PrintSuperVision v3.7

OKI
PRINTING SOLUTIONS

Configuration Guide

59318402

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Introduction

PrintSuperVision (referred to as PSV throughout this document) is a Windows server application designed for managing and monitoring printing and copying devices. The core application is server−based and is accessible from any browser enabled device connected to a network. Popular browsers supported include Internet Explorer, Firefox and Opera.

The application is available in two editions: Professional Edition and Enterprise Edition.

The Professional Edition is a subset of the Enterprise edition and shares the same menu structure and many of the same features. Notations will be made throughout this document to indicate differences between the Enterprise and Professional Editions.

The only major feature in the Professional Edition that does not exist in the Enterprise Edition is the Single-user "Easy Configuration" option. The Single-user option can be installed in a non-server configuration on network-connected laptops and desktops.

The Single-user Easy Configuration option allows users to check status of supply levels, monitor consumable life remaining and collect printed page counts while providing the ability to order supplies on line. The easy configuration option is designed for very small offices and does not support the automatic delivery of device Alerts through email.

Some of the common features of both PSV Professional and PSV Enterprise Editions include:

- Discovers and configures devices
- Helps pinpoint devices on the network
- Assists in remote trouble shooting
- Automatically identifies device status and emails alerts
- Produces reports and automatically delivers them via email
- On-line supplies and consumable ordering (configurable by region)

What's New in Version 3.7

Perhaps the most important enhancement in version 3.7 Enterprise Edition is the ability to monitor Oki devices that are not directly connected to the network, (i.e.) devices that are connected to networked PC's via USB interface.

PSV Enterprise Edition now monitors locally connected Oki devices through the use of an agent which can be installed on Windows-based laptops or desktops. The agent can also be pushed down to an entire fleet of PC's using the new PSV "Director" application. For more information on the Agent and Director proceed to the Monitoring Locally Connected Devices section on page 120.

Note: The PSV Professional Edition does not support locally-connected device monitoring and therefore does not include the Agent or Director applications.

Several other noteworthy enhancements have been made to both PSV Pro and PSV Enterprise Editions in version 3.7 and include:

- Product License Key now required for Enterprise Edition
- Data Synchronization added to Enterprise Edition: Ability to transfer data from one PSV site to another
- "Usage based" alerts added to both editions: sends alerts when supplies are low or out
- Ability to remotely change IP addresses on Oki devices from Dynamic assigned to Static and vice versa
- Ability to identify computers that have the PSV Agent installed
- Ability to view supply status and page counts of the locally connected device
- Added "Windows Job Logs" to show print job details if PSV Agent is installed
- Added "Device Job Logs" to show print job data for selected devices
- Added a "supplies levels report"
- Improved device import process (from excel or CSV file)
- Added a "monthly printing report"
- Changed default database from MS Access to SQL Compact in PSV Pro edition
- Quick Search Added to both Pro and Enterprise Editions
- Enhanced the file download feature to support remote firmware installation

Installing the Software

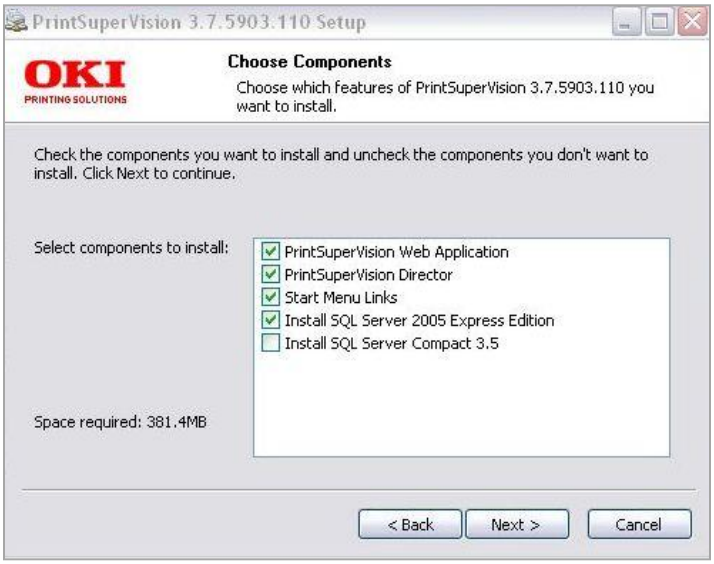
PSV Professional and Enterprise Editions are available from www.okidata.com at http://www.okidata.com/mkt/html/nf/PrintSuperVision.html

Both Enterprise and Professional editions downloaded from the web include the PSV Server application. PSV Enterprise also includes the PSV Director application described later. The corresponding PSV Agent application is available as a separate download from the web and operates only with PSV Enterprise.

During installation, PSV checks the target server to see if .NET 2.0 (or above) is installed. If the.NET platform is not detected, PSV will link the user to the Microsoft website to download and install the .NET software. PSV also provides the option to download and install Microsoft's free versions of SQL databases such as the Express Edition and Compact Edition. Keep in mind that PSV uses Microsoft Access as the default database which is built into the server application. Using SQL databases is optional.

To install PrintSuperVision, locate the executable file that was downloaded from the Oki website, and click on it. A standard licensing agreement is displayed. If you agree with the license agreement, click **Next**.

Both editions allow you to select the desired components to install. The following dialog box displays the options that can be installed in the Enterprise Edition. Fewer choices are available from the same dialog box when installing the Professional edition.



An application called PSV Director can be installed along with the core server (web) application and other options. PSV Director provides Windows domain administrators the ability to remotely install, upgrade, uninstall, monitor, and configure the PSV Agent (which is a separate download).

The Director can also collect information about printer queues, drivers, and ports on either a single computer or all computers in a domain. PSV Director will be discussed in more detail in the **Monitoring Locally Connected Devices** section. Click the PSV Director check box if you wish to install that module.

Note: When PSV Director is installed, you can find it later by clicking **Start /All Programs /PrintSuperVision**. It is not accessible from the setup wizard discussed in the following section.

You also have the option to install free versions of SQL Express or SQL Compact Editions which will be used later to collect device information and subsequently to run reports.

If you do not install SQL Express or SQL Compact edition you will still be able to use PSV's built-in Microsoft Access database that installs automatically with the PSV server application.

Setup and Configuration: Using the Setup Tool

Immediately following installation, the PSV setup tool (wizard) is launched. Follow the step by step process to configure PrintSuperVision. Keep in mind that many of the configuration options are also available from within the PSV server application so it is not imperative to complete all settings during the setup process.

You may also return to the PSV Setup Tool at any time. It is available from the Windows Start menu by clicking **All Programs** / **PrintSuperVision** / **PrintSuperVision Setup**.

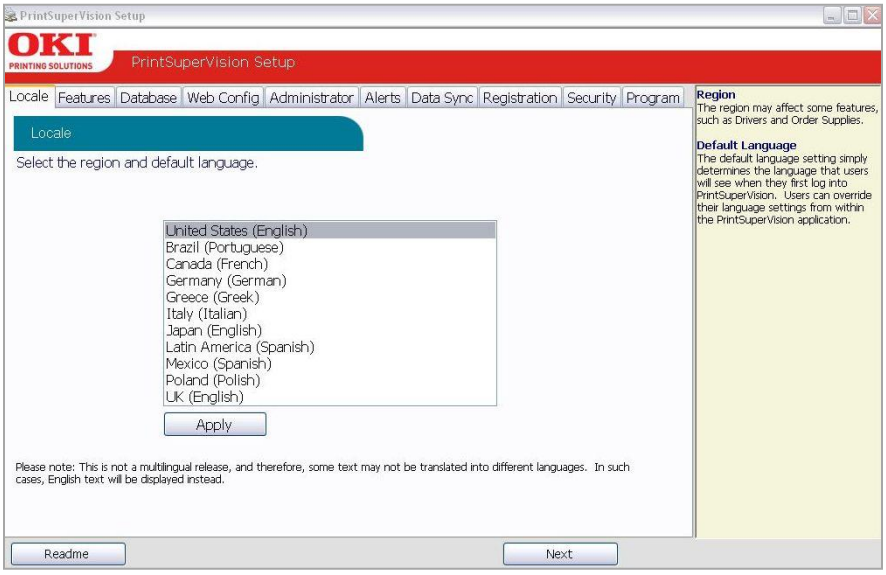
Note: Certain changes using the PSV setup tool can only be made when the web application and PSV Engine services are not running. For example, in order to change the web server component from "embedded" to "IIS", the web service application must not be running.

Selecting a Location/Language

The PSV setup tool launches directly into the Locale tab and displays the Location/ Language selection screen first.

1. Select a default location / language for all users
2. Click Apply and Next

Each user can later change his/her language preference directly from the application. Use caution however when selecting the desired language since it is changed as soon as the user clicks "Apply". If you are not familiar with the language selected, it may be difficult to return to your native language.

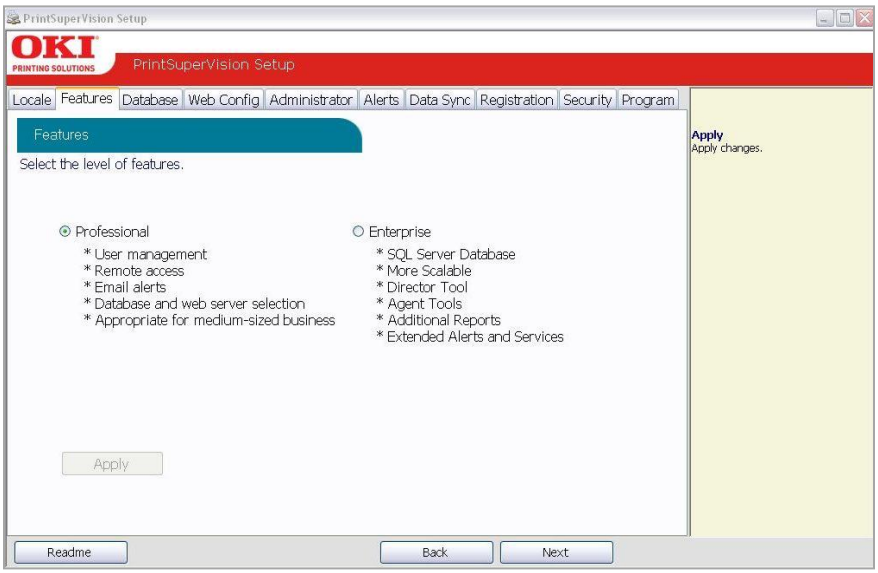


Note: The location/language selected effects enabling or disabling the On-Line supplies ordering feature in PSV. Selecting "United States" will enable the On-Line ordering feature while selecting any other location disables the ability to order supplies on-line from links that appear within the application.

Selecting a PSV Edition: Features Tab

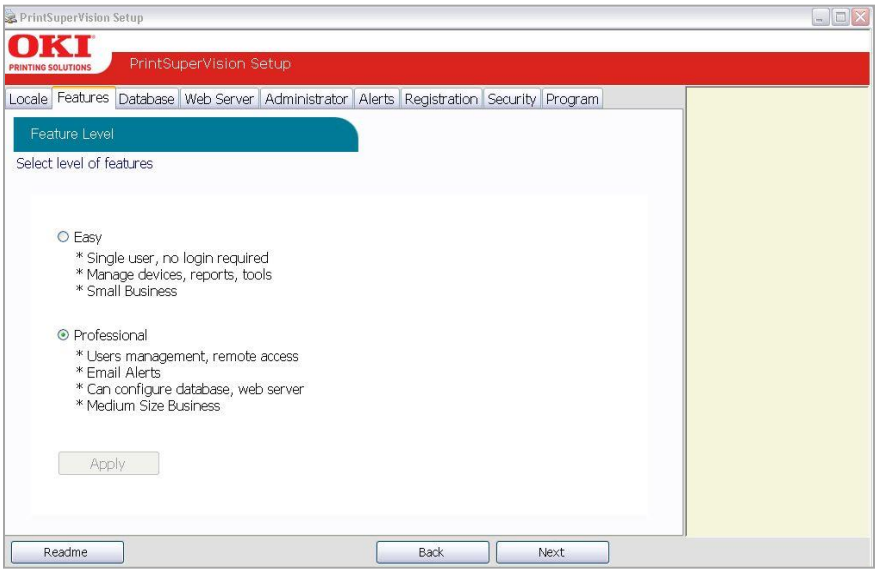
After choosing a language and clicking **Next** you will be prompted to select the PSV edition that you would like to use.

If you installed the Enterprise Edition you are offered the choice to install either the Enterprise or Pro edition (but not the single-user Easy edition).



Select the desired PSV configuration, Click **Apply** and **Next**.

If you installed the Professional edition you have the choice of selecting the Single-user "Easy" edition or the standard server-based Professional edition. Select the appropriate configuration and click **Apply** and then **Next**.



Entering a Software License Key: Enterprise Edition Only

If you selected the Enterprise Edition you will be prompted to enter a valid license key that can be requested from Oki Data Customer Support via email at psvlicensekey@okidata.com or by calling 800-okidata.

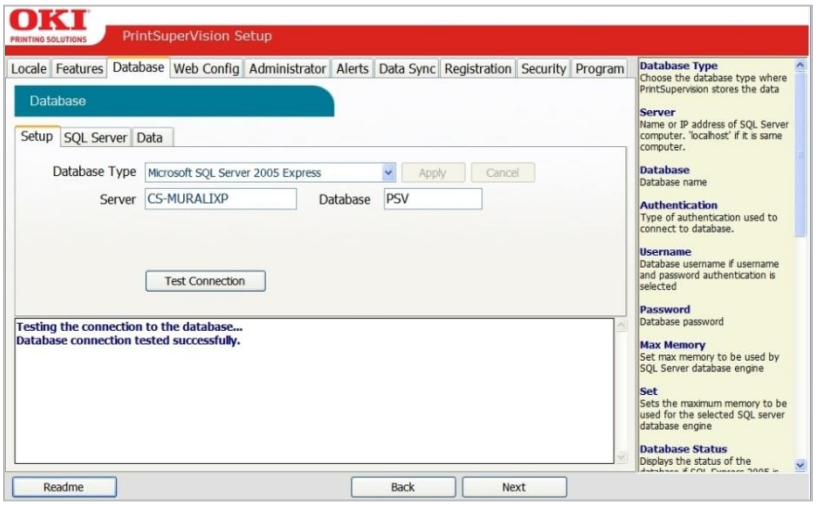
Enter a valid license key and Click **OK**

Selecting a Database: Database Tab

The next step is to select the type of database you would like to use with PrintSupervision. As mentioned previously, both editions of PrintSuperVision utilize a built-in Microsoft Access database, but you may choose other options as well.

If you do not wish to use the built-in Access database, PSV allows you to select SQL Compact Edition 3.5 (in the Pro edition) as well as SQL Server 2005 Express in the Enterprise edition. Both versions of SQL were provided as optional choices when installing PSV Enterprise.

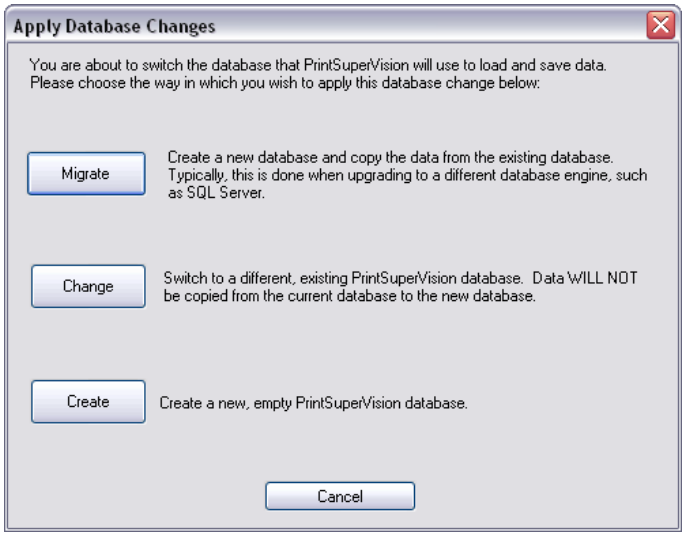
While in the **Database** tab, Click the **Setup** tab and select the desired database from the dropdown menu.



Note: The Screen shot shown above is from PSV Enterprise. PSV Professional does not provide the option to enter a name for the server or database.

Also note that the SQL Server Tab is dynamic and will only appear if you have a full version or express version of SQL server installed on the server/computer.

Click **Apply,** and the following options are presented:



Please note that even if you already have a compatible database such as SQL Compact Edition installed on your server, you still must complete the following steps to "create" it so that PSV knows where to save data.

Click one of the following options:

- **Migrate**: Migrates your current database to a new one
- **Change**: Switches to an existing database
- **Create**: Creates a new database

For new PSV Installations click **Create** which creates a new (empty) database.

To switch to an existing database without saving any previous data click **Change**.

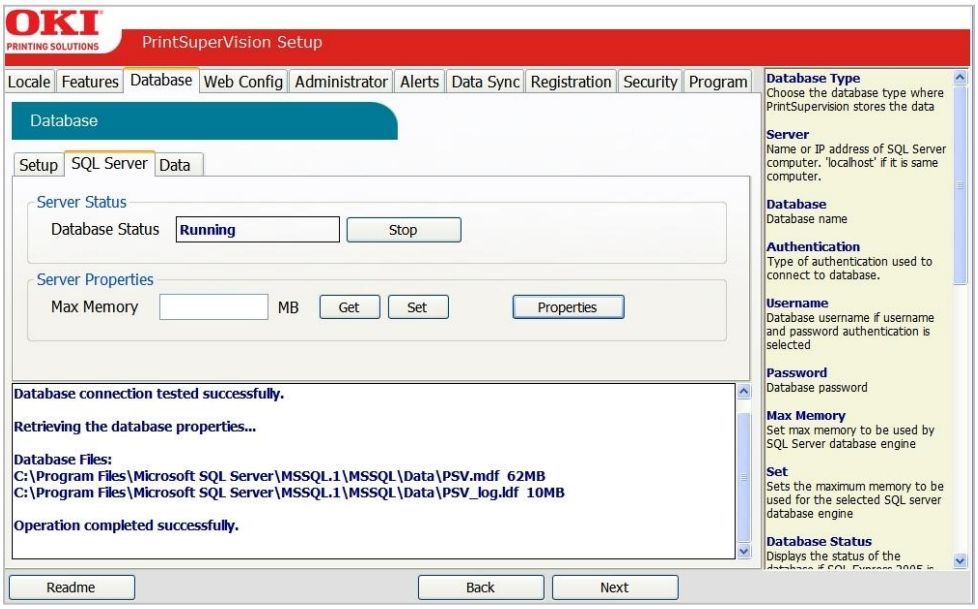
To create a new database and copy existing data to the new database click **Migrate**.

Click **Start** to process the database selection and click **OK** when the operation is complete.

Notice in the Enterprise Edition (not available in Pro) that you may also test the connection to the server and enter a new name for the server if you selected SQL Server 2005 Express or another SQL database such SQL 2000, 2005, or MSDE that have already been installed on the server.

Assigning server memory limits to SQL server: Database Tab

If the server you are installing PSV on already has a full version (or express version) of SQL installed, the SQL Server tab will appear in the Database section.



This tab allows you to assign a maximum amount of memory that SQL can use and may prevent SQL from consuming a significant part of your server's memory.

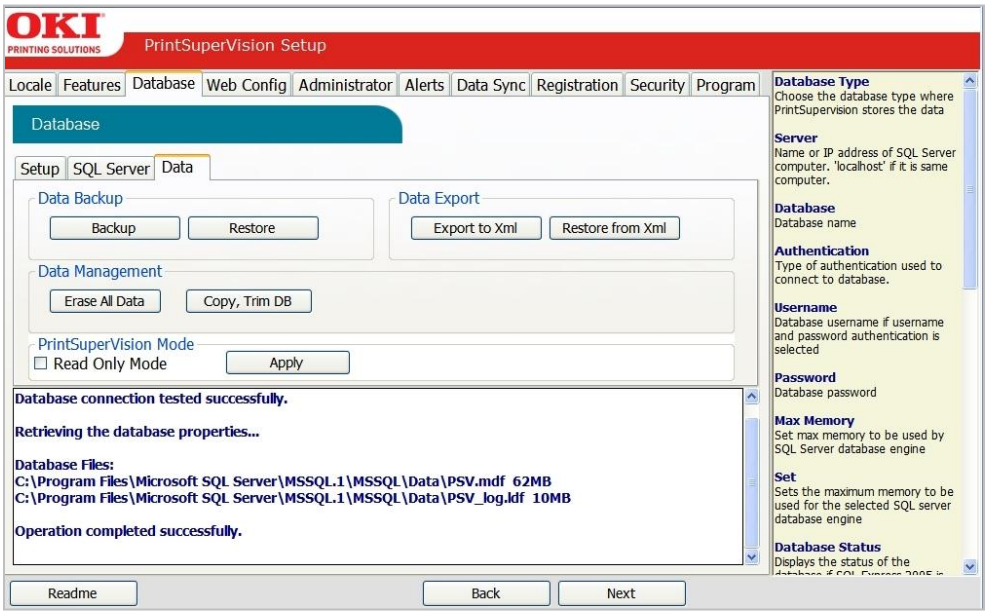
To check the amount of memory (RAM) that SQL is currently using click the **Get** button. A numeric value will be displayed. To allocate a larger or smaller amount of RAM to the database application, type in an amount (in megabytes) in the **Max Memory** field and click the **Set** button.

You may also click the **Properties** button to see the accumulated size of your database files.

Note: The SQL Server tab is not available in the PSV Pro edition

Database Housekeeping features: Database Tab

While in the database section, you may also click the **Data Tab** for several other database "housekeeping" options such as backing up and restoring a database, exporting data, erasing, copying, and trimming data from an existing database.



A noteworthy feature in the **Data** section is the **Read Only Mode**.

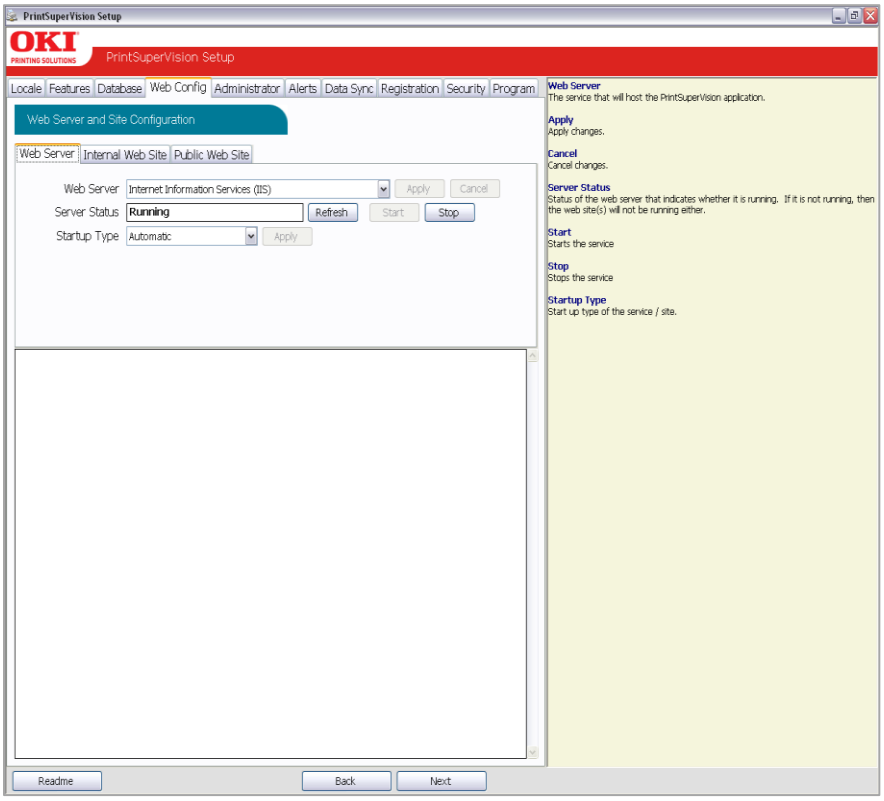
By checking the **Read Only Mode** box it prevents PSV from discovering devices. This is particularly useful when a device database has been imported for diagnostic purposes and you do not want PSV to discover those devices. But use caution and do not check the Read Only Mode box for normal operation.

Perform the desired functions and click **Next** to move to the next setup module.

Selecting a Web Server: Web Config Tab

PSV supports both Microsoft IIS web server and/or an Embedded Web Server that is packaged with the PSV application. It is strongly recommended to use IIS if you will be monitoring large networks with hundreds or thousands of devices. The embedded server provides the same functionality as IIS but performance can be affected when using it in large network installations.

If IIS is not installed on the target server/computer, it will not be visible in the Web Server drop down box displayed below.



Select the desired web server from the drop down box and click **Apply**.

The server status box indicates whether the service is running and you have the ability to start it or stop it. You also have the option to select how the web server should start: automatically, manually or disabled. Make the desired settings and click **Apply**.

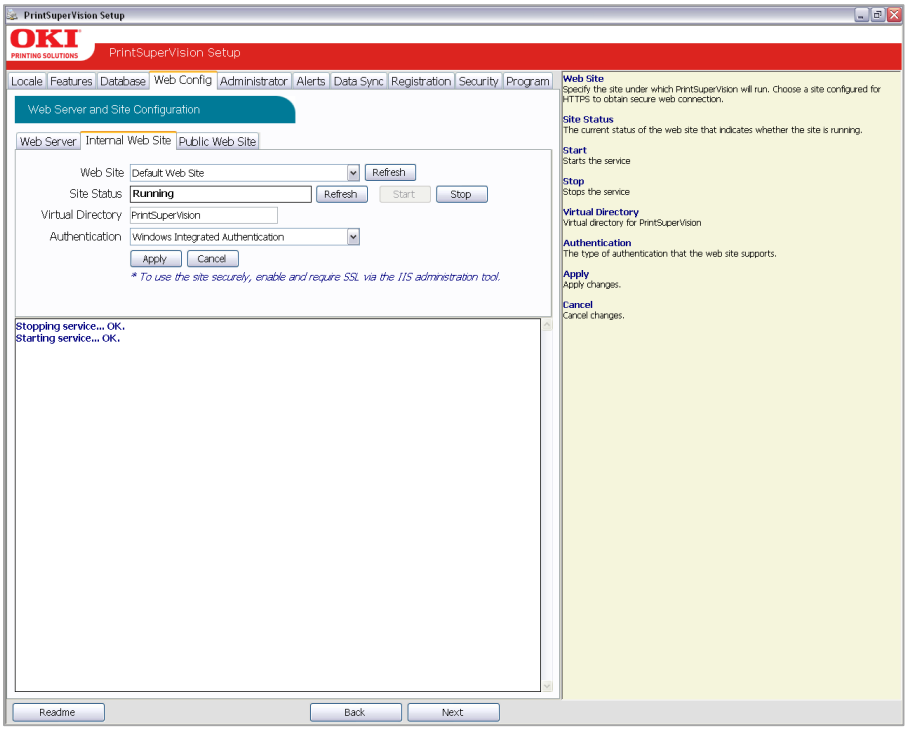
Configuring an Internal Web Site: Web Config Tab

PSV provides an option to select a pre-defined web site rather than using the default web site. When multiple web sites are created and configured in IIS, the website names will appear in the website selection drop down box. Select the appropriate web site or use the default if no web sites have been previously configured.

PSV also provides the option to use a unique **virtual directory** name or use the default name, which is configured as "PrintSuperVision".

The **Authentication** option eliminates the need for an Admin to log in to PSV if they have previously been authenticated on their domain. Select **Windows Integrated Authentication** to take advantage of this time saving feature.

To require Admin log-in every time, keep the default setting which is **PrintSupervision Authentication**.



Click **Apply** to save changes.

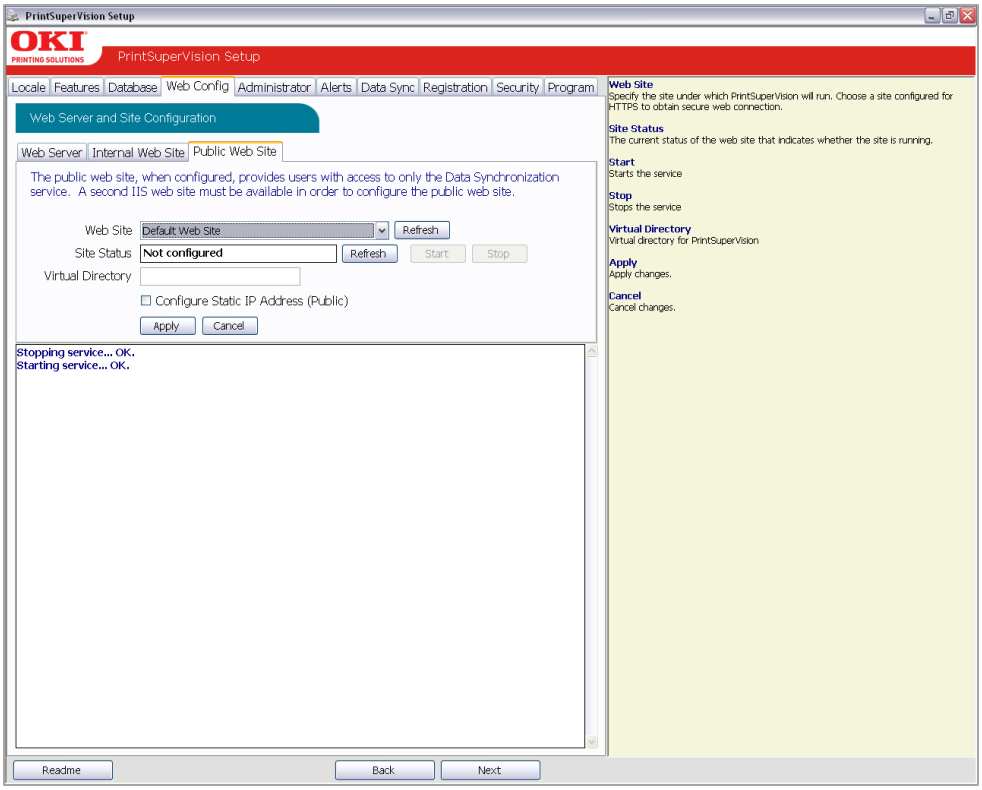
Configuring a Public Web Site: Web Config Tab

The Public Web Site tab is only supported in PSV Enterprise edition and will appear only if IIS is selected as the web server.

The Public Web Site feature allows you to create an intranet or internet site that can receive data from multiple PSV server sites or from multiple PSV Agents. This can be particularly helpful in retrieving device page counts and other supply status information from one designated site rather than requiring users to access multiple PSV server sites.

An additional feature in PSV v3.7 allows IT technicians to change IP address configurations (on Oki Devices only) from dynamic to static by using an intranet web page without the need to access the core PSV server application. In this scenario, a technician, who does not have PSV Admin rights can simply access an intranet web page rather than having to run a standalone utility.

You must create the intranet web page by adding a **Virtual Directory** prior to entering the virtual directory name and/or selecting the **Configure Static IP Address** check box in the setup routine. A new virtual directory can be created from the IIS section in your OS.

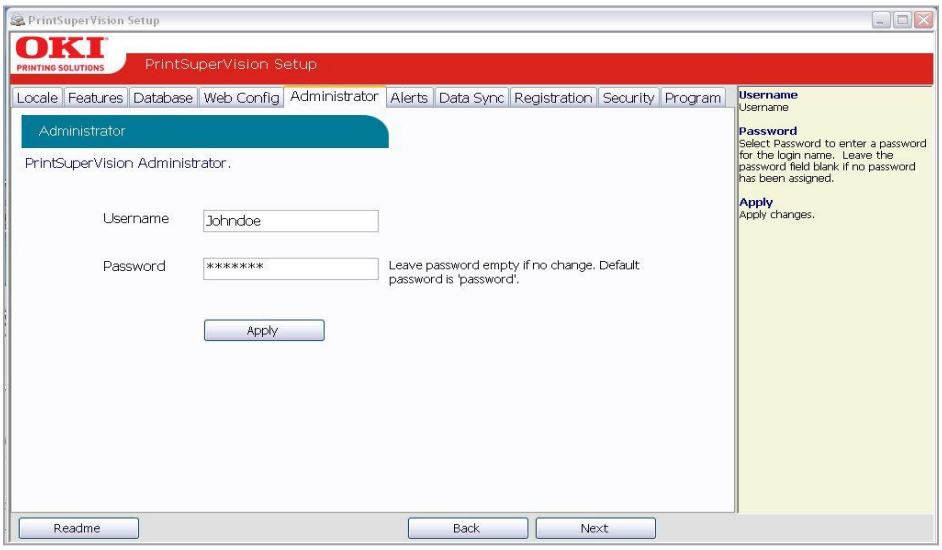


Note: This feature is intended for Intranet usage only, so if the PSV public website is configured for public internet, the check box should not be selected.

Assigning Admin Username and Password: Administrator Tab

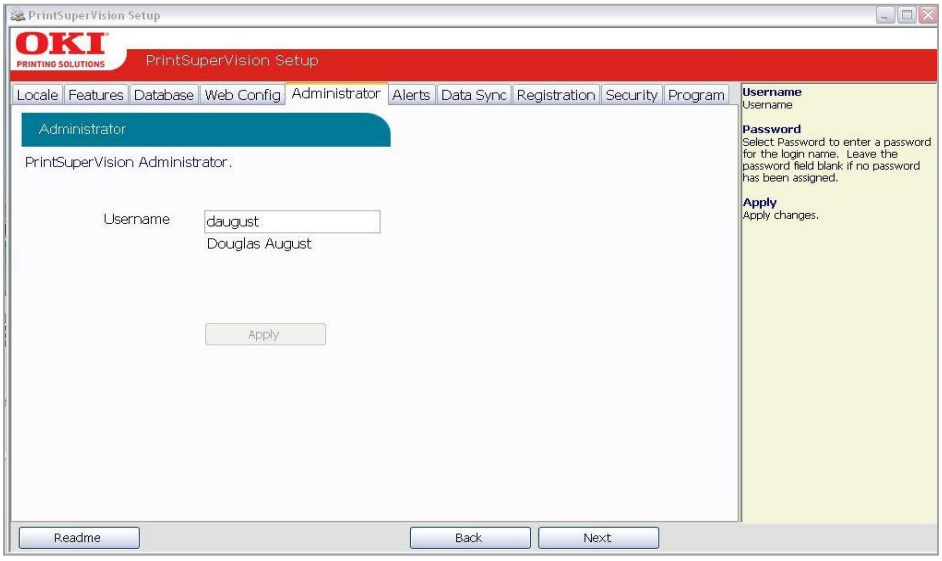
Newly installed versions of PSV come with a single user account called "Admin" which has all Administrator Access rights. It is strongly recommended to enter a new Username and Password for the global Administrator.

The Global Administrator can later add other administrators or standard users from within the application.



Click **Apply** after a new username and password have been created.

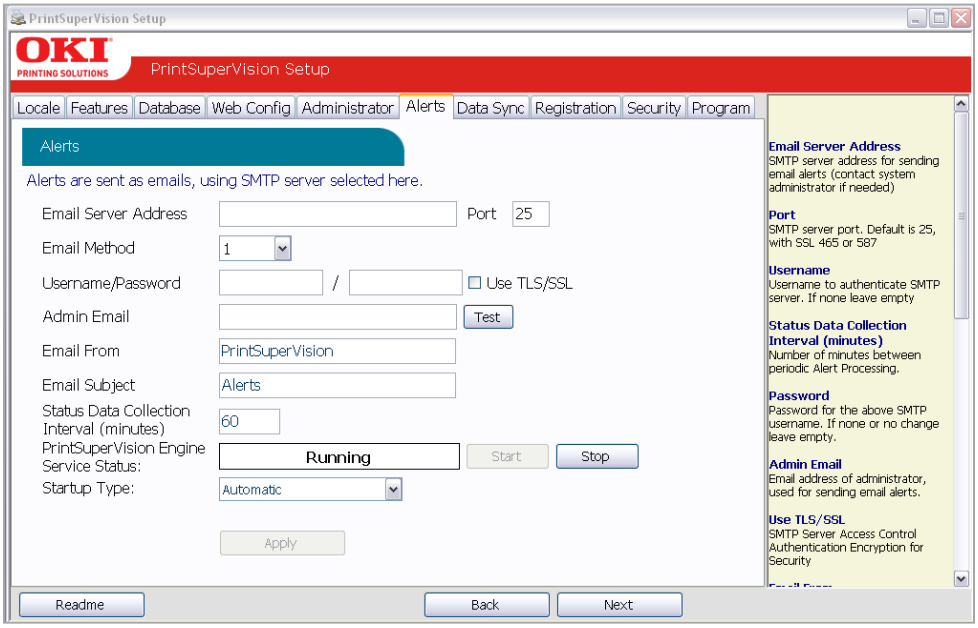
If you selected **Windows Integrated Authentication** mode described in the last section, the following screen will be displayed just for verification.



Click **Next** to go to the next setup module.

Configuring your E-mail server: Alerts Tab

In order for PSV to send out device related alerts via email, you must first enter the necessary information such as the address of your email server, username, password, the email address of the recipient, etc.



Enter the desired Email Server Address and SMTP server port (default port number is 25 and 456 or 587 if using SSL/ TLS).

Select the appropriate email sending method. PSV provides 4 methods that define how the email message is sent:

Method 1 – This is the Default setting. It uses a SMTP library from IP Works
Method 2 – Permits streaming. Emails are sent without buffering once the connection is established
Method 3 – Uses Webmail library from .NET 1.1
Method 4 – Content of email is saved as a file attached to an email message

Method 1 is recommended, but you may try methods 2, 3 and 4 if emails are not successfully sent using the default setting.

If your email server requires authentication, indicate the appropriate username and password in the fields provided. Click the **TLS / SSL** checkbox if your organization uses these communication protocols.

Enter the email address of the recipient in the Admin Email field.

As an added convenience, PSV allows you customize the header and subject line of all email messages sent. Add the desired words to the "Email From" and "Email Subject" fields or keep the defaults which are PrintSuperVision and Alerts.

Indicate the interval time (in minutes) for PSV to wait to obtain device status. Set to a larger number if network traffic is a concern. Set to a smaller number if you would like more frequent updates reported from your print/copy devices.

Finally, another added convenience allows you to start and stop the PrintSuperVision Service from the set up menu and select whether the PSV Services should start automatically, manually or are disabled.

You can test the email connection by clicking the **Test** button (located next to the Admin Email field). PSV will attempt to send an email message to the address you specified.

If an email is received successfully, click **Apply** to save your settings and click **Next** to go to the next setup module.

Data Synchronization: Data Synch Tab

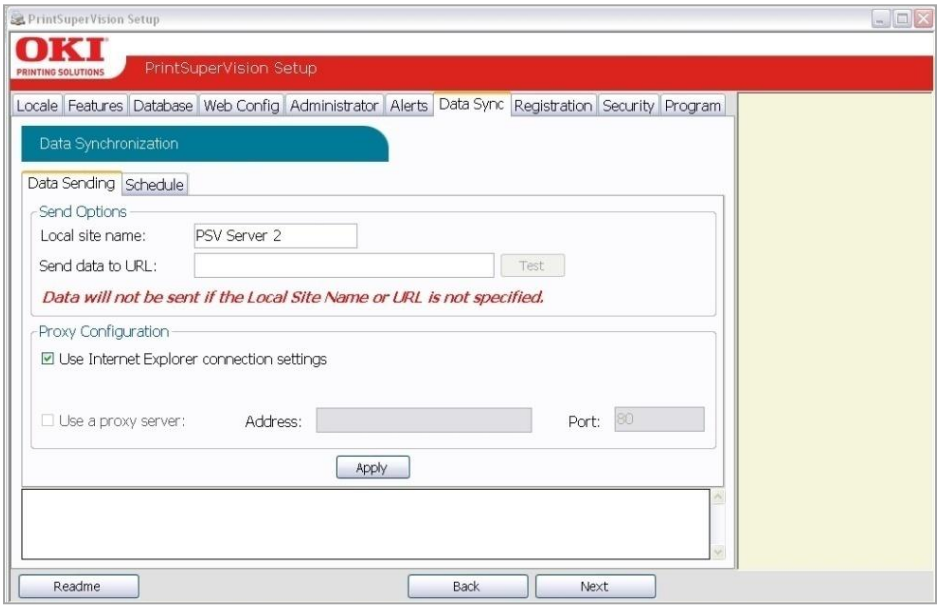
Making configuration settings in the Data Sync section are only required when multiple PSV servers are installed and are configured to communicate with each other (a new feature in PSV 3.7).

Disregard this section and click **Next** if you have a single PSV server /site that does not communicate with any other PSV server.

Note: PSV Enterprise Edition can receive and send data while PSV Professional Edition can only send data, therefore an Enterprise Edition must be designated as a receiving site.

Each PSV Enterprise server (site) can send and receive data which can help streamline the reporting process by collecting and saving data in one central location. Thus an admin may run reports from other PSV sites while being logged into one server designated as the "receiving site".

To receive data from other PSV sites, simply enter the name of the receiving PSV site in the "Local Site Name" field. If no data will be sent from the receiving hub PSV site, leave the Send Data to URL field blank.



It is important that the Local Site Name is specified. If a name is not entered, data will not be sent during data synchronization.

Each remote PSV site must also be configured to send data to the central hub PSV receiving site. To do that, you must log into each remote PSV site, assign a local

site name as we just did, and indicate the address / URL of the receiving PSV site in the **Send Data to URL** field.

The data synch feature also allows you to specify a proxy server should one be required to connect to the PSV receiver site.

Keep the default setting; **Use IE Connection Settings** checked if you would like the proxy configuration to be fetched from the current user's Internet Explorer configuration. Otherwise, check the **Use Proxy Server** box and enter the appropriate proxy address and port number.

Click **Apply** to save changes.

To schedule how often data synchronization should take place among PSV sites, click the **Schedule** tab and enter the appropriate time and interval.

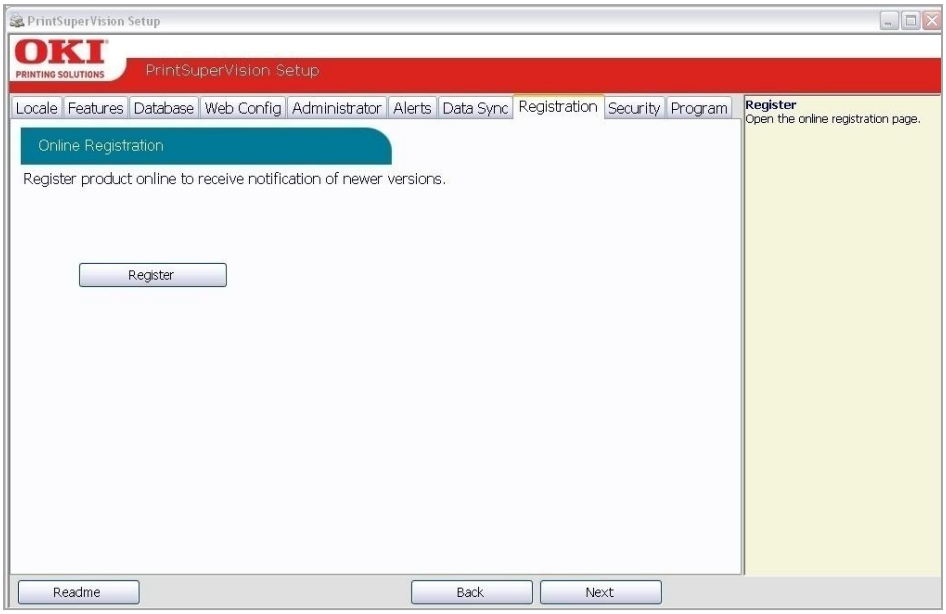
If no interval values are entered, PSV assigns a default value of 24 hours. The minimum value is 1 hour and the maximum interval value is 99 hours (which is 4.125 days).

Click **Apply** to save changes and click **Next** to proceed to the next section

Note: The ability to configure the Data Synchronization feature is also available from within the PSV application and will be discussed later in this guide.

Software Registration: Registration Tab

You can register your new PrintSuperVision software with Oki Data Americas or Oki Europe Ltd. on-line by clicking the **Register** button.



Registering your name and email address with Oki Printing Solutions will help us keep you informed of new product releases and PSV related information. All registration information supplied is kept in strict confidence.

Select the appropriate language / location to register. Use the **Americas** locations if you are located in North or South America. Use the European locations if you are located in Europe.

Enter your user information including your email address and click **Save**.

A validation email will be sent to the email address indicated. Click the validation link in the email message when you receive it and your information will be registered.

The PSV Setup tool will still be running. Click on the PSV Setup tool icon in the tool bar to return to the Setup process. Click **Next** to go to the next setup module.

Check for Security Updates: Security Tab

As a convenience, PSV provides links to check for Microsoft security updates before completing the setup process.

Simply click on the Windows Updates Link to go to:

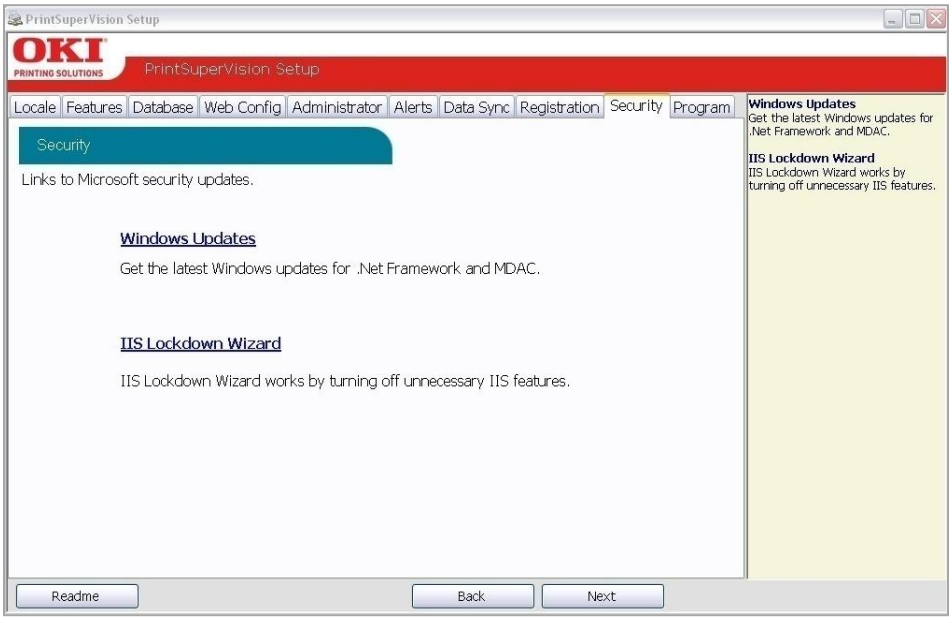
http://update.microsoft.com/microsoftupdate/v6/default.aspx?ln=en-us

Or

Click the IIS Lockdown Wizard link to go to:

http://www.microsoft.com/downloads/details.aspx?FamilyID=dde9efc0-bb30-47eb-9a61-fd755d23cdec&displaylang=en

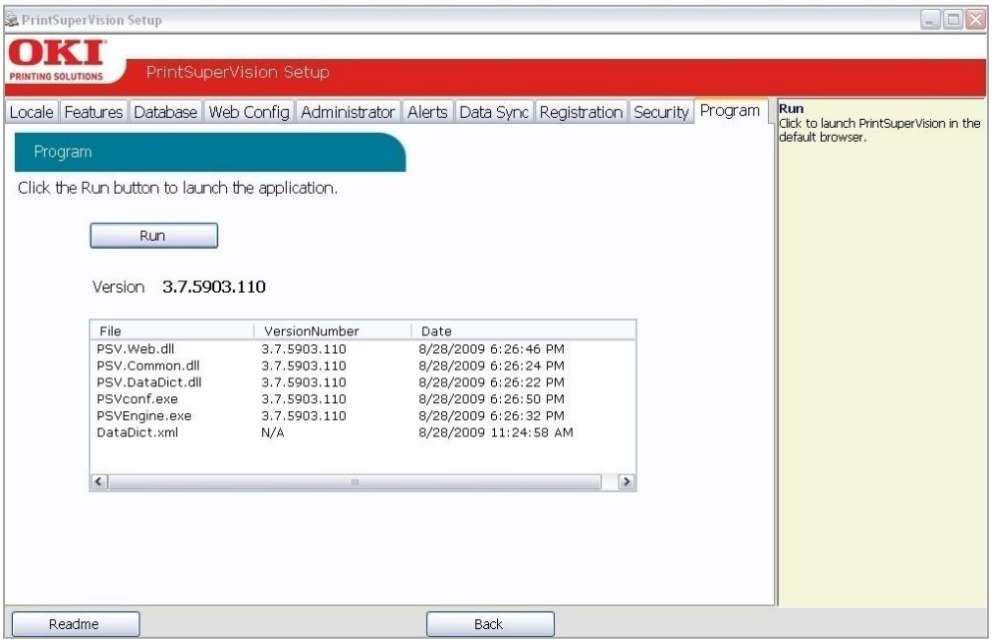
The IIS Lockdown Wizard assists in turning off unnecessary features, thus reducing the attack surface available to attackers.



Click **Next** to go to the next setup module.

Identifying PSV Version Numbers: Program Tab

The Program tab is provided as a means to quickly identify the version numbers of each major component in PrintSuperVision.



Click the **Readme** button to view the PSV Readme file

Click **Back** to return to a previous section, or

Click **Run** to complete the setup process and begin using the PSV application.

Getting Started

Now that you have installed and configured PrintSuperVision, you may use any browser-enabled computer or device connected to your network to access the PSV application.

Open your browser and type the IP address of the PSV server followed by /printsupervision. For example: http://172.31.44.162/printsupervision

If you are the Global Administrator or have Admin rights, click **Login**, and type your user name and password. If you have not changed the login username and password, the default is admin and password.

Context Sensitive Help

Throughout the PrintSuperVision application, help is just a click away. For context sensitive help, click the icon located in the upper right corner (next to the printer icon) on every page.

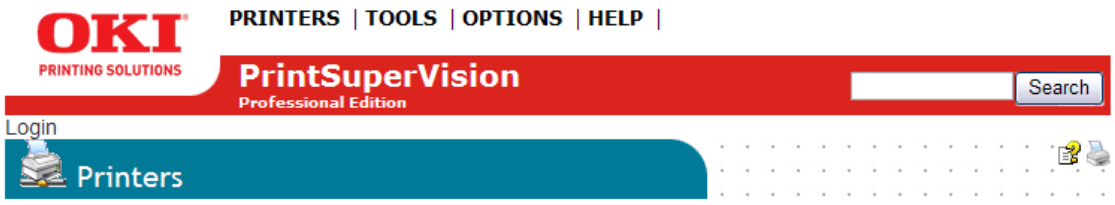
User Access

One of the first things to determine is the level of access rights to assign to each user. There are 3 ways a user can access the PSV application from any browser:

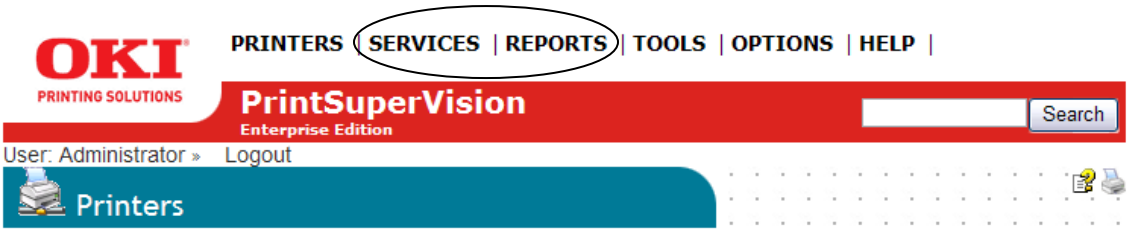
- Without Logging into PSV
- Logging in as a User
- Logging in as an Administrator

Be aware that certain menu options are only available to users with Admin rights that have logged into PSV. See example below.

Professional Edition: User is not logged in



Enterprise Edition: User is logged in as an Administrator



If a user does not log in, the two areas that are not accessible are **Services** and **Reports** and the following functionality will not be available

- Cannot view, add, or configure Alerts
- Cannot generate any type of report or configure email sending
- Cannot add or delete devices or users

Adding a User / Assigning Individual User rights

To add an individual user to the system:

1. Select **Options** from the main menu
2. Click **Users** from the drop down box
3. Click the **Add User** button and fill in the user's information. Make sure that you include a password that contains at least 6 digits.
4. Before clicking **Save**, assign the appropriate user rights by Selecting **Administrator** from the **Add to Group** drop-down box or leave it blank for Standard User rights.
5. Click **Save**

A list of users will be displayed. Notice that individuals with Admin rights are displayed with a red line under the icon while those with Standard User rights are displayed with a blue line under the icon.

Note: User attributes can be changed at any time by clicking the icon in the Edit column and entering new information.

Importing a List of Users

It may also be helpful to take advantage of the **Import Users** feature to save time. You can import users into the application from a text file using a comma separated format. The fields available for data import are the same fields listed in the **Add User** section.

Fields cannot be left empty with the exception of **Password**. If passwords are not supplied in the text file, PSV will set it to the word "*password*" by default.

To import a list of users:

1. From the main menu click **Options**
2. Select **Users**
3. Select the **Import Users** button
4. Specify the text file location or click **Browse** to locate the file
5. Click the **Import Users** button.

PSV will add users one by one into the application. When complete, the number of users imported successfully will be displayed as well as details of any errors that may have occurred.

Creating User Groups

In large organizations it may be helpful to organize users into groups based on admin status, user status or by any number of criteria. This feature should not be confused with creating groups of print devices which is also possible in PSV and described in the next section.

To create a group of users:

1. Click your browser's back button or select **Options** from the main menu
2. Select **User** from the drop down box.
3. Click the **User Groups** button
4. Click the **Add User Group** button
5. Enter a name for the user group
6. Click **Save.** A list of groups will be displayed.

You will notice that the new group name is automatically added to the **Add to Group** drop down menu when adding an individual user.

For convenience, the **All Users** button has been provided in the **User Groups** area to help identify if an individual has been assigned to a group.

Changing Your Password

To change your password:

1. Select **Options** from the main menu
2. Click **Change Password**
3. Enter your current password, then enter your new password and confirm the new password by typing it again
4. Click Change to save new password

Creating / Editing Groups of Devices

Before discovering the devices on your network, it may be beneficial to organize them into logical groups in order to monitor and manage them in an efficient manner.

- A Group can have attributes assigned to it such as location, contact person, SNMP community and even images of maps and floor plans which are used to quickly locate individual devices

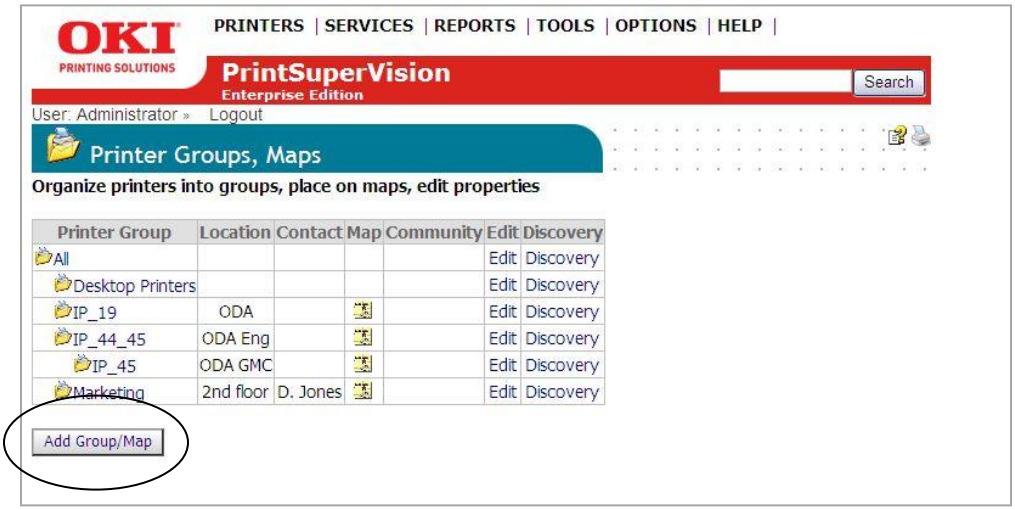
- Groups can be arranged in a hierarchy where a "parent group" can contain sub groups. A device can also be a member of more than one group

- You can assign a subnet or a range of IP addresses (for discovery purposes) to a group, and as an added convenience, a link to the discovery screen is provided when groups are displayed.

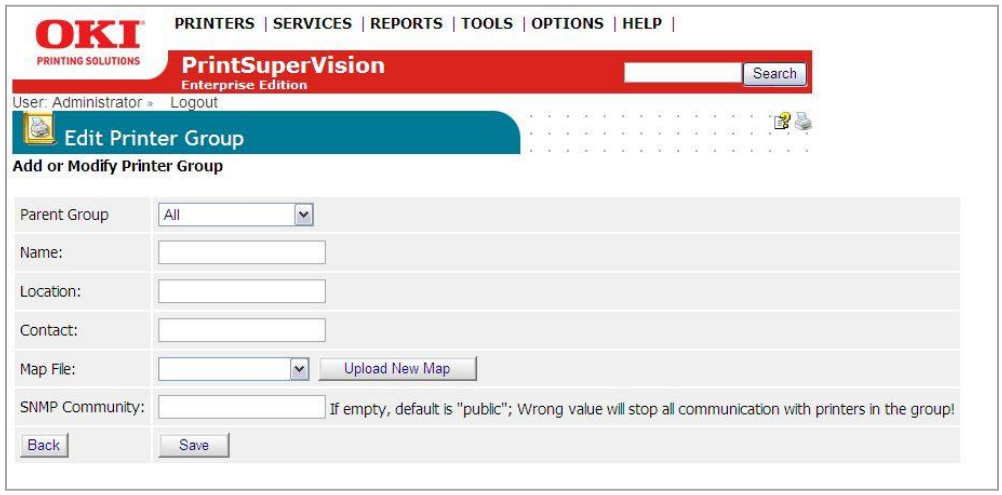
To create or edit a Group:

1. Click **Printers** from the main menu and **Printer Groups, Maps** from the drop down menu to view a list of groups already created.

2. Click the **Add Group/Map** button to create a new group of devices



3. Assign a Parent group, a group name, location, contact person responsible for the group, a map or floor plan and the SNMP community name.



4. Click the **Save** button

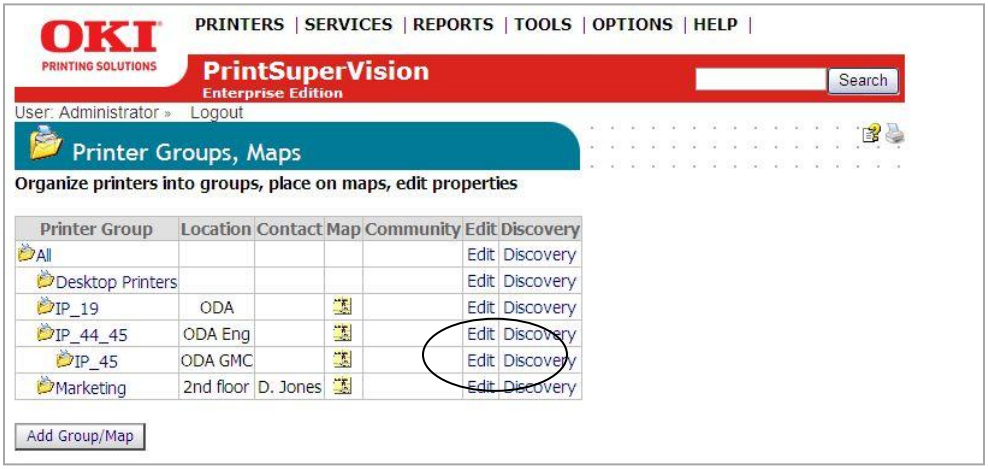
See Adding Maps and Floor Plans to Groups on page 34 for more information.

Adding/Removing a Device to/from a Group

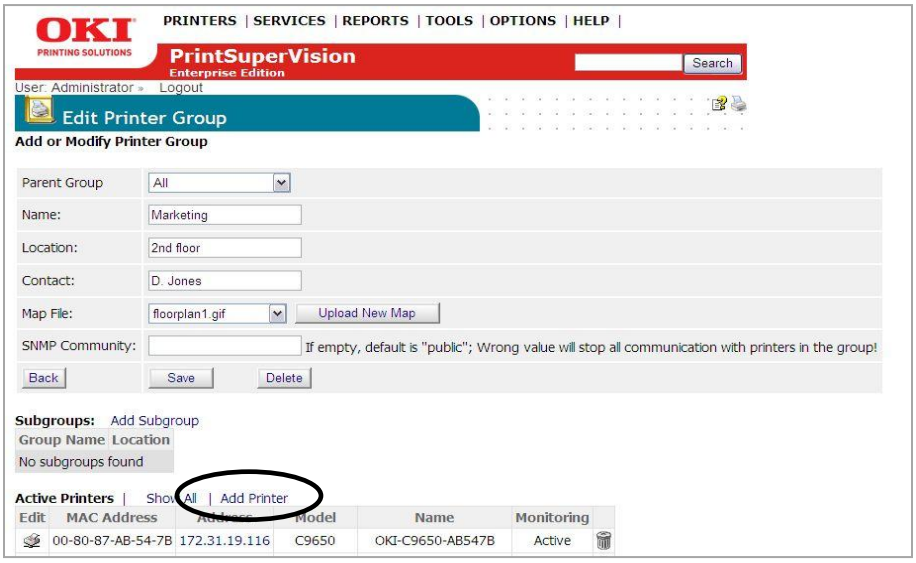
To add a device to an existing Group

1. Click **Printers** from the main menu and **Printer Groups, Maps** from the drop down menu view a list of groups already created

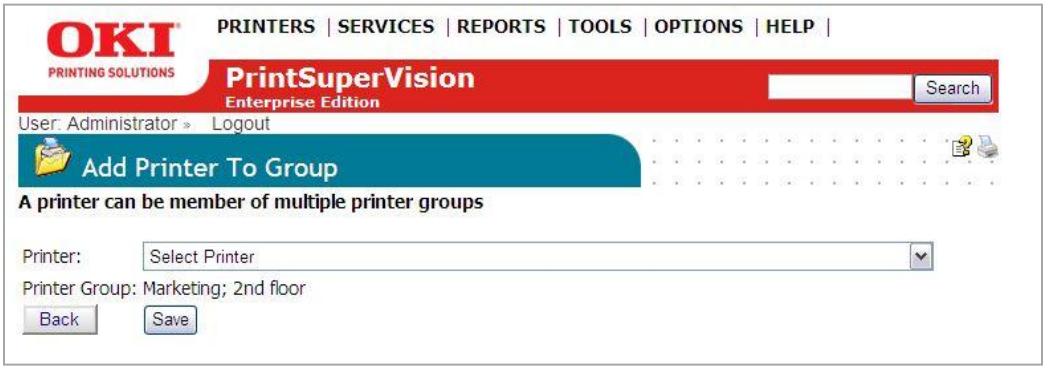
2. Click **Edit** in the Edit Column of the group you wish to modify.



3. Click **Add Printer**



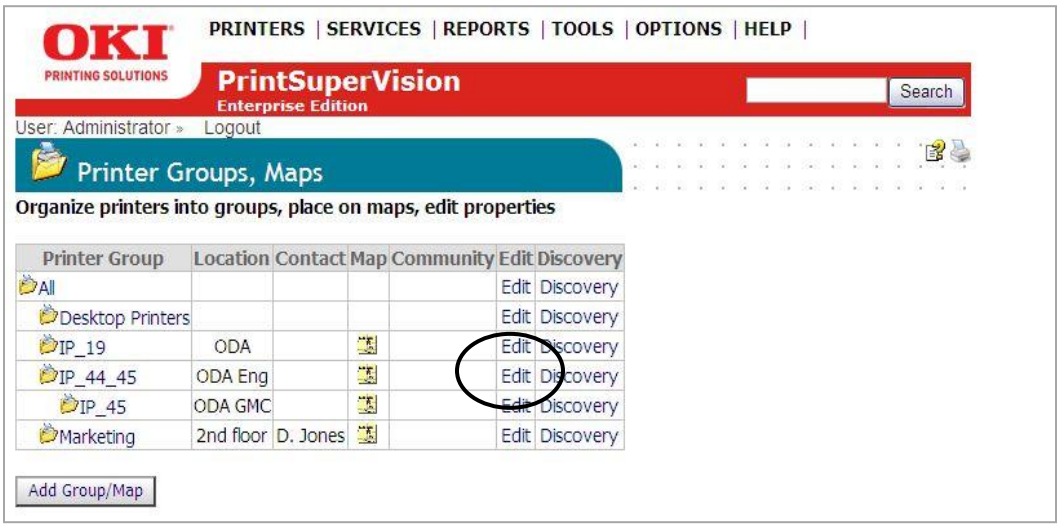
4. Select the appropriate device from the Printer drop down menu and click **Save**



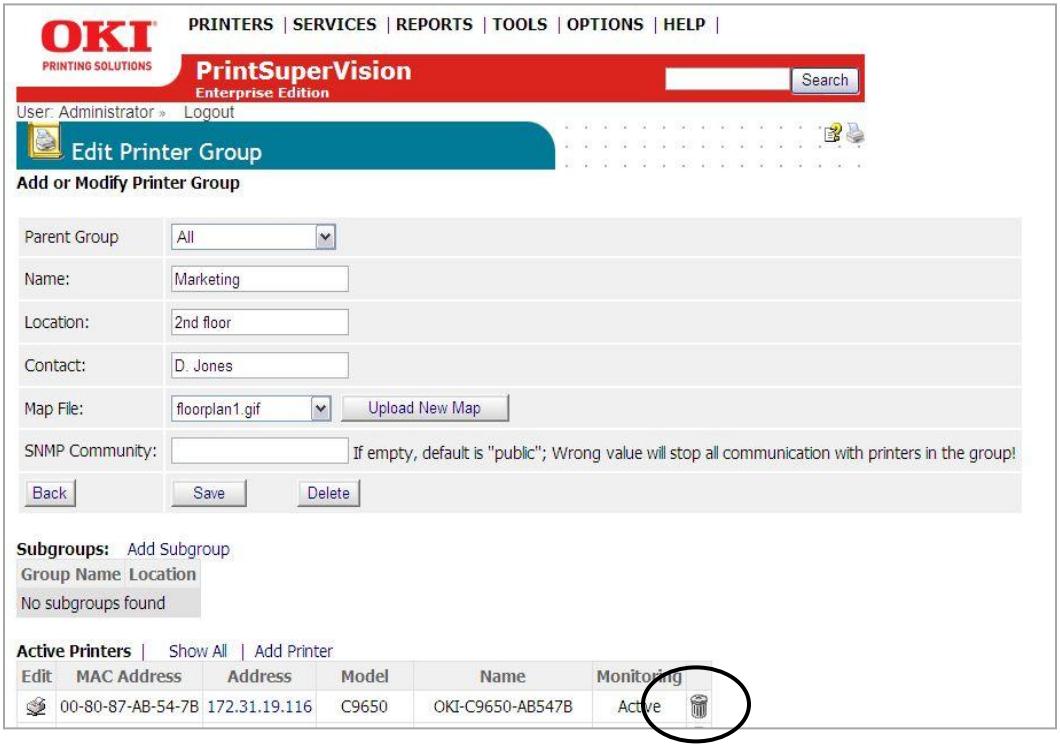
If the group was initially empty, you will see the added device listed after clicking save. If the group already contained devices you will see an updated list of all devices in that group.

To **remove** a device from an existing group

1. Click **Printers** from the main menu and Printer Groups, Maps from the drop-down menu to view a list of groups already created
2. Click **Edit** in the Edit Column



3. Click the Trash Can Icon from the list of grouped devices displayed on the **Edit Printer Group** screen. The device will be deleted from the selected group.



Adding Maps and Floor Plans to a Group

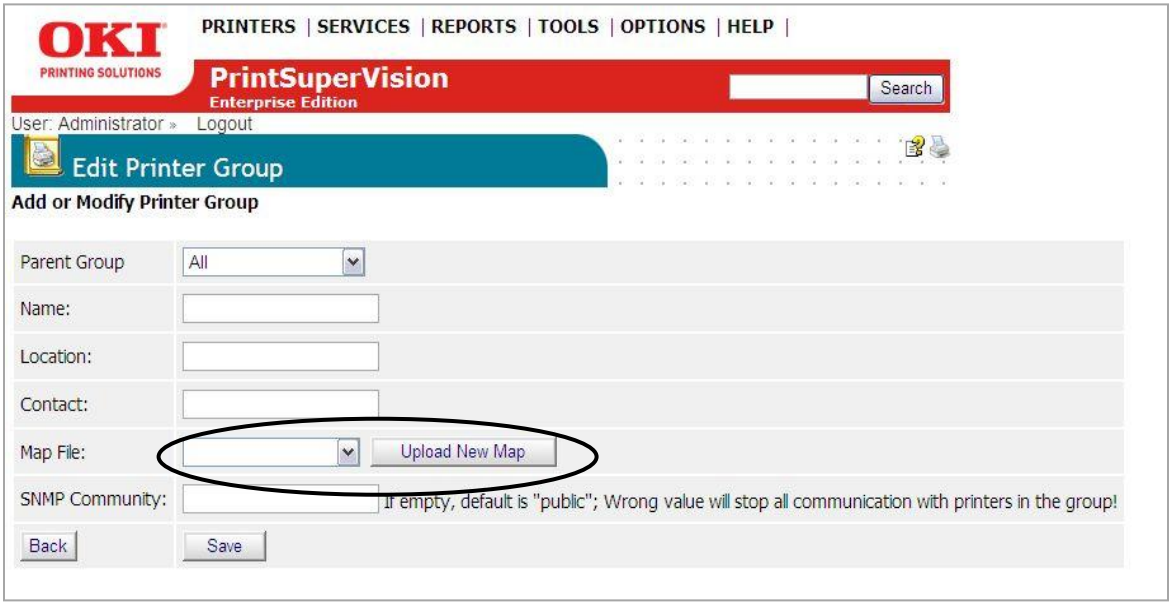
Groups can also have images of maps, floor plans, etc. assigned to them, which in turn allows PSV to display the location of a device icon on an associated map or floor plan.

Several popular image file formats for maps and floor plans are supported, such as .gif, .jpg, .bmp, or .png.

You can assign a map or floor plan image to a new group as soon as you create the group or you can add a map / floor plan image to an existing group at any time.

To add the image while creating the group:

1. Select Printers from the main menu and click **Printer Groups, Maps**.



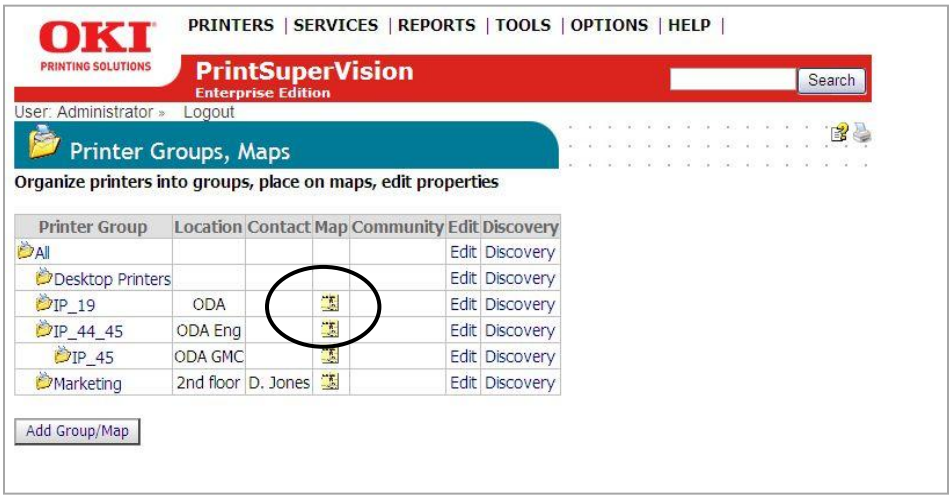
2. Select a saved image file from the drop down menu and click **Save** or click **Upload New Map** to browse for your desired image. Once an image has been located, click **Upload**.

3. Place a device icon on the map or floor plan

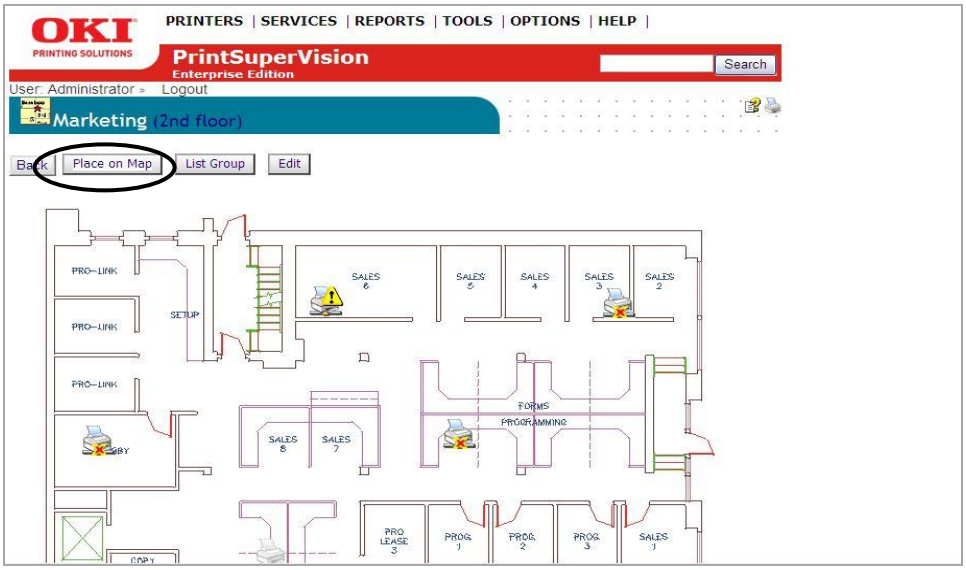
Note: Remember the individual device must be a member of a group before it can be placed on the map.

4. From the main menu select **Printers** and **Printer Groups** from the drop down box. If you have successfully linked an image with a group, you will see an icon in the map column.

5. Click the **map icon** and the image will be displayed.

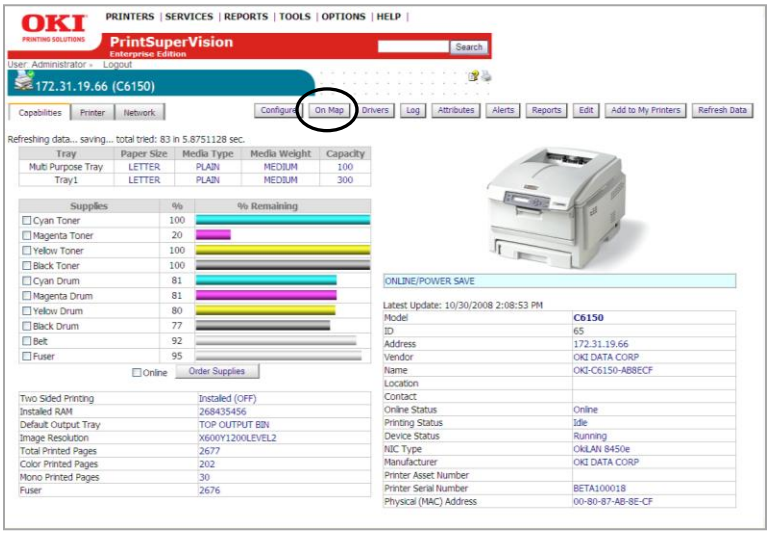


6. Click **Place on Map**, and select a device from the drop down menu.
7. Click on the image and the device icon will be placed where your mouse pointer is positioned



To move the device icons at any time, click the **Place on Map button** and drag and drop the icon to the desired location on the map. Left click once more to activate.

Remember, when viewing the map or floor plan, the interactive icons can be clicked at any time to go directly to the device's status page.



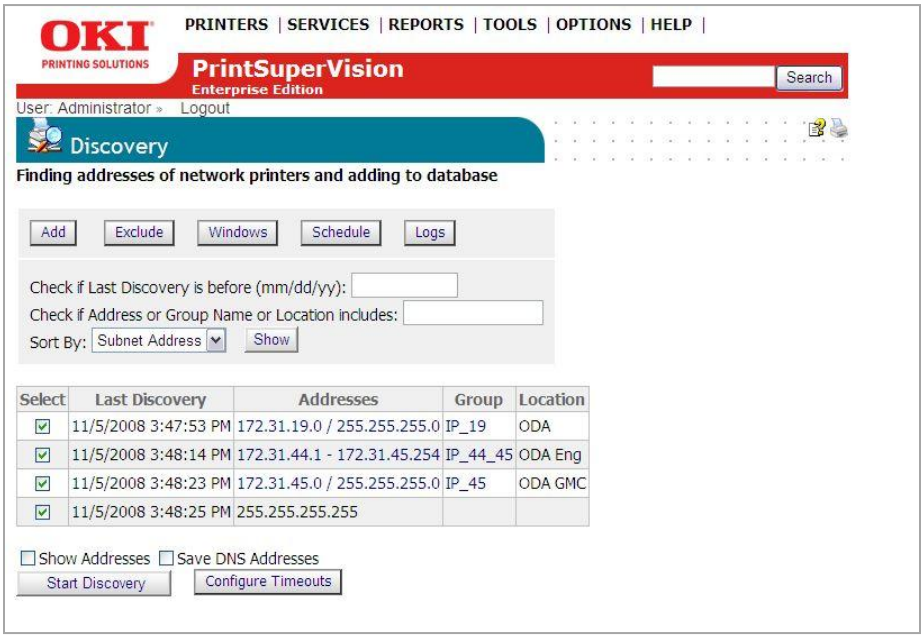
While on the **Device Status Page**, you can link back to the map or floor plan by clicking the **On Map** button.

Note: If you return to the map or floor plan from the **Device Status Page** by clicking the **On Map** button you will only see that device's icon displayed on the image. To see all devices on the map or floor plan, click **Printers** from the main menu and select **Printer Groups, Maps** from the drop down box. Click the map icon associated with a particular group.

Discovering Devices

The next step is to discover devices on your network. Click **Printers** from the main menu and select **Discovery** from the drop down menu. PSV is capable of discovering any device that is compliant with Public MIB Specification RFC 3805.

Click **Start Discovery** if you want to discover all of the compatible devices on your network. For large organizations, see ***Making Discovery Easier: Importing IP Addresses from a Text File*** section before starting the discovery process.

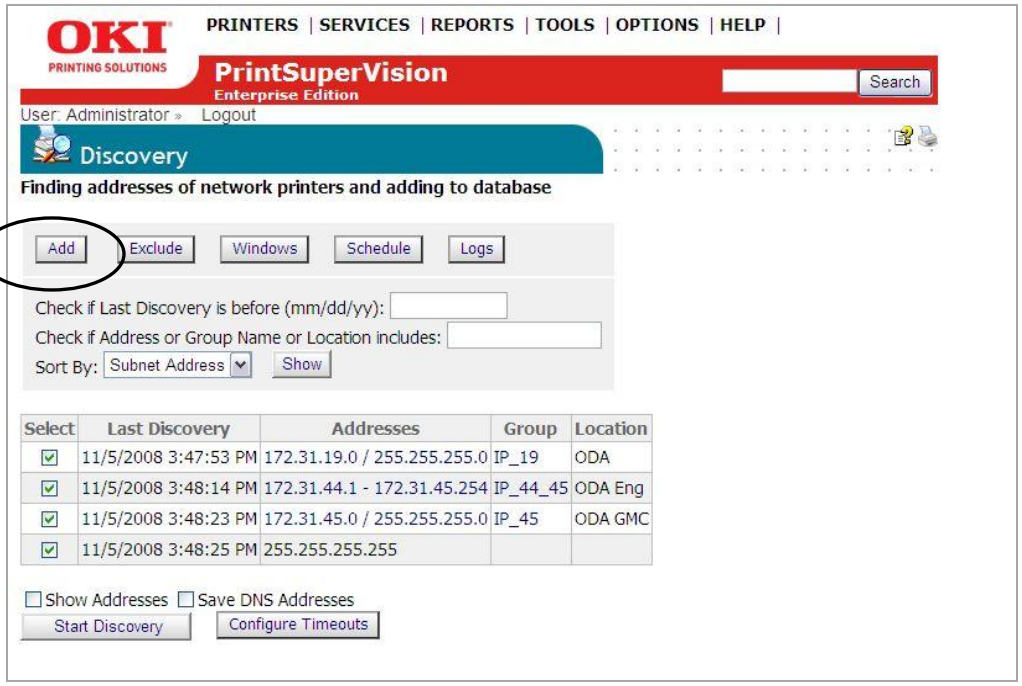


For Enterprises with several hundred or even several thousand devices, it may be time consuming to discover all devices at once.

PSV provides the flexibility to selectively discover individual subnets or ranges of IP Addresses by simply selecting the appropriate check box and clicking **Start Discovery**.

Discovery: Add Button

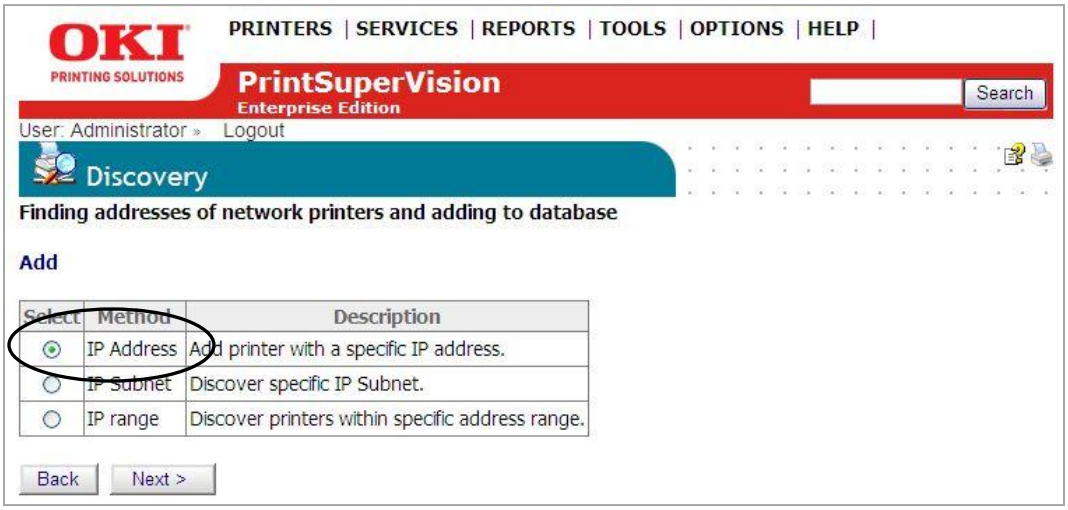
Click the **Add** button to selectively discover devices.



The **Add** button allows you to:

- Add an IP address of a device to the discovery database
- Create a discovery list based on IP subnet entered
- Create a discovery list based on a range of IP addresses indicated

Click the **IP Address** radio button and click **Next.**



When adding a specific IP address to the discovery database, PSV provides an option to assign the device to a specific group of devices and associate the group to a specific SNMP community.

Enter an IP address, select a group name from the **Printer Group** drop down menu and type the desired SNMP community. Click **Add** to save your changes.

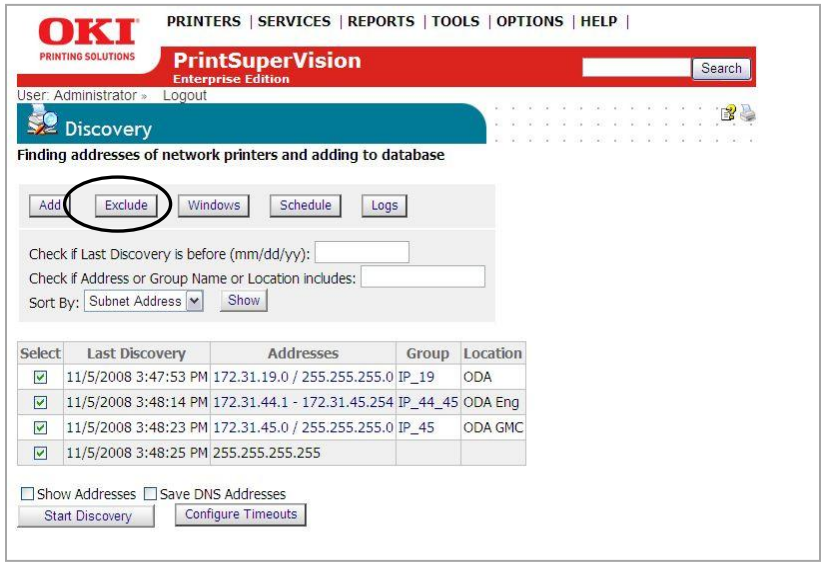
Similar to adding a single IP Address to a database, click the **IP Subnet** or **IP Range** radio buttons to create a discovery list for a specific IP Subnet or Range of IP addresses.

PSV also provides the option to assign a group name to the subnet or the IP address range by selecting a predefined name from the group drop down menu or by clicking on the map/group button if you would like to create a new group name.

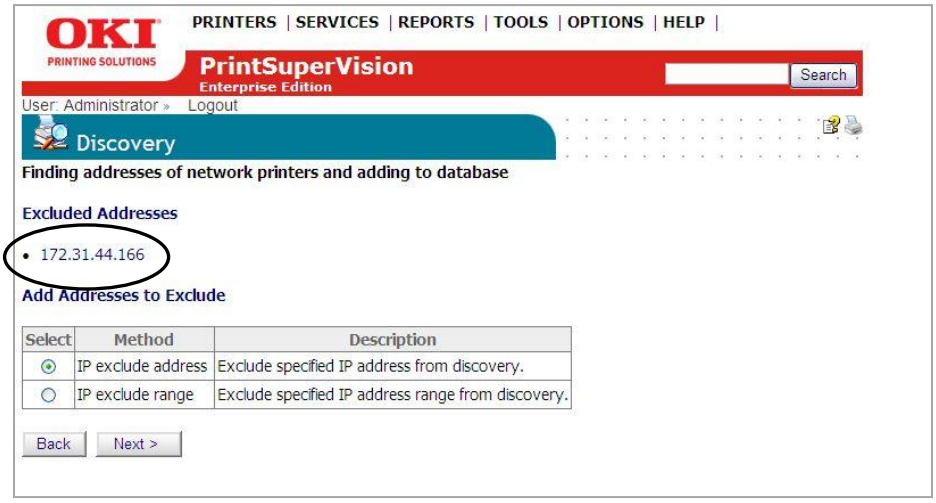
Enter the appropriate information and click **Save**.

Discovery: Exclude Button

Use the Exclude button to exclude a specific IP address or IP address range from the discovery process.



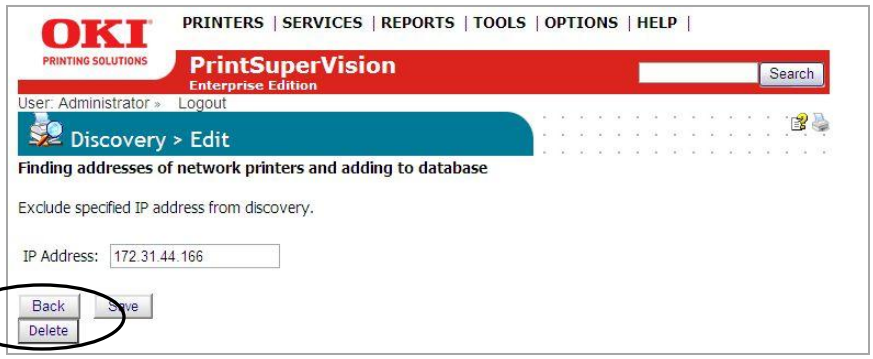
1. Click the Exclude button and select either **Exclude IP address** or **Exclude IP range** and Click **Next**



Notice that PSV displays all IP Addresses and IP Address Ranges that have been excluded previously.

2. Enter desired IP address to exclude and click **Save**, or for IP Range, enter the range of IP addresses to exclude and click **Save**.

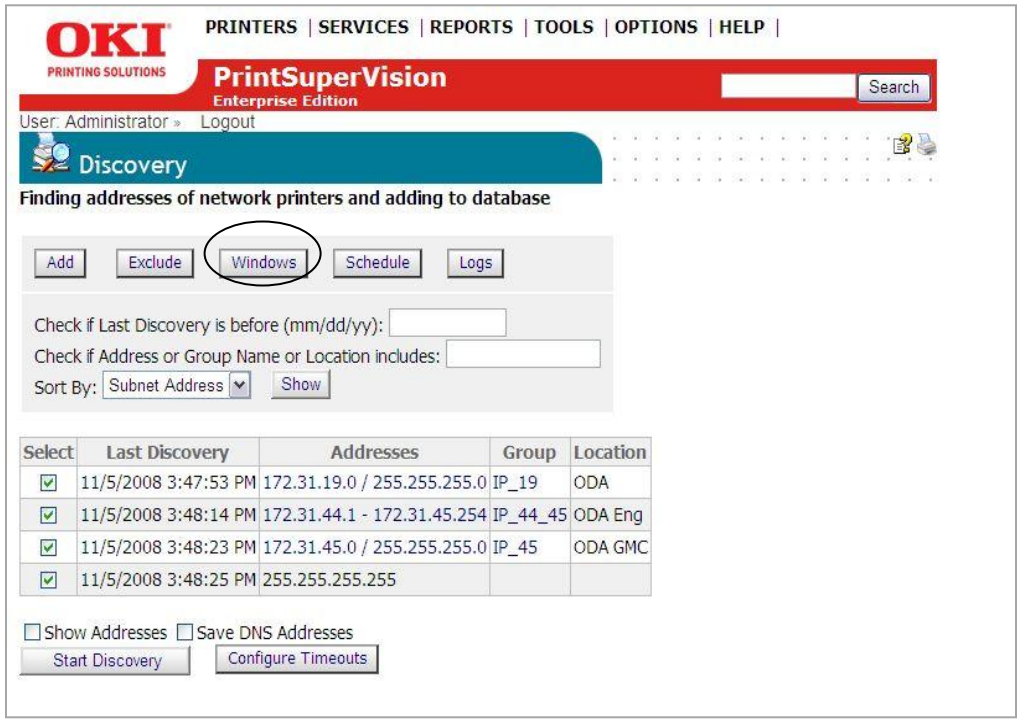
3. To include an IP address that was previously excluded, return to the Discovery section, click the **Exclude** button, Click on one of the **IP addresses** listed as previously excluded and click the **Delete** button.



Discovery: Windows Button

1. From the Discovery screen, click the **Windows** button.

The Windows button provides a list of devices that have been saved in the local system's Windows Print Queue. The local system is defined as the desktop or server that PSV is running on. Each device listed can be selectively saved to the discovery database.

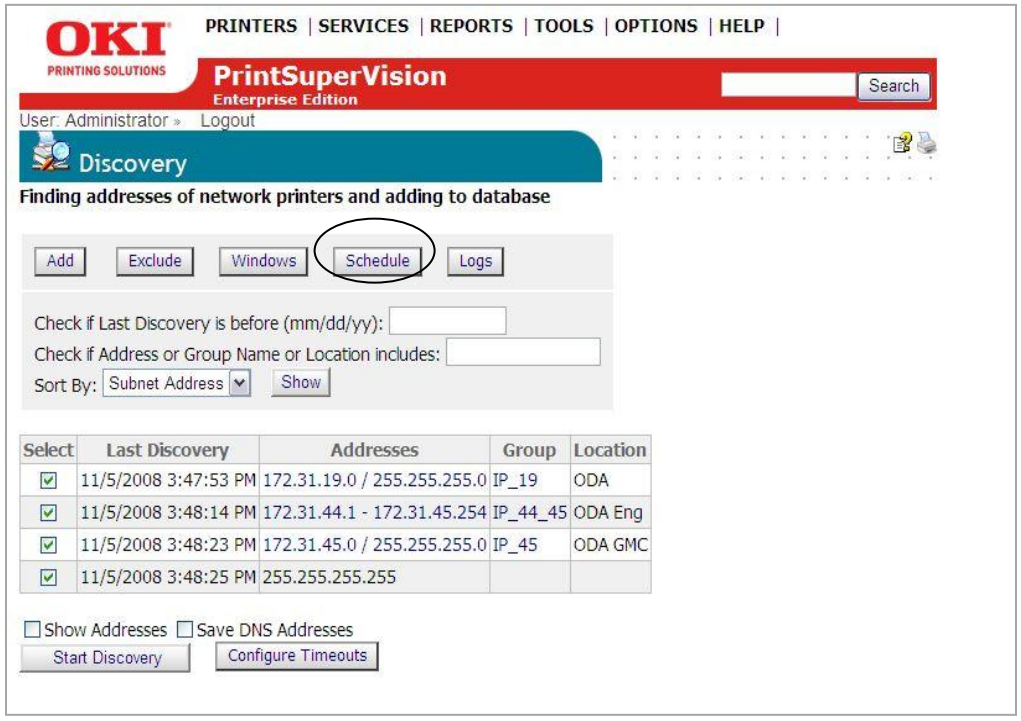


2. Click the check boxes to select the devices to add to the discovery database
3. Click the **Start Discovery** button.

As an added convenience, PSV can create a group of devices called My Printers (accessible from the Printer tab in the main menu) by clicking the **Add to My Printers** check box and then clicking **Start Discovery**.

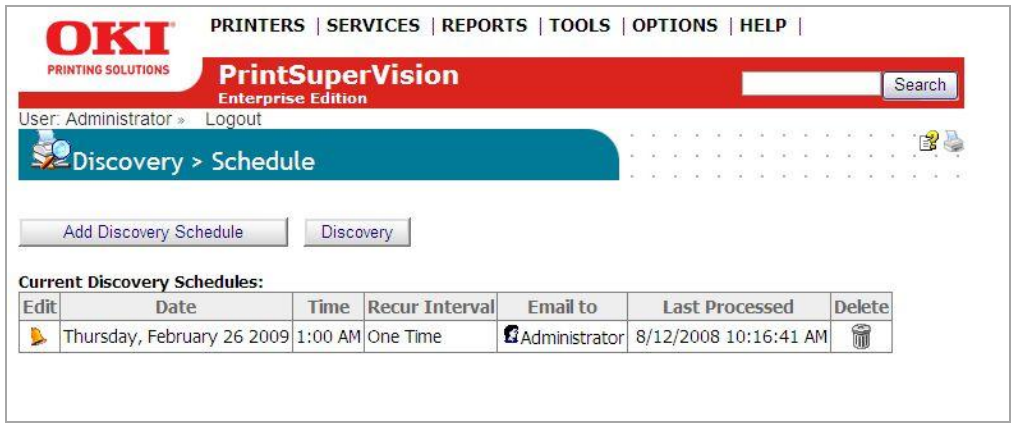
Discovery: Schedule Button

Discoveries can be scheduled by clicking the **Schedule** button.



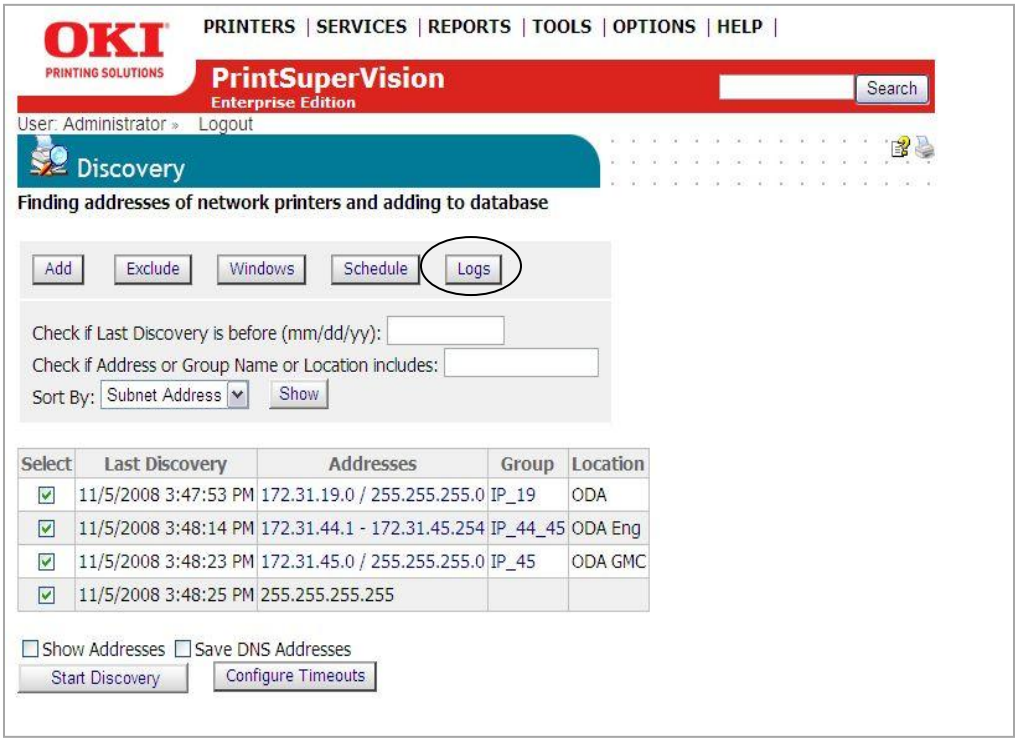
Indicate the appropriate date, time and a recurring interval that you desire for the discovery to take place.

An added feature is the ability to send the Admin an email message indicating the results of the discovery. Leave blank or indicate who the email should be sent to. Click the **Save** button to save the Discovery schedule.



Discovery: Logs Button

PSV records a log of all discoveries performed (and several other system activities) and indicates whether the discovery was successful or not.



Click the **Logs** button to view the system activity log.

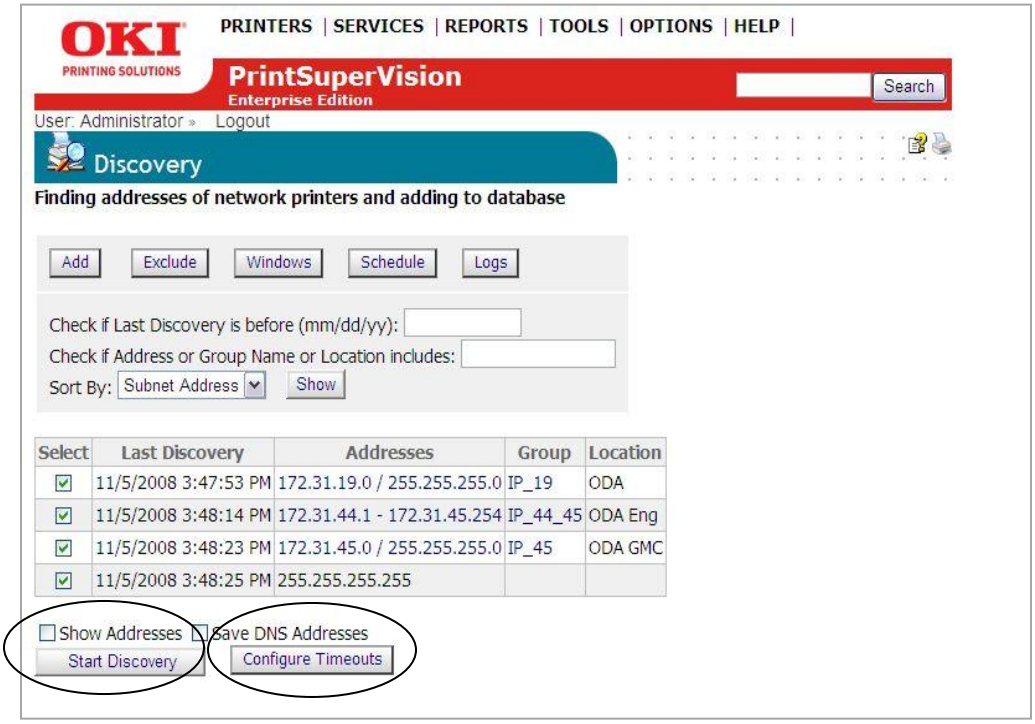
To obtain just a Discovery log, select **Discovery** from the **Type** drop down box, indicate time frame by entering desired dates and click **Show** to display the log.

Note: This feature creates activity logs for all other activities supported in the drop down box.

Caution: Clicking **Clear Log** will delete all discovery log entries permanently.

Show Addresses

Selecting **Show Addresses** displays a list of all IP addresses that PSV attempts to discover when a Discovery is performed.



Save DNS Addresses

Save DNS Addresses translates IP addresses to DNS names if possible, and saves them in the PSV database. When a list of devices is displayed in other areas of PSV, you will see the DNS address name displayed instead of the IP address. This is particularly helpful when an organization uses DHCP

Start Discovery

Start Discovery begins the discovery process for all subnets and IP address ranges selected.

Configuring Timeouts

The SNMP Get timeout value, which controls the length of time PSV will wait for a response from the device before timing out can be adjusted. Keep in mind the greater the SNMP Get timeout value, the longer the overall discovery will take.

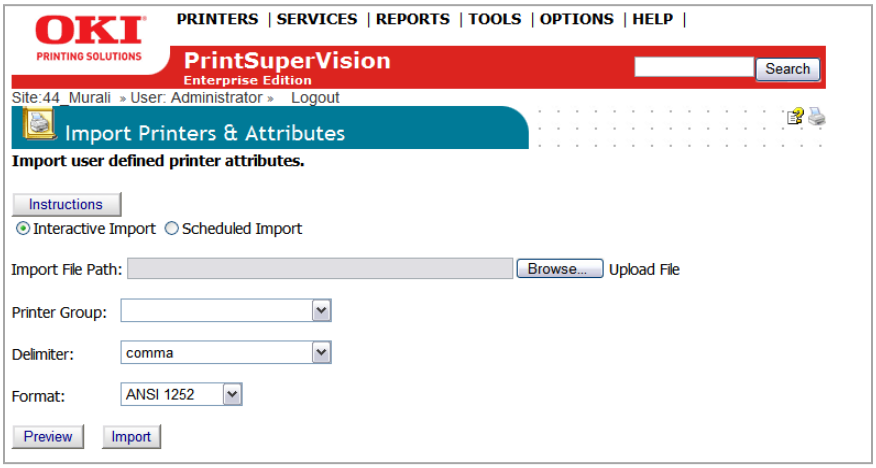
The status icon timeout value sets the time interval that PSV waits for a response from a device before turning the status icon gray (status icon is displayed in the Printers List). Notice that after clicking **Refresh**, the status icons are returned to an active state. Enter a desired value for each option and click **Save.**

After the discovery process is complete, clicking the **Printers** button at the bottom of the screen will display a list of the devices that were previously discovered with refreshed status. Clicking the **Discovery** button takes you back to the main discovery screen.

Making Discovery Easier: Importing IP Addresses from a text file

In large organizations, IT departments may keep track of the IP addresses of their print and copy devices in a text file. If such a file exists, you can use PSV's "Import" feature to speed the discovery process. This is done by simply importing the text file:

1. From the main menu click **Printers** and select **Import Printers & Attributes**



2. Click **Browse** to locate the desired file. The text file should be formatted so that one device address is on each line of the file. For more detailed instructions click the **Instructions** button.

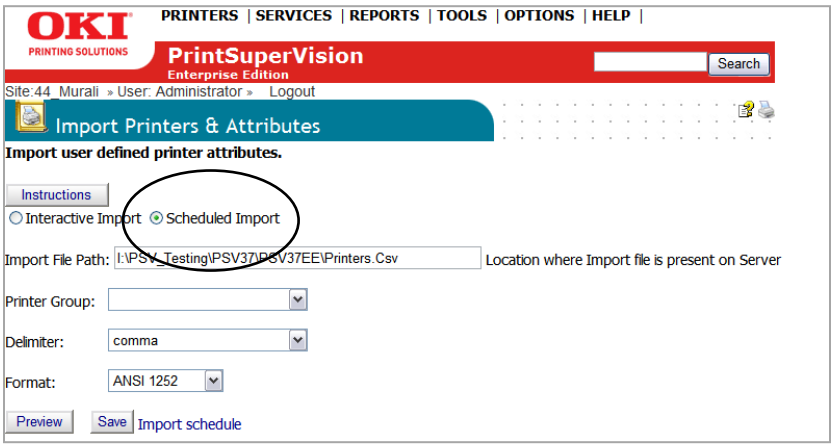
3. Select an appropriate group name from the **Printer Group** dropdown box (or leave blank).

4. Select the way the file is delimited by selecting **comma, semi colon or tab**

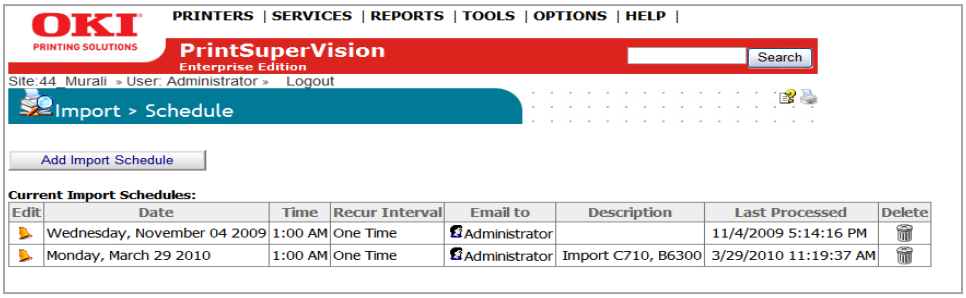
5. Select the format of the text file: ANSI 1252 or UTF-8

You may click **Preview** to view the data before importing it or Click **Import** to add the devices immediately.

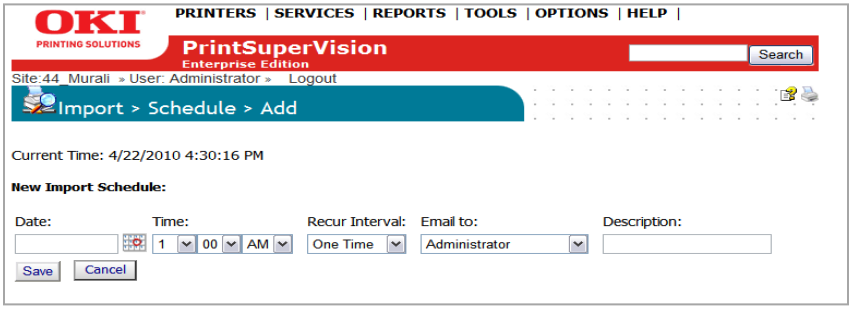
The import process can also be automated and scheduled to occur on a regular basis. To schedule an import:



1. Click the **Scheduled Import** button
2. Enter the location of the file to be imported in the **Import File Path** field
3. Enter a printer group if you want the imported devices to be placed in a specific group
4. Select the way the file is delimited by selecting **comma, semi colon or tab**
5. Select the text file format
6. Click Save
7. Click the Import Schedule link to indicate when the file should be imported



8. Click the **Add Import Schedule** button

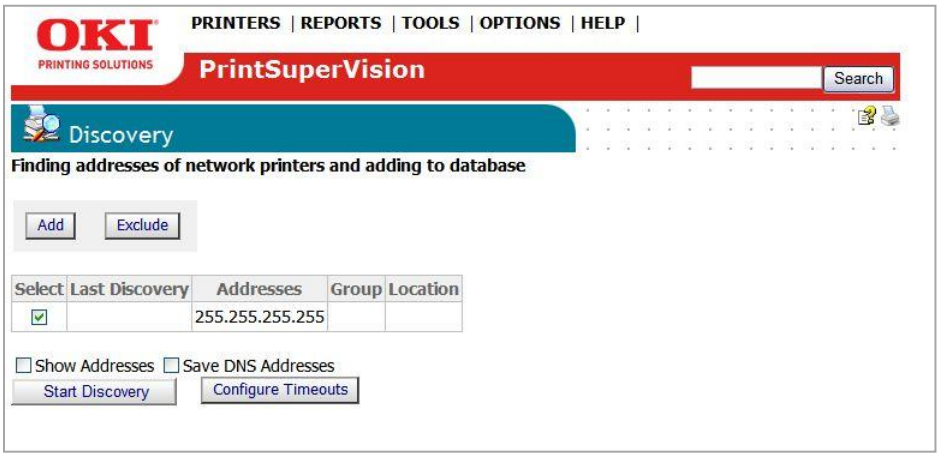


9. Enter date, time, recurring interval and who should receive the confirming email. Click **Save**

Discovering Network Devices: Easy Configuration

If you have installed the single-user "Easy Configuration" option from PSV Professional Edition you will notice there are fewer discovery options.

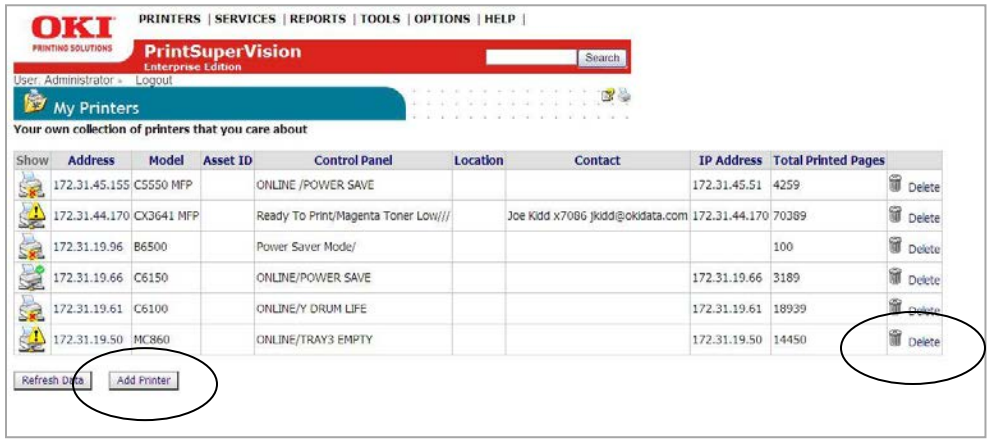
Click **Printers** from the main menu and select **Discovery** from the drop down box. The two discovery options available are: **Add Subnet** and **Exclude**. Both features are included in PSV Enterprise although more limited. See previous discussion for a complete description of these features.



My Printers

An alternative way to group devices together is to use the **My Printers** feature. It's an easy way to view device status with minimal mouse clicks.

1. From the main menu select **Printers** and **My Printers** from the drop down box. You will see a list of devices that have been added to the My Printers group.



2. To add a device to the My Printers group, simply click the **Add Printer** button, choose the desired device and click **Save**.

3. To delete a device, click the trash can icon / **Delete** button listed in the right column.

Near Me

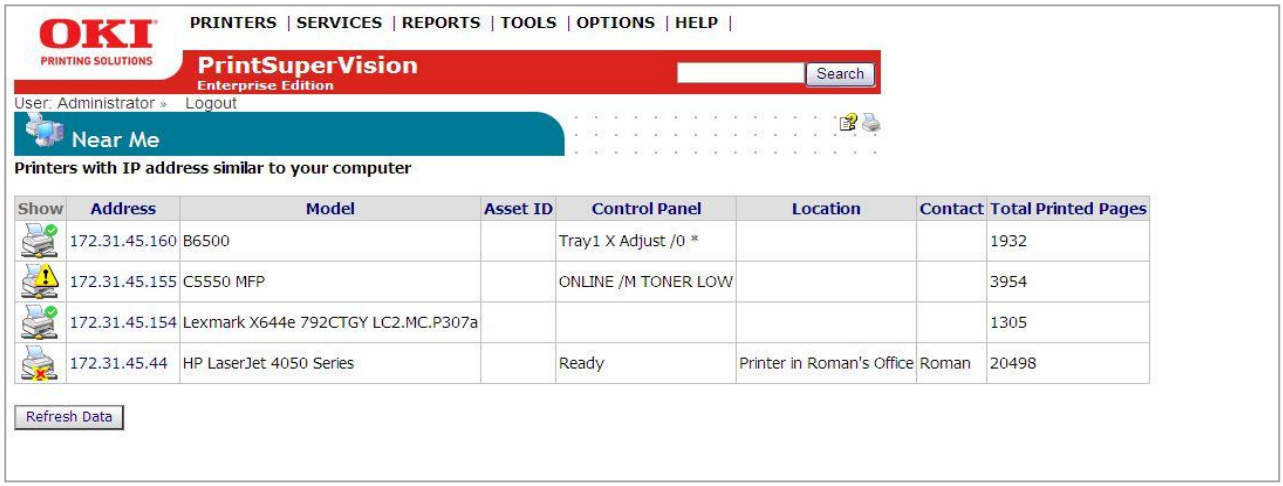
Another time saving, grouping feature available in PrintSuperVision is called **Near Me.**

Near Me allows a user to quickly view the status of devices that are conceptually located near the PC being used, without the need to configure or group devices.

PSV detects and locates devices that have similar network addresses to the client computer (or browser enabled device) being used to access the PSV application and automatically includes those devices in the Near Me group.

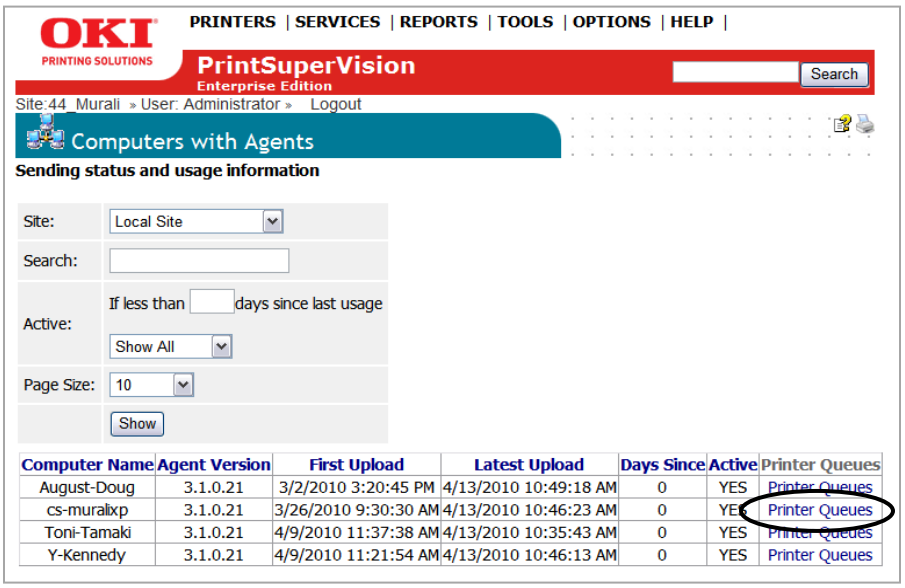
From the main menu select **Printers** and **Near Me** from the drop down menu. Device status in the Near Me group will be displayed.

Note: Devices cannot be added or deleted from the Near Me group.



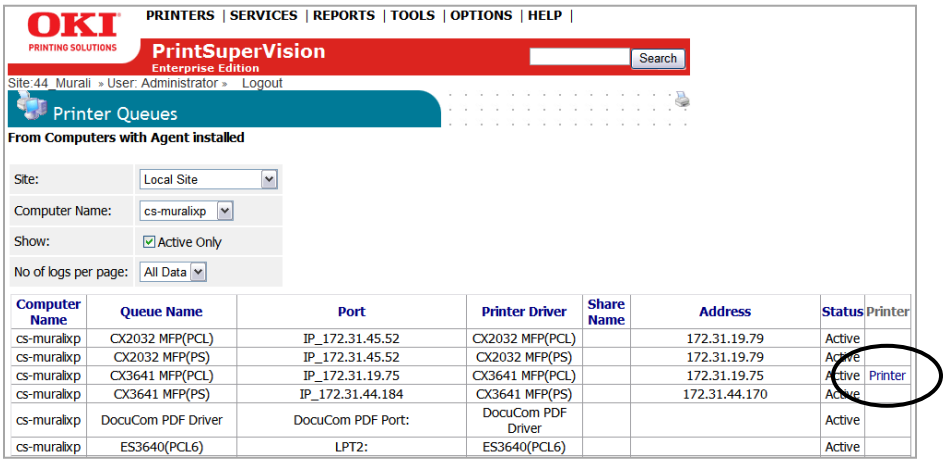
Computers with Agents

If you have installed the PSV Agent on desktops or laptops within your organization to monitor USB-connected Oki devices, you have the ability to search for and view those client computers from PSV. Click **Printers** from the main menu and **Computers with Agents** from the drop down menu.



In addition, you can view all of the print queues and print drivers that an individual user has installed on their computer and can even obtain consumable status and printed page counts from the Oki USB connected devices as well as network connected devices.

Select an individual user and click **Printer Queues.** Then click **Printer**.



The status page for the device is displayed containing page counts, supplies status and the current operational status.

Configuring Email Alerts

Now that you have discovered devices on the network and logically organized them into groups, the next step is to set up PSV to notify a helpdesk or network admin that a device has generated an alert.

Alert notifications are available in the Enterprise Edition and the server configuration of the Professional Edition. Alerts are not available in the single-user Easy Configuration option of the PSV Pro Edition.

Only users with Admin rights can edit email alert configurations or set alerts for other users or user groups. A non-Admin user however, may configure and view Alerts just for themselves.

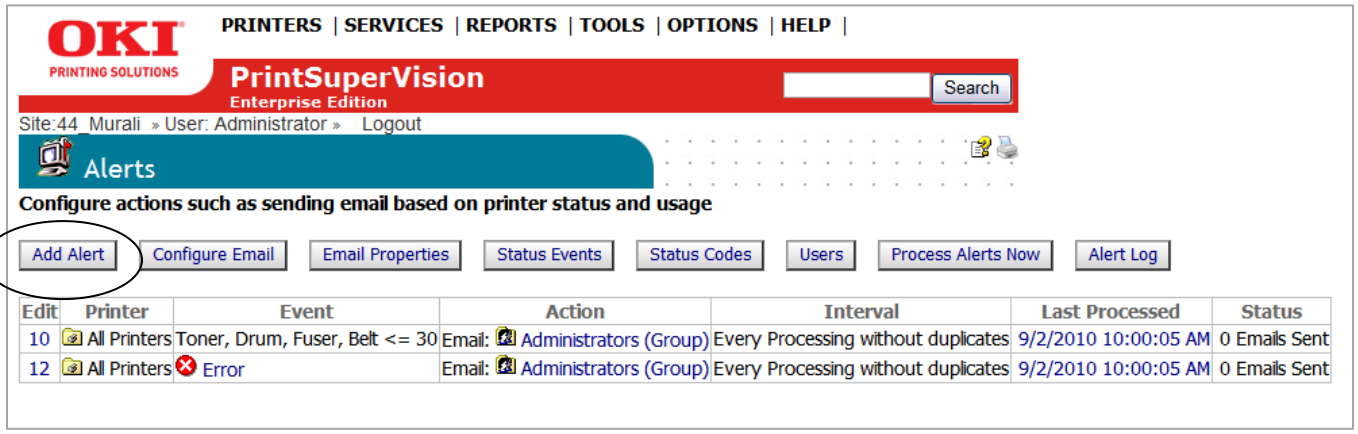
PSV uses email to deliver alert conditions. The email message can be sent to an individual user or a group of users.

An Alert can also be saved in a "log file" or processed by another software application (if you choose to perform the integration).

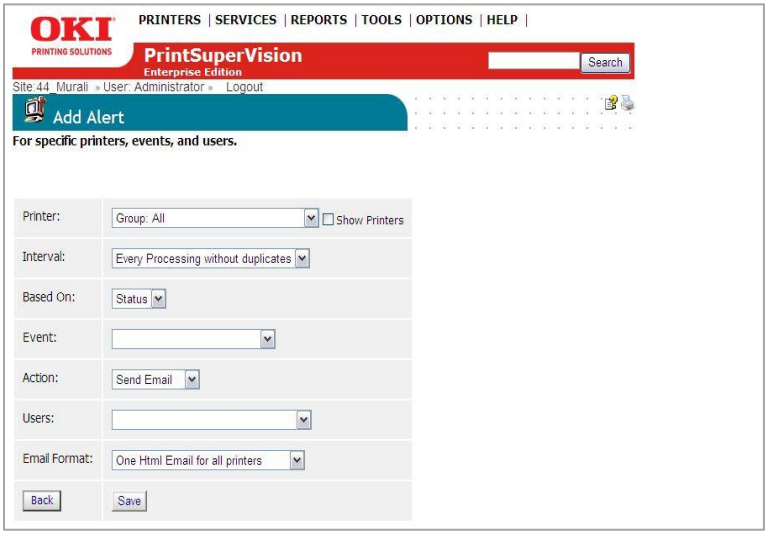
Each alert can be configured to be processed immediately upon receiving updated status from the device, or processed at specified time intervals.

To add an email Alert:

1. Select **Services** from the main menu and **Alerts** from the drop down box



2. Click the **Add Alert** button.



Adding an alert requires the following information and steps

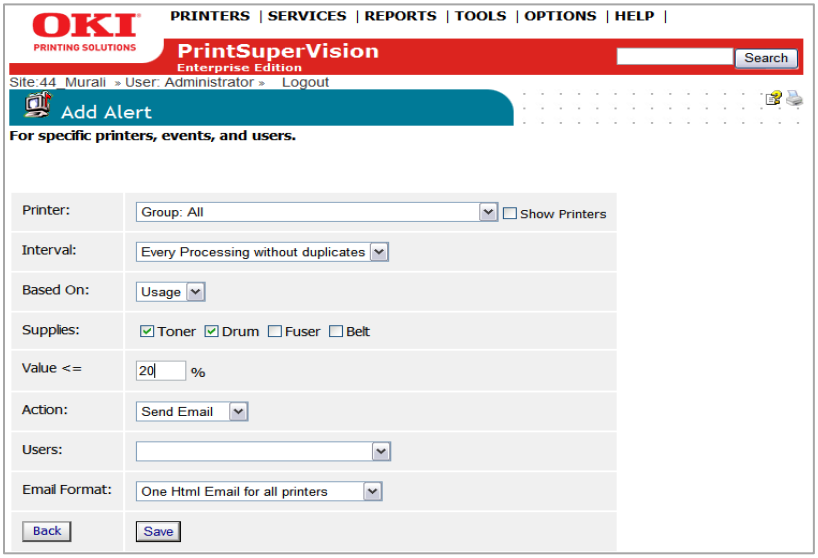
3. Identify the device or a group of devices to monitor and select it from the **Printer:** drop down box

4. Select how often you would like the Alert to be sent from the interval drop down box

5. Next, you have the option to select **Usage** or **Status** from the "Based On" drop down menu. Some explanation may be required before proceeding:

A Status based alert instructs PSV to act upon events that are generated directly by the print device. A Usage based alert is used for monitoring supplies and maintenance items such as toner, drums, transfer belts and fusers. A greater level of detail can be applied to Usage based Alerts since you can set life remaining thresholds for each item.

6. Select **Usage** from the drop down menu



Notice in the screenshot above that you have the ability to choose all supply and maintenance items or just the items that are most important to you. You also have the ability to set the life remaining threshold that triggers the alert. So in the example above PSV will send an alert email whenever toner or drum exceeds 20% life remaining. In order to assign different life remaining threshold values to each individual supply or maintenance item you must create separate Alerts for each item.

6. Select the supply or maintenance item that you wish to create an Alert for

7. Enter a % life remaining threshold in the **Value** field that applies to each supply or maintenance item checked

8. Select the appropriate action from the drop down menu that will occur when an Alert condition is met. Select **Send Email** to have the Alert message delivered by email.

Note that there are 2 additional options in the drop down box: **Run Program** and **Log Alert Only**. Run Program allows PSV to call another windows based application that can be installed on the same PSV server. Using Run program requires individual customer integration not included in PSV.

Log Alert Only records the Alert into a running log file.

9. Click **Save**

To select a Status based Alert, return to step 5 above by clicking the **Back** button or by clicking the Add Alerts button from the main Alerts screen.

6. Select the **Event** group that will trigger the Alert. For example, select "Error" if you only want to be notified when the device reports an error condition. Individual status conditions have been grouped in this list for convenience.

Keep in mind that if you have previously added events manually they will automatically be displayed in this drop down box

7. Select the appropriate action from the drop down menu that will occur when an Alert condition is met. Select **Send Email** to have the Alert message delivered by email.

Note that there are 2 additional options in the drop down box: **Run Program** and **Log Alert Only**. Run Program allows PSV to call another windows based application that can be installed on the same PSV server. Using Run program requires individual customer integration not included in PSV.

Log Alert Only records the Alert into a running log file.

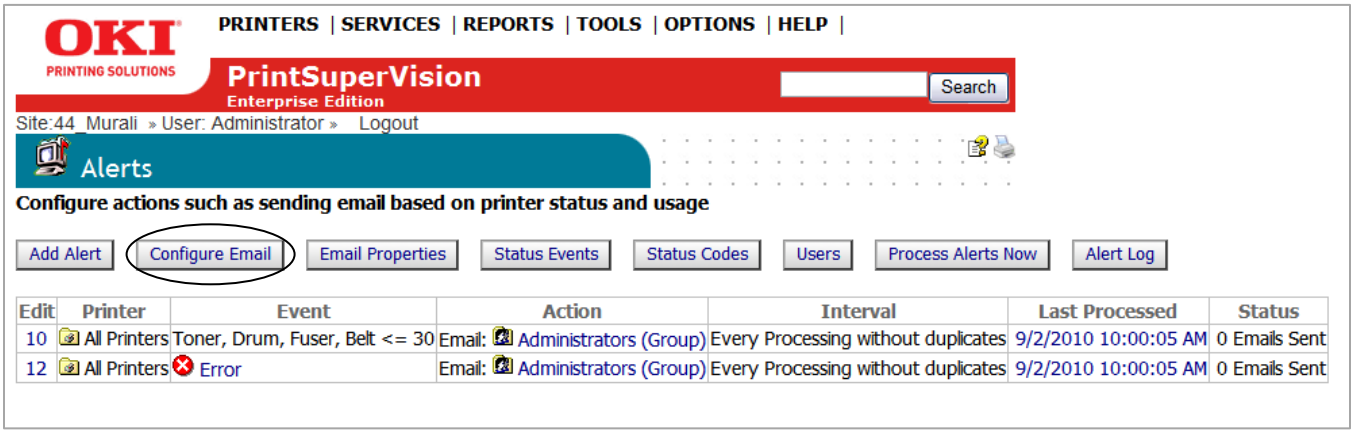
7. Select the user or group of users the Alert message will be sent to

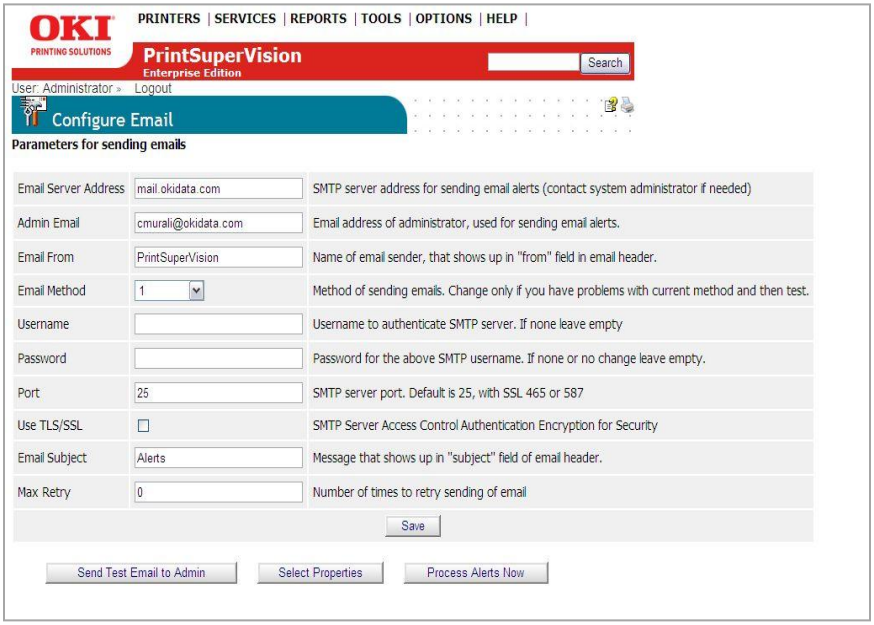
8. Select the format of the email message (text or html) to be sent.

9. Click **Save** after the information has been entered.

Configuring an Email Server

1. To set the parameters for sending alerts in email, click the **Configure Email** button from the **Alerts** page



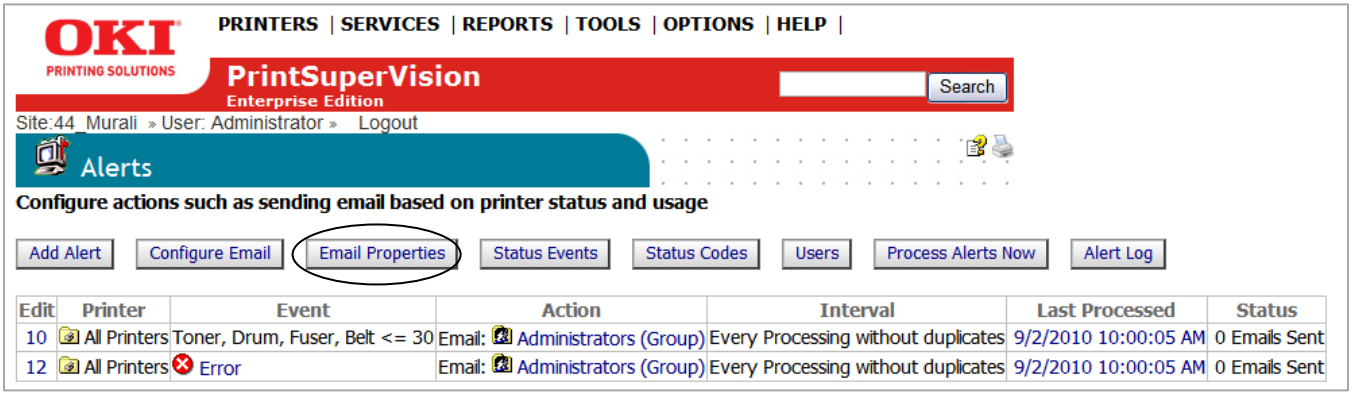


2. Enter the following information and click **Save:**

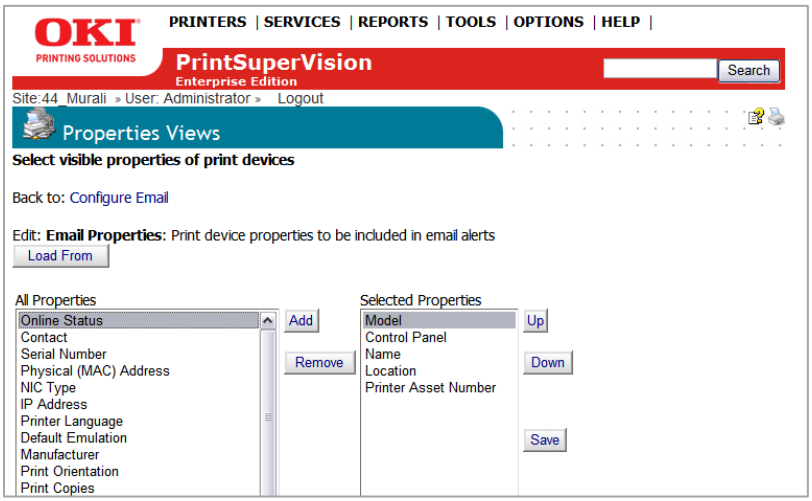
- The address of your email server
- The Administrator's email address
- The Sender's name that will be placed in the "From" field in the email
- The email method
- The Username and Password for authentication if required
- The SMTP Port
- TLS or SSL Encryption
- The Subject of email message
- The maximum number of message attempts

Note: To test whether the email configuration is correct, click the **Send Test Email to Admin** button. PSV will attempt to send an email to the address specified.

3. To select the Print device properties to be included in the email alert message, click the **Email Properties** Button.



4. Highlight the desired properties to be included in the email alert message and click the **Add** button. It will appear in the Selected Properties column. To remove it, simply highlight it and click the **Remove** button.



For convenience, four pre-populated lists of properties are available by clicking the **Load From** button. The choices are: Standard, Long List, Toners and Toner Details. Once selected, you will notice that the properties associated with a pre-populated list are already entered into the "Selected Properties" column. Don't forget to click **Save** to save your settings.

Testing The Email Alert Configuration

For convenience, you can click the **Process Alerts Now** button to make sure everything is configured properly. PSV will process the alert and send an email message to the assigned recipient.

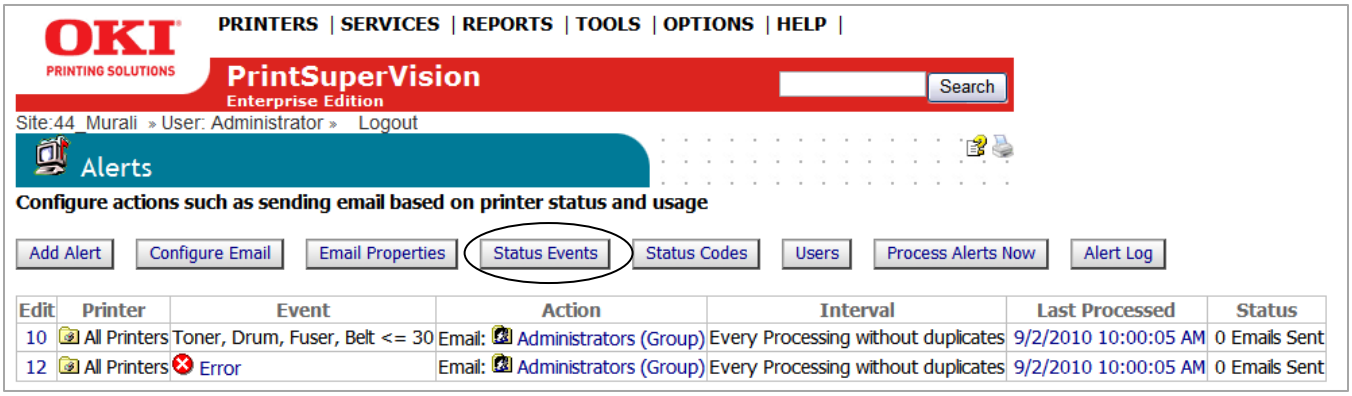
Note: the "Process Alerts Now" function is system wide and not tied to a particular device or group. Therefore, if you have a large number of devices in your network, it may take an extended period of time to scan your entire fleet of devices and send the alert email.

Configuring Status Events

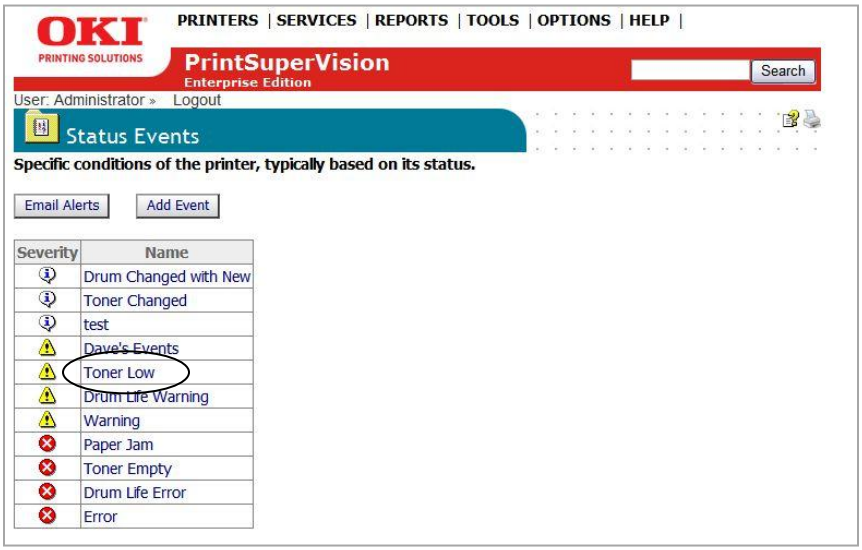
PrintSuperVision allows you to customize certain events that trigger notification emails. An "Event" is different than a standard Alert condition where the print device generates the Alert and PSV delivers the Alert in an email.

A customized Event can be created where a single condition or several conditions are assigned to one Event. This can be useful if you only want to be notified when a critical condition is met or when several conditions are met.

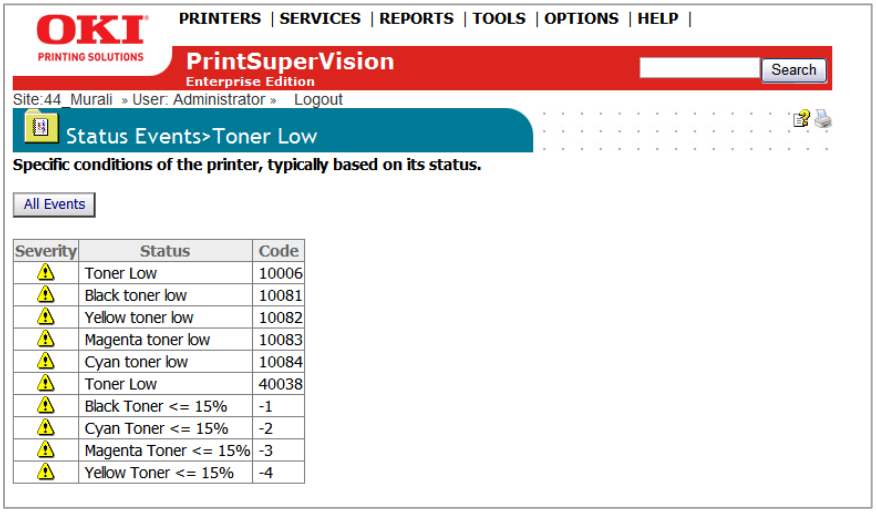
1. To add or modify an event, go back to the Alerts page and click the **Status Events** button.



A list of default events is displayed. You can add an event by clicking the **Add Event** button, or review the conditions of each existing event.



2. Click the name of the Event to see a list of conditions that are assigned to that event category. Click "Toner Low" for example



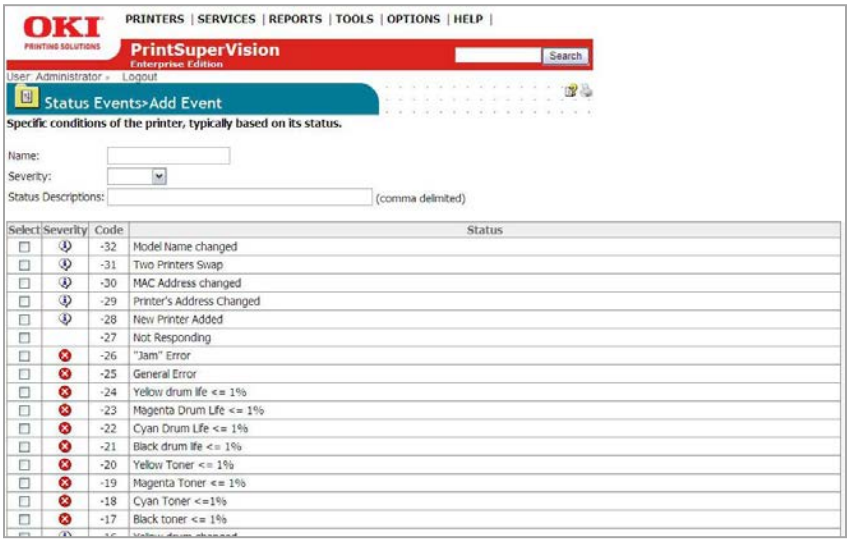
Severity	Status	Code
⚠	Toner Low	10006
⚠	Black toner low	10081
⚠	Yellow toner low	10082
⚠	Magenta toner low	10083
⚠	Cyan toner low	10084
⚠	Toner Low	40038
⚠	Black Toner <= 15%	-1
⚠	Cyan Toner <= 15%	-2
⚠	Magenta Toner <= 15%	-3
⚠	Yellow Toner <= 15%	-4

In this Event it tells us that an email alert will be sent when toner is less than or equal to 15% remaining.

Notice also that PrintSuperVision translates difficult to understand proprietary error codes displayed by the device into meaningful descriptions.

Click your browsers back button

3. Click the **Add Event** button
4.



Select	Severity	Code	Status
☐	⬇	-32	Model Name changed
☐	⬇	-31	Two Printers Swap
☐	⬇	-30	MAC Address changed
☐	⬇	-29	Printer's Address Changed
☐	⬇	-28	New Printer Added
☐		-27	Not Responding
☐	⊗	-26	"Jam" Error
☐	⊗	-25	General Error
☐	⊗	-24	Yellow drum life <= 1%
☐	⊗	-23	Magenta Drum Life <= 1%
☐	⊗	-22	Cyan Drum Life <= 1%
☐	⊗	-21	Black drum life <= 1%
☐	⊗	-20	Yellow Toner <= 1%
☐	⊗	-19	Magenta Toner <= 1%
☐	⊗	-18	Cyan Toner <=1%
☐	⊗	-17	Black toner <= 1%

5. Enter a unique name for the customized event
6. Assign a severity level to the event by selecting one of the options from the drop down box

Note: It is not necessary to fill in the **Status Description** field. Entering a description in that field instructs PSV to try and match a similar description of a

message that is displayed on the device's Control Panel. This is an alternative method to adding Alerts by entering a name and severity level described above.

Keep in mind that the description displayed on the device operator panel must match the description you entered in the **Status Description** field exactly in order for PSV to recognize the condition and act upon it.

7. Select one or more conditions to assign to the event by selecting the check boxes in the left margin.

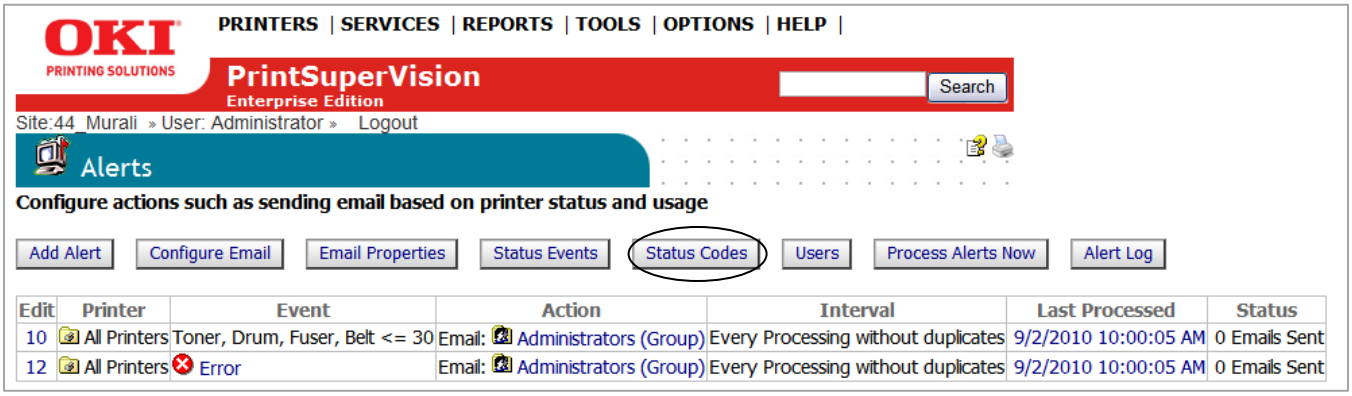
8. Click the **Add Event** button at the bottom of the page (not shown in the screenshot above) to save the customized Event.

Customizing Status Codes

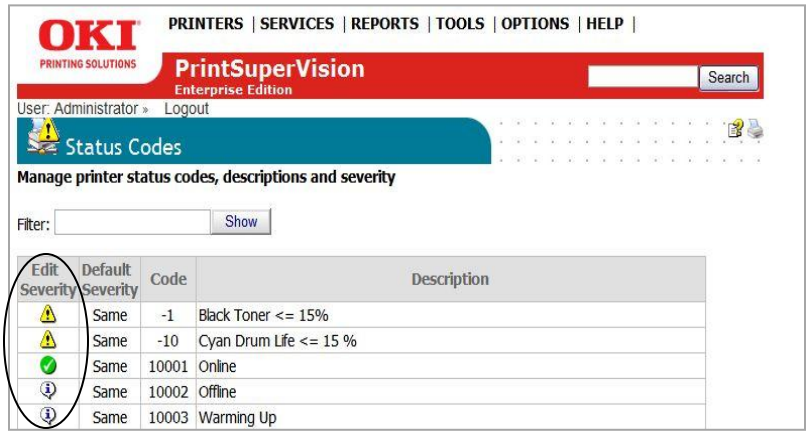
PSV also allows you to customize the severity level of any of the status code conditions. By default, PSV has assigned a predefined severity level to each status code, but you may decide that a code is too critical or not critical enough for the default code so you have the option to change the status code displayed in PSV.

To modify status codes:

1. Return to the Alerts main page and click the **Status Codes** button.

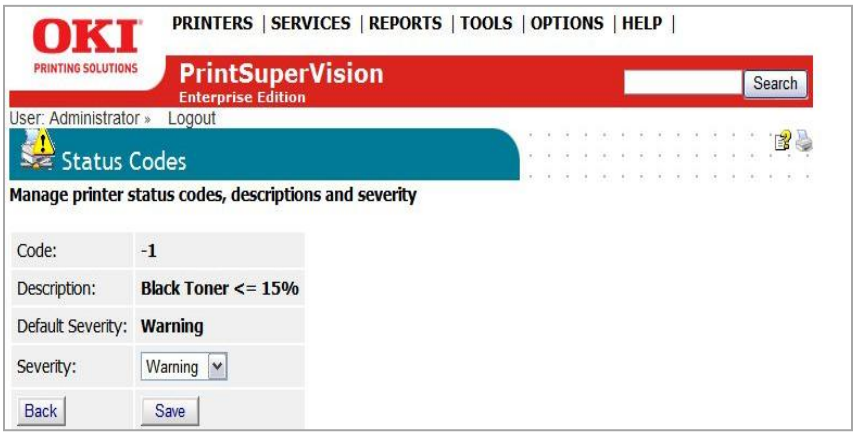


2. Scroll through the list of conditions or type in a search word to narrow your choices.

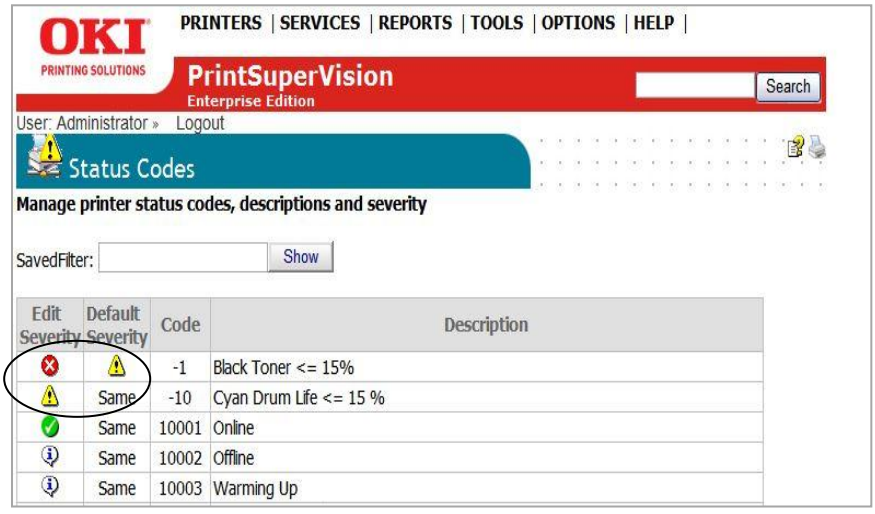


3. Click on the severity level icon listed in the **Edit Severity** column.

4. Select the new severity level from the drop down menu and click **Save**



The default severity level and the new severity level will both be displayed in the Status Codes page. You may go back and change the severity level at any time.



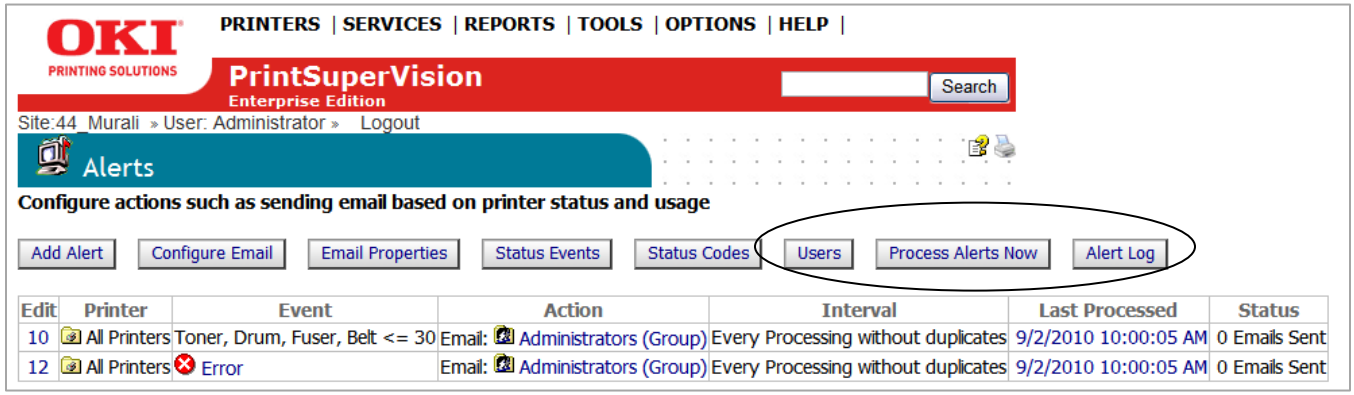
Processing Alerts /Generating Alert Logs

This section discusses the functionality of the Users button, the Process Alerts Now button and the Alerts Log button.

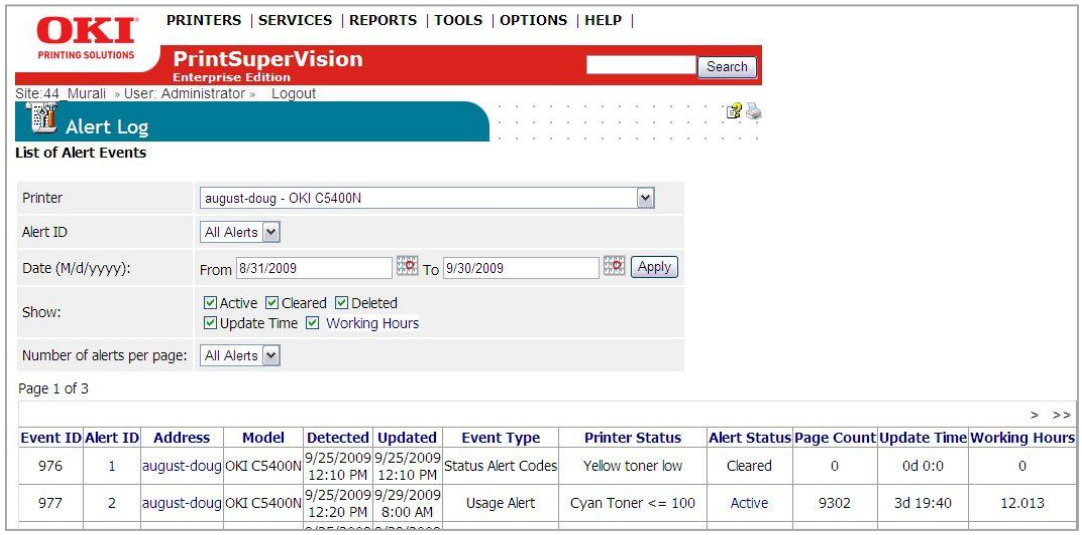
Click your browsers back button to return to the **Alerts** main page.

The **Users** button is only provided for navigation convenience and links to the All Users page.

The **Process Alerts Now** button processes all outstanding Alert conditions immediately. As mentioned above, it is a system wide command and will scan every device in the network and process outstanding Alerts. If you are monitoring several thousand devices on the network, this process may take an extended period of time to complete.



The **Alert Log** button takes you to the following screen where you can selectively generate a list of all Alerts that have been processed for a single device or group of devices.



From the Alert Log page you can also:

1. Select the type of alert to display in the log
2. Specify a date range for the alerts, or
3. Select **Active**, **Cleared** or **Deleted** Alerts

The **Update Time** option indicates the amount of time an Alert has been in an Active state (it's a calculation of updated time minus detected time). The Update Time format is displayed in days followed by hours. This feature is particularly helpful in determining response times by viewing the amount of time the Alert was in an Active state, or in other words, the time it took to clear the Alert.

The **Working Hours** option displays the amount of time (adjusted for work hours) that an Alert has been in an active state, and can also be used to estimate response times.

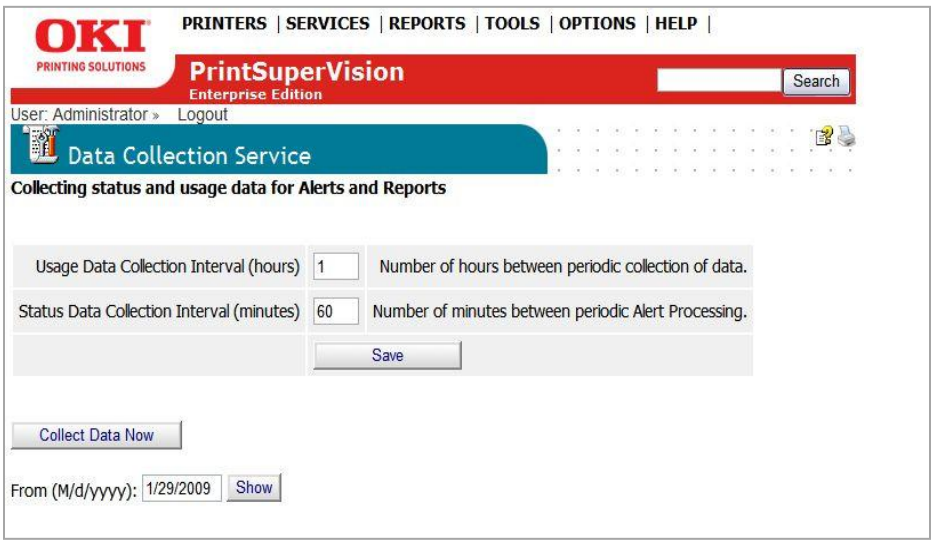
Data Collection Interval

PSV periodically collects data from devices and saves it into a database, thereby enabling PSV to create reports or generate Alerts. Users with Admin rights can configure the data collection interval time in hours for basic usage information and in minutes for processing Alerts.

To set the data collection interval:

1. Click **Services** from the main menu and select **Data Collection Services** from the drop down box.

2. Indicate the desired data collection interval times and click **Save**.



To display a log of previous data collection activity for a selected date range, enter the appropriate date and click **Show**. PSV will list all data collection activity from the date indicated to the present date.

For added convenience, click the **Collect Data Now** button and specify options. Click the **Start** button to begin processing.

Cloning

PSV Enterprise edition offers a time-saving feature called Cloning. Cloning is not available in PSV Professional edition. Cloning allows multiple devices of the same type to be configured remotely using the settings of an origin device.

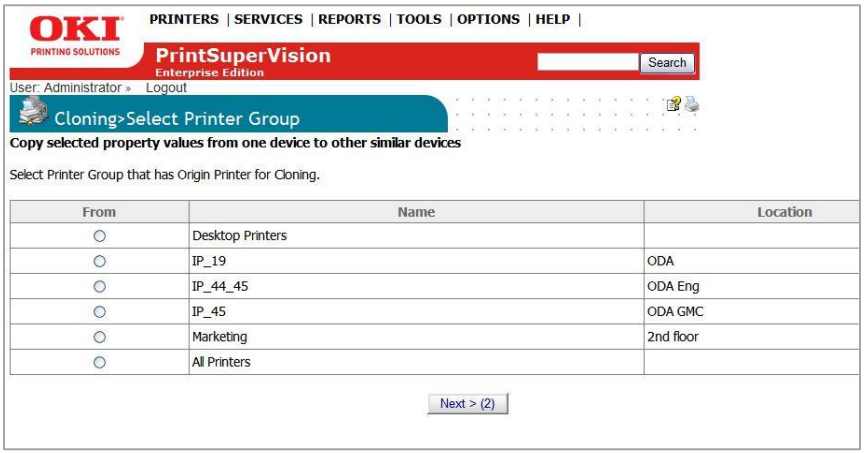
Essentially, the cloning feature copies the device configuration settings of one device and saves the same settings to a group of similar devices.

Note: Both the origin device and the target devices must be Oki branded devices and must be the same make and model number.

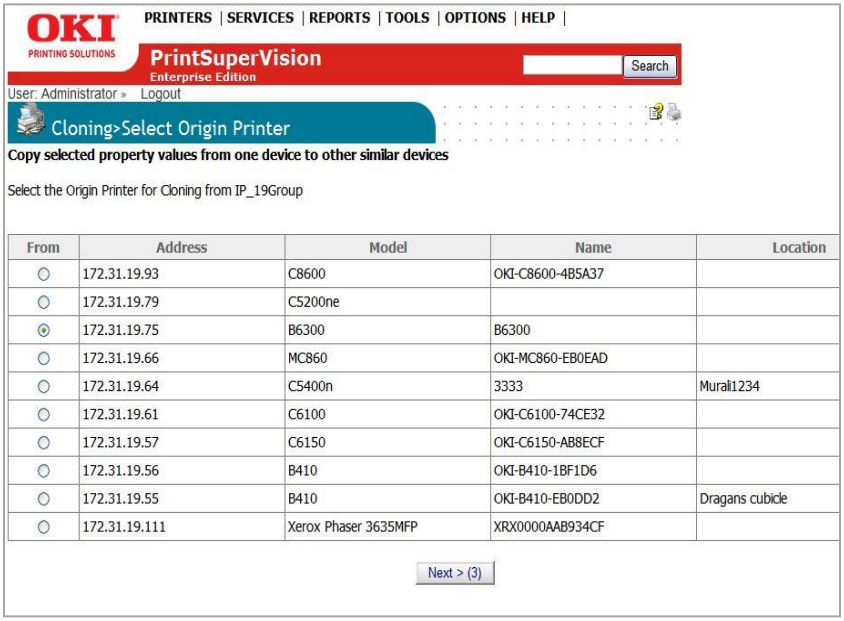
1. Select **Tools** from the main menu and **Cloning** from the dropdown box.

2. Locate and select the device that will supply the configuration information to be cloned. Click a radio button associated with a group of devices.

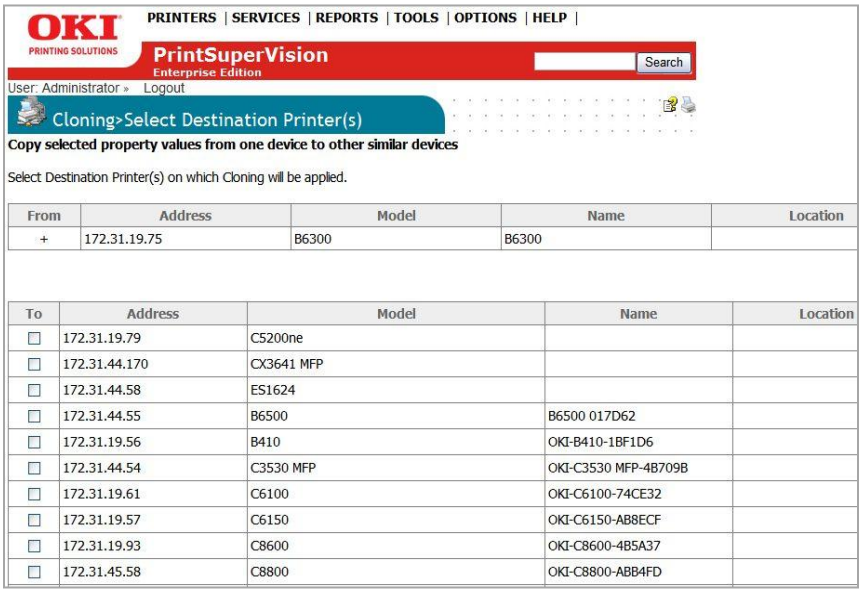
3. Click **Next**.



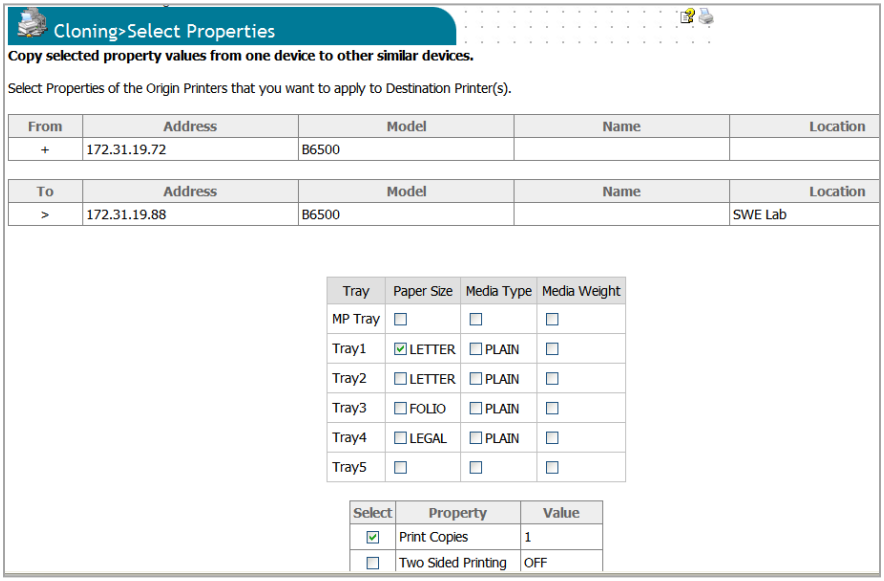
4. Select the radio button for the origin device and click **Next**



5. Select a compatible destination device that will be configured with the same parameters and click **Next**.



6. Select properties to be cloned and click the Start Cloning button.



PSV will apply the values of the selected properties to all destination devices indicated.

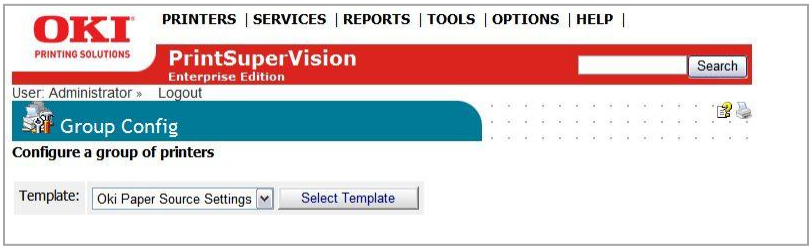
Note: PrintSuperVision will not check to ensure a compatible destination device is selected. The origin device and all destination devices must be the same make and model in order for cloning to successfully take place.

Group Configuration

Only available in the PSV Enterprise edition, Group Configuration is a more advanced way to configure devices remotely by using the parameters from one device to configure a group of similar devices.

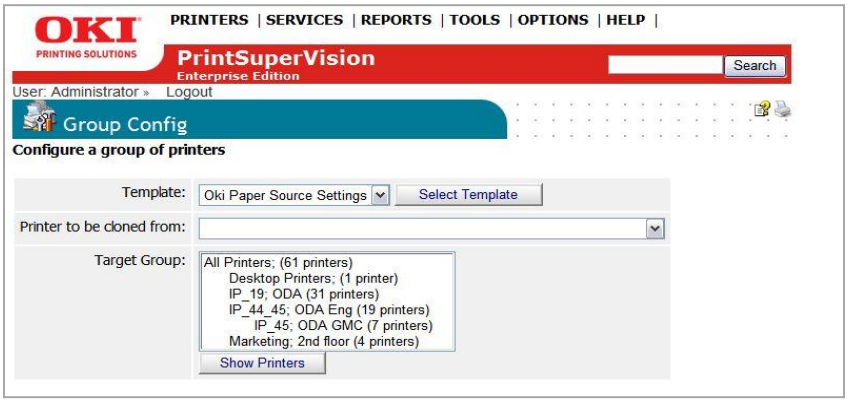
Group configuration uses an XML file as a "Template" to remotely set up groups of devices. Currently there are 4 sample templates included with PSV. Developing additional custom templates can be requested from Oki Printing Solutions based on resource availability.

To use Group Configuration: Click **Tools** from the main menu and click **Printer Group Config** from the drop down box.



2. Select a template from the drop down menu, and click **Select Template**.
3. Select the Target Group of devices that will receive the new configuration.

For a list of devices in each group click **Show printers**. Select the devices that will receive the configuration by clicking the check boxes in the **Select** column.



The "paper source" configuration from the origin device can be modified before applying the configuration to the group selected.

4. Make desired configuration changes and click **Apply.**

There are other sample Group Configuration templates provided that perform various tasks.

Configuring Static IP Addresses

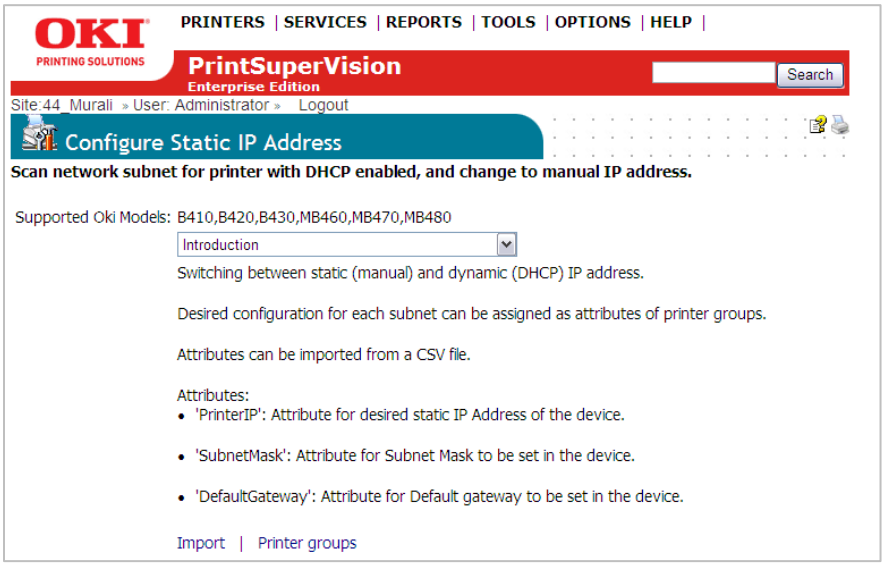
For specific Oki models, (currently the B400 and MB400 series), IP Addresses can be configured remotely using the Enterprise edition of PSV. This allows you to change Dynamic IP addresses to Static IP Addresses (or vice versa) without physically being onsite and changing it from the device operator panel. Additional Oki devices will be supported in future releases of PSV.

Changing the IP Address assignment method (dynamic to static or vice versa) can be accomplished in three ways:

1. By all groups that contain the requisite attributes
2. By a group of devices in a single subnet
3. By importing a CSV file containing a list of devices

By Groups that contain required attributes

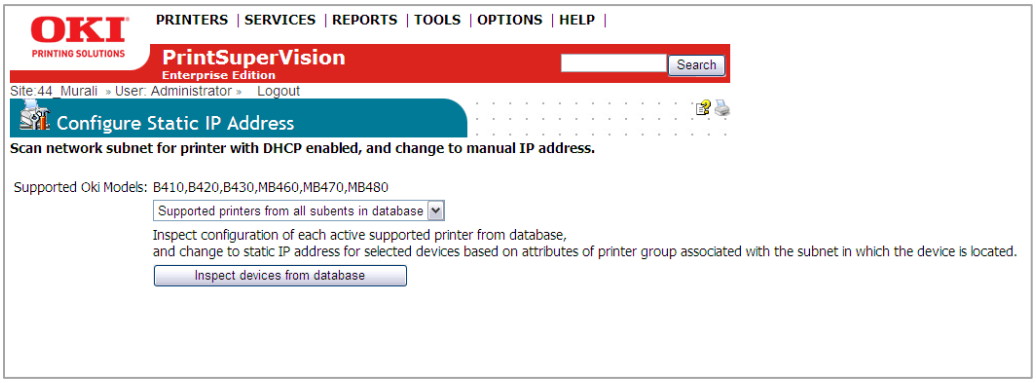
1. From the main menu click **Tools** and select **Configure Static IP Address** from the drop down menu.



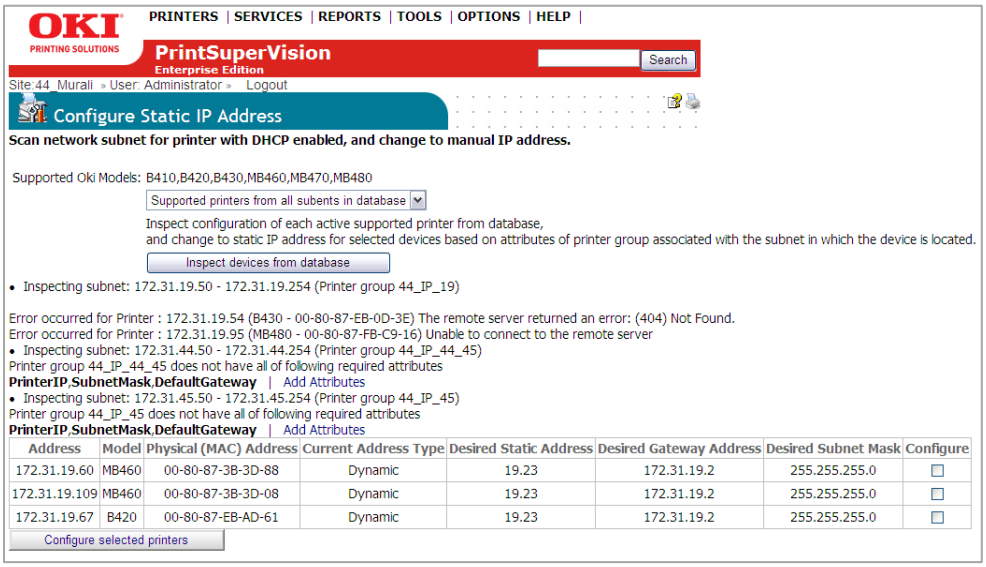
The screen above provides background information on how to go about changing the way IP Addresses are assigned.

There are 2 additional options in the drop down menu that help find matching devices inside of selected subnets and to detect the type of IP address configuration that the device is using.

2. Select **Supported Printers from all subnets in database** from the drop down box



3. Click the **Inspect Devices from Database** button



PSV provides a list of all supported devices in its database. In the example above, 3 devices are available to change from Dynamic to Static. PSV also identifies the groups that do not have the required attributes configured. Click "Add Attributes" to configure those groups.

4. Select the desired devices by checking the appropriate box in the **Configure** column and click the **Configure Selected Printers** button.

If the devices are on the network and on-line, the method of IP Address assignment will be changed from Dynamic to Static.

Note: to change the devices back to Dynamic IP address assignment, you must use a different procedure described in the next section.

By a Group of Devices in a Single Subnet

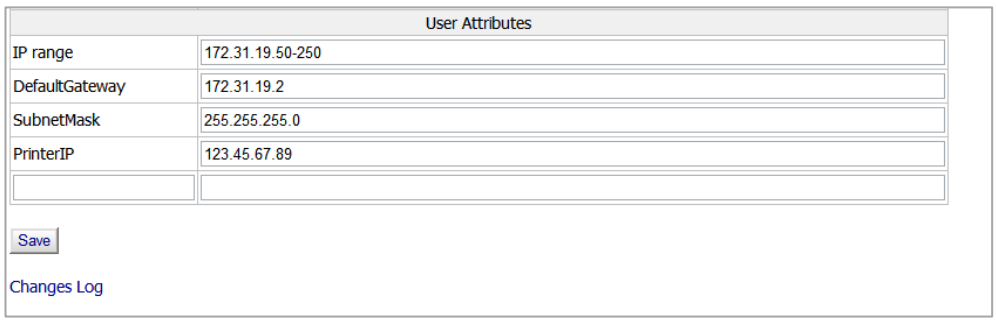
For large fleets of Oki devices you may also create a group of devices to make the task of changing the IP Address configuration easier, but you must add specific attributes to the group before making the change. You must also assign the group to a specific subnet.

The following attributes must be assigned to the group:

- IP Range − Defines the IP address range for a subnet. It is also used as the name of the group associated with the subnet.
- PrinterIP − Is the attribute for the desired Static IP Address of the device.
- SubnetMask − Is the attribute for the Subnet Mask to be set in the device
- DefaultGateway − Is the attribute for the default gateway to be set in the device

1. To add a group of devices, Click **Printers** from the main menu and **Printers, Groups, Maps** from the drop down box
2. Add all pertinent information and click **Save**
3. Click **Printers, Groups & Maps** again and locate the name of the group you just created
4. Click the word **Attributes** associated with your new group
5. Scroll to the bottom of the screen and enter the name of the attribute in the left hand column of the **User Attributes** section. Note: The attribute names are case sensitive.
6. Enter the corresponding value to the Attribute in the column to the right and click **Save**
7. Click Edit to enter another attribute.

Note: When completed, the list of user attributes should look like the following:



When finished, you will need to assign the group to a specific subnet.

8. Click **Printers** from the main menu and select **Discovery** from the drop down box

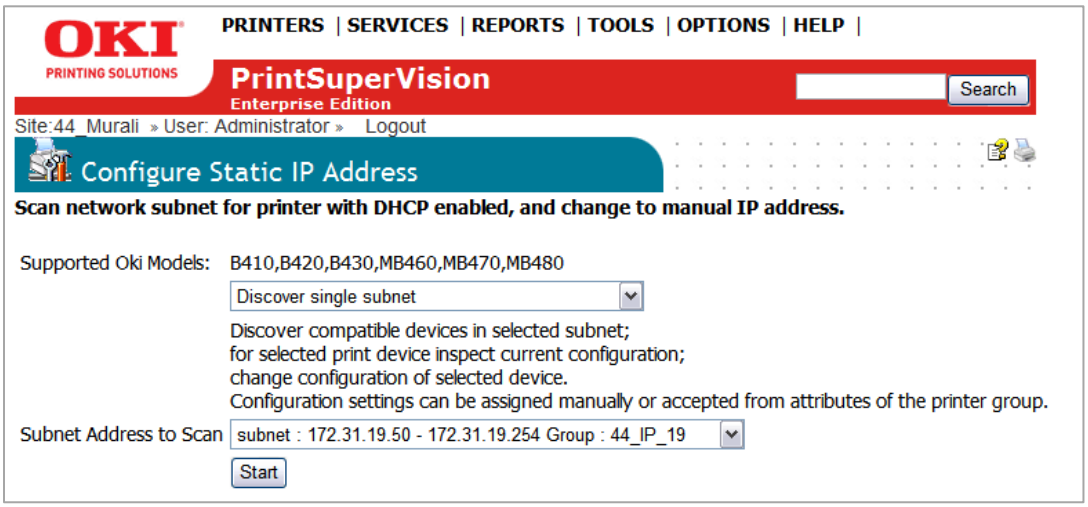
9. Click the **Add** button, select the IP Range and click **Next**

10. Enter a "from" and "to" IP address and select the group that you just created from the drop down box

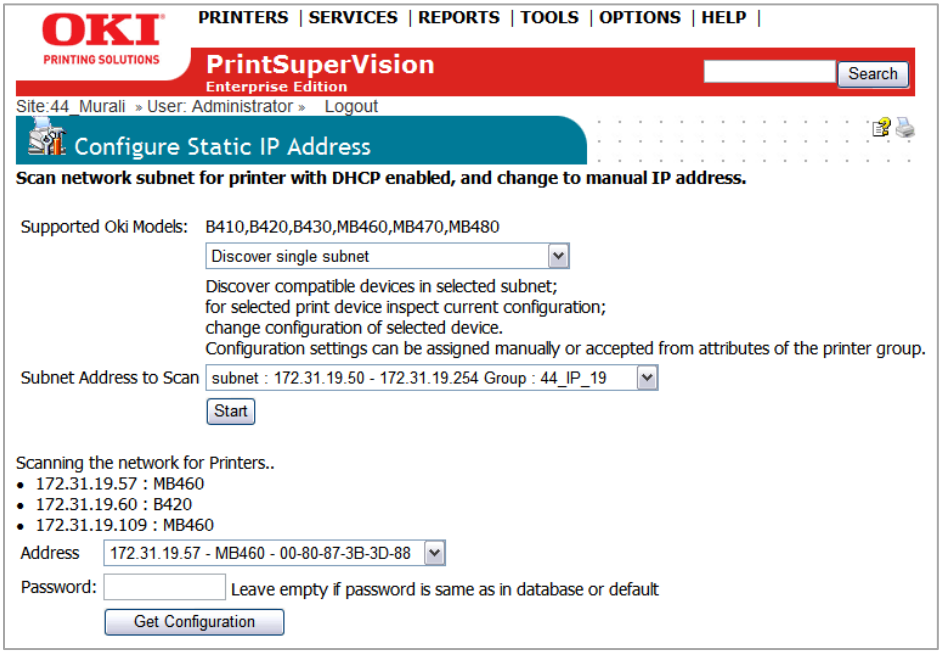
11. Click the **Save** button

12. Return to the Configure Static IP Address section by clicking **Tools** and selecting **Configure Static IP Address**

13. Select **Discover single subnet** from the drop down box

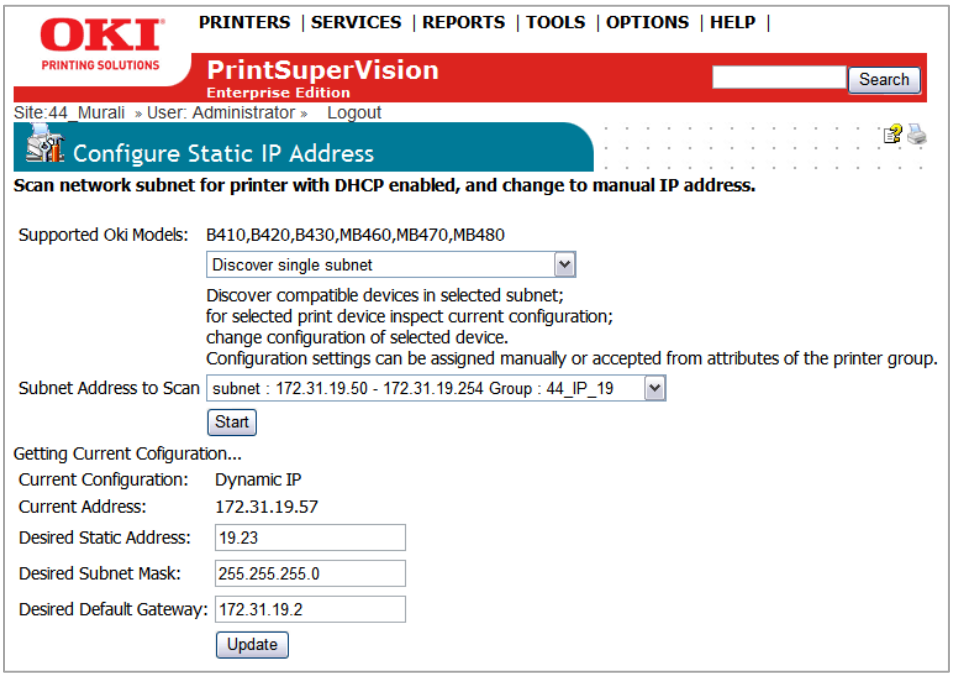


14. Select the group that you just created from the drop down box and click the **Start** button



15. Select the device from the drop down menu. Leave the password field blank if you have not changed the password for the devices' internal web page.

16. Click the **Get Configuration** button

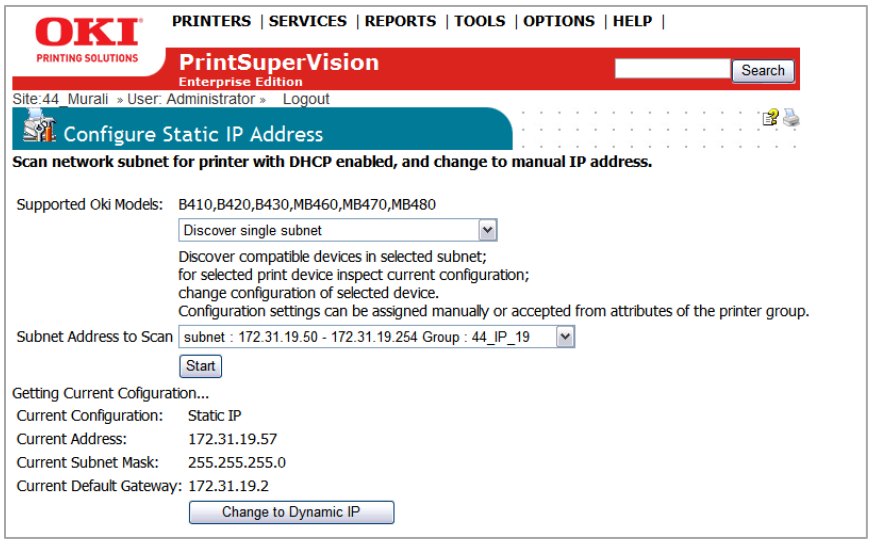


17. Enter the desired Static IP Address and click the **Update** button

Note: Current configuration of the device is retrieved from the device's internal web page. PSV will display "Dynamic IP" if the current IP address assignment method is set to dynamic. PSV also displays Desired Static Address, Desired Subnet Mask and Desired Default Gateway which are all retrieved from the group attributes that were entered previously.

If the group associated with the subnet does not have values for these attributes, default values for the desired settings will be populated from those specified in the devices internal web page.

18. Click the **Get Configuration** button again to verify the IP Address was successfully changed



The current Configuration method will be displayed as Static IP.

19. To undo the Static method and return to Dynamic, click the **Change to Dynamic IP** button

By CSV File

Perhaps the easiest way to change the IP address assignment method is to import a list of subnets in a CSV file. The file should be in the following format where the first row must be the header row. The header row is case sensitive and should contain the names for all attributes that are to be imported. See the previous section for a description of each attribute.

During import, PSV will add a subnet for each row in the CSV file.

	A	B	C	D	E	F
1	IP range	PrinterIP	SubnetMask	DefaultGateway		
2	172.31.19.50-250	172.31.19.223	255.255.255.0	172.31.19.2		

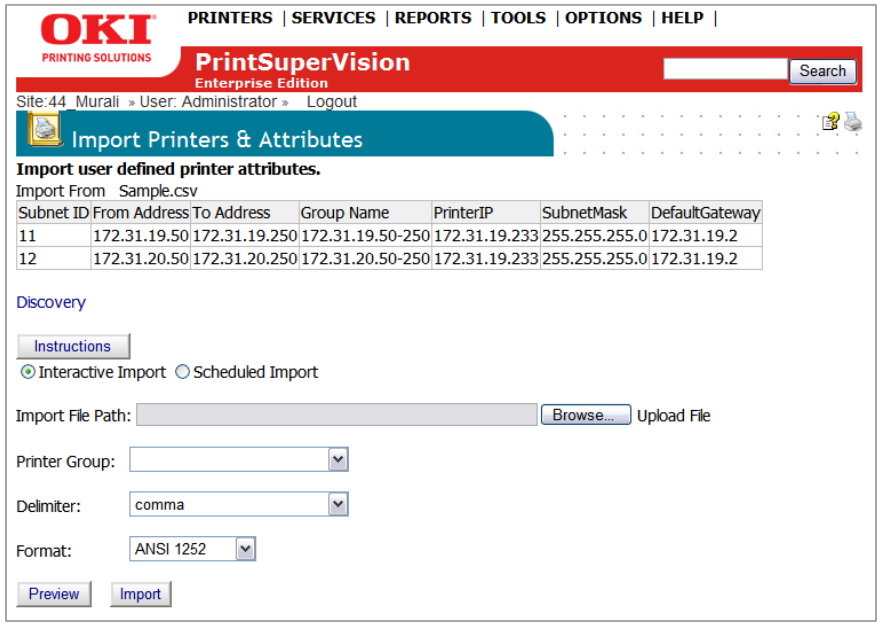
To import the CSV file:

1. Click **Printers** from the main menu and select **Import Printers and Attributes**

2. Click the browse button and locate the CSV file to import

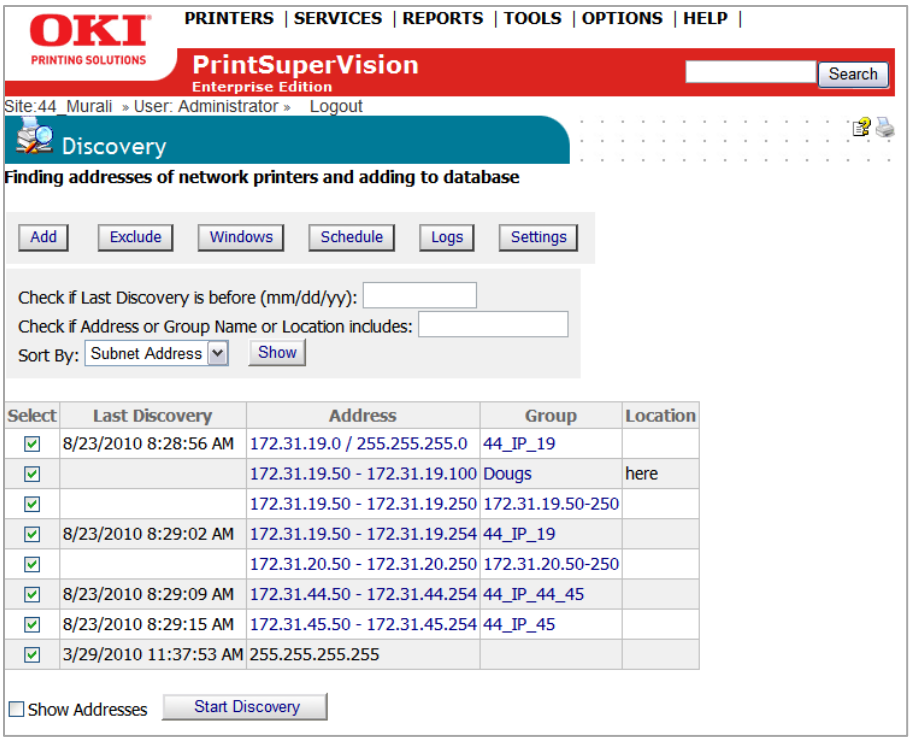
3. Leave the Printer Group drop down box empty as PSV will automatically create a group name based on values specified in the IP range column

4. Make sure **comma** is selected in Delimiter field and click the **Import** button



5. Click the word **Discovery**

PSV will display a list of groups including the ones that were just imported



6. Return to the Configure Static IP Address section by clicking **Tools** from the main menu and select **Configure Static IP Address** from the drop down box

7. Select **Supported Printers from all subnets in database** from the drop down box

8. Click the **Inspect Devices from Database** button

A list of available devices is displayed

- Select the desired devices to change by clicking the appropriate check boxes in the Configure column

- Press the **configure selected printers** button

"Printer Configuration Updated Successfully" will be displayed if all devices selected were successfully changed to a Static IP address.

Changing IP addresses without Admin Rights

As an alternative to the process described above, the PSV Enterprise Edition provides a simplified way for your field technicians to quickly change IP addresses on supported Oki devices without the need to provide them with PSV Admin rights.

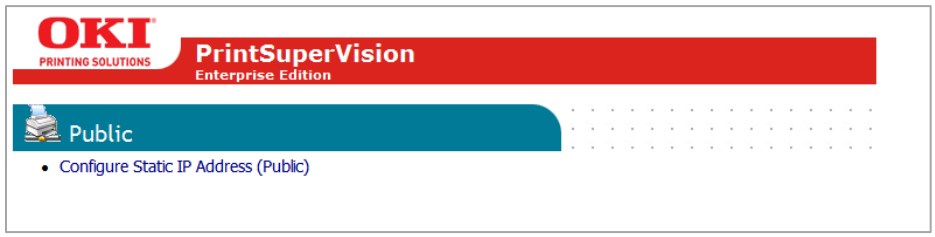
It also allows the technician to perform one task (changing IP addresses from Dynamic to Static or vice versa) without subjecting them to unnecessary features and functionality.

To change IP addresses requires an Admin to first set up a "public website" (described earlier in the Configuring a Public Web Site: Web Config Tab section)

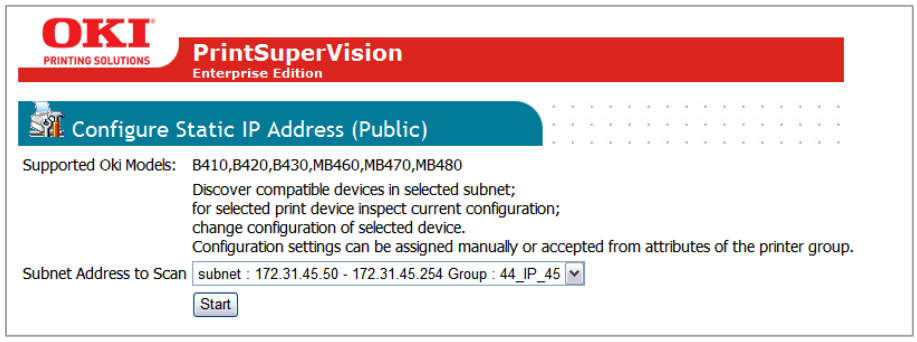
To access the public website:

1. Open a browser and type the IP address of the PSV server followed by /public.

The technician will see the following screen. To simplify access even further, instruct the tech to save the PSV server public web site location in the browsers favorites area.

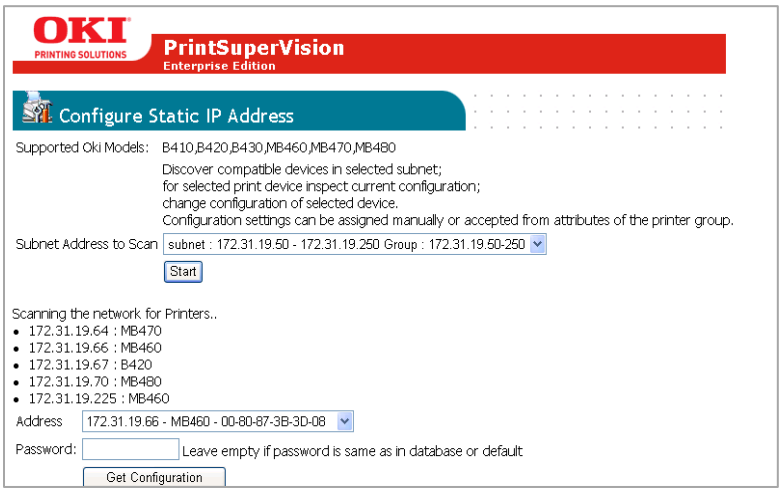


2. Click the **Configure Static IP Address (Public)** link



You will notice that only one subnet range is displayed in the drop down box. This is by design since the public web tool can only discover addresses on the local subnet where the web browser is coming from.

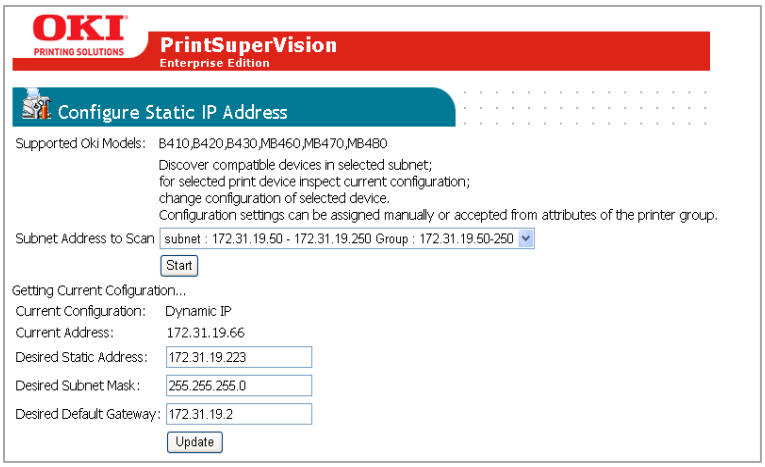
3. Click **Start**. PSV will search for supported Oki devices on the local subnet



4. Select the desired device from the "Address" drop down box – Only one device can be configured at a time.

5. Enter the password for the web page on the physical device if it has been changed from the factory default password. If the default password has not been changed from the factory default, leave the password field blank and PSV will automatically enter the default password

6. Click the **Get Configuration** button



Desired Static IP Address, Desired Subnet Mask and Desired Default Gateway values are retrieved from user attributes associated with the printer group that was set up earlier. All values are read only and cannot be changed by the technician.

7. Click the **Update** button to change the IP address

Supplies Ordering

Both editions of PSV provide the option to order supplies on-line directly from the application. An Admin has several options to help make the supplies ordering process as easy and efficient as possible. It is also understood that not every organization is setup to order supplies on-line, so an option to disable on-line ordering is also included.

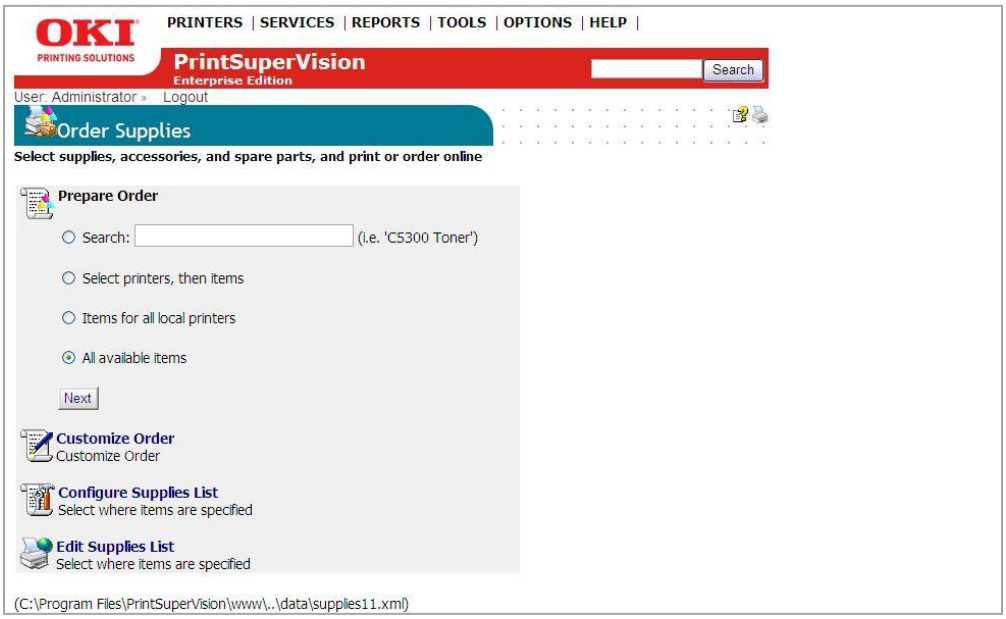
Preparing on Online or printed order:

You can order supplies for your Oki devices at any time by:

1. Selecting **Tools** / **Order Supplies** from the main menu.

   The options in the Order Supplies section help users to:

   - Search for supply item
   - Create an order manually
   - Configure the URL for all on-line ordering
   - Edit PSV's database of supplies
   - Disable on-line ordering



Searching for a supply item

To search for an item, click the **Search** radio button, enter a description of a desired item and click the **Next** button. PSV will search its database for related supply items.

Select Printers, then Items

The "Select Printers then Items" feature provides a list of the devices that PSV is monitoring so that you can first choose the device that needs supplies, then indicate the quantity of the item to purchase.

1. Check the "Select Printers then Items" radio button and click **Next**.

A list of monitored devices is displayed.

2. Select the desired device by clicking the check box and click the **Next** button.

   A list of supply items related to the device will be displayed.

3. Add the desired order quantity and click **Next/Order On-line** or **Next/Print** to simply print your order.

   The default e-commerce site is http://esales.okidata.com, which can be changed to any e-commerce site and will be discussed later in this section.

Items For Local Printers

Click this option for a list of supply items that go to the devices that PSV is currently monitoring. Use the list to obtain a description of the supply item and Oki part number needed to place an order. Click **Next/Order On-line** or **Next/Print** to simply print your order.

All Available Items

Click this option to display and print the entire database of supply items.

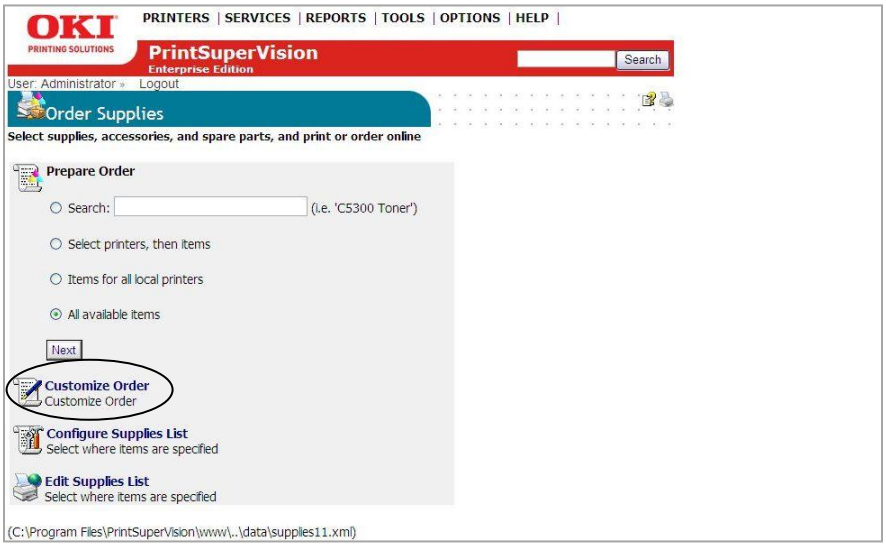
1. Enter a quantity of the item desired

2. Click **Next/Order On-line** or **Next/Print** to simply print a list of supply items

Customizing Supplies Orders

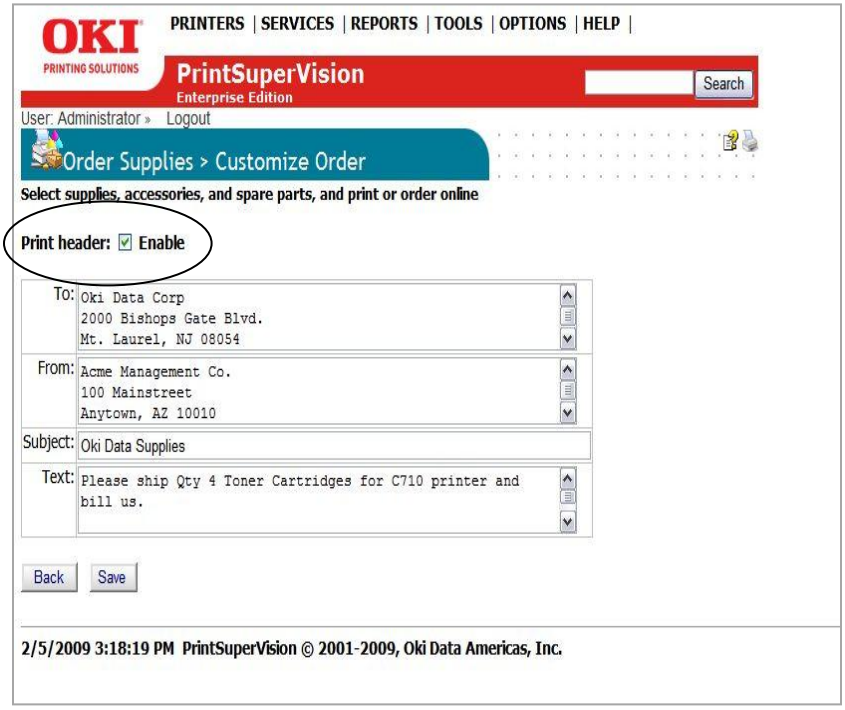
If on-line ordering is not desired in your organization, you have the option to manually create a printed supplies order page that contains the supply part number, description and quantity desired.

1. Click the Customize Order option.



2. You can add information to each printed supply order page by typing information in the **To, From, Subject** and **Text** fields template. Information typed will be added as a header to each supply order page.

3. Select the **Print Header Enable** check box to add the pre-configured information to each printable supplies order page.

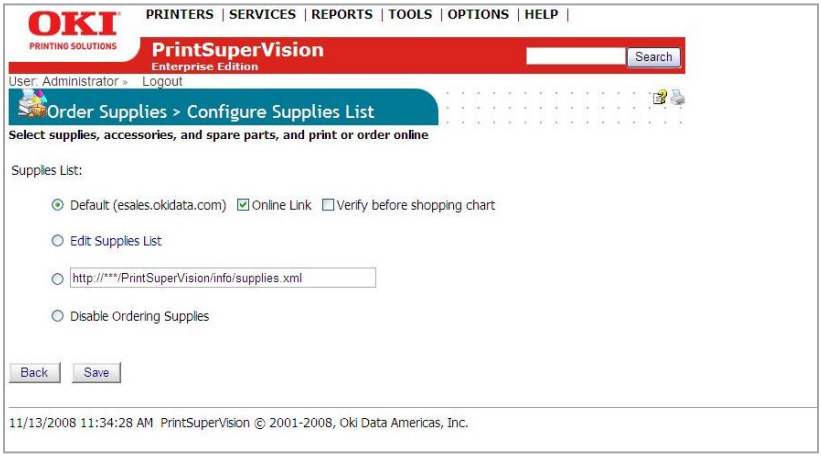


4. Click **Save** to return to the Order Supplies page

Configuring the Supplies List

There are four options to configure the supplies list that is integrated into the PSV application:

- You can use the existing supplies list which obtains its information from http://esales.okidata.com
- You can edit and add to the existing supplies list
- You can point PSV to another list
- You can disable supplies ordering entirely



Default Button

Selecting **Default** continues to use the supplies list that is provided with the PSV application.

As an added convenience you may want to allow your users to verify the ordering information before linking to an e-commerce shopping cart. Click the **Verify Before Shopping Cart** check box for that option.

Enabling / Disabling Online Supplies Ordering

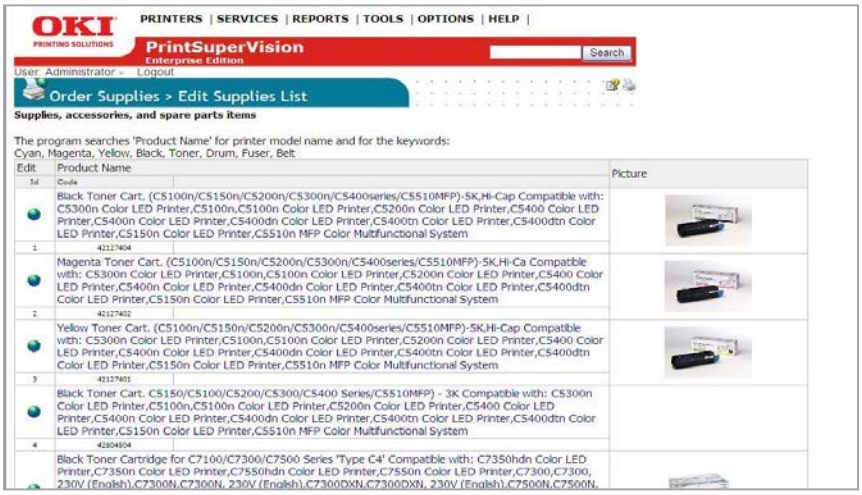
To enable or disable on-line ordering entirely, select or deselect the **Online Link** check box. Checking this box will add the **Order Online** button to the printer status page (and system wide) and allows users to order supplies on-line from many different areas.

Unchecking the box removes the **Order Online** button system wide and eliminates the ability to order supplies on-line entirely.

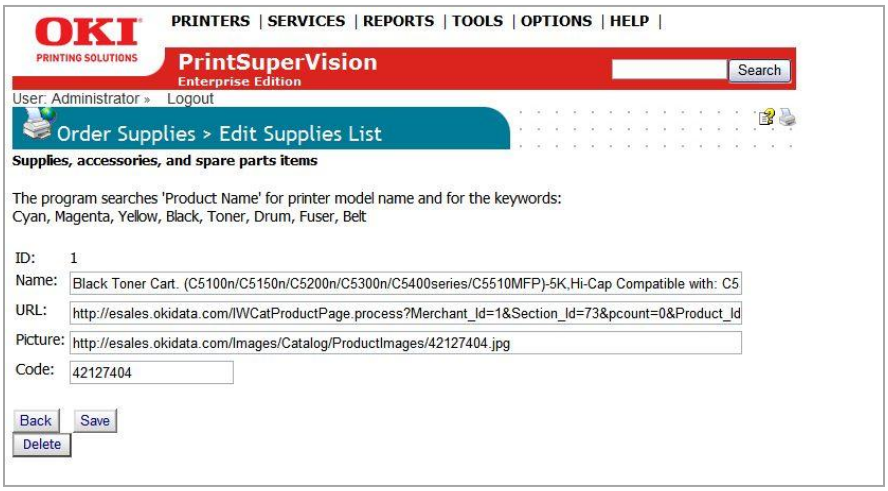
Editing the Supplies List

The default supplies ordering information list can also be customized. Editing the Supplies List creates an additional XML file that contains the default supplies ordering information plus any edits or additions you make to the default file.

Selecting the **Edit Supplies List** radio button tells PSV to use your edited list (versus the default list). Clicking on the **Edit Supplies List** link (displayed in blue) takes you to the area where additions and edits can be made and is displayed in the following screenshot.



1. Click on the globe icon displayed in the **Edit** column to edit existing information or scroll to the bottom of the list to add information and click **Add Item**



2. Enter or edit the name and description of the supply item in the **Name** field. Since PSV uses the contents of the **Name** field as search criteria, it is important to indicate the model number of the device that the supply item is related to in that field.

3. If you plan to use a different e-commerce site than esales.okidata.com, enter the appropriate web site address in the URL field. If the URL field is left blank, the supply item will be unavailable to order on-line. The description of the supply item however will be available to print when creating a printed supplies order page described earlier.

4. The **Picture** field is used to display an image of the supply item when viewing the supplies list. Enter an appropriate link to the desired image. Leaving the field blank will still display a description and part number of the item in the supplies list, but no image will be displayed.

5. To edit the item's part number or SKU, enter the new number in the **Code** field.

6. Click the **Save** button to save your changes.

Note: This procedure must be replicated for each supply item if you intend to use an e-commerce site other than http://esales.okidata.com. As an alternative to editing each supply item manually, you may edit the Supplies List XML file that PSV uses for this purpose.

You can locate the file in the following folder and perform a global search and replace on the old / new URLs. The XML file is stored in
C:\Program Files\PrintSuperVision\www\..\data\supplies11.xml

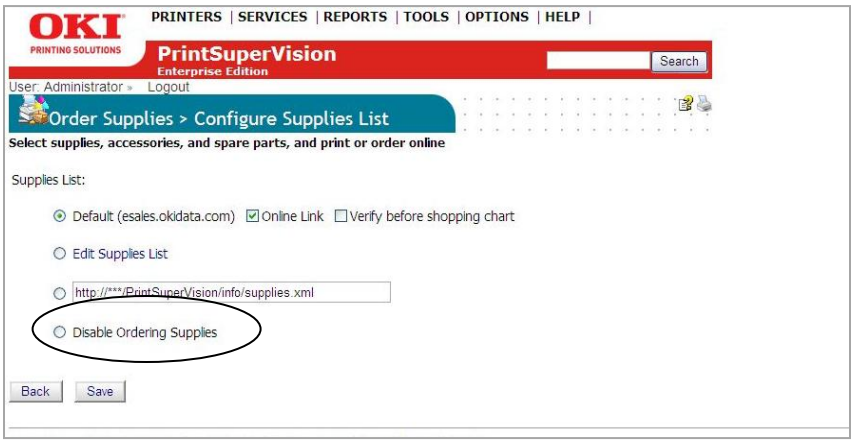
Selecting an Alternative Supplies List

You can also point PSV to any other compatible XML file that contains custom supply descriptions and part numbers. Enter the appropriate URL of the file in the box and click the associated radio button.

Use the XML file mentioned above as a template when creating a custom supplies list

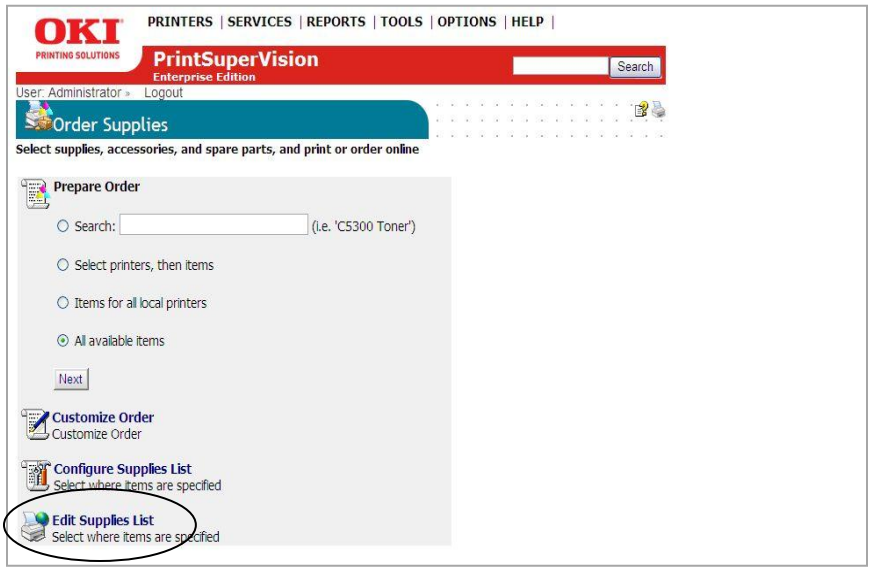
Disabling Supplies Ordering

To completely disable the ability to order supplies either on-line or by manually printing a supplies order page (discussed earlier), click the Disable Supplies Ordering Button and click Save.



Editing the Supplies List (Optional Link)

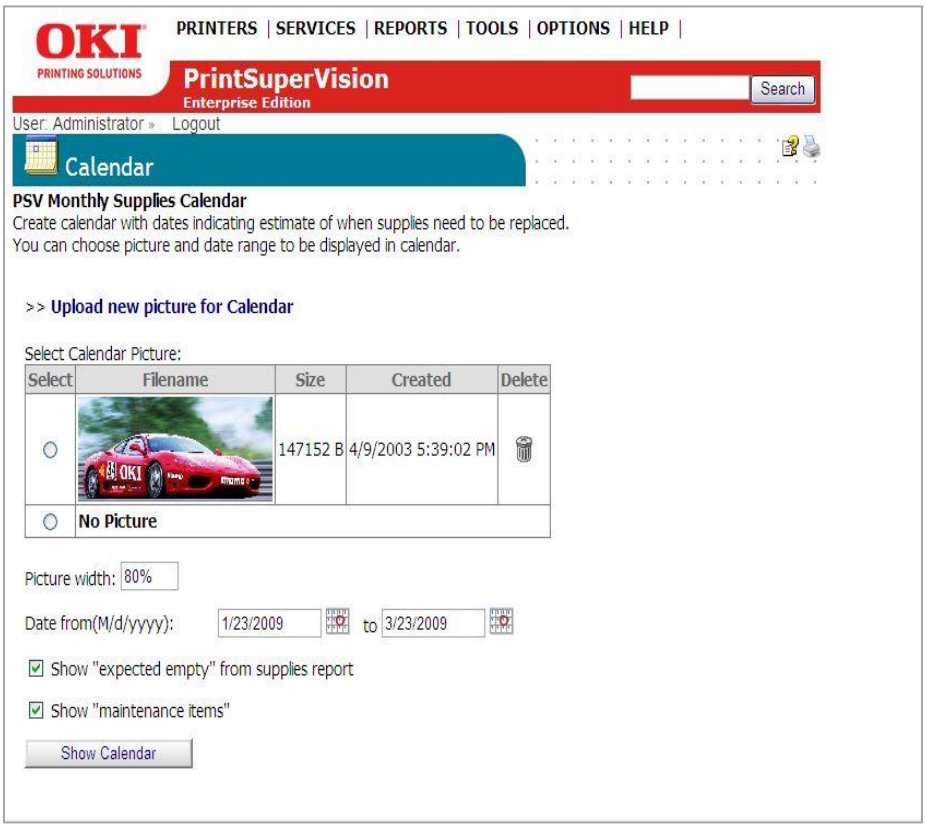
The Edit Supplies List option provides a link to the same area previously described. The link is provided for navigational convenience.



Supplies Ordering Calendar

To help you plan ahead when ordering supplies, PSV offers a monthly supplies calendar view that indicates (based on historic usage) when a supply item will run out and when a maintenance item needs to be replaced. And with your favorite picture, you can print the calendar and hang it on the wall.

1. Click **Tools** from the main menu and **Calendar** from the drop down menu.



2. Select the **Picture** radio button if you wish to display and/or print an image on the calendar.
3. Select a date range for the calendar
4. Check the **Show Expected Empty From Supplies Report** and **Show Maintenance Items** if you wish to be reminded of both supplies and maintenance items that need to be replaced (such as fusers and transfer belts).
5. Click the **Show Calendar** button to generate your supplies ordering calendar.

Reporting

PSV can generate several reports that identify supplies use, predict toner replacement dates, indicate pages printed, export device properties and so on.

Most reports can be displayed or saved in various formats such as HTML (Web), XML, Excel, CSV or Text files

Most reports can be scheduled to be periodically generated and delivered by email. Reports available depend on the PSV edition installed and user access rights.

Available Reports

The following reports are available in PSV Enterprise Edition

- Supplies Levels Report
- Toner Changes Report
- Supplies Usage Report
- Printed Pages Report
- Color / Mono Pages Report
- Export Printers Data Report
- Usage Report
- Monthly Printing Report
- Windows Print Job Logs
- Printers Log Report
- Device Job Logs

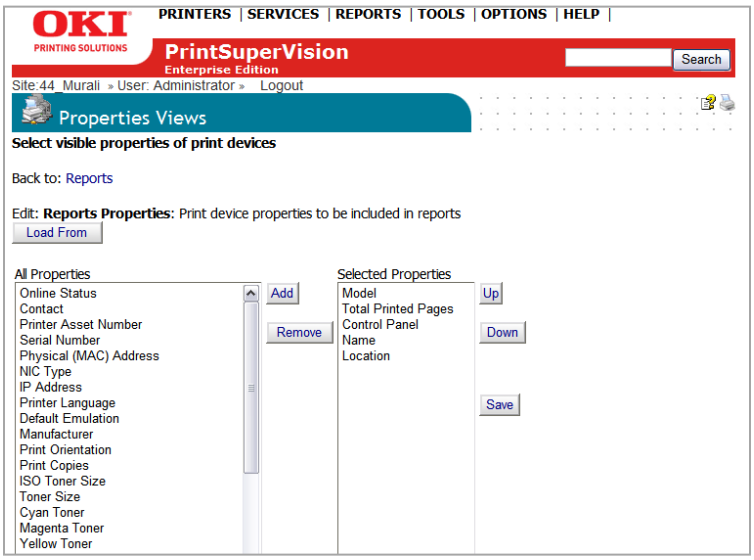
Configuring Report Properties

Before selecting and scheduling delivery of an individual report, you have the option to add or delete many different attributes and properties that are available for reporting.

Once the properties and attributes are saved, PSV creates a universal report configuration that applies those saved properties to all reports (except the Windows Print Job Logs report). You may edit the saved properties at any time.

To select reporting properties and attributes:

1. Select **Reports** from the main menu
2. Click **Reports Properties** from the drop down menu



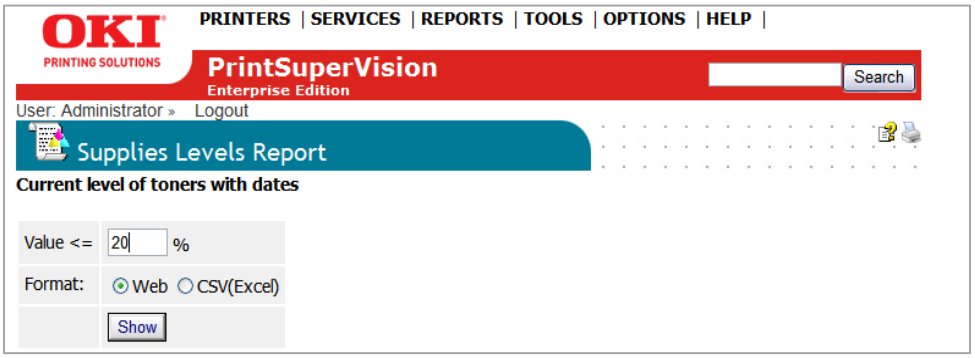
3. Select desired device properties from the All Properties column
4. Click **Add** to move them to the Selected Properties column. If you make a mistake, click **Remove** and the property will be placed back in the All properties column.
5. Once you have added the desired properties to the report, you may prioritize them by clicking the **Up** and **Down** keys. The order in which the property is listed is the order the column will appear in each report.
6. Click the **Save** button to save your selections.

Alternatively, four pre-configured report formats have already been created and may be selected by clicking the **Load Form** button. Select the desired format from the drop down menu and click the **Load** button. Be sure to click **Save.**

The Supplies Levels Report

The Supplies Levels report is a very simple way to identify devices that are reporting toner remaining levels equal to or less than the user defined percentage.

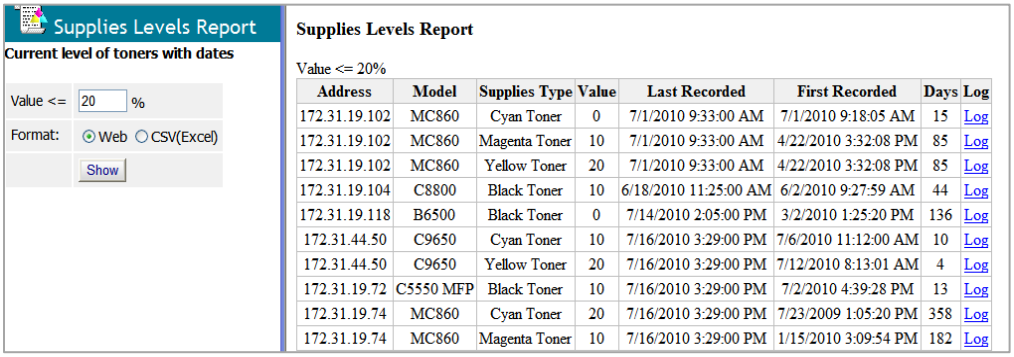
1. From the main menu click **Reports** and select **Supplies Levels Report** from the drop down menu.



Enter a desired value that is less than or equal to the % toner remaining

2. Select **Web** if you wish to display the report on your screen or **CSV** if you wish to save into Excel

3. Click **Show**



Address	Model	Supplies Type	Value	Last Recorded	First Recorded	Days	Log
172.31.19.102	MC860	Cyan Toner	0	7/1/2010 9:33:00 AM	7/1/2010 9:18:05 AM	15	Log
172.31.19.102	MC860	Magenta Toner	10	7/1/2010 9:33:00 AM	4/22/2010 3:32:08 PM	85	Log
172.31.19.102	MC860	Yellow Toner	20	7/1/2010 9:33:00 AM	4/22/2010 3:32:08 PM	85	Log
172.31.19.104	C8800	Black Toner	10	6/18/2010 11:25:00 AM	6/2/2010 9:27:59 AM	44	Log
172.31.19.118	B6500	Black Toner	0	7/14/2010 2:05:00 PM	3/2/2010 1:25:20 PM	136	Log
172.31.44.50	C9650	Cyan Toner	10	7/16/2010 3:29:00 PM	7/6/2010 11:12:00 AM	10	Log
172.31.44.50	C9650	Yellow Toner	20	7/16/2010 3:29:00 PM	7/12/2010 8:13:01 AM	4	Log
172.31.19.72	C5550 MFP	Black Toner	10	7/16/2010 3:29:00 PM	7/2/2010 4:39:28 PM	13	Log
172.31.19.74	MC860	Cyan Toner	20	7/16/2010 3:29:00 PM	7/23/2009 1:05:20 PM	358	Log
172.31.19.74	MC860	Magenta Toner	10	7/16/2010 3:29:00 PM	1/15/2010 3:09:54 PM	182	Log

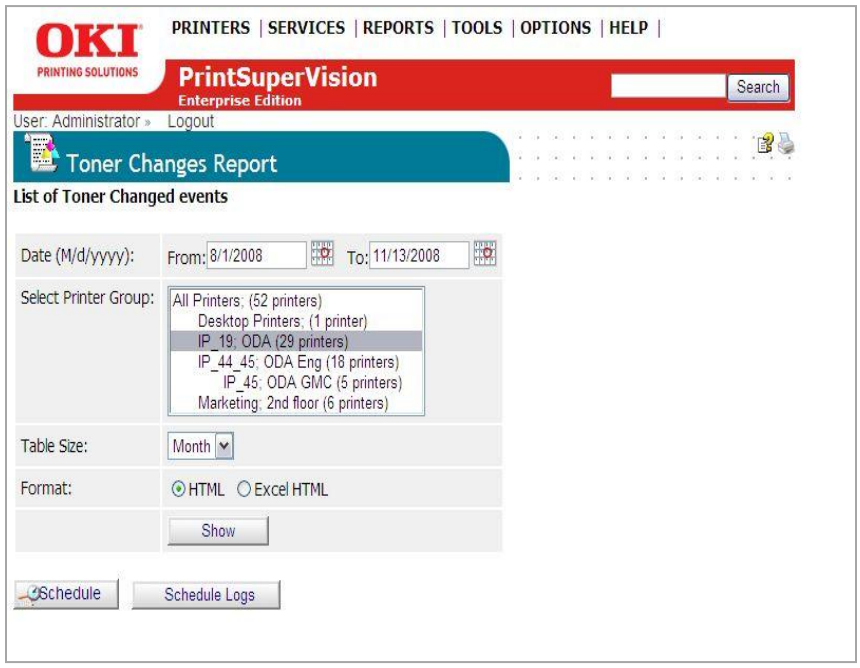
A list of devices that meet the criteria for % toner remaining will be displayed. You may click the word "Log" to view toner usage for an individual device on a running basis.

The Toner Changes Report

The "Toner Changes" Report shows the dates of the last toner cartridge replacement for a group of devices and indicates if there was any toner remaining at the time of replacement. This report is particularly helpful in identifying wasted toner as a result of changing the cartridge too soon.

Note: The Toner Change Report is not available in the Professional Edition.

1. Select **Reports** from the main menu and **Toner Changes Report** from the drop down box.



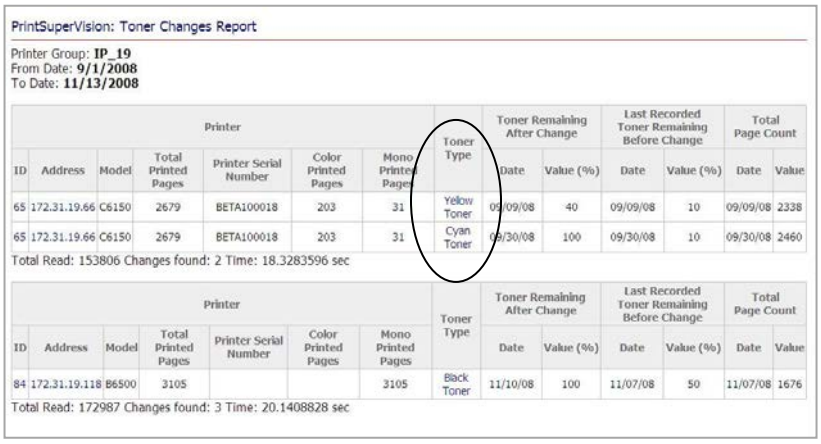
2. Enter a range of dates or click on the calendar icons to select dates.

3. Select a group of devices to report on

4. Select a report format and the method to display results; by month or by various table sizes to make the data more readable.

5. Indicate either HTML or Excel format and click **Show** to generate the report

Additional details for toner replacement are available by clicking the toner type links (highlighted in blue). This presents a sub-report that can help you pinpoint toner remaining at on a particular date.



PrintSuperVision: Toner Changes Report

Printer Group: **IP_19**
From Date: **9/1/2008**
To Date: **11/13/2008**

Printer							Toner Type	Toner Remaining After Change		Last Recorded Toner Remaining Before Change		Total Page Count	
ID	Address	Model	Total Printed Pages	Printer Serial Number	Color Printed Pages	Mono Printed Pages		Date	Value (%)	Date	Value (%)	Date	Value
65	172.31.19.66	C6150	2679	BETA100018	203	31	Yellow Toner	09/09/08	40	09/09/08	10	09/09/08	2338
65	172.31.19.66	C6150	2679	BETA100018	203	31	Cyan Toner	09/30/08	100	09/30/08	10	09/30/08	2460

Total Read: 153806 Changes found: 2 Time: 18.3283596 sec

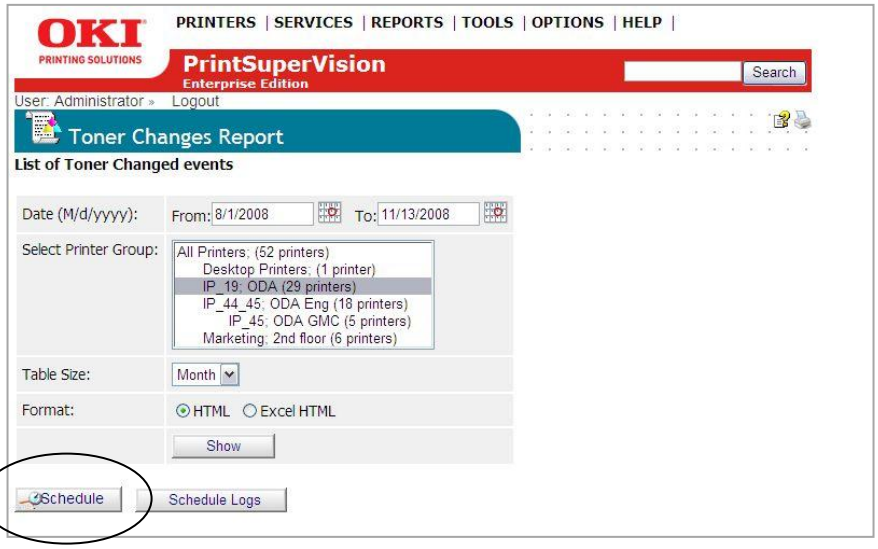
Printer							Toner Type	Toner Remaining After Change		Last Recorded Toner Remaining Before Change		Total Page Count	
ID	Address	Model	Total Printed Pages	Printer Serial Number	Color Printed Pages	Mono Printed Pages		Date	Value (%)	Date	Value (%)	Date	Value
84	172.31.19.118	B6500	3105			3105	Black Toner	11/10/08	100	11/07/08	50	11/07/08	1676

Total Read: 172987 Changes found: 3 Time: 20.1408828 sec

Scheduling a Toner Change Report:

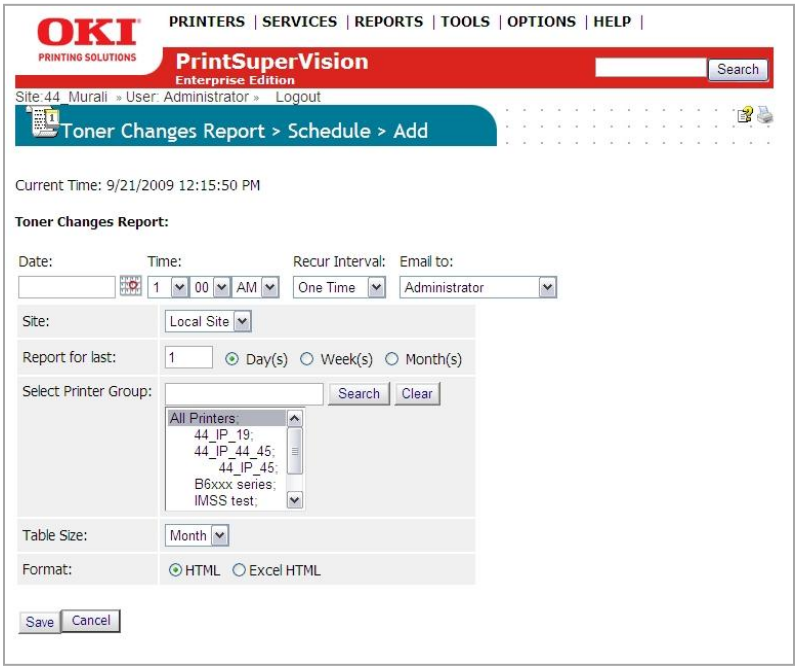
A Toner Change report can be scheduled to run periodically and automatically delivered via email to an individual or group.

1. Click the Schedule button



2. Click the **Add Toner Changes Report** button

3. Select a starting date and time, select a recurring interval for the report to be generated and sent, indicate email recipients and click **Save**.



The toner changes report will be generated and sent to the recipient on the dates and times indicated

Note: For added convenience the **Schedule Logs** button located next to the **Schedule** button provides a quick way to see if/when the Toner Changes Report was generated and sent via email.

1. Click the **Schedule Logs** button

2. Indicate the desired date range

3. Select **Toner Changes Report** from the drop down menu

4. Click **Show** to run the status log

Supplies Usage Report

The Supplies Usage report displays current levels of toner as well as drum, transfer belt and fuser usage.

- The report can be created for a group of devices or a single device
- Report data can be displayed as an HTML table or chart
- Data can be imported into Excel
- Data can be presented in XML format

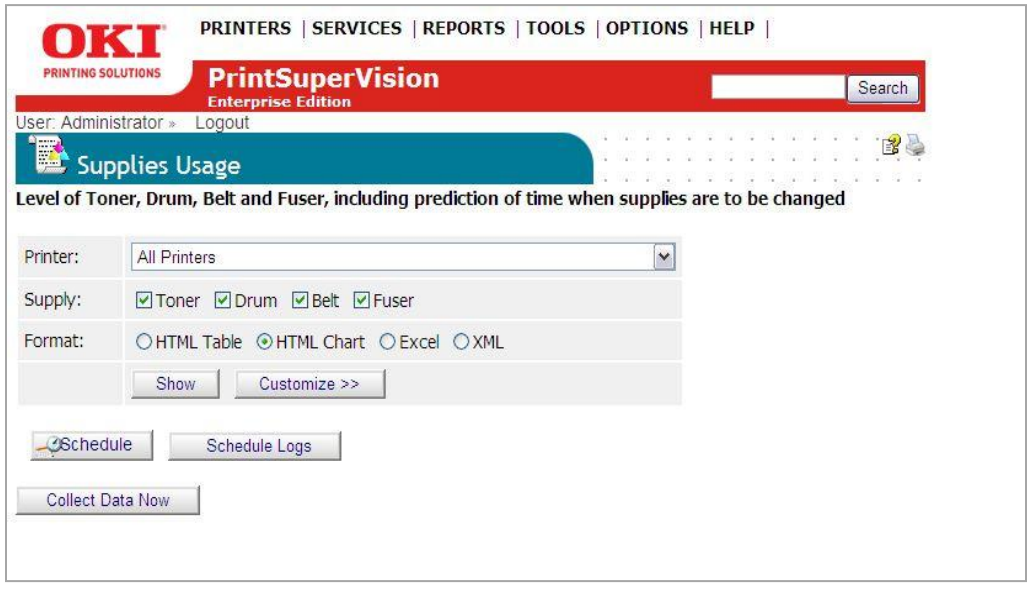
The Supplies Usage report helps you to plan your supply purchases by predicting when consumables (supply items) will run out.

1. Select **Reports** from the main menu and Select **Supplies Usage**

2. Select an individual device or group of devices from the dropdown menu.

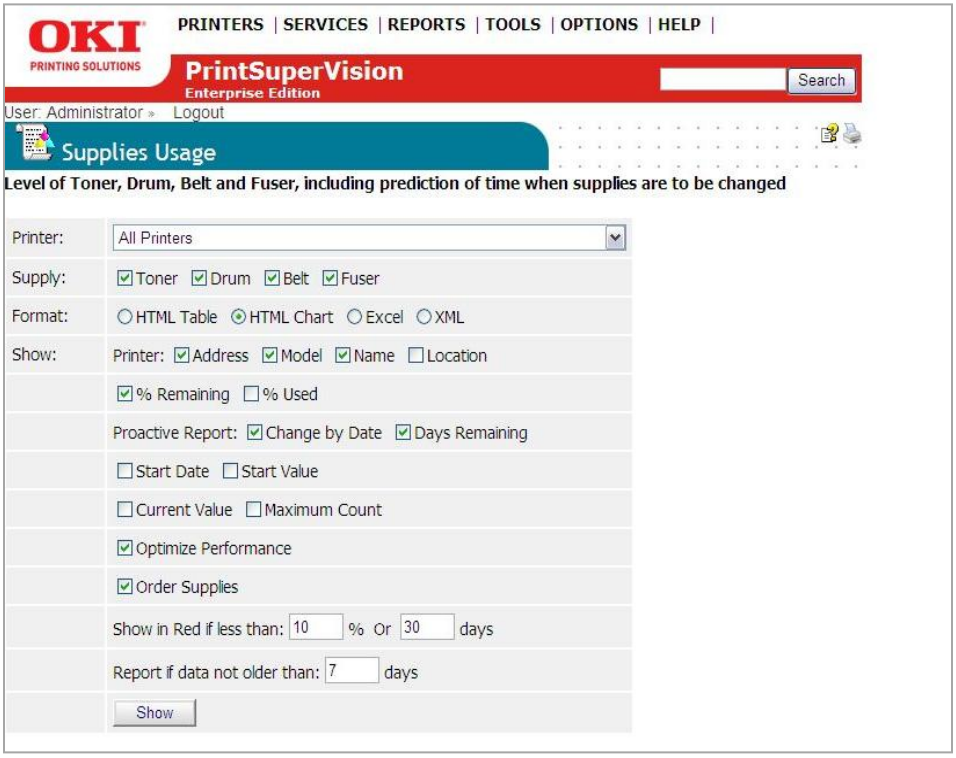
3. Select the Supplies you wish to view and the desired format of the report.

4. Click the **Show** button to run the report



After running the report with default settings, you may choose to customize the report:

1. Click the **Customize** button



2. Select any of the following options

% Remaining:

- Indicates the percent of each supply item that is not used

% Used:

- Indicates the percent of each supply item that has been used

Change by Date:

- Indicates the anticipated date the supply item will run out

Days Remaining:

- Indicates the anticipated number of days remaining before the supply item runs out

Start Date:

- The date that PSV started monitoring the device

Start Value:

- The consumable value recorded when PSV started monitoring the device

Current Value:

- The consumable value recorded at the time the report is generated

Maximum Count:

- Displays the maximum design value of the consumable. This value is used in calculating the remaining percentage of the consumables.

Optimize Performance:

- Use when a report is generated for a large number of devices, this allows PSV to optimize the performance.

Order Supplies:

- If the option is deselected, the Order Supplies checkbox won't be visible in the Supplies Usage Report

Show in Red if less than XX% or less than XX days:

- Prints values in red text to stress the importance of replacing supplies that are almost out. Use a higher value if you need more time react. Use a lower value if you are only concerned with critical situations.

Report if data is not older than XX days:

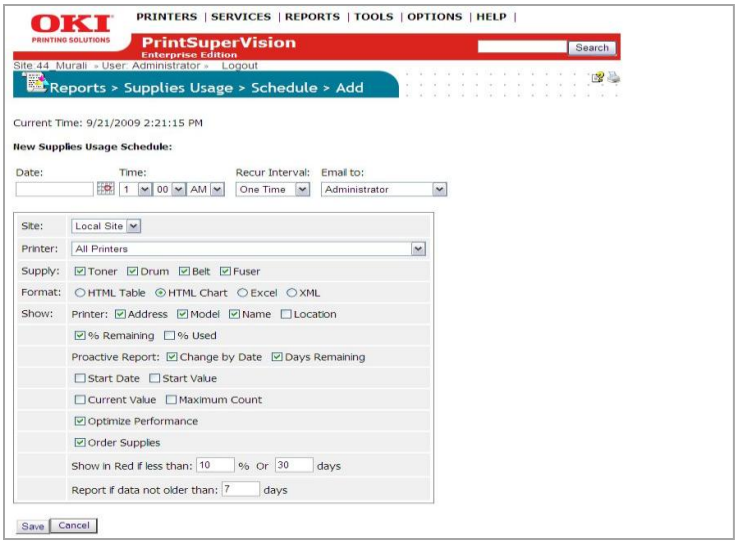
- Allows data from inactive devices to be filtered out

3. Click **Show** to run the Supplies Usage Report

Scheduling a Supplies Usage Report

Like all PSV reports, The Supplies Usage Report can be run automatically and sent to a user by clicking the **Schedule** button.

1. Click the **Add Supplies Usage Schedule** button



2. Select a starting date and time, select a recurring interval for the report to be generated and sent, indicate email recipients

3. Choose formatting options

4. Click **Save**

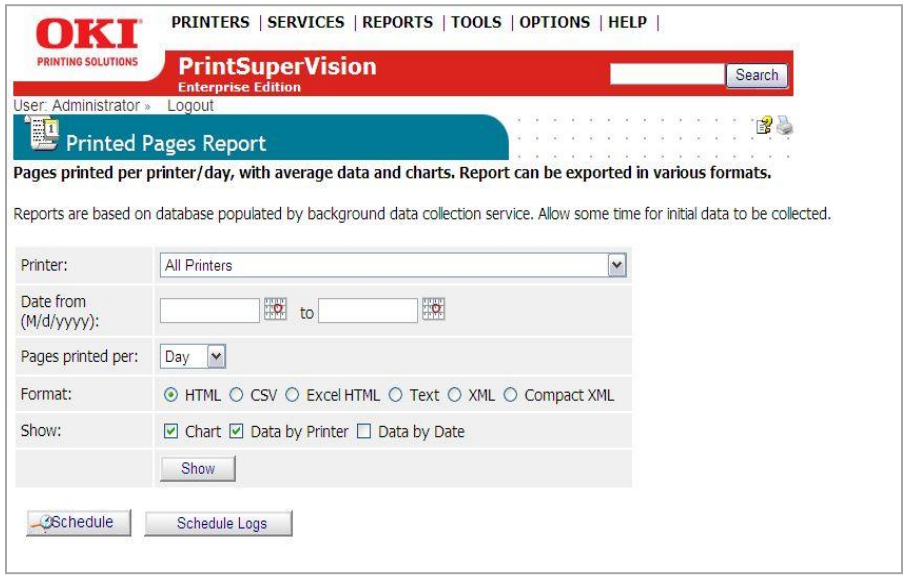
Click the **Schedule Logs** button to verify that reports are being generated and sent according to the schedule specified.

Printed Pages Report

The printed pages report displays the number of pages printed over a period of time by an individual device or by a group of devices. Like all of PSV reports, you can use the **Configure Properties and Attributes** feature prior to defining the parameters of the report to add additional information to the report.

1. Select **Reports** from the main menu

2. Select **Printed Pages Report** from the drop down box



3. Select a single device or group of devices

4. Enter a date range for the report

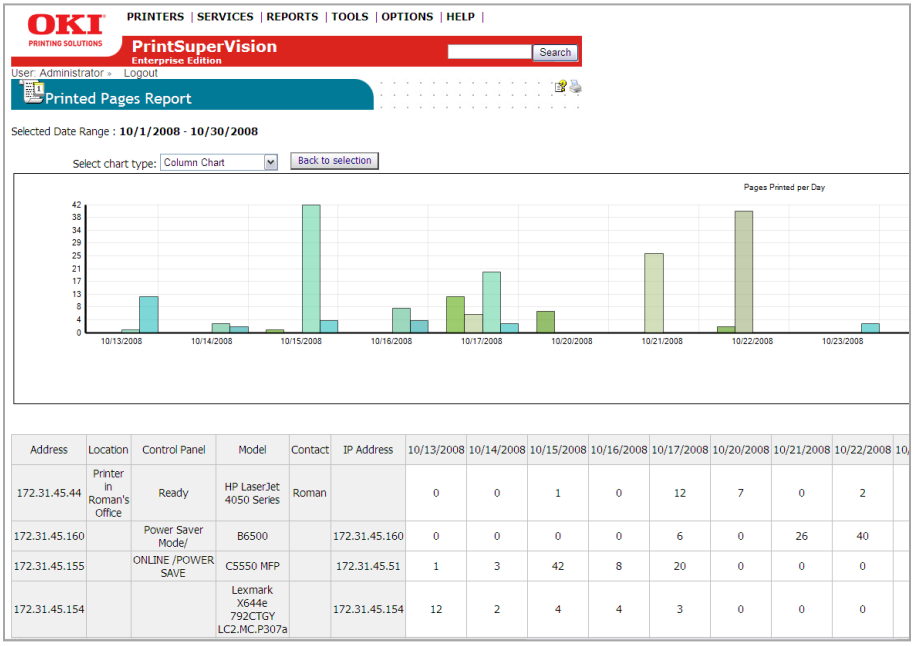
5. Choose the desired format type

6. Indicate whether you would like PSV to calculate average pages printed per day and /or to include a graph or chart of the pages printed.

Note: If the Chart option is selected, the "Pages Printed" report can be graphed using several different charting formats such as pie charts, bar graphs and line graphs.

7. Click the **Show** button to run the report.

A sample report is displayed below.



Address	Location	Control Panel	Model	Contact	IP Address	10/13/2008	10/14/2008	10/15/2008	10/16/2008	10/17/2008	10/20/2008	10/21/2008	10/22/2008	10/
172.31.45.44	Printer in Roman's Office	Ready	HP LaserJet 4050 Series	Roman		0	0	1	0	12	7	0	2	
172.31.45.160		Power Saver Mode/	B6500		172.31.45.160	0	0	0	0	6	0	26	40	
172.31.45.155		ONLINE /POWER SAVE	C5550 MFP		172.31.45.51	1	3	42	8	20	0	0	0	
172.31.45.154			Lexmark X644e 792CTGY LC2.MC.P307a		172.31.45.154	12	2	4	4	3	0	0	0	

Scheduling a Printed Pages Report:

The Printed Pages Report can also be automatically created and sent to a user at predetermined intervals.

From the Printed Pages Report screen:

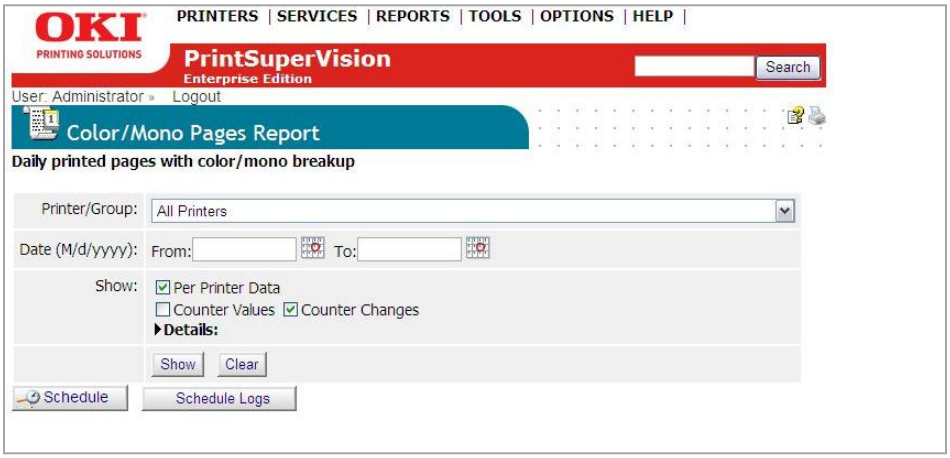
1. Click the **Schedule** button
2. Click the **Add Printed Pages Schedule** button
3. Select a starting date and time, select a recurring interval for the report to be generated and sent, indicate email recipients
4. Choose formatting options
5. Click **Save**

Click the **Schedule Logs** button to verify that reports are being generated and sent according to the schedule specified.

Color/ Mono Pages Report

The color / mono pages report displays color and mono page counts for each device and adjusts for different paper sizes by displaying the equivalent A4/letter size page count in the total printed pages area. This report is available only in the Enterprise Edition.

1. Select **Reports** From the main menu and **Color/Mono Pages Report** from the drop down box.



1. Select an individual or group of printers
2. Enter a desired date range
3. Click the **Counter Values** check box to display mono, color and total page counts as a snapshot on a particular day for a date range indicated.

Note: that this mode will display counter values on every day of the date range regardless of whether printing occurred on that day or not.

4. Click the **Counter Changes** check box to view only the number of pages that changed on a daily basis for mono, color and total pages printed.
5. Click both **Counter Values** and **Counter Changes** for both.

Additional formatting options are available by clicking the **Details** button such as:

- Averaging page counts over the number of days a device has been inactive
- Displaying page counts every time PSV has polled the device
- Displaying page counts from and to a specific date and time

6. Click **Show** to run the report.

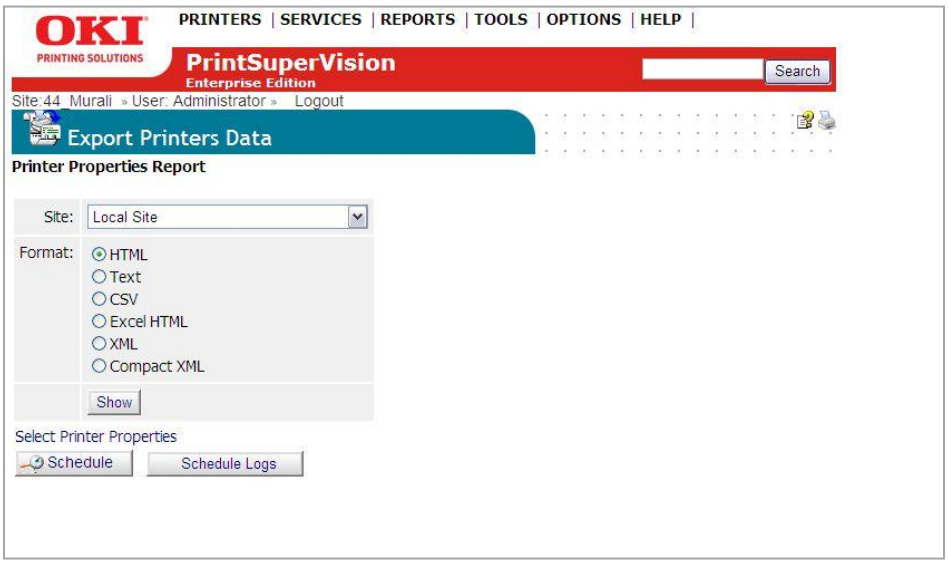
Click the **Schedule** button to send the report at predetermined intervals.

Click the **Schedule Logs** button for a running log of the Color/Mono Pages Report events.

Exporting Device Properties and Attributes Report

The **Export Printers Data** option makes it easy to view and save a list of all device properties and attributes for each device. You control the content included in the report by selecting the desired properties and attributes from the **Configure Properties and Attributes** page (Select **Reports** from main menu and **Configure Properties and Attributes** from the drop down box to configure the report).

Select **Reports** from the main menu and **Export Printers Data** from the drop down box.



Note: if you have more than one PSV site running, you may also choose the appropriate PSV Site from the drop down box.

Select the desired file format for report and click **Show**.

You may also choose to have the report automatically emailed to you by clicking the **Schedule** button.

The **Schedule Logs** button allows you to view a running log of all scheduled events or just the events pertaining to the generation and distribution of this report

Usage Report

Many devices from Oki Printing Solutions are capable of producing a Usage Report that is generated and printed directly from the device's operator panel. PSV can access this data remotely if the Usage Report has been enabled on the device.

The Usage Report tracks black and color printed pages and displays page counts in Letter/A4 size page equivalents (generally required for pay-for-print scenarios).

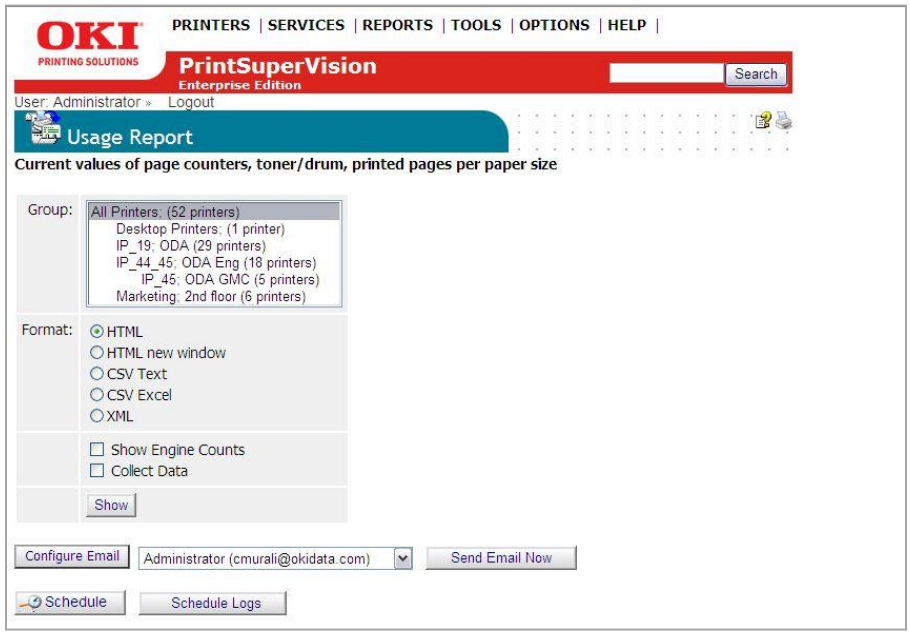
PrintSuperVision provides remote access to the Usage Report. And, as an added convenience, supplies and consumable status is also displayed in the Usage Report.

Note: With most Oki devices, the Usage Report feature can be disabled from the device's operator panel. If the Usage Report feature is disabled, PrintSuperVision will be unable obtain the Usage Report page count information.

As an alternative, an option is available in the Usage Report section of PrintSuperVision that enables "engine counts" to be displayed rather than page count data. Engine counts are used primarily for maintenance purposes and are referred to as "life counts" of the device.

To generate a Usage Report,

1. Select **Reports** from the main menu and select **Usage Reports** from the drop down box.



2. Select a group of devices

3. Indicate the desired file format for the Usage report.

"Show Engine Counts" is an option that displays life counter information but is not needed if the Usage Report option is enabled in the device and is reporting page count data to PrintSuperVision.

The **Collect Data** option instructs PSV to obtain the latest information from the device before the usage report is generated.

4. Click the **Show** button to generate a report.

The **Configure Email** button is provided as a navigational convenience and is not necessary if your email system has already been configured.

The **Send Email Now** button sends the report in Email immediately to the recipient indicated in the drop down box.

Click the **Schedule** button to send the report at predetermined intervals.

Click the **Schedule Logs** button for a running log of the Color/Mono Pages Report events

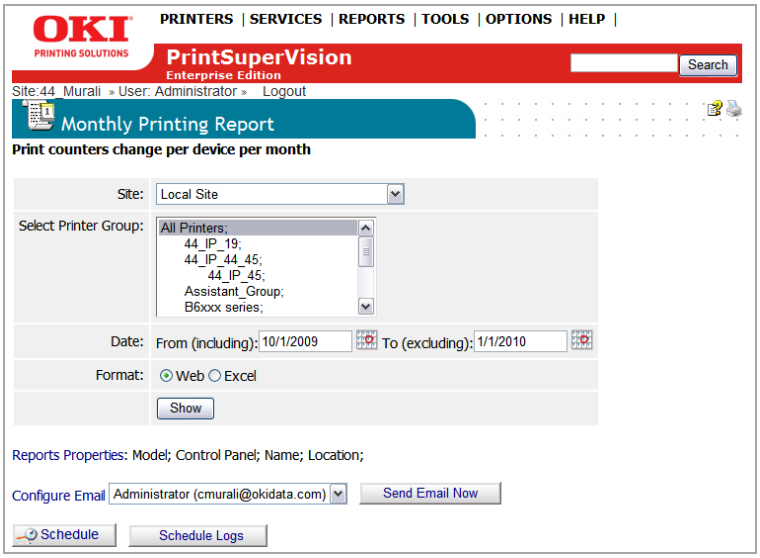
As an added convenience PrintSuperVison can enable the Usage Report option remotely on most Oki devices by clicking on the **Enable Usage Report** Feature. Select a group of devices and click **start**.

Monthly Printing Report

Use the monthly Printing Report to obtain mono and color page counts from each device on a monthly basis. This report is very useful when monitoring page counts for an entire fleet of devices.

Like all PSV reports, you control the content by selecting the desired properties and attributes of the report. A link to the Configure Properties and Attributes page is now available at the bottom of the page.

1. Click **Reports** from the main menu and **Monthly Printing Report** from the drop down box



2. Select the appropriate site if you are monitoring more than one PSV server
3. Select the appropriate group of devices
4. Select a date range for the report
5. Select the output format
6. Click **Show** to generate the report

Links to set the Report Properties and to configure the email recipient have been included for convenience.

To set up a schedule to automatically generate a monthly printing report, click the **Schedule Button**, click the **Add Monthly Printing Report Schedule**, indicate the date and time to start, indicate the report interval, select the devices to monitor, indicate the desired format of the report and click **Save**. PSV will now automatically create the report and send it to the recipient on a monthly basis.

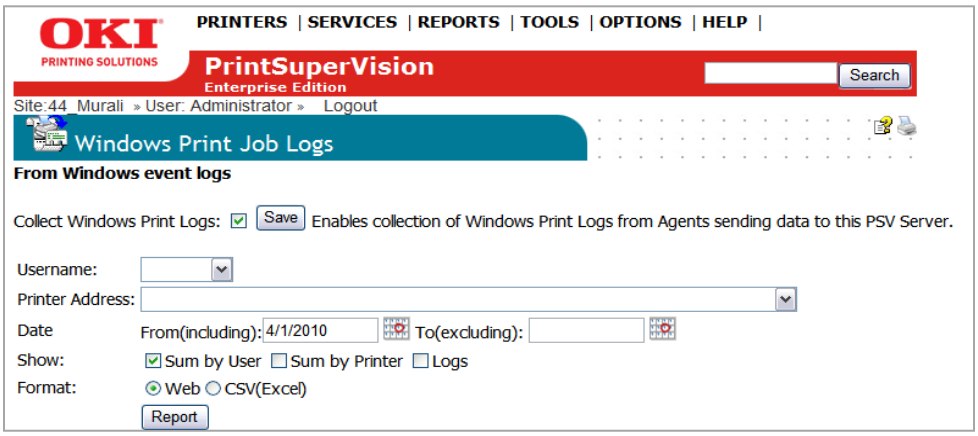
Windows Print Job Logs

Another convenient feature in PSV is the ability to view individual print logs obtained from the Windows print queue on client PCs where the PSV Agent is installed. The print logs indicate the date the document was printed, the name of the computer used, the driver used, the print queue, whether it was printed via USB or over the network, the name of the document, and the number of pages.

The Print Job Logs report also provides the ability to summarize the number of pages printed by a user and the number pages printed by particular device (only when the PSV agent is used).

Since data is being obtained from Windows (and not the device) you can use this report if you have non-Oki devices connected to PC's that are running the PSV agent.

To run a Windows Job log report, click **Reports** from the main menu and select **Windows Print Job Logs** from the drop down menu.



Click the **Collect Windows Print Logs** check box and click **Save.** The next two operations are optional but will help obtain more granularity in the data desired.

Click the down arrow in the **Username field** and select the desired **Agent** or leave blank to obtain data from all agents.

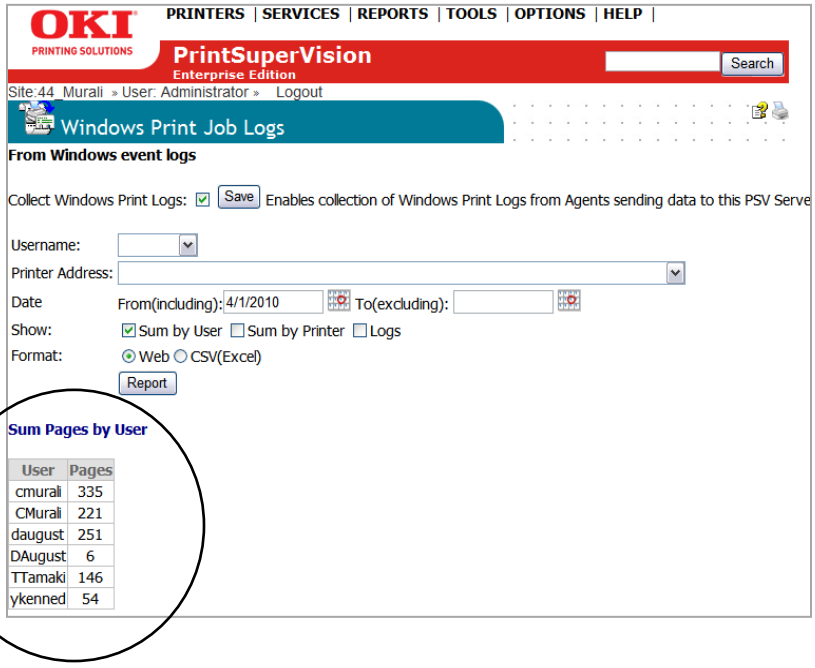
Click the down arrow in the **Printer Address field** and select the appropriate print queue or leave blank for all print queues.

Select desired date ranges

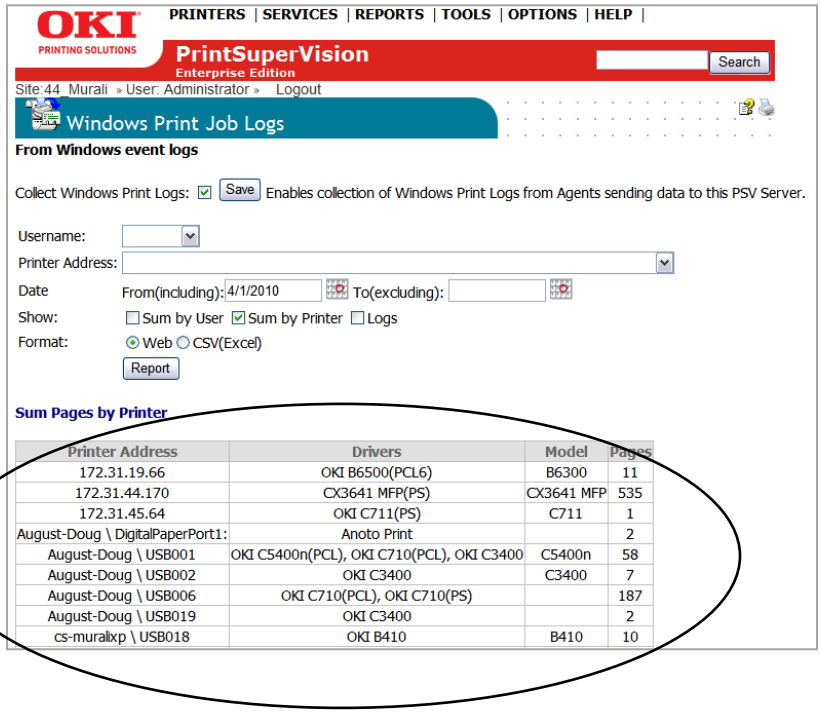
At this point you have the option to select any of the three choices:

1. Sum by User, Sum by Printer, Logs

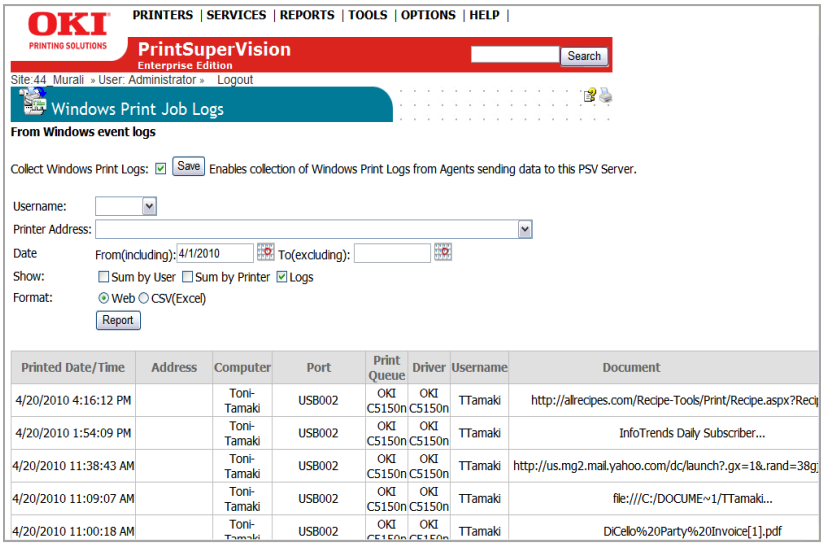
For example, clicking **Sum by User** generates a simple list of the users that have the agent installed and a corresponding number of pages printed by that user.



Clicking **Sum by Printer** generates list print queues, the type of driver used, the type of print device used and the number of pages.



Clicking **Logs** generates a report that was previously described in the beginning of this section.



Finally, click the CSV option on any of these reports to export the data to excel for further manipulation.

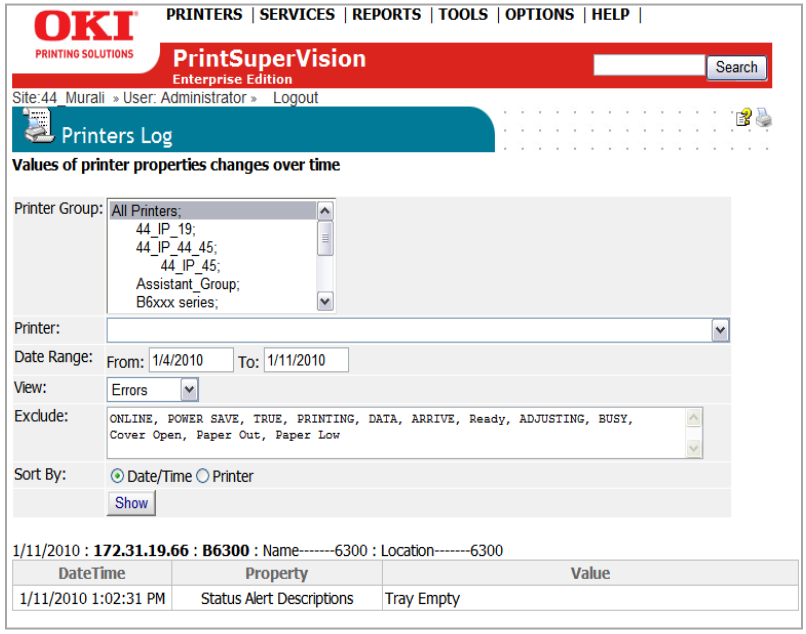
Printers Log Report

The Printers Log report collects status messages that are periodically displayed on the device's operator panel and saved in the device's memory. It can be helpful to view a history of all the messages the device has generated over a period of time when planning a refresh or just looking at the performance of each device.

The Printers log report allows you to select a specific group and/or device, a date range, the types of messages and the ability to exclude certain messages (such as "online", "power save" and "data arriving". You can also sort the logs by date / time of by device.

To run the Printers Log report:

1. Click **Reports** from the main menu and **Printers Log** from the drop down box.



2. Select **All Printers**, an individual group of devices and/or a single device from the drop down menu

3. Select the desired date range

4. Select the type of log to view or select **All**

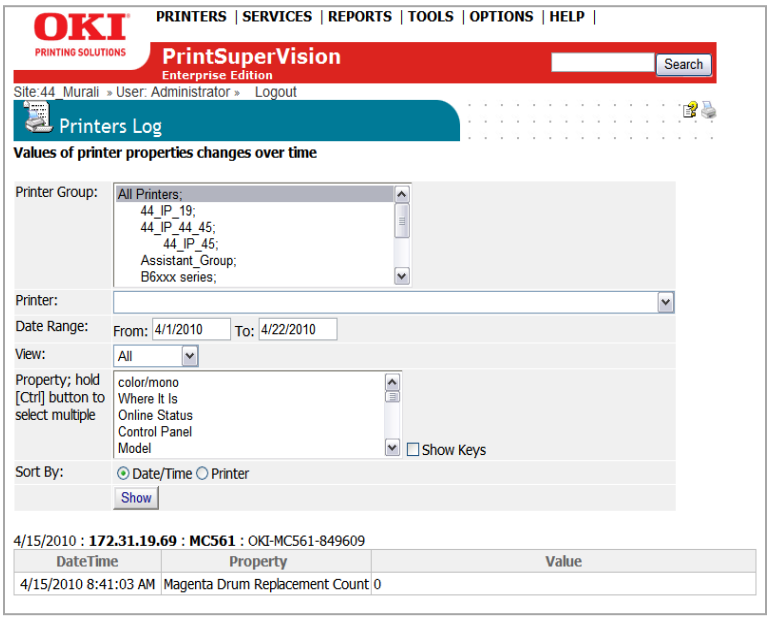
5. The **Exclude area** allows you to filter out common messages that may be unimportant to you like "paper out" "data arriving" and "online". You can keep

the default filter words displayed or add and delete as you see fit. Make sure the words or phrases are separated by a comma.

6. Sort the report by the date and time the log was registered or by individual device.

7. Click **Show** to generate the Printer Log report

Note: When **All** is selected in the View field, you have the ability to filter the log search results further by selecting only the property that you are interested in.



For example, the Magenta Drum info property was selected in the screen below. After clicking **Show**, all logs that pertain to that property were displayed.

Device Job Logs Report

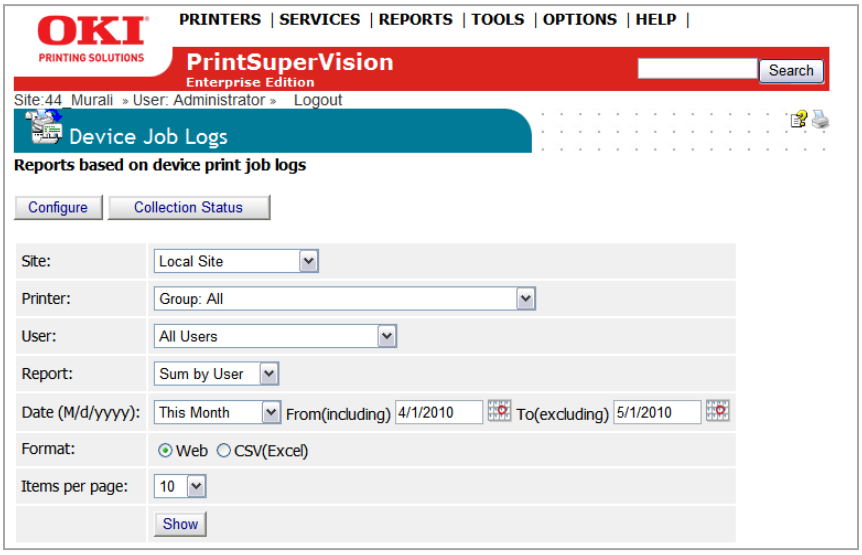
The Device Job Logs report allows you to analyze the type of print jobs sent to a device. It provides the document name, the number of pages and sheets printed, the date and time the document was printed and the username of the person who printed it.

It also lets you assign a "per-page" and "per-sheet" cost to each page and/or sheet to quickly calculate the cost of printing. Pages represent a printed single side of paper and sheets represent the physical piece of paper.

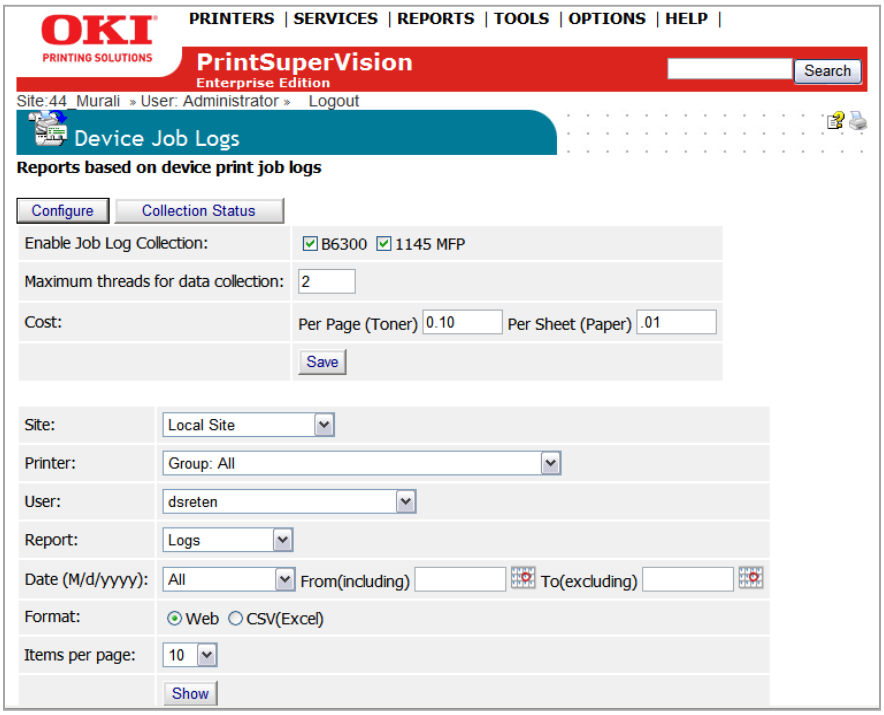
Note: Currently, this report is limited to 2 Oki Data Devices (the CX1145 and B6300). Support for more devices will be added at a later date.

To configure and run a Device Job Logs report:

1. Click **Reports** from the main menu and select **Device Job Logs** from the drop down menu



2. Click the **Configure** button and select the B6300, the CX1145 MFP or both.



3. To minimize processing time, enter a greater number of threads in the **Maximum threads for data collection** field if your hardware is capable of multi-processing.

4. Enter a per page and per sheet cost if you would like PSV to calculate costs

5. Click **Save**

To run a Device Job Logs report:

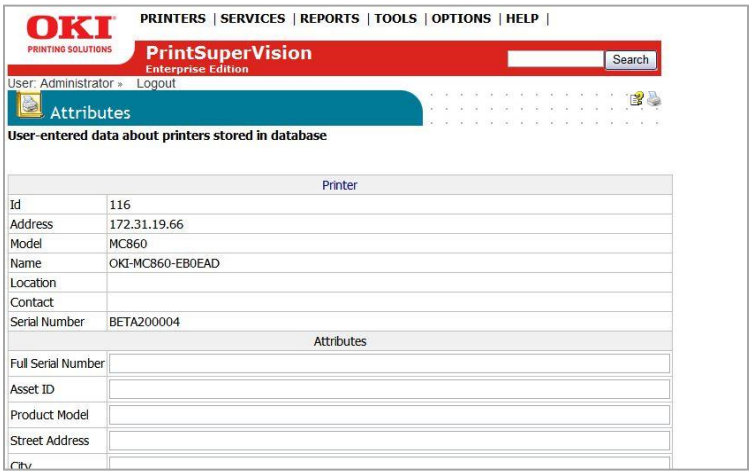
1. Select the appropriate PSV **site**, **group**, and **user**.
2. Select the option to summarize all logs by individual **user**, by **printer** or to just produce a list of all job logs from each device.
3. Select a **date range**
4. Select **Web** if the report is to be viewed on screen, or **CSV** if you intend to import data into Excel
5. Determine the number of entries per page
6. Click **Show**

Adding Device Attribute Data

PrintSuperVison allows a user to attach attributes to a device to help locate it, to determine who is responsible for maintaining it, etc. The added attributes are not reported by the device, so as a user you must manually enter data into the attribute fields.

To add attribute data

1. Select **Printers** from the main men
2. Select **Printers** from the drop down menu
3. Click on any status icon (printer icon in the left margin) to link to a print device's status page.
4. Click the **Attributes** button and click **Edit**
5. Enter data in any of the Attribute fields and click **Save** at bottom of the screen.



The user-entered attribute information can be included in several reports if the same Attributes are selected from the Configure Properties and Attribute section listed under Reports in the main menu.

Note: An Admin can also import a CSV file that already contains the desired attributes associated with many devices at once.

To import a CSV file:

1. Click **Printers** from the main menu
2. Select **Import Printers and Attributes**
3. Browse for an appropriate CSV file, Indicate how the fields are delimited and click **Import**.

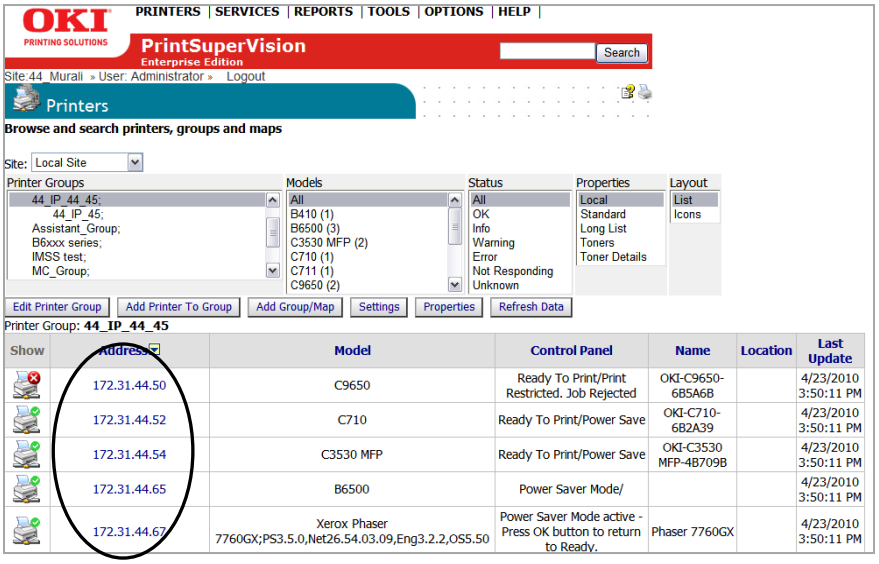
Configuring a Print Device Remotely

In addition to all of the configuration options that PSV provides, an Admin can always link to the device's on-board web page remotely to make even more configuration settings.

From the main menu:

1. Select **Printers**

2. Click **Printers** from the drop down menu to display a list of print devices.



3. Click on the highlighted IP address of a device and enter the username and password for the internal web page if required (usually the user name is "root" and password is the last 6 digits of the device's mac address without dashes.

Once you have logged into the device's web server you can make various network settings, email settings and maintenance settings that help to better manage your fleet of print devices.

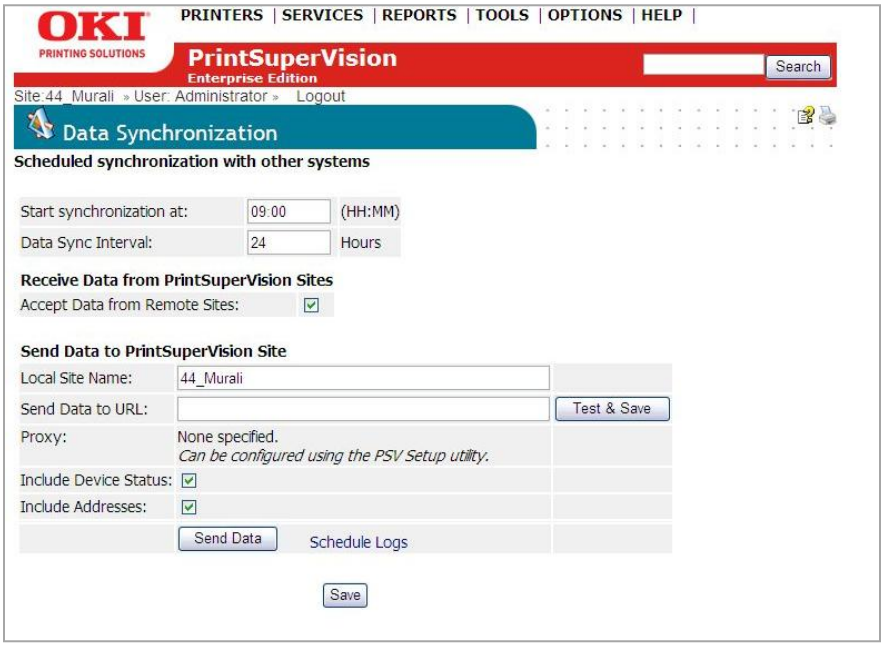
Data Synchronization

The Data Synchronization feature allows data to be transferred from one PSV site to another automatically. This feature is particularly helpful from a reporting standpoint when there are several PSV sites running in a large enterprise environment. Rather than accessing each PSV site individually to run reports, you can simply log into the "receiving server" and run all necessary reports from that server.

PSV Enterprise Edition can send and receive data while the Professional Edition can only send data, therefore the Enterprise Edition must be designated as the receiving site.

If you have not already configured the Data Synchronization feature in the PSV Setup wizard you may do so from within the PSV application:

1. Click **Services** from the main menu and **Data Synchronization** from the drop down box



If you are configuring a "Receiving Site", simply click the **Accept Data from Remote Site** check box and click **Save**.

If you are configuring a "Sending Site", access the appropriate PSV Server:

1. Click **Services** from the main menu and **Data Synchronization** from the drop down box

2. Enter the appropriate time and interval between synchronizations. If no interval values are entered, PSV assigns a default value of 24 hours. The minimum value is 1 hour and the maximum interval value is 99 hours (which is 4.125 days).

Note: If you are using a PSV Enterprise Edition as a sending site, do not check the **Accept Data from Remote Site** box

3. Specify a name for the Local (sending) Site. If a name is not entered, data will not be sent during data synchronization.

4. Indicate the address/URL of the receiving PSV site in the **Send Data to URL** field

If the receiving site has already been configured, you can click the **Test and Save** button to verify that the sending site is successfully connecting to the receiving site.

Note: If configuring a proxy server is required, it must be done using the PSV Setup wizard which is located in **Start** > **All Programs** > **PrintSuperVision** > **PrintSuperVision Setup** > **DataSync** Tab

5. Click on the Include **Device Status** and/or **Include Addresses** check boxes to include individual device status and a list of device IP addresses in the data that is sent to the receiving site. This allows the Admin from the receiving site to view control panel messages from devices being monitored by the sending site at the time the data is sent. It also provides the admin with a link directly to each devices internal web page.

   Note: The option to not send IP addresses between PSV servers is to provide for a higher level of security and privacy.

6. Click the **Save** button to save settings

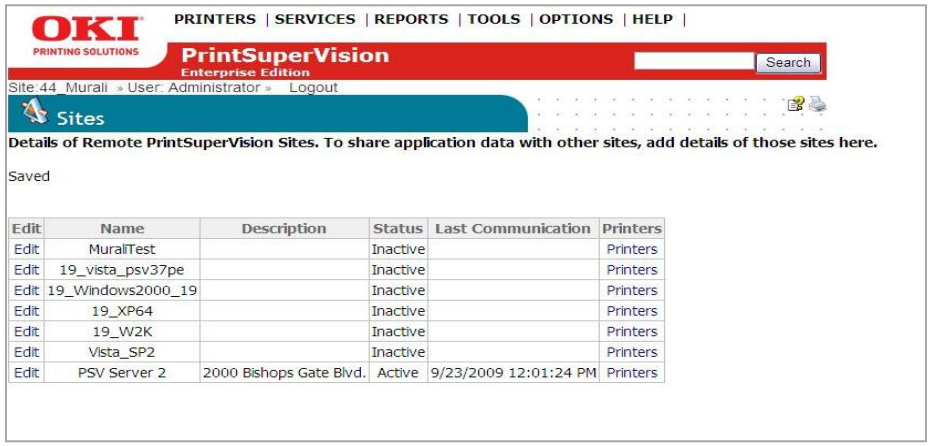
7. (Optional) Click the **Send Data** button to manually send data to the receiving site

Viewing a List of Sending Sites

Note: This section pertains to the Enterprise Edition only

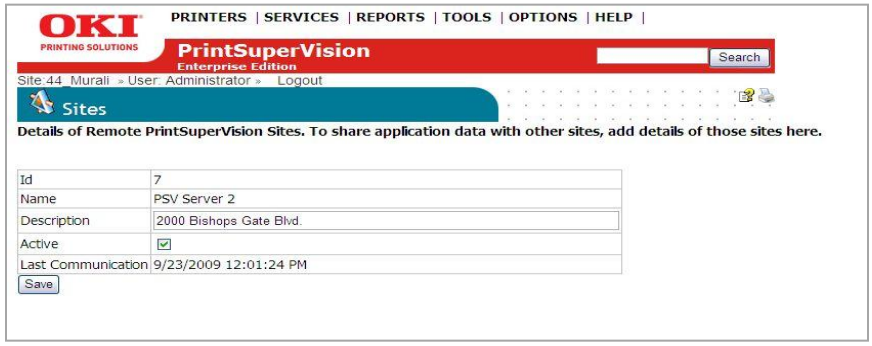
To view a list of sites that have connected to the Receiving Site, to activate a Sending Site and to generate reports from the Sending Sites:

1. Click **Services** from the main menu and **Sites** from the drop down box



A list of Sending Sites is displayed along with the sites' active or inactive status. The Receiving Site has the ability to restrict access to the sending site data by changing the status to Inactive.

1. Click the **Edit link** in the left column of the desired site



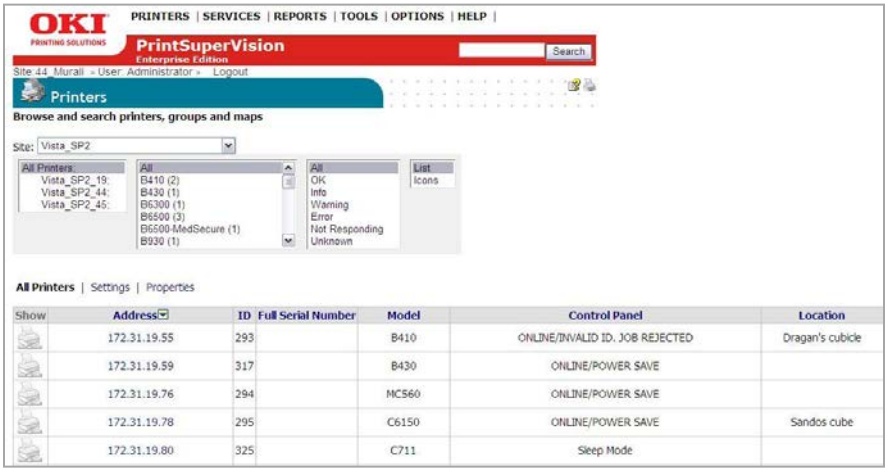
2. Click the **Active** checkbox to gain access to the sending site data
3. (Optional) you can help identify the sending site by describing its location, etc. by entering text into the Description field
4. Click **Save** to save the change

The description of the Site will now appear in the list of Sites shown above.

Generating Reports from Sending Sites

To access data and run reports from each "Active" sending site:

1. Click **Services** from the main menu and **Sites** from the drop down box
2. Locate the desired Active Sending site and click the **Printers** link



You will notice that the site you chose is selected in the drop down box at the top of the screen.

Run any report for the site indicated by selecting **Reports** from the main menu.

Keep in mind the reports will reflect only the data that was last sent to the receiving site.

To generate repots for another sending site, select a different site from the dropdown box and repeat the report generation process.

Monitoring Locally Connected Devices

PSV allows you to monitor Oki devices that are connected to laptops or desktops via USB rather than connected directly to the network.

Local monitoring is achieved by installing the PSV Agent on each client that has a locally connected Oki device. The agent consists of a Windows Service that monitors local print devices connected through USB ports. The PSV Agent periodically collects management data from the device and sends it to a PSV Enterprise server. The agent reports alert conditions, supply levels and page counts just as if the device was directly connected to the network.

The agent supports all popular Windows operating systems including Win XP, Vista, Windows 7, Server 2003, Server 2008 and Server 2008 R2.

Installing the PSV Agent: Option 1

The PSV Agent can be installed individually at each desktop or laptop computer or can be pushed down to each PC using command line installation.

To install the PSV Agent:

1. Copy the PSV Agent file to the system – for example: Oki-PSVAgent-3-1-0-21.exe. If the file name extension is not .exe, change the extension to .exe.
2. Launch the EXE

If PSV Agent is already installed in the system, the installer will upgrade the Agent version keeping the existing configuration parameters.

The Agent is packaged as a self-installing .exe and can be invoked with command line arguments in silent mode for batch installation on large numbers of computers.

The command line options for the Agent installer include:

/S	silent mode
/url="http://myserver/psv/"	address of PSV server to send data to **(required)** (can be https)
/interval=60	number of minutes between sending data to server (optional)

```
C:\PSV>Oki-PSVAgent-3-1-0-21.exe /S /Interval=60 /url="http://172.31.44.79/psv4"
```

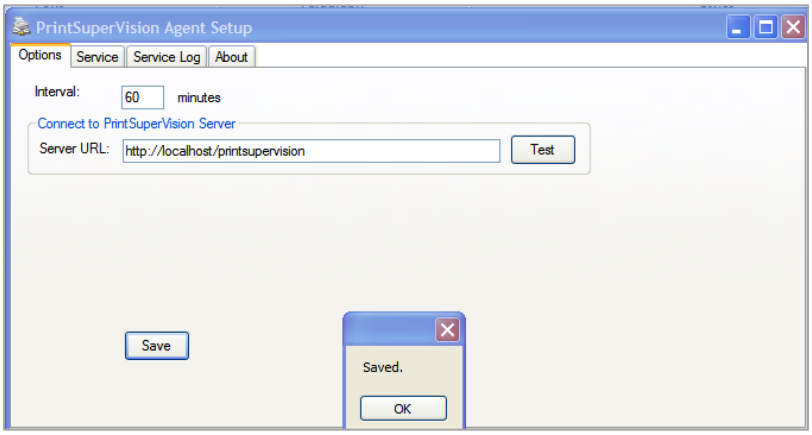
Configuring the PSV Agent

After installation is complete, a setup screen is displayed. Within the Options tab:

1. Select a desired interval in minutes that the agent will contact the PSV server

2. Enter the URL of your PSV Enterprise Server

3. Click **Save**



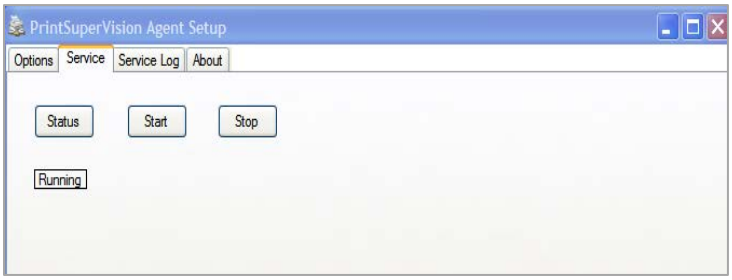
4. You may check the connection to the server by clicking on the "Test" button.

Once the Agent is installed, it is mostly invisible on the computer. There is a windows service called "PrintSuperVision Agent" that performs the job of sending updates to PSV server.

After installing the PSV Agent, if the server URL configuration needs to be changed, you may do so from the command line: run "c:\program files\PrintSuperVision Agent\PSVDA3.exe setup".

The Setup can also be launched by selecting *"Start | Programs | PrintSuperVision Agent | PrintSuperVision Agent Setup".*

PSV Agent Service Tab



The Service tab is used to check the status of the PSV Agent service to verify that it is running, to start the service or to stop the service.

1. Click the Status button to verify the service is runnib

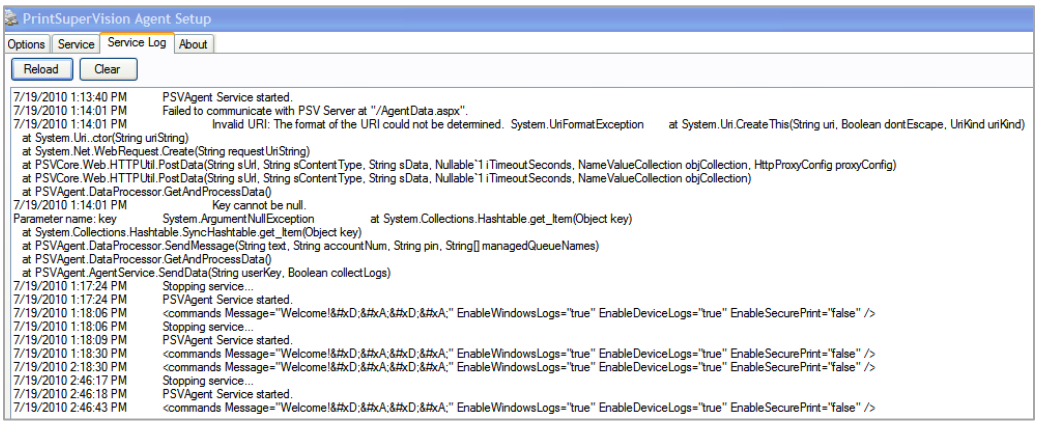
2. Click the Start button to start the service

3. Click the Stop button to stop the service from running

PSV Agent Service Log Tab

The PSV Agent Service Log Tab displays an event log for the PSV Agent service

1. Select the **Reload** button to view the latest logs.



2. Select the **Clear** button to clear the logs.

Note: A text file of the log is automatically saved in the folder where the PSV Agent is installed as "AgentLog.txt"

Installing the PSV Agent Using PSV Director: Option 2

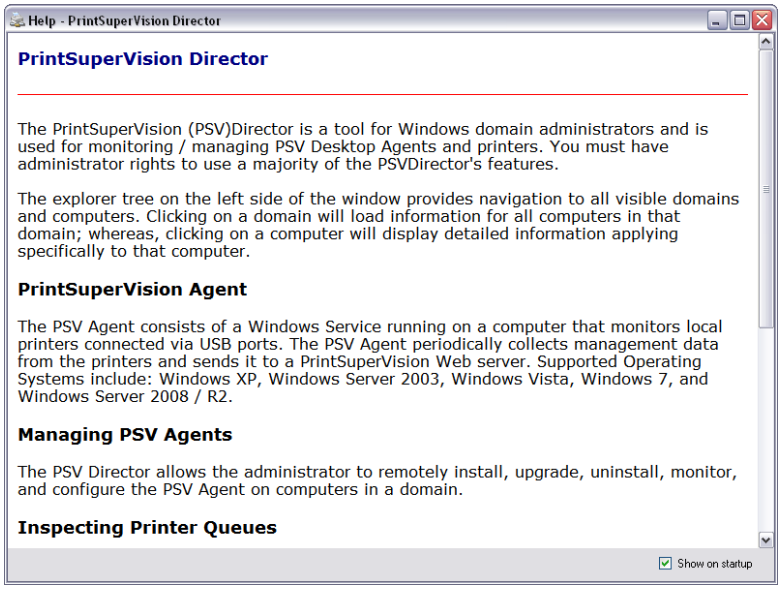
The Agent can also be installed remotely using the **PSV Director** application. PSV Director is a tool for Windows domain administrators that remotely installs, upgrades, uninstalls, monitors, and configures the PSV Desktop Agent on computers within a domain.

The Director can also collect information about printer queues, drivers, and ports on either a single computer or all computers in a domain.

If the PSV Director application was selected for installation when you installed PSV Enterprise, the application will be located in: **Start** / **All Programs** / **PrintSuperVision** / **PrintSuperVision Director.**

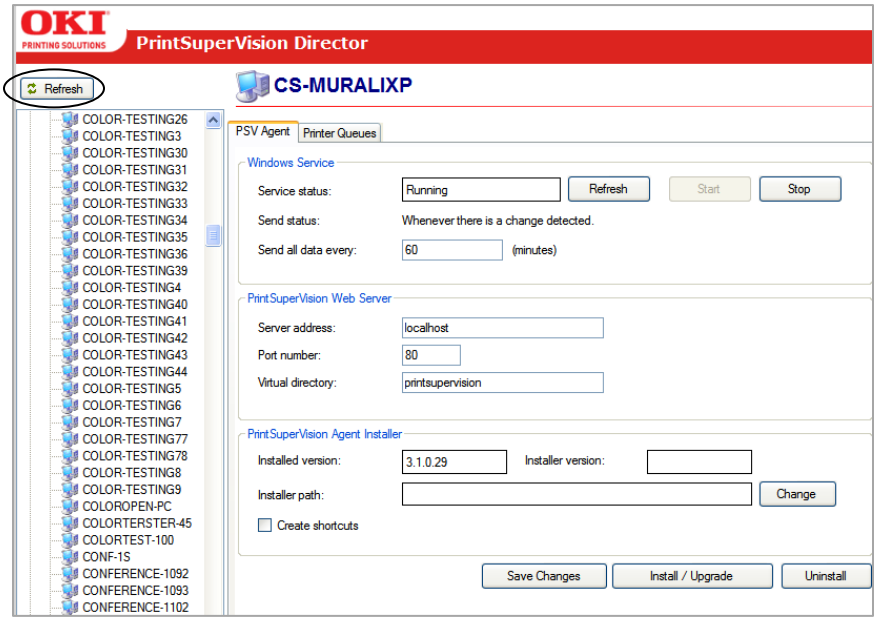
1. Click **PrintSuperVision Director** and open the application

The following help screen appears: Close it if you do not need it.



Navigating PSV Director

The tree view on the left side of the main window lists all visible domains and computers in the Active Directory. To view an up to date list, click the **Refresh** button, located directly above the tree view. Alternatively, right click a domain and click refresh, to update just the computers within that domain.



PSV Agent Tab

This tab indicates whether or not the PSV Agent is installed on the currently selected computer. If it is installed, you can check the service status and make configuration changes. Additionally you may install, upgrade, or uninstall the PSV Agent from this tab.

To install the PSV Agent using the Director:

1. Indicate the interval of time that the agent should contact the PSV Server

2. Enter the IP address of the PSV Server that the Agent will contact, along with the appropriate port number and Virtual Directory name

3. Click the **Change** button and browse for the Agent Installer which is an .exe file

4. Click the Install / Upgrade button to install the agent on all selected clients

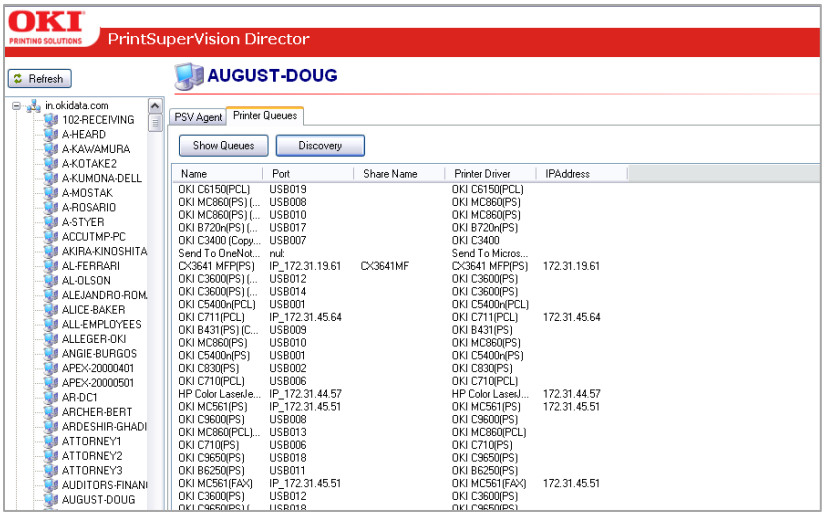
After installing the Desktop agent you can return to the same PSV Director screen to upgrade the Desktop Agent or make any necessary changes.

The Print Queues Tab

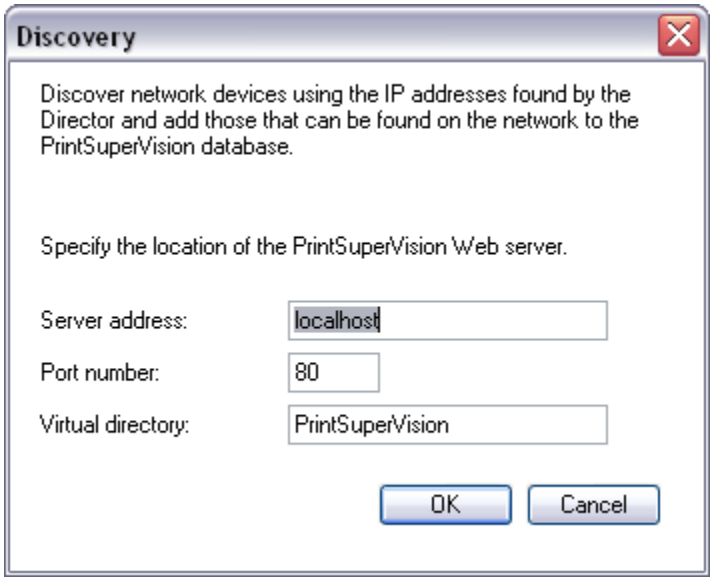
The Print Queues feature in PSV Director is designed to display available print queues from all or individually selected client computers. It also provides an alternative method to discover devices.

Click the **Show Queues** button to refresh the list

Click the **Discovery button** to discover the network printers on this machine. Currently, only HTTP communication is supported for this feature.



To add devices to the PSV database, enter the location of the PSV server, the port number and the virtual directory name:



Click the OK button

PSV Director will communicate with the PSV Server and add newly discovered devices to the PSV discovery database. It will also indicate if a device is already in the database.

Notes:

1. The PSV Director relies on a service packaged with Windows, called the "Remote Registry Service". In Windows XP and Windows Server 2003, this service is enabled and started by default.

   In Windows Vista, Windows 7, and Windows Server 2008/R2, the service is not started by default. So in order for the PSV Director to be able to access computers running these operating systems, this service must be started on each of the remote computers.

   It is recommended that the "Startup Type" for this service be set to "Automatic" on each of the client computers.

2. PSV Director is just one tool that can be used to "push" the Agents out to remote clients. If your IT organization uses your own tools to install and update client computers, you can certainly use those tools to install and maintain the PSV Agent as well.

3. The Agent is not included in the PrintSuperVision Enterprise Edition installation package but can be downloaded separately from www.okidata.com

PSV Assistant

For Parallel Port connected Oki devices you will need to use the PSV Assistant. The Assistant is **not** available as a download from www.okidata.com. Please contact Oki Data customer support at 1800-okidata to request the PrintSuperVision Assistant application.

The Assistant is a separate application much like PSV Agent that allows you to view printer attributes and supplies status from locally connected Oki print devices that are not directly connected to the network.

PSV Assistant supports the same Windows operating systems as the PSV Agent: Windows XP, Vista, Windows 7, Server 2003, Server 2008 and 2008 R2.

The Assistant is installed on users' desktops or laptops and periodically sends supply-related data such as page counts, toner and drum life status to the PrintSuperVision Enterprise server.

PSV Assistant can be installed individually at each desktop/laptop or can be pushed to each PC by using command line installation. To install PSV Assistant silently, use the syntax listed below.

Note: PSV Assistant requires providing the URL of the PSV server as a command line parameter during installation.

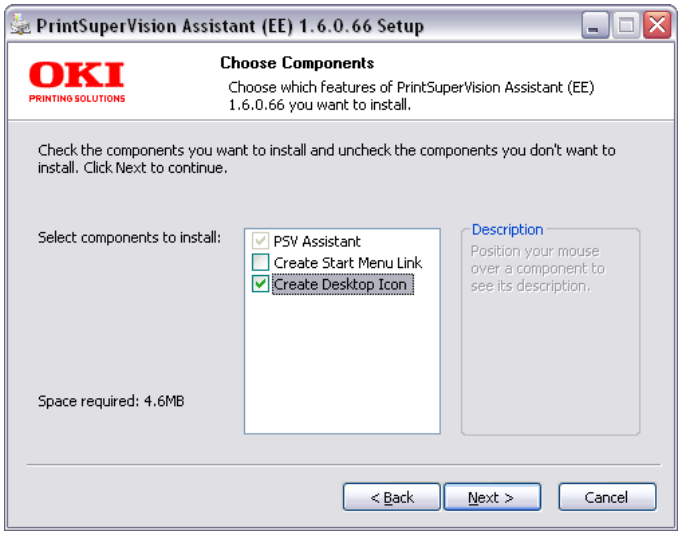
<assistant.exe> /U=<serverurl>

For example:

/"	(ex. /U="http://123.45.67.89/PrintSuperVision/")
/S	Silent install mode
/N	Do not create shortcuts, including a desktop icon and start menu link (shortcuts are created by default).
/I	Data collection interval in minutes (default value is 60).

An example is:

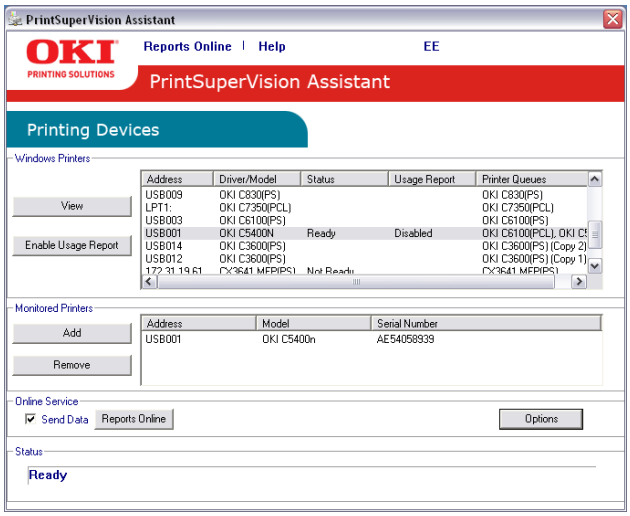
If you are not installing via command line instructions and you are installing locally, please follow these steps:



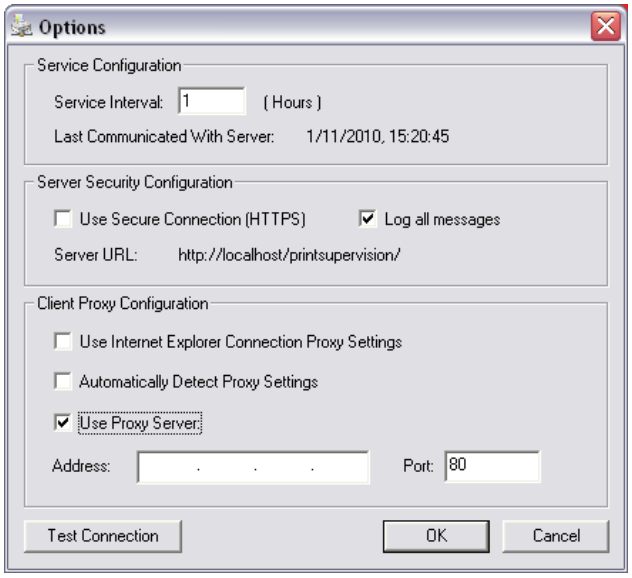
Click **Next** or check the appropriate boxes for available options

After installation is complete, open the PSV Assistant application and highlight the print device that is most often used from the list of available device drivers.

Click **Add** in the Monitored Printers section. Your device will be added (you can remove the device at any time by clicking the Remove button.

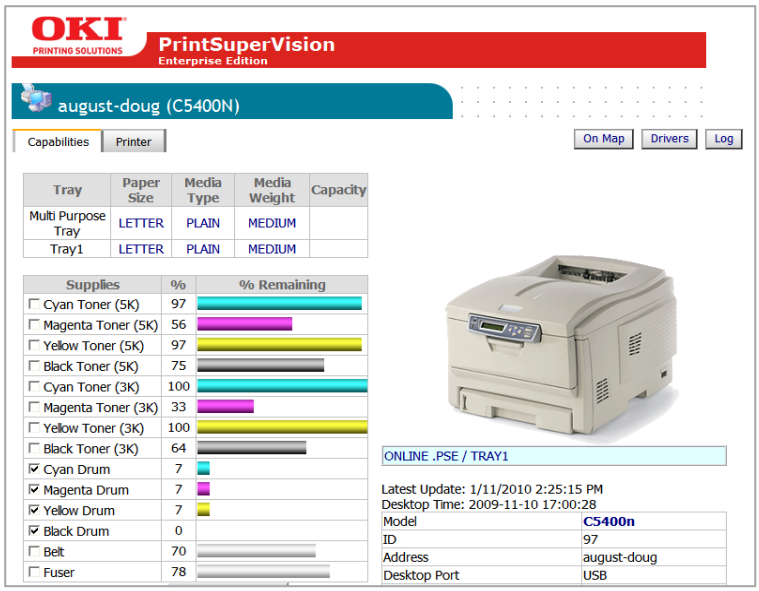


Click the **Options** button



1. Select the desired interval level which controls how often PSV Assistant contacts the PSV Server.
2. Set the option to use HTTPS if desired
3. Click the option to log (save) all messages if desired
4. Select the desired client proxy configuration
5. Click **OK**

If you allow your users to access PSV Assistant from their desktops, they can click the **Reports On-Line** button to view supply status, page counts, etc.



Note: The PSV Assistant is not distributed via the web. Please contact your Oki representative or 800-okidata to request a copy.

Performing Day to Day Tasks

Depending on the degree of automation set up during initial configuration, PSV can essentially run in the background on autopilot and only alert you when a device needs attention, or to deliver reports. But there will always be situations where you need to access PSV to check the status of a device, check the level of supplies or to manually run reports.

Viewing Device Status

To view a list of devices that was previously discovered:

1. Select **Printers** from the main menu
2. Click **Printers**, **My printers**, or **Near Me**.

Selecting "Printers" provides a list of all discovered devices. "My printers" displays only the devices that you previously added to the My Printers group.

Selecting "Near Me" automatically displays the print devices that share similar IP addresses with the computer you are using to access the PSV server. The Near Me option cannot be customized.

When viewing a long list of devices, make sure to scroll to the bottom of the screen and click the Refresh button to obtain the most recent status information on all devices displayed.

You will notice after clicking Refresh, a teal color moves from line to line indicating that the device status is being refreshed. Notice too that the printer icons in the left margin are now color coded to quickly determine the status of the device.

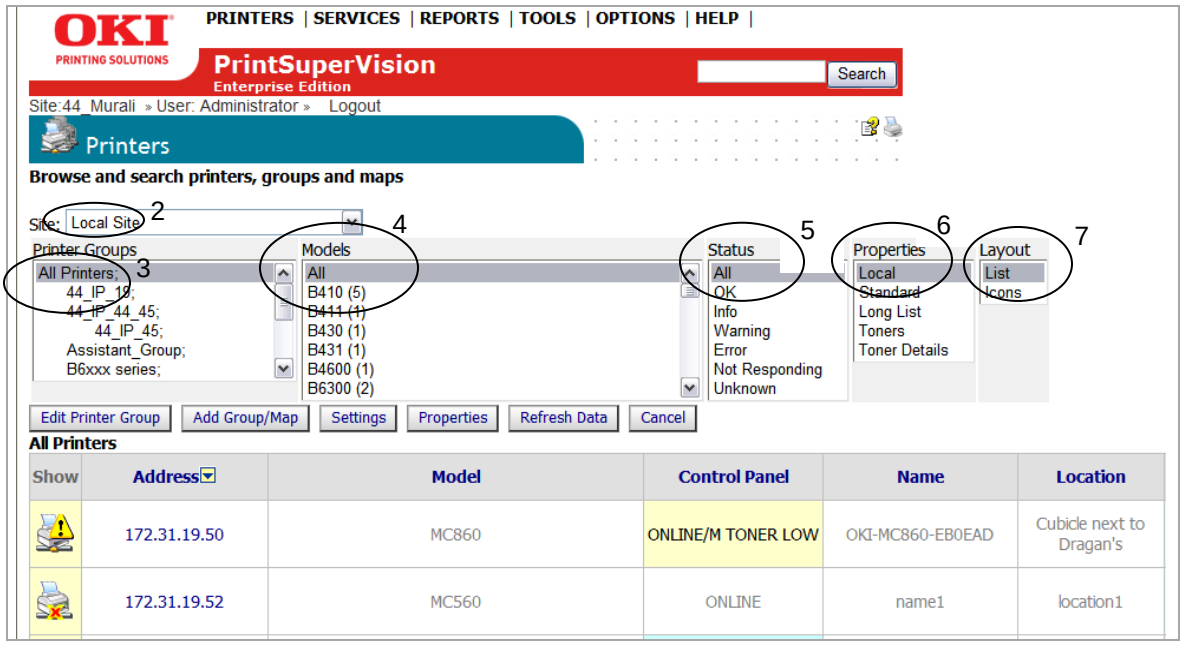
- Green indicates that the device is running fine, there are no Alerts and no supplies need to be ordered
- Yellow indicates that an alert has been received, an error has been detected or a lower level (less critical) action needs to be taken
- Red indicates that a critical error or serious Alert has been received and immediate action is required
- The information icon indicates an event has occurred, such as toner or drum replacement, cassette drawer is open or the device is printing. Generally no action is required when the information icon is displayed
- The "no access" icon indicates that the device is disconnected from the network, or is not responding

At any time while viewing the list of devices you may click on the status icons in the left margin and link directly to the status page of the individual device.

Quick Search

A new convenience feature added to PSV 3.7 allows quick access to all PSV sites, groups, individual devices and status codes from one main area. You also have the option to select several predefined sets of properties as well as how the information is viewed.

1. Click **Printers** from the main menu and select **Printers** from the drop down box.



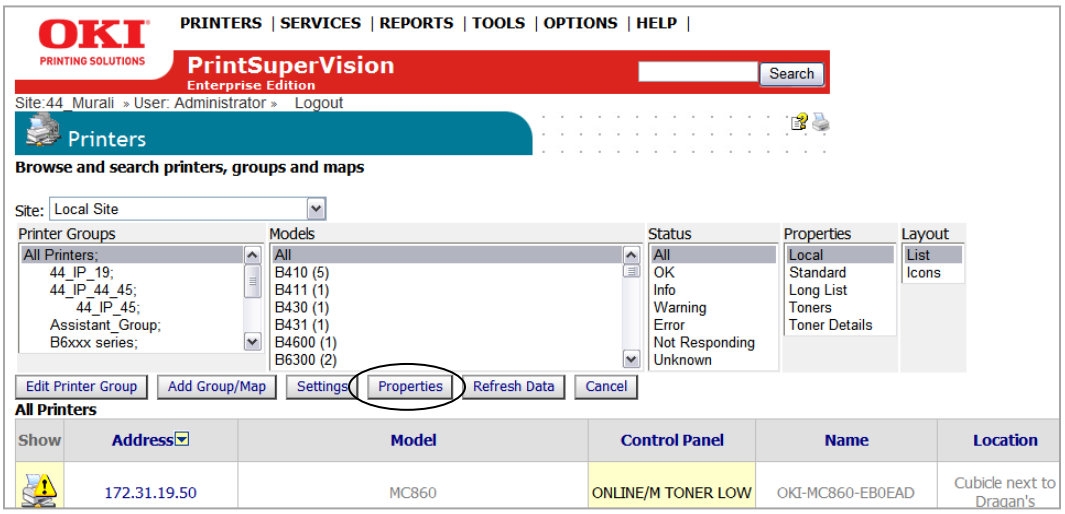
2. Select the appropriate PSV site from the drop down box
3. Click **All Printers** or the appropriate group name. The devices associated with that group are instantly displayed. You may also use the Search option to locate a group.
4. Click **All** to generate a list of all model devices within a group or click on the individual model name to show just that device
5. Click **all** to generate a list of all status codes, or select an individual status code for individual devices that are currently displaying that status code
6. Select the desired set of predefined device **Properties** to display or select Local for only the properties that you have previously indicated
7. Click **List** or **Icons** depending on your viewing preference

Note: You may also choose multiple selections at a time by using the standard Windows click sequences (hold down Ctrl key and click).

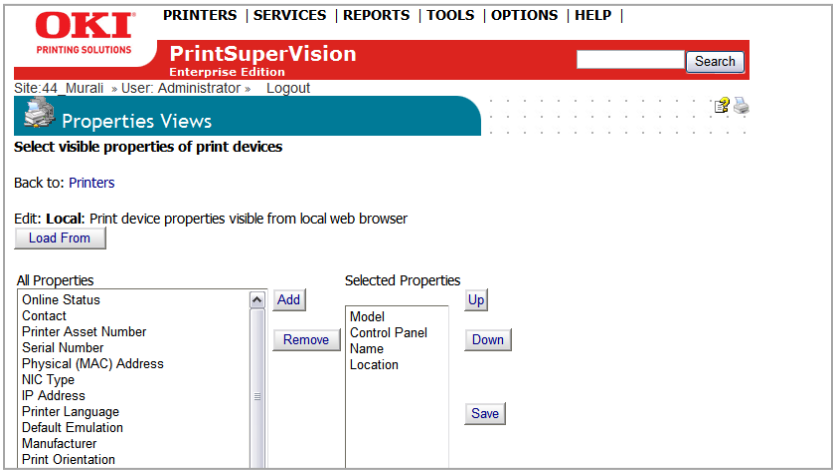
Changing the Device Properties Displayed

At any time, you may customize the device properties displayed on the "Printers Page", with the exception of IP address which is always displayed. To add or subtract properties:

1. Select **Printers** from the main menu and select **Printers** from the drop down menu



2. Click the **Properties** button
3. Select the device properties that you wish to display from the "All Properties" list and click **Add**



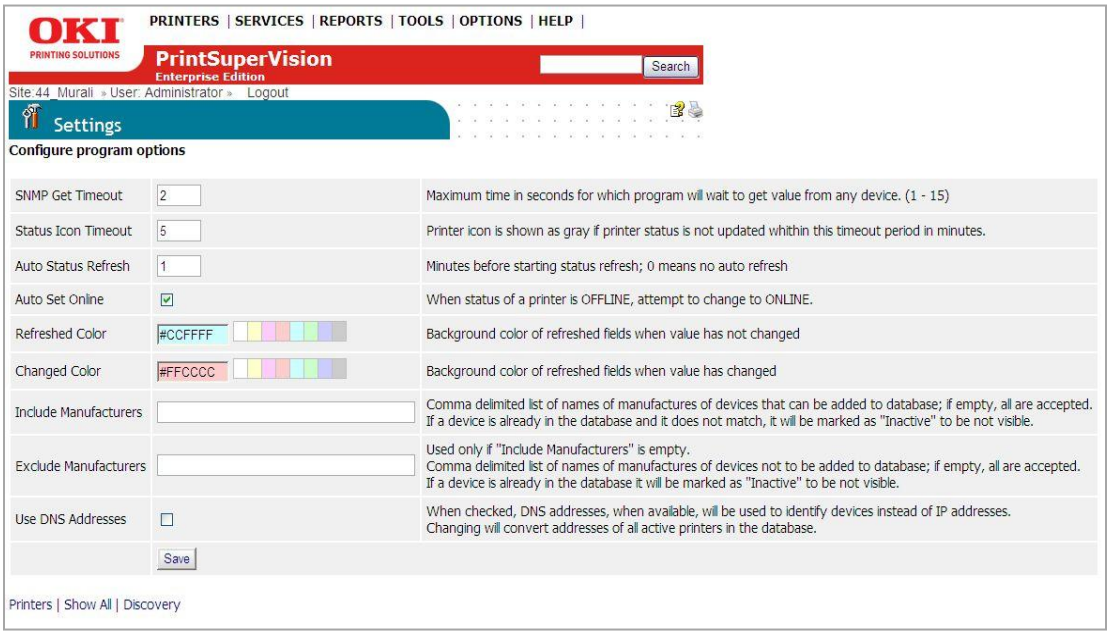
4. Reposition the order of the properties according to the viewing order by selecting the property and clicking the Up or Down buttons

5. Click **Save** to save the "Local" set of properties

Additional Configuration Settings

The **settings** page provides several configuration options explained below:

1. Click **Options** from the main menu and **Settings** from the drop down box
2. Make appropriate settings
3. Click **Save**



SNMP Get Timeout: Is the maximum time PSV will wait in seconds to obtain a value (via SNMP) from any device. Select 1 to15 seconds

Status Icon Timeout: The Printer status icon will be displayed in gray if the device status has not been updated within this timeout period in minutes.

Auto Status Refresh: The number of minutes PSV waits before starting a status refresh when viewing a list of devices. 0 = no auto refresh

Auto Set Online: Checking this box instructs PSV to try to switch an Oki device from Offline to Online during auto status refresh. This feature is only available for select Oki devices. **Note:** The Oki device has to be set to SNMP v1 to support this feature. The setting is located in the device's web page.

Refresh Color: When viewing a list of devices (by clicking Printers from main menu, then Printers from the drop down box), the background color of refreshed fields will be displayed in the color you choose when the value of the field **has not** changed. Set to White if no colors are desired.

Changed Color: Sets the background color of refreshed fields when the values of the fields **have** changed. Set to white if no colors are desired.

Include Manufacturers: Allows you to include only devices from specific brand names when generating a list of devices or during discovery. In other words, it filters out all devices except from the manufacturers named.

Exclude Manufacturers: Allows you to selectively exclude devices based on brand name when generating a list of devices or during discovery.

Use DNS Addresses: Identifies devices using DNS addresses, when available, instead of IP addresses. Activating this feature will convert IP addresses to DNS addresses on all active printers in the database.

Changing Languages

The language selected in PrintSuperVision can be changed at any time without the need to install language-specific versions of the application. To change language

1. Select **Options** from the main menu and **Locale** from the drop down box
2. Click the appropriate radio button
3. Click the **Save** button

Caution: The new language will be displayed as soon as the **Save** button is clicked. Take precautions to know how to get back to your native language if you are unfamiliar with the language just selected.

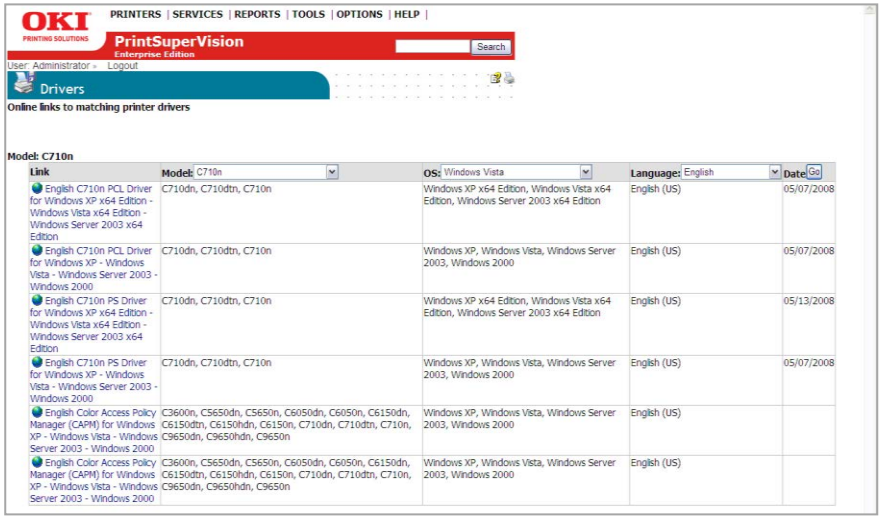
Downloading Oki Drivers

For convenience, PSV provides a built in search mechanism for Oki drivers and quick links to download a specific driver right from the PSV application. This feature saves time by eliminating the need to navigate, locate, and download drivers from www.okidata.com.

Note: The driver search and download feature is only available when United States/English is selected as the Locale during setup.

To search and download an Oki driver:

1. Select **Tools** from the main menu and **Drivers** from the drop down box.



2. Select the model, OS and Language of driver you are searching for
3. Click **Go**
4. Click the link to the desired driver in the left column and **Run** or **Save** the driver

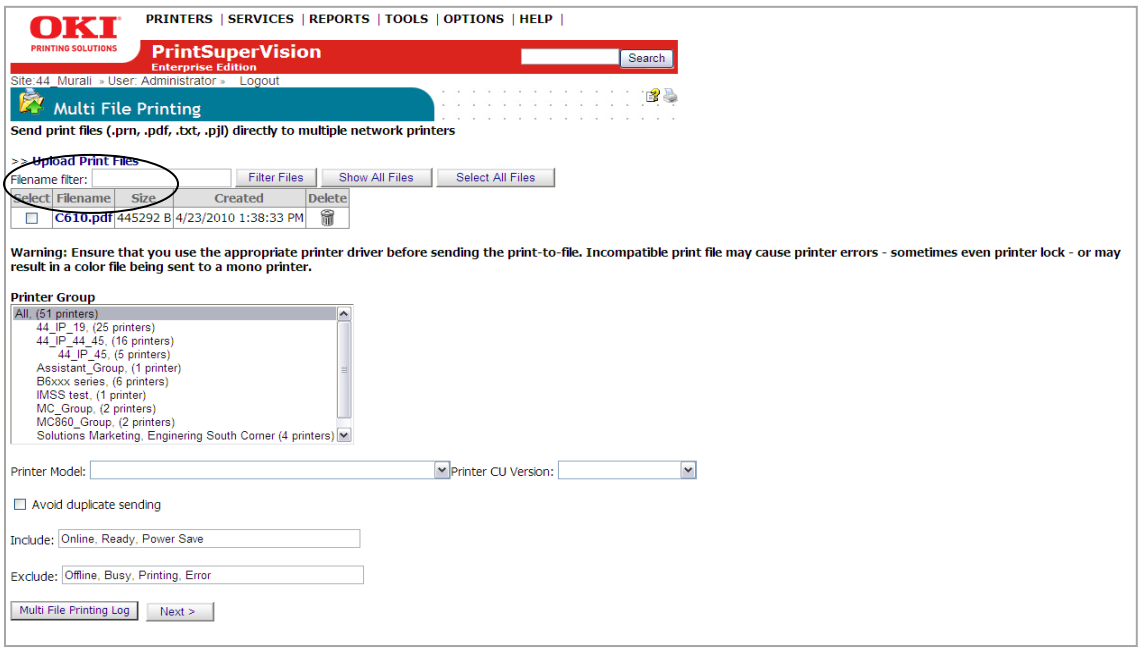
Sending Files / Updating Firmware from PSV

PrintSuperVision can even send files to an Oki device connected to the network. That includes firmware files that can upgrade your Oki devices (depending on whether the device's firmware is upgradeable).

A single device or groups of devices can be upgraded at one time.

To send a file to an Oki device on your network:

1. Select **Tools** from the main menu and **Multi-file Printing** from the drop down box.



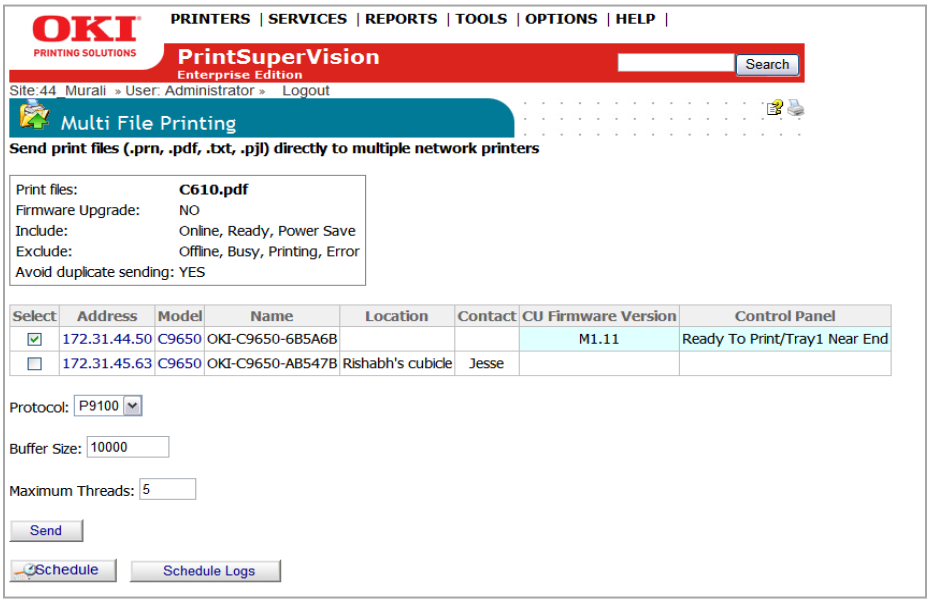
2. Click **Upload Print Files**
3. Click **Browse** to locate any PDF, PRN, TXT, or PJL file
4. Click the **Upload** button
5. Select the desired "group" or All
6. Select the model od device from the drop down box
7. Select the current level of firmware of the target devices, or if you do not know the firmware level, leave this field blank
8. Check the avoid duplicate sending box if desired

Note: during firmware upload and installation the device must not be used by other people and it must be in a Ready state. Therefore by including Online, Ready and Power Save in the Include Field, PSV will check to make sure the device is in one of these states before it uploads and attempts to install the new firmware.

Similarly, PSV checks to make sure the device is not in an Offline, Busy, Printing or Error state when these conditions are included in the Exclude field.

9. Keep the current conditions in the Include and Exclude fields or type in additional conditions to include or exclude.

10. Click **next**



11. Select the devices to upgrade by checking the Select box
12. Select the protocol to communicate with the device (Port 9100 or LPR)
13. Indicate Buffer size – A higher number will generally increase upload speed
14. Indicate number of threads
15. Click **Send** to upload and install the firmware file

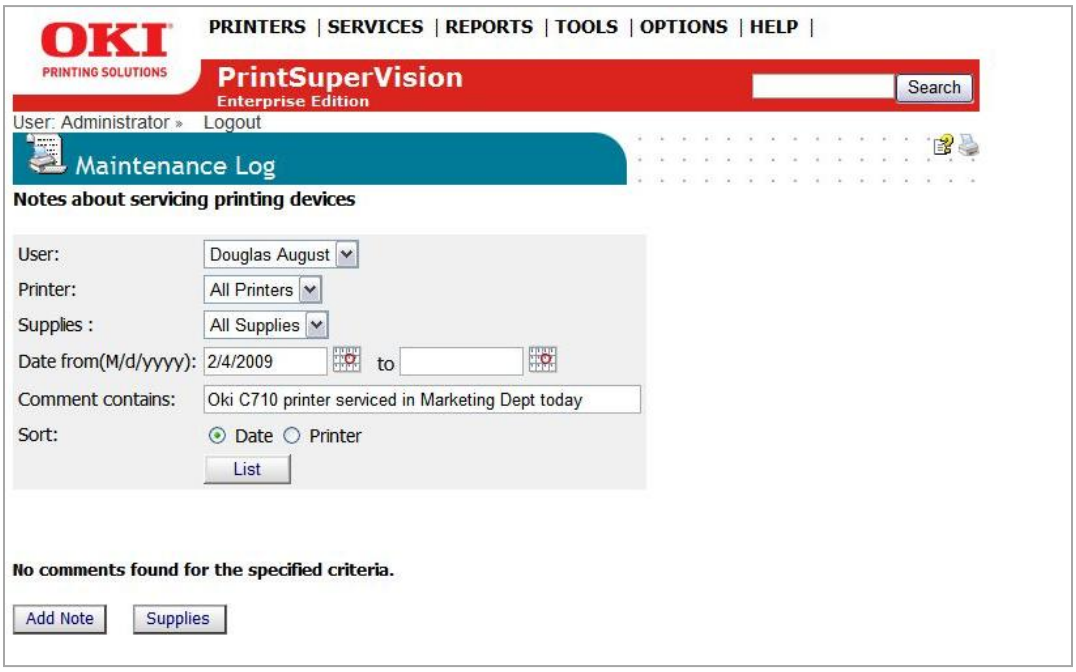
Sending files can also be scheduled when devices are not in use.

1. Click the **Schedule** button to set up a date and time, recurring interval and indicate the recipient of the confirming email.
2. Click **Save**

Creating a Maintenance Log / Managing Supplies Inventory

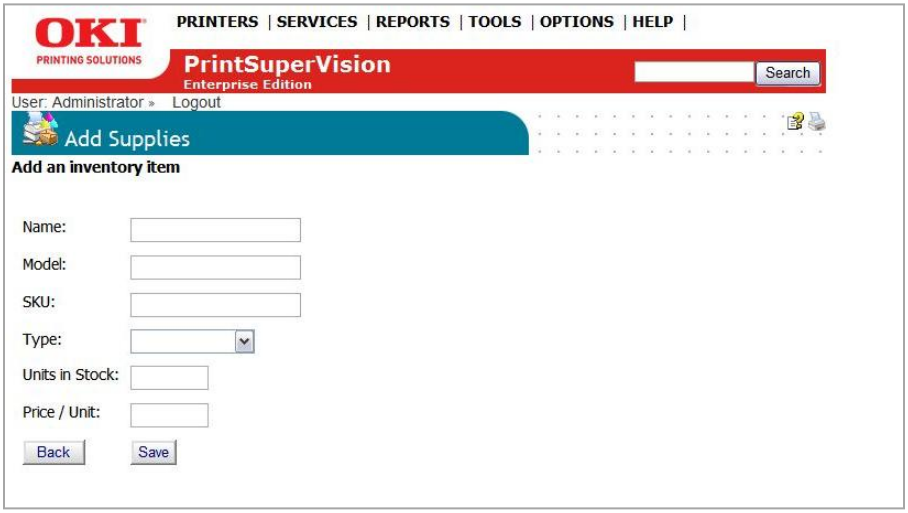
The maintenance Log feature allows you to keep track of services performed on individual devices and acts as tool to help keep track of supply items kept in your inventory including the price you paid for the item. All of the data in this area must be entered by the user.

1. Select **Tools** from the main menu and **Maintenance Log** from the drop down box.



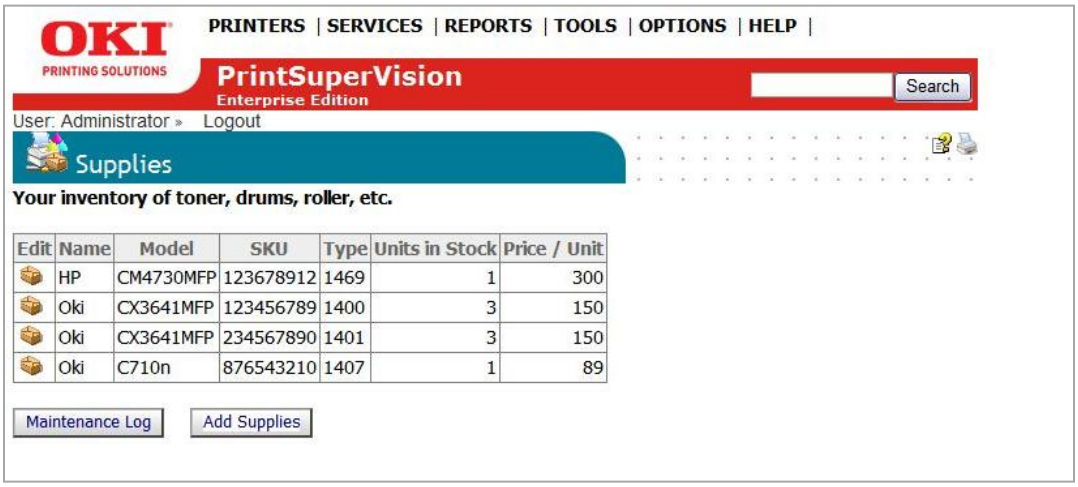
The screen shown above is used for searching for specific supply items and service calls that have been previously entered. Add various supply items and service calls before attempting to generate a List.

2. To add supplies to your electronic storage cabinet, click the **Supplies** button.



3. Enter the Brand of device, model name, SKU of the supply item and select the type of supply from the drop down menu. You can even enter the quantity that you are adding to inventory and price paid for the item.

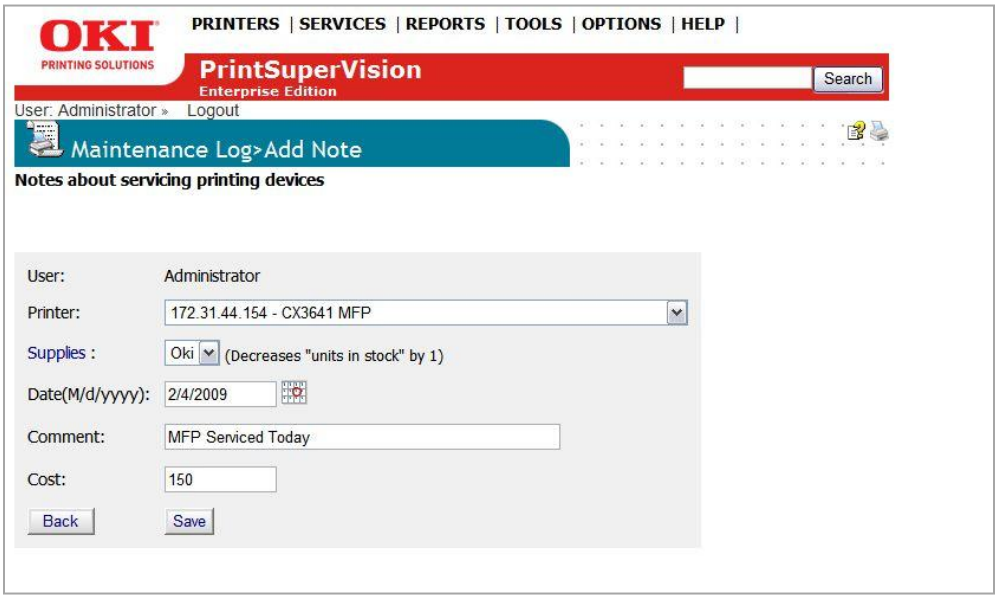
4. Click **Save**



You may return to the electronic storage cabinet at any time to edit the items, reduce the amount of inventory or delete the supply item. Click the brown box icon in the edit column to edit supply items.

To record a service call:

1. Click the **Maintenance Log** button and you will return to the main Maintenance Log screen.
2. Click the **Add Note** Button.

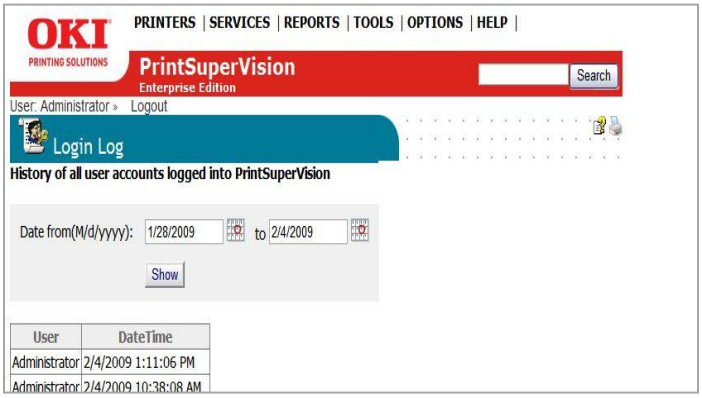


3. Select the appropriate device from the drop down list
4. Enter the date the service occurred, add optional comments
5. Enter the cost of the service
6. Click **Save** and a record of the service call is saved.

Creating a Log-in Log

The login log simply tracks who has logged into the system during a specific time interval.

1. Select **Options** from the main menu and **Login Log** from the drop down box.

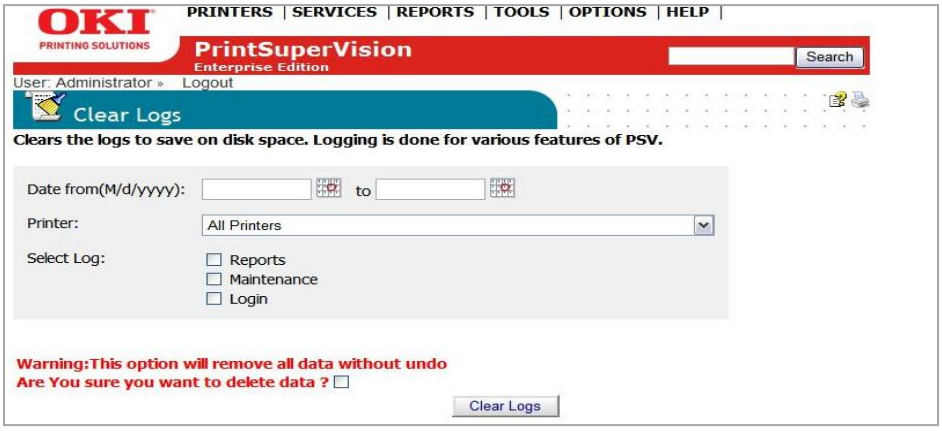


2. Enter the date interval and click **Show**.

Clearing (Deleting) Logs

To save disk space you may choose to clear (delete) all report logs, maintenance logs and login logs.

1. Select **Options** from the main menu and **Clear Logs** from the drop down box.



2. Enter the date range
3. Choose a specific device (or all devices)
4. Indicate the type of log to delete.
5. Click the "Are you sure you want to delete data" warning check box
6. Click the **Clear Logs** button to permanently delete

Public Web Services

PrintSupervision offers developers sample test applications and function calls to integrate PSV with other Enterprise applications.

1. Select **Services** from the main menu and **Public Web Services** from the drop down box.

Six samples test applications are provided and explained below:

- AboutVersion: Shows the PSV version number
- Address2 printers: Provides the details of a specific device
- GetProperties: Shows device properties
- Printers: Provides a list of the devices along with device details
- Status Codes: Provides a list of Alert Status Codes, their descriptions, and their severity level
- StatusSeverityNames : Shows available status name choices such as OK, Info, Warning, Error