

Agency IT Operations Plan

2017-2019

Information Technology Department

Line of Business: General Government
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Agency Number: 1120

2015-2017 Accomplishments

- Provide guidance and support to the Governor's Cybersecurity Task Force
- Expand desktop management service based on policy decisions, client demand and resource availability
- Advance the state's security posture by leveraging existing security investments
- Establish a protocol for responding to security breaches
- Pilot a configuration management database
- Expand communication with stakeholders regarding cloud services
- Determine the network, computing and software architecture necessary to support cloud services
- Align ITD rate structure with the evolving cloud-based technology landscape
- Become more proactive in audit/assessment response by improving processes and documentation to benefit auditors and ITD
- Develop and establish ITD role in brokering enterprise cloud services
- Develop procurement practices and enterprise architecture standards for cloud services
- Enhance ITD's understanding of the application portfolio in North Dakota state government in order to drive strategic planning
- Partnered with Dakota Carrier Network (DCN) to add dual point of presence to the STAGEnet backbone in Bismarck, Fargo and Grand Forks
- Implement a new ITD Billing System
- Implement a new web-based Records Management System
- Implement ADFS (Active Directory Federation Services)
- Deploy Office 365 (OneDrive and Office apps)
- Migrate to Windows 10 as desktop OS

- Pilot Microsoft Azure Infrastructure-as-a-Service (IaaS) and Platform-as-a-Service (PaaS)
- Develop phase 1 of a state government application inventory
- Retire the DELA platform
- Implement a new ITD website
- Continued scanning of ITD-developed web applications to proactively identify potential web vulnerabilities
- In partnership with the Statewide Interoperability Executive Committee, determine the feasibility and desirability of implementing a statewide interoperable radio network.

2017-2019 Technology Strategy Information

Goal

Strategy

Be Easy to Do Business With

Improve the customer experience for submitting requests and the internal processes for managing work.

Provide technology direction

Develop a secure, cost-effective web portal framework.

Provide an IT ecosystem that enables the managed utilization of the Internet of Things (IoT).

Manage Technology Spending

Standardize Processes and Approaches

Mature configuration management processes and tools.

Mature application development and operations processes (DevOps).

Deliver Solutions on Schedule & on Budget

Incorporate agile development methodology where appropriate.

Deliver Reliable & Available Services

Mature event management processes to improve ITD's operational performance.

Mature security processes and tools based on priorities established to support the cybersecurity framework.

Deliver Needed IT Services

Establish Platform and Infrastructure as a Service models (PaaS and IaaS).

Plan for Technology Change

Enhance maturity of Software as a Service technology framework.

2017-2019 Planned Activity Information

- Pursue a hybrid cloud approach
- Mature configuration management processes and tools
- Incorporate agile development methodology where appropriate
- Investigate MS Exchange and SharePoint as PaaS
- Develop a SaaS governance framework
- Continue to sunset the mainframe
- Continue to sunset the AS/400
- Continue to expand internal use of Office 365 and OneDrive
- Develop a secure, cost-effective web portal framework
- Investigate/enhance network requirements to support IoT
- Identity federation with SaaS leveraging ADFS and possibly Azure AD
- Accelerate the evolution of the zero trust posture
- Execute IPv6
- Automation/orchestration of network services
- Develop a NAC/network port control strategy
- Maintain and expand commitment to responsive design (plus mobile apps on app store when it makes sense)
- Examine user experience for managing requests, projects, work (e.g., WMS/SP/HEAT)
- Continue to strengthen MFA for privileged accounts
- Define sunset expectations and guidelines for SharePoint Foundation services
- Enhance Egress Filtering
- Improve flexibility and efficiency for pre-production environments
- Research and incorporate new application deployment models to leverage containerization
- Continue to train and mentor Application Security discovery and remediation skillsets within Software Development
- Define sunset expectations and guidelines for CA-Gen, Blaze, and Lotus Notes

2017-2019 Technology Being Investigated or Considered

Internet of Things

Analyze network requirements to support potential growth of the Internet of Things.

New Projects

- Statewide Interoperable Radio Network (SIRN)
- ND Health Information Network Care Coordination

Technical Infrastructure Information

Number of Computers/Workstations	792
Number of Portable Devices	180
Number of Network Printers	40
Number of Servers	388
Number of public-facing web sites	7
Number of internally facing web sites	1

Application Information

<i>ITD Billing System</i>	Billing System
<i>ITD Rate Worksheets (Excel)</i>	Cost Flow and Cost Center Projections
<i>Records Management System</i>	Process record series, state form inventory, and records disposal
<i>CDE Website</i>	Website
<i>GeniusSIS</i>	Student Information
<i>Microsoft Dynamics Great Plains</i>	Business
<i>KeCommerce</i>	Commerce
<i>Enrollment Registration App</i>	Registration
<i>Agilix xLi Buzz LMS</i>	Learning Management
<i>Blackboard Collaborate Ultra</i>	Collaboration
<i>LastPass Enterprise</i>	Password Mgmt
<i>Microsoft Office 365</i>	Collaboration
<i>ND K12 Office 365</i>	Collaboration, communication
<i>PowerSchool</i>	Student Information System
<i>iSupport</i>	Support Ticket Tracking
<i>WordPress.blogs</i>	Blogging, Web Hosting

<i>Tech Coordinator Tools</i>	User management
<i>Building Facilitator Tools</i>	User management
<i>MyAdmin</i>	User management
<i>MyPortal</i>	User management
<i>Forefront Identity Manager</i>	User management
<i>EduTech Training App</i>	Training Registration and evaluation
<i>Sendit Mail</i>	Email
<i>EduTech Website</i>	Website
<i>eTranscripts</i>	K12 Student Transcripts
<i>State Longitudinal Data System</i>	Student Data Warehouse
<i>WordPress-EduSites</i>	School Web sites
<i>Hurderos</i>	Identity Management
<i>NDSU LDAP</i>	Identity Directory
<i>WordPress-HealthIT</i>	Web presence
<i>K12 Active Directory</i>	Directory Service
<i>NDUS Listserv</i>	Email List Management
<i>Customer Feedback Management System</i>	Process survey results from Incidents and Requests
<i>ND Portal</i>	Web portal for ND government
<i>Work Management System</i>	Manage Service Requests
<i>HEAT Service Management</i>	Service Management (Incident, Request, Change, & Configuration Management)
<i>ITD Website</i>	Primary website for ITD
<i>ITD Intranet</i>	Intranet site for ITD
<i>ND GIS Hub Data Portal</i>	Find data, services, maps, and applications
<i>ND GIS Hub Explorer</i>	A mapping tool for exploring GIS Hub datasets
<i>ND ArcGIS Online</i>	Maps and applications for computers and mobile devices

<i>Statewide Longitudinal Data System Project Website</i>	Website for Statewide Longitudinal Data System project
<i>ND Health Information Technology Advisory Committee Website</i>	Website for ND Health Information Technology Advisory Committee
<i>ND Health Information Network</i>	Website for ND Health Information Network
<i>NDHIN Direct Secure Messaging (Communicate)</i>	Facilitates secure messaging among medical stakeholders
<i>NDHIN Health Information Exchange</i>	Integration engine and clinical repository for longitudinal data view of patient
<i>NDHIN Advanced Directive Repository</i>	Repository of Advanced Directives (Living Wills)
<i>Walking Works</i>	Log physical activity of employees
<i>Network Resource Center</i>	Inventory and configuration management of network resources
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<i>Statewide Interoperability Executive Committee Website, including FirstNet and Statewide Interoperable Radio Network</i>	Website for ND Statewide Interoperability Executive Committee
<i>Relay North Dakota</i>	Website service for capturing spoken text and displaying it on phones
<i>AD-User Password Change</i>	Change nd.gov passwords
<i>Master Client Index (w/DHS)</i>	Master Client Index
<i>FileNet - Document Storage System</i>	FileNet - Document Storage System