

Input Output Virtualization (IOV) Incubator Charter Dated 2/9/2010

The information provided below is subject to change and reflects the current state of the Initiative proposal within the DMTF.

Management Problem(s) and Environment

Efficient and effective virtualization aware networks can only be achieved by supporting standards on the management, control, and data plane especially in networks with equipment from multiple vendors and virtualization at every level. To increase adoption, extensions to prevailing standards are generally preferred to defining new standards, However, new standards that can easily be adopted or provide significant advancements toward virtualization-aware networks may be required in some cases.

Proposed Incubator Scope

The DMTF's IOV incubator will develop a suite of DMTF informational specifications that deliver architectural semantics to unify the interoperable management of multi-vendor virtual network infrastructures by identifying and guiding the standardization of key interfaces for interoperability between vendors, with a focus on the control and management planes.

Business Justification

This effort will help to extend and complete IO Virtualization management. This initiative would provide benefit to our members on several fronts:

- Act as the industry catalyst to drive the virtualization-aware networks' vision by:
 - Defining management requirements for networks in the context of new virtualization innovations ranging from NICs, operating systems and switches coupled with advancements in networking hardware.
 - Engaging with the appropriate standards groups, and sponsor extensions to the existing standards or definitions of the new ones.
 - Provide guidance on how to leverage standards to actively participate and enable workload-aware networks.

Supporting Companies

The following leadership or board companies are interested in the formation of a DMTF Incubator to address the problems identified in this document:

- **Dell** – Robert Winter robert_winter@dell.com
- **Brocade**– John Crandall crandall@brocade.com
- **HP** – Mike Krause, mkrause@hp.com
- **Intel** – Ilango Ganga, ilango.s.ganga@intel.com
- **IBM** – Jeff Lynch jjlynch@us.ibm.com
- **VMware, Inc.** – Winston Bumpus wbumpus@vmware.com
- **Citrix Systems, Inc.** – Abolfazl Sirjani abolfazl.sirjani@citrix.com

Incubator Goals

The IOV incubator is intending to create a set of informational documents to advance industry thinking around virtualization-aware networks, including:

1. Development of use cases and scenarios for virtual machine instantiation and migration across networks.
2. Identification of gaps not covered by current industry forums, including DMTF, that are needed to support the developed use cases and scenarios in (1) above.
3. Providing recommendations and guidance to address identified gaps in (2) above to the DMTF Process Committee.

Incubator Deliverables and Timeline

1. **2Q CY10**: List of scenarios that the incubator will focus on.
2. **2Q CY10**: List of relevant standards (existing or being developed) that are relevant to the scenarios listed in deliverable (1) above.
3. **3Q CY10**: Gap analysis, identification and proposals on how they may be addressed.

Participation Requirements

Addition of new leadership members requires a SUPER MAJORITY (75%) of the Review Board.

Review Board Voting Policy

Review Board voting will be a SUPER MAJORITY (75%) of the Review Board.

Alliance Partnerships

IEEE 802.1 Working Group

Reliance/Coordination with other WG Models

This document should not be forwarded to anyone who is not a member of the DMTF.

The Systems Virtualization, Partitioning, and Clustering Working Group including all profiles and the OVF specification.

The Systems Virtualization, Partitioning and Clustering Network Virtualization Sub-Group
Physical Platform Profiles Work Group

Interim Chairs

Robert Winter robert_winter@dell.com

Related Work

SVPC Virtualization Management 2.0