SIERRA RV50 CELLULAR MODEM QUICK START GUIDE

Complete the following steps to configure the Sierra RV50 cellular modem to work with the Intellilogger.

OVERVIEW

The Sierra Wireless RV50 can be used to enable wireless (cellular) connectivity between an IntelliLogger and the Internet. This allows for remote connection between an Internet connected PC and the IntelliLogger for real-time monitoring, alarming, FTP, data download and reprogramming.

Following are the basic steps to configure the RV50 and IntelliLogger for cellular connectivity with details below:

1. Obtain a Static IP address and data plan
2. Establish a USB connection to the RV50 from a PC
3. Configure the RV50 to pass the communications originating from the user's PC via HyperWare-II and via Browser through to the connected IntelliLogger.
4. Configure a universal DNS alphanumeric name for the RV50 such that the modem can be accessed with a more memorable "Name" URL.   This is optional as the numeric Static IP address can be used if desired.
5. Configure the IntelliLogger Network parameters such that the RV50 and IntelliLogger have IP addresses on a common "mini" local area network. This is required so they can communicate via a direct Ethernet connection between the IntelliLogger and RV50.

OBTAIN A STATIC IP ADDRESS

Due to security changes in 4G cellular technology, bi-directional communication now requires a Static IP address. Static IP addresses can be obtained for a fee from the various carriers.

If using Verizon service, contact Logic Beach for a Static IP Address (no charge) and associated activation and data plan. If other carriers are to be used, contact them directly and purchase a Static IP address and data plan.

ESTABLISH PC TO RV50 USB CONNECTION

The RV50 is configured for operation via a program called Ace Manager which is served by the RV50. To access Ace Manager an configure the RV50, a USB connection can be used as follows:

1. Install the SIM card containing the Static IP credentials into the RV50. Remove two screws on front face of modem to access the SIM Card socket.
2. Connect an antenna to the Cellular RF connector (an antenna is not required to be connected to the Diversity RF connector)
3. Connect nominal 12 to 24Vdc power to the RV50 with provided connector or power supply
4. Wait for a few minutes until the RV50 LED's stabilize.
5. Connect a USB cable between the RV50 and PC
6. A temporary additional network connection will be established by the PC via the USB cable and a Windows notification dialog may display.
7. Launch a web browser and enter the default USB connection RV50's Ace Manager IP address… http://192.168.14.31:9191 and after a short delay, the Ace Manager should display. The Ace Manager screens are served by the RV50. If the connection is not made, wait a few more minutes for the USB/LAN connection to reconcile and try again.
8. Log in to Ace Manager using the factory default Username of "user" and password of "12345"
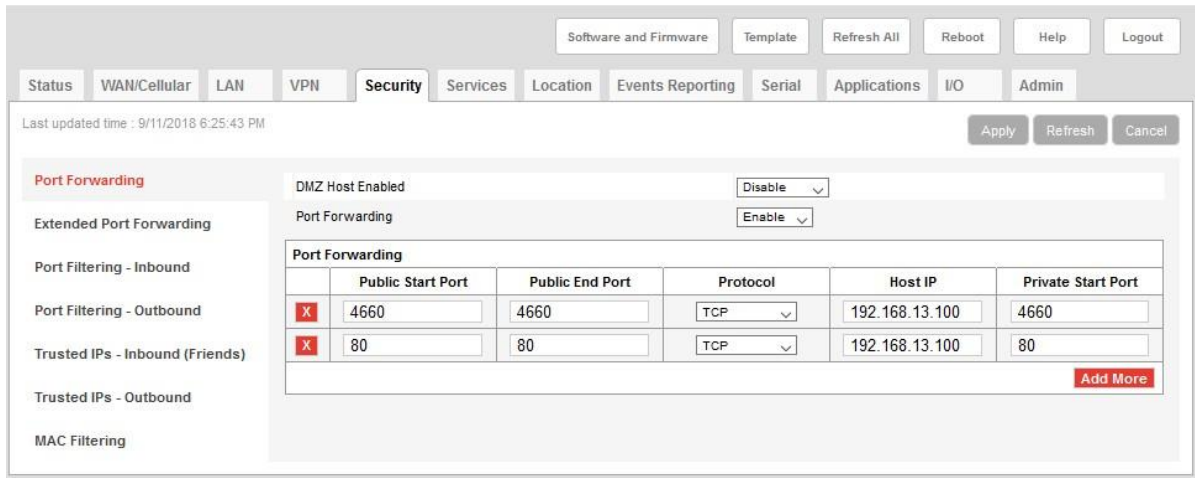9. Select the *Security* Tab (top menu); *Port Forwarding* (Figure 1):

Figure 1

♦ Enable *Port Forwarding*

♦ Add the following two Port Forwarding rules (click *Add More)*. The following rules assume that the 4660 and 80 ports have not been changed within the IntelliLogger. If they have, then substitute the changed port numbers. The current Port numbers in the IntelliLogger can be viewed by opening the Logger Configuration Settings dialog (hammer dialog in Comm Window of HyperWare-II), then choosing the *Advanced Network Settings* button on the *Network* tab.

Public Start Port	Public End Port	Protocol	Host IP	Private Start Port
4660[1]	4660	TCP	192.168.13.100	4660
80[2]	80	TCP	192.168.13.100	80

♦ Click Apply

10. DNS assignment.

Note: This step is only required if it is desired to assign a more memorable alphanumeric name to the RV50-IntelliLogger pair such as "LogicBeach01". Alternatively, this step can be skipped and the assigned Static IP address can be used for the URL.

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[1] 4660 is the default port within the IntelliLogger as shipped. This port is used for communications from HyperWare-II.
[2] 80 is the default port within the IntelliLogger as shipped that is used for browser (HTML) communications.
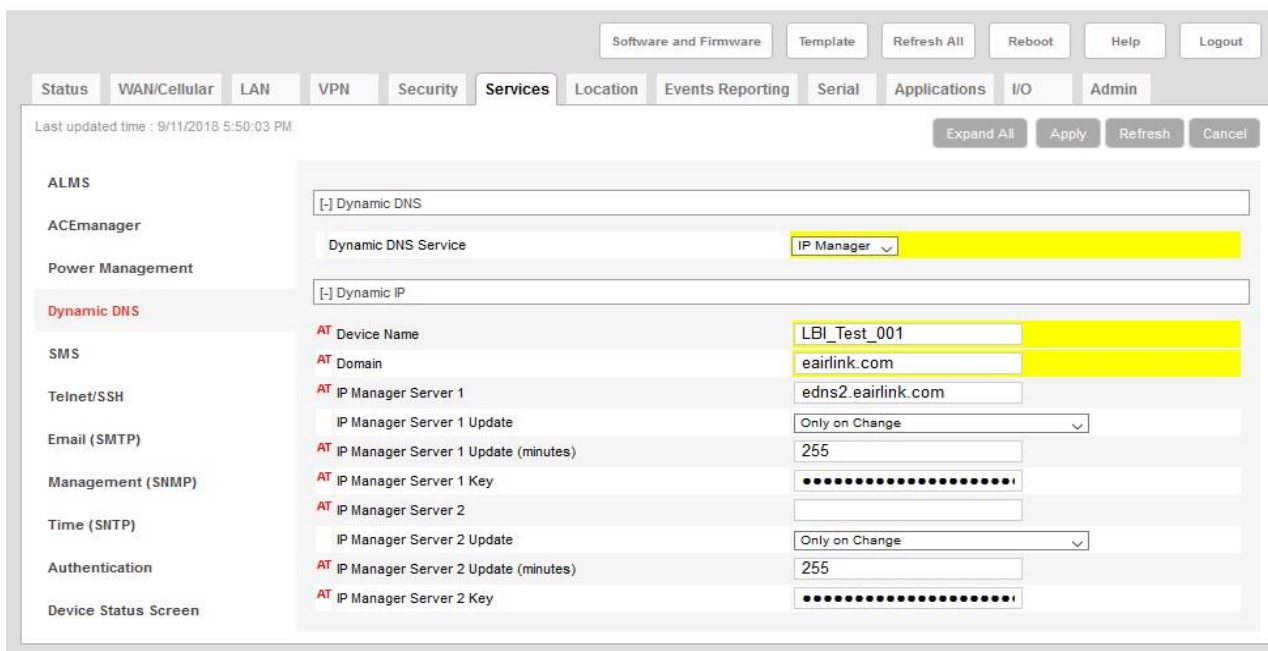
Figure 2

Select the *Services* Tab; *Dynamic DNS* (Figure 2):

- ♦ Set *Dynamic DNS Service* to IP Manager
- ♦ Set Device Name to a unique alphanumeric name that you want for the logger. This name will be used as the URL for establishing a cellular connection to the IntelliLogger.
- ♦ Set *Domain* to eairlink.com
- ♦ Set *IP Manager Server 1* to edns2.eairlink.com
- ♦ Click Apply

11. Select *Ace Manager* and *Services* tab (Figure 3)
    - ♦ *Set Remote Access to Both HTTP and HTTPS.* (Enabling of this setting allows for remote access to the RV50/Ace Manager in the event that field troubleshooting is required.
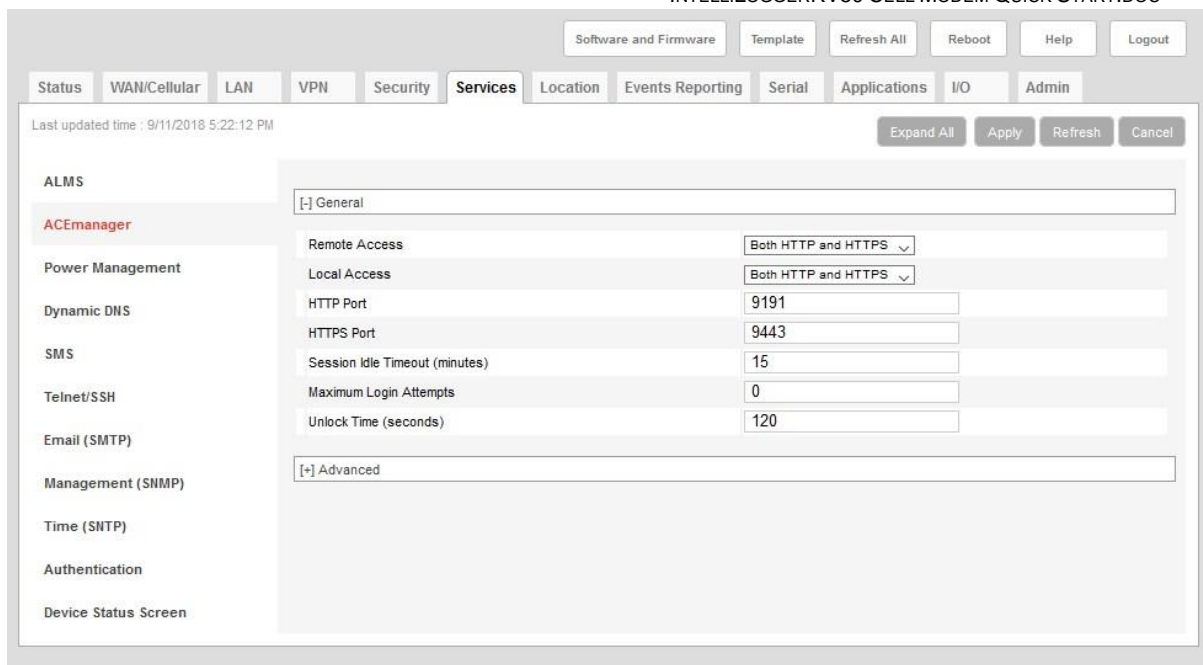
Figure 3

12. Click *Reboot* button (upper right) to restart the RV50.

INTELLILOGGER NETWORK CONFIGURATION

The RV50 has now been configured for operation. The IntelliLogger now has to be configured with an IP address on the same Subnet as the RV50 such that they can communicate.

1. Launch HyperWare-II and establish a USB connection to the IntelliLogger
2. From the Communications window, double-click or drag the Logger Configuration icon overlaying the IntelliLogger graphic to the PC graphic to open the Logger Configuration dialog
3. Click the Network Tab
4. Under Routing, set logger IP Address to 192.168.13.100
5. Set logger Gateway to 192.168.13.31
6. Click Send to logger. These steps configure the IntelliLogger to be on the same "mini-LAN" as the RV50. The IntelliLogger will have address 100 and the RV50 by default has address 13.
7. Connect an Ethernet cable between the IntelliLogger and RV50.

TEST THE CONNECTION:

1. Disconnect the USB cable.
2. Attempt connecting to the IntelliLogger through the RV50 by entering the following address in your browser (where "uniquename" is the name assigned in the RV50 configuration above):

   uniquename.earlink.com
3. Alternatively, the assigned Static IP address can be used in lieu of the name.
4. Upon success, a new Network Connection can be added into HyperWare-II in the Communications window using the same uniquename.earlink.com URL.

LOGIC BEACH INC
Document Revision History
8-28-2018: Updated for RV50 modem