# "Always-On" – Optical Data Center

Presentation #558

## URL: <u>http://www.hp.com/go/iotechnologies</u>

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Target Audience: All Technical Level: Intermediate / Novice

### **Two-line Summary:**

This presentation will describe the HP Optical Data Center (ODC) – The "Always-On" Infrastructure. ODC is the solution infrastructure for delivering customer-visible value for services and storage.

### What attendees will learn:

- 1. What an Optical Data Center is the components, storage, services, etc.
- 2. Customer-visible value propositions and impact to service delivery
- 3. How the Optical Data Center impacts technology decisions / directions
- 4. How storage fabrics will evolve and what is HP's strategic direction
- 5. Is InfiniBand a suitable data center technology?

#### Abstract:

The HP Optical Data Center (ODC) is the "Always On" infrastructure to deliver solutions and services for the Internet Chapter 2. ODC technologies and solutions apply to any size data center – whether standalone or distributed across any geographical distance.

The HP ODC delivers customer-visible value across a wide-range of solution spaces:

- Instantaneous access to any service, any data or any device
- Eliminates distance barriers through the use of optical switching / technology
- Complete "Instant Capacity-on-Demand" (iCOD) for all resources
- Translate any data center resource change into an ODC iCOD change
- Dynamic SLA-driven response to environment and service requirements
- Provides single point of management for any service, any where, any time
- Creates a single, open and interoperable infrastructure
- Develop Once; Deploy Everywhere Guaranteed Inter-operability
- Converge all communication to IP-based solutions

This presentation will also discuss the future of Storage fabrics and what technologies are suitable for the future and where do new technologies such as Storage over TCP/IP (iSCSI) and InfiniBand fit into the overall picture.

### **Biographical Sketch:**

Michael Krause is a Senior Interconnect Architect. For the past 15 years at HP, Michael has worked on I/O, Interconnect, IPC protocol design, RAS, System / Fabric management, Performance analysis and tuning, Networking, and OS architecture and implementations focused on HP's Enterprise solutions. For the past several years, Michael has been the technical lead for HP's System Area Networking architecture focused on IPC (Inter Process Communication) and I/O solutions. He was one of the founding architecture. Within the InfiniBand Trade Association, Michael is the Link Workgroup Co-Chair and is HP's core architecture workgroup technical lead.