



G1 Device Software Release Notes 0.975

vRN-G1-2022-03



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****NOTE**** For the most up-to-date manuals, please download the latest version of this document on our customer portal: www.taranawireless.com/private

Intended Audience

This document is intended for use by system administrators and engineers interested in the design, daily management, operations, and troubleshooting of a Tarana G1 network including Base Nodes, Remote Nodes, and the Tarana Cloud Suite (TCS).

It is assumed that the reader has a good working knowledge of RF, wireless systems, and networking concepts.

The G1 products are designed for installation and use by trained professionals and require adherence to all relevant regulatory, safety, and telecom industry best practice guidelines for outdoor radios. It is assumed that the Tarana G1 Base Node and Remote Nodes have been installed onsite and are connected to the TCS.

Models Supported by Release 0.975

Released Version: 0.975.003

Frequency	Device Type	Part Number	Description
5.8 GHz	BN	30-0134-001	5.8 GHz Base Node
	RN	30-0128-001	5.8 GHz Remote Node
3.5 GHz	BN	30-0141-001	3.5 GHz CBRS Base Node
	RN	30-0142-001	3.5 GHz CBRS Remote Node

Backward Compatibility

BN/RN	0.809	0.913	0.975
0.809	✓	✓	✓
0.913	✓	✓	✓
0.975	✓	✓	✓

- Any device with running software version 0.809 or higher can be upgraded directly to 0.975.
- Tarana strongly recommends upgrading to 0.975 as soon as possible to allow renewal of device certificates (see next section).
- Support for software revision 0.809 will be deprecated on June 30, 2022.

Notes:

- A previous build (0.975.001) was made available for a brief time that has a critical Ethernet bug on the RN. If this has been installed, Tarana strongly recommends installing the GA build (0.975.003).
- An issue has been identified that in some instances the TCS Operator Portal becomes unresponsive when the Device UI is open in the same browser window as TCS. Please close the Device UI to work around this.

Release 0.975 Features

Feature / Bug Fix	Description
Management tunnel enhancements	Device software support to enable increased resiliency and availability of the secure tunnel to TCS ¹ .
Device Certificate Rotation	Device software support for automatic certificate rotation from TCS prior to expiry. The certificates are used to authenticate Tarana G1 devices with TCS.
CBRS Functionality	0.975 adds CBRS functionality to CBRS hardware.
User password management	The device password can be changed from the Device UI.
Additional network profiles support	Network profiles 5 and 6 are now supported ² .
L2 Traffic Optimization	The ACM operating point has been optimized for reduced packet error rate and latency.
Support (optional) for broadcast DHCP offer	The software can now allow broadcast DHCP offer packets in instances where the DHCP client requests a broadcast response. This is <u>not</u> enabled by default ³ .
Fix snapshot upload failure	The device snapshot upload to TCS was failing occasionally. This has been fixed.

1. Subdomain vpn1.cloud.taranawireless.com may need to be added to the DNS allow-list of the customer network. This is only applicable if individual subdomains are being allowed through the firewall (not recommended). If the *.cloud.taranawireless.com is on the allow list (recommended) no changes are needed.
2. Network Profiles:

Network Profile	DL:UL Ratio	Max. supported cell range
1	4.5:1	15 km
5 (new)	2.67:1	15 km
6 (new)	1.75:1	15 km

Note: The network profile defines the maximum distance an RN can be from its BN and the ratio of the downlink rate to the uplink rate.

3. For DHCP clients that cannot support unicast packets prior to IP address assignment, the BROADCAST bit can be set (to 1). Note that the use of this mechanism is discouraged [RFC1542]. For devices where this cannot be avoided, Tarana can enable broadcast DHCP offer. Please contact Tarana Support if this needs to be enabled.

About Tarana

Tarana Wireless, Inc. is the performance leader in next-generation fixed wireless access network solutions, powered by a number of industry-first and well-proven breakthroughs in perfect, multidimensional optimization of radio signals. Its Gigabit 1 fixed access system overcomes previously insurmountable network economics challenges for service providers in both mainstream broadband and underserved markets, using free unlicensed spectrum. The company is headquartered in Milpitas, California, with additional research and development in Pune, India. For more information, visit taranawireless.com.