PrintMIB
Meter Read Key™
A Management Information Based Meter Read Solution

PrintMIB, LLC
www.printmib.com
1.866.722.6642
sales@printmib.com

General Overview

PrintMIB™ is a print device collection package which allows any user, technical or not, to collect **accurate** print device audits. PrintMIB™ can be run from any Windows computer or laptop (XP, 2000, 2003, Vista) with a USB port that is connected directly to a network using TCP/IP. PrintMIB™ does not require any software to be installed on the computer running the scans. PrintMIB™ has two main functions. First is the ability to accurately get print device information (Serial, Manufacturer, Model, IP Address, Mac Address, numerous Page Counts, miscellaneous supply levels). The Second function is to build an Asset Management history based on client, location and/or device. PrintMIB™ gives office managers and support technicians the ability to greatly reduce the time normally required to perform these tasks into mere minutes.

PrintMIB™ employs a technology known as Simple Network Management Protocol or SNMP in order to query networked devices, including print devices. Specific information about the device is embedded in that device's permanent memory by the manufac-turer. Since implementing SNMP is not mandatory, some hardware manufacturers provide no or very little information. This is most common in older devices. PrintMIB™ uses a multiple query system in order to increase the odds

of getting a complete response from every device, but some devices will simply not respond, and others will return little more than a page count.

The only information gathered by the PrintMIB Meter Read Key™ is that which is found on the print devices which are scanned, and client information specifically entered by the user into the PrintMIB™ database. None of the information collected by the PrintMIB Meter Read Key™ is ever reported or transmitted to PrintMIB LLC, or any other person or persons.

PrintMIB Meter Read Key™

Monitor any networked print device from any desktop.

PrintMIB™ Key advantages:

- Accurate site assessment scans in less than a minute
- Thorough reports
- Straightforward, easy to use interface
- No software installation or special hardware requirements
- Unlimited scans for one price...no recurring monthly fees
- Historical data collection for reporting
- No User Interference
- No walking around to all the print devices
- More accurate meter reads
- No Delay in receiving results
- Integration through popular accounting & business software
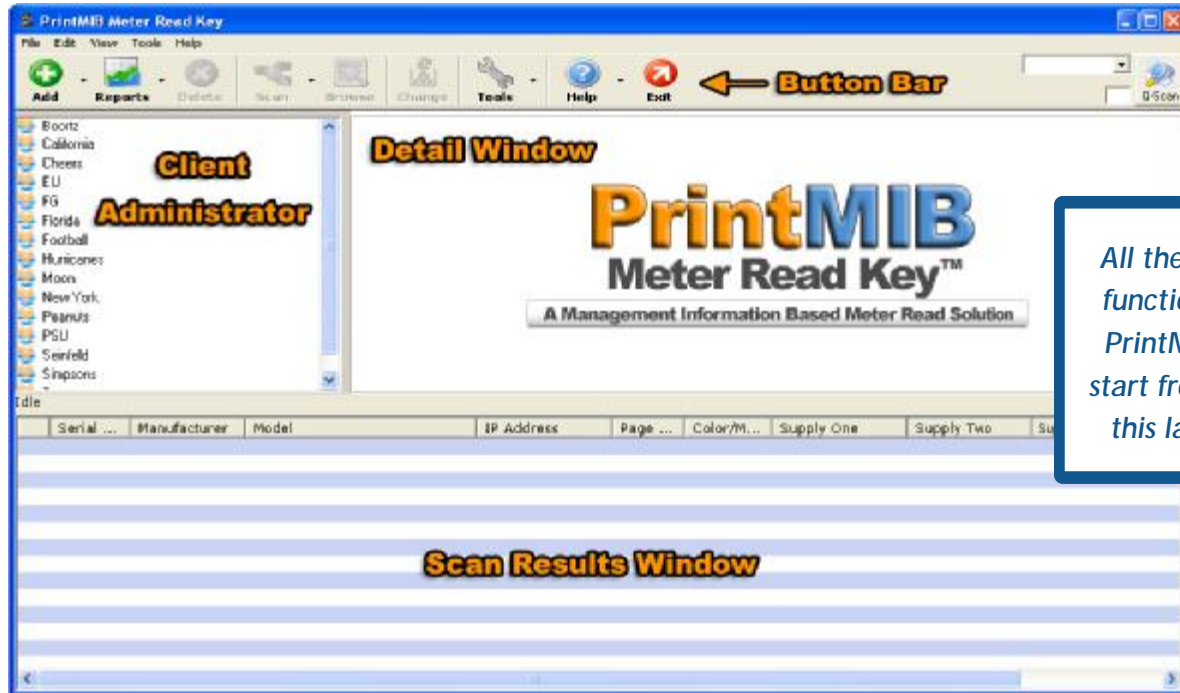- Ability to scan multiple IP address ranges

PrintMIB™ Collects:

- Serial Number
- Manufacturer
- Model
- IP Address
- MAC Address
- Multiple Page Counts (mono, copy, fax, scan, etc.)
- Color/Mono Print Device Type
- Supplies Part Numbers & Percentage of Toner Life Left
- Console Screen Message

Manufacturers Supported

- Brother
- Canon
- Dell
- Epson
- Fujitsu
- Gestetner
- Hewlett Packard
- Hitachi
- IBM
- Konica-Minolta
- Kyocera-Mita
- Lanier

- Lexmark
- OKI Data
- Panasonic
- QMS
- Ricoh
- Samsung
- Savin
- Sharp
- Source Technologies
- Tektronix
- Toshiba
- Xerox

Layout / Main Program Functions

All the main functions of PrintMIB™ start from the this layout

The main screen is divided into 4 sections:

The Button Bar – This is where the main functions of PrintMIB™ are triggered. Some of the buttons have multiple options found by clicking on their respective pull-down.

The Detail Window – The Detail Window displays information from the database about each client and/or location in the database. It will display as much or as little information as the user chooses to enter.

The Client Administrator – Client and Locations are maintained here. There is no limit on the number of clients and unlimited Locations are supported for each Client. The number of scans performed shows after the Location in parenthesis
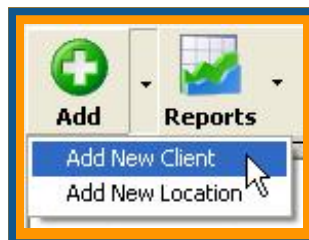
The Scan Results Window – The Scan Results Window is where the results of a scan will be displayed. Historical scans can also be loaded into the Scan Results Window.

Asset Management

Add a New Client

Historical scan data is organized in PrintMIB™ by setting up a hierarchal tree structure with Clients and Locations. Locations can have unlimited IP address ranges. Clients have one or many Locations and Locations have one or many print devices. Using Clients and Locations in this manner provide the ability to quickly and easily store multiple site assessments.

Stored scans can be opened from the Client Administrator for viewing and are also used in doing comparative analysis between multiple stored scans.

Adding a Location to a Client

Once a Client is set up, a Location for that client can be added. There is no limit on the number of Locations that can be set up under a Client, however, all Location names must be unique for that client.

Client and Location information that has been entered in the database automatically displays in the upper-right Detail Window.

At any time you can add, edit or delete information about a particular Client or Location from this window and save it to the database.
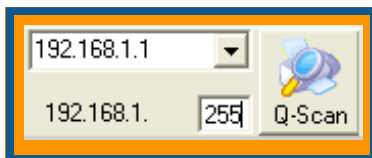
Scanning

There are two types of scans that PrintMIB™ performs. Either the scan can be performed and then written to the database or the scan can be informational only. Both types of scans will display the scan results in the Scan Results window. In addition, after a scan has been performed, double-clicking on the Location in the Client Administrator will show all devices that have been found for that Location. Depending on the SNMP Timeout, the scan should take 30 – 60 seconds to complete. Multiple reports can be generated, either to HTML or comma-delimited files after performing either type of scan. Performing a scan has a negligible impact on a network and only reads information provided by a particular device— it never attempts to write any values to a device. Results from a scan are only saved to the database located on the USB Key and are never transmitted anywhere else.
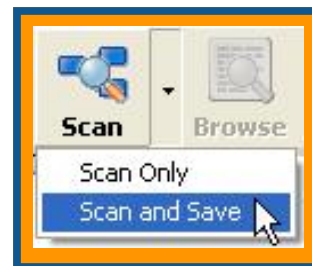
Q-Scan

Q-Scan – A Q-Scan is performed when you want a quick snapshot of what print devices are operating on a network. It is not necessary to set up a Client/Location to perform this scan. Simply enter the starting and ending IP addresses and click the Q-Scan button. The results are displayed in the Scan Results Window but are lost when either closing the program or running a new scan. The Q-scan dropdown keeps a history of the past six scans performed.

Scan and Save

Saved Scan – To perform a scan and also have the results written to the database, simply choose the Location and Client and run a "scan and save". You can have unlimited saved scans in the database for a particular Location. Historical saved scans can be loaded into the scan results windows, deleted from the database or purged completely.

PrintMIB™ Scan Results

PrintMIB™ Meter Read Key

The results of any scan are displayed on the bottom in the "Scan Results" window. Supplies having less than twenty percent remaining will show up in red.

1	JPHAD16928...	Hewlett-Pack...	hp color LaserJet 4650	192.168.001.024	9764	Color	Black Print Cartridge HP C9720A: 87%
2	USQL051216...	Hewlett-Pack...	HP LaserJet 4050 Series...	192.168.001.059	172489	Mono	Toner Cartridge HP C4127X: 0%
3	JPHAC19143...	Hewlett-Pack...	hp color LaserJet 4650	192.168.001.064	74557	Color	Black Print Cartridge HP C9720A: 18%
4	JPKAC42182...	Hewlett-Pack...	hp color LaserJet 4650 ...	192.168.001.074	8494	Color	Black Print Cartridge HP C9720A: 97%
5	K2955401391	Ricoh	LANIER LD145 2.40 / LA	192.168.001.088	82154	Mono	Toner: Okay
6	CNBR20493...	Hewlett-Pack...	hp color LaserJet 3550 ...	192.168.001.089	3036	Color	Black Print Cartridge HP Q2670A: 68%
7	JPPCB32910...	Hewlett-Pack...	HP Color LaserJet 4550	192.168.001.122	124300	Color	Black Toner Cartridge HP C4191A: 59%
8	LGM402157	Xerox Corpo...	Phaser 7700DN aka Xer...	192.168.001.192	182143	Color	Cyan: 81%
9	NE01322546...	Xerox Corpo...	Xerox Document Centre	192.168.001.224	4278311	Mono	Toner Bottle CRU: 100%

Devices with Extended Page Counts can be displayed by clicking on this icon.

A popup window will expand showing the different counts that particular device.

Page Style	Count
C13 - Total Printed Images (e.g....	4278311
C13(po) - Total Printed Images s...	61952
C2 - Total Marked Print Images	827457
C4 - Total Copy Sheets	2019369
C5 - Total Printed Sheets	484261
C7 - Total Duplex Copy Sheets	1431269
C8 - Total 2 Sided Print Sheets	343196

Right clicking on a line in the results gives the following options:

- Browse Device Webpage
- Update This Device
- Export to CSV
- Current Scan Report
- Copy to Clipboard

● **Browse Device Website** – This will open up a web page and browse to that specified IP address of the device. Most printers have built-in web servers for viewing but some older models do not.

● **Update This Device** – Occasionally, a device will not return all the information available or return garbled data. Clicking on "Update This Device" following a "Scan and Save" operation will scan only the selected device and replace the previous results in the saved scan.

● **Export to CSV** - This will export to a file that can be imported into another application. If Microsoft Excel is installed on the scanning computer it will launch and import the .csv file automatically.

● **Current Scan Report** – This shows the current scan results or historical scans in an easy to read HTML format.

● **Copy** – This lets you copy specific line out of the display results window. You can highlight multiple lines by holding down the Control Key.

PrintMIB™ Reporting

All of the reports that PrintMIB™ generates are saved as standard HTML files and can be viewed using any web browser. Some of the reports that PrintMIB™ produces are:

- **Export to CSV** – technically not a report this will export to a file that can be imported into another application. If Microsoft Excel is installed on the scanning computer it will launch and import the csv file automatically.

- **Client Detail Report** – Shows all clients in the database.

- **Current Scan Report** – Shows the current scan results or historical scans in an easy to read HTML format.

- **Comparison Report** – This report allows you to select two prior scans and run a comparison to track any changes in page count, toner usage, etc. between the two.

- **Client Location Report** – Shows all the Locations in the database for a particular client.

- **Client Device Summary Report** – Shows all unique devices for each Location for a particular Client.

- **Discovered / Missing Devices Report** – This report allows you to select two stored scans and compare them to locate print devices which are newly discovered, or are no longer responding to scans. This report allows you to quickly discover changes in the printing environment.

Reports can also be generated on historical scans by loading a previous scan in the Scan Results window. Custom logo branding can be easily added to the reports to give them a tailored appearance.

PrintMIB
Meter Read Key™

Collecting Proprietary SNMP Data

Collecting SNMP data from print devices can be a topic of great confusion. When evaluating meter read software be aware that there are some inherent limitataions with the breadth of information that a particular print device can return.

Most newer print devices (in the past 10 yrs) will return a common grouping of information. This includes: total page counts, manufacturer, model, serial number, console information, etc. This type of information is generally not proprietary as all major print device manufaturers loosely adhere to this standard.

In more recent years, manufacturers are including more detailed information in their print devices, allowing PrintMIB™ to extract more specific data. A majority of print devices—approx 70%, will return supply details (i.e. toner percentage, toner part number, etc.)

A very small number - less than 10%, return toner density and/or coverage information. Support for this information is often very erratic. One would hope that as new models are released the manufacturers would include as much information as possible. Unfortunately, this is not the case. Some older printers, for example, a Hewlett-Packard LaserJet 2300, which is a discontinued printer model, returns detailed coverage/toner density information. Conversely, a Hewlett-Packard Laser Jet 3380, a relatively new printer model, does not return this type of advanced data.

It is apparent that there is no MIB standardization among the different print device manufacturers. Ultimately, **any** SNMP program communicating with a device is limited by the information the manufacturer has chosen to include on that device. This is why some printers will return a limited amount of information and others return a great deal. We are continually adding and improving our product to include as much data as the print device will provide.

The PrintMIB Meter Read Key™ provides quick, accurate, unlimited and easy to use meter reads second to none at a excellent price. There are **no** hidden or recurring monthly charges to use the software, nor will there be **any** charge for technical support.

LocalMIB

Local Device Management Made Easy

LocalMIB™ provides an easy link between printers connected directly to Windows computers via USB or parallel cables and PrintMIBs range of products. It continuously monitors the Windows workstation for print jobs makes that information available during a scan.

LocalMIB is designed to have minimal performance impact on the computer on which it is running, and since it's a free download, it also has minimal impact on your bottom line.

PrintMIB, LLC
www.printmib.com
1.866.722.6642
sales@printmib.com

Collecting Non-networked Print Devices

LocalMIB extends the scanning functionality of PrintMIB and QuickMIB to include printers connected directly to computers via parallel, USB or even serial ports. LocalMIB is a small program which can be installed on any Windows 2000/XP/2003/Vista computer. It will constantly monitor printer activity and pass that information on to PrintMIB and/or Quick-MIB enabling you to complete your printing environment profile.

Like all PrintMIB products, LocalMIB is designed to be simple to use. Installation can be accomplished in a few seconds, and for basic use no configuration is necessary beyond specifying which printer should be monitored.

Once installed, LocalMIB simply waits in the Windows system tray watching for documents being sent to the specified printer. When a document is detected LocalMIB notes the number of pages printed, and makes that data available to PrintMIB and/or QuickMIB via Simple Network Management Protocol (SNMP).

Running LocalMIB in the basic mode will provide the following information:

● IP Address of the computer to which the printer is connected
● Model of the printer
● Windows Name of the printer
● Pages printed since LocalMIB was installed

LocalMIB also can be configured to pass on the following information which may have to be entered manually the first time the program is run:

● Serial Number
● Starting page count (which will be incremented automatically)

LocalMIB is free, and works with all SNMP compliant management consoles, though additional functionality is provided when used in tandem with our PrintMIB Meter Read Key and/or QuickMIB Automated Meter Read Tool.