samsung Mobile Print Pro/Samusng Mobile Print Manager**
  - **Android:** Search for **Samsung Mobile Print Pro** or **Samusng Mobile Print Manager** from Play Store, and then download the app.

Supported Mobile OS

- **Samsung Mobile Print**
  - Android OS 2.3 or higher
  - iOS 5.0 or higher

- **Samsung Mobile Print Pro/Samusng Mobile Print Manager**
  - NFC and Wi-Fi Direct enabled, supported mobile apps installed mobile device with Android 4.0 or higher

AirPrint

Only AirPrint certified machines can use the AirPrint feature. Check the box your machine came in for the AirPrint certified mark.
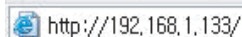
AirPrint allows you to wirelessly print directly from iPhone, iPad and iPod touch running the latest version of iOS.

Setting up AirPrint

Bonjour(mDNS) and IPP protocols are required on your machine to use the **AirPrint** feature. You can enable the **AirPrint** feature by one of the following methods.

1 Check whether the machine is connected to the network.

2 Start a web browser such as Internet Explorer, Safari, or Firefox and enter your machine's new IP address in the browser window.

For example,

http://192.168.1.133/

3 Click **Login** in the upper right of the SyncThru™ Web Service website.

4 Type in the **ID** and **Password**, then click **Login**. Type in the below default ID and password. We recommend you to change the default password for security reasons.

- **ID: admin**

- **Password: sec00000**

5 When the SyncThru™ Web Service window opens, click **Settings** > **Network Settings**.

6 Click **Raw TCP/IP, LPR, IPP** or **mDNS**.

You can enable the IPP protocol or mDNS protocol.

Printing via AirPrint

For example, the iPad manual provides these instructions:

1 Open your email, photo, web page, or document you want to print.

2 Touch the action icon ( ).

3 Select **your printer driver name** and option menu to set up.

4 Touch **Print** button. Print it out.

2. Using a Network-Connected Machine 181

AirPrint

 Cancelling print job: To cancel the printing job or view the print summary, click the print center icon ( ) in multitasking area. You can click cancel in the print center.

Google Cloud Print™

Google Cloud Print™ is a service that allows you to print to a printer using your smart phone, tablet, or any other web-connected devices. Just register your Google account with the printer, and you are ready to use the Google Cloud Print™ service. You can print your document or email with Chrome OS, Chrome browser, or a Gmail™/ Google Docs™ application on your mobile device, so you don't need to install the printer driver on the mobile device. Refer to the Google website (http://www.google.com/cloudprint/learn/ or http://support.google.com/cloudprint) for more information about Google Cloud Print™.

Registering your Google account to the printer

Registering from Samsung Mobile Print app

 | In order to use this feature, **Samsung Mobile Print** app needs to be installed on your cell phone.

1 Open **Samsung Mobile Print** app from your mobile device.

2 Select device setting.

3 Select **Google Cloud Print**.

4 Enter your printer's name and description.

 | If the network environment of your printer is using a proxy server, you need to configurethe proxy's IP and port number from **Proxy Setting**. Contact your networkservice provider or network administrator for more information.

5 Click **Register**.

6 You need to authenticate as an administrator. Type in the below default ID and Password.

  • **ID: admin**

  • **Password: sec00000**

7 Confirm your printer in pop-up window.

Now your printer is registered with Google Cloud Print™ service.

Registering from the Chrome Browser

 | • Make sure the printer machine is turned on and connected to a wired or wireless network that has access to the Internet.

  • You should create your **Google** account in the advance.

1 Open the Chrome browser.

2 Visit www.google.com.

Google Cloud Print™

3 Sign in to the Google website with your Gmail™ address.

4 Enter your printer's IP address in the address field and press the Enter key or click **Go**.

5 Click **Login** in the upper right corner of the SyncThru™ Web Service website.

6 If it's your first time logging into **SyncThru™ Web Service** you need to log-in as an administrator. Type in the below default **ID** and **Password**. We recommend you to change the default password for security reasons.

- **ID: admin**
- **Password: sec00000**

> If the network environment is using a proxy server, you need to configure the proxy's IP and port number from **Settings** > **Network Settings** > **Google Cloud Print** > **Proxy Setting**. Contact your network service provider or network administrator for more information.

---

7 When the **SyncThru™ Web Service** window opens, click **Settings** > **Network Settings** > **Google Cloud Print**.

8 Enter your printer's name and description.

9 Click **Register**.

The confirmation pop-up window appears.

> If you set the browser to block pop-ups, the confirmation window will not appear. Allow the site to show pop-ups.

---

10 Click **Finish printer registration**.

11 Click **Manage your printers**.

Now your printer is registered with Google Cloud Print™ service.

Google Cloud Print™-ready devices will appear in the list.

Registering your Google account to the printer

Registering from Samsung Mobile Print app

> In order to use this feature, **Samsung Mobile Print** app needs to be installed on your cell phone.

---

1 Open **Samsung Mobile Print** app from your mobile device.

2 Select device setting.

3 Select **Google Cloud Print**.

4 Enter your printer's name and description.

Google Cloud Print™

 If the network environment is using a proxy server, you need to configurethe proxy's IP and port number from **Proxy Setting**. Contact your networkservice provider or network administrator for more information.

5 Click **Register**.

Confirm your printer in pop-up window.

6 Click **Finish**.

Now your printer is registered with Google Cloud Print™ service.

Registering from the Chrome Browser

 • Make sure the printer machine is turned on and connected to a wired or wireless network that has access to the Internet.

 • You should create your **Google** account in the advance.

1 Open the Chrome browser.

2 Visit www.google.com.

3 Sign in to the Google website with your Gmail™ address.

4 Enter your printer's IP address in the address field and press the Enter key or click **Go**.

5 Click **Login** in the upper right corner of the SyncThru™ Web Service website.

6 If it's your first time logging into **SyncThru™ Web Service** you need to log-in as an administrator. Type in the below default **ID** and **Password**. We recommend you to change the default password for security reasons.

 • **ID: admin**

 • **Password: sec00000**

 If the network environment is using a proxy server, you need to configure the proxy's IP and port number from **Settings** > **Network Settings** > **Google Cloud Print** > **Proxy Setting**. Contact your network service provider or network administrator for more information.

7 When the **SyncThru™ Web Service** window opens, click **Settings** > **Network Settings** > **Google Cloud Print**.

8 Enter your printer's name and description.

9 Click **Register**.

The confirmation pop-up window appears.

 If you set the browser to block pop-ups, the confirmation window will not appear. Allow the site to show pop-ups.

Google Cloud Print™

10 Click **Finish printer registration**.

11 Click **Manage your printers**.

   Now your printer is registered with Google Cloud Print™ service.

   Google Cloud Print™-ready devices will appear in the list.

Printing with Google Cloud Print™

The printing procedure varies depending on the application or the device you are using. You can see the application list that supports Google Cloud Print™ service.

 Make sure the printer is turned on and connected to a wired or wireless network that has access to the Internet.

Printing from an application on mobile device

The following steps are an example of using the Google Docs™ app from Android mobile phone.

1 Install the Cloud Print application on your mobile device.

 If you do not have the application, download it from the application store such as Android Market or App Store.

2 Access the Google Docs™ application from your mobile device.

3 Tap the option ( ) button of the document that you want to print.

4 Tap the send ( ) button.

5 Tap the Cloud Print ( ) button.

6 Set the printing options if you want.

7 Tap **Click here to Print**.

Printing from the Chrome browser

The following steps are an example of using the Chrome browser.

1 Run Chrome.

2 Open the document or email that you want to print.

3 Click the wrench ( ) icon in the browser's top right corner.

4 Click **Print**. A new tab for printing appears.

Google Cloud Print™

5 Select **Print with Google Cloud Print**.

6 Click the **Print** button.

3. Useful Setting Menus

This chapter explains how to browse the current status of your machine, and the method of setting for advanced machine setup.

Before you begin reading a chapter

This chapter explains all the features available for this series' models to help users easily understand the features.You can check the features available for each model in the Basic Guide (see "Menu overview" on page 26).The following are tips for using this chapter

- The control panel provides access to various menus to set up the machine or use the machine's functions. These menus can be accessed by pressing **Menu**( )
  or from the touch screen.

- Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.

- For models that do not have the **Menu**( ) or the touch , this feature is not applicable (see "Control panel overview" on page 19).

- Some menu names may differ from your machine depending on its options or the models.

Information

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

• Press **Menu**( ) > **Information** on the control panel.

• For the model with a touch screen, select (**Information**) on the touch screen.

Item	Description
• **Menu Map** • **Help List**	Prints the menu map which shows the layout and current settings of this machine.
Configuration	Prints a report on the machine's overall configuration.
Network Configuration	Prints a report on the machine's current network configuration.
Demo Page	Prints the demo page to check whether your machine is printing properly or not.
Supplies Information	Prints supplies' information page.
Usage Counter	Prints a usage page. The usage page contains the total number of pages printed.

Item	Description
Account	Prints a report of printout counts for each user. This is only available when Job Accounting is enabled from the SyncThru™ Web Admin Service.
PCL Font	Prints the PCL font list.
PS Font	Prints the PS font list.

Layout

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

• Press **Menu**( ) > **Layout** on the control panel.

• For the model with a touch screen, select   (**Setup**) > **Layout** on the touch screen.

Item	Description
Orientation	Selects the direction in which information is printed on a page. • **Portrait** • **Landscape**

Item	Description
Margin	• **Common Margin:** Sets the margin for each side of paper. • **MP Tray:** Sets the paper margins in multi-purpose tray. • **<Tray X>** X**:** Sets the paper margins for the paper trays. • **Emulation Margin:** Sets the paper margins for emulation print page.
Duplex	To print on both sides of the paper, choose the binding edge. • **Off:** Disables this option. • **Long Edge** • **Short Edge**

Paper

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- Press **Menu**( ) > **Paper** on the control panel.

- For the model with a touch screen, select   (**Setup**) > **Paper** on the touch screen.

Item	Description
Copies	Selects the number of copies.
MP Tray/ Tray [x][a]	• **Paper Size:** Selects the default paper size. • **Paper Type:** Selects the paper type currently loaded in the tray.
Paper Source	Sets the default paper tray to use. **Auto:** Automatically locates the tray with the same sized paper as an original.
• **Tray Confirm** • **Tray Confirmation**	Activates the tray confirmation message. If you open and close a tray, a window asking you whether to set the paper size and type for the tray just opened appears.

a. [tray type] indicates the tray number.

Graphic

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- Press **Menu**( ) > **Graphic** on the control panel.

- For the model with a touch screen, select (**Setup**) > **Graphic** on the touch screen.

Item	Description
Resolution	Specifies the number of dots printed per inch (dpi). The higher the setting, the sharper printed characters and graphics.
Clear Text	Prints text darker than on a normal document.
Auto CR	Allows you to append the required carriage return to each line feed, which is useful for Unix or DOS users.
Edge Enhance	Allows user to enhance sharpness of text and graphics for improving readability.

System Setup/ Setup

To change the menu options:

- Press **Menu**( ) > **System Setup** on the control panel.

- For the model with a touch screen, select (**Setup**) > **System** or **Tray Behavior** on the touch screen.

Item	Description
Date & Time	Sets the date and time.
Date Format	Sets the date format.
Clock Mode	Selects the format for displaying time between 12 hours and 24 hours.
MSD Spooling	When enabled, this feature spools print jobs sent from the network on the mass storage device(Hard Disk)of the machine.
Language	Sets the language of the text that appears on the control panel display.
• **Default Paper** • **Default Paper Size**	You can set the default paper size to use.

Item	Description
Power Save	Sets how long the machine waits before going to power save mode. When the machine does not receive data for an extended period of time, power consumption is automatically lowered.
Wakeup Event	When this option is **On**, you can wake up the machine from the power saving mode with the following actions: • Loading paper in a tray. • Opening or closing the front cover. • Pulling a tray out or pushing a tray in.
Job Timeout	When there is no input for a certain period of time, the machine cancels the current job. You can set the amount of time the machine will wait before canceling the job.
Held Job Timeout	You can set the time to hold the temprarily stopped job.
Altitude Adjustment	Optimize print quality according to the machine's altitude ("Altitude adjustment" on page 213).
Humidity	Optimizes print quality according to the humidity in the environment.
Job Rescheduling	When a job is paused due to a paper mismatch or paper empty error, the **Job Rescheduling** feature switches from the paused job to the next job if the next job can be printed without any paper errors.

System Setup/ Setup

Item	Description
Auto Continue	Determine whether or not the machine continues printing when it detects the paper does not match the paper settings. • **0 Sec:** This option allows you to continue printing when the paper size you have set is mismatched with the paper in the tray. • **30 Sec:** If a paper mismatch occurs, an error message will display. The machine waits for about 30 second, then automatically clear the message and continue printing. • **Off:** If a paper mismatch occurs, the machine waits until you insert the correct paper.
Auto Tray Switch	Determine whether or not the machine continues printing when it detects the paper does not match. For example, if both tray 1 and tray 2 are filled with the same size paper, the machine automatically prints from tray 2 after the tray 1 runs out of paper. This option does not appear if you selected **Auto** for **Paper Source** from printer driver.
Paper Substitution	Automatically substitutes the printer driver's paper size to prevent the paper mismatch between Letter and A4. For example, if you have A4 paper in the tray but you set the paper size to Letter in the printer driver, the machine prints on A4 paper and vice versa.

Item	Description
Tray Protection	Decides to use or not use the **Auto Tray Swi.** /**Auto Tray Switch** feature for a certain tray. If you set tray 1 to on, for example, then tray 1 is excluded during tray switching.
Tray Mode	• **Dynamic:** If you open and close the tray when a paper mismatch occurs, the paper settings (size and type) for that tray automatically change to the settings required for the job. (When you open and close the tray in the **Dynamic** mode, the machine presumes that the paper in the tray was replaced with the size and type required for the job.) • **Static:** The tray settings do not change when you open and close the tray.
Skip Blank Pages	The printer detects the printing data from computer whether a page is empty or not. You can set to print or skip the blank page.

System Setup/ Setup

Item	Description
Maintenance	• **Supplies Life/Supplies Info.:** Allows you to check how many pages are printed and how much toner is left in the cartridge. • **RAM Disk:** Enables/disables RAM disk to manage jobs. • **Paper Low Alert:** Allows you to set the alarm for when the paper is low. • **Toner Save:** Activating this mode extends the life of your toner cartridge and reduces your cost per page beyond what one would experience in the normal mode, but it reduces print quality. • **Image Manamement:** This menu allows you to adjust contrast.
Image Overwrite	You can set the machine to overwrite data stored in the memory. The machine overwrites the data with different patterns eliminating the possibilities of recovery.
Toner Save	Activating this mode extends the life of your toner cartridge and reduces your cost per page beyond what one would experience in the normal mode, but it reduces print quality.

Item	Description
Eco Settings	Allows you to save print resources and enables eco-friendly printing (see "Eco printing" on page 52). • **Default Mode:** Select whether to turn the Eco mode on or off. **On Force**: Sets the Eco mode on. If a user wants to turn the Eco mode off, the user needs to enter the password. • **Select Temp.:** Selects the eco template set from the SyncThru™ Web Service.

System Setup/ Setup

Item	Description
Auto Power Off	Turns power off automatically when the machine has been in power save mode for the length of time set in **Auto Power Off** > **On** > **Timeout**. • To turn the machine on again, press the ⏻ (**Power/Wakeup**) button on the control panel (make sure the main power switch is on). • If you run the printer driver or Samsung Easy Printer Manager, the time automatically extends. • While the machine is connected to the network or working on a print job, **Auto Power Off** feature doesn't work.
Filing Policy	If the memory already has the same name when you entered a new file name, you can rename or overwrite it.

Emulation

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- Press **Menu**( ) > **Emulation** on the control panel.

- For the model with a touch screen, select (**Setup**) > **Emulation** on the touch screen.

Item	Description
Emulation Type	The machine language defines how the computer communicates with the machine.
Setup	Sets the detailed settings for the selected emulation type.

Image Management

| | Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26). |

To change the menu options:

• Press **Menu**( ) > **Image Management** on the control panel.

• For the model with a touch screen, select (**Setup**) > **System** > **Maintenance** > **Image Management** on the touch screen.

Item	Description
Custom Color	This menu allows you to adjust contrast, color by color. • **Default:** Optimizes colors automatically. • **Print Density:** Allows you to manually adjust color density for print. Adjust the print density. It is recommended to use the **Default** setting for best color quality.

Network

> Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

• Press **Menu**( ) > **Network** on the control panel.

• For the model with a touch screen, select (**Setup**) > **Network** on the touch screen.

> You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click **Settings** > **Network Settings** (see "Using SyncThru™ Web Service" on page 240).

Option	Description
TCP/IP (IPv4)	Selects the appropriate protocol and configure parameters to use the network environment (see "Setting IP address" on page 139). > There are lots of parameters to be set. If you are not sure, leave as is, or consult the network administrator.

Option	Description
TCP/IP (IPv6)	Selects this option to use the network environment through IPv6 (see "IPv6 configuration" on page 151).
Ethernet	Configure the ethernet port and network transmission speed. > Turn the power off and on after you change this option.
802.1x	You can select the user authentication for network communication. For detailed information consult the network administrator.
Wi-Fi	Select this option to use the wireless network (see "Wireless network setup(Optional)" on page 154).
Protocol Management	You can activate or deactivate the protocols. > Turn the power off and on after you change this option.
Network Configuration	This list shows information on your machine's network connection and configuration (see "Printing a network configuration report" on page 139).
Clear Setting	Reverts the network settings to the default values. > Turn the power off and on.

Job Management

	• This feature is not supported for **M382xD**. • Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

• Press **Menu**(   ) > **Job Management** on the control panel.

• For the model with a touch screen, select   (**Setup**) > **System** on the touch screen.

Item	Description
Active Job	Shows the print job lists that are waiting to be printed.
Secured Job	Shows the print job lists that are secured on the disk.
Stored Job	Shows the print job lists that are stored on the disk.

Admin Setup

> • Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).
> • You need to enter a password to enter this menu. The default password is **sec00000**.

To change the menu options:

• For the model with a touch screen, select [ ] (**Setup**) > **Admin Setup** on the touch screen.

Item	Description
User Access Control	You can control user access to a machine. • **Authentication:** Select the authentication mode. > You can also use this feature from the SyncThru™ Web Service. Open the Web browser from your networked computer and type the IP address of your machine. When SyncThru™ Web Service opens, click the **Security** tab > **User Access Control**.

Item	Description
Stamp	You can apply the stamp feature. • **Stamp Activate:** You can activate stamp feature. • **Item:** You can select the items to print on the printout such as time, date, and etc. • **Text Size:** You can select the text size such as small, normal, large. • **Opacity:** You can select the stamp transparency. • **Position:** Sets the stamp position.
Change Admin. Password	Changes the machine's password for accessing the **Admin Setup**.
Firmware Upgrade	To upgrade the latest firmware, turn this option "**On**" and then download the firmware file.
Application	You can install or uninstall applications. • **Application Management:** You can uninstall or enable/disable installed applications. • **Install New Application:** You can install a new application from a USB.
Secure Print	You can set the login method of secure print.
Supplies Management	• **Toner Low Alert:** If toner in the cartridge has run out, a message informing the user to change the toner cartridge appears. You can set the option for this message to appear or not. • **Imaging Unit Low Alert:** Allows you to set the alarm for when the imaging unit is low.

Admin Setup

Item	Description
Import Setting	Imports data stored on a USB memory stick to the machine (see "Backing up data" on page 55).
Export Setting	Exports data stored on the machine stick to a USB memory (see "Restoring data" on page 56).

Eco

 Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- For the model with a touch screen, select ![Eco icon] (**Eco**) on the touch screen.

Item	Description
Eco-On/Eco-Off	View current eco mode and change on/off option.
Settings	Sets eco-related settings and change default settings. • **Default Mode:** Select this to turn on or off the default mode. • **Feature Configuration:** Select the **Default** mode or **Custom** mode. If you select the **Custom** mode, you can set the settings to apply for the Eco mode.

USB

> Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- For the model with a touch screen, select (**USB**) > on the touch screen.

Item	Description
Print From	Select a file to print.
File Manage	Select a file to delete. You can format the USB device.
Show Space	Shows the remaining space.

Job Status

> Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- For the model with a touch screen, select ![icon] (**Job Status**) > on the touch screen.

Item	Description
Current Job	Displays the list of jobs in progress and pending.
Secure Job	Displays the list of jobs that are secured on the disk
Stored Job	Displays the list of jobs that are stored on the disk.
Complete Job	Displays the list of completed jobs.

Counter

	Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- For the model with a touch screen, select   (**Counter**) > on the touch screen.

Item	Description
Total Printed	Displays the number of pages printed.

Help

> Some menus may not appear in the display depending on options or models. If so, it is not applicable to your machine (see "Menu overview" on page 26).

To change the menu options:

- For the model with a touch screen, select (**Help**) > on the touch screen.

Item	Description
Basic Taskflow	Displays basic method to start your job.
Troubleshooting	Displays troubleshooting information.

4. Special Features

This chapter explains special printing features.

> The procedures in this chapter are mainly based on Windows 7.

Altitude adjustment

Print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. The following information will guide you on how to set your machine for the best print quality.

You can choose the altitude of the place where your machine is located. The print quality is affected by atmospheric pressure, which is determined by the height of the machine above sea level. Therefore, it is important to set the right altitude.

- **Normal:** 0-1,000 m(3,280 ft)

- **High1:** 1,000 m(3,280 ft)-2,000 m(6,561 ft)

- **High2:** 2,000 m(6,561 ft)-3,000m(9,842 ft)

- **High3:** 3,000 m(9,842 ft)-4,000 m(13,123 ft)

- **High4:** 4,000 m(13,123 ft)-5,000 m(16,404 ft)

You can set the altitude value from Samsung Easy Printer Manager program or SyncThru™ Web Service.

For Windows and Mac users:

- If you machine is connected to the local, you can set the altitude value from **Samsung Easy Printer Manager** > (**Switch to advanced mode**) > **Device Settings** (see "Device Settings" on page 246).

- If your machine is connected to the network, you can set the altitude value from **SyncThru™ Web Service** > **Settings** tab > **Machine Settings** (see "Using SyncThru™ Web Service" on page 240).

 You can also set the altitude in **System Setup** or **System** option on the machine's display (see "System Setup/ Setup" on page 195).

Entering various characters

As you perform various tasks, you may need to enter names and numbers.

Keypad letters and numbers

| • M453xND series only.
| • Special character sets may differ from your machine depending on its options or the models.
| • Some of the follow key values may not appear depending on the job you are doing.

Key	Assigned numbers, letters, or characters
1	@ / . ' 1
2	A B C a b c 2
3	D E F d e f 3
4	G H I g h i 4
5	J K L j k l 5
6	M N O m n o 6
7	P Q R S p q r s 7
8	T U V t u v 8
9	W X Y Z w x y z 9

Key	Assigned numbers, letters, or characters
0	& + - , 0
*	* % ^ _ ~ ! # $ ( ) [ ] (These symbols are available when you type for network authentication.)
#	# = | ? " : { } < > ; (These symbols are available when you type for network authentication.)

Understanding the pop-up keyboard

| • M453xNX series only.
| • This feature is only available for models with a touch screen.
| • Some of the following keys may not appear depending on the job you are doing.

You can enter alphabet characters, numbers, diacritical marks, or special symbols using the keyboard on the home screen. This keyboard is specially arranged like a normal keyboard for better usability to the user.

Entering various characters

Touch the input area where you need to enter alphabet characters, numbers, diacritical marks, or special symbols and the keyboard pops up on the screen.

No.	Key	Description
1		Moves the cursor between characters in the input area.
2		Toggles between lowercase keys and uppercase keys.
3		Returns to the upper menu.
4		Deletes character in the input area.

No.	Key	Description
5		Deletes all characters in the input area.
6		Switches from the alphanumeric keyboard to the numbers or special symbols keyboard.
7		Saves and closes input result.
8		Switches diacritical characters.
9		Enters a blank between characters. Also, you can insert a pause.

Printing features

> • For basic printing features, refer to the **Basic Guide** (see "Basic printing" on page 49).
> • This feature may not be available depending on model or optional accessories added to the device (see "Features by model" on page 7).

Changing the default print settings

1 Click the Windows **Start** menu.

- For Windows 8, from the **Charms**, select **Search** > **Settings**.

2 For Windows XP/Server 2003, select **Printer and Faxes**.

- For Windows Server 2008/Vista, select **Control Panel** > **Hardware and Sound** > **Printers**.

- For Windows 7/8, select **Control Panel** > **Devices and Printers**.

- For Windows Server 2008 R2, select **Control Panel** > **Hardware** > **Devices and Printers**.

3 Right-click on your machine.

4 For Windows XP/Server 2003/Server 2008/Vista, select **Printing Preferences**.
For Windows 7/8 or Windows Server 2008 R2, from context menus, select **Printing preferences**.

> If **Printing preferences** has a ▶, you can select other printer drivers connected to the selected printer.

5 Change the settings on each tab.

6 Click **OK**.

> If you want to change the settings for each print job, change it in **Printing Preferences**.

Setting your machine as a default machine

1 Click the Windows **Start** menu.

- For Windows 8, from the **Charms**, select **Search** > **Settings**.

2 For Windows XP/Server 2003, select **Printer and Faxes**.

- For Windows Server 2008/Vista, select **Control Panel** > **Hardware and Sound** > **Printers**.

- For Windows 7/8, select **Control Panel** > **Devices and Printers**.

- For Windows Server 2008 R2, select **Control Panel** > **Hardware** > **Devices and Printers**.

Printing features

3 Select your machine.

4 Right-click your machine and select **Set as Default Printer**.

> For Windows 7 or Windows Server 2008 R2, if **Set as default printer** has a ▶, you can select other printer drivers connected to the selected printer.

Using advanced print features

> **XPS printer driver**: used to print XPS file format.
>
> • See "Features by model" on page 7.
>
> • The XPS printer driver can be installed only on Windows Vista OS or higher.
>
> • Install optional memory when an XPS job does not print because the printer is out of memory.
>
> • For models that provide XPS driver from the Samsung website, http://www.samsung.com > find your product > Support or downloads.

Printing to a file (PRN)

You will sometimes need to save the print data as a file.

1 Check the **Print to file** box in the **Print** window.
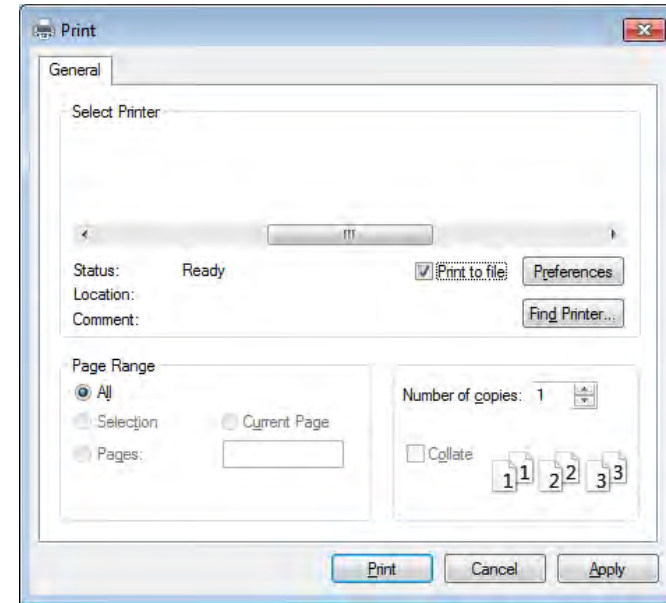
2 Click **Print**.

3 Type in the destination path and the file name, and then click **OK**.

For example, **c:\Temp\file name**.

> If you type in only the file name, the file is automatically saved in **My Documents**, **Documents and Settings**, or **Users**. The saved folder may differ, depending on your operating system or the application you are using.
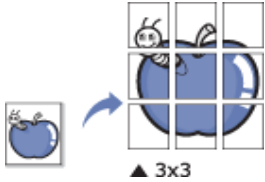
Printing features

Understanding special printer features

You can use advanced printing features when using your machine.

To take advantage of the printer features provided by your printer driver, click **Properties** or **Preferences** in the application's **Print** window to change the print settings. The machine name, which appears in the printer properties window, may differ depending on the machine in use.

> • Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
>
> • Select the **Help** menu or click the button from the window or press **F1** on your keyboard and click on any option you want to know about (see "Using help" on page 51).

Item	Description
Multiple Pages per Side	Selects the number of pages to print on a single sheet of paper. To print more than one page per sheet, the pages will be reduced in size and arranged in the order you specify. You can print up to 16 pages on one sheet.
Poster Printing	Prints a single-page document onto 4 (Poster 2x2), 9 (Poster 3x3), or 16 (Poster 4x4) sheets of paper, for the purpose of pasting the sheets together to form one poster-size document. Select the **Poster Overlap** value. Specify **Poster Overlap** in millimeters or inches by selecting the radio button on the upper right of **Basic** tab to make it easier to paste the sheets together.

Printing features

Item	Description
Booklet Printing[a]	Prints your document on both sides of a sheet of paper and arranges the pages so that the paper can be folded in half after printing to produce a booklet. • If you want to make a booklet, you need to print on Letter, Legal, A4, US Folio, or Oficio sized print media. • The **Booklet Printing** option is not available for all paper sizes. Select the available paper **Size** option under the **Paper** tab to see what paper sizes are available. • If you select an unavailable paper size, this option can be automatically canceled. Select only available paper (paper without or mark).

Printing features

Item	Description
Double-sided Printing	Print on both sides of a sheet of paper (duplex). Before printing, decide how you want your document oriented. • You can use this feature with Letter, Legal, A4, US Folio or Oficio sized paper • If your machine does not have a duplex unit, you should complete the printing job manually. The machine prints every other page of the document first. After that, a message appears on your computer. • **Skip Blank Pages** feature does not work when you select the duplex option. • We recommend not to print on both sides of the special media, such as labels, envelopes, or thick paper. It may cause a paper jam or damage the machine. Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine. • **Printer Default:** If you select this option, this feature is determined by the settings you have selected on the control panel of the machine. • **None:** Disables this feature. • **Long Edge:** This option is the conventional layout used in bookbinding. • **Short Edge:** This option is the conventional layout used in calendars. • **Reverse Double-Sided Printing:** Check this option to reverse the print order when duplex printing.

Printing features

Item	Description
Paper Options	Changes the size of a document to appear larger or smaller on the printed page by entering in a percentage by which to enlarge or decrease the document.
Watermark	The watermark option allows you to print text over an existing document. For example, you use it when you want to have large gray letters reading "**DRAFT**" or "**CONFIDENTIAL**" printed diagonally across the first page or all pages of a document. • **Header:** You can add the selected text to the top left, top center, or top right. • **Footer:** You can add the selected text to the bottom left, bottom center, or bottom right.
Watermark **(Creating a watermark)**	**a** To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 50). **b** From the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list. **c** Enter a text message in the **Watermark Message** box. You can enter up to 256 characters. When the **First Page Only** box is checked, the watermark prints on the first page only. **d** Select watermark options. You can select the font name, style, size, and shade from the **Font Attributes** section, as well as set the angle of the watermark from the **Watermark Alignment and Angle** section. **e** Click **Add** to add a new watermark to the **Current Watermarks** list. **f** When you finish editing, click **OK** or **Print** until you exit the **Print** window.
Watermark **(Editing a watermark)**	**a** To change the print settings from your software application, access **Printing Preferences** (see "Opening printing preferences" on page 50). **b** Click the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list. **c** Select the watermark you want to edit from the **Current Watermarks** list and change the watermark message and options. **d** Click **Update** to save the changes. **e** Click **OK** or **Print** until you exit the **Print** window.

Printing features

Item	Description
Watermark **(Deleting a watermark)**	**a** To change the print settings from your software application, access **Printing Preferences**. **b** Click the **Advanced** tab, select **Edit...** from the **Watermark** drop-down list. **c** Select the watermark you want to delete from the **Current Watermarks** list and click **Delete**. **d** Click **OK** or **Print** until you exit the **Print** window.
Overlay[a] 	This option is available only when you use the PCL/SPL printer driver (see "Software" on page 7). An overlay is text and/or images stored in the computer hard disk drive (HDD) as a special file format that can be printed on any document. Overlays are often used to take the place of letterhead paper. Rather than using preprinted letterhead, you can create an overlay containing exactly the same information that is currently on your letterhead. To print a letter with your company's letterhead, you do not need to load preprinted letterhead paper in the machine: just print the letterhead overlay on your document. To use a page overlay, you must create a new page overlay containing your logo or image. • The overlay document size must be the same as the document you print with the overlay. Do not create an overlay with a watermark. • The resolution of the overlay document must be the same as that of the document you will print with the overlay.
Overlay[a] **(Creating a new page overlay)**	**a** Create or open a document containing text or an image for use in a new page overlay. Position the items exactly as you wish them to appear when printed as an overlay. **b** To save the document as an overlay, access **Printing Preferences**. **c** Click the **Advanced** tab, and select **Create** from the **Overlay** drop-down list. **d** In the **Save As** window, type a name up to eight characters in the **File name** box. Select the destination path, if necessary (The default is C:\Formover). **e** Click **Save**. **f** Click **OK** or **Print** until you exit the **Print** window. When a confirming message window appears, click **Yes**. **g** The file is not printed. Instead, it is stored on your computer hard disk drive.

Printing features

Item	Description
Overlay[a] **(Using a page overlay)**	**a** Create or open the document you want to print. **b** To change the print settings from your software application, access **Printing Preferences**. **c** Click the **Advanced** tab. **d** Select the **Print Overlay** from the **Overlay** drop-down list. **e** If the overlay file you want does not appear in the **Overlay File 1** or **Overlay File 2** drop-down list, select **Load** from the **Overlay List**. Select the overlay file you want to use. If you have stored the overlay file you want to use in an external source, you can also load the file when you access the **Load** window. After you select the file, click **Open**. The file appears in the **Overlay List** box and is available for printing. Select the overlay from the **Overlay List** box. **f** If necessary, check **Confirm Page Overlay When Printing** box. If this box is checked, a message window appears each time you submit a document for printing, asking you to confirm your wish to print an overlay on your document. If this box is not checked and an overlay has been selected, the overlay automatically prints with your document. **g** Click **OK** or **Print** until you exit the **Print** window. The selected overlay prints on your document.
Overlay[a] **(Deleting a page overlay)**	**a** In the **Printing Preferences** window, click the **Advanced** tab. **b** Select **Edit** in the **Text** drop down list. **c** Select the overlay you want to delete from the **Overlay List** box. **d** Click **Delete**. **e** When a confirming message window appears, click **Yes**. **f** Click **OK** or **Print** until you exit the **Print** window. You can delete page overlays that you no longer use.

Printing features

Item	Description
Print Mode	• This feature is available only if you have installed the optional memory or mass storage device (Hard Disk) (see "Variety feature" on page 8). • Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine. • To enable this feature, check **Storage Options** (see "Setting Device Options" on page 71). • Without installing the mass storage device (Hard Disk) in the machine, the Ram Disk feature provides only 3 options: **Normal**, **Proof**, and **Confidential**. The default **Print Mode** is **Normal**, which is for printing without saving the printing file in the memory. • **Normal:** This mode prints without storing your document in the optional memory. • **Proof:** This mode is useful when you print more than one copy. You can print one copy first to check, then print the rest of the copies later. • **Confidential:** This mode is used for printing confidential documents. You need to enter a password to print. • **Store:** Select this setting to save a document in the mass storage device (Hard Disk) without printing. • **Store and Print:** This mode is used when printing and storing document at the same time. • **Spool:** This option can be useful when handling large amounts of data. If you select this setting, the printer spools the document into the mass storage device (Hard Disk) and then prints it from the mass storage device (Hard Disk) queue, decreasing the computer's work load. • **Print Schedule:** Select this setting to print the document at a specified time. • **Job Name:** This option is used when you need to find a stored file using the control panel. • **User ID:** This option is used when you need to find a stored file using the control panel. The user name automatically appears as the user name that you use to log on Windows. • **Enter Password:** If the **Property** of the document you selected is secured, you have to enter the password for the document. This option is used for loading a stored file using the control panel. • **Confirm Password:** Re-enter the password to confirm it.

Printing features

Item	Description
Job Accounting	This option allows you to print with the given permission. • **User permission:** If you check this option, only users with user permission can start a print job. • **Group permission:** If you check this option, only groups with group permission can start a print job. --- • Click the question mark( ) from the upper-right corner of the window and click on any option you want to know about. • Administrators can enable job accounting and configure permissions in the control panel or **SyncThru™ Web Admin Service**.

a. This option is not available when you use XPS driver.

Using Direct Printing Utility

 | • Direct Printing Utility may not be available depending on model or optional accessories added to the device (see "Software" on page 7).
• Available for Windows OS users only.

What is Direct Printing Utility?

Direct Printing Utility is a program that sends the PDF files directly to your machine to print without having to opening the file.

To install this program:

Download the software from the Samsung website then unpack and install it: (http://www.samsung.com > find your product > Support or Downloads).

 | • Optional memory or mass storage device (Hard Disk) should be installed on your machine, to print files using this program (see "Variety feature" on page 8).
• You cannot print PDF files that are restricted. Deactivate the printing restriction feature and retry printing.
• You cannot print PDF files that are restricted by a password. Deactivate the password feature, and retry printing.
• Whether or not a PDF file can be printed using the Direct Printing Utility program depends on how the PDF file was created.
• The Direct Printing Utility program supports PDF version 1.7 and below. For higher versions, you must open the file to print it.

Printing

There are several ways you can print using the Direct Printing Utility.

1 From the **Start** menu select **Programs** or **All Programs** > **Samsung Printers** > **Direct Printing Utility** > **Direct Printing Utility**.
The Direct Printing Utility window appears.

2 Select your machine from the **Select Printer** drop-down list and click **Browse**.

3 Select the file you wish to print and click **Open**.
The file is added in the **Select Files** section.

4 Customize the machine settings for your needs.

5 Click **Print**. The selected PDF file is sent to the machine.

Using the right-click menu

1 Right-click on the PDF file to print and select **Direct Printing**.
The Direct Printing Utility window appears with the PDF file is added.

2 Select the machine to use.

Using Direct Printing Utility

3 Customize the machine settings.

4 Click **Print**. The selected PDF file is sent to the machine.

Mac printing

 📝 Some features may not be available depending on models or options. It means that the features are not supported.

Printing a document

When you print with a Mac, you need to check the printer driver settings in each application you use. Follow the steps below to print from a Mac:

1 Open the document to print.

2 Open the **File** menu and click **Page Setup** (**Document Setup** in some applications).

3 Choose your paper size, orientation, scaling, other options, and make sure that your machine is selected. Click **OK**.

4 Open the **File** menu and click **Print**.

5 Choose the number of copies and indicate which pages to print.

6 Click **Print**.

Changing printer settings

You can use advanced printing features when using your machine.

Open an application and select **Print** from the **File** menu. The machine name, which appears in the printer properties window, may differ depending on the machine in use. Except for the name, the composition of the printer properties window is similar to the following.

Printing multiple pages on one sheet

You can print more than one page on a single sheet of paper. This feature provides a cost-effective way to print draft copies.

1 Open an application, and select **Print** from the **File** menu.

2 Select **Layout** from the drop-down list under **Orientation**. In the **Pages per Sheet** drop-down list, select the number of pages you want to print on one sheet of paper.

3 Select the other options to use.

4 Click **Print**.

The machine prints the selected number of pages to print on one sheet of paper.

Mac printing

Printing on both sides of the paper

> Some features may not be available depending on models or options. It means that the features are not supported (see "Variety feature" on page 8).

Before printing in the duplex mode, decide on which edge you will be binding your finished document. The binding options are, as follows:

• **Long-Edge Binding:** This option is the conventional layout used in book binding.

• **Short-Edge Binding:** This option is the type often used with calendars.
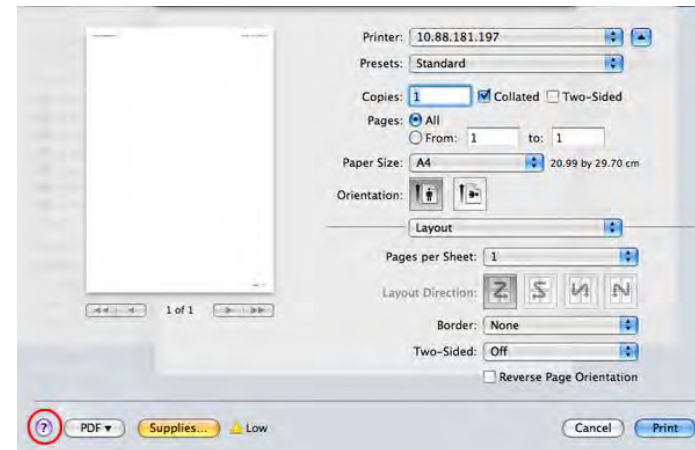
1 From your Mac application, select **Print** from the **File** menu.

2 Select **Layout** from the drop-down list under **Orientation**.

3 Select a binding orientation from the **Two-Sided** option.

4 Select the other options to use.

5 Click **Print** and the machine prints on both sides of the paper.

> ⚠ If you print more than 2 copies, the first copy and the second copy might print on the same sheet of paper. Avoid printing on both sides of paper when you are printing more than 1 copy.

Using help

Click the question mark on the bottom-left corner of the window and click on the topic you want to know about. A pop-up window appears with information about that option's feature, which is provided from the driver.

Linux printing

> Some features may not be available depending on models or options. It means that the features are not supported.

Printing from applications

There are a lot of Linux applications that allow you to print using Common UNIX Printing System (CUPS). You can print on your machine from any such application.

1 Open the document to print.

2 Open the **File** menu and click **Page Setup** (**Print Setup** in some applications).

3 Choose your paper size, orientation, and make sure that your machine is selected. Click Apply.

4 Open the File menu and click **Print**.

5 Select your machine to print.

6 Choose the number of copies and indicate which pages to print.

7 Change other printing options in each tab, if necessary.

8 Click **Print**.

> Automatic/manual duplex printing may not be available depending on models. You can alternatively use the lp or lpr printing system or other applications for odd-even printing.

Printing files

You can print text, image, pdf files on your machine using the standard **CUPS**, directly from the command line interface. The **CUPS** lp or lpr utility allows you to do that. You can print these files by using below command format.

"lp -d <printer name> -o <option> <file name>"

Please refer to lp or lpr man page on your system for more details.

Configuring Printer Properties

You can change the default printing options or connection type with Printing utility supplied by o/s.

1 Launch Printing utility(Go to **System** > **Administration** > **Printing** menu or execute "**system-config-printer**" command in Terminal program).

2 Select your printer and double-click it.

Linux printing

3 Change default printing options or connection type.

4 Click **Apply** button.