

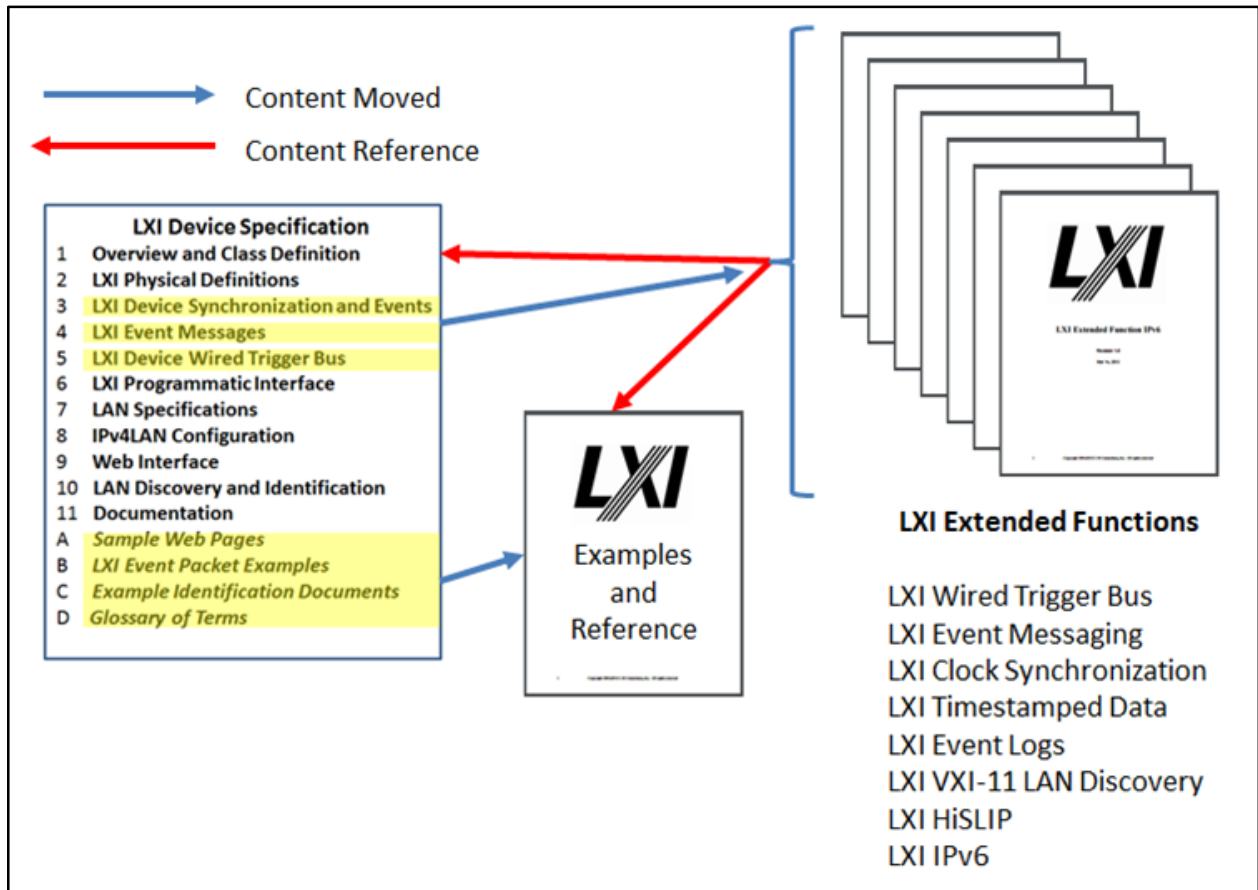
LXI Consortium Working on new LXI 1.5 Standard for Final Review in Munich

By [David Owen](#), LXI Technical Committee Chairman

The LXI Specification is currently at Version 1.4, but a number of issues have surfaced since that release (including the creation of the LXI Reference Design), requiring the creation of Version 1.5 of the LXI Standard. For the most part, the proposed changes involve re-organizing the specification and deprecating or changing Rules. The main purpose and goal is for simplification of the specification for future enhancements and to improve the overall LXI Conformance process.

There were no easy solutions in trying to accomplish this task, so an initial draft was prepared for review at the San Diego meeting in February 2016. At that meeting, members spent a lot of time reviewing the new proposed documentation structure. Attending members walked through the entire specification and came to an agreement on new proposed changes. Here is a summary of technical changes to the LXI Specification:

- Main LXI Device Specification now consists of core or common capabilities of all LXI Devices.
- Optional advanced features are now in separate Extended Function documents.
- VXI-11 LAN Discovery is no longer a requirement and has moved to an Extended Function.
- Rules and Recommendations concerning safety, environmental, and mechanical (rack) standards are deprecated.
- Any material deemed informative such as example Web pages, example xml identification files, glossary, etc. have been moved to a living document that can be updated without membership voting.



As indicated in the above diagram, a significant amount of material moves out of the current LXI Device Specification and into the Extended Function documents. Of critical importance is maintaining Rule and Recommendation numbers to avoid disruption of the Test Suite and maintain clarity in looking back at older versions of the standard. Therefore, the newly created Extended Function documents retain the original numbering.

Some of the newly created optional Extended Functions have common Rules and Recommendations. To avoid duplication in each Extended Function, the common requirements remain in the LXI Device Specification (see Rule and Section Interdependency Table below). Common requirements called out in each Extended Function have pointers back to the LXI Device Specification.

Rule or section	WTB	Event Message	Clock Sync	Timestamp data	Event Log
Complete dependency				Must have clock sync	Time stamp data for non-zero values must have clock sync
3.2			√		
3.3		√			
3.4		√			
3.5	√	√			
3.6				√	
3.7	√	√			√
4		√			
5	√				
6.1.1	√	√	√		
6.3	√	√			
6.4		√			
6.4.4 to 6.4.6	√	√			
6.5		√	√		
6.6		√			
6.7		√			√
9.6	√	√	√		
10.2.5	√	√	√	√	√

LXI Conformance Changes

The LXI Conformance Test Suite will be modified to accommodate these changes. Since Rule numbers remain unchanged, the changes to the Test Suite are more oriented around the deprecated Rules – which were mostly found in the Vendor Declaration section. Some additional documentation pointers will also be added to point to the newly created Extended Functions, where the unchanged Rules can now be found.

The San Diego meeting also reviewed the conformance policy. The decision was made to set the overlap for testing 1.4 and 1.5 at one year from the release of the new LXI 1.5 Standard. Technical Justification will be permitted from versions 1.3, 1.4, and 1.5 with no end date as they are all compatible versions of the LXI Standard.

Each newly created Extended Function contains all conformance requirements, including location of Rules that may be found outside of the particular Extended Function document. These pointers and Rules are found in Section 1.4 of each document.

Timeline for Review and Ratification of the new LXI 1.5 Standard

The intent is to conduct a final review of the LXI 1.5 Standard documentation at the Munich meeting in June, 2016. The Technical Committee will be announcing the final ratification process timeline to all LXI membership in the coming weeks.

LXI Documentation Overview

An updated document called *Guide to LXI Documentation* will be prominently located on the LXI Specification Website tab after ratification of Version 1.5. This document provides detailed information of how to locate and use the new LXI Specification and member documentation.