

networkMaryland™ Advisory Group Meeting

October 19, 2010
Annapolis, MD



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: Deputy State CIO - Operations
- Guests/Visitors



New Business

- Meeting Minutes Approval
 - April 2010
- Announcements
 - Personnel
 - Jean Boyer : Operations Manager



New Business

- Product Roadmap
 - We are in the process of establishing dates for services that are in deployment and development, including
 - EE (multiple sites per LATA)
 - VPRN
 - Managed CPE
 - QoS
 - Security/Remote Access (as a service)
 - Diverse/Redundant data circuits
- Baltimore & Annapolis Fiber
 - “Clean up” fiber plant issues in each MAN





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Operational Subscribers

- 76 Operational Subscribers
- Circuit Breakdown
 - 82 ISP Circuits (+1)
 - 82 SwGI Circuits (NC)
 - 1384 Layer 2 Circuits (-13)
 - 11 VPN Subscriber Connections (NC)
 - 26 VPRN Circuits (NC)
 - 137 EE Circuits (+10)



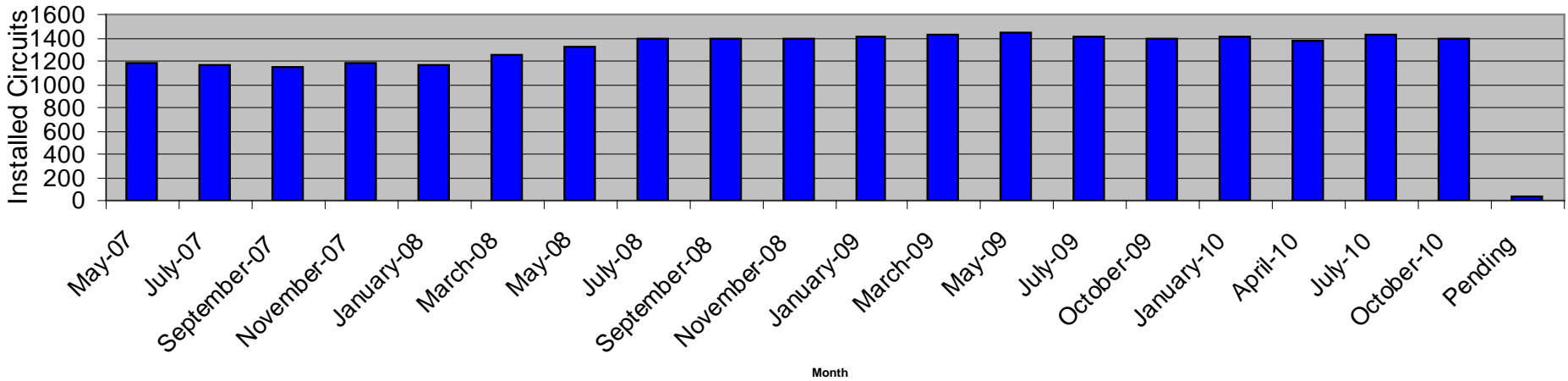
Subscriber Provisioning

- 41 circuits are currently in the subscriber's testing/implementation phase
- 47 new circuits have been provisioned since the last meeting
- 16 circuits have been accepted by the subscriber since the last meeting





Installed Circuits





Executive Branch

Executive Branch networkMaryland Subscribers as of Oct. 19, 2010

Treasurer	Internet SwGI Layer 2 EE	Comptroller	Internet SwGI Layer 2 EE	Governor's Office	Internet SwGI Layer 2 EE	Attorney General	Internet SwGI Layer 2 EE	Secretary of State	Internet SwGI Layer 2 EE
Environment	Internet SwGI Layer 2 EE	Agriculture	Internet SwGI Layer 2 EE *	Budget & Management	Internet SwGI Layer 2 EE	Business & Economic Development	Internet SwGI Layer 2 EE	Education	Internet SwGI Layer 2 EE
Information Technology	Internet SwGI Layer 2 EE	General Services	Internet SwGI Layer 2 EE *	Health & Mental Hygiene	Internet SwGI Layer 2 EE *	Housing & Community Development	Internet SwGI Layer 2 EE	Human Resources	Internet SwGI Layer 2 EE *
		Juvenile Services	Internet SwGI Layer 2 EE *	Labor, Licensing & Regulation	Internet SwGI Layer 2 EE *	Natural Resources	Internet SwGI Layer 2 EE *	Planning	Internet SwGI Layer 2 EE
		Public Safety Correctional Services	Internet SwGI Layer 2 EE *	State Police	Internet SwGI Layer 2 EE *	Transportation	Internet SwGI Layer 2 EE *	Veteran's Affairs	Internet SwGI Layer 2 EE
								Maryland Energy Admin.	Internet SwGI Layer 2 EE

Legend:

Agency is Not Receiving networkMaryland Service - A Cost Savings exists if networkMaryland provides service
Agency Expressed Interest in Receiving networkMaryland Service
Agency is in Process of Receiving networkMaryland Service (JCR submitted)
Agency is Receiving networkMaryland Service
Size of Agency is small and does not realize a significant cost savings by connecting to networkMaryland or the service is not required

* networkMaryland Provisioning has been completed, Department is in process of migrating to service

** Agency is receiving networkMaryland service through parent, primary agency

* - denotes a change in service since the last Advisory Group Meeting





Non-Executive Branch

Non-Executive Branch
networkMaryland Subscribers as of Oct. 19, 2010

Office of People's Council	Internet SwGI Layer 2 EE	Judiciary	Internet SwGI Layer 2 EE	MD General Assembly	Internet SwGI Layer 2 EE	Office of Legislative Auditors	Internet SwGI Layer 2 EE	State Lottery	Internet SwGI Layer 2 EE	*
State Board of Elections	Internet SwGI Layer 2 EE	Maryland State Archives	Internet SwGI Layer 2 EE	Department of Assessment and Taxation	Internet SwGI Layer 2 EE	MIEMMS	Internet SwGI Layer 2 EE	Subsequent Injury Fund	Internet SwGI Layer 2 EE	
Commission of Human Relations	Internet SwGI Layer 2 EE	Office for Children	Internet SwGI Layer 2 EE	Office of Public Defender	Internet SwGI Layer 2 EE	Dept. of Rehabilitative Services	Internet** Layer 2 SwGI** EE	Dept. of Military	Internet SwGI Layer 2 EE	*
Workers' Compensation Commission	Internet SwGI Layer 2 EE	State Retirement Agency	Internet SwGI Layer 2 EE	Maryland State Retirement Plan	Internet SwGI Layer 2 EE	MD Auto Insurance Fund	Internet SwGI Layer 2 EE	State Board of Contract Appeals	Internet SwGI Layer 2 EE	
MD Higher Education Commission	Internet SwGI Layer 2 EE	College Savings Plans of Maryland	Internet SwGI Layer 2 EE	Office of Crime Control & Prevention	Internet SwGI Layer 2 EE	Maryland Emergency Management Agency	Internet SwGI Layer 2 EE	MD Stadium Authority	Internet SwGI Layer 2 EE	
Legend: Agency Expressed Interest in Receiving networkMaryland Service Agency is in Process of Receiving networkMaryland Service (JCR submitted) Agency is Receiving networkMaryland Service Size of Agency is small and does not realize a significant cost savings by connecting to networkMaryland or the service is not required.										
		Register of Wills	Internet SwGI Layer 2 EE	Office of Admin Hearings	Internet SwGI Layer 2 EE	Canal Place Authority	Internet SwGI Layer 2 EE			
		Public Service Commission	Internet SwGI Layer 2 EE	MD Insurance Administration	Internet SwGI Layer 2 EE	Office of State Prosecutor	Internet SwGI Layer 2 EE			

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Non-State Customers

Non-State entities\Counties\Municipalities networkMaryland Subscribers as of Oct. 19, 2010

Baltimore City	Internet SwGI Layer 2 EE	Charles County Government	Internet SwGI Layer 2 EE *	MD Public TV (MPT)	Internet SwGI Layer 2 EE	University System of Maryland	Internet SwGI Layer 2 EE *	Frederick County Government	Internet SwGI Layer 2 EE
Baltimore City State's Attorney Office	Internet SwGI Layer 2 EE	Carroll County Gov't	Internet SwGI Layer 2 EE	Garrett County Public Schools	Internet SwGI Layer 2 EE	Alleghany County Board of Education	Internet SwGI Layer 2 EE	Prince Georges County Government	Internet SwGI Layer 2 EE
Baltimore City Community College	Internet SwGI Layer 2 EE	Caroline County Gov't	Internet SwGI Layer 2 EE	St. Mary's County Gov't	Internet SwGI Layer 2 EE	Anne Arundel County Government	Internet SwGI Layer 2 EE *	Howard County Government	Internet SwGI Layer 2 EE
Baltimore County Government	Internet SwGI Layer 2 EE	Ocean City Gov't	Internet SwGI Layer 2 EE	City of Laurel Gov't	Internet SwGI Layer 2 EE	City of Annapolis Gov't	Internet SwGI Layer 2 EE	Harford County Gov't	Internet SwGI Layer 2 EE
Maryland School for the Deaf	Internet SwGI Layer 2 EE	Montgomery County Government	Internet SwGI Layer 2 EE	CAPWIN	Internet SwGI Layer 2 EE	College of Southern MD	Internet SwGI Layer 2 EE	Washington County (BWA)	Internet SwGI Layer 2 EE
						Garrett County Government	Internet SwGI Layer 2 EE	Washington County Public Network (WCPN)	Internet SwGI Layer 2 EE
						Wicomico County	Internet SwGI Layer 2 EE		

Legend:

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New Provisioning Activity

- Virtual Private Routed Network (VPRN)
 - Private Layer 3 (IP) routed network
 - Allows “many to many” connections
 - QoS will be supported
 - SwGI was the “template” configuration
 - DOIT deployment completed
 - DORS deployment is completed
 - DHR deployment is underway
 - DPSCS limited deployment in design phase





Performance Standards & Service Levels – July 2010

Jul-10	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	5	106	99
Initial Response from Detection (10m, 10m, 10m)	5 100%	104 98%	95 96%
Begin Diagnosis (10m, 10m, 10m)	5 100%	104 98%	95 96%
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	3	4
Onsite Support With Parts (4h, 4h, 24h)	0 100%	3 100%	3 75%
Total # of Cases Included in Escalation SLA's	5	73	84
1st Escalation (20m, 4h, 24h)	3 60%	72 99%	84 100%
2nd Escalation (1h, 4h, 24h)	4 80%	73 100%	84 100%
3rd Escalation (1h, 4h, 24h)	5 100%	73 100%	84 100%
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





Performance Standards & Service Levels – August 2010

August 2010	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	7	69	83
Initial Response from Detection (10m, 10m, 10m)	7 100%	69 100%	78 94%
Begin Diagnosis (10m, 10m, 10m)	7 100%	69 100%	78 94%
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	0	1	3
Onsite Support With Parts (4h, 4h, 24h)	0 100%	0 100%	3 100%
Total # of Cases Included in Escalation SLA's	6	38	69
1st Escalation (20m, 4h, 24h)	6 100%	36 95%	68 99%
2nd Escalation (1h, 4h, 24h)	6 100%	37 97%	68 99%
3rd Escalation (1h, 4h, 24h)	6 100%	37 97%	68 99%
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





Performance Standard & Service Levels – September 2010

September 2010	1 - Critical	2 - High	3 - Normal
# of Cases Relating to Outages	4	69	82
Initial Response from Detection (10m, 10m, 10m)	4 100%	69 100%	77 94%
Begin Diagnosis (10m, 10m, 10m)	4 100%	69 100%	78 95%
Initial Notificaiton to State (10m, 10m, 10m)	100 %	100 %	100 %
# of Cases for Onsite Support with Parts	1	1	6
Onsite Support With Parts (4h, 4h, 24h)	0 100%	1 100%	5 83%
Total # of Cases Included in Escalation SLA's	4	40	68
1st Escalation (20m, 4h, 24h)	2 50%	39 98%	66 97%
2nd Escalation (1h, 4h, 24h)	2 50%	40 100%	67 99%
3rd Escalation (1h, 4h, 24h)	4 100%	40 100%	67 99%
Resolution Notification (10m, 10m, 10m)	100 %	100 %	100 %





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Project Status

- Ethernet Everywhere
 - We are at capacity in several POPs
 - Received two Overture 6000s
 - Installed two OC-3s
 - Ordering “tail circuits” for Baltimore and Eastern Shore
 - Working on establishing multiple “hub” sites in each LATA



Project Status

- ARRA Round 2: DoIT awarded \$115M for Statewide project
 - Working with MdBC for deployment in rural counties
 - \$43M grant funds
 - \$14M State matching funds
 - Howard County led consortium of counties for deployment in central Maryland
 - \$72M grant funds
 - \$20M cash match (\$2M State match)
 - First 6-9 months: Environmental Assessment
 - Finalizing Site List and Fiber Routes
 - 1006 Anchor Institutions / 1293 miles of new fiber





Project Status

- Migration from ATM to Native IP
 - Target for Migration : 12/31/2011
 - networkMaryland will create non-EE “TDM” offering for migration
 - DoIT will work with OBA for budgeting
 - DoIT has budgeted for hardware required to migrate
 - DoIT will submit to OBA
 - Circuit costs / EE Costs for agencies
 - Consulting services
 - Phase VI: Last Mile (FRASI Replacement)
 - In progress: MSP; DPSCS, WCC
 - Phase VII: Direct ATM Connections
 - In progress: DJS; DHR; DORS; DPSCS; MDOT; WCC





Project Status

- Network Resiliency Initiative : Separate service delivery from core
 - Dedicated routers for upstream ISP connectivity (**Completed**)
 - Move Layer3 terminations off core routers
 - UMCP: **In progress (ARRA funding ties)**
 - Baltimore: **In progress (ARRA funding ties)**
 - Deliver L3 services at 6 Saint Paul as an MSC: **Completed**
 - Deliver L3 services at 301 W Preston as an MSC: **In progress**
 - Direct fiber connected buildings in Baltimore @ 6 Saint Paul
 - Direct fiber connected buildings in Baltimore @ 301 W Preston
 - Hagerstown
 - Easton





Project Status

- Deployment of multi-cast capabilities on SWGI
 - Distribute CHART video feeds to non-MDOT subscribers
 - Established access to CHART application via SWGI
 - Distribute Flash video over SWGI (unicast): **completed**
 - Awaiting code fix for Juniper software bug.
 - **Currently Lab Testing New Code Version**
- Akamai Agreement
 - **Installed and Operational**





Project Status

- Frederick MAN
 - Build a diverse fiber path through Frederick
 - Frederick County is dual connected to networkMaryland at diverse POPs (UMCP and Hagerstown)
- Cambridge MAN
 - Meetings with Bay Country to establish timeline for fiber installations at State offices
- Initiate Eastern Shore Fiber Backbone project
 - On hold pending ARRA funding





Fiber Projects

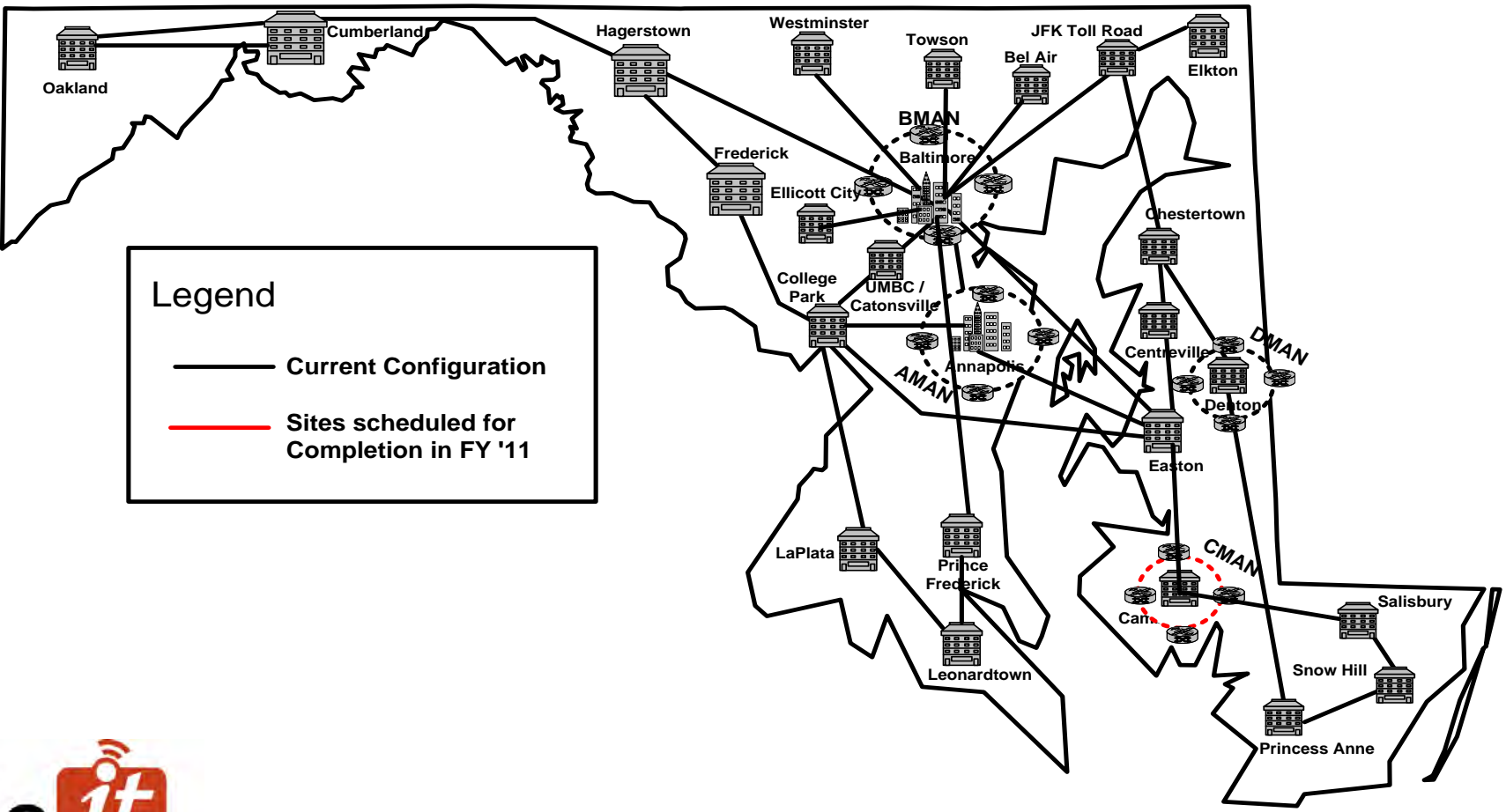
- Pikesville
 - Working with MSP, DPSCS, Baltimore County, and Baltimore City Police to build fiber along Reisterstown Rd near Pikesville
- Hagerstown: Fiber to DPSCS complex:
 - Part of ARRA proposal
- Fiber documentation and mapping project
 - Hagerstown: Documentation in Progress
 - Baltimore City: Documentation in Progress





Network Overview

(July 2010)





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Other Business

- networkMaryland™ Engineering Committee meeting
 - November 8th, 2010, 1:30 PM @ UMBC Technology Center
 - Merged with UMATS engineering meeting
- Closing Questions or Comments

Meeting Adjourned

