SIEMENS

How to Change the Log Level

RUGGEDCOM ROX II / RX1500 CROSSBOW APPLICATION

This entry is from the Siemens Industry Online Support. The general terms of use (http://www.siemens.com/terms_of_use) apply.

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates.

For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit http://www.siemens.com/industrialsecurity.

To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit http://support.industry.siemens.com.

Table of Contents

1   Overview

This document describes how to change the log level for the RUGGEDCOM CROSSBOW application for RUGGEDCOM ROX II. The default log level for the application is set to 2. However, for more detailed information to help with troubleshooting, a log level of 5 is required.

CAUTION	Configuration hazard – risk of data corruption. The tasks described require access to maintenance mode in RUGGEDCOM ROX II. Maintenance mode is provided for troubleshooting purposes and should only be used by Siemens Canada Ltd. technicians. As such, this mode is not fully documented. Misuse of the commands available in this mode can corrupt the operational state of the device and render it inaccessible.

NOTICE	Changes made to the configuration in maintenance mode will override the current configuration settings (e.g. IP addresses, VLAN settings, etc.), but are discarded following a system reboot.

NOTE	For more information about the RUGGEDCOM CROSSBOW application for RUGGEDCOM ROX II, refer to the RUGGEDCOM ROX II User Guide for the associated RUGGEDCOM RX1500 series device.

2   Changing the Log Level

To change the log level for the RUGGEDCOM CROSSBOW application, do the following:

1. Connect to the RUGGEDCOM RX1500 device via SSH and login as an admin.

2. In normal mode, type **maint-login** and press **Enter**. A password prompt appears.Type the current maintenance mode password/passphrase and press **Enter**.

Example:

```
ruggedcom# maint-login
Password:
Welcome to ruggedcom Partition2 (Rev ROX 2.4.0 (2013-01-24
 18:20)) RX1511 SN R15R-3410-PR061
22:29:20 up 1 day, 8:42
Temperature +41.0 C (+105.8 F) Disk 25% Memory 43%
root@ruggedcom:~#
```

3. If the version of the RUGGEDCOM CROSSBOW application is earlier than v.414, perform the following steps. Otherwise, proceed to step 4:

   a. Open the rsyslog.conf file by typing the following:

   ```
   vim /etc/rsyslog.conf
   ```

   b. Use the keyboard down arrow key and scroll to the *RULES* section as shown:

   c. Press the **i** key to enable insert mode.

   d. Move the cursor to the end of the following line:

   ```
   daemon.=debug                   -/var/log/rmf_debug.log
   ```

   e. Press **Enter** to create a new line and then add the following, if not already present:

   ```
   daemon.*               -/var/log/crossbow.log
   ```

   f. Press **Esc** to exit insert mode.

   g. Save and close the file by typing :

   ```
   :wq
   ```

4. [Optional] To remove the existing log before starting a new log at the new log level, do the following:

   a. Remove the current log file by typing:

   ```
   rm  /var/log/crossbow.log
   ```

b. Restart rsyslog to create a new log file by typing:

```
Invoke-rc.d rsyslog restart
```

5. Review the network statistics by typing the following and pressing **Enter**:

```
netstat  -anup
```

Note the port number for the connection manager process. The output will be similar to the following:

```
rx1510-demo1:~# netstat -anup
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State           PID/Program name
udp        0      0 127.0.0.1:52612         0.0.0.0:*                               5518/ConnectionMana
udp        0      0 127.0.0.1:44812         0.0.0.0:*                               5519/IEDAProxyClien
udp        0      0 0.0.0.0:54932           0.0.0.0:*                               4060/lmstats
udp        0      0 0.0.0.0:55082           0.0.0.0:*                               3882/lmstats
```

6. Set the log level by typing the following:

```
setLogLevel -port <udp-port> -loglevel [1-5] -duration [1-3600]
```

where *<udp-port>* is the port number of the connection manager process from step 5, *[1-5]* is the desired log level, and *[1-3600]* is the desired duration in seconds.

NOTE   The desired log level for debugging is loglevel 5.

Refer to following example:

```
rx1510-demo1:~#
rx1510-demo1:~#
rx1510-demo1:~#  setLogLevel -port 52612 -loglevel 5 -duration 3600
Sent log level 5 request to udp port 52612
rx1510-demo1:~#
```

NOTE   Following the specified duration period, the log level will reset to 2, the default log level. If loglevel 5 debugging is still required, repeat step 6.

Once created, the logs will be stored on the device under /var/log/crossbow.log.

3 Customer Support

Customer support is available 24 hours, 7 days a week for all Siemens customers. For technical support or general information, please contact Siemens Customer support through any one of the following methods:

- **Online**

  Visit http://www.siemens.com/automation/support-request to submit a Support Request (SR) or check on the status of an existing SR.

- **Telephone**

  Call a local hotline center to submit a Support Request (SR). To locate a local hotline center, visit http://www.automation.siemens.com/mcms/aspa-db/en/automation-technology/Pages/default.aspx.

- **Mobile App**

  Install the Industry Online Support app by Siemens AG on any Android, Apple iOS or Windows mobile device and be able to:

  - Access Siemens' extensive library of support documentation, including FAQs, manuals, and much more
  - Submit SRs or check on the status of an existing SR
  - Find and contact a local contact person
  - Ask questions or share knowledge with fellow Siemens customers and the support community via the forum

4 History

Table 4-1

Version	Date	Modifications
1	1/2017	Initial release