



# **Modernize IT Infrastructure and Reduce Cost**

The **Infrastructure Optimization (IO) Center of Excellence (CoE)** supports partner agencies in assessing existing infrastructure and business needs, identifying modernization opportunities, and orchestrating efforts as they evolve. Services include consolidating federated data centers into a single enterprise facility, modernizing the application landscape, driving out IT infrastructure cost inefficiencies, improving security, and positioning agencies for future improvements.

### **OVERVIEW**

As the public sector continues to modernize its technology, agencies continue to increase demand on their IT infrastructures. Rather than rely on meeting this new demand in the face of flat or reduced budgets, the pace of innovation has created opportunities to optimize infrastructure and accomplish better service while simultaneously improving efficiency. The IO CoE is designed to assist agencies in creating an IT infrastructure strategy that best suits the agency's mission by leveraging qualified expertise and industry best practices.

## **CORE COMPETENCIES**

Our expertise can support agencies as they strive to meet the requirements presented by the following statutes and directives:

	21 <sup>st</sup> Century Integrated Digital Experience Act	Federal Data Strategy	Data Center Optimization Initiative (DCOI)	Federal Information Security Modernization Act (FISMA)	Federal Information Technology Acquisition Reform Act (FITARA)	Cloud Smart	Federal CIO Authorization Act
Workload Assessment and Modernization	<b>✓</b>		~	~		<b>~</b>	<b>✓</b>
Application Rationalization	<b>✓</b>	~		~	<b>✓</b>	<b>~</b>	<b>✓</b>
Enterprise Architecture Modernization		<b>✓</b>	~			<b>~</b>	<b>✓</b>
Accelerated Assisted Technology Acquisition					<b>✓</b>	<b>~</b>	<b>~</b>
DevSecOps Adoption	<b>~</b>		~	<b>✓</b>		<b>~</b>	<b>~</b>
Data Center Optimization		~	~	<b>✓</b>		<b>~</b>	<b>~</b>

## **CASE STUDIES**



## **Department of Agriculture**

- Collaboration with USDA on the Data Center Optimization Initiative (DCOI) led to the closure of 34 of 37 targeted data centers in FY19.
- Since FY18, data center closures, combined with aggregated cloud services acquisition, have led to cumulative cost savings and avoidance of \$42.3M, exceeding USDA's target goal by \$18.7M.
- USDA's FITARA score improved in June 2019.



#### **Office of Personnel Management**

- Collaboration with OPM on their mainframe modernization efforts.
- Continual support establishing robust disaster recovery facilities, ensuring the reliability of retirement services, human resources and benefits management across the federal government.
- In collaboration with the CX CoE, we are evaluating the OPM legacy retirement calculators and are in the process of procuring a Business Rule Management Engine to provide a modern retirement calculation service.







## **INFRASTRUCTURE OPTIMIZATION COE SERVICE CATALOG**

SERVICE	DESCRIPTION	SAMPLE DELIVERABLES		
Data Center Consolidation/ Migration Planning	Develop a roadmap of key activities, milestones, owners, impact, and sequencing – charting a clear path from current to future state.	<ul> <li>Site Visits and Assessments</li> <li>Business Case Development</li> <li>Pre-populated Starting Points</li> <li>Workshops on Industry Best Practices</li> <li>Inventory Hardware Assessments</li> <li>Project Plan Pressure Tests</li> </ul>		
Enterprise Architecture Modernization	Evaluate the specific technological needs of partner agencies, calculate the level of maturity and create a path toward modern IT practices.	<ul> <li>Evaluation of Enterprise Modernization Efforts</li> <li>Introduction of Enterprise-IT-as-a Service (EITaaS) and Serverless Architectures</li> </ul>		
DevSecOps	Introduce a collaboration model that supports continuous improvement and automation throughout the IT service-delivery pipeline and security components, which get integrated at all stages of SDLC.	<ul> <li>CI/CD/CS Pipeline Modeling</li> <li>DevOps Maturity Assessment</li> <li>DevSecOps Reference and Design Architecture</li> </ul>		
Enterprise Data Service	Through the planning and implementation of a streamlined, uncoupled data strategy, facilitate the technological modernization of any large-scale organization.	<ul> <li>Unified Framework and Controls to Support Enterprise-Wide Data Access</li> <li>Standardized Data Modeling</li> <li>Modern Data Governance Support</li> </ul>		
Enterprise Network Modernization	To facilitate and drive opportunities to supporting emerging technologies including Software-Defined Networking (SDN), Zero-Trust Architectures, 5G Wireless, Remote Access, and TIC 3.0 use cases.	<ul> <li>Network Modernization Roadmap</li> <li>Identification and Exploration of Small-Scale Proofs of Concept and Controlled Deployments</li> <li>Establish New Policies to Support New Flexibility in Cyber/Risk Postures</li> </ul>		
Project Management / Coordination	Drive high-level project execution and coordinate with other stakeholders for IT Infrastructure Modernization Initiatives.	<ul><li>Timeline of Key Dates and Deliverables</li><li>Meeting Cadence with Execution Team</li><li>Clear Pathway for Escalation</li></ul>		
Enterprise Infrastructure Acquisition Assistance	Support partner agencies through short acquisition cycles by blending GSA and partner agencies' acquisition vehicles with our the CoE's technical and team acquisition expertise.	<ul><li>Acquisition Packages and RFIs</li><li>Market Research</li><li>Build vs. Buy Analysis</li><li>Industry Days</li></ul>		
Communication Strategy	Provide tailored messages for agencies to share with their customers, employees, and stakeholders.	Communications Playbook     Informational Documents for Internal Distribution		
Workforce Training and Change Management	Develop digital training packages to better prepare the workforce for new concepts, as well as build the infrastructure architecture and operating models to help agencies implement best change-management practices.	<ul> <li>Course Curriculum, Content and Certification</li> <li>Detailed Enrollment and Training Procedures</li> <li>Change Management and Best Practices</li> <li>Workshops with Industry and Agency Experts</li> </ul>		













