
MWT2 Site Report

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OSG All Hands Meeting
Clemson University
March 14, 2016



Outline

- Equipment purchases
- Network performance
- Ceph update
- LSM update

MWT2 technical team

- David Lesny - UIUC
- Elizabeth Prout - IU
- Lincoln Bryant - UC
- Judith Stephen - UC

New equipment @ UC

- 20 x Dell R730xd servers
 - 2 x Intel Xeon E5-2650 v3 @ 2.30GHz
 - 96 GB memory
 - 2 x 1 TB for root disk
 - 14 x 8 TB SAS + 2 x 200 GB SSD for Ceph
 - 10 Gb Ethernet
 - 24 slots per server (16 reserved for Ceph), 480 total

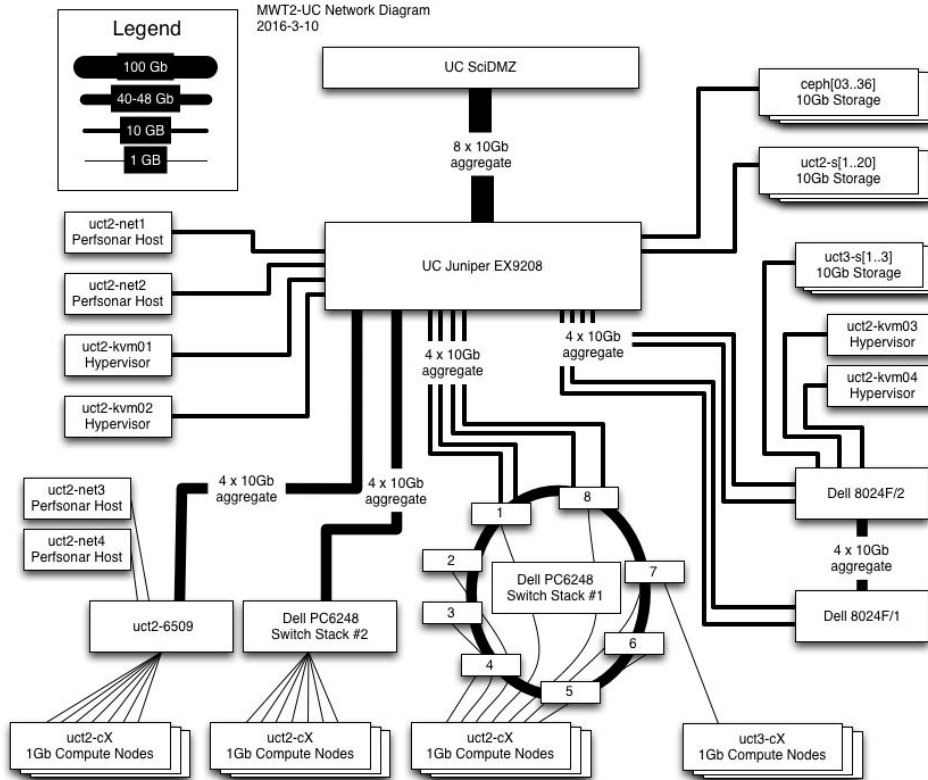
New equipment @ IU

- 24 x Dell R630 servers
 - 2 x Intel Xeon E5-2650 v3 @ 2.30GHz
 - 128 GB memory
 - 4 x 1 TB local disk
 - 1 Gb Ethernet
 - 40 slots per server, 960 total

New equipment @ UIUC

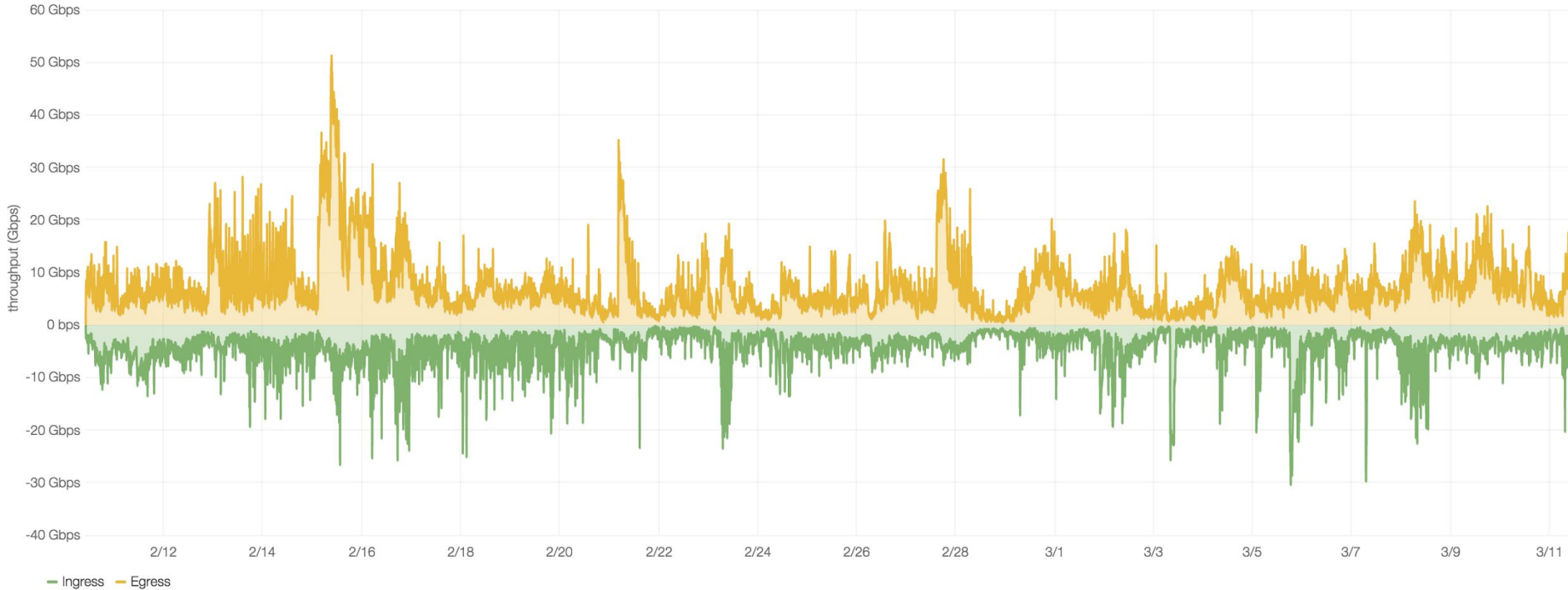
- 5 x Dell C6320 2U modules
 - 4 nodes, 24 drive bays, 10Gb Ethernet per module
 - 2 x Intel Xeon E5-2680 v3 @ 2.5GHz
 - 256 GB memory
 - 5 x 1TB local disk
 - 48 slots per node, 960 total
- 10 Gb NICs for existing mwt2 nodes
- Arista switch with 96+ 10Gb

UC Network

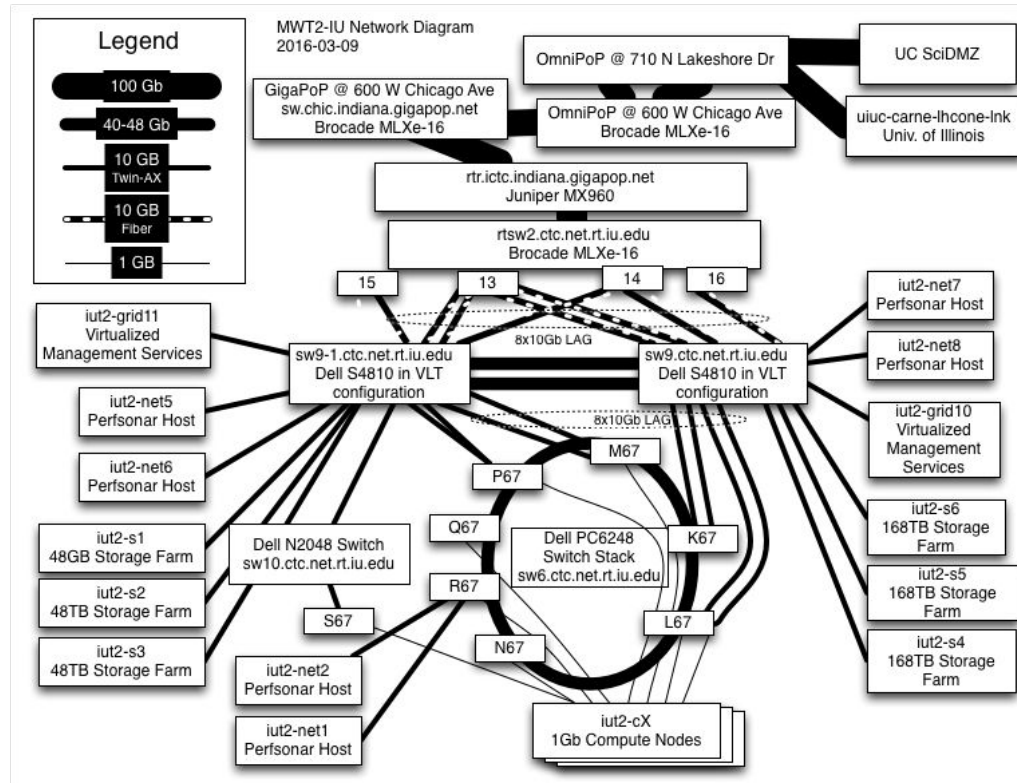


Recent network performance @ UC

Juniper EX9208 to Campus SciDMZ

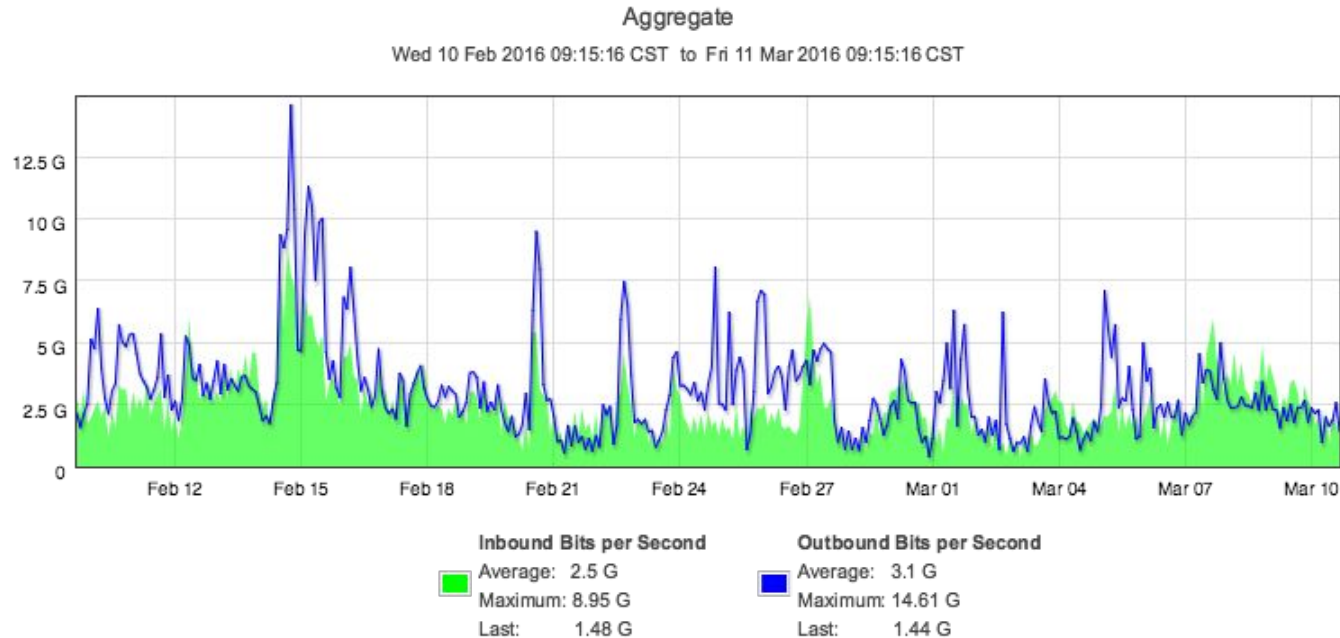


IU Network

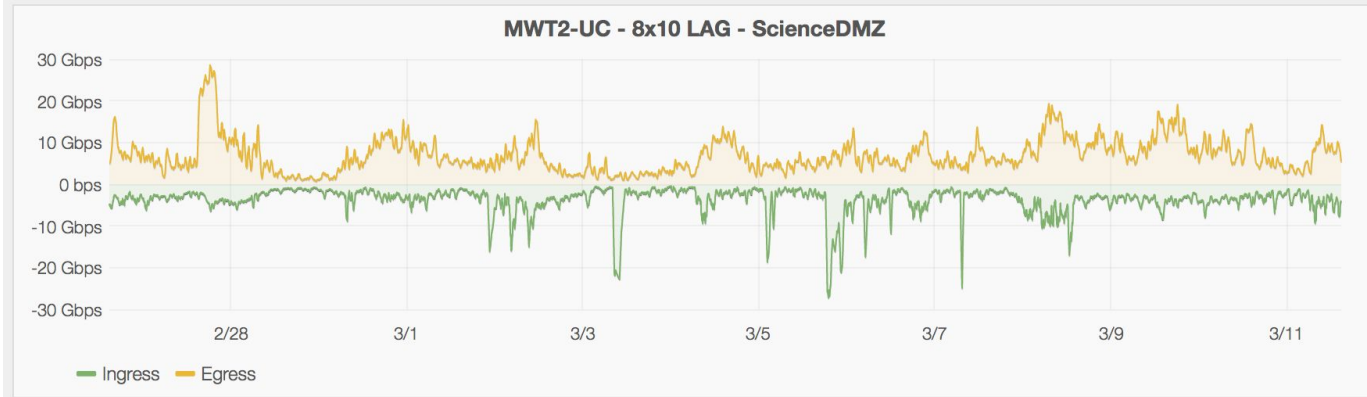
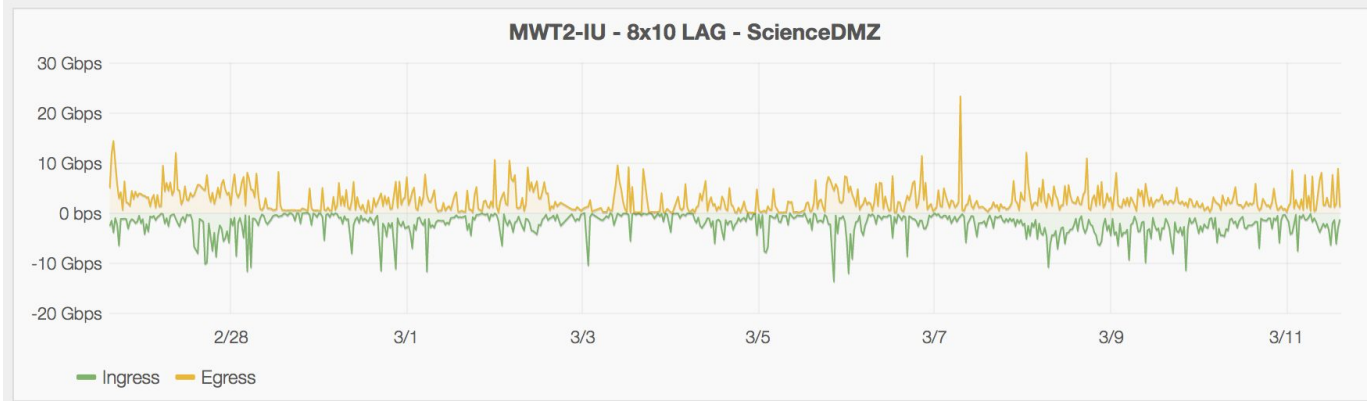


Recent network performance @ IU

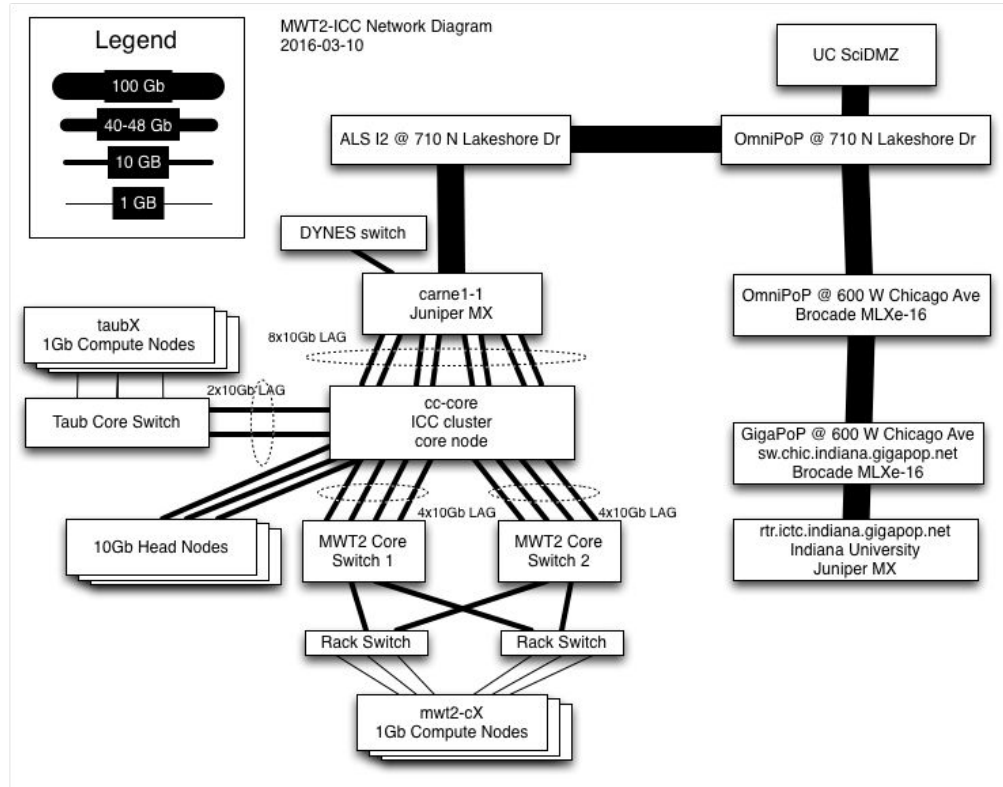
rtsw2.ctc.net.rt.iu.edu to sw9.ctc.net.rt.iu.edu, sw9-1.ctc.net.rt.iu.edu



Combined MWT2 Traffic Monitor



ICC Network



Ceph

- New Ceph cluster (33x Dell R730xd)
 - 3 PB raw
 - Migrating LOCALGROUPDISK token to Ceph
- Old Ceph cluster (2x Dell R510)
 - 400 TB raw
 - Repurposing as dCache

LSM - Local Site Mover

- Current LSM uses DCAP (get) and LCG (put)
 - DCAP and LCG are no longer distributed by OSG in 3.3.x
 - DCAP is dCache specific which will not work on CEPH SE
 - LCG deprecated and being replaced by GFAL2
- New LSM uses GFAL2, XRD (and LCG)
 - SRM or XRD (local or FAX) for get
 - SRM for put
 - Reports to Elastic Search

<http://kibana.mwt2.org/app/kibana#/dashboard/LSM-Get>

<http://kibana.mwt2.org/app/kibana#/dashboard/LSM-Put>