Z9-P2 or Z9-PE2 Release Notes

These sections describe the additions, changes, and known limitations in each software version for the ZumLink Z9-P2 or Z9-PE2. The most recent version is listed first.

The latest firmware and software versions and the most recent list of known limitations and workarounds are available on www.freewave.com.

1.1. Version 1.1.2.2 (Initial Release)

Release Date: July 2019

Additions and Changes

- The Web Interface has been re-designed for improved usability on the Z9-P2 or Z9-PE2.
- Support has been added for:

  Note: See the **localDiagnostics.SupplyVoltage** parameter for more information.

  - VLAN Management
    - Users can only access the device from the VLAN ID.
    - If the VLAN tag is set on a specific Ethernet port, that port cannot be used to access the Management VLAN ID.

  Note: See the **network.vlanMgmt** parameter for additional information.

- **Windows® File Explorer** now shows 4.4 GB of space instead of the 1.8 GB in previous software versions.
  - This is a result of the ptp directory moving to a new partition.
  - To view space available for applications, login as **devuser** and run the command `df -h`.
    - The /persist directory is where applications reside.

Corrections have been implemented for:

- The `devuser` login password and the sudo password were out of sync when loading a new IQ Application Environment when the default password was changed on the existing IQ Application Environment. These passwords are now in sync.
- Files uploaded using the Web Interface cannot be deleted by users.
- After updating the **systemInfo.rteTemplateVersion** parameter, a reboot is necessary to update the **sys_info.txt** file.

Known Limitations and Workarounds

- Setting **date.timeString** causes the **entire Z9-P2 or Z9-PE2 configuration** to revert to saved settings.

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  - **Workaround**: Save settings before changing the **date.timeString** parameter.
- Cannot change the **date.timeString** once the time is set using NTP.
- The **UCD-SNMP-MIB-WP201.txt** file is missing definition for **dskIndex**.
- The Ethernet ports can become unresponsive after changing networks and the **network.vlanTagPort1** and/or **network.vlanTagPort2** IDs.
  - **Workaround**: Reboot the Z9-P2 or Z9-PE2 for changes to take effect.
- Setting the **network.vlanTagPort1** or **network.vlanTagPort2** may affect the connectivity of the other port.
- Unable to get input voltage via Modbus.
- When using the Web Interface on a computer with **Windows**® 8 or **Windows**® 10, clicking **Cancel** does **not** halt the upload process.
- Files uploaded using the Web Interface drag-n-drop procedure are now write-protected and cannot be deleted.
- When changing and saving the **radiosSettings Parameters**, the CLI interface may momentarily lock.
- If there is enough space to transfer the update firmware but not enough to facilitate the update, the update fails and the Upgrade Failed LEDs do not function.
  - **Workaround**: Users should verify the available free space before uploading an update firmware file.
    At least 2x free space is needed on the Z9-P2 or Z9-PE2 for the firmware update file.
- Users should wait at least 30 seconds after a factory default command is issued before making configuration changes.
- The fields in the **NTP** parameters are **not** validated by the system.
  - **Workaround**: Verify the NTP parameter settings are correct.
- Unable to set the time when the **ntpReference** parameter **=NETWORK_TIME_SERVER**.
- The highest baud rate supported for RS422 and RS485 is 421 kbps.
- In Firmware v1.1.2.2, when the **Com1.flowControl** or **Com2.flowControl** parameter is set to **hardware**, the COM port's flow control does not function.
- Exiting from the CLI may take up to 30 seconds.
- Entering the shortcut text of **ModbusTcp** and **ModbusRtuOverTcp** results in a DUPLICATE_PARAMETER Error.
  - **Workaround**: The fully-qualified parameter of **modbus.modbusTcp** and **modbus.modbusRtuOverTcp** must be entered.
- When issuing the **factoryDefaults=set** command, after making changes for any of the **Network** parameters, the user is locked out of the CLI.
  - **Workaround**: Reboot the Z9-P2 or Z9-PE2 for changes to take effect.
- VSWR reading may be inconsistent between the **Network Diagram** on the **Network Diagnostics** window and the information reported in the **Local Diagnostics** window.
- The **File Upload** window shows a 100% upload when the upload file has not completed on **Windows**® 8 and **Windows**® 10 computers.

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  - **Workaround**: Wait the appropriate amount of time or watch the LEDs to indicate completion of file transfer or use the **Firmware Upgrade - Drag and Drop** procedure.
- When setting the parameter `network.arpFilterEnabled=true`, ARP requests and responses are NOT blocked on VLAN interfaces.
- Rebooting a pair of radios simultaneously when one of the Z9-P2 or Z9-PE2 has the parameter `TerminalServerRelay.termserv_relay_mapping=Enabled`, the terminal server relay takes up to 6 minutes to become active.
- To update the **Network Diagnostics** window, refresh the browser to clear the browser cache.
- When the **TerminalServerRelay.termserv_relay_mapping** parameter is designated and the **Com1.flowControl** or **Com2.flowControl** parameter is set to `Hardware`, the COM port's flow control does not function.
- Significant data is lost between radios when operating in close proximity (3-6 feet) when `radioSettings.rfDataRate=RATE_4M`.
  - **Workarounds**:
    - Reduce power on radios when operating in close proximity.
    - Enable the **radioSettings.lnaBypass**.
- When using the USB, the CLI may lock up on units with **termserv_relay_mapping** parameter enabled.
  - **Workarounds**:
    - Re-seat the cable
    - Reconfigure the **TerminalServerRelay.termserv_relay_mapping** parameter.
- When the **TerminalServerRelay.termserv_relay_mapping** parameter is in use, the **Com1 or Com2.connectionDrops** count should be ignored.
- When operating at `radioSettings.rfDataRate=RATE_4M` and with multiple Repeaters, if a **short** **radioSettings.beaconInterval** and a **high** **radioSettings.beaconBurstCount** are designated, throughput is very low.
  - **Workaround**: Use either a **longer** **radioSettings.beaconInterval** or a **lower** **radioSettings.beaconBurstCount**.
- As Repeaters are chained in the network, round trip delay increases.
  - When issuing pings of large packet sizes at the lower data rates, such as 115.2K, and a `beaconInterval=TWENTY_FIVE_MS`, the latency can increase causing the pings to fail.
    - **Workaround**: Allow an appropriate delay between pings.

  > **FREEWAVE Recommends**: Set the `beaconBurstCount=2` or more and `beaconInterval=ONE_HUNDRED_MS` or more for optimal throughput when extended Repeater networks are used.

- The **localDiagnostics.signalLevel** parameter reports a maximum of -42 dBm when the `radioSettings.rfDataRate=RATE_1M`.

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Learn More

For additional product information about the ZumLink Z9-P2 or Z9-PE2, visit http://support.freewave.com/.

For additional assistance, contact a local reseller, or contact FreeWave Technologies, Inc. at 303.381.9200 or 1.866.923.6168, or by email at support@freewave.com.

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The Z9-P2 or Z9-PE2 complies with FCC Part 15 rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation.

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