

Remote Asset Manager

Version 2.4

Administrator's Guide

December 2018 www.lexmark.com

Contents 2

Contents

Change history	3
Overview	4
Deployment readiness checklist	5
Getting started	6
Installing the application	6
Uninstalling the application	8
Accessing the Remote Asset Manager web page	8
Configuring rollup settings to Lexmark Fleet Tracker	9
Configuring rollup connection	9
Configuring e-mail rollup	10
Discovering printers	11
Configuring printer discovery	11
Running a discovery	12
Scheduling discovery and collection	12
Collecting data	13
Importing printers	13
Running a full collection	13
Configuring tools	13
Rolling up LPMA data manually	15
Troubleshooting	16
Cannot run a discovery or collection	16
Cannot access the application web page	16
Notices	18
Index	20

Change history 3

Change history

December 2018

- Added the following instructions:
 - Installing the Lexmark Remote Asset Manager
 - Unnstalling the Lexmark Remote Asset Manager

June 2018

• Added note on the aggregated LPMA data encryption.

April 2018

- Added the following information:
 - The default directory used during installation
 - Creating or updating the password
 - Rolling up Local Printer Management Agent (LPMA) data
 - Polling jobs

September 2017

- Added support for Linux operating systems.
- Added support for password authentication.
- Added support for full rollup at enrollment.
- Updated the scheduling feature to gather updates only for devices with state change.

March 2017

- Added support for Windows Server® 2016.
- Added information on optimizing network and generating logs.

April 2016

• Initial document release.

Overview 4

Overview

Use the application to discover printers, collect printer data, and then send a report to a server or administrator. The collected data includes device counters, supply information, and statuses.

This document provides instructions on how to configure, use, and troubleshoot the application.

Deployment readiness checklist

Make	e sure that:
	Any of the following supported operating systems is installed on your computer:
	For Microsoft® Windows® operating systems
	- Windows Server® 2016
	- Windows Server 2012 R2
	- Windows Server 2012
	- Windows Server 2008 R2
	- Windows 10
	- Windows 8.1
	- Windows 7
	For Linux operating systems
	- Ubuntu 17.10
	- Ubuntu 16.04 LTS
	- Debian 8
	Any of the following supported browsers is installed on your computer:
	 − Microsoft EdgeTM
	 Google Chrome[™] 45 or later for workstations
	 Google Chrome 47 or later for Android devices
	 Mozilla Firefox 43 or later
	− Safari® 9 or later
	 Internet Explorer® 10 or later
	The enrollment code is available if you are using Lexmark Fleet Tracker 3 (LFT 3) to process collected data. To generate the enrollment code, see the <i>Lexmark Fleet Manager Administrator's Guide</i> .
	The firewall settings are configured to allow communication between the data collector and the servers.
	The Simple Network Management Protocol (SNMP) settings are configured to allow the application to communicate to devices.
	A proxy server is configured to allow communication to off-site servers.

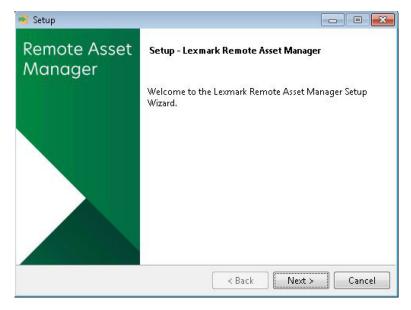
Getting started 6

Getting started

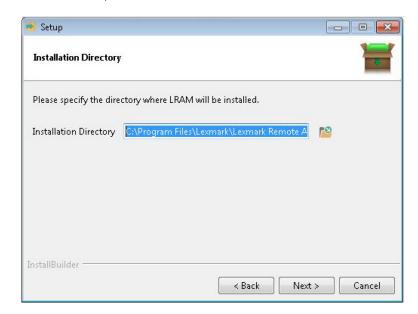
Installing the application

Make sure to log in to the computer as an administrator.

- 1 Save the installation file to your computer, and then launch it.
- 2 Click **Next**, and then accept the license agreement.



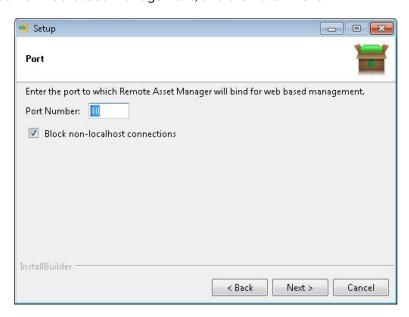
3 Select a location for the installation, and then click Next.



Note: For Microsoft Windows operating systems, the default installation directory is **C:\Program Files** \Lexmark\Lexmark Remote Asset Manager\.

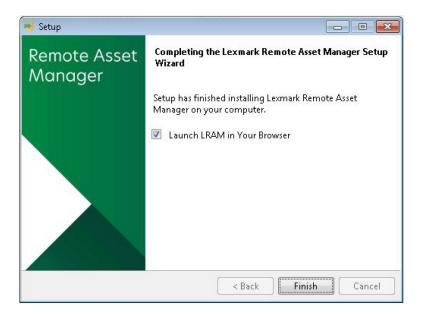
Getting started 7

4 Enter the port number for web-based management, and then click Next.



Note: By default, the application is bound to port 80 for web-based management. If the port number is bound to another application, then use a different port number.

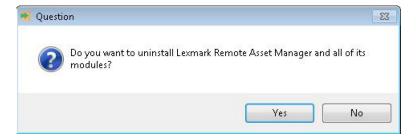
- **5** Click **Next**, and then wait for the installation to complete.
- 6 Click Finish.



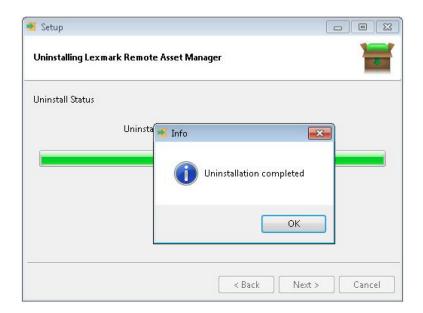
Getting started 8

Uninstalling the application

- **1** Run the Lexmark Remote Asset Manager uninstaller.
- **2** Click **Yes**, and then wait for the uninstallation to complete.



3 Click OK.



Accessing the Remote Asset Manager web page

1 Open a web browser, and then type the localhost or the IP address of the computer where the application is installed.

Note: If you are not using port 80, then type **:yyyy** after the localhost or the IP address, where **yyyy** is the port number specified during installation. For example, **123.123.123.8080**.

2 If prompted, type the password.

Configuring rollup settings to Lexmark Fleet Tracker

Configuring rollup connection

- 1 From the Remote Asset Manager web page, click General > Rollup Configuration.
- **2** Configure the settings.
 - Host—The IP address or the Domain Name System of LFT 3
 - Port—The port used to connect to LFT 3

Note: By default, SSL Secured is selected, and the port number is set to 443.

• Enrollment Code

Note: Generate the enrollment code from LFT 3. For more information, see the *Lexmark Fleet Manager Administrator's Guide*.

- Rollup Method
 - HTTP/HTTPS—Data is sent to the aggregation system such as LFT 3 or other server-based data aggregators. This method is the default. For more information on how to incorporate CA certificate for HTTPS protocol, contact your Lexmark representative.
 - **Email**—When enrolled, data is sent to the aggregation system.
 - Manual—Data is exported manually from the data collector, and then imported manually to the LFT 3.

Note: To run a full collection of device counters, supply information, and statuses at enrollment, select **Start a Full Collection Now**.

3 Click Enroll.

Notes:

- If a Server Not Trusted error appears, then validate the information from the server, and then proceed to complete the enrollment.
- The enrollment code is unique for every enrollment. If you reenroll, then retrieve a new enrollment code from LFT 3.

Configuring proxy server settings

When a server is off-site, a proxy server may be required to connect to the server. For more information, contact your administrator.

- 1 From the Remote Asset Manager web page, click **General** > **Proxy Configuration**.
- **2** Configure the settings.
 - Proxy Host—The IP address or the Domain Name System of the proxy server
 - Proxy Port—The port used to connect to the proxy server
 - Username
 - Password
- 3 Click Save.

Configuring e-mail rollup

This option is required only for e-mail rollup.

- **1** From the Remote Asset Manager web page, click **General > Email Configuration**.
- **2** Configure the settings.
 - SMTP Server—The IP address of the SMTP server
 - **SMTP Port**—The port used to connect to the SMTP server
 - Subject Line
 - From Address
 - To Addresses

Notes:

- To prompt for user credentials, select **Enable Authentication**.
- To receive an e-mail when you save your configuration, select **Send Test Email On Save**.
- To e-mail the results of your polling, select **Enable Email Transmission**. This setting is not applicable if you are using LFT 3 to process collected data.
- 3 Click Save.

Discovering printers 11

Discovering printers

Configuring printer discovery

- 1 From the Remote Asset Manager web page, click **Printer Discovery**.
- **2** Configure the following options:

Import Search Strings

Before you begin, create either of these text files, and then compress them as a ZIP file:

- include.txt—List of address strings to include during discovery
- exclude.txt—List of address strings to exclude during discovery

When creating the list of address strings, use one of the following formats:

- 10.199.10.244 (single address)
- myprinter.example.com (single host name)
- 10.199.10.1–10.195.12.2 (IP address range)
- 10.199.10.* (wildcards)
- 10.199.10.1/22 (Classless Inter-Domain Routing or CIDR notation)

Notes:

- Type each string on a separate line. Do not use comma-separated values.
- Make sure that the string has no spaces before and after it.
- You can import only up to 5000 strings at a time.
- a Click Import Search Strings.
- **b** Browse to the ZIP file.
- c Click Save.

Export Search Strings

- a Click Export Search Strings.
- **b** Save the file.

Discovery Configuration

- a Click Discovery Configuration.
- **b** Add the addresses, and then provide the following information:
 - Included Address
 - Excluded Address
 - **SNMP Profile**—The SNMP profile to use for the addresses

When adding the addresses, use the following formats:

- 10.199.10.244 (single IP address)
- myprinter.example.com (single host name)
- 10.199.10.1–10.195.12.2 (IP address range)

Discovering printers 12

- 10.199.10.* (wildcards)
- 10.199.10.1/22 (CIDR notation)

Note: By default, a local subnet search string is added to the address space.

c Click Save.

Network Utilization

Regulate network traffic by slowing down the query received by the network when discovering multiple devices or a range of IP addresses.

- a Click Network Utilization.
- **b** Adjust the throttle. The longer the pause, the longer the discovery phase.
- c Click Save.

Running a discovery

Before you begin, make sure that SNMP is configured or that a list of search strings are imported. For more information, see "Configuring printer discovery" on page 11.

From the Remote Asset Manager web page, click **Printer Discovery > Start Printer Discovery Now**.

Note: When the discovery is completed, the number of printers discovered and the time it took to discover them appears on the main page.

Scheduling discovery and collection

- 1 From the Remote Asset Manager web page, click General > Schedule Configuration.
- **2** Depending on the task, select one of the following tabs:
 - **Discovery**—Schedule when to search for devices.
 - Full Collection—Schedule when to collect device counters, supply information, and statuses.
 - **Printer Status Monitoring**—Schedule when to gather updates only for devices with changes in the number of alerts. The state change can also be triggered if the printer has printed any pages since the last rollup.
- **3** Configure the settings.
- 4 Click Save.

Collecting data 13

Collecting data

Importing printers

This feature lets you import a list of printer IP addresses for polling without network discovery.

Before you begin, create a text file that contains a list of printer IP addresses. If you are using SNMP profiles other than the default, then add a space after the IP address, and then type the name of the profile.

Notes:

- The profile name is case sensitive.
- Type each string on a separate line. Do not use comma-separated values.
- Make sure that the string has no spaces before and after it.
- You can import only up to 5000 strings at a time.
- 1 From the Remote Asset Manager web page, click Data Collection > Import Printers.
- 2 Browse to the file, and then, if necessary, select the option to replace previously imported printers.
- 3 Click Submit.

Running a full collection

A full collection includes device counters, supply information, and statuses.

Note: This feature is intended only for confirming the data collector setup.

From the Remote Asset Manager web page, do any of the following:

• To start collecting data, click Data Collection > Start a Full Collection Now.

Note: When the discovery is complete, the number of printers discovered and the time it took to discover them appears on the main page.

To view a table of discovered devices and collected data, click View Collection Results.

Configuring tools

Generate logs to diagnose a problem, or set the privacy and language preferences.

- **1** From the Remote Asset Manager web page, click **Tools**.
- **2** Configure the following options:

MIB Walk

- a Click MIB Walk, and then configure the settings.
 - Host—The host name of the device
 - Profile—The profile used to connect to the device
- b Click Walk.

Collecting data 14

Logging Level

- a Click Logging Level, and then select an option.
 - Off
 - Normal
 - Verbose
- b Click Save.

Export Diagnostics

- a Click Export Diagnostics.
- **b** Save the file.

Create/Update Password

- a Click Create/Update Password.
- **b** Provide a password.

Note: The password must be at least eight characters long, containing uppercase and lowercase characters and at least one number.

c Click Save.

Export Polling Results

- a Click Export Polling Results.
- **b** Save the file.

Privacy Configuration

- a Click **Privacy Configuration**, and then select one or more options.
 - Protect Sensitive Information
 - Encrypt Outbound Email—This option is applicable only for e-mail rollup.
 - Block non-localhost connections (requires restart)—Only allow access to the application web portal
 from the computer where the application is installed. When enabled, the Lexmark Remote Asset
 Manager restarts automatically.
- b Click Save.

Poll for Jobs

Retrieve jobs immediately from the server instead of waiting for the next polling cycle (approximately 15 minutes).

Note: This option is available only if the Lexmark Remote Asset Manager is enrolled with a Fleet Tracker server. For more information see <u>"Configuring rollup connection" on page 9</u>.

Click Poll for Jobs.

Language

Click Language, and then select the language.

Collecting data 15

Rolling up LPMA data manually

Before you begin, from the Fleet Manager server, enable LPMA aggregation for the data collector. For more information, see the *Lexmark Fleet Manager Administrator's Guide* and *Local Printer Management Agent Administrator's Guide*.

Notes:

- Data is rolled up to the server every hour automatically.
- The aggregated LPMA data is encrypted.
- **1** From the Remote Asset Manager web page, click **LPMA Aggregation Enabled** on the lower-right corner of the web page.
- **2** Do either of the following:
 - View the latest LPMA aggregation statistics.
 - Validate the LPMA aggregation by clicking **Rollup LPMA Data** to do a one-time rollup to the server.
- 3 Click Close.

Troubleshooting 16

Troubleshooting

Cannot run a discovery or collection

Try one or more of the following:

Compress the text files as a ZIP file

For more information, see "Configuring printer discovery" on page 11.

Make sure that the search address is configured correctly

Use the following formats:

- 10.199.10.244 (single address)
- myprinter.example.com (single host name)
- 10.199.10.1–10.195.12.2 (IP address range)
- **10.199.10.*** (wildcards)
- 10.199.10.1/22 (CIDR notation)

Note: By default, a local subnet search string is added to the address space.

Make sure that the SNMP community names are correct

For more information, see "Configuring e-mail rollup" on page 10.

Increase the SNMP timeout

For more information, see "Configuring e-mail rollup" on page 10.

Contact your Lexmark representative

Cannot access the application web page

Make sure that the port number used is not assigned to other applications or systems

You can change the port number only during installation. To change the port number, reinstall the application. For more information, see <u>"Installing the application" on page 6</u>.

Make sure that the application is not blocked by a firewall

If you are not using port 80, then type : yyyy after the localhost or the IP address, where yyyy is the port number specified during installation

For example, 123.123.123.8080.

Troubleshooting 17

Use localhost

The privacy setting may be configured to block non-localhost connections.

Contact your Lexmark representative

Notices 18

Notices

Edition notice

December 2018

The following paragraph does not apply to any country where such provisions are inconsistent with local law: LEXMARK INTERNATIONAL, INC., PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in later editions. Improvements or changes in the products or the programs described may be made at any time.

References in this publication to products, programs, or services do not imply that the manufacturer intends to make these available in all countries in which it operates. Any reference to a product, program, or service is not intended to state or imply that only that product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any existing intellectual property right may be used instead. Evaluation and verification of operation in conjunction with other products, programs, or services, except those expressly designated by the manufacturer, are the user's responsibility.

For Lexmark technical support, go to http://support.lexmark.com.

For information on Lexmark's privacy policy governing the use of this product, go to **www.lexmark.com/privacy**.

For information on supplies and downloads, go to www.lexmark.com.

© 2016 Lexmark International, Inc.

All rights reserved.

GOVERNMENT END USERS

The Software Program and any related documentation are "Commercial Items," as that term is defined in 48 C.F.R. 2.101, "Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. 12.212 or 48 C.F.R. 227.7202, as applicable. Consistent with 48 C.F.R. 12.212 or 48 C.F.R. 227.7202-1 through 227.7207-4, as applicable, the Commercial Computer Software and Commercial Software Documentation are licensed to the U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein.

Trademarks

Lexmark and the Lexmark logo are trademarks or registered trademarks of Lexmark International, Inc. in the United States and/or other countries.

Google Chrome is a trademark of Google Inc.

Microsoft, Windows, Windows Server, and Internet Explorer are either registered trademarks or trademarks of the Microsoft group of companies in the United States and other countries.

Safari is a registered trademark of Apple Inc.

Notices 19

All other trademarks are the property of their respective owners.

Index 20

Index

Α

accessing the Remote Asset Manager web page 8 application uninstalling 8

C

cannot access the application web page 16 cannot run a discovery or collection 16 change history 3 checklist deployment readiness 5 collecting printer data 13 collection schedule 12 configuring e-mail rollup 10 configuring printer discovery settings 11 configuring proxy server settings 9 configuring rollup connection 9 configuring tools 13 creating password 13

D

deployment readiness checklist 5 diagnostics exporting 13 Discovery Configuration 11 discovery schedule 12

Ε

Export Diagnostics 13
Export Polling Results 13
Export Search Strings 11
e-mail configuration 10
e-mail reporting 10
e-mail rollup
configuring 10

F

full collection 13

Import Search Strings 11 importing printers 13 installing the application 6

J

jobs polling 13

L

language setting 13 Logging Level 13 LPMA data rolling up manually 15

M

MIB Walk 13

Ν

Network Utilization 11

O

overview 4

P

password
creating 13
updating 13
polling for jobs 13
polling results
exporting 13
printer discovery 12
printer discovery settings
configuring 11
Privacy Configuration 13
proxy configuration 9

R

Remote Asset Manager
accessing 8
rolling up LPMA data manually 15
rollup 9
rollup configuration 9
running a discovery 12
running a full collection 13

S

schedule configuration 12 scheduling discovery and collection 12 search strings exporting 11 importing 11

T

tools
configuring 13
troubleshooting
cannot access the application
web page 16
cannot run a discovery or
collection 16

U

uninstalling the application 8 updating password 13