

IT Optimization

May 2014

- Federated, decentralized IT environment is not sustainable
 - 26 Cabinet Agencies and over 70 Boards and Commissions
 - FY13 IT spend of more than \$930 million
- More than 5,000 servers in more than 30 data centers
- More than 1,600 applications
 - 20% more than 10 years old
 - 54% more than 5 years old
 - Aging legacy systems (10-20yrs) are more expensive to maintain
- 14 separate statewide networks, \$54M annual contract spend
- 2,500 IT professionals supporting duplicative IT functions
 - 32% of IT workforce eligible for retirement
- Competing projects distracting Agency focus and resources supporting infrastructure

Consolidated Plan - Bringing Value to Ohio

Key Ways IT Transformation will Bring Value to Ohio

Cost Reduction/Cost Avoidance	<ul style="list-style-type: none"> • IT Cost Reductions - 15 to 25% • Workforce Reduction - approximately 400+ FTE through attrition/retirement • Cost Avoidance by leveraging existing resources, assets and past investments
Value Add Focus	<ul style="list-style-type: none"> • Focus on proprietary business applications that support employees & constituents
Quality & Process	<ul style="list-style-type: none"> • Adoption of standard policies, practices & procedures • Result - fewer disruptions in service, faster resolution times & better internal controls
Security	<ul style="list-style-type: none"> • Reduce # of devices, facilities, systems to patch & external access points • Build confidence that state is a trusted custodian of confidential & business data
Scalability	<ul style="list-style-type: none"> • Private cloud environment ensures scalability & flexibility through peaks & troughs of computing resource demand
Enterprise Automation Tools	<ul style="list-style-type: none"> • Leverage enterprise automation tools • Greater efficiency in IT operation, reduces manual error rates & enhances system availability
Skill Development	<ul style="list-style-type: none"> • Pulling IT expertise from across the state will result in cross training opportunities & skill development • Allow the state to replace long-term, high cost contractors with existing staff
Best Practices	<ul style="list-style-type: none"> • Adopt a standard set of industry best practices • Allows comprehensive market analysis & improves IT business decision making
Vendor Management	<ul style="list-style-type: none"> • Consolidation of contracts & technologies allows Ohio to leverage economies of scale

Consolidated Plan - Targeted Cost Savings

Target areas for cost reduction through IT Optimization

Target Area	Annual Cost	Conservative Savings Estimate			
		Conservative Savings Estimate		Optimistic Savings Estimate	
		%	Amount	%	Amount
Internal Labor**	\$277,800,000	15	\$41,670,000	25	\$69,450,000
Contract/Consultant	\$178,700,000	20	\$35,740,000	30	\$53,610,000
OIT billed Excluding Labor	\$74,600,000		\$0		\$0
Maintenance/Lease/Rent/repair	\$70,500,000	15	\$10,575,000	25	\$17,625,000
Hardware/Software Cost Avoidance*	\$70,400,000	15	\$6,315,000	25	\$10,525,000
Misclassified	\$64,500,000		\$0		\$0
Network	\$46,100,000	20	\$9,220,000	30	\$13,830,000
Exempt Agency Direct	\$15,500,000		\$0		\$0
Desktop Related	\$14,000,000		\$0		\$0
Mainframe Exp	\$12,100,000		\$0		\$0
Telecommunications	\$7,900,000		\$0		\$0
misc	\$5,600,000		\$0		\$0
Total***	\$837,700,000		\$103,520,000		\$165,040,000

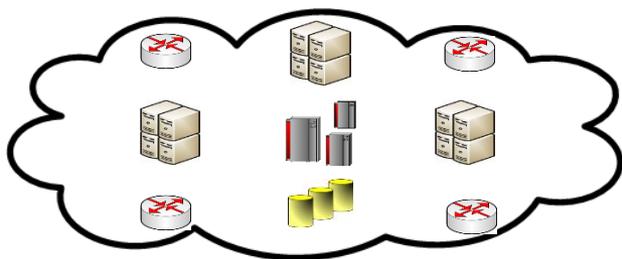
* Assumes that 60 Percent of hardware and software can be optimized

** This would require a workforce reduction of between 380 and 650 respectively

*** Total does not include COPS

Consolidated Plan - Three Focus Areas

Ohio's Private Cloud



- Consolidate, standardize & integrate State's technical infrastructure
- Re-focus resources on applications that directly serve Ohio's citizens and businesses
- Work well underway...
 - SOCC Remediation
 - Ohio One Network
 - Storage & Server Virtualization
 - Storage & Server Consolidation
 - Mainframe Consolidation

Enterprise IT Shared Solutions



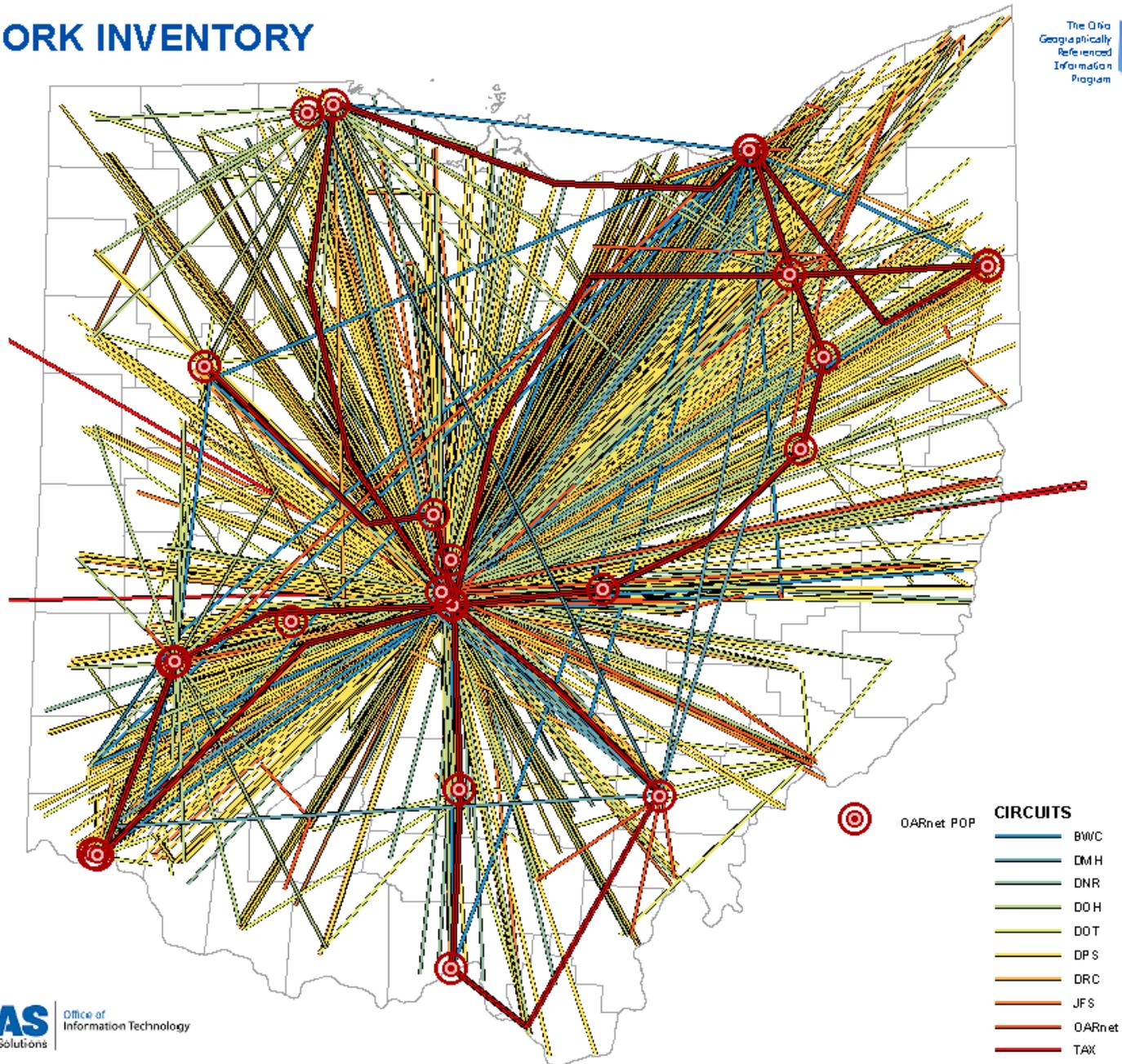
- Address common technology needs
- Provide tools & application platforms for collaboration, communication & data analysis
- Provide a platform for consumer specific application development
- Work well underway...
 - OAKS
 - Ohio Shared Services
 - MARCS
 - E-mail Consolidation
 - VoIP
 - E-Licensing /E-Payment Platform
 - BI Platform
 - SharePoint /Mobile App Platform

Online Services

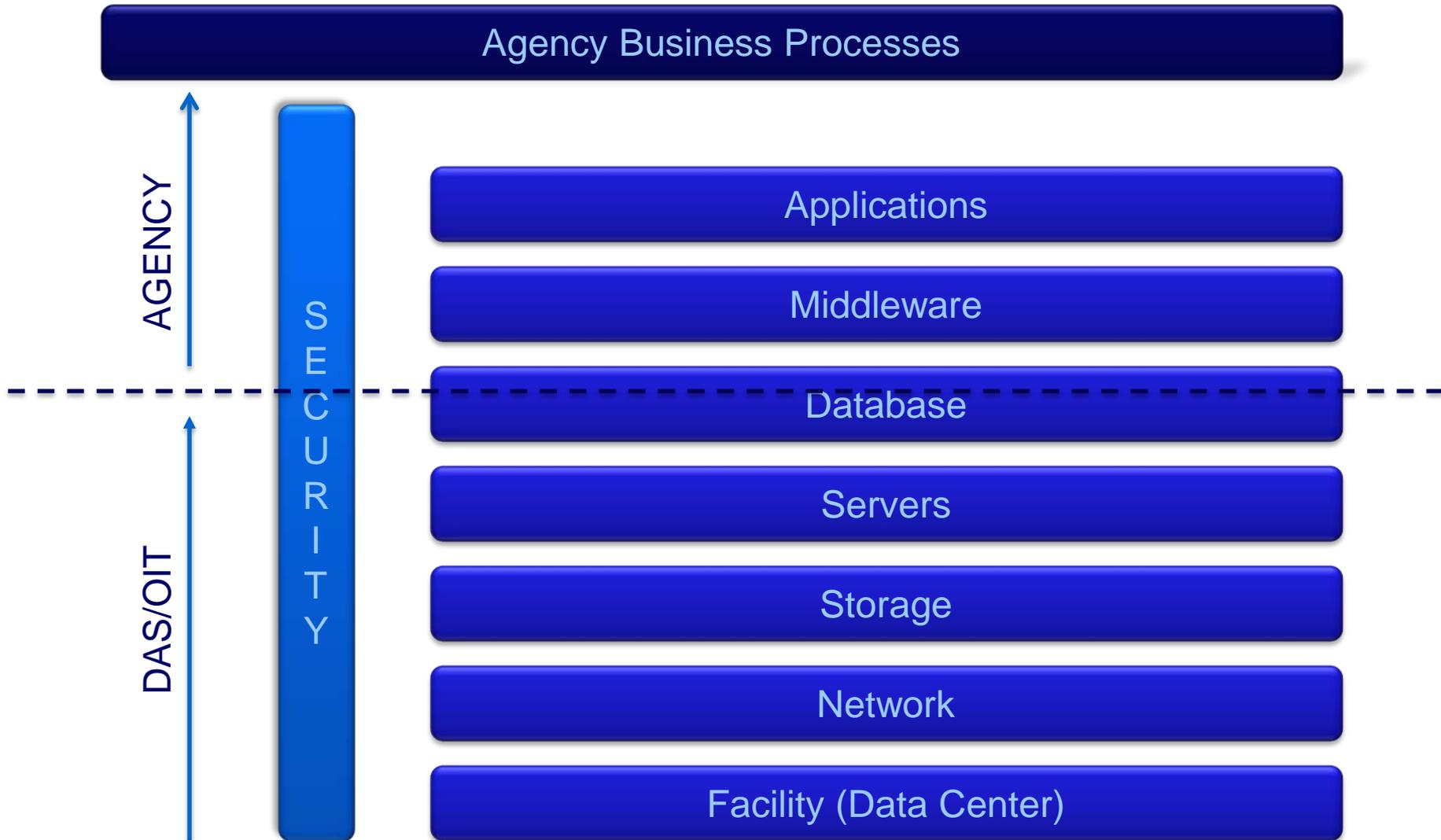


- Provide easy to use, accessible & secure online services
- Deliver reliable and cost effective solutions
- Expand the scope of online services
- Work well underway...
 - OBG
 - Ohio Benefits
 - MyOhio

NETWORK INVENTORY



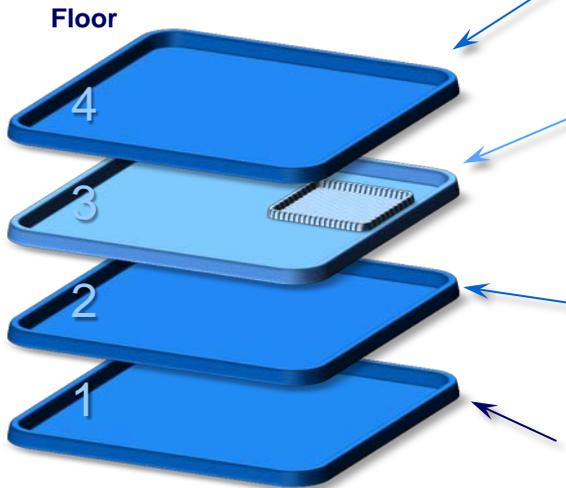
- Private Cloud
 - Server Administration
 - Providing Windows and Unix (AIX/Linux) Server Services
 - Storage Management
 - Providing Storage and Backup Service Management
 - Mainframe
 - Management of the Mainframe Environment
 - Network
 - IP Address Resolution
 - WAN Consolidation
- We will be managing the following services inside the Private Cloud:
 - Hardware Management
 - Operating Systems & Components
- We will NOT be managing agency applications running in the Private Cloud.



SOCC Remediation: End-State

End-state of SOCC remediation process will be a consolidated computing center on the 2nd Floor with requisite power, cooling and security features

End-State SOCC Configuration



4. Mixed Use

- 13,500+ sq ft Ohio Supercomputer Center
- 4,990+ sq ft MARCS
- 39,000+ sq ft Data Center *essential* personnel

3. Available Data Center Space

- 75,000+ sq ft Data Center (57,213 sq ft raised floor) – tenancy under evaluation
- 8,000+ sq ft Unified Network (State retained)

2. State Computing Center

- Computing, Storage, Mainframes, Networking Devices
- Network Operations Center

1. General and Mixed Use

- Mechanical (UPS, Telecom, Controls)
- Administrative (meeting space, building management)
- Common (atrium, restrooms)

Foundational Concepts

- State use of the facility will move from current 70 ft²/computing image to less than 5 ft² (industry standard is between 0.3 and 1 server/ft²)
- The 3rd FL of the building will be vacated and made available for potential sub-lease tenants
- The current market for fully conditioned and powered data center floor space is on the order of \$24-32 ft² per month
- Personnel who, in the course of normal job functions, do not physically interact with IT infrastructure devices will be relocated to Agency locations in early FY15

Agency = DOH Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	Complete	Complete																	
Network Extension	TBD	TBD																	
Virtual - Virtual Migrations (213)	10/07/13	11/03/13																	
Physical Migrations (94)	12/09/13	01/05/14																	
Tools Implementation	02/10/14	03/16/14																	
Agency = DMH Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	Complete	Complete																	
Network Extension	TBD	TBD																	
Virtual - Virtual Migrations (209)	12/09/13	01/05/14																	
Physical Migrations (64)	01/20/14	02/02/14																	
Tools Implementation	03/24/14	04/27/14																	
Agency = DYS Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	Complete	Complete																	
Network Extension	TBD	TBD																	
Virtual - Virtual Migrations (141)	01/27/14	02/16/14																	
Physical Migrations (48)	03/03/14	03/09/14																	
Tools Implementation	03/17/14	04/27/14																	
Agency = DOE Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	TBD	TBD																	
Network Extension	TBD	TBD																	
Virtual - Virtual Migrations (230)	01/27/14	03/02/14																	
Physical Migrations (42)	03/24/14	03/30/14																	
Tools Implementation	02/10/14	04/13/14																	

Agency = ODOT Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	TBD	TBD																	
Network Extension	TBD	TBD																	
Virtual - Virtual Migrations (358)	06/16/14	08/10/14																	
Physical Migrations (75)	04/14/14	06/01/14																	
Tools Implementation	04/28/14	08/17/14																	
Agency = ODRC Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	Complete	Complete																	
Network Extension	TBD	TBD																	
Physical - Virtual Migrations (95)	11/29/13	TBD																	
Physical Migrations (46)	06/23/14	08/24/14																	
Tools Implementation	07/07/14	09/07/14																	
Agency = DPS Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	TBD	TBD																	
Network Extension	TBD	TBD																	
Virtual - Virtual Migrations (297)	07/07/14	08/24/14																	
Physical Migrations (194)	09/08/14	12/21/14																	
Tools Implementation	07/21/14	12/31/14																	
Agency = BWC Project			Start	End	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
					13	13	13	14	14	14	14	14	14	14	14	14	14	14	14
Network																			
IP Addressing	TBD	TBD																	
Network Extension	TBD	TBD																	
Virtual - Virtual Migrations	N/A	N/A																	
Physical Migrations (52)	10/20/14	11/23/14																	
Tools Implementation	11/03/14	12/07/14																	

Leverage lessons from pilot activities to adjust and minimize business impact

Agency = Pilot Project (Tentative)			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations (121)	N/A	N/A															
Physical Migrations (9)	N/A	N/A															
Tools Implementation	01/23/14	02/09/14															
Agency = DAS/OIT Project			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations (635)	N/A	N/A															
Physical Migrations (359)	N/A	N/A															
Tools Implementation	02/10/14	05/11/14															
Agency = EPA Project			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations (113)	N/A	N/A															
Physical Migrations (20)	N/A	N/A															
Tools Implementation	05/05/14	06/01/14															
Agency = OOD Project			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations	N/A	N/A															
Physical Migrations (9)	N/A	N/A															
Tools Implementation	05/05/14	06/01/14															

Agency = ODJFS Project			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations (634)	N/A	N/A															
Physical Migrations (388)	N/A	N/A															
Tools Implementation	06/02/14	09/01/14															
Agency = TAX Project			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations (141)	N/A	N/A															
Physical Migrations (93)	N/A	N/A															
Tools Implementation	08/11/14	09/14/14															
Agency = OBM Project			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations (108)	N/A	N/A															
Physical Migrations (0)	N/A	N/A															
Tools Implementation	09/08/14	10/05/14															
Agency = DODD Project			O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Start	End	13	13	13	14	14	14	14	14	14	14	14	14	14	14	14	14
Network																	
IP Addressing	TBD	TBD															
Network Extension	TBD	TBD															
Virtual - Virtual Migrations (311)	N/A	N/A															
Physical Migrations (2)	N/A	N/A															
Tools Implementation	09/29/14	11/02/14															

Deploy tools in collaboration with agencies under change control

- IT Optimization weekly newsletter- Staffing Corner
- Training resources available:
 - UET/EDF/LearnIT Ohio/OLPD
 - Careers.Ohio.Gov (OHMS) job aids
 - Workshop to Success advertised on Careers.Ohio.Gov
- Job Interest Card on Careers.Ohio.Gov (OHMS)
- Clearly worded language on DAS job postings for IT positions for current state employees only.
- In Development:
 - Potential enterprise training in specific technologies
 - New learning groups in LearnIT Ohio



Hiring To Date:

- Hired 5 people (Information Security Officers/ ITC3 and IT architect 1)
- 3 positions in the process of making offers (Information Security Officers – ITC3)
- One position posted- Security Monitoring Supervisor
- Future position estimates for FY15:
 - 16 positions – various security officers, interns, analysts, program administrator
- Agency's currently being supported by the central model
 - Security Officer: DPS, Edu, DSA, DoDD, Medicaid
 - Security Architects: EPA, DNR, Health
 - Other agencies will roll on based on current security personnel moving to DAS

Server and Storage Staffing Projection Calendar

DAS Server/Storage Staffing Projection Calendar

Section	Activity	Type	Number Posted	Nov 13	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sept 14	Oct 14	Nov 14	Dec 14	Jan 15
Servers	Post	Exempt	2		X													
Servers	Post	BU	10		X													
Servers	Fill	Exempt					X											
Servers	Fill	BU						X										
Servers	Post	BU	33									X						
Servers	Fill	BU											X					
Servers	Post	Exempt	1									X						
Servers	Fill	Exempt											X					
Identity	Post	BU	2		X													
Identity	Fill	BU					X											
Storage	Post	Exempt	1			X												
Storage	Post	BU	2			X												
Storage	Fill	Exempt						X										
Storage	Fill	BU						X										
Storage	Post	BU	9							X	X							
Storage	Fill	BU										X	X					
Storage	Post	BU	2									X						
Storage	Fill	BU											X					
Storage	Post	BU	1												X			
Storage	Fill	BU																X

63

*NOTE: All Classifications Being Posted are Infrastructure 2 - 4's

To Date:

- Server Managers- 2 hired
- Server support positions hired /in process—8
- A Unix position posted now
- Storage – 3+ positions to be posted soon

1. All infrastructure classifications will only be used by DAS/OIT in the future. 
2. Desktop support and agency helpdesk functions will be moved to OIT. 
3. Once an agency migrates DAS/OIT will take all the employees doing that work from the agency. 
4. I should wait to apply until my agency migrates to OIT. 
5. Agency HR should work with supervisors and managers to engage their employees early to discuss IT Optimization impacts to their jobs. 
6. DAS posted positions are for current State of Ohio employees. 
7. My agency can hire external candidates for IT jobs. 

Technology Board – Lines of Business

Restructure around Lines of Business (LoBs) – Agency CIOs report to LoB Lead and Directors

LoB Leads would report to the State CIO

Runs through Enterprise Architecture and Governance Process

Line of Business Lead	Line of Business Lead	Line of Business Lead	Line of Business Lead	Line of Business Lead
Health and Human Services	Business and Industry	Administration and Finance	Public Safety and Criminal Justice	Infrastructure and Environment
<ul style="list-style-type: none"> • Aging • DODD • MHAS • JFS • Health • MCD • OOD • DVS 	<ul style="list-style-type: none"> • BWC • Commerce • DSA • PUCO • IC • Insurance • Taxation 	<ul style="list-style-type: none"> • BOR • DAS • OBM • ODE • Lottery 	<ul style="list-style-type: none"> • Adjutant General • DPS/EMA • DRC • DYS • Inspector General 	<ul style="list-style-type: none"> • Agriculture • DNR • DOT • EPA • OFCC • Ohio Turnpike*
* Voluntary Participation	• Secretary of State*	<ul style="list-style-type: none"> • State Auditor* • HR/Senate/LIS* • Treasurer* 	<ul style="list-style-type: none"> • Attorney Gen* • Public Defender* • Supreme Court* 	

Goals of the Technology Board are to:

- Increase the level of adoption for enterprise shared solutions and services
- Identify new enterprise shared solution opportunities across common agencies that share business and technical components
- Manage enterprise shared solutions across LoB and work with the agency CIOs to leverage initiatives, resources, tools, infrastructure and solutions

Purpose and objectives of the Technology Board will be to:

- Ensure alignment with State strategies, enterprise architecture and major expenditures and purchases
- Provide guidance on the direction and development of strategies for future enterprise shared solutions
- Ensure adoption of current enterprise shared solutions
- Support prioritization of agency initiatives and projects
- Ensure budget controls are in place across agencies
- Facilitate resource alignment based upon business needs
- Create opportunities to share resources within/across LoB

- Outreach
 - 17 agency IT Staff meetings to date
 - Union IT Committee
 - State Audit Committee
 - HR Administrator Meetings & CFO Meetings
- Ohio Integrated Eligibility launch
- Medicaid Elevation
- Email
 - 86 of 88 agencies migrated (57,000+ accounts)
 - DYS & JFS migrate early CY14
- SOCC Remediation
 - 2nd Floor remodel & exterior power house
 - OSC separate power
- Servers – DOH, DNR, MHAS migrations

- VoIP
 - Contract established for \$13 for basic service – potential annual savings of \$3.2M as users migrate from Centrex
 - 13,000+ lines migrated to date
- Software Licensing – Service Now negotiated from \$104 to \$45 per seat
- OAKS HCM upgrade
- Maintenance Agreement – Consolidated Cisco agreement will save \$1.5M for participating agencies
- Security
 - Extended Enterprise Security Information Event Manager to AOS and Commerce. Additional capacity for IE & JFS
 - Established penetration testing service
 - Centralizing staffing approach to support consistent practices

- Next Steps:
 - Consolidated IT Transformation Implementation Approach published
 - Plan the Work ... Work the Plan
 - Staffing & budget
 - Communications
 - Weekly emails & Agency Meetings
 - Agency CIO/HR/CFO Meetings
 - Business Partner briefings

Thanks for your time...

Questions?

Feel free to send any questions directly to the IT Transformation Office at:
IT.Transformation@ohio.gov.

Stu Davis, Tom Croyle, Katrina Flory, Cathy Herron & Spencer Wood
Office of Information Technology
Ohio Department of Administrative Services
30 East Broad Street, 39th Floor
Columbus, Ohio 43215

IT Optimization webpage: <http://das.ohio.gov/ittransformation>