OFA/ DMTF / SNIA Work Register Version 1.0 Date Initiated: 06/17/2021

The Work Register is created between DMTF, SNIA, and the OFA to formally define the objectives, scope, benefits, and deliverables of the alliance partnership. The register helps the three organizations coordinate efforts to achieve the stated goals and objectives.

Alliance Organizations

- <u>Storage Networking Industry Association</u> (SNIA)
- <u>OpenFabrics Alliance</u> (OFA)
- <u>DMTF</u>

SNIA

SNIA is an organization which develops and promotes standards, technologies, and educational services to empower the management of information in the storage domain.

The SNIA Non-Volatile Memory Programming (NVMP) Technical Work Group (TWG) delivers specifications describing the behaviour of a common set of software interfaces that provide access to non-volatile memory (NVM). The TWG goal is to encourage a common ecosystem for NVM-enabled software without limiting the ability to innovate.

The SNIA Scalable Storage Management (SSM) Technical Work Group defines the Swordfish specification that extends the Distributed Management Task Force (DMTF)'s Redfish specification (API) to handle the management of storage equipment and storage services found in modern data centers.

OpenFabrics Alliance

The OpenFabrics Alliance (OFA) mission is to develop and promote software that enables maximum application efficiency by delivering wire-speed messaging, ultra-low latencies, and maximum bandwidth directly to applications with minimal CPU overhead. It seeks to accelerate the development and adoption of advanced fabrics for the benefit of the advanced networks ecosystem. This is accomplished by creating opportunities for collaboration among those who develop and deploy such fabrics, incubating and evolving vendor independent open source software for fabrics, and supporting and promoting the use of such fabrics technology software.

The OpenFabrics Management Framework Working Group (OFMFWG) is chartered to create an open-source, fabric agnostic management framework.

The OpenFabrics Interfaces Working Group (OFIWG) is committed to (1) developing, testing, and distributing and extensible, open source framework that provides access to

high-performance fabric interfaces and services; and (2) extensible, open source interfaces aligned with ULP and application needs for high-performance fabric services.

The Fabric Software Development Platform Working Group (FSDPWG) supports a multi-vendor, multi-fabric cluster that is made available to OFA members for developing, testing, and validating networking software and hardware. It delivers on the OFA's mission to accelerate the development and adoption of advanced fabrics for the benefit of the advanced network ecosystems.

The Marketing Working Group (MWG) has the charter to promote the benefits of OFA and accelerate the adoption of existing and emerging advanced fabric technologies.

DMTF

DMTF is an industry standards organization working to simplify the manageability of network accessible technologies through open and collaborative efforts by leading technology companies. DMTF creates and drives the international adoption of interoperable management standards, supporting implementations that enable the management of diverse traditional and emerging technologies including cloud, virtualization, network, and infrastructure.

The Redfish Forum is responsible for the DMTF's Redfish®. The Redfish standard is designed to deliver simple and secure management for converged, hybrid IT and the Software Defined Data Center (SDDC). Both human readable and machine capable, Redfish leverages common Internet and web services standards to expose information directly to the modern tool chain.

The Redfish Forum has chartered a Fabrics Task Force to develop Redfish models and schema for various fabrics.

Alliance Goals and Scope

The OpenFabrics Alliance has launched an effort to design and develop an open Fabric Management framework (OFMF) consisting of common APIs and methods to deliver security, provide route management, and maintain optimized performance. The new Fabric Management framework will utilize DMTF Redfish and SNIA Swordfish. The goals of OFMF are to

- Extend fabrics management for existing and future fabrics technologies.
- Add value-add fabric-agnostic capabilities such as workload-management, performance load-balancing, reliability-enhancements, and orchestration.

The Redfish Forum wants to extend the fabric model and other fabrics and would value the fabric management expertise from the OpenFabrics Alliance.

The goal of the alliance is to release a Redfish model/schema update which includes model extension for managing a variety of fabrics as well as any Swordfish model/

schema updates to support storage fabric management workload and resource orchestration use-cases.

Limitations

OFA, DMTF, and SNIA have differing policies for both how contributions are made, and governance of any outputs of the work. The collaboration must respect those policies.

Each organization's contributions are necessarily limited by the availability of volunteer resources.

OFA will not produce delegated standards that conflict or diverge from existing or proposed DMTF or SNIA standards where possible.

Alliance Organization Assets

The alliance will reference the DMTF Redfish and SNIA Swordfish specifications and ecosystems, including draft and work-in-progress content. In addition, the alliance will leverage and extend DMTF and SNIA open-source tools, as needed, to develop the OpenFabrics Management Framework, proof-of-concept(s), and demonstration(s).

Milestones / Dates

This section is to list specific milestones that will be accomplished by the alliance partnership.

Milestone/Deliverables	Timeframe
DMTF, SNIA, and OFA approves of Work Register	June/July 2021
DMTF, SNIA, and OFA announce the new trilateral agreement as appropriate	July 2021
DMTF Redfish schema releases with fabric management extensions	On-going
SNIA Swordfish schema releases with storage-fabric management extensions	On-going
OFA proof-of-concept demonstrations and presentations	As- scheduled
Support for the collaboration at industry events to be identified	On-going

Access

DMTF, SNIA, and the OFA may want to provide documentation and collateral to each other. This information can be exchanged publicly as appropriate.

Providing access to documents

- DMTF will provide access to information and specifications available by releasing and posting documents on the public DMTF website. The documents will be released as either "Work-in-Progress", "Informational", or "Standard"
- SNIA will share updates & Work in Progress Drafts of the specification, profiles, registries, schema, and supporting documentation produced by the Scalable Storage Management Technical Work Group
- OFA: All OFA meetings, code bases, and collateral are open source. Existing code is dual licensed GPLv2 and BSD.

Feedback and contributions which may involve intellectual property:

- OFA can submit feedback and contributions to DMTF specifications via the DMTF Technology Submission Portal (dmtf.org/standards/feedback), subject to the terms of the DMTF Intellectual Property Rights Agreement set forth on such portal.
- OFA can submit feedback and contributions to SNIA specification through the SNIA Standards Feedback Submission Portal (snia.org/feedback) subject to the SNIA Feedback Contribution Agreement set forth on the portal.
- DMTF and SNIA can submit feedback and contributions to OFA specifications and proof-of-concepts by participating in an OFA working group. Note there is no cost to join an OFA working group and membership is open to all. Membership in the OFA is only required to lead or vote in a working group. Instructions on how to join a working group is readily available on the OFA web site.

Work Register Review Date

The next review date is expected to be June 2022

The DMTF work register review processes can be found in DS4003.

Resources Identified / Points of Contact:

Below are the members of each organization that will act as points of contact between the two organizations.

OFA:

- OFA Chair, Doug Ledford (dledford@redhat.com)
- OFA Vice Chair, Phil Cayton (phil.cayton@intel.com)
- OFA Executive Director, Treasurer, Jim Ryan (jimdryan@gmail.com)

• OFA Marketing Working Group Chair, Doug Ledford (dledford@redhat.com)

DMTF:

• DMTF VP of Alliances (vp-alliances@dmtf.org)

• DMTF's OFA Alliance Contacts mail-list (OFA-alliance@dmtf.org) SNIA:

- SNIA Technical Liaison to the OFA (ofaliaison@snia.org)
- SNIA Marketing Liaison to the OFA (ofaliaison-marketing@snia.org)
- SNIA Technical Liaison to the DMTF (dmtfliaison@snia.org)
- SNIA Board Liaison to the DMTF (dmtfboardliaison@snia.org)

SNIA Document Approval

This document will be an official SNIA alliance record after following reviews:

The document will be reviewed and approved by the SNIA Strategic Alliances Committee

The document will be reviewed and approved by the SNIA Board

Approved by SNIA SAC: June 10, 2021

Approved by SNIA Board: July 1, 2021

OFA Document Approval

The document will be reviewed and approved by the OFA Board.

Approved by OFA Board: June 17, 2021

Approval by the DMTF Board of Directors

Approved by the DMTF Board of Directors; Board Resolution **2021-06-05**, on June 24, 2021.