LXI Conformance - Technical Justification

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LXI

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www.lxistandard.org

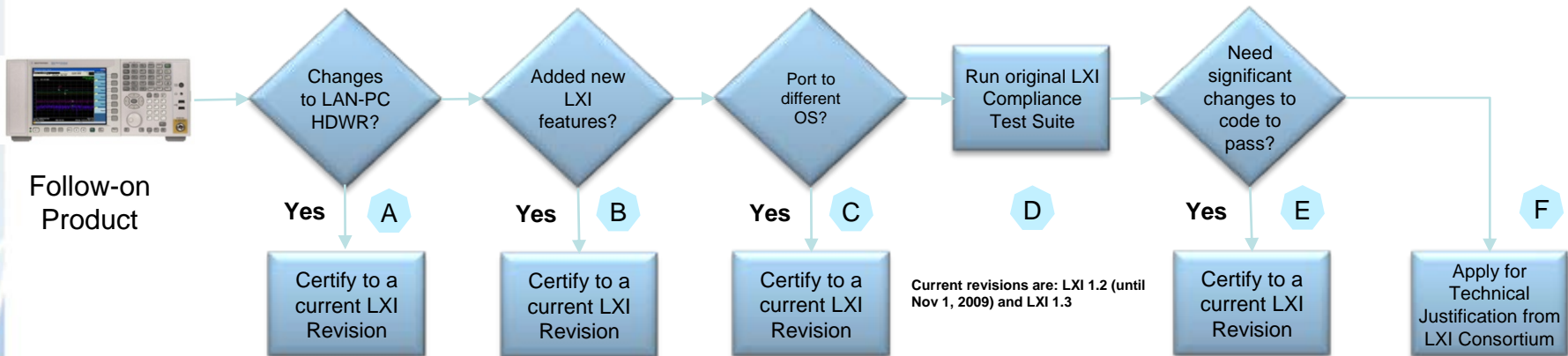# Technical Justification

Definition in the LXI Standard:

- "Conformance certification can be requested based on written Technical Justification that a new LXI Device has a direct legacy from and traceability to an existing LXI Device that has already received approval.
Reasonable engineering judgment should be exercised when writing the justification document, and the main goal – that of building and selling LXI Devices that interoperate with other LXI Devices without problems – should be kept in mind when taking this course of action."

Technical Justification

- **A follow-on product that uses the platform of a previous product that has been LXI certified can apply for Technical Justification to that prior version of the LXI specification if the product can be shown to pass the original LXI conformance test and it has not undergone significant changes to the original LXI connectivity code.**

LXI Technical Justification

Follow-on Product

Changes to LAN-PC HDWR?

Yes — A

Added new LXI features?

Yes — B

Port to different OS?

Yes — C

Run original LXI Compliance Test Suite

D

Need significant changes to code to pass?

Yes — E

F

Certify to a current LXI Revision

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Current revisions are: LXI 1.2 (until Nov 1, 2009) and LXI 1.3

Certify to a current LXI Revision

Apply for Technical Justification from LXI Consortium

Brief Explanations

Platform has migrated to a different compute engine or LAN hardware. Vendor should be prepared to certify to newest version in many cases:

Significant:
• If causes OS changes
• If causes change to drivers

Much Lower Significance:
• LAN PHY supports Auto-MDIX

Product now has LXI capability it did not have before from newer LXI revision. *Adding a Recommendation to current LXI spec simply requires showing this feature works.* Examples of newer features:

• XML Discovery (1.2)
• mDNS discovery (1.3)
• Any Class A or B features to a Class C product

Platform has migrated to a different OS. Vendor should be prepared to certify to newest version in many cases:

Significant:
• WinCE to WinXP
• VxWorks to Windows
• Windows to Linux
• WinXP to WIn7
• Win2000 to WinXP

Much Lower Significance:
• VxWorks 6 to 6.1
• Minor patches/upgrades

LXI code was changed significantly in order to pass original LXI conformance test.

Significant:
• Changes to Network operation
• Corrections to LXI Web pages related to proper LAN connectivity

Much Lower Significance:
• Corrected HTML on web pages
• Correcting default conditions stored in flash memory
• Adding statistical LAN information on web page derived from LAN driver
• Correcting defects in IVI driver

Original Product

Certify product to a current version of LXI Standard → Test results from Original LXI Compliance Test

LXI Product Vendors are ultimately responsible for their LXI Products to become and remain conformant.

Any product applying for LXI Technical Justification must run and pass internally its original LXI conformance test.

As a general rule, if a Vendor requires running its own product regression tests, it should re-run the original LXI conformance test.

Explanations, statements, and flow are suggestions and are to be reviewed by Compliance WG

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