networkMarylandTM Advisory Group Meeting



October 18, 2011 Annapolis, MD





Meeting Agenda

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





Welcome

- Introductions
- Gregory Urban: Deputy State CIO Operations
- Guests/Visitors





New Business

- Meeting Minutes Approval
 - April 2010 : Need to approve via email.





New Business

- Internet Service Capacity
 - Upgraded capacity to 2.4 Gbps aggregate capacity
 - Working with Level3 to increase capacity
 - 1 Gbps @ Level3 McLean
 - 1 Gbps @ 300 W. Lexington
- E-Rate
 - Received SPIN
- IPv6 Support
 - Received IPv6 allocation (/32)
 - Initial application will be on SWGI





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Operational Subscribers

- 80 Operational Subscribers one new subscriber Maryland First Responders Interoperable Radio System Team - FiRST
- Circuit Breakdown
 - 90 ISP Circuits (+1)
 - 89 SwGI Circuits (+2)
 - 1375 Layer 2 Circuits (-84, due to FRASI decommissions)
 - 12 VPN Subscriber Connections
 - 36 VPRN Circuits (+4)
 - 263 EE Circuits (+55)







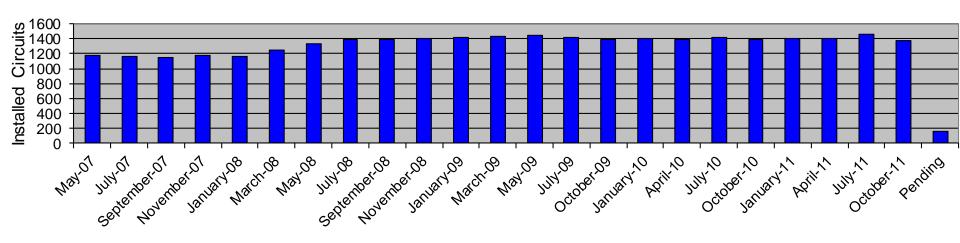
Subscriber Provisioning

- 41 Provisioning requests were received.
- 199 Cumulative active provisioning requests are in process.
- 120 tickets were completed (Customer Acceptance Form sent to customer).
- Of the 120 completed tickets, 107 were accepted/closed.





Installed Circuits



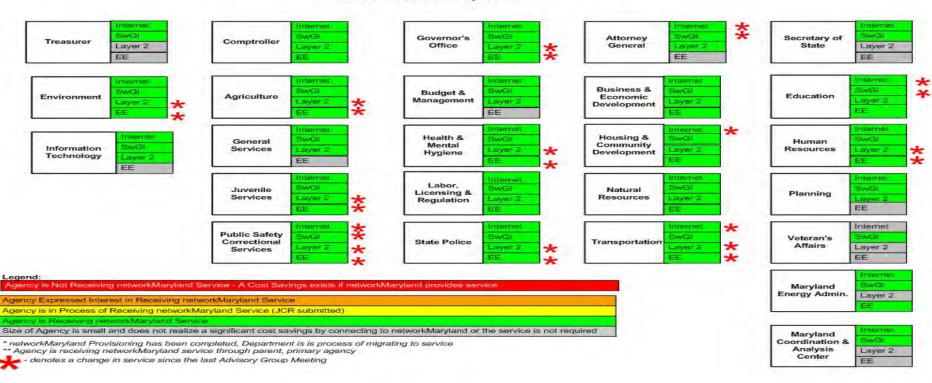
Month





Executive Branch

Executive Branch networkMaryland Subscribers as of October 18, 2011

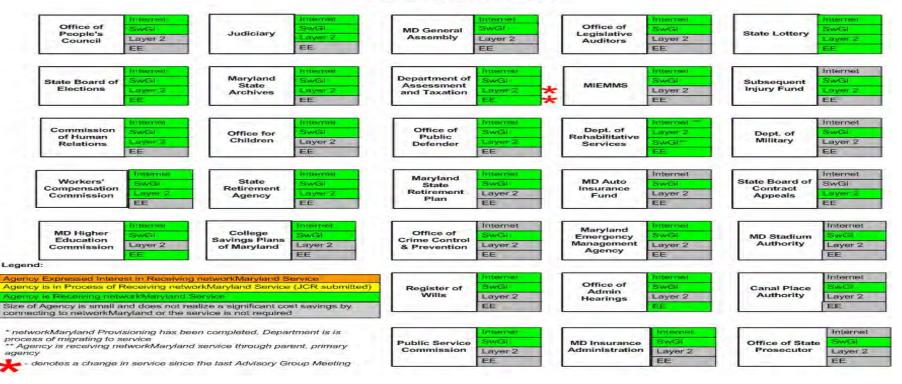






Non-Executive Branch

Non-Executive Branch networkMaryland Subscribers as of October 18, 2011

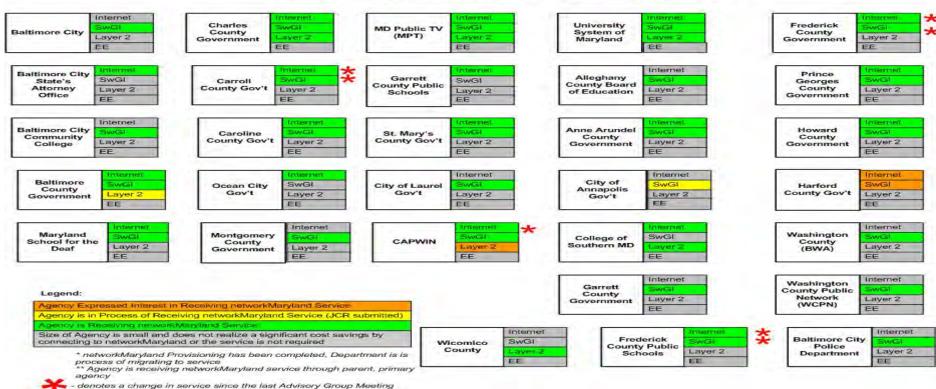






Non-State Customers

Non-State entities\Counties\Municipalities networkMaryland Subscribers as of October 18,2011







New Provisioning Activity

- Bundled Services Offering (ISP/SWGI Bundles)
 - 50 Mbps ISP / SWGI : \$15,000/year
 - 100 Mbps ISP / SWGI : \$25,000/year
 - 200 Mbps ISP / SWGI : \$45,000/year
 - 500 Mbps ISP / 100 Mbps SWGI: \$78,000/year
 - * All services 100 Mbps or higher include a second connection to networkMaryland for redundancy. Interfaces are configured active/standby. Subscriber must be located at a networkMaryland "on-net" facility.





Service Level Performance

July 2011	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	12	116	23
Initial Response from Detection (10m, 10m, 10m)	12	115	22
	100 %	99 %	96 %
Begin Diagnosis (10m, 10m, 10m)	12	115	22
	100 %	99 %	96 %
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	1	0	2
Onsite Support With Parts (4h, 4h, 24h)	1	0	1
	100 %	100 %	50 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	7	74	18
1st Escalation (20m, 4h, 24h)	6	74	17
	86 %	100 %	94 %
2nd Escalation (1h, 4h, 24h)	6	74	18
	86 %	100 %	100 %
3rd Escalation (1h, 4h, 24h)	6	74	18
	86 %	100 %	100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





Service Level Performance

August 2011	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	8	132	35
Initial Response from Detection (10m, 10m, 10m)	8 100 %	132 100 %	35 100 %
Begin Diagnosis (10m, 10m, 10m)	8 100 %	132 100 %	35 100 %
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 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	7	79	24
1st Escalation (20m, 4h, 24h)	7 100 %	77 97 %	22 92 %
2nd Escalation (1h, 4h, 24h)	7 100 %	77 97 %	24 100 %
3rd Escalation (1h, 4h, 24h)	7 100 %	78 99 %	23 96 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





Service Level Performance

September 2011	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	3	150	27
Initial Response from Detection (10m, 10m, 10m)	3 100 %	150 100 %	26 96 %
Begin Diagnosis (10m, 10m, 10m)	3 100 %	150 100 %	26 96 %
Initial Notification to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	0	1
Onsite Support With Parts (4h, 4h, 24h)	0 100 %	0 100 %	0 %
Total # of Cases Included in Escalation SLA's (Not Approved for Exemption)	3	79	19
1st Escalation (20m, 4h, 24h)	0 0 %	75 95 %	17 89 %
2nd Escalation (1h, 4h, 24h)	0 0 %	75 95 %	19 100 %
3rd Escalation (1h, 4h, 24h)	2 67 %	75 95 %	19 100 %
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





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- Ethernet Everywhere
 - Each LATA has an OC-3 installed
 - We installed a second OC-3 in Baltimore
 - We have cancelled OC-3 orders that were not completed
 - We are ordering DS-3 circuits going forward instead of OC-3s
 - Verizon was unable to demonstrate operational capabilities with OC-3 circuits. They were unable to troubleshoot and resolve outages
 - networkMaryland did not take advantage of SONET capabilities due to the extremely high costs to initiate service
 - It will be easier to migrate off of the older Overture hardware (ISG-5100) to the ISG 6000s
 - Discontinue SONET grooming of T1 circuits save costs and simplify operations. We can decommission the SONET infrastructure when the backbone gets upgraded from OC-48 to 10 Gbps





- One Maryland Broadband Network
 - Received backbone hardware
 - We are able to initiate equipment purchases and construction
 - Engineering work started in all regions
 - Fiber contract awarded to OFS large order placed
 - Additional IFB for fiber released
 - Replacement fiber construction contract imminent
 - Need Pole Attachment Agreements
 - Verizon: completed
 - BGE: *completed* entities are signing individual agreements
 - Allegany Power
 - Delmarva Power





- Migration from ATM to Native IP
 - Phase VI: Last Mile (FRASI Replacement)
 - In progress
 - Phase VII: Direct ATM Connections
 - In progress: DJS; DORS; DHR; MDOT; DHMH; WCC; DPSCS
- NCRnet
 - Established physical connection at UMCP





- Network Resiliency: Separate service delivery & core
 - Dedicated routers for upstream ISP connectivity: completed
 - Move Layer 3 terminations off core routers
 - UMCP: completed
 - Baltimore Core Sites: completed
 - Migrate MANs from Layer 2 to Layer 3 connections
 - Annapolis MAN: not started
 - Baltimore MAN: not started
 - Cambridge MAN: in progress
 - Denton MAN: not started
- Backbone Upgrade to 10Gbps: August / September
- Redundant fiber connecting Baltimore POPs: on hold



- Deployment of multi-cast capabilities on SWGI
 - Final implementation of awaiting arrival of hardware
- Frederick MAN
 - Build a diverse fiber path through Frederick (no change)
- Cambridge MAN
 - District Courthouse and Dorchester County Office Building
- Initiate Eastern Shore Fiber Backbone project
 - 12 strands of fiber received from MdBC on entire shore
 - Princess Anne and Elkton next on the list



DEPARTMENT OF INFORMATION TECHNOLOGY

Fiber Projects

- Pikesville
 - Working with MSP, DPSCS, Baltimore County, and Baltimore City Police to build fiber along Reisterstown Rd near Pikesville
- Hagerstown: Fiber to DPSCS complex:
 - Part of OMBN project
- Rockville Courthouse
- Fiber documentation and mapping project
 - Level3 Backbone: To be completed by MdBC as part of Resource Share Agreement (2 years to complete)



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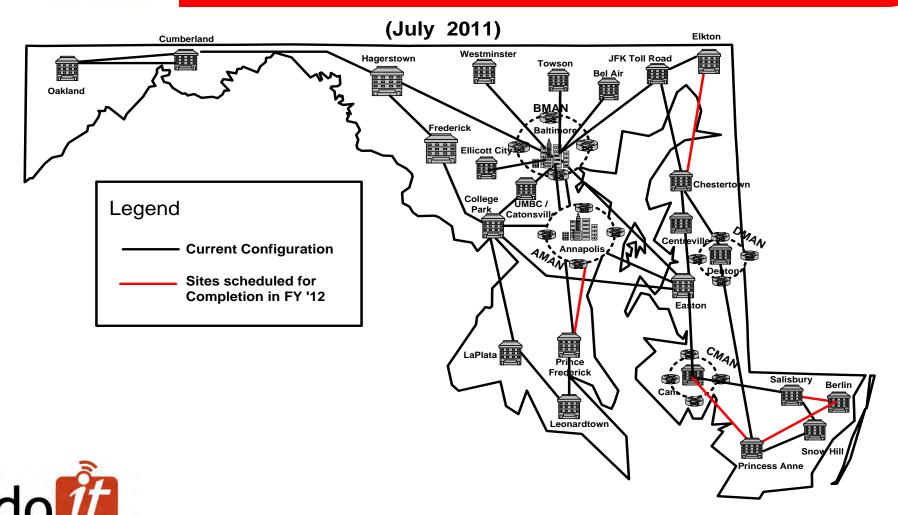
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DEPARTMENT OF INFORMATION TECHNOLOGY

Network Overview





Other Business

- networkMarylandTM Engineering Committee meeting
 - September 12th, 2011, 1:30 PM @ UMBC Technology Center
 - Merged with UMATS engineering meeting
- Closing Questions or Comments





Meeting Adjourned



