

# networkMaryland™ Advisory Group Meeting

July 16, 2013

Annapolis, MD



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S T A T E   O F   M A R Y L A N D  
D E P A R T M E N T   O F   I N F O R M A T I O N   T E C H N O L O G Y



# Meeting Agenda

- | Welcome & Introductions
- | New Business
- | State of the Network
- | Status of Project
- | Other Business



# Welcome

- | Introductions
- | Gregory Urban: CTO, State of Maryland
- | Dave Mangrum: Director, Networks Division - DoIT
- | Guests/Visitors



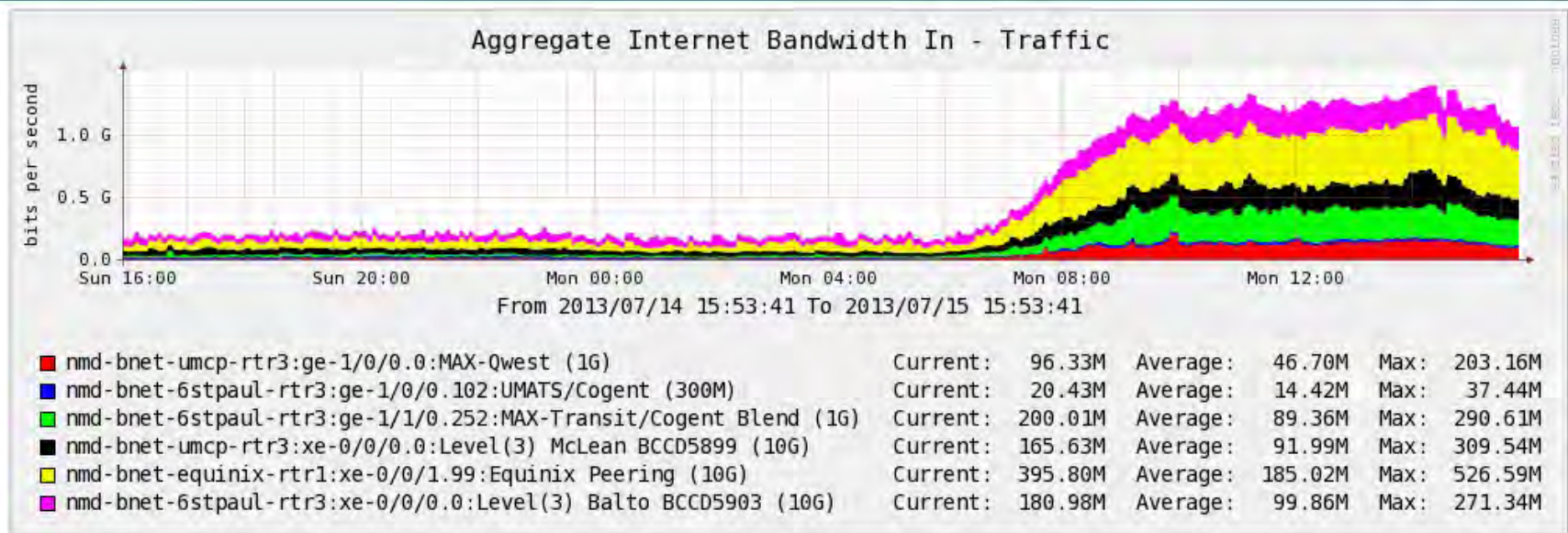
# New Business

- | Future Meetings
  - Dave Mangrum will run future meetings
  
- | Meeting Minutes Approval
  - April 2013
  
- | High Availability Working Group
  - Continue to meet with agencies and develop requirements for the network and services
  
- | Circuit Evaluation
  - Identify circuits that are not in use and can be disconnected





# Equinix Peering



## Current Peers in Production

Google, Akamai, Facebook, Blackboard, Yahoo!, Amazon, Microsoft, and Symantec.



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# Operational Subscribers

- | 89 Operational Subscribers: 4 new subscribers
  - Calvert County – Service Pending
  - Hilltop Institute (at UMBC) – Service Installed
  - Queen Anne’s County – Service Pending
  - University of Maryland Baltimore – Service Pending
- | Circuit Breakdown:
  - 101 ISP Circuits (+7)
  - 92 SwGI Circuits (+1)
  - 1247 Layer 2 Circuits (-119)
  - 13 VPN Subscriber Connections (+0)
  - 93 VPRN Circuits (+33)
  - 529 EE Circuits (+14)



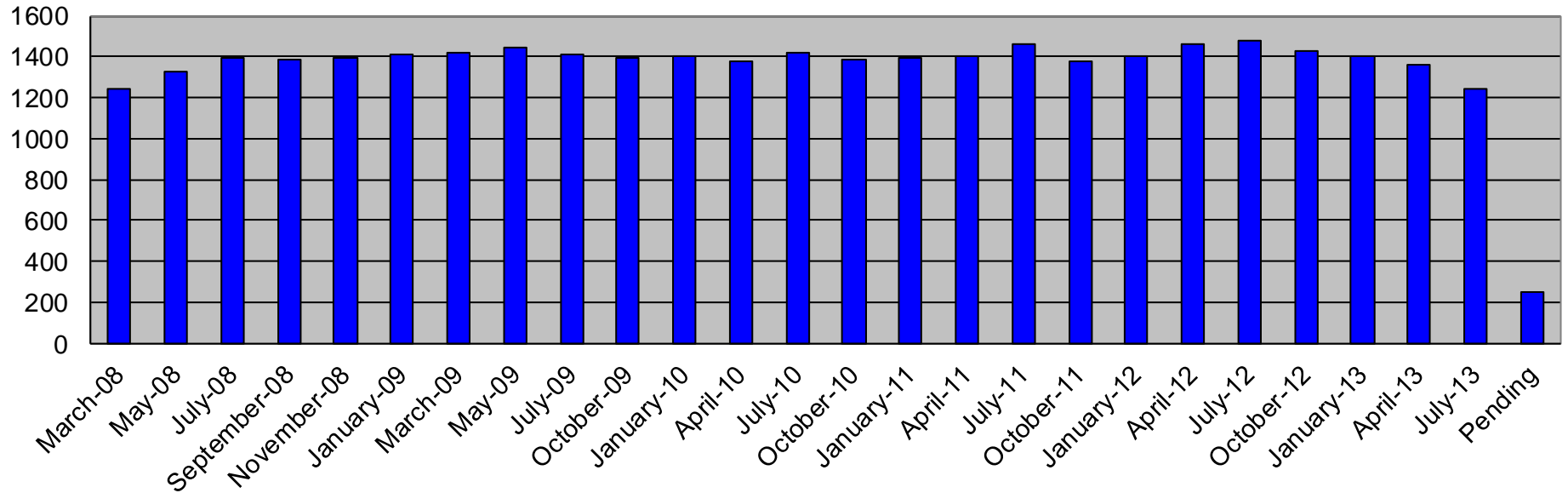
# Subscriber Provisioning

- | 137 Provisioning requests were received.
- | 249 Cumulative active provisioning requests are in process.
- | 86 tickets were completed (Customer Acceptance Form sent to customer).
- | Of the 86 completed tickets, 70 were accepted/closed.





# Installed Circuits





# Service Level Performance

## Severity 1

- Subscriber Hardware: 1
- Verizon: 1
- Hardware:

April 2013	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	3	80	39
Initial Response from Detection (10m, 10m, 10m)	3 100 %	80 100 %	39 100 %
Begin Diagnosis (10m, 10m, 10m)	3 100 %	79 99 %	39 100 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	1	0
Onsite Support With Parts (4h, 4h, 24h)	0 100 %	0 0 %	0 100 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	3	40	21
1st Escalation (20m, 4h, 24h)	3 100 %	39 98 %	21 100 %
2nd Escalation (1h, 4h, 24h)	3 100 %	40 100 %	21 100 %
3rd Escalation (1h, 4h, 24h)	3 100 %	40 100 %	21 100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





# Service Level Performance

	May 2013	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages		5	105	69
Initial Response from Detection (10m, 10m, 10m)		5 100 %	105 100 %	66 96 %
Begin Diagnosis (10m, 10m, 10m)		5 100 %	104 99 %	66 96 %
Initial Notificaiton to State (10m, 10m, 10m)		100 %	100 %	100 %
# of Cases for Onsite Support with Parts		0	1	1
Onsite Support With Parts (4h, 4h, 24h)		0 100 %	0 0 %	0 0 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)		4	57	48
1st Escalation (20m, 4h, 24h)		4 100 %	55 96 %	46 96 %
2nd Escalation (1h, 4h, 24h)		4 100 %	55 96 %	47 98 %
3rd Escalation (1h, 4h, 24h)		4 100 %	55 96 %	48 100 %
Resolution Notification (10m, 10m, 10m)		100 %	100 %	100 %

## Severity 1

- Hardware: 1
- Verizon: 2
- Subscriber Hardware: 2





# Service Level Performance

## Severity 1

- Power Outage: 5
- Verizon: 6

June 2013	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	11	151	44
Initial Response from Detection (10m, 10m, 10m)	10 91 %	151 100 %	44 100 %
Begin Diagnosis (10m, 10m, 10m)	10 91 %	150 99 %	44 100 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	2	0	0
Onsite Support With Parts (4h, 4h, 24h)	2 100 %	0 100 %	0 100 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	5	75	36
1st Escalation (20m, 4h, 24h)	5 100 %	75 100 %	35 97 %
2nd Escalation (1h, 4h, 24h)	5 100 %	75 100 %	36 100 %
3rd Escalation (1h, 4h, 24h)	5 100 %	75 100 %	36 100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





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# Project Status

## I One Maryland Broadband Network – Original Plan

Entity	CAI Goal	CAI Actual	% Complete	Fiber Goal	Fiber Actual	% Complete
DoIT	291	337	116%	524	521	99%
Frederick Co.	58	51	88%	n/a	n/a	n/a
ICBN	657	519	79%	836	754	90%
<b>TOTAL</b>	<b>1006</b>	<b>907</b>	<b>90%</b>	<b>1294</b>	<b>1134</b>	<b>88%</b>

## I One Maryland Broadband Network – Current Plan

Entity	CAI Goal	CAI Actual	% Complete	Fiber Goal	Fiber Actual	% Complete
DoIT	387	337	88%	540	521	88%
Frederick Co.	59	51	86%	n/a	n/a	n/a
ICBN	648	519	80%	800	754	94%
<b>TOTAL</b>	<b>1089</b>	<b>907</b>	<b>83%</b>	<b>1340</b>	<b>1134</b>	<b>85%</b>







# OMBN Progress - DoIT

	Completed	Total	
Site Surveys	36	36	100%
Site Plans	34	36	100%*
Sites Deployed	34	36	100%*
10 Gbps Links	50	112	47%

**As of 6/26**

**\*Two sites were de-scoped from the backbone  
(Hagerstown 911 and Frederick Montevue Lane)**



# Project Status

- | Backbone Upgrade - Completed the Western Path
  - UMCP  $\beta$  à Rockville
  - Rockville  $\beta$  à Hagerstown
  - Hagerstown  $\beta$  à Frederick
  - Hagerstown  $\beta$  à Cumberland
  - Cumberland  $\beta$  à Oakland
  
- | Forecast
  - Chestertown  $\beta$  à Elkton
  - Elkton  $\beta$  à JFK
  - JFK  $\beta$  à Bel Air
  - Bel Air  $\beta$  à Towson
  - Ellicott City  $\beta$  à UMBC
  - Westminster  $\beta$  à Frederick
  - Westminster  $\beta$  à Ellicott City







# Project Status

- | Fiber Connected Customer Pickup
  - Fiber connected sites will use Ciena Metro Ethernet
  - Initial deployment for OMBN sites only
  - Future deployment will replace existing MAN deployments
  
- | Deployment Plan
  - Deployment has been “Productized”
  - Controller/management software configured in lab
  - Aggregation hardware received and being deployed
  - Production Servers being provisioned @ UMCP
  - Sites will start being “lit” in August



# Project Status

## I QoS

- Created QoS policy and customer profile sheets
- Pilot with MSP on the eastern shore (VPRN)
- Engineering is in progress

## I Circuit Reconciliation

- Decommissioned inactive frame relay / FRASI circuits
- Consolidating OC-3 aggregation circuits (eliminate 5 OC-3s)
  - I Easton: 2 OC-3s to 1 OC-3: **COMPLETE**
  - I UMCP: 2 OC-3s to 1 OC-3: Scheduled
  - I ADC: 2 OC-3s to 1 OC-3: Scheduled
  - I 6 St. Paul: 3 OC-3s to 1 OC-3: Scheduled
  - I Hagerstown: 1 OC-3s to 1 OC-3: **COMPLETE**



# Fiber Projects

## I MSCs

- 6655 Sykesville Road, Sykesville

## I Customer Locations

- MEMA
- Maryland School of the Deaf (Frederick and Columbia)
- 750 Pratt Street (Healthcare Exchange)
- 12501 Willowbrook Road, Cumberland (DHMH)
- 10100 Country Club Road, Cumberland (DHMH)
- 1380 Marshall Street, Hagerstown (DHMH)
- 1750 Forest Drive, Annapolis (MAIF)



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# Other Business

- | MDREN Engineering Committee meeting
  - Monday, September 9, 2013, 1:30 PM @ UMBC Technology Center
  
- | High Availability Working Group
  - Tuesday, October 9, 2013, 10:00 AM @ Knowtion Center
  
- | Closing Questions or Comments

# Meeting Adjourned

