A photograph of the Arizona State Capitol building in Phoenix, Arizona. The building features a prominent golden dome and a classical facade with columns. In the foreground, three tall flagpoles stand, flying the United States flag, the Arizona state flag, and a dark flag. To the right of the flagpoles is a statue of a man in a military uniform. The scene is set against a clear blue sky with some greenery and palm trees visible on the left and right sides.

ITAC Project & Change Review FY17 ADOR Datacenter Modernization

Arizona Department of Revenue
December 7th, 2016



Agenda

- ADOR Datacenter Background
- Opportunity
- Solution: Engineered Computing and Storage Solution (VCE vBlock), Co-Located Datacenter (Phoenix IO)
- System Overview: Before and After
- Scope and its changes over time
- Financials
- Timing and Milestones
- Questions and Follow-up



Background & Opportunity

Background:

- Sixty percent (60%) of ADOR server hardware is end of life, or close to being end of life.
 - The increasing strain on the current systems has resulted in backup failures which have led to unrecoverable critical data loss.
- ADOR is experiencing rapid data growth, expanding virtual server needs, and growing application deployments. These dynamics, compounded by demands for faster and easier data recovery, are increasing strain on the current traditional data protection processes that are already broken.
 - Growth/Expansion/Application Deployments: TPT Reform, Business Application Renewal, TPT Licensing Renewal, and Data Sharing.
- ADOA Datacenter 1510 Adams ADOR server cage is out of capacity, limited growth capacity to enlarge server cage, and the 1510 Adams will be transitioning to Phoenix IO.

Opportunity:

- Current Computing and Storage Infrastructure at end of technology life, end of vendor support, and end of usefulness
 - Infrastructure: 8+ years old / FY17 End of Life / End of Support Infrastructure
 - 26 Physical HP and Sun Microsystem Servers
 - 14 Cisco Network Switch (Fiber Channel / Standard Ethernet)
 - 1 Data Storage Array

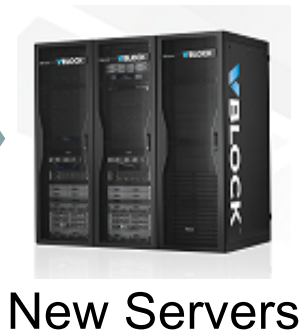


FY17 Datacenter Modernization

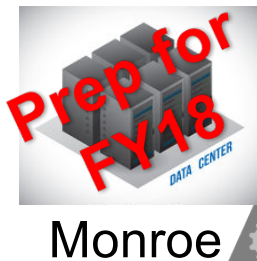
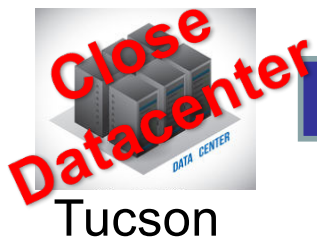
- Eliminate End of Life and End of Support Hardware
- Eliminate OAG and IRS Findings
- Reduce Total Cost of Ownership (TCO)
 - Eliminate EOL Support Premiums
- Always-On Availability
- High Density Computing Resources
- Consolidate Storage/Increase Capacity
- Speed of Business Performance
- Hard Drive Encryption (IRS Finding)
- Standardization
- Ease of Vendor Support



System Overview: Before and After



21st Century Architecture



Monroe



Customer Experience

Accelerated Time to Market

High Performance

High Availability

Converged Management

Reduced Risk

Lowered TCO

12/07/2016

FY17 Datacenter Modernization



Scope

- Procure replacement infrastructure and equipment for all currently end of life/end of support equipment.
- Install, configure and test new infrastructure and equipment
- Identify and secure space at a qualified private Data Center (Tier 3).
- Establish Network connectivity from qualified private Data Center to state network (AZNET)
- Convert all Physical Servers in the Tucson Datacenter to Virtual Servers (P2V) for all applications residing on end-of-life physical hardware
- Relocate Virtual Hosts and Storage hardware to Monroe Data Center and qualified private Data Center.
- Decommission Tucson Datacenter
- Migrate Applications to new infrastructure and equipment



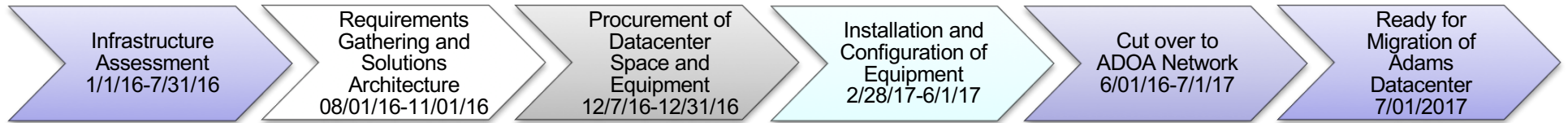
Financials

Summary of PIJ Financials	
Total of Development Cost:	\$ 3,999,971
Total of Operational Cost:	\$ 300,825
Total Costs:	\$ 4,300,795

Project Cost - Itemized										
Item	Description	Category	Development (Implementation) or Operational (Ongoing)	Fiscal Year Spend	Qty or Hours	Unit Cost	Extended Cost	Enter Tax Rate if Applicable (Generally 8.6% for PHX)	Tax	Total Cost
1	Purchase of Vblock for IO including installation & configuration	Hardware	Development	1	1	\$3,365,479	\$3,365,479		\$229,215	\$3,594,694
2	Purchase of Viprion Devices	Hardware	Development	1	1	\$237,592	\$237,592		\$20,164	\$257,756
3	Viprion Maintenance	License & Maint Fees	Operational	1	1	\$56,423	\$56,423		\$0	\$56,423
4	IO Datacenter Initial Installation Costs	Hardware	Development	1	1	\$141,276	\$141,276		\$0	\$141,276
5	IO Datacenter Initial Recurring Costs	Hardware	Operational	1	7	\$34,915	\$244,402		\$0	\$244,402
6	Vendor Relocation of Equipment Costs for VMAX move (EMC)	Prof & Outside Services	Development	1	1	\$6,245	\$6,245		\$0	\$6,245



Timing and Milestones



Milestone	Finish	% Complete	Status
Project Kickoff	8/17/2016	100%	COMPL
Requirements Development	9/30/2016	100%	COMPL
Solution Architecture	10/15/2016	100%	COMPL
Procurement of datacenter space	12/31/2016	0%	Pending
Procurement, Installation, and configuration of new Equipment	5/31/2016	0%	Pending
Telecommunications Cutover to ADOA Network	6/15/2016	0%	Pending
Project Close	6/30/2016	0	Pending



Questions?

Thank you.