GE MDS

**Obtaining Debug Information from Locomotive-Borne entraNET 220 Equipment**

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# 1 Introduction

This document contains instructions for downloading entraNET 220 RCL information from a locomotive for debugging comm loss issues.

# 2 Basic Information

| Item | Value |
|---|---|
| Date and Time of Trouble (Local) | |
| Locomotive Location<br>(Nearest Street Intersection or Mile Post) | |
| 1st OCU<br>(Nearest Street Intersection or Mile Post) | |
| 2nd OCU<br>(Nearest Street Intersection or Mile Post) | |
| Comm Loss After Extended Period of Stable Use | O Yes<br>O No |
| Problem When Linking 1st OCU | O Yes<br>O No |
| Problem When Linking 2nd OCU | O Yes<br>O No |
| Number of Times Link Was Attempted Before System was Stable | |
| Was OCU IR Window Held Within 6 Inches of IR Window n SCU? | O Yes<br>O No |

# 3 BSP Logs From USB Memory Stick

The MDS AP logs all over the air messages sent and received by the 220 radio to a USB memory stick inserted into the radio enclosure's USB port or directly into the MDS AP.

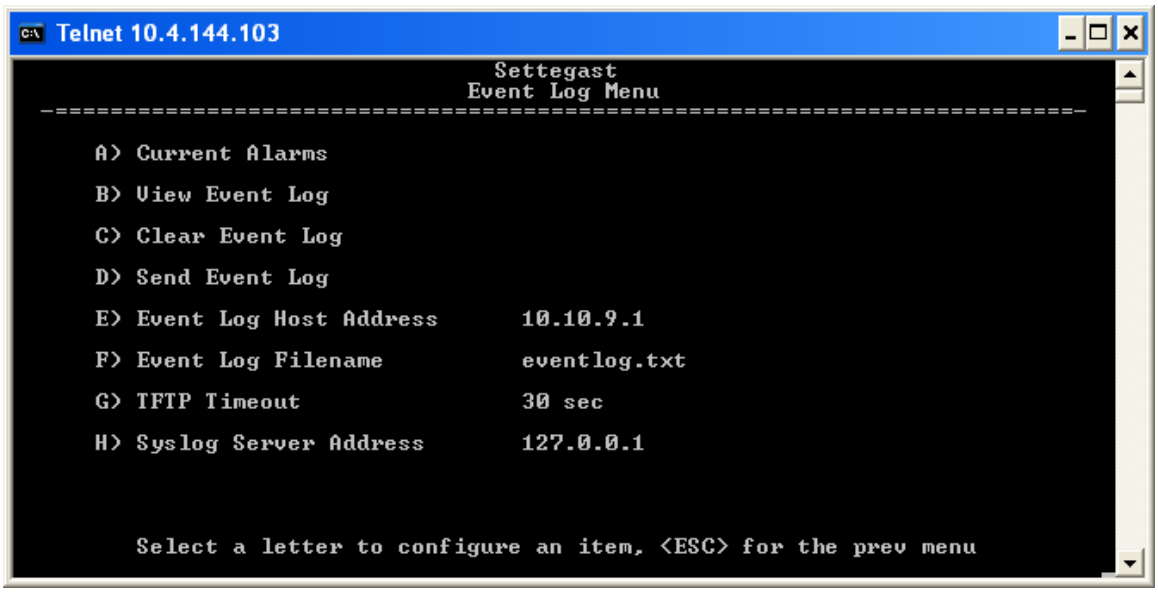
1. Remove the USB stick from the AP
2. Insert it into your laptop.
3. Copy all files off from the stick to the laptop.
4. Erase the files on the memory stick **except the "dologging" file**, which is required to trigger the AP to log to the stick.
5. Identify the file that contains the time period during which the trouble occurred.

# 4 Data From the MDS AP

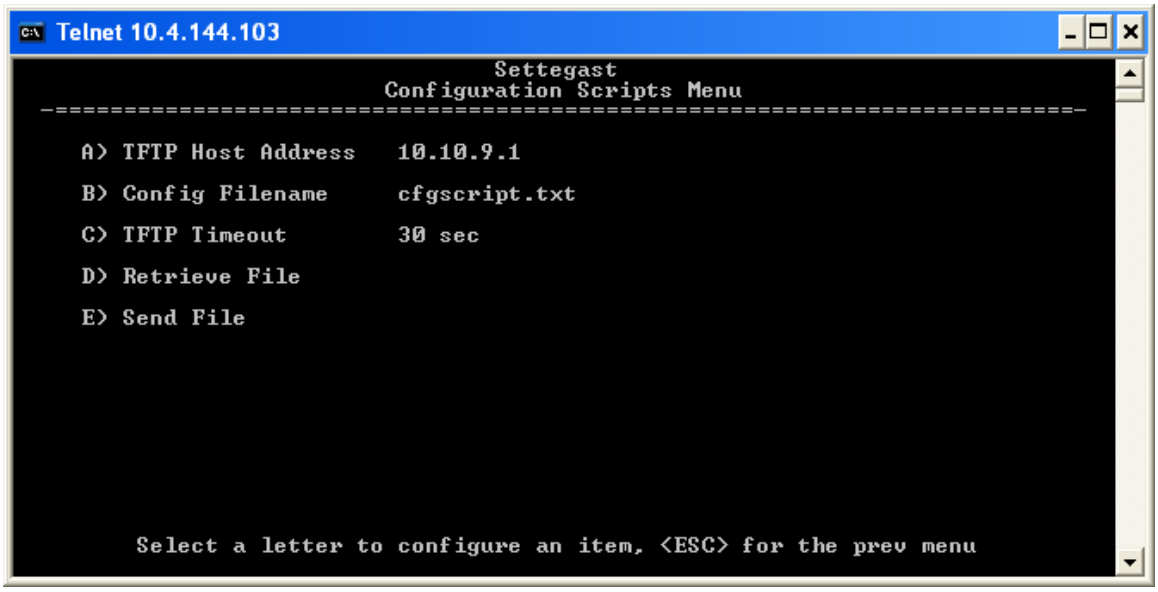
We need to obtain the Event Log and Configuration Script from the MDS AP.

1. Set the IP address of your laptop to 10.10.9.1.
2. Use the special Ethernet Cable to connect from the laptop to the radio enclosure's circular Ethernet port.

3. Make sure the MDS TFTP Server is running on your laptop.
4. Using the Ethernet cable and laptop, go to a command prompt on the laptop and telnet to the Access Point. Login as admin/admin.
5. Go to the Statistics / Logging Menu with “E”, then the Event Log Menu with “B”.




6. Set the Event Log Host Address to the IP address of your laptop (usually 10.10.9.1).
7. Enter a filename like eventlog-UPY118-2007-11-14.txt.
8. Select “D”, Send Event Log to upload the event log to your laptop.
9. The named file will be sent to your laptop via the MDS TFTP server and placed in the folder specified in the TFTP server’s Options tab.
10. Backup to the Main Menu with ESC, ESC, then enter the Maintenance/Tools Menu with “G” then the Configuration Scripts menu with “B”.




11. Set the TFTP Host Address to the IP address of your laptop (usually 10.10.9.1).

12. Enter a filename like cfgscript-UPY118-2007-11-14.txt
13. Select “E”, Send File to upload the configuration to your laptop.
14. The named file will be sent to your laptop via the MDS TFTP server and placed in the folder specified in the TFTP server’s Options tab.

# 5 Data From the MDS PRM

1. Obtain the special serial adapter that connects between the serial port on your laptop and the serial port on the radio enclosure or directly to the MDS PRM.
2. Start Hyperterminal on your laptop and connect to the appropriate serial port to obtain the “entraNET>” prompt at 19200 bps.
3. Start capturing text from within Hyperterminal to a file like prm_session-UPY118-2007-11-14.txt
4. Login to the PRM with admin/admin.
5. Enter ALARM
6. Enter CONFIG SHOW
7. Enter AUTH
8. Enter LOG SHOW
9. Step through the event log display until you have seen the log entries for several reboot cycles.
10. Make sure to make Hyperterminal stop capturing text when done.
11. Make sure to reconnect the Radio Enclosure’s serial port back to the RCL system when done.

# 6 Uploading Files to MDS

When connected to the Internet, please upload the files from the above steps to the MDS FTP server using the following example. This session is from a Windows command prompt. You need to change directories to the location where you stored your logs and configs. You type what is in bold below.

```
> ftp ftp.microwavedata.com
Connected to ftp.microwavedata.com.
220 ProFTPD 1.2.10 Server (MDS Public FTP Server) [64.80.107.144]
Name (ftp.microwavedata.com:tmayo): ftp
331 Anonymous login ok, send your complete email address as your
password.
Password: ftp
230-
 ***************************************************************
 * Microwave Data Systems FTP Server                           *
 * Unauthorized access is prohibited.                          *
 ***************************************************************
230 Anonymous access granted, restrictions apply.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> cd INCOMING/RCL
250 CWD command successful
ftp> binary
200 Type set to I
ftp> put filename1
local: filename1 remote: filename1
```

```
200 PORT command successful
150 Opening BINARY mode data connection for filename1
226 Transfer complete.
2419712 bytes sent in 55.60 secs (42.5 kB/s)
```

[Repeat for each log and config file]

```
ftp> exit
```