Data Center Test Bed

Discussion Slides
November 7th, 2017

Issue

- New features in storage devices which are targeted to meet Hyperscaler requirements need new code
  - Both in the drive as well as the host
- The specification of these features may be immature and subject to different interpretations
  - Certification tests take time to develop and approve
- One on one testing between Drive vendor and Hyperscaler will not discover interoperability problems between drive vendors

Some ideas

- SNIA Technology Center in Colorado Springs could be a location for a possible test bed for new standards features of interest to Hyperscalers

- Examples might include NVMe (IOD, KV), NVMe-oF (TCP), Persistent Memory over Fabrics.

- The SNIA facility is used for other plugfests but is under utilized at this time.

Example Benefits

◆ **Early testing on new features would help accelerate adoption.**

- Hyperscalers can debug prototype code with early implementations
- Drive/Fabric vendors can debug firmware with real world Datacenter applications
- SNIA workload groups may be able to capture loads for performance characterization
- Testing/Certification organizations (UNH-IOL) can debug early test suites
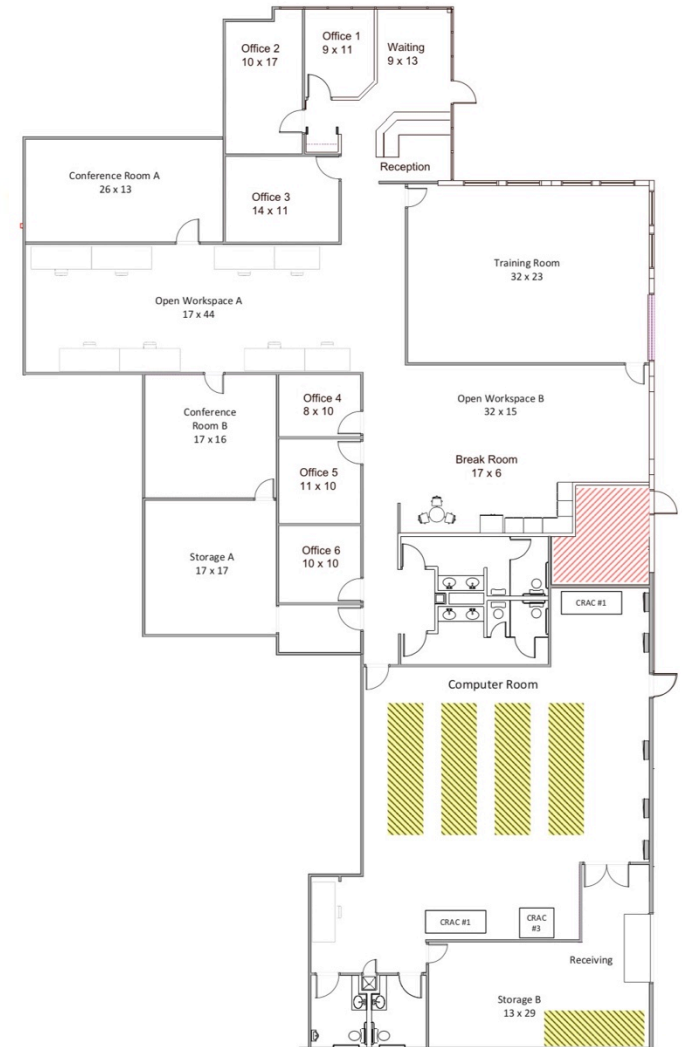
SNIA Technology Center

- 7,500 sq. ft. overall
- Private entrance
- Equipment to support storage networking training
- 1,500 sq. ft. of Interoperability test labs
- Classrooms and meeting space
- Industrial-grade tiered workbenches
- Integrated network and fibre infrastructure
- Teleconferencing and other meeting support (remote demonstrations of storage technologies)
- Secure remote access to testing labs and other hosted equipment
- Pre-stage and remote deployment of storage networking equipment for demonstrations and hands-on training opportunities

Fees, Building Layout

Service Name	Description	Pricing
1U rackspace	1U rackspace, 3 Amps power, one 10/100 Mb drop, network drop 100GB of transfer, 1 external IP address	$150/month $100 setup*
¼ Cabinet (2 to 10U)	10U rackspace, 5 Amps power, one 10/100 Mb drop, 125GB of transfer, up to 2 external IP addresses	$300/month $100 setup*
½ Cabinet (11 to 20U)	20U rackspace, 10 Amps power, one 10/100 Mb drop, 150GB of transfer, up to 4 external IP addresses	$450/month $200 setup*
Full Cabinet (21 to 42U)	42U rackspace, 20 Amps power, one 10/100 Mb drop, 175GB of transfer, up to 8 external IP addresses	$700/month $200 setup*
Additional Power	Additional 20 Amps circuit. *Setup fee will apply for 3 or more circuits per cabinet.*	$200/month
Additional Drop	Additional 10/100 Mb drop, network drop to your cabinet. No additional bandwidth included.	$50/month $50 setup*
Additional 20GB of Traffic	Contracted price	$40/month
Additional 50GB of Traffic	Contracted Price	$80/month
VPN access	Single VPN access account to customer equipment.	$50/month $50 setup*
Additional external IP address	Up to 4 additional external IP addresses	$15 /month $50 setup*

Discuss

- Open Mailing List:
  - Send email to the list (must be subscribed): datacenter@snia.org
  - Subscribe (empty email to): datacenter-subscribe@snia.org