

# IOT VMware & Storage Services - 2023

**Who We Are:** A 11-member team that manages the storage, data protection, and VMWare infrastructure for all state agencies.

**Our Mission:** Maintain/maximize storage and VMWare infrastructure uptime while protecting data & keeping current on technology.

**Department:** 493022

**Manager:** John Thatcher

**What We Do:**

Support all storage and VMWare offerings provided for the State of Indiana. This includes licensing, infrastructure, configuration, monitoring, and maintenance of all storage and VMWare offerings.

**Our Products:**

1052	Virtual Server Hosting	1177F	Additional Gig SAN
1052A	VirServer Hosting (+ CPU)	1177K	Isilon Fast Tier
1052B	VirServer Hosting (+ GB RAM)	1224A	Archive Storage
1177A	Tier 1 SAN Storage	1224B	Data Protection

**Our Tools:**

ASM	Ticket Management and SLA Measurement
FileZilla	Transferring files to/from agencies/vendors via secured FTP
Putty	SSHClient for connecting to AIX/Unix/Linux (Exadata) servers
WinSCP -	Transfer Oracle software and patching to servers
VMware Horizon	virtual workstation administration
DCNN	Administration for the SAN Switches
vSphere	Administration for VMWare
Cisco Intersight	Infrastructure management
Visio	Topology diagrams and architecture illustrations
Notepad, Notepad ++, Wordpad	- Viewing and editing text files
TreeSize Prof 4Server	file admin (finding out-dated/large/hidden files)

**Our Metrics:**

Mon-Fri 6am-6pm excluding state holidays  
Resolve customer issues within 32 IOT business hours 90%+ G; 87%+ Y; <87% R  
Storage Availability 99.9%+ G; 96.9%+ Y; <96.9% R

**Our Customers:** Executive Branch, Judicial Branch and Secretary of State.

**Our Budget:** \$12.5 million

**Our Growth:**

- Block – 980 TB Total Size – 2% Annual Growth
- File – 2.9 PB Total Size – 3% Annual Growth
- VM Infrastructure – 3420 VMs - ~ No Annual Growth

**Recent Major Accomplishments:**

- Pure Consolidation
- VM Dashboards for agency Self-Service
- Subscription Licensing for Dell
- Architected First Generation Secure Storage Solution

**Current Projects:**

- Secure Unstructured Storage Solution
- NSX (T) Data Center Pilot
- Hardware consolidation and upgrades for UCS and Storage infrastructure
- UCS Domain Consolidation
- Safemode Snapshots
- Pursuing Secure Flash Recovery for server backups