SUSE
Linux Enterprise Desktop

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IPRINT CLIENT USER GUIDE

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Preface

This manual is designed to introduce you to the iPrint Linux* Client include with SUSE® Linux Enterprise Desktop and show you how to configure printing on your desktop.

This guide contains information about the following:

- "Understanding iPrint" on page 7
- "Installing the iPrint Linux Client" on page 9
- "Installing Printers" on page 11
- "Removing iPrint Printers" on page 11
- "Using iprntcmd" on page 12
- "Uninstalling the iPrint Client" on page 14

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We want to hear your comments and suggestions about this manual and other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation, or go to www.novell.com/documentation/feedback.html and enter your comments there.

Additional Documentation

For information about installing and administering SUSE Linux Enterprise Desktop, see the *SUSE Linux Enterprise Desktop 10 Deployment Guide* (http://www.novell.com/documentation/sled10/pdfdoc/sled10_deployment/sled10_deployment.pdf).

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Setting Up iPrint on Client Workstations

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When installing SUSE® Linux Enterprise Desktop (SLED), you can choose to install the iPrint Linux Client. The iPrint Client lets you easily install printers using your Web browser. The following sections help you understand and use the iPrint client:

- Section 1.1, “Understanding iPrint,” on page 7
- Section 1.2, “Understanding Security,” on page 8
- Section 1.3, “Installing the iPrint Linux Client,” on page 9
- Section 1.4, “Installing Printers,” on page 11
- Section 1.5, “Removing iPrint Printers,” on page 11
- Section 1.6, “Managing Print Jobs from the Client,” on page 12
- Section 1.7, “Using iprntcmd,” on page 12
- Section 1.8, “Uninstalling the iPrint Client,” on page 14

1.1 Understanding iPrint

The iPrint system consists of two pieces: the iPrint Manager that runs on the server and the iPrint Client that runs on the workstation.

1.1.1 iPrint Manager

The iPrint Manager does the following:

- Spools print jobs from clients
- Sends print jobs to printers
- Maintains printer status information
- Manages the print database
- Maintains the iPrint Printer List page used to install and monitor printers

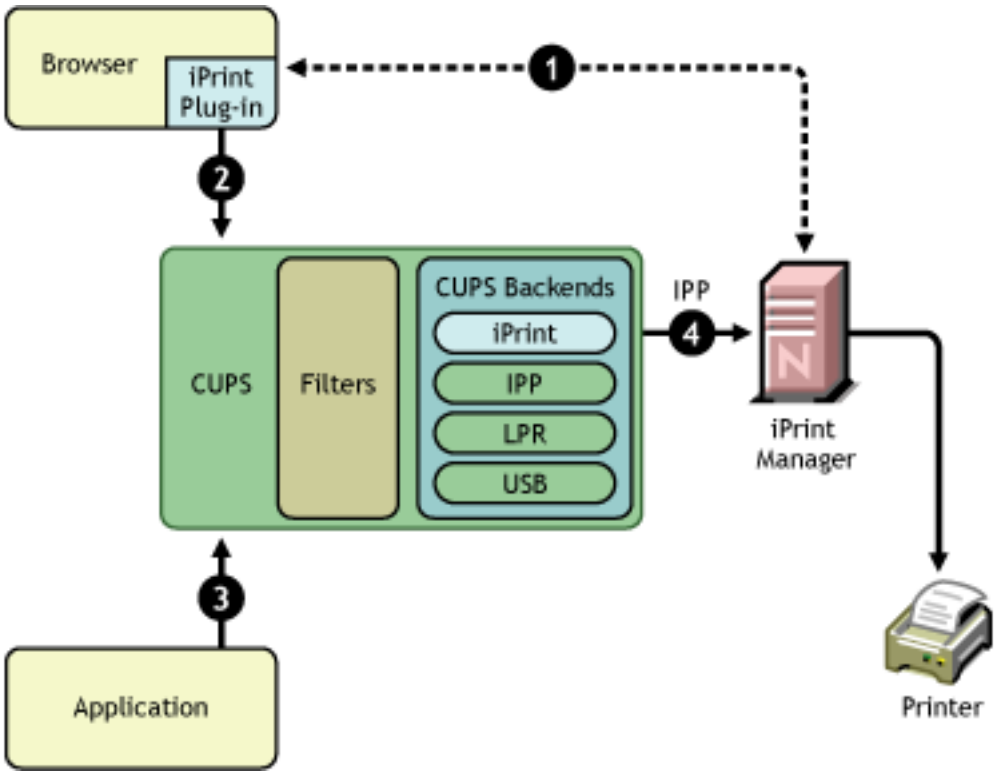
1.1.2 iPrint Client

The iPrint Client lets Linux workstations install iPrint printers and includes the following components:

- **Browser plug-in:** The iPrint Client contains a browser plug-in for Mozilla*-based browsers. This plug-in lets you install printers into CUPS using your Web browser.
- **Console utility:** The Linux iPrint client includes the iprntcmd utility that lets you install printers, print test pages, and upload drivers to a driver store from a console prompt. For more information, see Section 1.7, “Using iprntcmd,” on page 12.
- **CUPS Integrator:** The client integrates with the CUPS backend and uses the CUPS local spooler to send print jobs to the Print Manager.

- **CASA:** CASA (Common Authentication Services Adapter) is a separate package that you install with the iPrint client to cache your username and password for secure printers. If you do not access secure printers, then you do not need CASA.

Figure 1-1 *Using iPrint*



The following steps are taken when installing a printer and printing to it:

1. Using your Web browser, you access the iPrint Printers List or a custom map, as specified by your administrator.
2. When you click a printer in the list or on a map, the iPrint plug-in creates the printer and installs the associated PostScript* Printer Definition (PPD) file in CUPS. After a printer is installed, you do not need to repeat this process for the same printer.
3. With the iPrint printer installed, you can print from any application as you normally would. The printer appears as printer in your printer list. The application sends the print job to CUPS for processing.
4. CUPS gives the print job to the iPrint backend, which sends it to the iPrint Manager. When the printer is ready, the iPrint Manager sends the job to the printer.

1.2 Understanding Security

The Linux iPrint Client is packaged in two different, specialized installations that control access to the workstation's print system. The following table explains the differences between the two clients.

Client Filename	Workstation Access	Description
novell-iprint-xclient-sh-*release_date*.i586.rpm	Security high. Limited access to the print system.	This client requires workstation users to be defined with `lppasswd` to install, delete, or administer printers on the workstation. When performing one of these print operations, the user is challenged for a password.
novell-iprint-xclient-sl-*release_date*.i586.rpm	Security low. Unlimited access to the print system.	This client allows all users of the workstation to install, delete, or administer printers and print jobs on the workstation, including printers and print jobs of other users. By default, the iPrint Printer List Web page installs this rpm.

The above clients do not affect installation of the iPrint Client, just access to the workstation print system. To install the iPrint Client you still need root permissions. Also, these clients do not limit printing capabilities.

IMPORTANT: To install the iPrint Client you need root permissions. To upload drivers from the system, you need to be defined with `lppasswd` or know the root password; otherwise, when you attempt to add drivers from the system, the driver list is blank. To define a user to be part of `lppasswd`, you can use the following command:

```
lppasswd -a linux_user_account -g sys
```

For more information on the client installed on your SUSE Linux Enterprise Desktop workstation, consult with your network administrator.

1.2.1 Printing to Secure printers

When installing a secure iPrint printer, you might be prompted twice for your username and password. First you are prompted to provide your network credentials to verify that you have access to the printer (it would be no use installing a printer that would not allow you to print). The second prompt is for CUPS to ensure you have rights to install printers on the client machine. Each time you perform a print operation with a secure printer, you are prompted for your username and password.

If you installed CASA (Common Authentication Services Adapter), your credentials are cached.

Printing to secure printers is supported only when you are logged in to the desktop. If for any reason the CUPS iPrint backend cannot deliver the job to a secure printer, the job is requeued on the client with a hold. You can then see the held job and release it after you log in to the desktop.

1.3 Installing the iPrint Linux Client

The following sections provide information about installing the iPrint Linux Client:

- Section 1.3.1, “Requirement,” on page 10
- Section 1.3.2, “Procedure,” on page 10

1.3.1 Requirement

- ❑ In order for iPrint to work properly, your workstation needs to have a Mozilla-based browser such as Firefox, which is included with SLED. If it is not already installed, KDE users should use YaST to install Firefox.

1.3.2 Procedure

You can install the iPrint Client during SLED installation or using YaST after SLED is installed.

- "Installing during SLED Installation" on page 10
- "Installing after SLED Installation" on page 10

Installing during SLED Installation

Shortly after the installation program begins, you can choose to install the iPrint client using the following steps. You can also install the client later using the YaST Control Center.

1. After selecting your preferred desktop, scroll down the list of Installation Settings and click *Software*.
2. Click *Detailed Selection*.
3. Change the *Filter* to *Search*, and search for iPrint,
4. Select the iPrint Client you want installed.

   For more information about the iPrint Linux Client, see Section 1.1.2, "iPrint Client," on page 7 or contact your network administrator.
5. (Optional) Search for and select CASA (Common Authentication Service Adapter).

   CASA retains your username and password for printers that require authentication.
6. Click *Accept*.

Installing after SLED Installation

1. Start YaST.
   - **GNOME:** Click *Computer* > *More Applications* > *System* > *YaST* .
   - **KDE:** Click the main menu button > *System* > *YaST*.
2. Search for iPrint.
3. Select the iPrint Client you want installed.

   For more information about the iPrint Linux Client, see Section 1.1.2, "iPrint Client," on page 7 or contact your network administrator.
4. (Optional) Search for and select CASA (Common Authentication Service Adapter).

   CASA retains your username and password for printers that require authentication.
5. Click *Accept*.

1.4 Installing Printers

Depending on how your administrator has configured your iPrint system, you install iPrint printers in one of the following ways. Contact your administrator for details on how you should access the iPrint system.

- Section 1.4.1, “Using the iPrint Printer List Web Page,” on page 11
- Section 1.4.2, “Using Location-Based Printing Web Pages,” on page 11

1.4.1 Using the iPrint Printer List Web Page

iPrint generates a list of printers associated with a Print Manager that can be used to install the iPrint Client, install an iPrint printer, or check the status and configuration of a printer including a list of print jobs.

1. Enter the iPrint URL in your Web browser Address field.

   The iPrint Printer List is located at http://*server_IP_ address_or_dns_name*/ipp.

2. From the list of available printers, select the printer you want to install.

   During the printer installation, iPrint downloads and installs the printer driver called a PPD file, if one is associated with the printer, and installs the printer on the user's workstation. The first time a printer is installed, this PPD file is forced to the workstation, even if the workstation contains a newer PPD file.

1.4.2 Using Location-Based Printing Web Pages

Location-based printing lets you use your Web browser to select printers based on locations by using a list view or a map, both of which are created by your iPrint administrator.

1.5 Removing iPrint Printers

To remove iPrint printers, use the CUPS management utility included with your Linux distribution. GNOME* users can use the printer folder in *Computer* > *Control Center* > *Printers*, and KDE users can use the Printing Manager by clicking the main menu button > *Tools* > *Printing* > *Printing Manager*.

GNOME users of SUSE Linux Enterprise Desktop cannot delete printers. If security is not an issue and you are running the low-security iPrint Linux Client, you can use the following instructions to configure GNOME so that all desktop users can add and delete printers.

WARNING: The following procedure should be implemented only if security is not an issue, because it lets all users of the desktop access the print system.

---

1. On the SLED workstation, log in as root.
2. Edit `/etc/sudoers` and add the following line to the end of the file:

   ALL ALL = NOPASSWD: /opt/gnome/bin/gnome-cups-manager
3. Edit `/opt/gnome/share/control-center-2.0/capplets/printconf.desktop` by doing the following:
   - Change TryExec=gnome-cups-manager to TryExec=gnome-cups-manager-root.

- Change Exec=gnome-cups-manager to Exec=gnome-cups-manager-root.

4. Create a text file with the following:

   #!/bin/bash
   sudo /opt/gnome/bin/gnome-cups-manager

5. Save the file as `/opt/gnome/bin/gnome-cups-manager-root`.
6. Open a terminal as user root and change the permissions of the `/bin/gnome-cups-manager-root` file by executing the following command:

   ```
   chmod 755 /opt/gnome/bin/gnome-cups-manager-root
   ```

To test the new settings

1. Log in to GNOME as a normal user, not as root (not root).
2. Click *Computer* > *Control Center*.
3. Double-click *Printers*.
4. In the Printers folder, right-click a printer.

   If the *Remove* menu item is listed, then the procedure worked correctly. If the Remove item is not listed, repeat the procedure again.

1.6 Managing Print Jobs from the Client

Users can monitor and manage their own print jobs from their workstations using the CUPS management utility included with your Linux distribution. GNOME users can use the printer folder in *Computer* > *Control Center* > *Printers*, and KDE users can use the KJobViewer by clicking the main menu button > *Tools* > *Printing* > *KJobViewer (Print Jobs)*.

NOTE: If the iPrint server is busy when your installed printer attempts to communicate, CUPS moves the printer into an error state and holds all print jobs. To release print jobs, use a printer management utility to restart the printer.

1.7 Using iprntcmd

The Linux iPrint Client includes the iprntcmd utility that lets you install printers, print test pages, and upload drivers to a driver store from a terminal prompt. The iprntcmd utility is located in `/opt/novell/iprint/bin/iprntcmd`.

Use the following parameters when executing the iprntcmd command:

Table 1-1 *Parameters Used with* `iprntcmd`

Parameters	Description
-a or --addprinter *printer_uri*	Installs the specified printer.
-d or --delprinter *printer_uri*	Removes the specified printer.
-g or --getdefault	Displays the default printer installed on the workstation.
-h or --help	Displays help for the command.

Parameters	Description
-j or --listjobs *printer_uri*	Lists the print jobs for the specified printer that are on the server in a pending or printing state.
-l or --listlocalprinters	Lists printers installed on the workstation.
-L or --listprintersonserver *psm-hostname or psm-address*	Lists iPrint printers on the specified Print Manager where *psm-hostname* or *psm-address* can be a DNS name or IP address.
-p or --printfile *printer-uri file path*	Sends a printer-ready file to the specified iPrint printer.
-P or --ppdlist	Lists the PPDs installed on this workstation.
-s or --setdefault *printer_uri*	Sets the specified printer as the default.
-t or --testpage *printer_uri*	Prints a test page to the specified printer.
-u or --upload *ids_uri ids_user ppd*	Uploads the specified PPD files to the indicated driver store where *ids_uri* is the IP Address or DNS name for the driver store, *ids_user* is the username with rights to add drivers to the driver store, and *ppd* is the directory path and filename to the PPD files. You can use wildcards in the PPD filename.
-U or --upload RMS *rms_uri rms_user rms_address ppd*	Uploads the specified PPD files to the indicated Broker where *rms_uri* is the IP Address or DNS name for the Broker's associated print manager, *rms_user* is the username with rights to add drivers to the broker, *rms_address* is the IP address or DNS name of the broker, and *ppd* is the directory path and filename to the PPD files. You can use wildcards in the PPD filename.
-v or --version *server_uri server_user*	Displays the server platform and version information where *server_uri* is the URI for the server and *server_user* is a valid user for the server.

1.7.1 Syntax

```
iprntcmd parameters
```

IMPORTANT: You must use quotes around parameter information that contains a space, such as printer names and printer drivers.

1.7.2 Example

To install a printer named Color Printer 1 and set it as the default printer, you would enter the following for nonsecure printing:

```
iprntcmd -a "ipp://printing.my_company.com/ipp/Color Printer 1"
```

You should use ipp:// instead of http:// or https://.

1.8 Uninstalling the iPrint Client

You can remove the iPrint Linux Client RPM from a terminal prompt using the following commands, depending on the client installed.

```
rpm -e novell-iprint-xclient-sh
```

```
rpm -e novell-iprint-xclient-sl
```

NOTE: When you uninstall the Linux iPrint Client, all iPrint printers remain installed on the workstation and you can still print to the printers until the printer is deleted from the workstation.