networkMaryland™ Advisory Group Meeting

January 21, 2014

Annapolis, MD

Meeting Agenda

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

Welcome

- Introductions
- Dave Mangrum: Director of Networks, State of Maryland
- Guests/Visitors

New Business

- Meeting Minutes Approval
  - October 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
  - Work with agencies to ensure circuits with no traffic are not needed for redundancy or other reasons

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Operational Subscribers

▮ 98 Operational Subscribers: 1 new subscribers

Service pending for ODHH – Office of Deaf and Hard of Hearing

Circuit Breakdown:

- 111 ISP Circuits (+4)
- 107 SwGI Circuits (+6)
- 1258 Layer 2 Circuits (+7)
- 13 VPN Subscriber Connections (+0)
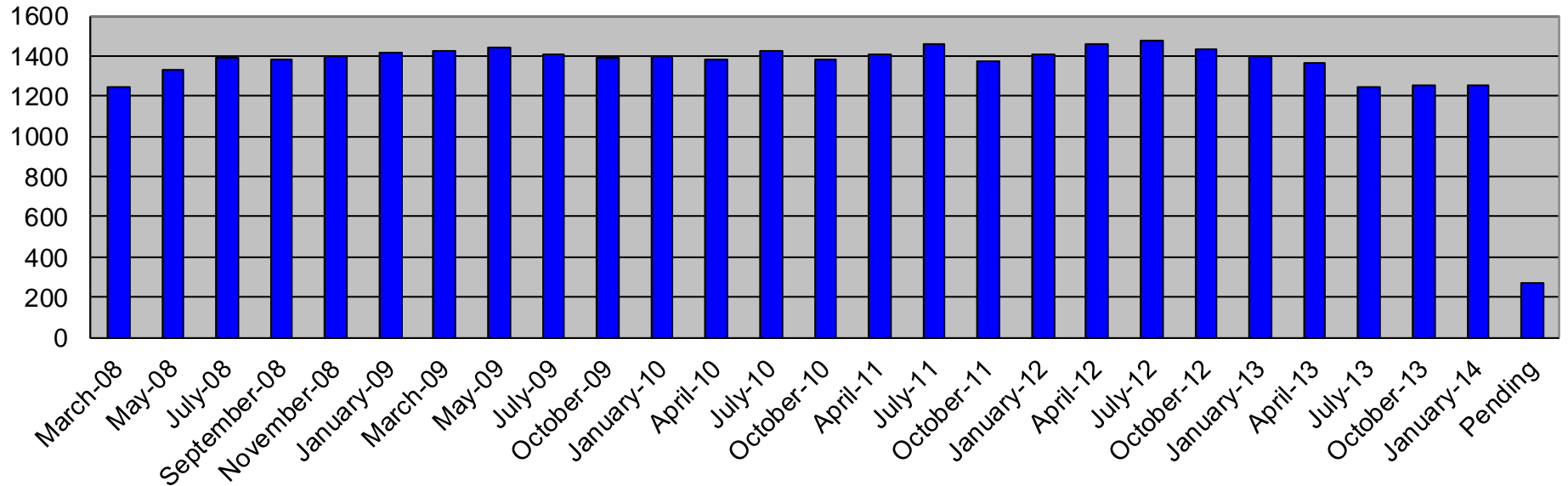- 111 VPRN Circuits (+14)
- 580 EE Circuits (+13)

Subscriber Provisioning

- 71 Provisioning requests were received.

- 269 Cumulative active provisioning requests are in process.

- 72 tickets were completed (Customer Acceptance Form sent to customer).

- Of the 72 completed tickets, 50 were accepted/closed.

Installed Circuits

Service Level Performance

Severity 1
- **Fiber: 1**
- **Verizon: 4**
- **Hardware: 2**
- **HVAC: 1**
- **Power: 3**

October 2013	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	11	111	52
Initial Response from Detection (10m, 10m, 10m)	10 91 %	111 100 %	46 88 %
Begin Diagnosis (10m, 10m, 10m)	10 91 %	111 100 %	46 88 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	1	2	3
Onsite Support With Parts (4h, 4h, 24h)	1 100 %	0 %	2 67 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	5	36	33
1st Escalation (20m, 4h, 24h)	5 100 %	34 94 %	33 100 %
2nd Escalation (1h, 4h, 24h)	5 100 %	35 97 %	33 100 %
3rd Escalation (1h, 4h, 24h)	5 100 %	35 97 %	33 100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %

Service Level Performance

Severity 1
- **Power: 4**
- **Verizon: 2**

November 2013	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	6	82	39
Initial Response from Detection (10m, 10m, 10m)	5 83 %	82 100 %	39 100 %
Begin Diagnosis (10m, 10m, 10m)	5 83 %	82 100 %	39 100 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	2	0
Onsite Support With Parts (4h, 4h, 24h)		2 100 %	100 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	1	38	27
1st Escalation (20m, 4h, 24h)	1 100 %	38 100 %	26 96 %
2nd Escalation (1h, 4h, 24h)	1 100 %	38 100 %	26 96 %
3rd Escalation (1h, 4h, 24h)	1 100 %	38 100 %	26 96 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %

Service Level Performance

Severity 1
- **Power Outage: 7**
- **Hardware: 1**
- **Verizon: 3**

December 2013	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	11	100	45
Initial Response from Detection (10m, 10m, 10m)	11 100 %	99 99 %	43 96 %
Begin Diagnosis (10m, 10m, 10m)	11 100 %	99 99 %	43 96 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	1	4	0
Onsite Support With Parts (4h, 4h, 24h)	1 100 %	1 25 %	100 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	5	38	29
1st Escalation (20m, 4h, 24h)	5 100 %	34 89 %	28 97 %
2nd Escalation (1h, 4h, 24h)	5 100 %	37 97 %	28 97 %
3rd Escalation (1h, 4h, 24h)	5 100 %	37 97 %	28 97 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %

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Project Status

■ County School MOUs

County	MOU Executed?	NetworkMD deployed?	ISP Bandwidth	SWGI Bandwidth
Allegany BOE	Yes	Yes	500	200
Calvert	Yes	Yes	200 at 2 locations	100 at 2 locations
Caroline	under review by county attorney		200	200
Carroll			50	50
Cecil	No		200	200
Charles	under review by county attorney		300	100
Frederick CPS	none required		25	0
Garrett	Yes	Yes	200	200
Kent	with county for signatures		200	200
Queen Annes	Yes	Yes	200	200
Somerset BOE	Yes	Yes	200	100
St Marys BOE	Yes		200	100
Washington BOE	Yes		200	200
Wicomico BOE	Yes	Yes	200	100
Worcester BOE	Feb-14		200	100

Project Status

- One Maryland Broadband Network - Overview

Entity	CAI Goal	CAI Actual	Fiber Goal	Fiber Actual
DoIT	291	370	524	535
Frederick Co.	58	59	n/a	n/a
ICBN	657	639	794	789
TOTAL	1006	1068	1294	1324

OMBN Progress - DoIT

	Completed	Total	
Site Surveys	38	38	100%
Site Plans	36	36	100%
Sites Deployed	36	36	100%
10 Gbps Links	40	55	73%
OMBN Links	38	40	95%
ICBN Links	2	15	13%
Metro-E Core	17	19	89%

Project Status

- **Completed the Southern Ring**
  - Prince Frederick to ADC
  - Oxon Hill Tower to UMCP
  - Oxon Hill to La Plata
  - Oxon Hill to McLean
- **Completed Western Maryland**
  - UMCP to Rockville
  - Rockville to Hagerstown
  - Hagerstown to Frederick
  - Hagerstown to Cumberland
  - Cumberland to Oakland
  - Cumberland to McLean
- MEMA on-net fiber attached

Project Status

- Firewall as a Service
  - Centralized firewall services
    - Dedicated Virtual firewall
    - Managed Perimeter defense

- SwGI as a "Trusted Network"
  - Creating a network device security policy
  - Develop a SwGI Network Security Plan
  - Create network device hardening procedures
  - Audit security configurations
  - Certify SwGI as a trusted entity
  - Update the SwGI Routing Policy
  - Create customer agreement form including AUPs

Project Status

- QoS
  - For Layer3 services (not L2 circuits)
  - Created QoS policy and customer profile sheets
  - Pilot QoS deployment candidates (MSP, DHMH, DHR)

- Circuit Reconciliation
  - Reduction of FRASI circuits driven by fiber availability:
    - Ciena Deployments
    - Fiber Path Studies

Fiber Projects

Recently Completed

■ Calvert County Health Departments

■ DHMH and PCTC in Sykesville

In Progress

■ Jessup Correctional Institute

■ 106 E. Main St., Elkton (DJS)

■ 6 W. Washington St., Hagerstown (MSDE)

■ 750 E. Pratt St., Baltimore *MHBE)

■ 80 Fiber Path Studies

■ ICBN County Connectivity

■ SHA and County Re-Locates

■ 700 mhz build-out

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Other Business

- **MDREN Engineering Committee meeting**
  - Monday, February 10, 2014, 1:30 PM @ UMBC Technology Center

- **High Availability Working Group**
  - Wednesday, April 9, 2014, 10:00 AM @ Knowtion Center

- **Quarterly Maintenance**
  - Sunday, March 2, 6 AM to 12 PM

- **Closing Questions or Comments**

Meeting Adjourned