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For new and prospective UNH-IOL Members

Last Updated: September 08, 2017
Outline

Avnu Certification Testing Process

UNH-IOL Service Options

Working with UNH-IOL

Brief Overview of the UNH-IOL
Avnu Alliance Certification Testing Process

1. Restricted to Avnu Alliance Members
2. (Optional) Pre-test in-house: Contact UNH-IOL to access in-house test tools ([Request a quote](#))
3. (Optional) Pre-test at UNH-IOL ([Join Here](#))
4. Contact UNH-IOL to schedule testing (annual or pay-per-test options exist)
5. Work with UNH-IOL to pass all required certification tests
   For any failing test run, test reports are provided as well as logs/captures.
   Firmware changes require rescheduling and retesting.
6. Passing reports submitted to Customer
7. Customer provides Avnu with Logo Application Form
8. UNH-IOL provides passing reports to Avnu Alliance at Customer direction
UNH-IOL Developed Avnu Testing Tools

- Violett Automation Framework Tool provided from UNH-IOL
  - To fully realize capabilities, specific network cards & resources are required, more information is available here:
  - https://www.iol.unh.edu/solutions/test-tools/avnu

- Tool enables ~80% of certification testing in-house

- Two Test Packages are offered:
  - **Pro AV / Base Test Package**: Includes coverage for Pro AV Endstation and Bridges, and “Base” endstations / gPTP devices
  - **Avnu Automotive Test Package**: Includes coverage for Test Plans based on Avnu Automotive specification

- Tool pricing based on membership status:
  - Non-members of Avnu Alliance: $8,400 USD per seat per package
  - Members of Avnu Alliance: $4,000 USD per seat per package
  - Members of UNH-IOL Avnu Certification Test Service: $2,000 USD per seat per package

- Test tool access is provided for 12-months from licensing start.
- Tool updates are provided at no extra cost throughout the life of the license.
UNH-IOL Extended Tool Support

• 40+ Avnu members currently utilize the test tools in-house
• UNH-IOL routinely receives requests for debug, test result review and training/consulting, as well as vendor specific feature requests.
• The tool is updated approximately every 3-4 months.
• **Additional Support** available to members of UNH-IOL’s Avnu Certification Test Service are provided additional support.
  • Issue and in-house test result review
  • Limited training/consulting
    • Contact us if interested in formal training programs
  • Rapid access to new experimental features
  • Additional features such as enhanced automation for regression test
UNH-IOL Avnu Certification Testing Fee Options

• Option 1: Annual Membership in the UNH-IOL Avnu Certification Test Service
  • Annual Membership is not required, but does provide the best value to our customers.
  • Current fee: $18,000 USD per 12 months of access:
    • Annual access to testing, tool support, test result consulting for one low fee.
    • Full members may reserve testing time for pre-testing or for formal certification testing,
      • No other fees required.

• Option 2: ‘Pay-per-Test’
  • Non-members may elect to pursue testing on a ‘Pay-Per-Test’ basis
  • Currently offered at $8,000 (Endstation), $10,000 (Bridge) per one full test run (one product, one firmware, all certification tests performed)

• Options to test faster/sooner:
  • A Full member, or a non-member may pay the ‘Pay-Per-Test’ fee to reserve additional test periods.
  • A customer may expedite testing when scheduling for additional fee.

Information on this page is current as of 2017/09, subject to change, refer to www.iol.unh.edu for the latest fee information
Working with UNH-IOL
**Plan for Test**

- Complete testing of 1 device is currently expected to take >1 week.
- Devices must arrive the Thursday before the scheduled week.
- 2 are requested, if only 1 is available testing time will be extended.
- Pre-certification testing is encouraged.
- Lead time may vary from 6 weeks to 8+.
- Schedule your test slots 2 months in advance.
- Join Early - Book early.
- Expedited testing can be established
  - Additional fee
  - Evening/Weekend hours
Scheduling Process

• First-come, First-serve fair-access scheduling
  • “Fair access” – For each membership, one reservation can be held in the calendar at a time. For Annual members, this generally translates to 6-8 reservations per year per membership.

• 2 week reservation test-slot

• During an active week rebooking is allowed Friday noon of active week.

• Applies to UNH-IOL Avnu Certification Test Service Members and Pay-Per-Test customers alike.
Online Scheduling Process

• Members may access our Vendor Login area to schedule testing
  • https://www.iol.unh.edu/my/

• Testing Status:
  • Example:

• More details on how to schedule and obtain status at the link below:
Device Information

• The online scheduling system will require you to enter the device under test (DUT) to be entered in our inventory system.

• A questionnaire will be sent via email to collect necessary testing details.
  • Record of vendor’s officially supported features/ capabilities/ etc.
Device Updates

• Firmware updates may be provided at any time during pre-certification testing.
• After a new firmware is provided, Members\(^1\) may request to spot check a previous failure.
• For a single scheduled test period, the default action is to test all certification tests for a single firmware. When firmware changes, customer direction is requested to either:
  • Complete testing on old firmware; or,
  • Complete remaining tests on new firmware.

Note: For certification, passing results must be observed for all tests on a single firmware.

\(^1\)"Members” refers to UNH-IOL Avnu Certification Test Service Members.
Expectations: During a testing reservation

1. Attending a reserved test-slot is permitted with advance notification.

2. Testing occurs during the reserved period as technicians are available, this might not be uniform through a given week due to the our student technician’s class schedule. All testing may not be completed within a 5 day period.

3. Approximately 40-man-hours of work is provided with each scheduled slot
   a) This work may occur in parallel via multiple technicians provided >1 DUT is provided.

4. For a single scheduled test period, the default action is to test all certification tests for a single device with a single firmware.
   a) By default, each test period is treated as an official certification run (not a ‘pre-test’)
   b) If a customer wishes, a specific plan can be established to consume the 40-man-hours of the test period to best suite desires
      1) For example: run gPTP only and iterate with new firmware versions as they become available during the test period, or run gPTP on two different devices, etc. A new reservation would then be required to run all remaining tests on a device (or all tests if firmware is updated)

5. During certification testing, vendor interaction with the DUT is not allowed unless strictly supervised

6. Confirmed device issues are reported as soon as practical
Expectations: After a test slot

• Formal reports will be provided
• Allow ~5 business days following a test slot for the reporting process, including review, to be completed.
• Captures and logs provided through online means
Members of the UNH-IOL Avnu Certification Test Service may:
- Provide new firmware at any time for installing by UNH-IOL technicians
- Members may request “Spot-checking” of previous device failures
  - This service is provided on a best-effort basis as time allows

Pay-Per-Test customers:
- May provide firmware updates before their scheduled test period for installing by UNH-IOL technicians
- “Spot-checking” between test periods is not available to pay-per-test customers.

Any claims of test/tool/tester error will be investigated promptly
UNH-IOL Overview
University Of New Hampshire

Founded in 1866

Main campus located in Durham, New Hampshire

12000+ undergraduate students, 2000+ graduate students
University Of New Hampshire

Brief overview of the UNH-IOL

University of New Hampshire InterOperability Laboratory
The UNH-IOL is a non-profit neutral, third-party laboratory dedicated to testing data networking technologies through industry collaboration.

Performing Ethernet testing since 1988
- UNH-IOL Tests are listed on iol.unh.edu for public (re)viewing

Industry leading test facility for data, telecom and storage networking technology & consumer electronics

32,000 sq. ft lab facility
- 7,200 sq. ft pre-wired space dedicated to Plugfests
- >150 Employees, >20 full time staff
InterOperability Laboratory

The Lab
The UNH-IOL is a neutral, third-party laboratory dedicated to testing data networking technologies through industry collaboration.

Our Mission
To provide a neutral environment to foster multivendor interoperability, conformance to standards, and improvement of data networking while attracting students to, and educating them for, future employment in cutting-edge technologies.

https://www.iol.unh.edu/about/mission
Member Involvement

100% funded by commercial industry

- 150+ companies

https://www.iol.unh.edu/membership/members
Industry Involvement

More than a test house

• Active participation in standards providing feedback from a testing perspective

• Develops new tools and capabilities & work with T&M community to advance test technology

• Provide training opportunities

• Promote early adoption through collaborative group testing (Plugfests)
Industry Involvement (continued)
Thank you for your interest in the Avnu Alliance Certification Process and UNH-IOL

Make use of the free UNH-IOL developed tools for your in-house pre-certification testing

Engage with UNH-IOL early to assist and accelerate your in-house effort:
• Pre-test with UNH-IOL to build confidence faster as a Full Member of the UNH-IOL Avnu Certification Test Service

Plan for test
• Pre-test early and often.
• Certification testing may require 2-4 full iterations before passing all required tests

The UNH-IOL team looks forward to working with you!
Thank You For Your Time

Avnu Testing Service
Bob Noseworthy - ren@iol.unh.edu

Please contact avblab@iol.unh.edu with any questions or requests

For more information please refer to http://www.iol.unh.edu/avnu

To request a quote / join: https://www.iol.unh.edu/membership/join

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