

OpenFabrics Alliance InterOperability Working Group Charter

Version: 1.0

OpenFabrics Alliance Interoperability Working Group

Charter Agreement

1.0 Purpose

The Open Fabrics Alliance Interoperability Working Group (OFA-IWG) Charter Agreement is the overarching agreement between the OFA-IWG members (OFA-IWG-MEM) governing the policies, practices, procedures, acceptable use, and information handling of the activities and results arising from the OFA interoperability testing, from time to time, of certain versions of the OpenFabrics Alliance Software Stack (hereafter referred to as OFA-SS).

1.1 Background and Governing Agreements

The OpenFabrics Alliance (OFA) is the corporation within which the OFA-IWG is a properly constituted and approved Working Group. The OFA is the legal and financial entity on behalf of which the OFA-IWG operates.

An OFA Member may obtain Membership within the OFA-IWG by executing a copy of this Charter Agreement.

OFA-IWG activities under this Agreement must be consistent with the OFA Bylaws (OFA-BL) and the OpenFabrics Membership Agreement (OFA-MA) that are current at the time of execution of this Agreement. All OFA members in good standing who contribute to and participate in any OFA-IWG activities shall execute this Charter Agreement before participating. Only OFA-IWG members can participate in OFA-IWG interoperability activities including the OFA-UNH-IOL Tested Logo Program (OFILP).

As long as OFA-IWG uses the facilities of the University of New Hampshire (University) InterOperability Laboratory, it will adhere to the policies, practices and procedures of the University of New Hampshire (University) InterOperability Laboratory Usage Agreement (<http://www.iol.unh.edu/services/usageAgreement.pdf>) as modified and agreed to in this Charter Agreement.

An OFA-IWG member is eligible for the OFILP provided that a member pays the event fee (see Section 4 below) and participates in the interoperability event as defined in OFILP document on OFA web site (www.openfabrics.org).

Members of the OFA-IWG and the OFA may elect to impose sanctions on a member of the OFA-IWG who does not conform to the terms and conditions of this Agreement when participating in OFA-IWG activities.

Any OFA-IWG MEM that utilize the facilities of the UNH-IOL must agree to the acceptable use, policies, procedures terms and conditions of the UNH-IOL Usage Agreement (UNH-IOL-UA¹) version 1.2 (<http://www.iol.unh.edu/services/usageAgreement.pdf>) except as may be mutually agreed and as modified in this Charter Agreement.

This Charter Agreement extends the OFA-BL and UNH-IOL Usage Agreement for OFA-IWG needs and also extends the terminology of OFA and UNH-IOL for that purpose.

1.2 Transactions

OFA handles all financial transactions related to OFA-IWG.

1.3 Anti-Trust Law Compliance

For the purposes of this Agreement and as clarification for OFA-IWG-MEMs, OFA Bylaws Anti-Trust Article 18, and Section 1.3 of the UNH-IOL Usage Agreement are appended with paragraph 1.3.1 below:

1.3.1 The University and OFA-IWG-MEMs are committed to fostering open competition in the development of products and services based on the OFA technology. The OFA-IWG-MEMs 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 OFA-IWG-MEMs acknowledge that OFA-IWG-MEMs 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 OFA-IWG-MEM will counsel its representatives who participate in any activities relating to OFA-IWG documents or testing on the importance of limiting the scope of their discussions and communications to the topics that relate to the purposes of OFA-IWG documents or testing, whether or not such discussions and

¹ All reference to UNH-IOL Usage agreement refers to version 1.2
<http://www.iol.unh.edu/services/usageAgreement.pdf>

communications take place during formal meetings, informal gatherings, or otherwise.

2.0 Definitions Terminology Clarifications

Within the UNH-IOL Usage Agreement OFA-IWG MEMs are described collectively as “Consortium” and OFA-IWG-MEM individually as “Member”.

Within the UNH-IOL Usage Agreement “Charter” means this Charter Agreement.

Equipment Vendor or Vendor refers to a supplier of any hardware, firmware or proprietary software manufacturer whose pre-release or released component is deployed in support of the OFA-IWG activities governed by this Agreement.

OFA-UNH-IOL Tested Logo Program (OFILP) refers to a Logo granting process for vendor equipment and is defined in OFA-UNH-IOL Tested Logo Program document².

OFA-UNH-IOL Tested Logo Group (OFILG) refers to a subset of OFA-IWG members who participate in the OFILP as defined in OFA-UNH-IOL Tested Logo Program document².

Services mean those Services defined in the Testing Services Agreement between the UNH-IOL and the OFA attached as Attachment A hereto.

3.0 OFA-IWG Purpose and Goals

The specific purposes of OFA-IWG that are additional to Section 3.0 of the UNH-IOL Usage Agreement are:

- 3.1 To define, develop, execute, and contribute to the OFA software repository a comprehensive suite of tests and documents for testing the interoperability of the OpenFabrics Software Stack (OFA-SS) including Upper Level Protocols, Application Program Interfaces and Applications utilizing various RDMA transports supported by the OFA-SS. All such software and documentation contributed to the OFA software repository shall conform to the OFA Bylaws for contribution and licensing. All tests and test plan should be available a minimum of 30 days prior to an interoperability event.

OFA IWG tests are of two types: mandatory tests and beta tests. The beta tests are newly developed or included tests that had not been accepted as fully developed and ready for interoperability acceptance. The OFA IWG may vote to promote a beta test to mandatory test provided that it has gone through at least one OFA interoperability event.

² See OFILP document version 1.0 at www.openfabrics.org.

- 3.2 To coordinate the provision by the OFA-IWG-MEMs and other necessary facilities, equipment, services and procedures at the UNH-IOL that will allow thorough testing of RDMA transport switches, routers, channel and network adapters (i.e. R-NICs, HCAs, etc), systems including storage targets and their ability to properly participate in multi-vendor RDMA networks that are executing the OFA-SS, including ULPs, APIs and certain suitable applications supported by the OFA-SS.
- 3.3 To record all testing results confidentially, including a qualitative and quantitative analyses of the results. An individual member results may be made public as required for the OFILP² by the request of OFA-IWG member who participated in interoperability testing.
- 3.4 To document and investigate interoperability issues related to the OFA-SS over OFA-supported RDMA transports that are not particular to a vendor's hardware platform but are interoperability issues within the device-independent OFA stack discovered by interoperability testing; qualitative and quantitative analyses of the results and to provide a forum for their discussion. To submit these issues to the OFA reflector, and to provide recommendations based on these issues to the OFA Board of Directors for improvements.

4.0 Modification to Membership Agreement: Membership and Fee Structure

Section 4.0 of the UNH-IOL Usage Agreement is modified as follows in paragraphs 4.1 to 4.3 below:

- 4.1 Services to be provided by the UNH-IOL to OFA-IWG members:

- 4.1.1 Testing Services

A testing service will provide either a turnkey test using the minimum recommended test suite (<http://www.openib.org/docs/InteropTestPlan.pdf>), or carry out specific tests as specified by the member, or permit the member to carry out the specific tests within the constraints of Section 6.0. Scheduling of the testing services will be according to Section 4.3. Note that funding availability may limit UNH-IOL ability to perform services beyond logistical support for member interests.

- 4.1.2 Tests Availability

Tests and test plans including configuration information are available in the OFA repository and licensed as OFA documents. Test results are confidential as defined in Section 4.5.

4.2 Membership and Fee Structure

4.2.1 No additional membership fee to OFA-IWG is required beyond OFA membership dues. An additional fee is charged for the interoperability events as defined by 4.2.2. An additional Fee Structure terms may apply to the OFILG². Members and Non-Members of the Interoperability Events may also be bound by additional Fee Structure terms, as agreed by OFA-IWG from time to time.

4.2.2 OpenFabrics Alliance Interoperability Working Group Participation:

4.2.2.1 OpenFabrics Alliance Interoperability Working Group Membership:

There is no membership fee or dues for the OFA-IWG beyond the OFA membership dues.

4.2.2.2 OFA-UNH-IOL Tested Logo Group (OFILG) Dues:

The annual fee of Ten Thousand U.S. Dollars (\$10,000.00 USD) is due at the anniversary of the OFILG membership. Annual membership can start either on January 1st or July 1st. An OFILG member pays no fee to participate in an Interoperability Event. An OFILG member has a full access to testing services defined in 4.1 and is eligible for the OFILP².

4.2.2.3 A member of the OFA-IWG who is not a member of the OFILG can participate in an Interoperability Event by paying a fee of Five Thousand U.S. Dollars (\$5,000.00 USD) for that event. A member who paid to attend an Interoperability Event may apply the paid fee of Five Thousand U.S. Dollars (\$5,000.00 USD) towards the OFILG³ membership within sixty days of the payment. A member can request to join OFILG retroactively starting from the previous start of the OFILG membership period so that a member can get a Logo.

4.2.3 Changes to OFA-IWG Membership Fee

If a change in OFA-IWG fee is required the OFA-IWG must obtain approval from the OFA Board of Directors prior to adjusting OFA-IWG membership fees.

³ See OpenFabrics Logo Agreement version 1.0 at www.openfabrics.org.

4.3 OFA-IWG Scheduling Policy

The Service typically can be reserved for a period of one business week. Provisions exist to schedule testing outside of the regular calendar.

4.3.1 Regular Testing

In order for a company to utilize regular testing services, the following requirements must be met: the company must be an OFA-IWG member and either agree to pay the annual Interoperability Events fee, or agree to pay a one-time Service Fee, and sign any required non-disclosure agreement (not needed if Charter Agreement is signed) and must have guaranteed payment at the time of the beginning of the testing time slot. Companies which do not have guaranteed payment at the time of event scheduling may hold one, but only one active reservation to deter abuse of the scheduling calendar; and the device(s) under test must be available during the time slot.

4.3.2 Overtime Testing

Overtime testing is an alternative for companies to bypass the existing scheduling mechanism if time-critical services are required. Testing is performed outside of 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 the OFA-IWG and UNH-IOL personnel. In order for a company to utilize overtime testing services, the following requirements must be met: an overtime testing slot must be available; the device(s) under test must be available during the test slot.

4.3.3 Waiting List

The UNH-IOL personnel will maintain a list of testing requests from OFA-IWG companies who wish to use the facilities during a specific time slot currently reserved by another company. The provided contact of the first company on the list will be notified if the slot becomes available.

4.3.4 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 company 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 for all companies. The UNH-IOL will typically waive the penalty if just cause is given.

4.4 Platform Availability

OFA-IWG-MEMs who participate in an Interoperability Event shall provide a platform against which other members can test. This platform shall comprise the hardware and software components necessary to support the interoperability testing of the OFA-SS of interest at the time of the Service. Such platform or its equivalent must be consigned to the UNH-IOL for a period not less than eighteen (18) months. The platform shall be supported and upgraded as necessary for eighteen (18) months beyond the last renewal of the membership. A technical contact must be provided for the resolution of problems with the equipment. The member must maintain the equipment in operating condition. The providing member shall provide the latest software, firmware and/or hardware, as appropriate, for their platform(s) to best represent their platform(s) availability in the field. The member is encouraged to provide additional platforms representative of each of their product lines.

4.4.1 Equipment in Residence at UNH-IOL

Equipment provided to the OFA-IWG in fulfillment of this agreement remains the property of the providing member. Should the membership in the OFA-IWG lapse or the OFA-IWG be dissolved, the member has twenty-four (24) months to remove its equipment from the UNH-IOL at the member's expense. If the equipment has not been removed, the equipment shall be considered donated to the UNH-IOL with a zero asset value. A donation of equipment to UNH-IOL is subject to the UNH-IOL Usage Agreement.

4.5 Disclosure of Results

Members of the OFA-IWG are bound to non-disclosure agreement according to the OFA Bylaws and by Section 4.3.3 of the UNH-IOL Usage Agreement, with the following exceptions:

- an individual OFA-IWG member results in support of OFILP as stated in 3.3,
- interoperability issues related to the OFA-SS as stated in 3.4.

An OFA-IWG-MEM can disclose the fact that it participated in OFA interoperability event and such disclosure is not under NDA. But what testing it participated in and test results are under NDA as stated above.

4.6 OpenFabrics Interoperability Logo Program

An OFA-IWG member has the right to participate in the OFILP, as defined by the OFA-IWG Charter Agreement (this document) and by the OFILP document².

5.0 Confidentiality

The OFA-IWG activities are not confidential as defined in Article 17 of the OFA Bylaws. But the test results are confidential as defined by section 4.5 (above) and by UNH-IOL Usage Agreement Section 5.3.

Members of the OFA-IWG may execute Disclosure Agreements from time to time to release Confidential Information in relation to OFA-IWG activities. An individual member may publicly disclose its results with the OFA BoD approval in support of OFA-UNH-IOL Tested Logo Program as defined in Section 3.3 and in the OFA-UNH-IOL Tested Logo Program. An individual member may publicly disclose its participation in an OFA Interoperability event as defined in Section 4.5. Any of its information that a member disclosed in public, for example on an OFA reflector, falls under Section 5.3 (iii) of the UNH-IOL Usage Agreement, and is no longer confidential.

Any problems discovered with OFA-SS are not confidential. Article 17 of the OFA Bylaws specifically excludes the OFA-SS from being confidential information and Section 5.3 (i) of the UNH-IOL Usage Agreement also excludes the OFA-SS from being Confidential Information.

All testing done during interoperability event is done publicly among the participating members to ensure that the test plan is properly followed and the results can be verified.

6.0 Organization and Operation

The OFA-IWG agrees to Section 6.0 Organization and Operation in the UNH-IOL Usage Agreement, except where OFA Bylaws, resolutions of the OFA Board of Directors and OFA-IWG override as may occur in Sections: 4.3 Disclosure of Results; 6.2 Use of Information for Marketing Purposes; 6.2.1 Report Publishing; 6.2.2 UNH-IOL Tested; and 6.3 Levels of Participation.

7.0 Security of Physical Equipment

Security of OFA-IWG Physical Equipment will comply with Section 7.0 of the UNH-IOL Usage Agreement.

8.0 Warranty

Warranty representations as stated by the University in Section 8.0 of the UNH-IOL Usage Agreement are agreed to by the OpenFabrics Alliance, its Board of Directors, the OFA-IWG and OFA-IWG-MEMs.

9.0 Acceptance

An OFA member that has submitted payment or requested and received an invoice from OFA for required OFA-IWG annual Interoperability Event fees shall be construed as having agreed to full acceptance of the UNH-IOL Usage Agreement and this OFA-IWG Charter Agreement and all provisions outlined therein.

An OFA member who joins OFA-IWG by signing this Charter Agreement is construed as having agreed to full acceptance of the UNH-IOL Usage Agreement and this OFA-IWG Charter Agreement and all provisions outlined therein, including but not limited to an NDA implicit in this Charter Agreement and UNH-UOL Usage Agreement.

10.0 Amendments

Amendments to the UNH-IOL Usage Agreement proposed by UNH-IOL affecting the OFA-IWG will conform to the process described in Section 10.0 of the UNH-IOL Usage Agreement recognizing OFA-IWG-MEMs as “members” within the meaning of Section 10 and that “Charter” in Section 10 refers to this Charter Agreement.

Amendments to this OFA-IWG Charter Agreement proposed by OFA Board of Directors, OFA-IWG members or UNH-IOL will follow the same process as described in Section 10 of the UNH-IOL Usage Agreement except that the OFA-IWG is the proposing party.