

networkMaryland™ Advisory Group Meeting

July 20, 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: One new customer
 - Wicomico County
- Circuit Breakdown
 - 81 ISP Circuits (+3)
 - 82 SwGI Circuits (NC)
 - 1397 Layer 2 Circuits (+15)
 - 11 VPN Subscriber Connections (NC)
 - 26 VPRN Circuits (+26)

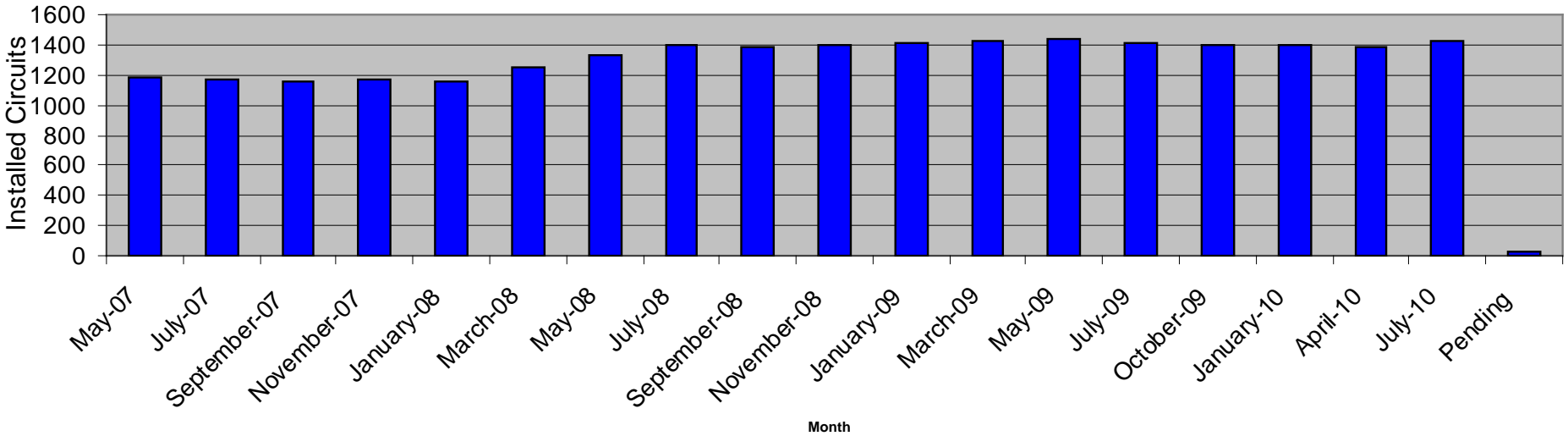


Subscriber Provisioning

- 26 circuits are currently in the subscriber's testing/implementation phase
- 58 new circuits have been provisioned since the last meeting
- 45 circuits have been accepted by the subscriber since the last meeting



Installed Circuits





Executive Branch

Executive Branch networkMaryland Subscribers as of July 20, 2010

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

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 July 20, 2010

Office of People's Council Internet SwGI Layer 2	Judiciary Internet SwGI Layer 2	MD General Assembly Internet SwGI Layer 2	Office of Legislative Auditors Internet SwGI Layer 2	State Lottery Internet SwGI Layer 2
State Board of Elections Internet SwGI Layer 2 *	Maryland State Archives Internet SwGI Layer 2	Department of Assessment and Taxation Internet SwGI Layer 2 *	MIEMMS Internet SwGI Layer 2	Subsequent Injury Fund Internet SwGI Layer 2
Commission of Human Relations Internet SwGI Layer 2	Office for Children Internet SwGI Layer 2	Office of Public Defender Internet SwGI Layer 2 *	Dept. of Rehabilitative Services Internet SwGI** Layer 2 *	Dept. of Military Internet SwGI Layer 2
Workers' Compensation Commission Internet SwGI Layer 2	State Retirement Agency Internet SwGI Layer 2	Maryland State Retirement Plan Internet SwGI Layer 2	MD Auto Insurance Fund Internet SwGI Layer 2	State Board of Contract Appeals Internet SwGI Layer 2
MD Higher Education Commission Internet SwGI Layer 2	College Savings Plans of Maryland Internet SwGI Layer 2	Office of Crime Control & Prevention Internet SwGI Layer 2	Maryland Emergency Management Agency Internet SwGI Layer 2	MD Stadium Authority Internet SwGI Layer 2
Public Service Commission Internet SwGI Layer 2	Office of Admin Hearings Internet SwGI Layer 2	MD Insurance Administration Internet SwGI Layer 2	Office of State Prosecutor Internet SwGI Layer 2	Canal Place Authority Internet SwGI Layer 2

Register of Wills Internet SwGI Layer 2
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Non-State Customers

Non-State entities\Counties\Municipalities networkMaryland Subscribers as of July 20, 2010

Baltimore City	Internet
	SwGI
	Layer 2

Charles County Government	Internet
	SwGI
	Layer 2

University System of Maryland	Internet
	SwGI
	Layer 2

Frederick County Government	Internet
	SwGI
	Layer 2

Baltimore City State's Attorney Office	Internet
	SwGI
	Layer 2

Carroll County Gov't	Internet
	SwGI
	Layer 2

Maryland School for the Deaf	Internet
	SwGI
	Layer 2

Montgomery County Government	Internet
	SwGI
	Layer 2

Baltimore City Community College	Internet
	SwGI
	Layer 2

Caroline County Gov't	Internet
	SwGI
	Layer 2

Alleghany County Board of Education	Internet
	SwGI
	Layer 2

Prince Georges County Government	Internet
	SwGI
	Layer 2

Baltimore County Government	Internet
	SwGI
	Layer 2

Ocean City Gov't	Internet
	SwGI
	Layer 2

Anne Arundel County Government	Internet
	SwGI
	Layer 2

Howard County Government	Internet
	SwGI
	Layer 2

MD Public TV (MPT)	Internet
	SwGI
	Layer 2

Garrett County Public Schools	Internet
	SwGI
	Layer 2

City of Annapolis Gov't	Internet
	SwGI
	Layer 2

Harford County Gov't	Internet
	SwGI
	Layer 2

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St. Mary's County Gov't	Internet
	SwGI
	Layer 2

CAPWIN	Internet
	SwGI
	Layer 2

City of Laurel Gov't	Internet
	SwGI
	Layer 2

Washington County (BWA)	Internet
	SwGI
	Layer 2

College of Southern MD	Internet
	SwGI
	Layer 2

Washington County Public Network (WCPN)	Internet
	SwGI
	Layer 2

Garrett County Government	Internet
	SwGI
	Layer 2

Wicomico County	Internet
	SwGI
	Layer 2





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 – April 2010

APRIL 2010	Severity 1 - Critical	Severity 2 - High	Severity 3 - Normal
# of Cases relating to Outages	1	70	72
Initial Response From Detection	1 100%	66 94%	61 85%
Begin Diagnosis (10, 10, 10)	1 100%	66 94%	61 85%
Initial Notification to State	1 100%	70 100%	72 100%
Onsite Support With Parts	-	-	1 of 1 100%
1st Escalation (20m, 4h, 24h)	1 100%	69 99%	70 97%
2nd Escalation (1h, 4h, 24h)	1 100%	68 97%	71 99%
3rd Escalation (1h, 4h, 24h)	1 100%	69 99%	71 99%
Resolution Notification (10, 10, 10)	1 100%	70 100%	72 100%





Performance Standards & Service Levels – May 2010

MAY 2010	Severity 1 - Critical	Severity 2 - High	Severity 3 - Normal
# of Cases relating to Outages	1	91	61
Initial Response From Detection	1 100%	91 100%	58 95%
Begin Diagnosis (10, 10, 10)	1 100%	91 100%	58 95%
Initial Notification to State	1 100%	91 100%	61 100%
Onsite Support With Parts	1 of 1 100%	1 of 2 50%	1 of 2 50%
1st Escalation (20m, 4h, 24h)	1 100%	91 100%	61 100%
2nd Escalation (1h, 4h, 24h)	1 100%	91 100%	61 100%
3rd Escalation (1h, 4h, 24h)	1 100%	91 100%	61 100%
Resolution Notification (10, 10, 10)	1 100%	91 100%	61 100%





Performance Standard & Service Levels – June 2010

June 2010	Severity 1 - Critical	Severity 2 - High	Severity 3 - Normal
# of Cases relating to Outages	0	129	100
Initial Response From Detection	-	129 100%	95 95%
Begin Diagnosis (10, 10, 10)	-	129 100%	95 95%
Initial Notification to State	-	129 100%	100 100%
Onsite Support With Parts	-	1 of 1 100%	1 of 2 50%
1st Escalation (20m, 4h, 24h)	-	128 99%	99 99%
2nd Escalation (1h, 4h, 24h)	-	129 100%	99 99%
3rd Escalation (1h, 4h, 24h)	-	129 100%	99 99%
Resolution Notification (10, 10, 10)	-	129 100%	100 100%





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Project Status

- Transition
 - We have re-engaged projects
- Ethernet Everywhere
 - We are at capacity in several POPs
 - Received two Overture 6000s
 - Established contract for OC-3s
 - Ordered OC-3s : anticipated delivery late August
 - Working on establishing multiple “hub” sites in each LATA





Project Status

- ARRA Round 2
 - DoIT submitted a round 2 application to cover the entire State
 - Working with consortium of counties (Inter County Broadband Network - ICBN) on broadband infrastructure deployment in central Maryland
 - Working with MdBC for deployment in rural counties
 - Project is in “due diligence”. First round of review completed and project is moving to next phase. Anticipated notification by August 31st





Project Status

- Migration from ATM to Native IP
 - Phase VI: Last Mile (FRASI Replacement)
 - Agencies that have migrated: MDA, MSDE(DORS), DLLR(DUI)
 - In progress: MSP
 - Phase VII: Direct ATM Connections
 - Completed: Montgomery County; DJS, MSP, DPSCS (ISP/SwGI)
 - In progress: DJS; DORS
 - In planning: DHR; MDOT; DHMH; WCC; DPSCS





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**
 - Baltimore: **In progress**
 - Deliver L3 services at 6 Saint Paul as an MSC: **In progress**
 - 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.
- Akamai Agreement
 - Signed agreement with Akamai for caching servers located at UMCP
 - Hardware was delivered last week to Skyline
 - Expected completion by end of August





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





Project Status

- Glen Burnie MSC: Bring MSC on-net
 - Project completed in June
 - In process of bringing customers “on-net”
- Redundant MSC Connections
 - Prince Frederick/Leonardtown: microwave link completed





Fiber Projects

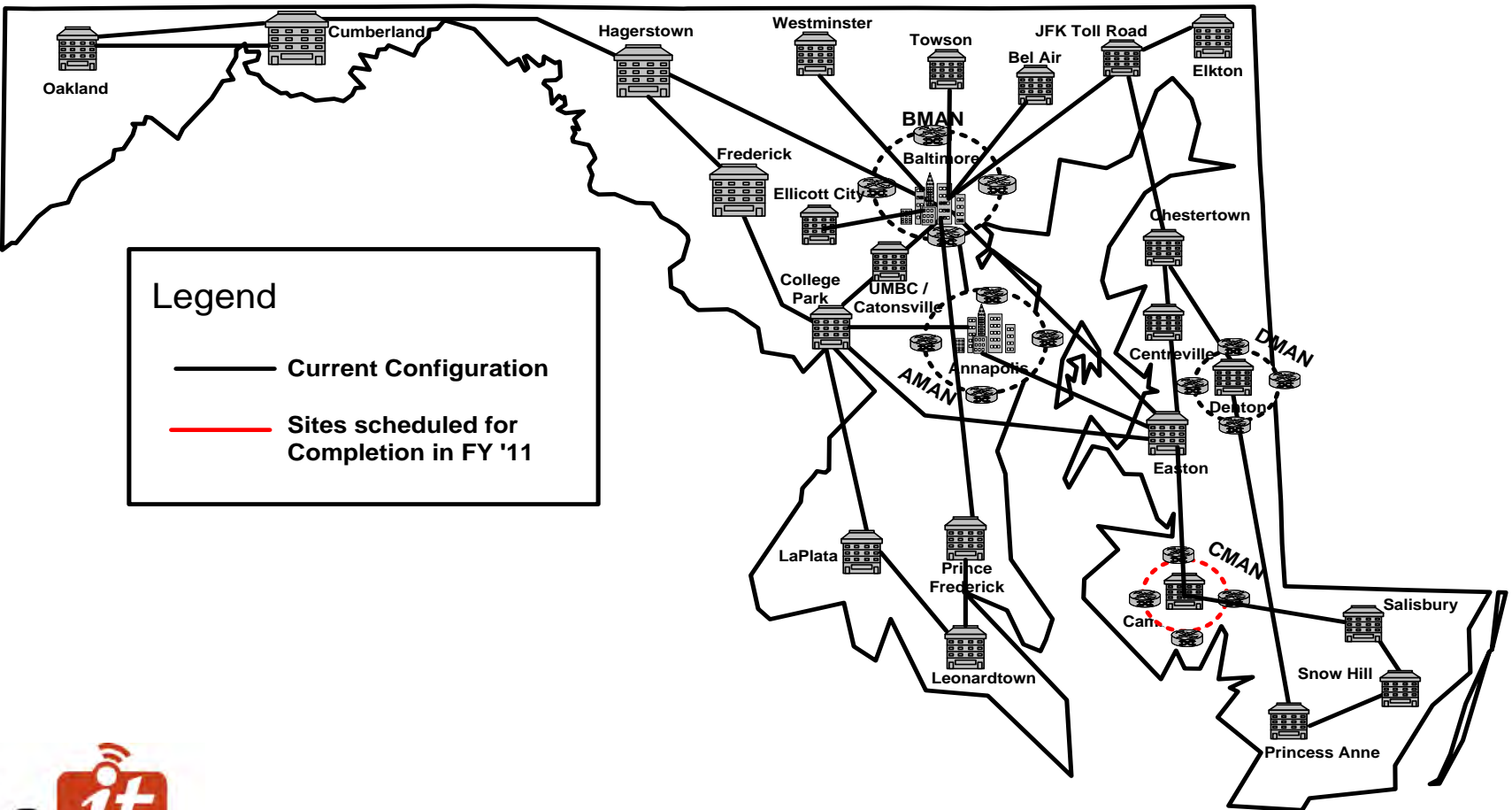
- Pikesville
 - Working with MSP, DPSCS, Baltimore County, and Baltimore City Police to build fiber along Reisterstown Rd near Pikesville
- Hagerstown: Fiber to DPSCS complex:
 - Looking for funding or partnership – part of ARRA proposal
- Fiber documentation and mapping project
 - Hagerstown: Documentation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





Network Overview

(July 2010)





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Other Business

- networkMaryland™ Engineering Committee meeting
 - August 9th, 2010, 1:30 PM @ UMBC Technology Center
 - Merged with UMATS engineering meeting
- Closing Questions or Comments

Meeting Adjourned

