

Abacus

PRINT COST RECOVERY SYSTEM

Abacus Copy Tracking - Quick Start Guide

Ricoh Embedded Software Architecture

Disclaimer This guide has been validated and reviewed for accuracy. The instructions and descriptions it contains are accurate for installation and setup of Abacus' application integration on Ricoh Embedded Software Architecture capable devices. However, succeeding versions and guides are subject to change without notice. MirrorPlus Technologies Inc. assumes no liability for damages incurred directly or indirectly from errors, omissions or discrepancies between the software and the guide.

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About This Guide

Purpose of this Guide



This user guide is designed to provide user-friendly, detailed instructions for performing all tasks associated with using the **Abacus** integration on Ricoh Embedded Software Architecture capable devices.

Who should read this Guide

This document helps the users to integrate Abacus on Ricoh ESA capable devices.

Typographical Conventions

Before you start, it is important to understand the typographical conventions used in this guide.

This	Represents
Bold	Menu, any option on the menu, radio button, check box, command button or a link.
	A note, providing additional information about a certain topic.
	An important message not to be ignored.

How to Get in Touch

The following section provides information on how to obtain support for documentation and software.

Documentation Support

For any questions, comments or suggestions on the documentation, contact us by email at abacussupport@mirrorplus.com

Technical Support

If you have any problems, questions or suggestions regarding this software, email us at abacussupport@mirrorplus.com. While contacting technical support, please have the following information ready:

- Abacus version
- The operating system
- A description of the steps leading to the problem
- The exact message that appeared when the problem occurred, or any other message that appeared on your screen

For additional information:

Please contact: MirrorPlus Technologies Inc via email, and / or phone:

Email: abacussupport@mirrorplus.com

Phone: 1-877 TRY ARC1 (Option 2 for Abacus Support)

www.mirrorplus.com

Overview of Abacus Copy Tracking

Abacus Copy Tracking is a software solution to track and bill all the off-the-glass copying activities.

The copy tracking process is as follows:

1. Abacus Copy Tracking application is installed in the Copier.
2. When a user walks to copier to copy, he needs to fill in the credentials / PIN number information in the Abacus Copy Tracking application.
3. The information is submitted to the IIS in the **Abacus Server**.
4. IIS updates the activity into the **Abacus Database**.

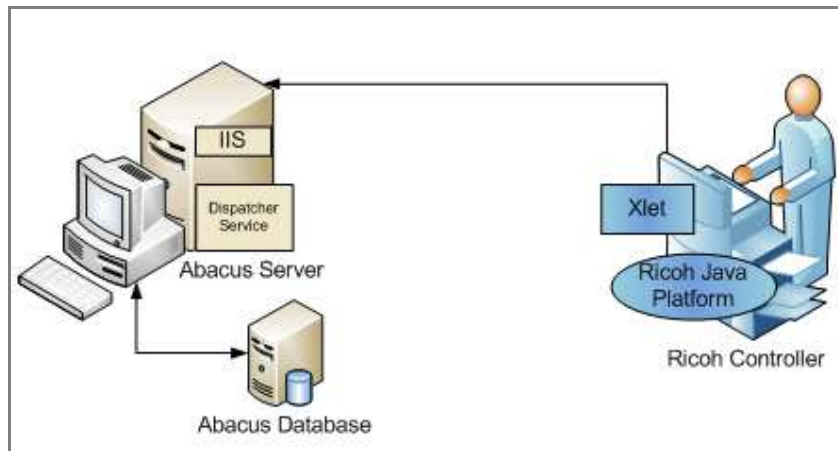
The current ESA integration is designed to lock the user from using any of the operations until he is authenticated.

Abacus – Ricoh ESA Integration Overview

This section gives you an overview of all the Abacus software components required for Abacus integration with Ricoh Embedded Software Architecture (ESA) or Java platform.

Abacus provides you the Xlet application which is installed within the Ricoh ESA device.

The following diagram illustrates the Abacus integration with Ricoh ESA capable devices.



Integration

Abacus Server: The Abacus Server is the base system to the entire Abacus Print Cost Recovery system. This is installed and configured before beginning.

Abacus Database: The Abacus Database stores all the activities and configuration information. Abacus Database is based on SQL Server.

Ricoh Controller: The Ricoh Java Platform (ESA) must be installed and running on the Ricoh Controller.

Xlet: The Xlet provides the user interface for users to enter the user, project and billing information.

Before you Begin

A Microsoft VM image is supplied with Abacus Server running. Make sure that a proper IP is assigned to it and also make sure that the windows firewall is **turned off** on it.

Most of the defaults are already configured.

On the Copier ensure that:

- Auto Start option is set for the application
- Function Preference is set to Java
- Configure timeouts to change focus to the xlet application

Installation of Abacus Java Application - Xlet

This section explains the installation and un-installation of Abacus Java application - Xlet. Abacus Xlet is a graphical user interface that displays on Ricoh device panels for the user to fill in the billing information.



It is recommended to install Abacus Java Application with an authorized Ricoh technician.

Installing Xlet on Java 1.x Devices

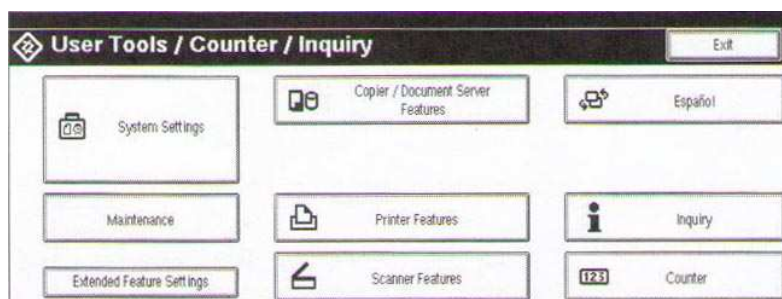
Java 1.x Devices

A complete list of the Java 1.x Ricoh devices that Abacus supports is provided in the Appendix. All these devices require Java Card Type B provided by Ricoh.

The Abacus copy tracking application installation requires that the Ricoh Java SD™ card has already been installed by an authorized Ricoh technician. Java 1.x requires that the Java runtime engines are installed manually through Extended Feature Settings. The Java 1.x implementation has a platform to run Xlets. At this stage, check the Java 1.x platform on the device panel.

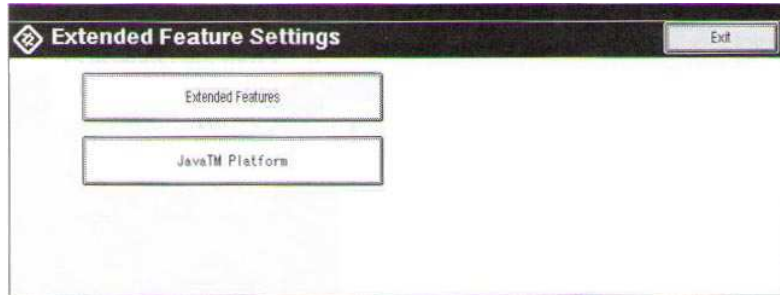
To check Java 1.x platform on Ricoh device panel

1. Select **User Tools / Counter** button on the device.



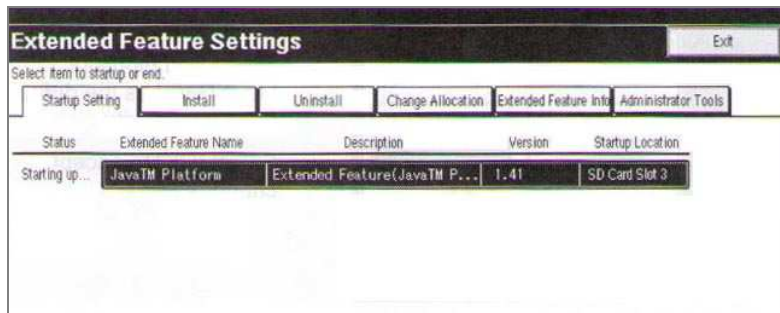
User Tools / Counter / Inquiry

2. Click **Extended Features Settings**.



Extended Feature Settings

3. Select **Extended Features**.



Extended Feature Settings

4. Click **Startup Setting** tab. Under the **Extended Feature Name** column, you should find both Java TM Platform and Java TM SVR Platform as loaded features.
5. The status for both features must be displayed as **Starting up...**



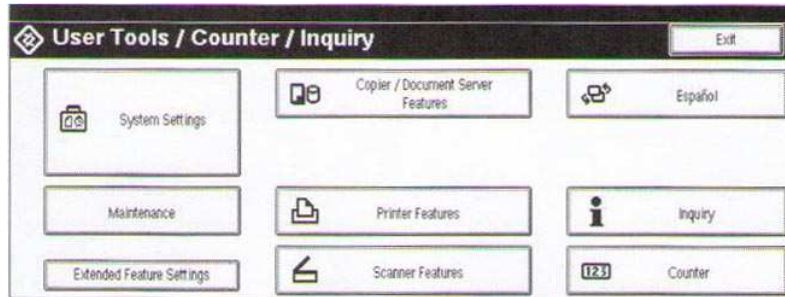
If the Java platforms are not detected as extended features, the Ricoh device is not ready to install Abacus Java Application. Contact your Ricoh technician.

Enabling Java 1.x Platform as Default Function Priority

The next step is to manually enable Java Platform as the default function priority on the Ricoh device panel. This ensures the Abacus Java application is launched at the system startup and locks out the device panel.

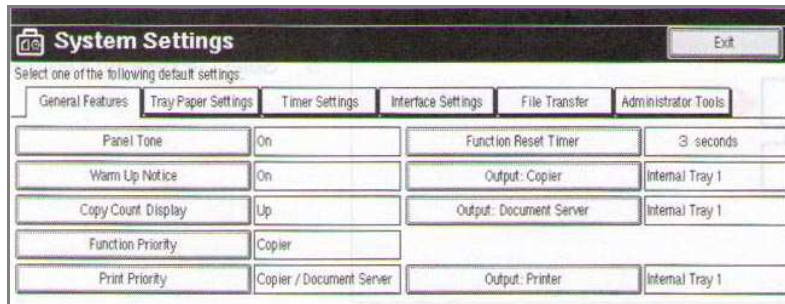
To set Java as default function priority:

1. Select **User Tools / Counter** button on the device.



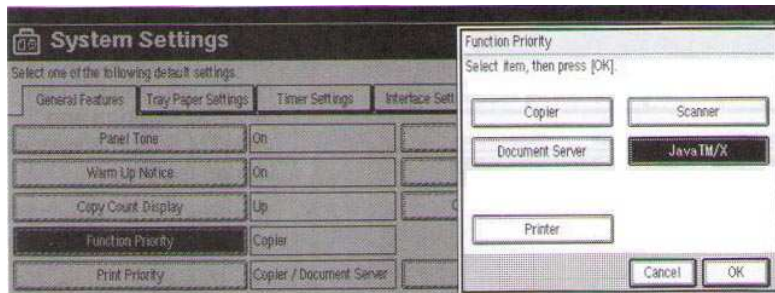
User Tools / Counter / Inquiry

2. Click **System Settings**.



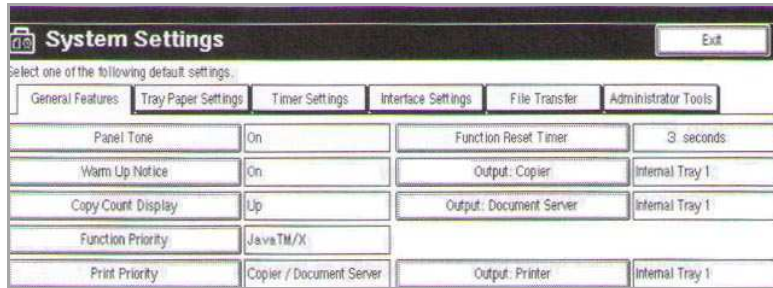
System Settings

3. Click **General Features** tab and then select **Function Priority**.



Function Priority

4. Select to highlight **Java TM/X** and then click **OK** to accept changes.

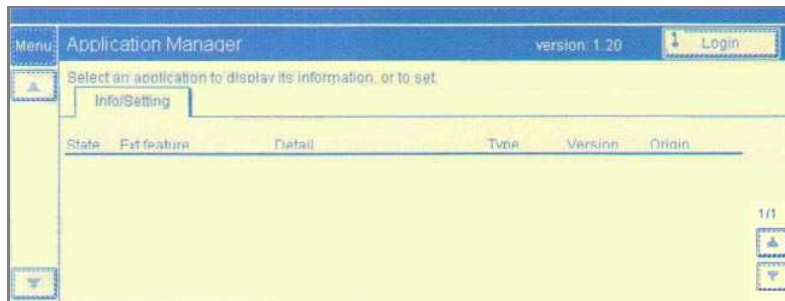


System Settings

- Note the **Function Priority** is now configured to **Java TM/X**. Click **Exit** to close **System Settings**.

Xlet Installation on Java 1.x Devices

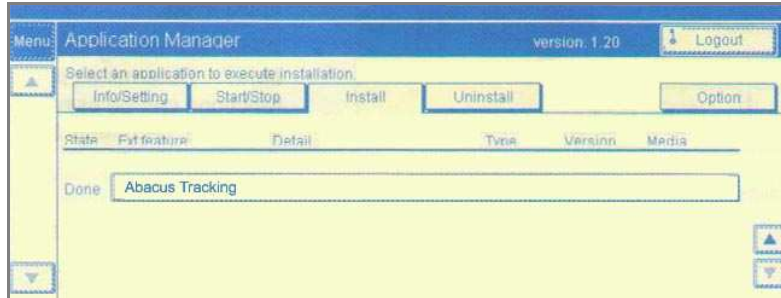
- Open Java Application Manager.
- Click **Login** and fill the credentials.



Application Manager - Login

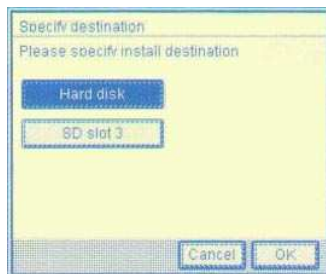
- Click **Install** tab.

4. Scroll down and select Abacus Tracking application.



Install - Abacus Tracking

5. Click **Hard Disk** to specify the installation destination.



Specify Destination

6. Click **OK** to accept the changes.
7. Click **Yes** for the **Auto start** option and then click **OK** to confirm the changes



Ext. feature info



Auto start option will start Abacus application upon boot up of the device.

Un-installing Abacus Xlet on Java 1.x Devices

It is recommended that you perform the un-installation with assistance of an authorized Ricoh technician.

To remove Abacus Xlet on Java 1.x devices:

1. Logon to Java Application Manager.
2. Click **Start/Stop** tab.
3. Select the **Abacus Tracking** application from the list.
4. Click **Execute** to stop the application.
5. Click **Uninstall** tab.
6. Select the **Abacus Tracking** application from the list.
7. Click **OK** to remove the application.
8. Reset the device to fully un-install the application.

Installing Xlet on Java 2.x Devices

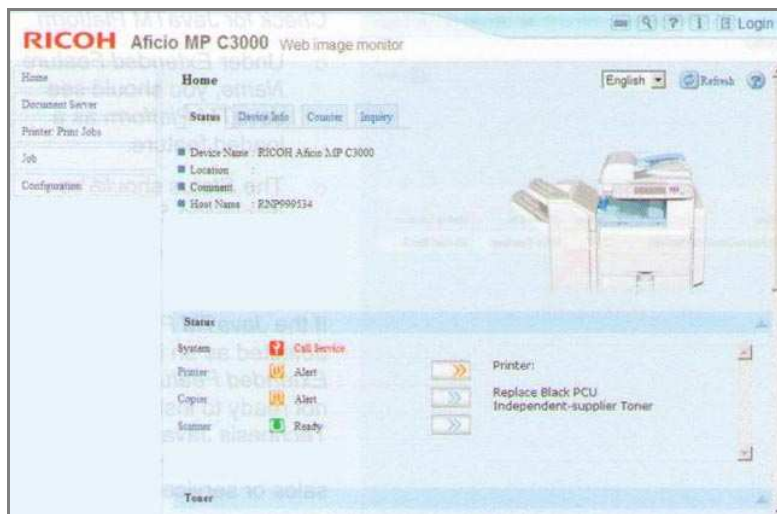
Java 2.x Devices

A complete list of the Java 2.x Ricoh devices that Abacus supports is provided in the Appendix. All these devices require Java Card Type C provided by Ricoh.

The Abacus copy tracking application installation requires that the Ricoh Java SD™ card has already been installed by an authorized Ricoh technician. Java 2.x requires that the Java runtime engines are installed. You can verify Java 2.x Platform remotely through a web browser.

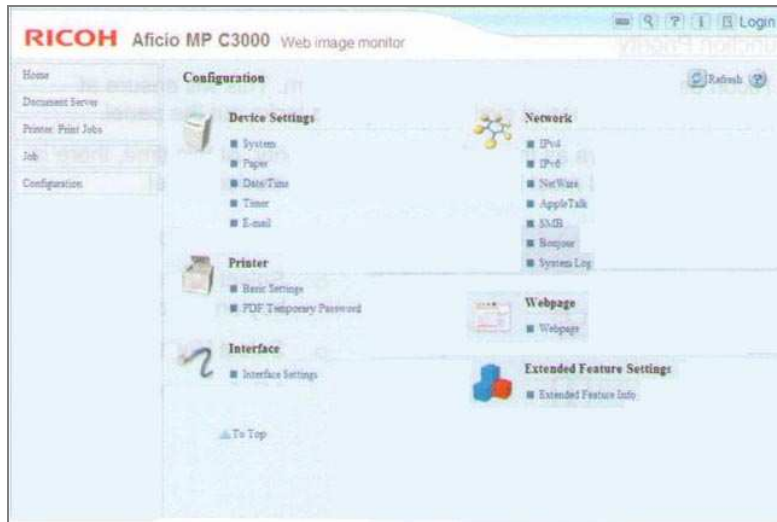
To check Java 2.x platform on Ricoh device panel

1. Open **Ricoh Web Image Monitor** and enter the following URL:
`http://<IP_Address>`, where `<IP_Address>` is the IP address of your Ricoh MFP.
2. Click **Configuration** on the left panel.



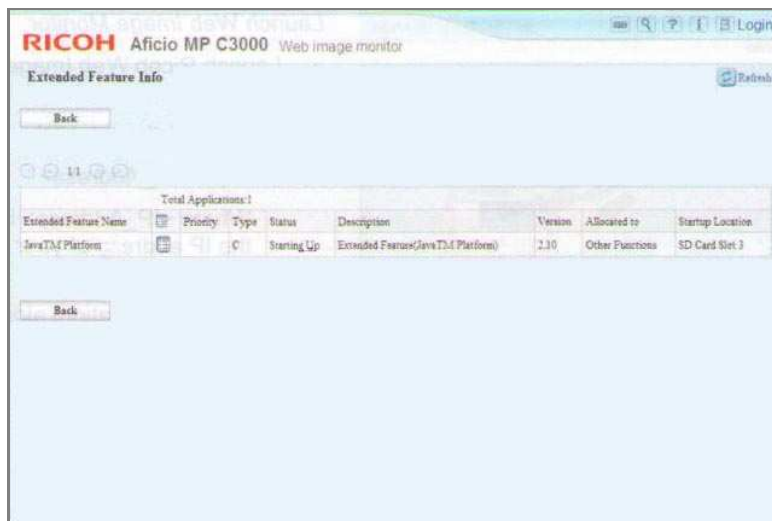
Web Image Monitor - Configuration

3. Click **Extended Feature Info** under the **Extended Feature Settings** section.



Extended Feature Info

- Under the **Extended Feature Name** column, you should find Java TM Platform as a loaded feature.



Extended Feature Settings

- The status must be displayed as **Starting up...**



If the Java™ Platform is not detected as an extended feature, the Ricoh device is not ready to install Abacus Java Application. Contact your Ricoh technician.

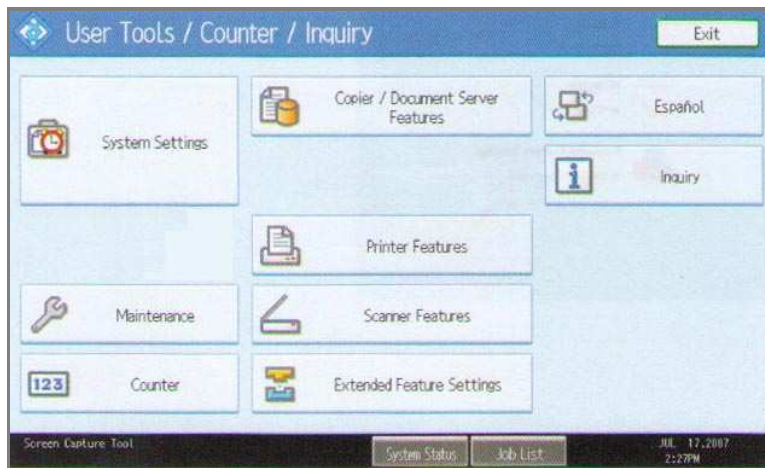
6. Click **Back** to exit.

Enabling Java 2.x Platform as Default Function Priority

The next step is to manually enable Java Platform as the default function priority on the Ricoh device panel. This ensures the Abacus Java application is launched at the system startup and locks out the device panel.

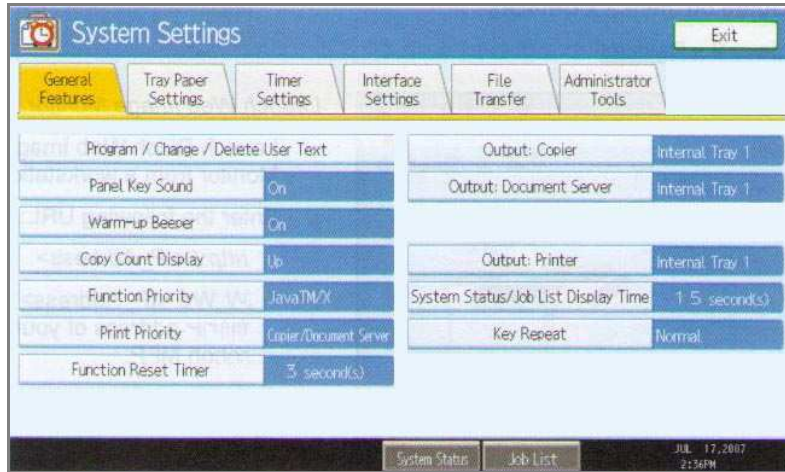
To set Java as default function priority:

1. Select **User Tools / Counter** button on the device.



User Tools / Counter / Inquiry

2. Click **System Settings**.



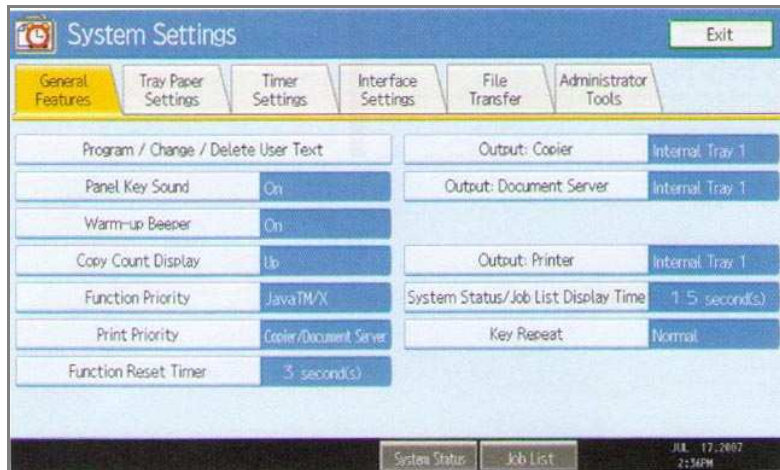
System Settings

3. Click **General Features** tab and then select **Function Priority**.



Function Priority

4. Select to highlight **Java TM/X** and then click **OK** to accept changes.

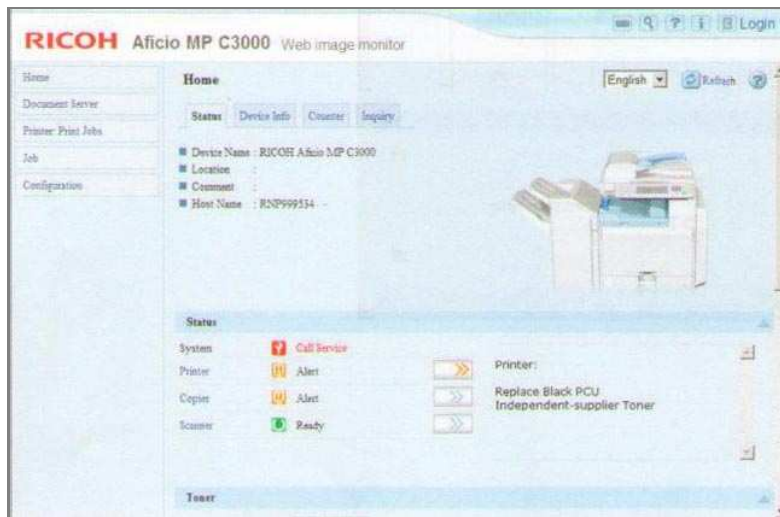


System Settings

5. Note the **Function Priority** is now configured to **Java TM/X**. Click **Exit** to close **System Settings**.

Xlet Installation on Java 2.x Devices

1. Open Ricoh Web Image Monitor and enter the following URL:
http://<IP_Address>, where IP_Address is the IP address of your Ricoh MFP.



Web Image Monitor

2. Click **Login** in the top right corner.



Web Image Monitor - Login

3. Enter appropriate credentials and click **Login**.



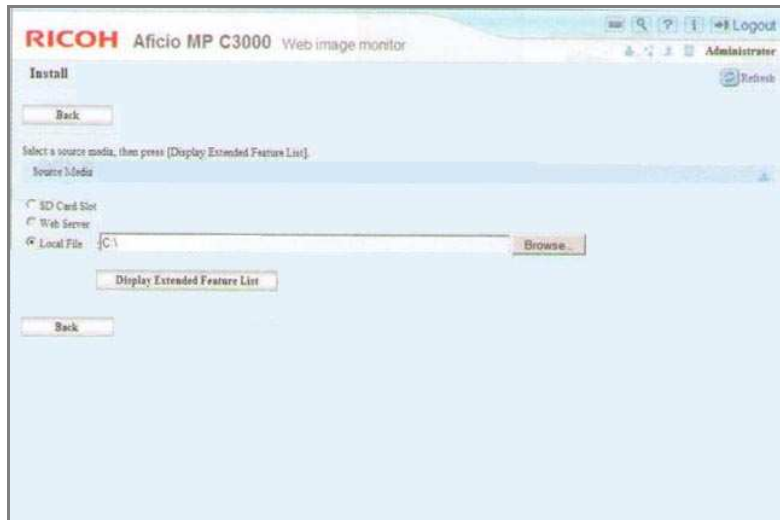
Web Image Monitor - Home

4. Click **Configuration** on the left panel.
5. Scroll down and click **Install** under the **Extended Feature Settings** section.



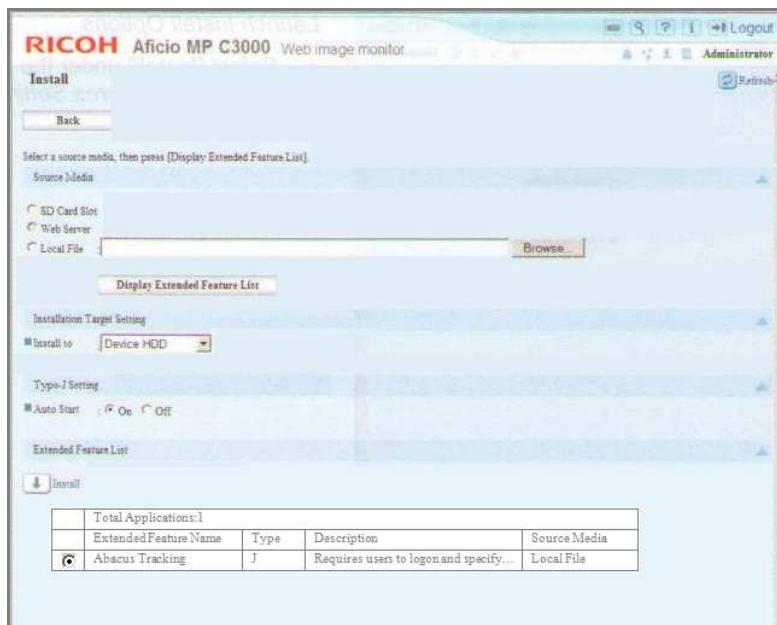
Extended Feature Settings

- Click **Local File** option under the **Source Media** section and then click **Browse** to look through the provided Abacus java application zip file - **34086656.zip**.



Source Media

- Click **Display Extended Feature List**.
- Under the **Installation Target Setting** section, select the **Install to** option as **Device HDD** from the drop-down list.



Installation options

- Under the **Type J-Setting** section, click **Auto Start** option as **On**.



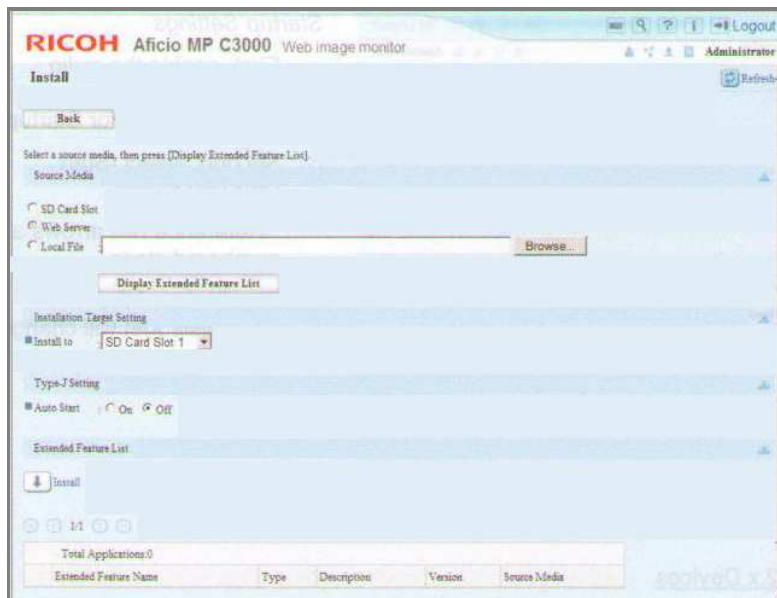
Auto start option will start Abacus application upon boot up of the device.

- Select the **Abacus Tracking** option for installation and then click **Install**.



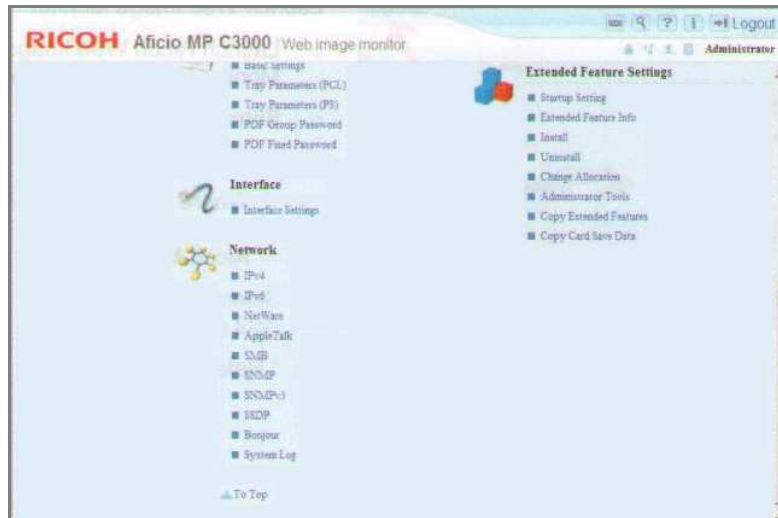
Confirm Installation

11. Verify **Abacus Tracking** is the selected **Extended Feature** to install and click **OK**.



Exit Installation

12. Click **Back** to exit the window.



Extended Feature Settings

13. Click **Startup Setting** under the **Extended Feature Settings** section.
14. Click **Abacus Tracking** option and then click **Start Up/Stop**. The status of Abacus Tracking shows **Starting Up**.

Un-installing Abacus Xlet on Java 2.x Devices

To un-install Abacus Xlet on Java 2.x devices:

1. Logon to Web Image Monitor.
2. Click **Configuration** on the left panel.
3. Click **Uninstall** under the **Extended Feature Settings** section.
4. Click **Abacus Tracking** option and then click **Uninstall**.
5. Click **OK** to confirm removal while extended feature is starting up.
6. Click **OK** to confirm removal.
7. Verify Abacus Xlet is not listed as an installed extended feature and click **Back** button.
8. The device is reset to fully un-install the application. Click **Reset Device**.
9. Click **OK** to confirm the reset of the device. This confirms the reset of the device and un-installation of Abacus Xlet.

Using the Abacus Copy Tracking Application

Copy Tracking Modes:

Abacus copy tracking allows users to bill jobs directly on the copier panel or at the user's desktop.

Billing at the copier panel: Users pre-bill the copying before using the device. Abacus Copy Tracking allows the user to logon and bill the activities to relevant projects.

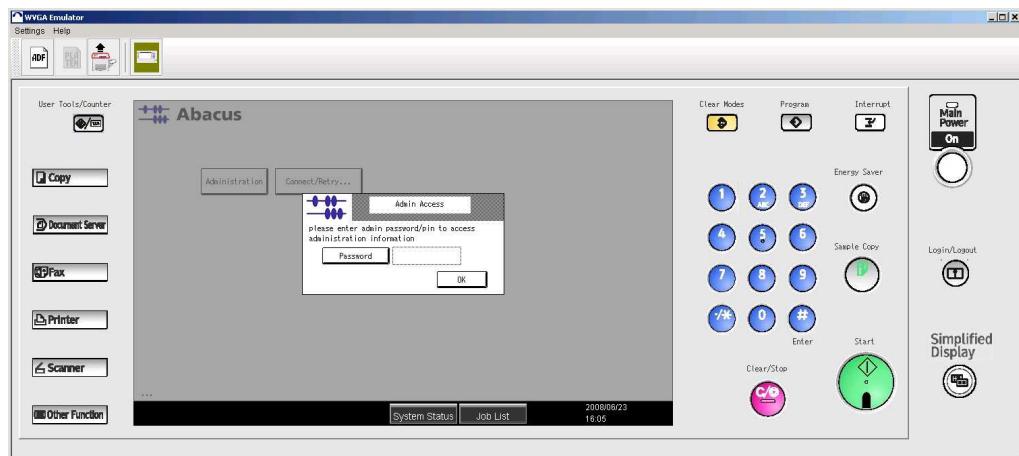
Billing at the user's desktop: Users logon to the copier and complete the copying activities. Abacus Copy Tracking delivers the billing popup to the user's desktop for billing. Users bill the activities to relevant projects.

The first time when the xlet is run, we need to configure the server location.

1. It prompts to enter password / PIN number to change the administrator settings.

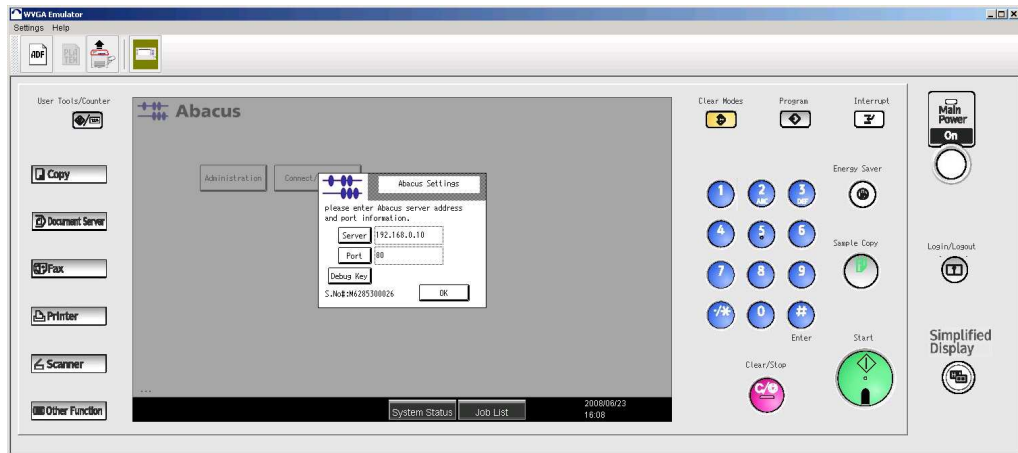


The default password is 00000000.



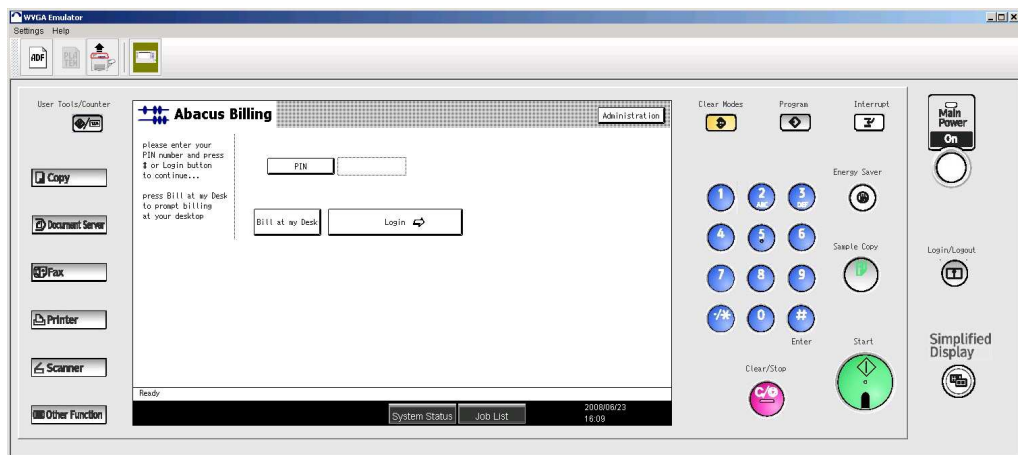
Admin access password window

2. Enter the password and click **OK**.



Abacus Settings window

3. Enter the Abacus Server IP address and the Port number in the text box and click **OK**.



PIN number window

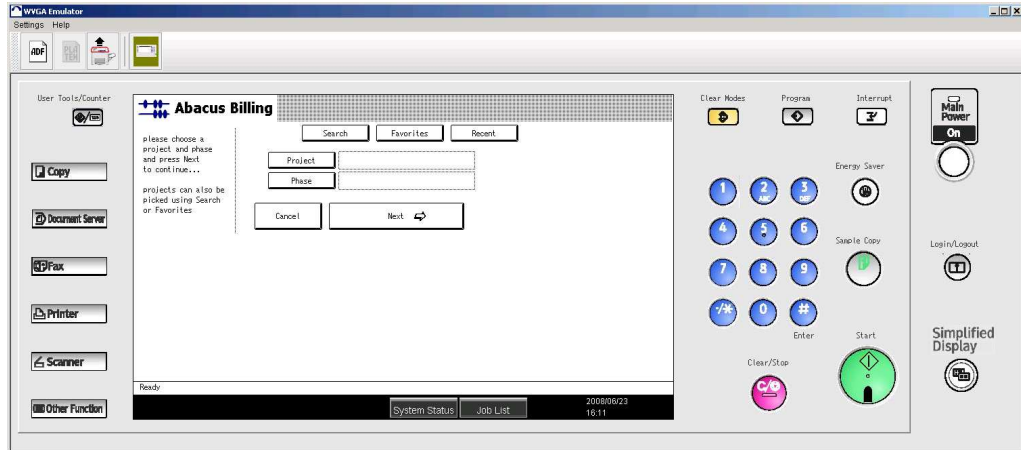
4. Enter the PIN number. For example, ABC123 and click **Login**.



Click Bill at my Desk to prompt billing pop-up at your desktop.

5. The following screen changes depending on the configuration settings in the Abacus Manager.

While adding a device in Abacus Manager, based on Project, Phase, BillCode, and Notes check boxes selected, appropriate fields are displayed.

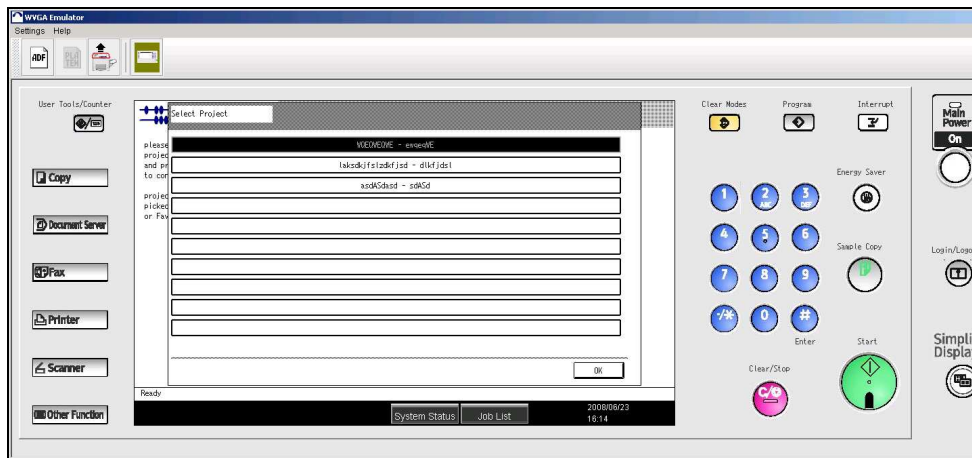


Project and Phase selection window

- Click **Project** to select a project. The **Select Project** window appears.



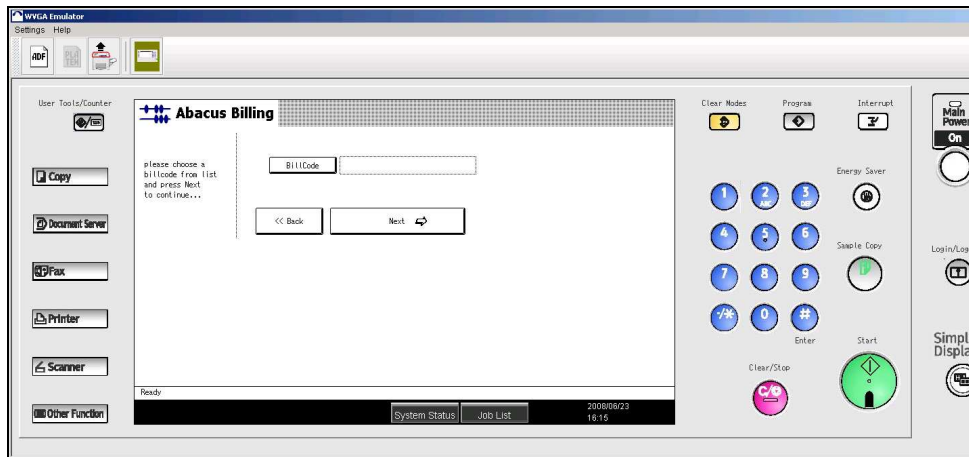
You can also select projects using Search or Favorites.



Select Project window

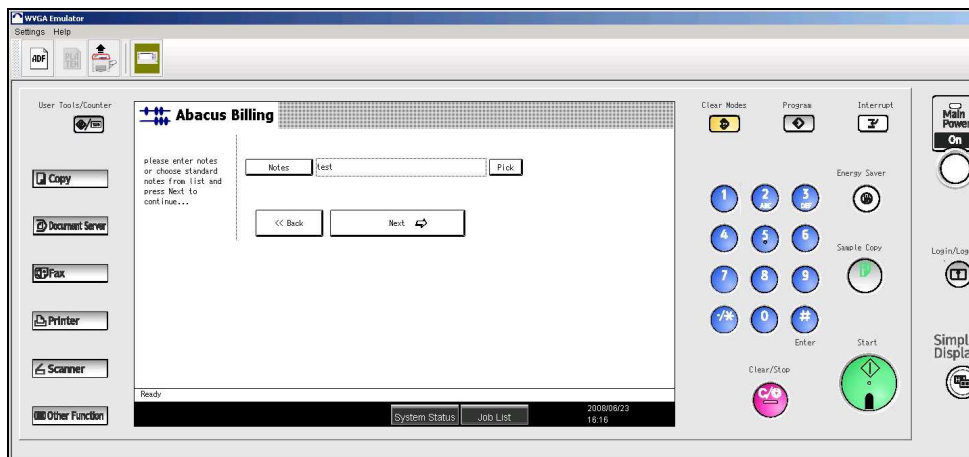
- Select a project from the list and click **OK**. That particular project is populated in the text box.

- Similarly select a project **Phase** and click **Next**.



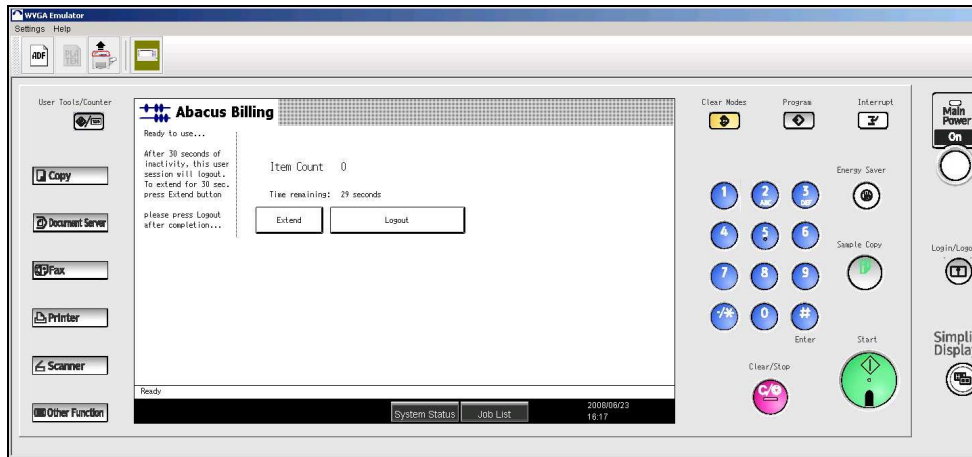
Billing Code selection window

- Select the **Bill Code** and click **Next**.



Notes window

- Enter your comments in the **Notes** text box or click **Pick** to choose standard notes from the list and click **Next** to continue.



Ready to use window

11. You can start making copies. The **Item Count** increments indicating the number of copies.
12. After the time limit of 30 seconds the session is automatically completed. To extend the session for 30 seconds, click **Extend**.
13. After completion click **Logout**. The transaction is recorded in Abacus Manager.

Adding a New Copier using Abacus Manager

Before you start copy tracking, the copier needs to be added using Abacus Manager.

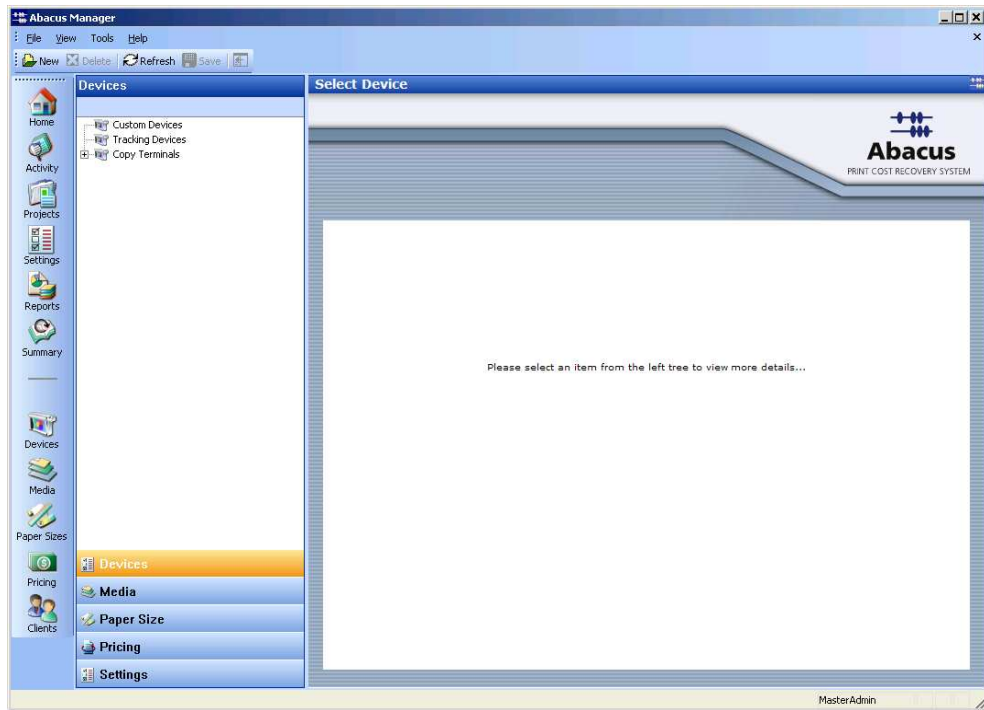
To add a new copier:

1. Open **Abacus Manager** application.
(Start > Programs > Abacus > Manager)



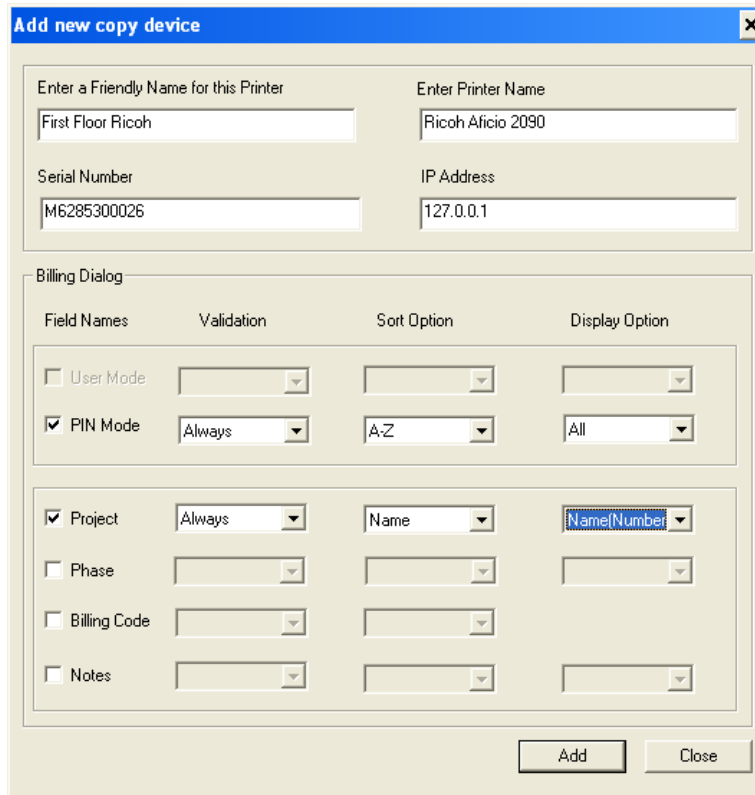
Abacus Manager application

2. Click on **Devices**.



Devices tree

3. Right-click on **Copy Terminals** and click **Add Copy Terminal**. The **Add new copier device** window appears.



Field Names	Validation	Sort Option	Display Option
<input type="checkbox"/> User Mode	[Dropdown]	[Dropdown]	[Dropdown]
<input checked="" type="checkbox"/> PIN Mode	Always	A-Z	All
<input checked="" type="checkbox"/> Project	Always	Name	Name Number
<input type="checkbox"/> Phase	[Dropdown]	[Dropdown]	[Dropdown]
<input type="checkbox"/> Billing Code	[Dropdown]	[Dropdown]	[Dropdown]
<input type="checkbox"/> Notes	[Dropdown]	[Dropdown]	[Dropdown]

Buttons: Add, Close

Add new copier device window

Enter a Friendly Name for this Printer: Enter a friendly name to easily identify the device.

Printer Name: Type the printer name. For example, Ricoh Aficio 2090

Machine Serial Number: Enter the serial number of the copier device.

IP Address: Enter the IP address of copier device.

Billing Dialog

Each field has the following options:

Check box – You can enable the field by selecting the check box next to the field. If you select a field, that particular field is displayed on the billing dialog.

Validation – This field indicates how the billing dialog validates a field. The following are the validation options:

- **Always** – Selecting this indicates validation is mandatory for all activities (all print / copy / fax / scan jobs)
- **Optional** – Selecting this indicates validation is not mandatory.

Sort Option – This field indicates how you want to arrange the data.

- **ASC** – Selecting this indicates the data is arranged in ascending order.
- **DSC** – Selecting this indicates the data is arranged in descending order.

Display Option – This field indicates how the data is displayed.

- **All** – Selecting this indicates the data is displayed to all the users in the Abacus database.
- **All-Abacus Users** – Selecting this indicates the data is displayed to all the users except default Abacus users such as Admin, Master Admin users.

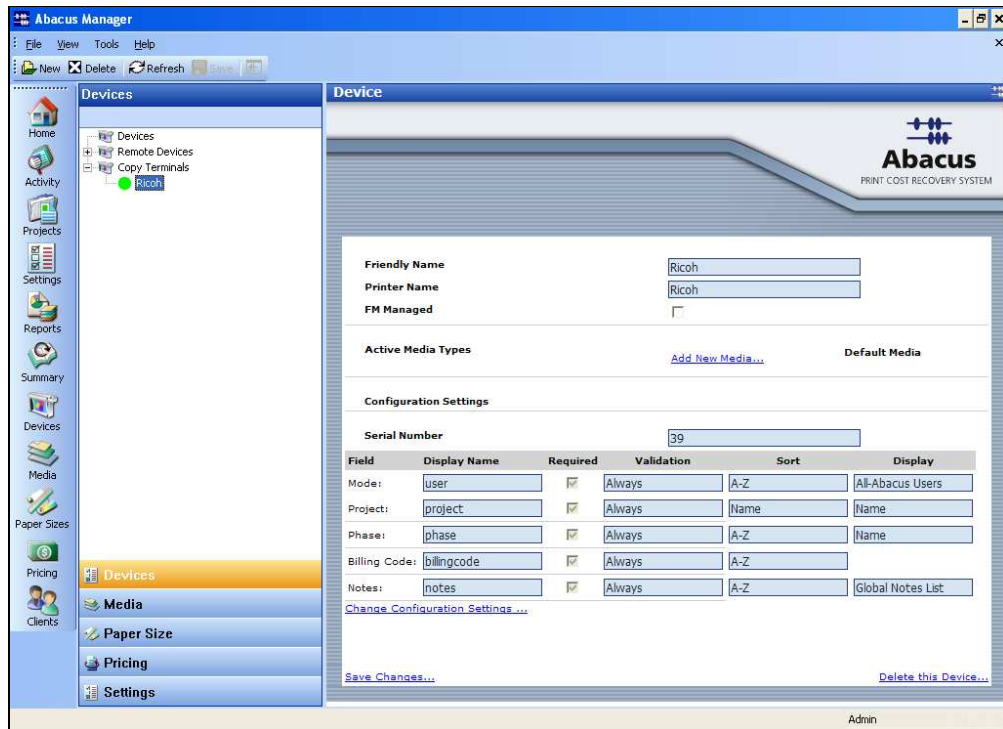
4. Select one of the modes. You can either select **User Mode** or **PIN Mode**.

In the **User Mode**, the user is validated based on user name and password. The user's names will be displayed in a drop-down list and password entered by user will be validated against the user name.

In the **PIN Mode**, the user is validated based on the PIN numbers that they enter.

5. The optional fields include, configuring projects, phase, billing code and notes. You can select as many fields as you require.
6. For configuring project, select the **Project** check box.
Select the **Validation** option.
Select the **Sort Option**.
Select the **Display Option**. This indicates how you want to display the project Name or Number or Name (Number) or Number (Name).
7. For configuring project phase, select the **Phase** check box.
Select the **Validation** option.
Select the **Sort Option**.
Select the **Display Option**. This indicates how you want to display the phase Name or Description or Name (Description) or Description (Name).
8. For configuring billing codes, select the **Billing Code** check box.
Select the **Validation** option.
Select the **Sort Option**.
9. For configuring notes, select the **Notes** check box.
Select the **Validation** option.
Select the **Sort Option**.
Select the **Display Option**. This indicates how you want to display the comments section. If you select **Global Notes List**, notes field is displayed as a drop-down list. Users can only select notes from the list. If you select **Text Field**, notes field is displayed as a text box. Users can enter their comments in the text box.

10. Click **Add**. The new device is added under **Copy Terminals**.
11. Click **Close** to close the window.
12. Click the newly added device under **Copy Terminals** to confirm the configuration settings.



Newly added device and configuration settings

13. To modify the configuration settings, click **Change Configuration Settings...** hyperlink.
To confirm the changes, click **Save changes...** hyperlink.
To remove the device, click **Delete this Device...** hyperlink.