AirCheck G2 version 2.0.0 Release Notes

October 2017

AirCheck G2 v2.0.0 Release Notes briefly describe the Bug Fixes included in the release, along with Known Issues to be aware of. It also includes a reference to Frequently Asked Questions (FAQ).

Upgrading to Version 2.0

Upgrading from 1.1.1 to 2.0 is straightforward, however there are several recommended steps that you can take to further minimize the chances for problems. Following these steps will ensure important data is not lost when transitioning to the new build.

1. Use the AirCheck G2 Manager application to export and save any screen captures or session files off your unit prior to upgrading.
2. Ensure you have saved a backup copy of all AirCheck G2 profiles, and session files you may have created, upgrading the unit will migrate files to a 2.0 format, and should you need 1.x versions in the future you will need to use the archived copies.
3. Before upgrading your 1.x AirCheck G2 to 2.0, we recommend that you ensure you are running 1.1.1. Upgrading directly from 1.0.0 is possible, but upgrading from 1.1.1 is recommended.
4. After performing steps 1 – 3 as applicable, you should then update your AirCheck G2 Manager software to the 2.0 version.
5. Finally after updating your AirCheck G2 Manager Software to 2.0, attach your 1.1.1 AirCheck G2 to your computer using the USB cable and update it to the v2.0 firmware.

Version 2.0 New Features

The AirCheck G2 v2.0 release brings enhancements to existing AirCheck G2 features as well as new features never before seen in an AirCheck tester.

New and Updated Features

Performance Testing with iPerf

Quickly and easily test the throughput on your network by conducting iPerf tests from an AirCheck G2 to an iPerf server. The iPerf test allows a user to validate the throughput on their network at a given location.
The tester uses the industry standard performance measuring tool iPerf in either UDP or TCP mode of operation. Tests can be conducted with a customer's iPerf server they install themselves on their own or utilizing our new Test Accessory.
IPerf results are logged to your session file and can be saved and reviewed by using the AirCheck G2 Manager software.

iPerf Configuration

A new configuration area is available in the AirCheck G2 settings: iPerf Settings. Additional new iPerf thresholds are available for configuration in the Thresholds area.

iPerf Settings

Protocol

iPerf tests can be run for TCP traffic or UDP. All performance tests will be run based upon the traffic type selected here.

Port

Configures the port to be used for the iPerf traffic.

Test Duration

Configures the amount of time (in seconds) for the iPerf test to run. The test runs an uplink followed by a downlink test. This duration is for the total time of both tests, so the default 20s setting will result in a 10s uplink followed by a 10s downlink test.

Thresholds

This is not a setting but instead is a link to the AirCheck G2 Thresholds configuration screen.
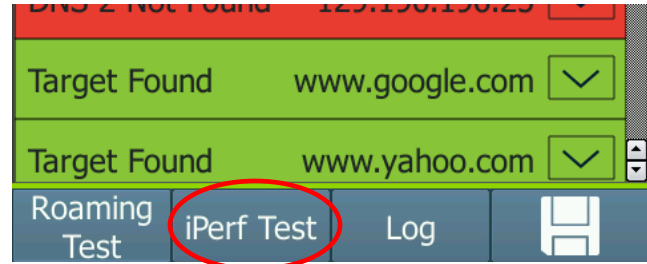
Remote Battery Type

This sets what battery type is present in a Test Accessory. The AirCheck will use this information to give the most accurate reading possible for the remaining battery level of your Test Accessories.
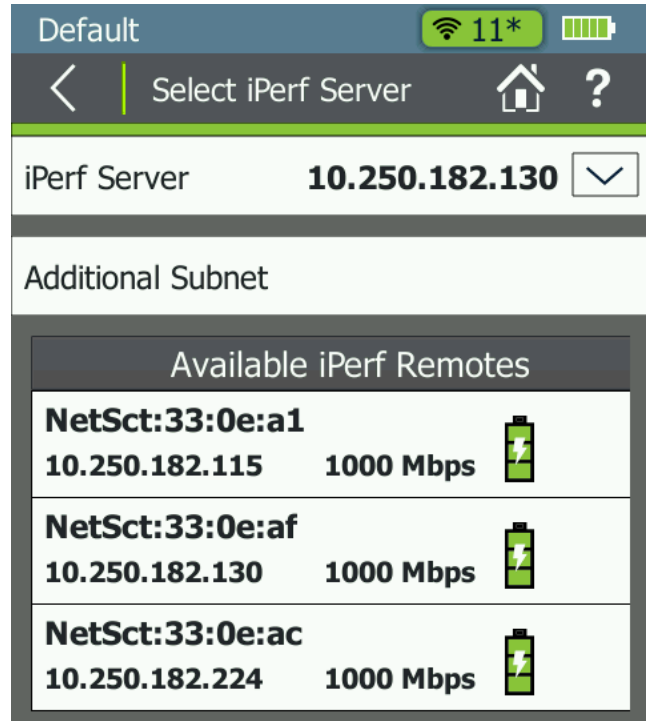
Running an iPerf Performance Test

An iPerf test can be conducted by following these steps:

1. Connect to a network or an AP as before
2. After a successful connection, a new button is available at the bottom of the screen titled "iPerf Test". Tap that button. The Select iPerf Server screen will now display.

3. You can now select what iPerf server you would like to use. You can tap in the space next to "iPerf Server" to manually enter the IP address of the iPerf server you would like to test against, or you can select from a list of detected Test Accessories at the bottom and then tap "Done". For further information on configuring iPerf servers and managing Test Accessories please refer to the User Guide.
4. Tap "Start" at the bottom of the screen to begin your iPerf test. The test will run for the configured amount of time, and results will be marked pass/fail based upon the configured threshold.

Captive Portal Support

Customers asked and we listened, users can now conduct all their AirCheck testing even on public facing networks that feature a captive portal.
A new configuration item is available in the AirCheck G2 Network Configuration screen. For a given network, you can set Captive Portal to be On or Off for that network.
When attaching to a network configured as a captive portal network, the AirCheck G2 will open a web browsing screen for the user to provide any necessary interaction.

Important Notes:
- Some web pages contain small features (such as check boxes) that can be difficult to accurately interact with unless the page is zoomed in.
- Secondary pop-up windows (such as opening a Terms and Conditions form) that open off the main Captive Portal page are not supported.

Authorization Classes

One of our popular AirCheck G1 features is now available on the AirCheck G2. Users can now mark APs as Authorized, Unauthorized, Neighboring, or Flagged. APs can be sorted by authorization class, and the updated AutoTest can now report on any APs that have been marked as Unauthorized or Flagged that are heard during the test scan. [Please note, Rogue AP for AutoTest is on by default after upgrading from 1.x to 2.0.] In addition, users can set up a 'default' setting to be used for any APs heard that do not already have an assigned Authorization class. If 'None' is selected, then no ACL will be assigned and that AP will not indicate any ACL icons in the AP listings.
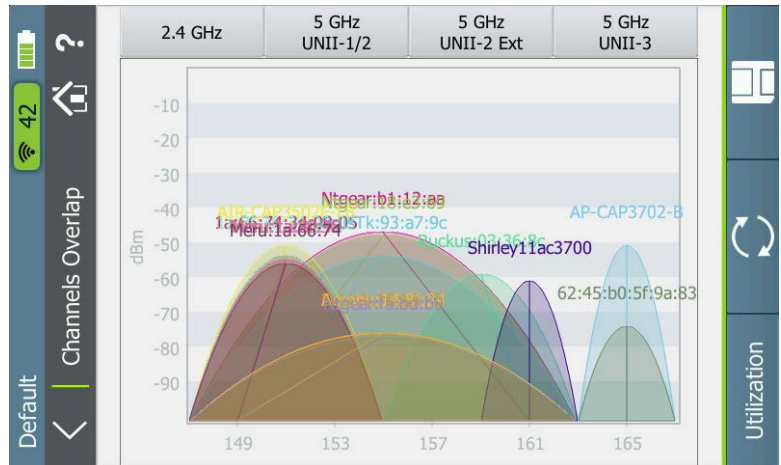
Interferer Detection and Classification

Sometimes the problem isn't the Wi-Fi, it's the other devices in your area. Get a view into what other technologies are in your airspace by detecting interferers such as Microwave ovens or wireless cameras. The AirCheck G2 will use its wi-fi radio to detect interfering technologies in the environment and attempt to identify them. Interferer events are categorized by the AirCheck G2 radio as it scans through the bands. Based upon the readings it receives during the scan, if the AirCheck G2 believes the devices is operating with enough power and regularity to interfer with your Wi-Fi Network, it will attempt to identify an interfering device and (if identified) an interferer event will be logged.

Various Small Enhancements

Channel Overlap

Users have requested the ability to visualize the channels and how they overlap with each other. This view is now available at the tap of a button from the Channels screen.

Supported Rates vs. Basic Rates

Another common request was to separate the rates information the AirCheck provides on an AP into Supported vs. Basic rates, so that the user could see explicitly how the AP was configured. We've made this change to the AP Details screen, so both pieces of information are now available.

Save a Packet Capture

Now when saving a session file, the user also has the option to save that information as a PCAP. The capture file is automatically set to slice packets at 512 length. Packet capture files can be exported from the unit via a supported USB thumb drive.

Version 2.0.0 Bug Fixes

DE14857	Upgrading firmware via the AirCheck G2 Manager no longer causes an error message of: "Error transferring AirCheck G2 firmware file"
DE15486	After disconnecting from AirCheck G2 Manager and rebooting, the AirCheck G2 no longer will occasionally show AutoTest, Ethernet Test and soft keys as disabled (greyed out).
DE15659	If a Profile is created/edited in AirCheck G2 Manager with multiple security certificates and at least one Network, and that Profile is transferred to an AirCheck G2 and that Network is edited within the AirCheck G2, the first certificate in the Profile's list is no longer automatically assigned to that Network.

Version 2.0.0 Known Issues

DE14570	AirCheck G2 Manager does not apply grouping of virtual APs (BSSIDs on the same AP radio). Therefore the AP count shown in AirCheck G2 with virtual AP grouping enabled may not match the AP count in AirCheck G2 Manager.
DE14604	If AutoTest connects to a hidden network, Network Coverage will show 0 APs. This will cause the connection test to fail when using the default threshold for Network Coverage. You can adjust this threshold in Settings / Thresholds to avoid this.
DE15401	If a negative signal adjustment causes the signal level to exceed the -99 dBm minimum level limit, Signal/Noise Ratio (SNR) readings may be incorrect.
DE15466	Link-Live does not report channel utilization for wireless connection tests.
DE15541	If the AirCheck G2 is set to scan on only one channel, it is possible that a Connect to Network test can connect to the network on a different channel. 802.11 Types reported to Link-Live might be missing in this scenario.
DE17209	After running an Ethernet or iPerf test the * will appear next to the profile name indicating a change to the profile despite the user not changing profile characteristics. This occurs due to "last used" information being saved to a profile by the unit automatically.
DE17343	If a 2.0 unit is downgraded to 1.1.1, the unit should be reset to factory defaults before upgrading again to 2.0 to prevent the first test result to fail Link-Live archiving.
DE17394	Changing the Date or Time on the unit puts it into a very slow scanning state which can only be recovered by rebooting the unit.

Frequently Asked Questions (FAQ)

For a list of FAQ and answers, please log into your link-live account and visit https://app.link-live.com/support. Select the AirCheck G2 article.