

# **NVMe Testing Service**

## **Charter Document**

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*NVMe Testing Service*

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<https://www.iol.unh.edu/testing/storage/nvme>

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## Modification Record

Date	Version	Description of change(s)
September 12, 2017	1.3	<ul style="list-style-type: none"><li>• Replaced “Consortium” with “Testing Service”</li><li>• Clarified support of IOL INTERACT software</li><li>• Removed connectivity membership</li></ul>
September 1, 2016	1.2	<ul style="list-style-type: none"><li>• Updated Address and front page format</li></ul>
May 11, 2015	1.1	<ul style="list-style-type: none"><li>• Added Connectivity membership tier</li></ul>
June 4, 2014	1.0	<ul style="list-style-type: none"><li>• Initial charter completed.</li></ul>

# NVMe Testing Service Charter

## 1 Extension of UNH-IOL Usage Agreement

This UNH-IOL NVMe Testing Service (hereafter referred to as *Testing Service*) Charter serves as an extension of the University of New Hampshire InterOperability Laboratory (UNH-IOL) Usage Agreement. As a result, this *Testing Service* Charter is bound to the full acceptance of the UNH-IOL Usage Agreement. The section numbers outlined in this *Testing Service* Charter reference the corresponding section numbers within the UNH-IOL Usage Agreement.

- <https://www.iol.unh.edu/services/usageAgreement.pdf>

## 2 Additional Definitions

Testing Service Manager	A representative of the UNH-IOL assigned to lead and support the efforts of the <i>Testing Service</i> . The Testing Service Manager is the primary contact for all <i>Testing Service</i> Members to the UNH-IOL.
Testing Service Member	Any company or person participating in the <i>Testing Service</i> and has agreed to abide by the Testing Service Charter and UNH-IOL Usage Agreement.
Testing Service Technology	The set of technologies, protocols, networks, interfaces, and/or research for which the <i>Testing Service</i> comes together to test and mutually solve interoperability problems.

## 3 Testing Service Purpose and Goals

### 3.1 Purpose

The purpose of the *Testing Service* is three-fold:

1. To provide the facilities, services, tools, and test procedures that will allow a quantitative assessment of a device(s) or component(s) that support *Testing Service Technologies*, with the ability to properly operate in multi-vendor deployments.
2. To investigate interoperability issues related to the *Testing Service Technologies* and to provide a forum for their discussion.
3. To develop and disseminate technical information relative to proper implementation and use of *Testing Service Technologies*, including but not limited to: aiding in the interpretation of industry standards, integration issues, and prototyping of implementations.

### 3.2 Goals

This agreement establishes the following items as goals for *Testing Service Members*:

1. To provide a long-term independent facility for an Interoperability Test Bed where products supporting the *Testing Service Technology* can be tested in a heterogeneous, multi-vendor environment.
2. To document a set of interoperability tests and testing procedures that will provide a high level of confidence in product interoperability.
3. To develop tests and procedures to diagnose interoperability problems.
4. To simplify interoperability testing procedures by reducing organizational overhead.
5. To provide a forum for the exchange of technical information between *Testing Service Members* concerning issues related to *Testing Service Technologies* and products.
6. To contribute to the industry standard development activities by providing feedback that will enhance interoperability.
7. To support the development of testing tools, test specifications and scripts allowing a detailed conformance examination of *Testing Service Technologies*.
8. To continue to work to further the goals of the UNH-IOL and *Testing Service Members*, and facilitate plugfests and workshops whenever possible or deemed necessary.

### **3.3 Compliance with Antitrust Laws**

The University and *Testing Service Members* are committed to fostering open competition in the development of **products and services based on the *Testing Service Technology***. The *Testing Service Members* understand that in certain lines of business they are or may be direct competitors and that it is imperative that they and their representatives act in a manner which does not violate any state, federal or international antitrust laws and regulations. Without limiting the generality of the foregoing, the *Testing Service Members* acknowledge that they will not engage in any communications regarding costs, prices, quantity or quality of production levels, methods or channels of distribution, markets, customers, exclusion of competitors or any other topic, which may be construed as a violation of antitrust laws. Accordingly, each *Testing Service Member* will counsel its representatives who participate in any activities relating to the ***Testing Service related standards or testing*** on the importance of limiting the scope of their discussions and communications to the topics that relate to **the purposes of the *Testing Service related standards or testing***, whether or not such discussions and communications take place during formal meetings, informal gatherings, or otherwise.

## **4 Membership Agreement**

### **4.1 Services to be provided by the *Testing Service* to *Testing Service Members***

Services are addressed in Section 4.1 of the UNH-IOL Usage Agreement.

Support services for *Testing Service* members engaged in active license agreements for custom test tools will be provided by UNH-IOL technical staff as referenced in Section 4.1.1.

- 4.1.1 Severity Levels. UNH will respond timely to problems with the tool(s) in accordance with Company informing UNH of any such problems and based on the following classification of the severity level of the problem as reasonably determined by Company:
- 4.1.1.1 Critical. Critical support items include system failure, any script/test-case that will not execute and that is not a result of misconfiguration, inclusion of a corrupted file that requires replacement from the UNH-IOL to restore system or immediately required test-plan and/or playlist or other such updates necessary for performance. Response time within one weekday of notification.
  - 4.1.1.2 Major. Major support items include bugs in any script/test-case that prevent test completion and/or results determination, questions on applicability of test procedures to devices that affect our testing, any testing issue related to system performance, required test-plan and/or playlist updates, and issues or questions about test architecture that immediately impact testing. Response time within 2 weekdays of notification.
  - 4.1.1.3 Minor. Minor support items include issues in any script/test-case that do not affect test execution but requires an update, questions on test procedures that need to be answered within 5 days, issues with or questions about test architecture that do not immediately impact testing but affect how test execution is completed, and recommended test-plan and/or playlist updates. Response time within 5 weekdays of notification.

## **4.2 Membership Structure and Fee Structure**

The following Fee Structure terms will apply to the *Testing Service*. *Testing Service Members* may also be bound by additional Fee Structure or Terms, such as those specified in Section 4.2 of the UNH-IOL Usage Agreement.

### **4.2.1 Testing Service Membership**

This fee is due annually at the anniversary of membership acceptance. This fee grants full access to the *Testing Service*, as requested by the *Testing Service Member*, within the constraint of equitable allocation of *Testing Service's* time. Overtime Testing (refer to section 4.2.5.2) reservations shall not apply to the total number of allowed reservations described above. The annual membership fee(s) for the *Testing Service* is posted on the UNH-IOL website and subject to Section 4.2.3 of the UNH-IOL Usage Agreement. Testing Service Membership will be maintained during this annual period by providing full payment of the amount identified in the Invoice.

### **4.2.2 Group Testing Event Fees**

Group Test Event fees are addressed in Section 4.2.2 of the UNH-IOL Usage Agreement.

### **4.2.3 UNH-IOL Membership Fee Adjustment**

Membership fee adjustment terms are addressed in Section 4.2.3 of the UNH-IOL Usage Agreement. The UNH-IOL may adjust any and/or all Test Service Fees in Section 4.2.6 to

ensure the ability of the UNH-IOL to continue fulfilling the expectations of *Testing Service Members*.

#### **4.2.4 UNH-IOL Testing Service Contributing Member**

Terms of the contributing member are addressed in Section 4.2.4 of the UNH-IOL Usage Agreement.

#### **4.2.5 UNH-IOL Testing Service Scheduling Policy**

The UNH-IOL is scheduled on a first come, first serve basis. Each *Testing Service Member* may have, at most, one active reservation per *Testing Service* membership at a given point in time. The laboratory typically can be reserved for a period of one business week. Provisions exist within the *Testing Service* to schedule testing outside of the regular calendar (*Overtime Testing*).

##### **4.2.5.1 Regular Testing**

In order for a *Testing Service Member* to utilize regular testing services, the following requirements must be met: the *Testing Service Member* must be in good standing at the time the requested testing is scheduled to occur; each *Testing Service Member* can have, at most, one active reservation per membership at any given point in time; and the device(s) under test must be available during the test reservation.

##### **4.2.5.2 Overtime Testing**

Overtime testing is an alternative for *Testing Service Members* to bypass the existing scheduling mechanism if time-critical services are required. Testing is performed outside of normal business hours, typically during weekends, such that the regularly scheduled testing service is not impacted. An additional service fee is required to schedule overtime testing. Specific costs, details and arrangements of overtime testing are coordinated with UNH-IOL personnel. In order for a *Testing Service Member* to utilize overtime testing services, the following requirements must be met: an overtime testing slot must be available; the *Testing Service Member* must be in good standing at the time the requested testing is scheduled to occur; the device(s) under test must be available during the test reservation.

##### **4.2.5.3 Waiting List**

The UNH-IOL personnel will maintain a list of testing requests from *Testing Service Members* who wish to use the *Testing Service* facilities during a specific reservation time currently reserved by another *Testing Service Member*. The administrative contact of the first *Testing Service Member* on the list will be notified if the reservation time becomes available.

##### **4.2.5.4 No show**

A NO SHOW is classified as a cancellation with less than two weeks notice, or failure to arrive at the UNH-IOL during the scheduled time period. A *Testing Service Member* who is guilty of a NO SHOW may not reserve the UNH-IOL for a period of eight (8) weeks in an effort to enforce fair and non-abusive access to the *Testing Service* for all *Testing Service Members*. The UNH-IOL may waive the penalty if just cause is given.

#### **4.2.6 Testing Services for non-Members**

This fee is due at the time of service. Testing Services fees are posted on the UNH-IOL website and are subject to change. Services available through this pay per test model are limited to the current service offerings of the *Testing Service* at the time the service is performed, and may not include all service offerings available. Any non-Member receiving service MUST agree to abide by all terms described within the *Testing Service* Charter and the UNH-IOL Usage Agreement.

#### **4.3 Equipment and Results**

Equipment and Results are addressed in Section 4.3 of the UNH-IOL Usage Agreement.

#### **4.4 Member Logo Usage**

*Testing Service Member Logo Usage* is addressed in Section 4.4 of the UNH-IOL Usage Agreement.

### **5 Confidentiality**

The following terms of confidentiality will apply to the *Testing Service*. *Testing Service Members* may also be bound by additional terms of confidentiality, such as those specified in Section 5.0 of the UNH-IOL Usage Agreement. “Confidential Information” is defined in Section 5.2 of the UNH-IOL Usage Agreement.

Refer to Sections 5.1 through 5.6 in the UNH-IOL Usage Agreement.

### **6 Organization and Operation**

Organization and Operation is addressed in Section 6.0 in the UNH-IOL Usage Agreement.

### **7 Security of Physical Equipment**

Security of Physical Equipment is addressed in the UNH-IOL Usage Agreement.

### **8 Warranty**

Warranty is addressed in Section 8.0 in the UNH-IOL Usage Agreement.

### **9 Acceptance**

A company that has submitted payment or a purchase order for payment of the *Testing Service* membership fee outlined in Section 4.2.1 or for Test Services outlined in Section 4.2.6 shall be construed to mean full acceptance of this *Testing Service* Charter, UNH-IOL Usage Agreement

and all provisions outlined. Account information such as Administrative and Technical Contacts shall be maintained by the University per Section 4.1.7 of the UNH-IOL Usage Agreement.

## **10 Amendments**

Amendments to the *Testing Service Charter* are made by the *Testing Service Manager* in consultation with all *Testing Service Members*. *Testing Service Members* may submit amendment requests for consideration to the *Testing Service Manager*. The *Testing Service Manager* will debate the amendment and draft a final version of the amendment for review by all *Testing Service Members*. All *Testing Service Members* will be contacted with the proposed amendment and asked to submit comments and questions in regards to the amendment. *Testing Service Members* will be provided thirty days to respond. At any time during this review period, the *Testing Service Manager* may revise the proposed amendment, based on feedback. However, doing so will require all *Testing Service Members* to again be contacted and the thirty-day review period restarted. At the end of the review period, should the requested change not be in violation of the UNH-IOL Usage Agreement and have a majority interest of existing *Testing Service Members*, then the UNH-IOL will amend the *Testing Service Charter* with the amendments noted in the modifications record.