



OFA-UNH-IOL Logo Program

Version 1.09

4/24/2010





OFA-UNH-IOL Logo Program

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Revision History

| Rev ID | Date | By |
|-------------------------|-------------------------------|---|
| First Draft version 0.1 | Oct 21, 2006 | Sujal Das |
| Revised 0.1-RD | | Rupert Dance/Arkady K |
| Version 0.2 | Nov 29, 2006 | Sujal Das |
| Version 0.3 | Nov 30, 2006 | Sujal Das |
| Version 0.4 | Dec 8, 2006 | SD. Feedback from OFA-IWG |
| Version 0.5 | Jan 15, 2007 | SD. Feedback from OFA-IWG |
| Version 0.6 | Jan 17, 2007 | SD. Feedback from OFA-IWG, UNH |
| Version 0.7 | Jan 18, 2007 | SD. Dues payment terms referenced to Charter doc. Updated process flow diagram and description. |
| Version 0.8 | Jan 25, 2007 | Arkady and Bob J's comments addressed |
| Version 0.9 | March 5 th , 2007 | Updated Membership requirements. and arbitration section |
| Version 0.91 | March 6 th , 2007 | Updated after the OFA-IWG meeting on 3/6/07. Changes accepted from version 0.90 and a few editorial updates |
| Version 0.92 | March 7 th , 2007 | Updated based on review by Arkady. Created Logo Process image in Visio |
| Version 0.93 | March 9 th , 2007 | Updated based on review by Johann |
| Version 0.94 | March 12 th , 2007 | Updated based on further review by Johann and added Sujal's new logo |
| Version 0.95 | March 13 th , 2007 | Updated based on further review in the OFA IWG Meeting on 3/13/07 |
| Version 0.96 | March 15 th , 2007 | Updated abbreviations to match the approved Charter with the exception that we removed the word "tested" |
| Version 0.97 | March 19 th , 2007 | Changed tables to repeat header row on each page break. Updated the tables for SMS |
| Version 1.0 | March 19 th , 2007 | Final Version of Logo Program |
| Version 1.01 | May 31 st , 2007 | Updated the flow chart |
| Version 1.02 | February 7, 2008 | Updated OFILG to OpenFabrics Interoperability Logo Group |
| Version 1.03 | January 15, 2009 | Updated Arbitration Notification Period section to clarify resolution timeframe. |
| Version 1.04 | May 1, 2009 | Updated document after the OFA IWG F2F meeting held during the OFA Interop Event |

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|--------------|-----------------|---|
| Version 1.05 | May 12, 2009 | Accepted previous changes and added new categories for iSER and SRP Servers |
| Version 1.06 | May 26, 2009 | Added TI RDS for RNICs and Basic RDMA Interop for HCAs and RNICs. Also added iWARP Connectivity for RNICs |
| Version 1.07 | January 5, 2010 | Updates to the document based on reviews after the October Interop Event |
| Version 1.08 | April 6, 2010 | Updates to the document for the May 2010 Interop Event |
| Version 1.09 | April 24, 2010 | Updates to the document after review by OFA IWG Changes to sections 6.2.1 and 6.2.2 for FW and SW Policy |

Definitions

| | |
|---------------------|--|
| OFA-IWG | Open Fabrics Alliance Interoperability Work Group |
| UNH-IOL | University of New Hampshire Interoperability Lab |
| OFILG | OpenFabrics Interoperability Logo Group |
| OFILP | OpenFabrics Interoperability Logo program |
| OFIL | OpenFabrics Interoperability IOL Logo |
| Logo Event Pair | There are a pair of events that are required to obtain a Logo |
| Interop Debug Event | This is the first event in which vendors are allowed to debug their products and commit changes to OFED |
| Interop GA Event | This event requires the use of OFED GA Builds and there are no changes allowed to hardware, firmware or software during the event. |
| Interop Validation | This is the name for the overall process required to be granted a Logo |

OFA-UNH-IOL Logo Program

1 Introduction

To deliver on the promise of end-user readiness, the OpenFabrics Alliance (OFA) software running on servers or hosts needs to support interoperability in many ways – between different supported transports that run the same OFA software, and with switches, gateways, servers, and storage targets that contain external (e.g., OEM provided) software elements that work in conjunction with OFA software to provide fabric wide functionality.

The OFA Interoperability Work Group (OFA-IWG) was formed to address the above interoperability requirements in collaboration with the industry-renowned and trusted UNH-IOL (University of New Hampshire Interoperability Labs). The result is the OpenFabrics Alliance & UNH-IOL Interoperability Program, referred to henceforth in this document as the Interoperability Program.

It is envisioned that to make the Interoperability Program effective for end users and suppliers alike, it will be useful if end users can quickly gauge the interoperability of equipment and associated software using a trusted name and source, and suppliers can add value to their offering by claiming interoperability using a third party trusted source. With UNH-IOL operating as such a trusted third party source, the OFA-UNH-IOL Logo program (OFILP) has been created to meet the above end user and supplier goals. OFILP is part of the OFA-IWG. Through increased value provided to supplier vendors, OFILP also has a secondary goal of raising Interoperability Program membership and funding levels.

2 Purpose/Scope of this Document

This document has three key areas that define the OFILP:

1. The Interoperability Program developed by OFA-IWG will enable vendors to apply for grant of the OFA-UNH-IOL Tested Logo (OFIL). The process of logo grant application is defined in this document.
2. The Interoperability Program will enable supplier vendors to claim and market interoperability by using the OFIL in their products or in their product marketing collateral. The use of the OFIL is defined in this document.
3. The OFIL will cover different aspects of interoperability for different product families. This includes what aspects of the [OFA-IWG Interoperability Test Plan](#) and test cases that are applicable to different equipment types and what constitutes passing or failing of such tests.

3 Logo Grant Application Process

Vendors who are paid OFILG members (i.e., have paid the OFILG dues as defined in the [OFA-IWG Charter Agreement](#)) and have participated in an OFA-UNH-IOL Interoperability Event are eligible to apply for the OFIL grant under the following conditions:

1. Membership renewals must be paid within three months or membership will be suspended.
2. If a vendor is three months overdue on the payment for a previous event, that vendor is not eligible for the current event.
3. A default will result in being removed from the Logo List.

See [Section 4.1.3](#) on how to renew an Expired Logo

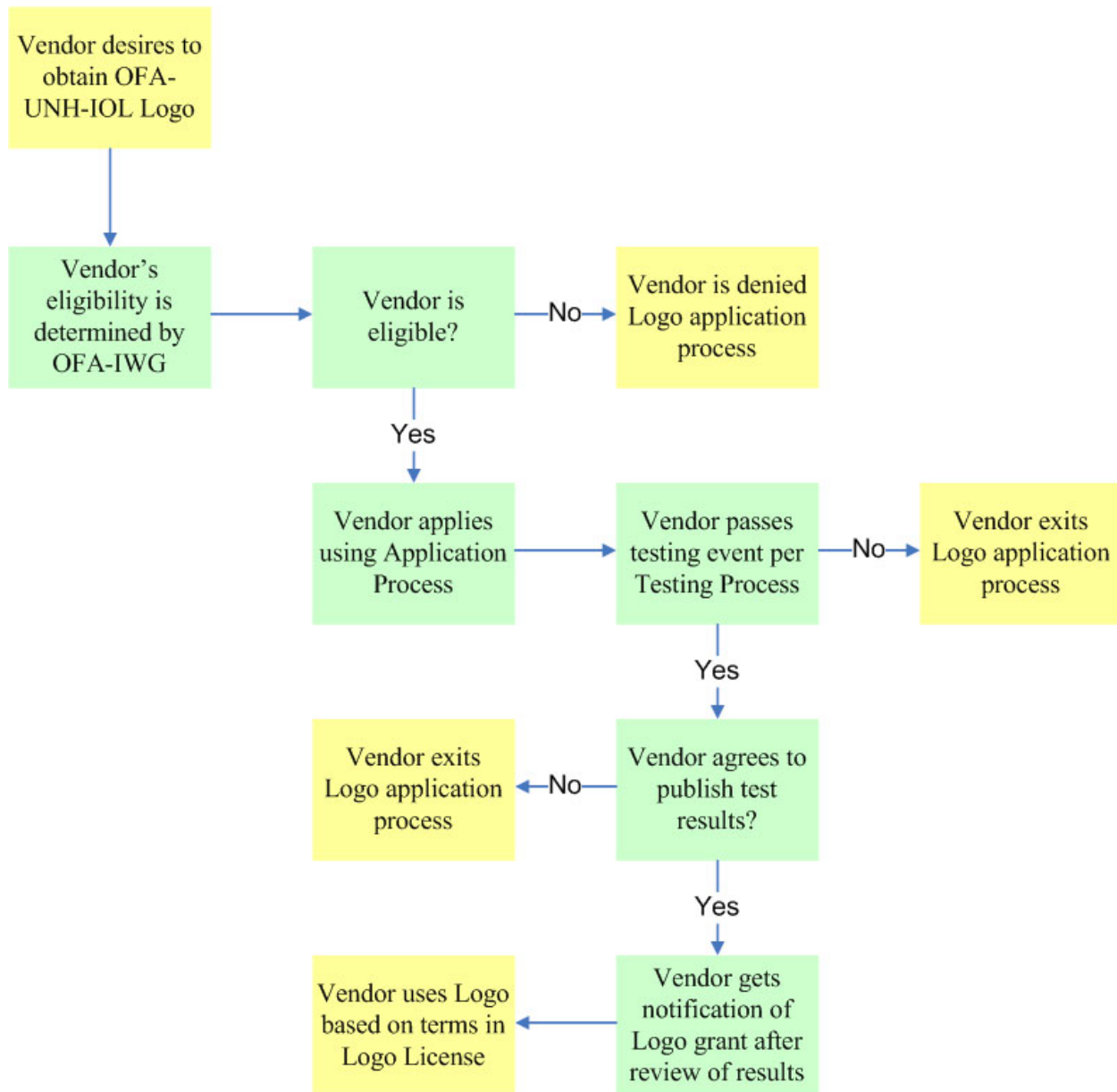
This section provides specifics on Logo eligibility criteria and the application process.

3.1 Scope of the OFIL

The OFIL process comprises the following steps:

1. Verification of the vendor's eligibility based on criteria defined in section 3.1.2.
2. Request from vendor to obtain the OFIL using Application Process defined in section 3.1.3.
3. Follow Test Process defined in section 3.1.4.
4. Vendor must authorize OFA IWG and UNH-IOL to publish the test results (as specified in section 3.1.5) using the email alias: iwg@lists.openfabrics.org or whatever is current. If the vendor chooses not to authorize the publishing of test results during the process, the vendor must withdraw from the Logo application process. In such a case, steps 5 and 6 below are not applicable.
5. Await notification of OFIL Grant by OFA-IWG as specified in section 3.1.6.
6. Use OFIL per terms in OpenFabrics Logo Agreement.

The following figure depicts the above process (green boxes show processes defined in this document):



3.2 Application Process

The application process for Logo grant comprises the following steps:

- Meet Eligibility Criteria outlined above.
- Execute the [OpenFabrics Logo Agreement](#).

3.3 Testing Process

The vendor must follow the following testing process as a step toward grant of the Logo:

- Participate in an OFA-UNH-IOL Interoperability Event. These could be regularly scheduled events by OFA and UNH-IOL, or on demand testing requested by the vendor.
- Execute all required tests for the equipment type for grant of OFIL – see section 5.
- Pass all tests required for grant of OFIL – see section 5.



3.4 Agreement to Publish Test Results

In order to avoid liability related costs to OFA and UNH-IOL, it is worthwhile to note that the OFIL does not signify certification of any sort. The Logo is indicative of the vendors' successful participation in an OFA-UNH-IOL Interoperability Event (either regularly scheduled or on-demand). To ensure sanctity of the OFIL and OFA which grants the Logo, it is necessary that the vendor acquiring the OFIL meets certain minimum quality criteria for interoperability. These criteria are achieved by requiring the vendor acquiring the OFIL to publish the results of interoperability testing on the following public web site <http://www.iol.unh.edu/services/testing/ofa/interolist/interolist.php>.

Vendor must authorize placing results on the above public website. By default, vendor specific test results from OFA-UNH-IOL Interoperability Event are confidential to the vendors. The need to publish test results is optional and required only for an OFIL grant.

3.5 Notification of Logo Grant

Once a vendor completes the Application and Testing Processes identified above, UNH-IOL will review test results and make a recommendation to OFA-IWG on whether the vendor should be granted an OFIL based on "Specific Logo Terms" such as the following:

- Part numbers of vendor equipment to which OFIL is applicable.
- Firmware version (if applicable) to which OFIL is applicable.
- OFA software version to which Logo is applicable.
- Applicable [OFA-IWG Interoperability Test Plan](#) version.
- Validity period (defined in section 4) of the OFIL (if applicable).

In case of a positive recommendation, the vendor is granted the OFIL. The granting of the Logo comprises the following:

- Signed letter from OFA Chairman explaining grant and terms of the OFA-UNH-IOL Tested Logo, including "Specific Logo Terms".
- Copy of Signed Logo License Agreement.
- Electronic image of OFIL for use with vendors marketing collateral.

The Logo image granted may contain a validity period or Test Plan revision number to reflect the extent of interoperability and need for renewal or refresh of the Logo through additional testing. These are explained further in section 4 below.



4 OFIL Usage Guidelines

This section describes guidelines on OFIL usage. The terms specified herein are complementary to what is specified in the OpenFabrics Logo Agreement.

4.1 Tied to Validity Period or Test Plan Revision Number

An OFIL grant is associated with a validity period or a Test Plan Revision Number.

For example, during the initial grants of the Logo, it is possible that the test plan and test cases relevant to a Logo grant need further extensions or enhancements. In such a case, vendors may be required to apply for a logo refresh within a certain period to maintain usability of the OFIL with the applicable vendor equipment. In this case, the Logo signage supplied will also contain an expiration date.

An alternate way to ensuring that vendors refresh their OFIL grants through new testing is to associate the applicable Test Plan version number with the Logo signage. That way, as new revisions of Test Plans become available, it will become necessary for vendors to refresh their Logo grants with new/additional testing at UNH-IOL.

It is envisioned that once the Interoperability Test Plan has been updated to address needed extensions or enhancements, OFIL grants will not be tied to validity periods in the future.

4.2 Logo Grant Conditions

This section describes the procedures that must be followed if an interoperability issue is discovered in a vendor product or an interoperability test after the conclusion of an OFA-UNH-IOL Interoperability Event. Vendors will have a six month grace period (after the defect is announced) to address the issue in their product or in the revised interoperability test. After this time they must attend the next scheduled OFA-UNH-IOL Interoperability Event and adhere to the conditions described in the Logo Program and the OFA-IWG Interoperability Test Plan in effect for that event. Failure to qualify for the Logo Grant will result in the vendor not being included in the current Logo Program List. However any failures discovered in the device or the interoperability test, after the conclusion of an OFA-UNH-IOL Interoperability Event, will not affect the results of any previous OFA-UNH-IOL Interoperability Event.

4.3 How to Renew Expired Logo

If a granted Logo has expired or has been revoked (because of reasons specified in section 4.1.1 and 4.1.2), vendors can refresh the OFIL grant for their equipment by participating in upcoming and regularly scheduled OFA-UNH-IOL Interoperability Event or requesting on-demand testing at UNH-IOL and paying a one-time Service Fee of Seven Thousand U.S. Dollars (\$7,000.00 USD). It is necessary that the vendor's paid status is valid at the time of such requests and throughout any testing. Once the vendor completes the needed testing, the vendor can follow the process outlined above to apply for a new OFIL grant.

4.4 Using OFIL in Marketing Collateral

Vendors can use the electronic image of the OFIL (that they receive when they are granted the Logo) in their marketing promotional materials. Vendors must follow the terms outlined in the OpenFabrics Logo Agreement.

4.5 Using Logo Sticker on Vendor's Equipment

Vendors can use the electronic image of the OFIL to produce OFIL stickers for use in their equipment that they sell to end users. Vendors must follow the terms outlined in the OpenFabrics Logo Agreement.

5 Applicable Interoperability Tests

5.1 By Vendor Equipment Types

The following table lists test cases from the OFA-IWG Interoperability Test Plan (available in www.openfabrics.org) that are applicable for OFIL testing and grant by vendor equipment type. Depending on completeness of test cases in each category, Logo grants for different equipment types may be supported in a staggered way. Beta level tests will not be eligible for OFIL usage. The following table and related OFA-IWG Interoperability Test Plan applicable for OFIL testing will be made available at least one month in advance of any Interop Debug Event and be finalized one month in advance of any Interop GA Event.

Table 1

| Vendor equipment type | Test Environment | Applicable Test Cases From Test Plan version 1.33 |
|---------------------------------------|--|--|
| InfiniBand HCA | Interoperability between InfiniBand HCAs (DUT – device under test) running OFA software and the following equipment (TD-tested device): <ul style="list-style-type: none"> • InfiniBand Switches with and without OEM SM • Other HCAs with OFA software • InfiniBand SRP Targets • InfiniBand iSER Targets • InfiniBand NFS-RDMA Servers • InfiniBand-Ethernet Gateways • InfiniBand-Fibre Channel Gateways | IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests IB SM Failover & Handover IB SRP Tests TI iSER Tests TI MPI Tests TI NFS-RDMA Tests TI RDS TI SDP Tests TI uDAPL Tests TI RDMA Interop |
| Ethernet R-NIC | Interoperability between Ethernet R-NIC (DUT) running OFA software and the following equipment (TD): <ul style="list-style-type: none"> • Ethernet 10GigE Switches • Other R-NICs • Ethernet iSER Targets • Ethernet NFS-RDMA Servers | Ethernet Link Tests Ethernet Fabric Initialize Ethernet Fabric Failover Ethernet Fabric Reconvergence iWARP Connectivity TI iSER Tests TI Open MPI Tests TI OSU MVAPICH 2 TI NFS-RDMA Tests Ti RDS Tests TI SDP Tests (after license issue) TI uDAPL Tests TI RDMA Interop |
| InfiniBand Switch with Subnet Manager | Interoperability between InfiniBand Switch (DUT) running OEM SM and the following equipment (TD): <ul style="list-style-type: none"> • InfiniBand HCA with OFA software • InfiniBand SRP Targets • InfiniBand iSER Targets • InfiniBand NFS-RDMA Servers | IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests IB SM Failover & Handover IB SRP Tests TI iSER Tests TI Open MPI Tests TI OSU MVAPICH 1 or 2 |

| Vendor equipment type | Test Environment | Applicable Test Cases From Test Plan version 1.33 |
|---|--|---|
| | <p>The same tests using Open SM (running on host with OFA software) instead of OEM SM. Note: Switches are part of all topologies and therefore all tests are applicable.</p> | <p>TI NFS-RDMA Tests TI RDS TI SDP Tests TI uDAPL Tests TI RDMA Interop TI RDMA Stress Test</p> |
| <p>InfiniBand Switch with no Subnet Manager</p> | <p>Interoperability between InfiniBand Switch (DUT) (not running OEM SM) and the following equipment (TD):</p> <ul style="list-style-type: none"> • InfiniBand HCA with OFA software • InfiniBand SRP Targets • InfiniBand iSER Targets • InfiniBand NFS-RDMA Servers <p>A dedicated management node is used that uses Switch OEM supplied software or a management node running Open SM Note: Switches are part of all topologies and therefore all tests are applicable.</p> | <p>IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests IB SRP Tests TI iSER Tests TI Open MPI Tests TI OSU MVAPICH 1 or 2 TI NFS-RDMA Tests TI RDS TI SDP Tests TI uDAPL Tests TI RDMA Interop TI RDMA Stress Test</p> |
| <p>Ethernet Switches</p> | <p>This category is for Ethernet Switches used in the Topology which includes R-NIC End Points.</p> | <p>Ethernet Link Initialize Ethernet Fabric Initialize Ethernet Fabric Failover Ethernet Fabric Reconvergence TI iSER Tests TI Open MPI Tests TI OSU MVAPICH 2 TI NFS-RDMA Tests TI RDS TI SDP Tests TI uDAPL Tests TI RDMA Interop TI RDMA Stress Test</p> |
| <p>SRP Target over InfiniBand</p> | <p>Interoperability between InfiniBand SRP Target (DUT) and the following equipment (TD):</p> <ul style="list-style-type: none"> • InfiniBand HCA with OFA software • InfiniBand Switch with OEM SM • InfiniBand Switch without SM (that is, using Open SM) | <p>IB Link Init Tests IB Fabric Init Tests IB SM Failover & Handover IB SRP Tests</p> |
| <p>SRP Server over InfiniBand</p> | <p>Interoperability between InfiniBand SRP Server (DUT) and the following equipment (TD):</p> <ul style="list-style-type: none"> • InfiniBand HCA with OFA software including SRP Target • InfiniBand Switch with OEM SM • InfiniBand Switch without SM (that is, using Open SM) | <p>IB Link Init Tests IB Fabric Init Tests IB SM Failover & Handover IB SRP Tests</p> |
| <p>iSER Target over InfiniBand</p> | <p>Interoperability between InfiniBand iSER Target (DUT) and the following equipment (TD):</p> <ul style="list-style-type: none"> • InfiniBand HCA with OFA software • InfiniBand Switch with OEM SM | <p>IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests (DM Only) IB SM Failover & Handover TI iSER Tests</p> |

| Vendor equipment type | Test Environment | Applicable Test Cases From Test Plan version 1.33 |
|---------------------------------|--|---|
| | <ul style="list-style-type: none"> InfiniBand Switch without SM (that is, using Open SM) | |
| iSER Server over InfiniBand | Interoperability between InfiniBand iSER Server (DUT) and the following equipment (TD): <ul style="list-style-type: none"> InfiniBand HCA with OFA software including iSER Target InfiniBand Switch with OEM SM InfiniBand Switch without SM (that is, using Open SM) | IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests (DM Only) IB SM Failover & Handover TI iSER Tests |
| Ethernet iSER Target | Interoperability between Ethernet iSER Target (DUT) and the following equipment (TD): <ul style="list-style-type: none"> Ethernet R-NIC with OFA software 10GigE Ethernet Switch | Ethernet Link Init TI iSER Tests |
| Ethernet iSER Server | Interoperability between Ethernet iSER Server (DUT) and the following equipment (TD): <ul style="list-style-type: none"> Ethernet R-NIC with OFA software 10GigE Ethernet Switch | Ethernet Link Init TI iSER Tests |
| NFS-RDMA Client over InfiniBand | Interoperability between InfiniBand NFS-RDMA Client (DUT) and the following equipment (TD): <ul style="list-style-type: none"> InfiniBand HCA with OFA software including NFS-RDMA Server InfiniBand Switch with OEM SM InfiniBand Switch without SM (that is, using Open SM) | IB Link Init Tests IB Fabric Init Tests IPoIB Datagram Tests IB SM Failover & Handover TI NFS-RDMA Tests |
| NFS-RDMA Client over Ethernet | Interoperability between Ethernet NFS-RDMA Client (DUT) and the following equipment (TD): <ul style="list-style-type: none"> Ethernet R-NIC with OFA software including NFS-RDMA Server 10GigE Ethernet Switch | Ethernet Link Init TI NFS-RDMA Tests |
| NFS-RDMA Server over InfiniBand | Interoperability between InfiniBand NFS-RDMA Server (DUT) and the following equipment (TD): <ul style="list-style-type: none"> InfiniBand HCA with OFA software including NFS-RDMA Client InfiniBand Switch with OEM SM InfiniBand Switch without SM (that is, using Open SM) | IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests (DM Only) IB SM Failover & Handover TI NFS-RDMA Tests |
| NFS-RDMA Server over Ethernet | Interoperability between Ethernet NFS-RDMA Server (DUT) and the following equipment (TD): <ul style="list-style-type: none"> Ethernet R-NIC with OFA software including NFS-RDMA Client 10GigE Ethernet Switch | Ethernet Link Init TI NFS-RDMA Tests |
| InfiniBand-to-Ethernet Gateway | Interoperability between InfiniBand-to-Ethernet Gateway (DUT) running OEM SM, and the following equipment (TD): <ul style="list-style-type: none"> InfiniBand HCA with OFA software (using IPoIB or VNIC as applicable) <p>The same tests using Open SM instead of all</p> | IB Link Init Tests IB Fabric Init Tests IB SM Failover & Handover If applicable – to IB interface of Gateway IB IPoIB Tests |

| Vendor equipment type | Test Environment | Applicable Test Cases From Test Plan version 1.33 |
|---|--|---|
| | available OEM SMs. Note: These tests are comparable to the required InfiniBand Switch tests | |
| InfiniBand-to-Fibre Channel Gateway | Interoperability between InfiniBand-to-Fibre Channel Gateway (DUT) running OEM SM, and the following equipment (TD): <ul style="list-style-type: none"> • InfiniBand HCA with OFA software (using SRP) The same tests using Open SM instead of all available OEM SMs. Note: These tests are comparable to the required InfiniBand Switch Tests | IB Link Tests IB Fabric Init Tests IB Fibre Channel Gateway IB SM Failover & Handover IB SRP Tests |
| Server Systems using InfiniBand HCA and running OFA software | Interoperability between Server Systems using InfiniBand HCAs (DUT – device under test) running OFA software and the following equipment (TD-tested device): <ul style="list-style-type: none"> • InfiniBand Switches with and without OEM SM • Other Servers and HCAs with OFA software • InfiniBand SRP Targets • InfiniBand iSER Targets • InfiniBand NFS-RDMA Servers • InfiniBand-Ethernet Gateways • InfiniBand-Fibre Channel Gateways | IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests (CM & DM) IB SM Failover & Handover IB SRP Tests Basic RDMA Interop TI iSER Tests TI MPI Tests TI NFS-RDMA Tests TI SDP Tests TI RDS Tests TI uDAPL Tests |
| Server Systems using InfiniBand HCA and running non-OFA software such as for Sun Solaris, Apple Mac, HP-UX, IBM AIX and other operating systems | Interoperability between Server Systems using InfiniBand HCAs (DUT – device under test) running non-OFA software and the following equipment (TD-tested device): <ul style="list-style-type: none"> • InfiniBand Switches with and without OEM SM • Other Servers and HCAs with OFA software • InfiniBand SRP Targets • InfiniBand iSER Targets • InfiniBand NFS-RDMA Servers • InfiniBand-Ethernet Gateways • InfiniBand-Fibre Channel Gateways Note: The TD (tested device) must not include servers running non OFA software | IB Link Init Tests IB Fabric Init Tests IB IPoIB Tests (CM & DM) IB SM Failover & Handover Basic RDMA Interop As Applicable IB SRP Tests TI iSER Tests TI MPI Tests TI NFS-RDMA Tests TI SDP Tests TI RDS Tests TI uDAPL Tests |
| Server Systems using Ethernet R-NIC and running OFA software | Interoperability between Server Systems using Ethernet R-NIC (DUT) running OFA software and the following equipment (TD): <ul style="list-style-type: none"> • Ethernet 10GigE Switches • Other Servers and R-NICs with OFA software • Ethernet iSER Targets • Ethernet NFS-RDMA Servers | Ethernet Link Tests Ethernet Fabric Initialize Ethernet Fabric Failover Ethernet Fabric Reconvergence TI iSER Tests TI MPI Tests TI NFS-RDMA Tests TI RDS Tests TI SDP Tests |

| Vendor equipment type | Test Environment | Applicable Test Cases From Test Plan version 1.33 |
|--|--|--|
| Server Systems using Ethernet R-NIC and running non-OFA software such as for Sun Solaris, Apple Mac, HPUX, IBM AIX and other operating systems | Interoperability between Server Systems using Ethernet R-NIC (DUT) running non- OFA software and the following equipment (TD): <ul style="list-style-type: none"> • Ethernet 10GigE Switches • Other R-NICs • Ethernet iSER Targets • Ethernet NFS-RDMA Servers Note: The TD (tested device) must not include servers running non-OFA software | TI uDAPL Tests Ethernet Link Tests Ethernet Fabric Initialize Ethernet Fabric Failover Ethernet Fabric Reconvergence Basic RDMA Interop As Applicable TI iSER Tests TI MPI Tests TI NFS-RDMA Tests TI RDS TI SDP Tests TI uDAPL Tests |

5.2 OFIL Test Pass Criteria

The Logo test pass criteria for a vendor equipment type is the same as the individual test pass criteria defined in the Interoperability Test Plan. Prior to each testing event, the OFA-IWG will decide and publish a list of Mandatory Tests required to obtain an OFIL grant.

In case of disagreement between parties as to what constitutes pass or fail of specific test cases, the [arbitration procedure](#) will be used to address the matter.

6 Testing Policies

6.1 Topology

Early in each debug event the participants will determine a topology, and each participant will receive a description of it.

6.1.1 Definition of "Topology Change"

A topology change is a change in the test bed that has a reasonable possibility of changing the outcome of a test. For example:

The following constitute topology changes:

- adding or removing a device
- replacing a device with a similar model
- changing a switch port's lane configuration, e.g. from 4x to 1x

The following do not constitute topology changes.

- replacing a device with the same model
- changing firmware
- updating or reconfiguring software
- changing a cable

6.1.2 Topology-change Policy

While it is hoped that changes to the topology are unnecessary, the topology is subject to change as follows.

During a Debug Event

Topology changes should be made as early in the event period as possible so as to demand the least amount of retesting. Changes should not be made in the last day or two of the event except for extraordinary reasons. If the topology does change during a debug event participants will receive notice of changes during the event and an updated description of the topology at the end of the event.

After a Debug Event

There should be no changes to the topology between the debug event and the logo event except for the removal of a device from testing. In particular, new devices cannot be added after the debug event. In the case that a device needs to be replaced between the debug event and the logo event the replacement must be of the same model.

6.2 Firmware and Software Policies

6.2.1 Firmware Policy

Firmware Policy during the Interop Debug Event

The firmware used during the Interop Debug Event is at the discretion of the device vendor. Vendors will be allowed to make changes to the firmware during the Interop Debug Event. However changes should be made as early in the event period as possible to reduce the amount of retesting which will result from these changes.

Firmware Policy during the Interop GA Event

The firmware used during the Interop GA Event must be provided to the UNH-IOL at least one week prior to the event. No firmware changes of any kind are allowed during the Interop GA Event. If the vendor does not provide updated firmware by the deadline, then the UNH-IOL will use the firmware from the Interop Debug Event or from the vendor's website, whichever is more current.

Firmware Availability

The firmware used for the Interop GA Event must be made publicly available on the vendor's website. This policy will take effect at the end of the fall 2010 Interop GA Event.

6.2.2 Software Policy

Software Policy during an Interop Debug Event

The software used during an Interop Debug Event will be an agreed-upon RC release of the subsequent OFED version. During the Interop Debug Event vendors will be allowed to make changes to the software, provided that the changes are based on the same RC release. Vendors are not allowed to extensively modify the software or completely replace it.

Software Policy during the Interop GA event

The software used during an Interop GA Event will be the GA release of the same OFED version as was used during the Interop Debug Event. No software changes of any kind are allowed during the Interop GA Event. It is the vendor's responsibility to ensure that any changes made during the Interop Debug Event are present in the OFED GA release.

6.2.3 Summary

For Interop GA Event the vendor cannot update or change any part of the device under test - this includes hardware, firmware and software. The only exception is for an outright hardware failure in which case the hardware may be replaced with an identical piece of hardware with the same SW and FW.

6.3 Hardware Policies

For MPI testing, HCA/RNIC vendors must provide at least five adapters. The adapters need not be all the same model, but they can be.

6.4 OFED Usage

- OFED Release Candidates (RC) should be used during the Interop Debug Event. This allows vendors to resolve bugs and issues and commit them to the OFED tree before the OFED General Availability (GA) is released.
- OFED GA versions shall be used for the Interop GA Events.

7 Arbitration

7.1 Arbitration Procedure

- OFA IWG will institute, if required, a review board for a period of 30 days after the test reports are distributed to deal with objections and review technical issues. Test accuracy and vendor specific claims can both be investigated.
- If a vendor wants to contest the result of a test, the vendor must prove that a defect in the test or test process caused the device to fail that test. Traces and log files must be submitted.
- Resolution of the contest allows possible granting of the OFIL.
- The review board is chosen by the members of the OFA IWG and will consist of members from OFA and UNH IOL who do not have products that are being evaluated for a Logo. After reviewing the issues, the review board will vote to arrive at a decision. Should a vendor disagree, they may appeal to the OFA BoD.
- If the vendor chooses to contest the results and is not successful in the contest, there will be an Appeal Fee charged which will consist of a minimum of \$500 and a maximum of \$1000. OFA IWG reserves the right to change the billing rate at any time.

7.2 Arbitration Notification Period

- Test reports will be delivered to vendors within 30 days of the conclusion of the Interoperability Event. Notification will also go out to any vendor whose tests results might be affected by the appeal of other vendors. Notification will include all supporting materials such as traces and log files.
- A vendor who wishes to contest a result must notify the Arbitration Committee in writing of its intent to contest within 14 days after the notification of the results. All contests must be resolved within 30 days after the vendor receives their results..
- It is the vendor's responsibility to present their case in detail and in sufficient time for the review board to complete the review in 30 days.

7.3 Arbitration Committee

- The arbitration committee includes the following individuals
 - Tuan Phamdo – Chair of the OFA IWG
 - Rupert Dance – Leader of the OFA IWG
 - Arkady Kanevsky – Design Engineer at EMC
- The arbitration committee **cannot** include the following
 - Engineers from a division of a company which is an OFILG member and which has products being submitted for Logo Validation
- Consultation - The committee may seek advice and data from the following groups



- UNH-IOL – OFA Interop testing vendor
- Software Forge – Company executing the IBTA CIWG Plugfest
- The company which submitted the request
- Contacts
 - All correspondence should be sent to the Arbitration Committee at the following address: iwg-arbitration-committee@openfabrics.org
 - The Chair of the Arbitration Committee will maintain the list of members of this group: iwg-arbitration-chair@openfabrics.org