Remote RMM-1400
Intelligent Remote Site Management Device
Release Notes
Version 4.00
January 2012

These release notes document new features, enhancements, and changes for Remote RMM-1400 version 4.00 and the RMB-1 expansion unit. This document also provides software update instructions for Remote RMM-1400 version 4.00.

Instructions for use of this product are detailed in the following documents:

- Remote RMM-1400 Intelligent Remote Site Management Device Configuration Guide
- Remote RMM-1400 Intelligent Remote Site Management Device Installation Guide

New Features
Remote RMM-1400 version 4.00 includes the following new features:

- Remote Support for SNMPv3 (Issue 64654)
- Updated Python Interpreter (Issue 67112)
- Updated Linux Kernel (Issue 67754)
- Configurable Alarm Simulation Duration (Issue 70990)
- Module Support (Issue 71009)
- Seven-Day Historical Data Collection (Issue 71230)

Remote Support for SNMPv3
RMM-1400 provides the capability to communicate with Optima and other Network Management systems using SNMP v3 protocol.

Updated Python Interpreter
RMM-1400 now supports the Python version 2.7.1 interpreter for application scripts. All Remote applications using the Python language must be re-compiled on Python 2.7.1 to run on RMM-1400.
Updated Linux Kernel
RMM-1400 has been updated to the Linux 2.6 kernel.

Configurable Alarm Simulation Duration
RMM-1400 has a configurable duration for the alarm simulation feature. Alarm simulation mode will now set the external alarm state to the specified normal or non-normal severity for the specified duration of 1 to 60 minutes. External alarm states are displayed in the "show alarm-entries" command, Web, and SNMP traps. The originator state will not be affected by the alarm simulation.

Module Support
Remote RMM-1400 now supports modules. A module is a pre-packaged, turn-key solution built to address a specific area of site management, such as Power Management or Environmental/HVAC Monitoring and Control.

Seven-Day Historical Data Collection
RMM-1400 now supports 7 days worth of historical data, provided not more than 200 measurements are being collected.
Enhancements

Remote RMM-1400 version 4.00 includes the following enhancements:

- Default Reset for Configuration of Discrete Points (Issue 71349)

**Default Reset for Configuration of Discrete Points**

A discrete input, output, or analog point can be reset back to its factory default configuration with the `config discrete default {type} {point}` command.
Changes

Remote RMM-1400 version 4.00 includes the following changes:

- When using NTP, once the time has been synchronized with an NTP server, Remote RMM-1400 will save the current time more frequently. This saved time stamp will be used to configure the clock following a reboot and minimizes the impact of condition where NTP synchronization does not occur immediately.
Known Issues

Review the following known issue prior to updating your Remote RMM-1400 software to version 4.00:

- Measurement Data Not Archived in Historical Data Files Consistently When Interval Is 1440 Minutes (Issue 71652)

Measurement Data Not Archived in Historical Data Files Consistently When Interval Is 1440 Minutes

Description: The maximum time interval for storing measurement data is every 1440 minutes (24 hours). Configuring the interval at this maximum value can result in missing historical data files. All other intervals, including the default interval of 15 minutes, work as expected.

Workaround: Use an interval that is less than 1440 minutes.
Software Update Instructions

The following sections provide information on updating your Remote RMM-1400 software to version 4.00 and your RMB-1 expansion unit software to version 1.11.

Obtaining the Software

Remote RMM-1400 version 4.00 software consists of the following files:

544REM400.img This is a binary file containing the Remote RMM-1400 version 4.00 software image.

The RMB-1 expansion unit requires the following file:

684RMB111.img This is a binary file containing the RMB-1 expansion unit version 1.11 software image.

If you need assistance with obtaining the software, please contact your sales representative or Kentrox Technical Support.

Updating the Remote RMM-1400 Software

Tip: It is recommended that you back up the Remote RMM-1400 configuration before updating the software.

Important: You must have a supervisor user profile to perform this procedure.

To update the Remote RMM-1400 software:

1. Using an FTP/SFTP utility, connect to and log into Remote RMM-1400.
2. Change the current directory to /images.
3. Using binary mode, transfer the Remote RMM-1400 image (544REM400.img) to boot.img.
4. Close the FTP/SFTP connection to Remote RMM-1400 and exit the FTP/SFTP utility.
5. Access and log into Remote RMM-1400.
6. At the main CLI prompt, reset Remote RMM-1400:
   
   reload

   The following message appears:

   Do you wish to save your running configuration? (y/N)

7. Save the running configuration by copying the running configuration to the startup configuration file:
The following message appears:

Are you sure you wish to reset? (y/N)

8. Confirm the reset:

y

Remote RMM-1400 resets and comes back online.


10. (optional) At the main CLI prompt, verify that the software has been updated properly:

`show version`

The command response appears similar to the following example:

```
| (Dub)>show version  
| Product: Remote RMM-1400  
| Version: 4.00  
| Build date: 2011-12-06, 13:15:22, -05:00  
| Build ID: 039  
| Image type: KTX544-Production  
| Bootloader Version: 1.10  
| (Dub)> |
```

**Updating the Expansion Unit Stage 2 Bootloader and Firmware**

To update the Expansion unit stage 2 bootloader and firmware:

1. Using an FTP/SFTP utility, connect to and log into Remote RMM-1400.

2. Using binary mode, transfer the stage two bootloader image (`160B2L310.img`, `670B2L311.img`, `681B2L340.img`, `685B2L320.img`, or `680B2L311.img`) to `stage2boot.img` in the appropriate directory:

   - `/images/peripherals/discrete-expansion` for Expand DEP
     - `160B2L310.img`
   - `/images/peripherals/serial18-expansion` for Remote RME-S8
     - `670B2L311.img`
   - `/images/peripherals/fe8-expansion` for Remote RME-E8
     - `685B2L320.img`
   - `/images/peripherals/fb64-expansion` for Remote RME-B64
     - `681B2L340.img`
   - `/images/peripherals/bistate48-expansion` for Expand FDCI
     - `680B2L311.img`
3. Using binary mode, transfer the firmware image (160DEP160.img) to boot.img in the desired directory.

   **Note:** Since the five expansion units use the same firmware, the firmware image can be transferred to boot.img in any of the five directories listed in step 2 of this procedure.

4. Close the FTP/SFTP connection to Remote RMM-1400 and exit the FTP/SFTP utility.

5. Access and log into Remote RMM-1400.

6. At the main CLI prompt, reload all managed expansion units:
   
   ```
   diag peripheral * reload
   ```
   
   The following message appears:
   
   Are you sure you wish to reset the peripheral? (y/N)

7. Confirm the reset:

   ```
   y
   ```
   
   Expansion units reset and come back online.

8. (optional) Verify that the expansion unit firmware and stage two bootloader have been updated properly:

   ```
   show expansion-images
   ```
   
   The command response appears similar to the example on the following page:
```plaintext
Dub> show expansion-images

discrete-expansion/boot.img
--------------------------------------------------
Product:    AI Expansion-Shelf
Version:    1.60
Build date: 2010-07-29, 16:46:54.0, -04:00
Build ID:   006
Image type: AIModExpan-Production
Production release.

discrete-expansion/stage2boot.img
--------------------------------------------------
Version:    3.10
Build date: Thu Jul  6 13:52:11 EDT 2006
Image type: AI160-Stage2Boot

serial8-expansion/boot.img
--------------------------------------------------
Product:    AI Expansion-Shelf
Version:    1.60
Build date: 2010-07-29, 16:46:54.0, -04:00
Build ID:   006
Image type: AIModExpan-Production
Production release.

serial8-expansion/stage2boot.img
--------------------------------------------------
Version:    3.11
Build date: Thu Jul 27 11:38:32 EDT 2006
Image type: AI670-Stage2Boot

bistate48-expansion/boot.img
--------------------------------------------------
Product:    AI Expansion-Shelf
Version:    1.60
Build date: 2010-07-29, 16:46:54.0, -04:00
Build ID:   006
Image type: AIModExpan-Production
Production release.

bistate48-expansion/stage2boot.img
--------------------------------------------------
Version:    3.11
Build date: Thu Jul 27 11:38:38 EDT 2006
Image type: AI680-Stage2Boot

fb64-expansion/boot.img
--------------------------------------------------
Product:    AI Expansion-Shelf
Version:    1.60
Build date: 2010-07-29, 16:46:54.0, -04:00
Build ID:   006
Image type: AIModExpan-Production
Production release.

fb64-expansion/stage2boot.img
--------------------------------------------------
```
Updating the RMB-1 Expansion Unit Software

To update the RMB-1 expansion unit software:

1. Using an FTP/SFTP utility, connect to and log into Remote RMM-1400.
2. Change the current directory to /images/peripherals/RMB-1.
3. Using binary mode, transfer the RMB-1 software image (684RMB111.img) to boot.img.
4. Close the FTP/SFTP connection to Remote RMM-1400 and exit the FTP/SFTP utility.
5. Access and log into Remote RMM-1400.
6. At the main CLI prompt, reload all managed expansion units:
   
   diag peripheral * reload

   The following message appears:

   Are you sure you wish to reset the peripheral? (y/N)

7. Confirm the reset:

   y

   Expansion units reset and come back online.

8. Verify that the expansion unit software has been updated properly:

   show peripherals unit 1

   The command response appears similar to the example shown below.
Important: In the command response, `Oper state: Online` indicates that the RMB-1 software download is complete, and you can verify that the correct firmware version (1.11) is displayed. If `Oper state` does not display as `Online`, execute the `show peripherals unit 1` command again until `Oper state: Online` displays. If `Oper state: Online` displays and the firmware version is incorrect, repeat steps 6 through 8.