

LXI Conformance Test Suite 3.0

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The LXI Conformance Test Suite is now upgraded to Revision 3.0, which includes some of the following improvements:

- New operating systems are supported (Windows 7 or Windows 10).
- Easier installation.
- Easier execution of 1588 tests.
- Better documentation of the software and hardware requirements.
- Performs conformance testing for the [LXI Device Specification, revs. 1.4 or 1.5](#).

The LXI Conformance Test Suite has been brought up to speed and packaged into an installer for all LXI members to download from the LXI website. Members can download the LXI Conformance Test Suite 3.0 from the [LXI Conformance page](#). (If you are not yet a member, then you are directed to the [How to Join page](#).) Obtaining the LXI Conformance Test Suite from this location will ensure that your LXI Conformance tests are done with the correct released version of the specifications.

The initial LXI Conformance Test Suite was designed for the operating system Windows XP 32-Bit, which of course is no longer used today. Today, most of the computers are equipped with Windows 7 or Windows 10, most of them with the 64-bit version of the operating system. In order to support these new operating systems, the LXI Conformance Test Suite was adapted accordingly and all related tools and scripts were reworked. Also some minor issues which were collected over the years had to be resolved to achieve a smooth transition. Furthermore the LXI Conformance Test Suite uses several external tools such as Bonjour, Wireshark etc. to verify many features of a device, the LXI Conformance Test Suite has been upgraded to be able to run with the current versions of these tools.

As mentioned above the LXI Conformance Test Suite has been outfitted with an installer which installs the LXI Conformance Test Suite binaries and application, but there are still further software and hardware requirements necessary to actually be able to run the entire conformance test. These requirements have been gathered together into a new document the “HowTo – LXI Conformance Test Suite” document.

A major issue during the clean-up programming was the 1588 testing, which until now were only executable in a certain environment. This has been rectified so that no special environment is necessary to test 1588 devices any more. All 1588 tests run on Windows 7 and Windows 10. Another issue was the Perl version necessary to run 1588 tests, since a specific module (IO::Socket::Multicast) is required. Therefore, the LXI Consortium now recommends using Strawberry Perl, since this has the module included free of charge.

All of these steps result in the LXI Conformance Test Suite 3.0 being significantly improved and ideally prepared for use on modern computers. This has been a major step to consolidate the LXI Conformance Test Suite for all members to use the same version as the testers do. This greatly reduces the time-consuming surprises, when members get their devices tested.

There are still further improvements to the LXI Conformance Test Suite in sight. At the moment the LXI Conformance Test Suite, rev. 4.0 is being discussed. The LXI Conformance Test Suite 4.0 shall be equipped with more automated tests, have more detailed test logging capabilities and reduce the amount of tools and scripts being used. Also this version will be able to run not only on Windows, but also on Linux operating systems as modern applications should. TSEP will present a first concept for the LXI Conformance Test Suite 4.0 at the June Plug Fest in Ft. Collins, Colorado. A hardware prototype will also be presented, showing the various components and giving an initial demonstration of the new concept.