



Office of
Information Technology

Consolidated IT Transformation Approach

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having a robust and well managed infrastructure available to house enterprise applications provides a single point of management for performance and connectivity issues, rather than multiple disparate management approaches. After the infrastructure consolidation has been successfully undertaken, it is then possible to focus on consolidation of enterprise applications.

An IT Transformation Program Office was organized in January 2013 to define the approach and plans to support implementation of the IT Optimization strategy through the creation of an efficient Central IT Office. The strategic components of IT Optimization are enabled through improved IT planning, reduced infrastructure complexity, increased use of enterprise applications/solutions and employing business intelligence tools. We have made significant progress regarding these strategic components over the last ten months.

Nine multi-agency subcommittees, collectively consisting of 100 representatives, met over a six month period to develop the transformation plans outlined within this document. The subcommittee's recommended approach can be divided into three distinct focus areas:

- **Private Cloud Expansion**¹: The expansion of Ohio's private cloud involves the consolidation, standardization and integration of the State's highly distributed technical infrastructure into a centrally managed computing and networking environment. With a private cloud in place, agencies will need to spend less of their resources on infrastructure and focus on the development of applications that directly serve Ohio's citizens and businesses. Much of the work associated with expansion of the private cloud environment is already well underway, with efforts such as the State of Ohio Computer Center (SOCC) Remediation and Storage Consolidation. Efforts will continue with the unifying of multiple agency networks into the Ohio One Network.
- **Enterprise Shared Solutions**: Enterprise shared solutions address common technology needs by providing tools and application platforms that promote collaboration, communication and data analysis across multiple agencies. Enterprise shared solutions will provide a platform for common service application development. The implementation of a number of enterprise shared solutions are already in progress including Ohio Administrative Knowledge System (OAKS), Enterprise E-mail, Voice over Internet Protocol (VoIP), eLicensing, ePayment and Business Intelligence Platform initiatives with plans to expand to all agencies.
- **Online Government Services**: Ohio provides a number of online government services today. Due to the rapidly changing landscape of technology and how customers of State services access information, past practices need to be revisited and refocused. Navigating the services provided to Ohio citizens and businesses can be a challenge due to multiple and redundant entry points. Online services will be provided to consumers in a new and enhanced fashion that is valuable to users and their needs wherever they are located. Current online government service initiatives include Integrated Eligibility, the Ohio Business

Ohio's Private cloud is a computing platform or environment implemented within the State's firewalls, under the control of an enterprise focused IT group. The private cloud approach for Ohio addresses concerns about control over enterprise and customer data, security and compliance with state statutes and federal security frameworks.

Gateway and strong consideration is also being given to the expansion of a citizen portal, self-service models and cross agency integration.

We continue to make progress in these three focus areas, saving over \$20 million in an opportunistic and ad hoc manner. By implementing a strategic and consolidated approach through IT Optimization, the State's goal of \$150 million in annual savings while enabling the business of government can be realized. However, this is only possible if we act and move as an enterprise.

To facilitate this enterprise focus and provide a governance structure over IT expenditures, we will establish a Technology Board. The Board will enhance enterprise IT alignment and ensure that agency interests are represented within the IT governance process and duplicative activities are minimized. The board will align agencies according to common purpose within Lines of Business (LoB): Health and Human Services, Business and Industry, Administration and Finance, Public Safety and Criminal Justice as well as Infrastructure and Environment.

This model for IT governance process will encourage the creation of new, innovative, enterprise focused solutions that meet LoB requirements. The LoB structure will facilitate communications between agencies and the Central IT Office as it pertains to shared solutions and services and assist in the development of strategies that increase value and decrease infrastructure and operating costs.

The LoB will ensure that key tenants of IT Optimization are conveyed and championed within and across the lines of business. The key tenants for change and collaboration are identified below:

1. The time for change is NOW and -together we can build momentum.

This is a Governor-sponsored program, and we need to use the current momentum to continue to move this program forward.

2. Cost savings will be reinvested for the greater benefit of Ohio citizens.

IT Optimization is a tangible way to realize IT savings over the long-term. Cost savings are expected from several sources, including consolidation of infrastructure and economies of scale in operations and enterprise-wide purchasing power. It is a continuous process of looking for opportunities to increase efficiency, reduce complexity, and eliminate redundancies.

3. Quality Service is everyone's expectation and responsibility.

The Central IT Office can only achieve the levels of service the State requires by having the commitment and involvement of all agencies, boards, and commissions. The next generation of IT services will be built together. Service Level Agreements (SLAs) are tools to guide and measure progress from both the requirement side and the delivery side.

4. The IT Optimization program is a collaborative effort.

IT leaders throughout the State, in partnership with the Central IT Office, need to be fully engaged in the development and design of the IT Optimization initiative. This means collaboration of ideas, requirements, and solutions.

5. IT Optimization provides new growth opportunities for employees.

The IT perspective is changing inside the State of Ohio. IT roles are evolving from a single department focus to an enterprise focus, which brings new opportunities for IT employees to become familiar with and skilled in a wider range of technologies and services.

The consolidated IT Transformation approach provides the operational and tactical roadmap to move the State IT environment into the 21st Century - to be flexible, adaptable and ensure IT serves as an enabler of business within the agencies. It will take all of us to get there and we look forward to working together to make this roadmap a reality.

1 Bringing Value to Ohio through IT Transformation

The majority of Ohio's 26 cabinet agencies and over 70 boards and commissions are managing their own IT infrastructures. Without question, the work done by these agencies has brought tremendous value to the State and to our constituents. However, independently managing the distributed, commoditized technology infrastructure and common applications drains vital agency resources away from providing new, value-added services to Ohio's constituents. An integrated enterprise private cloud and a set of underlying technologies is necessary to provide foundational services that support the delivery of agency business applications to Ohio businesses and citizens.

Many states have successfully undergone similar IT Transformation initiatives and after analyzing their experiences, it is clear that Ohio can achieve similar or better results. Conservatively, as this transformation progresses, the State's goal of \$150 million in annual savings can be realized. Making smart investments, leveraging shared infrastructure, enterprise shared solutions and increasing efficiencies we can bring Ohio's IT environment into the 21st century.

Experiences in other states suggest that the value of IT Transformation goes far beyond cost reductions. Money saved through transformation can be used to fund other initiatives that provide direct value to the State's constituents. Agency IT staff will now be free from the daily support and operations responsibilities associated with maintaining an agency's technology infrastructure and common business applications. Agency IT staff can focus on supporting their agency's core mission and working to maximize customer value by leveraging centrally provided technology platforms in the delivery of proprietary business applications for their employees and constituents. This will enable the enterprise to focus on delivering an excellent user experience and valuable information.

IT Optimization will address the following primary strategic business objectives:

- Achieve resource savings through economies of scale and the elimination of duplicative activities
- Improve the IT business decision-making process
- Free-up agencies to focus on their primary mission and core competencies
- Leverage savings to innovate, modernize, and continually upgrade through the reinvestment of funds
- Provide enhanced solutions delivery to internal agency partners, customers and the citizenry of the State
- Improve the security of the State's mission critical systems and constituent information
- Standardize technology use, procurement and contracting
- Effective use of IT professionals – leverage technical skills across the enterprise
- Alignment of enterprise applications with business goals

The intent moving forward is to achieve the value expected from IT Optimization and to recognize the potential impact such a significant change will have on State agencies, State employees, the vendor community and customers of State IT services. The IT Transformation will focus on stakeholder engagement and communication to ensure alignment to a shared vision, strategy and business case.

During the initial "Current State" assessment of IT across the State, numerous improvement opportunities were identified. The table below outlines a few of these opportunities and identifies the "Future State" view as outlined in the Subcommittee Transformation Plans.

1.1 Future State Objectives

Current State	Future State Objective
Ohio's Executive Branch annual IT-related spend continues to increase, with total IT-related spend for fiscal year 2013 exceeding \$930 million.	1) Reduce Ohio's Executive Branch annual IT-related spend by approximately \$150 million.
Ohio employs 2,500 full-time IT professionals.	2) Through natural attrition and retirement, reduce the number of full-time IT professionals by 400.
IT contract labor for fiscal year 2013 was in excess of \$200 million.	3) Leverage and train State employees to assume the positions of many of the contract employees. A 20 percent reduction in contract labor will result in over \$40 million in savings each year.
Significant duplication exists in IT infrastructure and IT service delivery, which increases costs. Most agencies perform common IT infrastructure functions in-house.	4) Eliminate duplications and centralize responsibility for IT Infrastructure, IT shared solutions and common business applications.
A variety of voice and data network services are implemented statewide with few common elements. This lack of standardization and duplication increases costs.	5) Consolidate network related services into the IT shared solutions portfolio, such as VoIP, to reduce costs and standardize technology across the State.
The State has over 30 data centers or server concentrations.	6) Consolidate all servers and shared storage devices into Ohio's primary data center – the State of Ohio Computer Center (SOCC) with backup and recovery at secondary sites.
14 agencies manage their own statewide networks.	7) Consolidate and merge network operations and support.
Multiple e-mail systems operate with different technologies and naming conventions.	8) Consolidate e-mail into a single system following a common set of standards and configurations.
9,000+ servers with low CPU utilization increases costs along with management, integration, security and operational complexity.	9) Greatly reduce the number of servers supported by virtualizing, shared infrastructure and consolidating servers within the SOCC.
IT Security is highly distributed and practices are not consistently applied across agencies.	10) Consolidate IT Security under the direction of the State Chief Information Security Officer and increase the IT security posture for the State.
While most agencies reported having a Disaster Recovery (DR) plan, they do not have a dedicated DR site.	11) Consolidate and centralize IT DR based upon agency requirements and leverage economies of scale.
The State currently maintains multiple mainframe environments.	12) Consolidate onto one mainframe within the SOCC.
The State currently does not exercise standard practices and procedures when delivering services.	13) Leverage industry best practices, such as Information Technology Infrastructure Library (ITIL), when developing the new central IT Service Management model.

Current State	Future State Objective
Online government services need to be more intuitive and comprehensive to support modern technologies. Standard policies and tools are not readily available to ensure consistency.	14) Provide an application environment on which to build intuitive, easy to use online government applications for internal and external users.
Data is not leveraged across the State to maximize efficiency and assist in the detection of errors, fraud and abuse.	15) Provide a secure information and data management environment to promote intelligent government. The citizenry of Ohio has entrusted government with an abundance of data. Good and proper use of that data both enhances and simplifies citizen interaction with government.

These efforts can be categorized into the following three focus areas that enable the business of the State and bring value to Ohio agencies, businesses and citizens:

- **Private Cloud Expansion:** The expansion of Ohio’s private cloud continues the consolidation, standardization and integration of the State’s highly distributed technical infrastructure. These efforts allow agencies to spend less of their resources on infrastructure and focus on the development of applications that directly serve Ohio’s citizens and businesses.
- **Enterprise Shared Solutions:** Ohio’s enterprise shared solutions currently address common technology needs, providing tools and application platforms promoting collaboration, communication and data analysis across multiple agencies. It is through the adoption and use of the State’s investments that speed, efficiencies and economies of scale equate to savings.
- **Online Government Services:** Navigating the services provided to Ohio citizens and businesses can be a challenge due to multiple and redundant entry points. The online services that are currently provided to constituents need to be enhanced so that they are more valuable to users and their needs wherever they are located. Also, due to the rapidly changing landscape of technology and how customers of State services access information, past practices need to be revisited and refocused. Online services must be reliable, secure and accessible from a variety of devices.

Many of the initiatives in these three focus areas are already underway. We are moving forward with the expansion of the private cloud environment with efforts such as the SOCC Remediation and the Storage Consolidation initiative. Private cloud expansion efforts will also continue with the unifying of multiple agency networks into the Ohio One Network.

With regard to Enterprise Shared Solutions, there are a number of shared solutions already in place including OAKS, Enterprise E-mail, VoIP, and the ePayment, eLicensing and Business Intelligence platforms. As agency adoption of these solutions continues, savings will accrue. Ohio provides a number of online government services today. Current online government service initiatives include MyOhio (employees), Ohio Benefits (citizens/Medicaid), the Ohio Business Gateway (businesses) and strong consideration is being given to the

expansion of citizen portals. It is imperative that these existing investments be leveraged and adoption of these solutions continues. This will reduce the duplication of entry points for services, provide a more streamline offering of services and most importantly, maximizes the taxpayers’ dollars necessary to build services that provide value back to the citizens.

There is much more to do, but progress is being made to support Ohio agencies, businesses and citizens.

1.2 Strategic and Tactical Actions

Over the next few months, a portfolio of IT Transformation projects and service initiatives will be launched that will align the State of Ohio with the three focus areas. These projects have multiple tasks and dependencies and will be started in an incremental manner, spanning a number of years. (Please refer to Appendix A for more detailed IT Transformation project and service descriptions.)

Online Government Services

- Ohio Benefits/Integrated Eligibility
- Ohio Business Gateway
- Vendor Self-Services

Enterprise Shared Solutions

- Business Intelligence Platform
- eDiscovery
- eLicensing Platform
- Enterprise e-Mail
- ePayment
- Multi-Agency Radio Communications System (MARCS)
- Ohio Administrative Knowledge System (OAKS)
- Ohio Shared Services
- Voice over Internet Protocol (VoIP)
- End Point Protection
- Identity Management
- Internet Filtering
- Intrusion Protection
- Security Information and Event Management (SIEM)
- Web Application Firewall
- Mobile Platform (Strategy)
- SharePoint
- Virtual Desktop Infrastructure

Private Cloud Expansion

- SOCC Remediation
- Data Center/Local Area Network (LAN) Implementation
- Mainframe Consolidation
- Storage Consolidation
- Wide Area Network (WAN) Core Implementation (Ohio One Network)
- Database Activity Monitoring
- Disaster Recovery
- Incident Response/Cyber Security
- VM Cluster Consolidation

There are also several IT Transformation Operational Support Initiatives that will address foundational requirements and are essential to delivering shared services and savings opportunities. The IT Transformation Operational Support Initiatives which will be launched include:

Security:

- Vulnerability Management
- Data Loss Prevention

Financial Management:

- IT Asset Management Plan
- IT Cost Recovery
- IT Expenditure Model
- IT Reinvestment Model

Strategic Planning, Sourcing and Portfolio Management:

- Enterprise IT Smart Sourcing
- Enterprise IT Strategic Planning
- Enterprise Application Organization Build
- Enterprise Portfolio Management

Network:

- Enterprise Internet Protocol Address Resolution

1.3 Central IT Office Organizational Model

The effective use of IT professionals is a strategic business objective of the IT Optimization effort. The State of Ohio has approximately 2,500 IT professionals across multiple agencies, boards and commissions. With the centralization of infrastructure functions it will not be necessary to replace staff as they retire or leave State service for other reasons.

Executive Branch agencies recently submitted their IT Workforce Plans. The Central IT Office will work with the Department of Administrative Services (DAS) Human Resources Division to review those plans. Agency plans will be used to ensure appropriate staffing levels are maintained.

IT staffing levels will decrease at the agency level as IT staffing requirements move to the Central IT Office to support the consolidation of data center functions (server and storage), network management, information security management, portfolio project management, enterprise architecture and business relationship management. The overall impact to the State should be net savings. The Central IT Office is working with the Ohio Civil Service Employees Association (OCSEA) and DAS Employee Services to ensure fair and equitable movement of staff to the Central IT Office as positions are identified.

Focusing on building stronger relationships with partner agencies is a critical success factor for IT Optimization and the Central IT Office. In addition, IT Transformation efforts also need to focus on further bridging the gap between IT and the business side of State agency operations. Therefore, IT Transformation will include assigning IT professionals to build and manage business relationships with our partner agencies. These professionals will work to understand and identify the business objectives of the agency and help ensure that solutions are closely aligned with those business objectives throughout the planning, design and implementation process.

1.4 Future State IT Governance

IT Governance helps an enterprise ensure that it is investing its limited resources in alignment with leadership's strategic direction. It is the responsibility of the governance process to ensure that the right things are being done, whereas it is the role of the State Chief Information Officer (CIO) to ensure that things are being done right.

1.4.1 The Role of Governance

As part of technology management in any organization, governance models enable the organization to make decisions in the best interest of the enterprise as well as provide prescriptive methods to initiate and manage work throughout the organization. The purpose of IT governance as a whole is to oversee the following activities:

- Alignment between agency business units and IT and ensure consistency.
- Evaluation and validation of information technology investments across the enterprise to ensure the State is getting the “biggest bang for the buck”.
- Management of risk in both the portfolio of project execution and decision-making; thereby, preserving financial resources and ensuring value propositions are realized.
- Resource management to ensure that resources are allocated to the highest priority activities.
- Definition and measurement of organizational performance; this includes the initiation of activities and introduction of change as required to address organizational performance deficiencies.

1.4.2 Ohio IT Governance

The primary objectives of Ohio IT governance are to ensure the proper stewardship of investments and resources and to effectively support agencies that are charged with delivering valuable and critical services to the citizenry. IT governance must enable service delivery optimization, which requires proper, discrete operational activities and the delivery of shared solutions that address common service requirements. Shared solutions chosen for implementation must provide tangible benefits to the citizenry or to State agencies. In order to meet these objectives, Ohio intends to apply IT governance to all IT operations, both centralized and within agencies.

Proper governance includes all aspects of IT; foundation, structure, function, and value. The foundation is the support structure required for IT value to be realized and includes all of the necessary infrastructure elements (e.g., networks, data centers, servers, etc.). The structure includes alignment of services and the delivery of those services to the agencies. For agencies to be truly functional there are core solutions that must be delivered reliably and consistently from the Central IT Office. The core solutions may support all or a cross section of agencies as appropriate. Shared solution platforms must be leveraged to bring the business of the agency to market quicker, making IT an agile and flexible enabler.

Enterprise shared solutions that are core elements must be in place for an agency to effectively conduct business. Common solutions such as phone systems/VoIP, payment engines, licensing engines, and business intelligence platforms are services that support multiple agencies and create enterprise value by reducing delivery cost, increasing efficiency and improving access to valuable information.

Lastly, IT Governance must support effective value creation to the citizenry and agency objectives. While each agency is currently staffed to support its specific purpose, there is value in shared core and common activities. IT Optimization supports this same value delivery from an enterprise perspective.



Shared solutions like the Ohio Business Gateway make it easier to do business in and with Ohio. This value creates an environment that improves the economy and potentially creates jobs. Similarly, through planned solutions such as the citizen portal, citizens have access to reliable services and benefits for which they are eligible (e.g., health and human services, etc.). IT governance must support the effective delivery of such value. To manage the planning, design, and operation of these solutions, Ohio IT governance will include the following:

- **Maintenance and Support**: While foundationally necessary, expenditures associated with maintenance and support do not provide any incremental value to agencies or the consumers of government services. Therefore, the goal of Ohio IT governance is to reduce these day-to-day operational costs to the greatest extent possible.
- **System and Technology Upgrades**: Upgrading systems and technologies in order to maintain external support or to minimize risk is a routine part of running any IT environment. In most cases, expenditures associated with upgrades provide only small incremental value to agencies or the consumers of government services. Ohio IT governance will coordinate these activities, planning them in advance to minimize the costs associated with upgrading aging systems. When possible, these activities should be done in conjunction with IT enhancements/projects.
- **IT Enhancements/Projects**: To the maximum extent possible, IT investments should shift away from routine maintenance and support and upgrade initiatives in favor of enhancements and new projects. IT enhancements/projects should be prioritized across the State according to overall value, potential for assisting with service delivery optimization efforts, opportunity to improve upon or implement new shared solutions, and overall value to the constituency.

1.4.3 IT Governance Structure

The proposed IT Optimization governance structure will to provide a comprehensive view of IT related projects and initiatives across the entire enterprise, evaluate the benefits of each, identify associated costs, assess the relevance of each based upon the Governor's and each agency's goals and objectives and then prioritize and ultimately approve IT projects and initiatives that deliver the highest value to the State. This IT governance process will:

- Ensure approved projects offer the maximum benefit to citizens, State employees and/or Ohio businesses.
- Identify IT services that are outside of the core missions of the State and consider other alternatives for the delivery of these services. If an existing service is not meeting the needs of the agencies, the State should consider other service delivery approaches. This includes decommissioning existing services and researching more cost effective private sector offerings.
- Identify duplicative, overlapping and redundant IT services that could serve the enterprise.
- Facilitate adoption of existing shared solutions.
- Bring together agency directors, managers and finance officers to make decisions that align the State's resources with what its leaders and citizens value the most.

Through the IT governance process, existing agency project initiatives will be submitted to the Office of IT Strategy and Investment Management and details will be captured through the Application Lifecycle Planning System (ALPS). This will allow the IT governance process to anticipate future opportunities for consolidation and collaboration. As previously defined, the initiatives that will be addressed in planning documents include:

- Routine Maintenance and Support
- System and Technology Upgrades
- IT Enhancements/Projects

In the case of new IT Service initiatives, a service strategy will be developed and a market analysis will be performed to ensure the best delivery approach is used.

1.4.3.1 Technology Board

A Technology Board will be established to enhance enterprise IT alignment and ensure that agency interests are represented within the IT governance process and duplicative activities are minimized. The board will align agencies according to common purpose within Lines of Business (LoB). This approach could serve as the model to engage the business side of the agencies through Fiscal Officers and Human Resource Administrators to further enhance cross-pollination of ideas and opportunities and work more cohesively at the enterprise level from a statewide perspective.

The structure of the Technology Board will follow the Communities of Interest developed through the IT planning process and formalized by the Multi-Agency CIO Advisory Council (MAC). Specifically, there are five Communities of Interest that have been meeting periodically for over two and a half years to discuss issues, concerns and opportunities within their LoB. In order to increase awareness of initiatives, streamline efficiencies and identify areas for functional consolidation within and across LoB, the Communities of Interest will be formalized to establish the Technology Board.

The five LoB identified by the MAC are as follows:

- Health and Human Services
- Business and Industry
- Administration and Finance
- Public Safety and Criminal Justice
- Infrastructure and Environment

The Technology Board will leverage the established relationships and structure for IT Optimization governance. These LoB have strong CIO representation from the executive branch agencies as well as elected officeholders. The CIOs are very engaged in the LoB process and demonstrate strong leadership and a commitment to IT Optimization.

The IT governance process will encourage the creation of new, innovative, enterprise focused solutions that meet LoB requirements. The LoB structure will facilitate communications between agencies and the Central IT Office as it pertains to shared solutions and services and assist in the development of strategies that increase value and decrease infrastructure and operating costs. This structure will assist agency CIOs and directors with the development and execution of new business initiatives.

The LoB alignment structure is defined as follows:

Lines of Business	Partner Agencies
Health and Human Services	Aging, Developmental Disabilities, Mental Health & Addiction Services, Job & Family Services, Health, Medicaid & Opportunities for Ohioans with Disabilities (formally Rehabilitation Services Commission)
Business and Industry	Commerce, Development, Public Utilities Commission, Industrial Commission, Insurance, Taxation, Bureau of Workers' Compensation & Secretary of State
Administration and Finance	Administrative Services, Auditor, Budget and Management, Education, House of Representatives, Legislative Information Systems, Lottery, Regents, Senate & Treasurer
Public Safety and Criminal Justice	Adjutant General, Attorney General, Public Defender, Public Safety, Rehabilitation & Correction, Supreme Court, Inspector General, Veterans Services & Youth Services
Infrastructure and Environment	Agriculture, Environmental Protection, Natural Resources & Transportation

The overall 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 and across LoB

The 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
- Create cross agency synergy focused on constituency objectives
- Manage enterprise shared solutions across LoB and work with the agency CIOs to leverage initiatives, resources, tools, infrastructure and solutions

The LoB Leads will drive long-term acceptance and sustainability of IT solutions, measured by the value to their LoB. The Leads for each LoB will ensure that IT Optimization and IT Transformation initiatives are communicated to all agency CIOs. The existing agency CIOs will report to the Directors of their agency, but will have a dotted line reporting structure to their respective LoB Lead. Formal budget development and reporting requirements will be established and agreed to with agency directors to ensure agency CIO's align with enterprise goals and objectives and follow prescribed service delivery requirements. This includes periodic formal reporting to the LoB Leads, metric tracking for the Value Management Office and adherence to enterprise standards and guidelines.

The LoB Leads shall spearhead and facilitate:

- Identification and pursuit of opportunities to consolidate, centralize, and standardize technology operations that leverage the shared solutions and services portfolio.
- Promotion of change in order to adjust to the fluctuation of future agency demands.
- Assistance in the development of business requirements to ensure enterprise solutions that enable the LoB.
- Integration of LoB data and functions to support constituent needs
- Working with agency CIOs to ensure customer service level expectations are being met and that clear escalation channels are in place to submit, track and fulfill requests.

In addition, if service levels are below expected value propositions, the Leads will be directly involved in facilitating a solution. The Leads will be responsible for the following:

- Leading the communication process between the Central IT Office, other agencies within their LoB and other LoB Leads.
- Review and recommend improvements based on agency feedback and industry best practices.
- Review and leverage new technologies that result in increased efficiency, improved service delivery, and reduced complexity.
- Facilitate data and service integration

- Establish a comprehensive service level agreement with the Central IT Office and establish baseline business level performance expectations.
- Define metrics to measure the level of customer satisfaction.
- Improve performance and service levels through standardization.
- Help agencies to comply with new federal and state regulations.
- Improve skill utilization and support workforce initiatives that offer greater career opportunities to the State IT workforce.
- Assist with agency escalation activities.

The LoB Leads will also help agencies to meet their needs/directives while maintaining alignment with IT Optimization. LoB Leads will be advocates for IT Optimization and agents of change for how we do business and gather partner agency requirements. This provides governance and prioritization based upon the business of the agency and the State. It will enable the State to move more quickly and be nimble in the adoption of new technology and enterprise shared solutions.

The Technology Board will have internal mechanisms to support business process analysis and project management activities. A subcommittee structure will exist to support review and consideration from the following perspectives:

- Strategic Investment Management
- Enterprise Architecture
- Operational Readiness
- Business Community/Requirement Definitions
- Policy

1.4.3.2 Enterprise IT Investment Board

The Enterprise IT Investment Board will be established to provide guidance and support to the State CIO and approve IT projects, service strategies and/or initiatives based on value and merit. It is expected that the Enterprise IT Investment Board will review:

- IT investment/recovery status by project/service
- Status updates on IT enhancements/projects
- Prioritization and funding for any new initiatives that may be submitted for approval by the Technology Board and State CIO
- Investment funding
- Post implementation reviews of IT enhancements/projects to ensure commitments made within the original business case or service strategy are being achieved

In essence, this board would serve as the Board of Directors for the newly transformed Central IT Office and would serve as the IT approval authority for enterprise IT related investments across the Executive Branch.

The proposed leadership for the Enterprise IT Investment Board is the Director of the Office of Budget and Management (OBM) serving as chairperson, the Director of DAS and a representative from the Governor's Office. The State CIO will serve as a non-voting participant and be a facilitator and advisor to the board.

1.4.3.3 Role of the Value Management Office (VMO)

In order to ensure enterprise programs achieve expected benefits, the State has formed a Value Management Office (VMO) within OBM. The VMO will be actively engaged with the LoB Leads and the State CIO as an ongoing advisor.

The VMO will be integrated into the portfolio project lifecycle from project conception through post implementation assessment. The VMO will assist in the development of measureable performance goals and will collect and report progress toward the achievement of those goals. Specifically, the VMO will assess whether process improvements and cost savings goals met projections.

1.5 Future State Service Delivery Model

Maintaining customer satisfaction levels will be critical to the success of the IT Transformation initiative. In the past, uniform customer service expectations and customer satisfaction metrics were not consistently applied from agency to agency. As the Central IT Office develops new services or existing services are enhanced or modified, a service delivery strategy for each service will be developed. A service manager will be defined for each service and the service manager will be responsible for the development of the service delivery strategy. Although, the service manager is responsible for the development of the strategy, it cannot be produced in a vacuum. At minimum, the service manager will seek input from the business relationship managers, the Technology Board, agency CIOs and the Central IT Office's Business Office. As mentioned before, service delivery strategies and associated projects will flow through the IT governance process no differently than any other IT initiative.

The service delivery strategy should cover a three year planning horizon. At minimum, the service delivery strategy will consist of:

- Service Definition
- Service level agreements
- Service Level Obligations
- How to Request or Adopt the Service
- Cost of the Service to the Consumer
- 12 month Tactical Service Plan
- 36 month Strategic Service Roadmap

The 12 month tactical plan and the 36 month strategic roadmap will be sent to the Office of IT Strategy and Investment Management and will be loaded into the Automated Lifecycle Planning System (ALPS) where new services and service enhancements will be processed and approved just like any other project or initiative.

All performance metrics are important. Since the service desk will be the initial face to the customer and the initial point of contact for most inquiries, being able to establish performance baselines and metrics that help indicate service delivery issues early in the IT Transformation process is critical. Service desk metrics will be key indicators of the customers' overall satisfaction with the Central IT Office. These metrics can also be used to ensure issues are being resolved at the appropriate level and that staff is effectively distributed across the organization to produce the maximum result. Efforts will be taken to staff the service desk with skilled employees, provide them the right tools to address customer needs, and to implement the appropriate

procedures to ensure that 60% to 70% of all customer issues are handled on initial call and that service level expectations are being met.

Critical success factors

We must continue to foster an enterprise mindset. We can go farther together than independently. IT Optimization is not an DAS/OIT initiative – it is a State imperative – and success can be measured by when we are spending more time finding ways to work together, and less time on why we cannot.

To move forward quickly we must focus on the factors that will ensure success:

- Maintain a true enterprise perspective – ensuring a State perspective and understanding we are responsible to our shareholders - the citizens of Ohio - will be instrumental. There will be Agency winners and losers in the costs of IT services. Not all agencies will see a cost decrease however; the adoption of enterprise solutions and maintaining an enterprise perspective will drive costs down across all agencies. A rising tide lifts all boats.
- Reinvest savings to provide increased benefits to the citizens of Ohio – increased efficiencies and cost avoidance are two driving factors for IT Optimization. Cost savings will be measured in a multitude of ways and will require agencies to assist in determining true cost savings. Instead of spending taxpayers' dollars in each of the 26 agencies and 70 boards and commissions, spend it once on solutions that can be used by multiple agencies.
- Enable the business of the State – providing solutions that get services to the citizens quicker and in a timely fashion and in a form they need. We can achieve this by adopting and leveraging past investments in existing enterprise solutions.
- Increase and improve services for the citizens – meeting agency quality of service expectations is the objective with the intent to exceed expectations.
- Partnership – IT leaders throughout the State, in partnership with the Central IT Office, need to be fully engaged in the development and design of IT Optimization initiatives. This includes collaboration of ideas, requirements, resources and solutions. Multi-agency teaming and partnership is necessary for IT Optimization to be a reality.
- Growth opportunities for State workers – evolving from a single agency focus to an enterprise view will bring new opportunities for IT staff as they become familiar with and skilled in a wider range of technologies and services.
- Funding – a mix of operating and capital funds is necessary to move Ohio forward. There are core services – such as networking connectivity - that should be funded through GRF. These core services support all levels of government, businesses and Ohio citizens. Additionally, there are numerous areas where a refresh or replacement of aging equipment is necessary requiring capital expenditures. To

achieve IT Optimization, combining GRF and Capital funding along with redirecting existing agency IT expenditures to support the enterprise view will be necessary.

Collaboration is critical. We cannot be successful if we don't team and work together. IT leaders throughout the State, in partnership with the Central IT Office, need to be fully engaged in the development and design of the IT Optimization initiative. This means collaboration of ideas, requirements, resources, spending and solutions.

We are all in this together and it is also important to have some understanding and patience. We are working on major changes to the way we do business in State government. These changes in culture, technologies and process are challenging. There will be hiccups, how quickly we recover and move forward will be all of our responsibility.

Clearly the time is now to move on the Governor's stated direction for moving Ohio's IT into the 21st century. We have multi-agency involvement in planning for these initiatives, we have momentum and we are creating a sense of urgency within the IT workforce. We must act quickly on these initiatives and show demonstrated progress and return on investments.

Quick wins, defined milestones with metrics and measurements to ensure on time delivery and within IT budgets will get us there. The time to act is now.

Appendix A: IT Optimization Projects & Services

Online Government Services

Ohio Benefits

<p>Sponsor: Office of Health Transformation (OHT), Department of Medicaid (ODM), Job & Family Services (JFS)</p>

<p>Service Line Manager: Deven Mehta, Deputy Director Department of Administrative Services (DAS) Office of Information Technology (OIT)</p>

I. **General Description:** Benefits.Ohio.Gov will be the citizen facing Web presence for benefits eligibility. Currently, Ohio citizens must navigate to numerous agency Web sites to find the necessary information regarding benefits eligibility. For the most part, the burden is on Ohio’s citizens to understand the parties involved in the benefits eligibility process and to navigate to the appropriate online resources. This project will deliver a “one stop shop” for benefits eligibility.

II. **Benefits Overview:**

- **Increases Efficiency:** The online Web presence will provide Ohio’s citizens with a single point of access for their benefit needs, reducing the number of clicks and searches. In addition, the multi-agency partnership that will support this effort makes it possible to provide a “one stop shop” for Ohio citizen’s benefits needs.
- **Improves Service:** The multi-agency partnership will greatly improve customer service. The benefits eligibility process will be much more intuitive and accessible to Ohio’s citizens. Citizens will no longer need to understand where one agency’s involvement ends and another agency’s begins.
- **Reduces Complexity:** The Benefits.Ohio.Gov Web presence will provide a transparent experience for Ohio’s citizens and reduce the complexity involved in navigating the eligibility process.
- **Delivers Savings:** Benefits.Ohio.gov reduces the cost of services by providing an extendable framework, governance process, and Web presence via a shared service model that can morph with project needs. In addition, it allows for cost avoidance by reducing the number of access points for benefits eligibility.

Online Government Services

Ohio Business Gateway

Sponsor: Eric Frick, Department of Administrative Services (DAS) Office of Information Technology (OIT)
Service Line Manager: Eric Frick, DAS OIT

I. **General Description:** The Ohio Business Gateway (OBG) is a critical system that processes over \$7 billion in annual transactions. It is an online filing and payment system that simplifies interactions with government agencies for Ohio’s businesses. The OBG also partners with local governments to enable businesses to file and pay selected Ohio municipal income taxes online.

The future vision for the OBG is to determine how Ohio systems can be further consolidated to expand the online business offerings. The objective is to eliminate the need to navigate through multiple agency Web sites and systems to fulfill business filing requirements.

Ten state agencies and more than 500 municipalities are currently using the OBG to assist the business community in complying with regulatory requirements. The goal is to not only increase the number of government entities that utilize the OBG, but also to increase the number of business related service offerings.

II. Benefits Overview:

- **Increases Efficiency:** The OBG offers a central coordination point for businesses to meet their filing requirements. It sends data and payment information directly to agency program administrators. This creates efficiencies for Ohio businesses and agencies, which saves them time and money.
- **Improves Service:** The OBG offers a central communication point for important regulatory updates. It also provides customer service support directly to agencies and businesses. In addition, Ohio businesses will be directly involved in defining any future system changes to ensure the OBG continues to meet their needs.
- **Reduces Complexity:** Streamlining filing and payment requirements reduces the overall processing complexity for businesses and government entities. Expanding the OBG offerings will serve to further simplify the requirements associated with doing business in Ohio.
- **Delivers Savings:** Consolidating systems and regulatory processes will save the state money. The state will be able to more easily realize economies of scale through enterprise standardization.

Online Government Services

Integrated Eligibility

Sponsor: Office of Health Transformation, Ohio Department of Medicaid, Job & Family Services

Service Line Manager: Deven Mehta, Deputy Director, Department of Administrative Services (DAS)
Office of Information Technology (OIT)

I. **General Description:** The goal of the Integrated Eligibility (IE) project is to more efficiently and effectively deliver critical services to millions of Ohioans. The project will replace Ohio’s current benefits eligibility system, Client Registry Information System-Enhanced (CRIS-E), with an enterprise solution that is capable of supporting both State and County operations. The new system also brings Ohio into compliance with federal Medicaid requirements and provides the flexibility to more easily align with future regulatory requirements. It will leverage more modern technology to easily detect instances of fraud, abuse and waste.

II. Benefits Overview:

- **Increases Efficiency:** Ohio will simplify eligibility through automated processes and transform and improve the way over 15,000 county and state workers provide services. IE will also allow state and local entities to easily share eligibility information.
- **Improves Service:** IE will improve citizen access to Ohio’s health and human services programs through online self-service features. It will also enhance the quality of Ohio’s services and interactions with health and human services program participants.
- **Reduces Complexity:** The new system will leverage more modern technology and will eliminate the more complicated agency-based model in favor of a person-centric model that offers self-service capabilities.
- **Delivers Savings:** Ohio IE reduces the cost of services by preventing service delivery duplication, waste, fraud and abuse.

Online Government Services

Vendor Self-Services

Sponsor: Everett Ross, Deputy Director, Office of Budget & Management Ohio Shared Services

Service Line Manager: Quanta Brown, Senior Business Transformation Analyst, Office of Budget & Management Ohio Shared Services

I. General Description:

Vendor Self-Services is a future program that will transform the way the state of Ohio works with the Ohio business community through:

- Consolidated Processing of Agency Vendor Invoices: Processing of vendor invoices in an effort to provide vendors with one customer experience.
- Utilizing eSupplier: Will provide vendors with the ability to view, online, the real-time status of their purchase orders, invoices and payment information.
- Shift Toward Online Storage and Processing of Vendor Maintenance Forms: Will provide 1099 form processing, resolution of vendor phone inquiries, and vendor master maintenance.

The vendor self-service program will improve overall interactions with vendors and help Ohio to realize even greater statewide savings and efficiencies.

II. Benefits Overview:

- **Increases Efficiency:** Vendor Self-Services will enable the vendor community to have a more predictable interaction with the State of Ohio. A more standardized process will reduce the time and complexity involved with doing business in Ohio.
- **Improves Service:** With a centralized interaction point, the concerns and challenges of the vendor community will be more widely understood and it will be easier to address their needs.
- **Reduces Complexity:** Through standardization and the use of a central coordination point, the regulatory environment will be less complicated to navigate and it will help attract additional business to Ohio.
- **Delivers Savings:** Standardizing how vendor enrollments are processed will deliver savings. In addition, allowing vendors to access their information online and real-time through eSupplier will help reduce the number of vendor inquiries and allow agencies to re-focus resources.

Enterprise Shared Solutions

Business Intelligence Platform

<p>Sponsor: Office of Health Transformation (OHT), Ohio Department of Medicaid (ODM), Job & Family Services</p>
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<p>Service Line Manager: Deven Mehta, Deputy Director, Department of Administrative Services (DAS) Office of Information Technology (OIT)</p>
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I. General Description: The Enterprise Business Intelligence (BI) platform will allow Ohio agencies to make more informed decisions. Enterprise BI allows agencies to target areas of waste, fraud or abuse as well as easily identify areas for possible improvement. Enterprise BI is the foundation for statewide reporting, data sharing and analytics. Initially, the focus of Enterprise BI will be on collecting information that will be used to analyze and report on Medicaid eligibility, claims, financial, and provider data. The Enterprise BI platform will be scalable to allow state agencies efficient access to technology and expertise without prohibitive investment.

II. Benefits Overview:

- **Increases Efficiency:** Enterprise BI increases efficiency by:
 - Reducing the need for redundant data repositories across the state;
 - Leveraging enterprise licensing to reduce the need for duplicate, small scale, and costly licensing for individual BI initiatives around the state; and
 - Providing a repeatable process that will pave the way for faster and more efficient BI implementations.

- **Improves Service:** Enterprise BI improves service by:
 - Developing and expanding a core competency in BI;
 - Making enterprise-class BI tools and expertise available to all agencies;
 - Developing a service delivery approach and standards that can be leveraged across varying lines of business;
 - Enabling data sharing to provide a holistic view of information and state services.

- **Reduces Complexity:** Enterprise BI reduces complexity by:
 - Offering a central resource for agencies in need of BI capabilities (e.g., data warehousing, reporting, analytics)

- **Delivers Savings:** Enterprise BI delivers savings by:
 - Eliminating the need for BI silos around the state;
 - Leveraging enterprise licensing to reduce the need for duplicate technology licensing; and
 - Allowing for more efficient implementations, expansions, and upgrades through repeatable models, standards, and competencies.

Enterprise Shared Solutions

eDiscovery

Sponsor: Eric Harrell, Department of Administrative Services (DAS) Office of Legal Services

Service Line Manager: Ben Hooker, DAS Office of Information Technology (OIT) Exchange Mail Service

I. **General Description:** The eDiscovery application, Clearwell, is offered as part of the centralized e-mail service. The Clearwell solution provides flexible, scalable eDiscovery functionality. It allows e-mail data to be identified, collected and searched for discovery purposes. It is a user-friendly, workflow based solution that provides legal hold functionality and real case management workflow for legal professionals.

II. Benefits Overview:

- **Increases Efficiency:** The Clearwell eDiscovery solution increases efficiency by simplifying the overall e-mail eDiscovery process for agencies. Agencies no longer need to manually import and export e-mail data to and from the Department of Administrative Services (DAS) to conduct e-mail eDiscovery searches. In addition, the user-friendly workflow functionality allows both IT and non-IT users to leverage the technology to conduct searches. While e-mail is within a centralized environment, the Clearwell eDiscovery solution provides the ability to conduct confidential, independent e-mail eDiscovery searches.
- **Improves Service:** The efficiencies realized through the Clearwell eDiscovery solution greatly improve the overall eDiscovery service. Agencies can quickly and easily conduct their own searches and are no longer waiting in a queue to have their searches performed. Agencies also have the flexibility to define their own workflow rules according to their internal eDiscovery processes.
- **Reduces Complexity:** The implementation of the Clearwell eDiscovery solution offers the opportunity to standardize the e-mail eDiscovery process across agencies. A common process will result in secure, reliable e-mail eDiscovery.
- **Delivers Savings:** The aggregation of agency licenses allowed Ohio to realize economies of scale and achieve tangible savings, 89% off of list price. The implementation of the overall eDiscovery solution yielded licensing savings of \$366,000.

Enterprise Shared Solutions

eLicensing Platform

Sponsor: Eric Frick, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Eric Frick, DAS OIT

I. General Description: eLicense is Ohio’s enterprise professional licensing application. It is the mechanism through which Ohio’s boards and commissions provide and renew professional certification and licensure, allowing Ohio citizens to remain gainfully and legally employed.

The system design is outdated. During periods of heavy license renewal activity, the system becomes slow and at times virtually unresponsive. In addition, the existing system design cannot incorporate the latest security advances.

This project will update the outdated system to provide a solution that meets the professional licensing requirements of Ohio’s boards and commissions. It will address licensee administration, enforcement management, examination tracking and scheduling, reporting and automated renewal processing. It will also incorporate security safeguards that will help ensure that Ohio’s citizen and business data remains secure.

II. Benefits Overview:

- **Increases Efficiency:** By updating the system, the State will be able to eliminate duplicative activities through system consolidation and improve the security of mission critical systems.
- **Improves Service:** The savings that are realized through the use of an enterprise system will allow the State to continually upgrade services for all licensing entities without individual agencies incurring excessive costs.
- **Reduces Complexity:** Offering an enterprise system to agencies will help standardize the eLicensing process; thereby, streamlining and simplifying customer interactions. In addition, it will eliminate the need for multiple and varied procurement activities and the associated fees.
- **Delivers Savings:** The eLicense application is able to leverage economies of scale by offering an enterprise solution to other licensing entities. This new system will reduce agency licensing management costs. Although the estimated savings are not yet calculated, it is anticipated that all State entities that support professional licensing will be able to use the upgraded system.

Enterprise Shared Solutions

Enterprise e-Mail

Sponsor: Stu Davis, State Chief Information Officer / Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Ben Hooker, DAS OIT

I. General Description: Enterprise e-mail is a cost effective, reliable, and secure intercommunications tool available to all state agencies, boards and commissions. The service is designed for a wide spectrum of users and addresses a wide range of needs. There are two e-mail service options available. The “Standard” option is for those who need frequent access and the “Lite” option is for occasional users. The two options are priced very competitively and include a variety of features (e.g., e-discovery, archiving, outbound faxing and security features such as e-mail encryption).

Over 90% of Ohio’s agencies, boards and commissions are now a part of the enterprise e-mail service and the goal is to have a 100% adoption rate. Full adoption of the service will maximize statewide cost savings and efficiencies. In the future, this service may also be leveraged by local governments, universities and other governmental entities.

II. Benefits Overview:

- **Increases Efficiency:** Consolidating individual agency e-mail systems into one enterprise service increases efficiency by improving and simplifying statewide communication. State employees can easily locate e-mail contacts through a common shared address book and schedule meetings through a centralized calendar. E-mail consolidation also streamlines the overall management and maintenance of the service.
- **Improves Service:** One solution allows for more targeted and effective training and it also allows help desk personnel to develop more specialized expertise; thereby, improving the overall service level. In addition, a single system allows for the creation of statewide standards and policies that reflect best practices.
- **Reduces Complexity:** The enterprise e-mail service reduces the overall complexity of statewide communication (e.g., e-mail, address book, calendar). Agencies are easily able to communicate with one another through more standardized procedures.
- **Delivers Savings:** Consumers will save money by not incurring additional expenses for monitoring and maintaining an e-mail service. Savings are also realized through achieving economies of scale (e.g., volume license discounts).

Enterprise Shared Solutions

ePayment

Sponsor: Eric Frick, Department of Administrative Services (DAS), Office of Information Technology (OIT)

Service Line Manager: Eric Frick, DAS OIT

- I. **General Description:** The ePayment business solution is a centralized payment and administrative function processing system that offers real-time tracking, reporting and auditing functions. This service makes it possible for state agencies to accept electronic credit card and Automated Clearing House (ACH) payments from customers. The Office of Budget & Management currently offers the ePayment service at no additional cost to agencies. DAS OIT provides setup, development and testing support as well as ongoing production support, which is also at no additional cost.

In fiscal year 2013, the ePayment service processed over 2.3M transactions for nine state agencies and multiple municipal income tax administrators. The goal is to continue to increase adoption of the service by state and local government entities. Increased adoption will result in greater efficiencies and statewide savings.

II. **Benefits Overview:**

- **Increases Efficiency:** ePayment provides a simplified, repeatable workflow and support procedures that are based upon extensive statewide experience. The fully automated, streamlined process reduces overall processing time, and consequently; increases efficiencies.
- **Improves Service:** A dedicated Customer Service Center that is staffed with skilled and experienced personnel provides swift ePayment incident resolution services. In addition, the standardized process delivers more predictable interactions to customers, which saves all parties time and money.
- **Reduces Complexity:** A central ePayment solution makes it easier to ensure that all parties are in compliance with regulatory and security requirements. In addition, potential incidents are more easily monitored and managed through a central coordination point.
- **Delivers Savings:** The customer will save money by not incurring additional expenses to monitor and maintain their own ePayment service. In addition, an enterprise solution will help the state to achieve economies of scale through enterprise licensing.

Enterprise Shared Solutions

Multi-Agency Radio Communications System (MARCS)

Sponsor: MARCS Steering Committee
Service Line Manager: Darryl Anderson, Department of Administrative Services MARCS

I. General Description: The Multi-Agency Radio Communication System (MARCS) is an 800 MHz voice and data network utilizing state-of-the-art trunked technology to provide statewide interoperability in digital clarity to thousands of public safety first response subscribers throughout Ohio. This statewide, secure, reliable public service wireless communication is designated for use by public safety and first responders. The system, designed in the 1994-1997 timeframe, began construction in 1999, with initial operations in 2001 and with project completion in 2004.

In May 2012, Ohio’s Controlling Board approved the spending of \$90M in Certificate of Participation (COPS) funds to upgrade the MARCS infrastructure to a VoIP, P-25 compliant platform. MARCSIP project management activities began at the beginning of FY13 (7/1/12). This statewide upgrade will provide multiple benefits for Ohio’s first responders and citizens and will prevent future catastrophic collapse of the current system.

By completing the migration to MARCSIP, Ohio will establish a true statewide system of systems, eliminating fragmented and dated local systems.

II. Benefits Overview:

- **Increases Efficiency:** The MARCSIP upgrade allows for the expansion of the system user base from 48,000 radios to 128,000. Efficiency and effectiveness will be realized by providing an interoperable public safety communications service, eliminating duplicative activities necessary at the local government level to upgrade, maintain or build separate systems.
- **Improves Service:** A seamless, integrated system-of-systems will provide enhanced communications for first responders in the State of Ohio, as well as serve as a model of shared services amongst all levels of government.
- **Reduces Complexity:** MARCSIP coverage and compatibility will be ensured regardless of location of the emergency response.
- **Delivers Savings:** There are over 1,300 discrete radio systems serving Ohio first responders, including police, fire and EMS. Over the next ten years, as much as \$0.5 B in avoided costs could be experienced by system adopters, as they will no longer need to maintain or upgrade their systems.

Enterprise Shared Solutions

Ohio Administrative Knowledge System (OAKS)

Sponsor: Department of Administrative Services (DAS) and Office of Budget & Management

Service Line Managers: Remard Colston and Rob DePalma, DAS

- I. **General Description:** OAKS is the State’s PeopleSoft enterprise resource planning (ERP) application serving as the primary integrated system for performing central administrative business functions. OAKS is the foundation for next generation evolution of process standardization that supports the sharing of state government business functions. OAKS currently provides the following services:
- **Financial Accounting:** Fully integrated platform and system of record for State financial recording and reporting; includes support for fund accounting, billing, revenue, accounts payable, asset tracking, and expense management. Provides for full cycle financial reporting including data entry, workflow, approval and financial policy enforcement and security.
 - **Planning & Budgeting:** Comprehensive biennium budget development and approval tool. Utilizing state budget models and guidelines, agency business units can build budgets using an integrated environment for establishing, monitoring, and adjusting financial objectives and deploying these objectives to all levels of the State while supporting forecasts and forecast updates throughout the fiscal horizon.
 - **Procurement of Goods:** Statewide purchasing solution that empowers State buyers to manage procurement transactions and execute the purchase of goods and services used in the conduct of State’s activities. Utilizes controls and policy management to maximize value of purchases for state of Ohio. Provides for purchases of all sizes including auctions and reverse bidding.
 - **Ohio Marketplace (eCatalog):** This Ohio Marketplace improves the requisitioner’s search capabilities for goods and services from one site returning appropriate information and pricing for items available on existing DAS contracts. The requisitioner selects the quantity desired and the information is stored in a shopping cart until the requisitioner has completed the order. Implementing purchasing catalogs will improve the speed, accuracy and ease with which commodities are purchased and improve the quality of spend data. The Ohio Marketplace will provide a similar purchasing experience as one would have when buying from an eCatalog such as Amazon. This solution will automate and standardize processes/workflows that will allow the State of Ohio to leverage full purchasing power and realize cost savings.
 - **Travel and Expense:** The statewide process for managing employee expenses included in preparing, performing, and requesting reimbursement for travel incurred while conducting business for the state, by using travel authorization, expense approval, and payment processes in Travel and Expense.

- **Human Capital Management (HCM):** A fully integrated Human Resources Management solution that provides agencies with the ability to track and compensate personnel, from initial hiring through end of service. Provides tools for the collection of employee’s time and labor data that is used to produce payroll checks. Provides employees innovative self-service access to their eligible leave and benefits.
- **ePerformance:** Enables electronic tracking of employee performance related goals and results. This data can then be tracked along with the employee’s labor and training data.
- **Enterprise Learning Management (ELM):** Enables agencies to define and deliver training to employees statewide.
- **Customer Relationship Management (CRM):** Provides the framework for the state to interact with the OAKS service support function including requests, incidents, needs, and inquiries by individuals, vendors, and other users. Provides for the management of work requests and provides for a structured accounting of case management feedback to OAKS users statewide.
- **Portal:** The myOhio portal allows users to access OAKS applications with only one authentication. Employees have access to self-service functionality. Provides the State the ability to communicate to all employees, as well as enabling agencies to target their own employees.

Below are a few metrics on OAKS utilization:

- Payroll supporting over 50,000 employees
- Nearly \$5 billion in voucher transactions are processed monthly
- Over 20,000 state employees utilize OAKS on a daily basis
- Asset tracking in excess of \$4 billion

II. Benefits Overview: OAKS currently provides the following benefits to the State:

- **Increases Efficiency:** OAKS increases efficiency by consolidating common business practices and administrative processes, providing electronic records and automated workflow which reduces the need for manual/paper processes, providing access to timely and accurate data to support improved decision making, and provides operational agility by leveraging the technical capability and best practices of ERP software.
- **Improves Service:** OAKS provides a statewide communication vehicle and easy access to employee self-service. The self-service function translates into more accurate and timely employee data.
- **Reduces Complexity:** OAKS provides single sign-on capability for all OAKS related applications.
- **Delivers Savings:** OAKS conserves agency resources by reducing the need for custom-built systems.

Enterprise Shared Solutions

Ohio Shared Services

Sponsor: Everett Ross, Deputy Director, Office of Budget & Management Ohio Shared Services

Service Line Manager: Quanta Brown, Senior Business Transformation Analyst, Office of Budget & Management Ohio Shared Services

I. **General Description:** Ohio Shared Services (OSS) is a business processing center for common state agency and business vendor administrative transactions with an emphasis on efficiency and customer service. OSS partners with agencies through consolidated management of business activities such as accounts payable, travel and expense reimbursements, vendor management, enterprise content management and contact center assistance. OSS' focus is to deliver a single, standardized approach for processing all business transactions. This standardization is done in an effort to enable state agencies to focus on their core mission.

The goal is to continue to increase OSS participation levels to realize even greater statewide savings and efficiencies.

II. Benefits Overview:

- **Increases Efficiency:** By consolidating common transactional processes, OSS is reducing processing costs and processing time. For example, processing an invoice one way will create more efficiency and reduce costs. Essentially, OSS enables state agencies to repurpose back-office functions towards more citizen-facing priorities.
- **Improves Service:** Service first is the OSS customer service philosophy. OSS works with partner agencies through the Voice of the Customer Program (VOC). The VOC Program includes service level agreements, monthly customer reviews, service management scorecards, contact center trends, customer surveys, and a customer advisory council. This data is used to uncover performance issues, provide information to quickly resolve any challenges, as well as recommend opportunities for continuous improvement.
- **Reduces Complexity:** OSS offers the opportunity to increase business processing standardization across the state. As the number of agencies that leverage OSS increases, the more opportunity there is to create processing standards. Therefore, business vendors have more predictable expectations for interactions with the state.
- **Delivers Savings:** Consolidation and standardization of common business processes will deliver savings. The ability to pool resources will also allow Ohio to take advantage of advancements in technology to improve efficiencies and customer service levels. Cost savings and efficiencies reported by OSS' eight original agency customers equaled \$1.7 million over the first year of operation. The Value Management Office (VMO) is currently reporting \$18M in savings for the 25 participating agencies (Accounts Payable) that have made internal process or staff changes to fully leverage OSS.

Enterprise Shared Solutions

Voice over Internet Protocol (VoIP)

Sponsor: Eric Schmidt, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: Eric Schmidt, DAS OIT
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I. **General Description:** The Voice over Internet Protocol (VoIP) system replaces the aging Centrex telephone system, which dates to the 1980s. The VoIP service offers new features while saving state agencies revenue. With VoIP, the state can save over \$2 million annually in telephone costs.

The VoIP system is hosted by Cincinnati Bell Technology Solutions (CBTS) and uses the computer network to digitally transmit calls instead of using analog telephone lines. State agencies can either buy or lease VoIP phones. The new phone system is available to all state agencies, boards, and commissions, as well as all public colleges and universities, K-12 schools and local governments.

The Centrex system begins at over \$16 a month per user for basic service. Basic service for the VoIP system with Cincinnati Bell starts at \$13 per month. In addition, VoIP eliminates long distance charges for calls in the state of Ohio, which would cut out 90% of the State's long distance charges. It also eliminates the five cents per call that the State paid under Centrex for all local calls. If enough higher education institutions, schools, and local governments adopt the system, the rates will be reduced even further. If 50,000 users move to VoIP, monthly phone costs will drop by about 50 cents per phone per month.

II. Benefits Overview:

- **Increases Efficiency:** VoIP includes many new features that were not previously available with Centrex. Some of the new standard features include: caller ID, call waiting, call history, phone directory, speed dial directory, conference calling and video cameras (some models).
- **Improves Service:** If video and Web collaboration are used, there is the potential for improved customer service and additional savings for time and travel expense.
- **Reduces Complexity:** The migration of all state agencies, boards and commissions to the hosted VoIP solution will reduce complexity and the added costs of managing multiple phone systems. It will get state agencies "out of the phone business" so they can better focus on their mission.
- **Delivers Savings:** As more subscribers enroll, the pricing has a tiered scale and drops below \$13.00 a month based on volume, meaning that the more that use the service, the more the state of Ohio saves. Currently users of the Centrex system pay roughly \$18.00 per month, and this does not include conference bridges, video services, Web collaboration, and many other features that are currently purchased separately. Call center and other services are also available under this contract.

Enterprise Shared Solutions

End Point Protection

Sponsor: David Brown, State Chief Information Security Officer (CISO), Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: David Brown, State CISO, DAS OIT

- I. **General Description:** Today's information security threats include exploits that target vulnerabilities on systems that are so new, no patch is available from the product manufacturer. They also include malware and other attack methods that completely bypass and in some cases disable common anti-virus software. Consumers need a complete solution for Endpoint Protection (EPP) with features beyond antivirus and personal firewall. The additional features will work together to provide an effective layered defense against attacks. The centralized EPP solution will include at a minimum antivirus/antimalware, host firewall, file integrity checking, software whitelisting, port/device control, and host intrusion detection system (IDS). This solution will also help all cabinet agencies comply with the controls stipulated by the Consensus Audit Guidelines (CAG) and the National Institute of Standards and Technology (NIST) Special Publication 800-53.
- II. **Benefits Overview:**
- **Increases Efficiency:** This project will utilize a solution that is centrally administered. This will increase efficiency by leveraging economies of scale to obtain lower costs for endpoint and server protection. It will provide a common management platform, which will require less people to administer EPP. The management platform will also send attack information to the enterprise Security Information and Event Management system for rapid response by trained security professionals.
 - **Improves Service:** By adding host firewall, file integrity checking, software whitelisting, port/device control and a host intrusion detection system, the base service offering of the centralized provider is extended to better fit the needs of a modern government agency.
 - **Reduces Complexity:** This project will reduce purchasing process complexity by using a standardized set of products across the enterprise. It will also reduce complexity by providing a single point of administration, which is easier to maintain.
 - **Delivers Savings:** By preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Enterprise Shared Solutions

Identity Management

Sponsor: Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Tom Croyle, Chief Technology Officer, DAS OIT (External – Citizen & County Service Manager) and Matt Popovich, DAS OIT (Internal/State Service Manager)
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I. **General Description:** Identity Management is a statewide strategic effort to provide user access and authentication from an enterprise perspective. This will serve to provide the customer base with increased efficiency, capabilities, and overall integration for both current and future services.

II. **Benefits Overview:**

- **Increases Efficiency:** The creation of a centralized identity environment allows end users to have a single credential to access a multitude of central IT services. This will reduce the inefficiency of having employees using multiple credentials in multiple systems. It will also reduce the amount of help desk time spent on performing password resets for the many different platforms that are supported.
- **Improves Service:** The development of enterprise identity management functions will provide a consistent means across State government to access core shared services and enterprise solutions as well as access services or applications with the appropriate level of authority. This function will be a critical component in delivering additional shared solutions and services. It is the foundation for being able to deliver reduced sign-on and a single identity for state workers. It will also provide automation and user self-service capabilities for password resets, user provisioning and de-provisioning, and facilitate the implementation of a more comprehensive enterprise security approach.
- **Reduces Complexity:** No longer will customers have to remember multiple passwords for all the different applications that require authentication during the course of their work day.
- **Delivers Savings:** Savings are created through the elimination of redundancy, both through agency consolidation of processes and workflow and the provision of government-wide services to support State Identity Credential and Access Management processes. This results in extensibility of the IT enterprise and reduction in the overall cost of security infrastructure.

Enterprise Shared Solutions

Internet Filtering

Sponsor: David Brown, State Chief Information Security Officer (CISO), Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: David Brown, State CISO, DAS OIT

I. **General Description:** Web filtering tools or Secure Web Gateways help ensure that Web sites accessed by employees are secure and do not contain malicious content that can infect enterprise computers and systems. They also prevent access to inappropriate Web content. Web filters are key protection tools for the enterprise.

II. **Benefits Overview:**

- **Increases Efficiency:** Limiting employee access and filtering Internet content helps ensure that the Web sites accessed are secure and germane to the work being performed by the employee. This helps to eliminate productivity losses that result from time spent accessing inappropriate content and the consequential need to repair compromised devices. Malware is blocked, thereby preventing infections which could lead to loss of data without the employee's knowledge.
- **Improves Service:** Internet filtering centralizes a necessary utility for government workers and standardizes filters across the enterprise.
- **Reduces Complexity:** Logs from these systems provide security personnel with the ability to see which user or computer may have succumbed to a particular threat that would otherwise go undetected. This information allows security teams to quickly identify and remediate potential infections that are obtained from Web sites. A common administration console makes it easier to identify computers that are out of compliance with security policy.
- **Delivers Savings:** Similarly, by preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Enterprise Shared Solutions

Intrusion Protection

Sponsor: David Brown, State Chief Information Security Officer (CISO), Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: David Brown, State CISO, DAS OIT

I. General Description: Intrusion detection Systems (IDS)/Intrusion Prevention Systems (IPS) are critical security architecture components. They enable IT administrators to secure the enterprise environment by:

- Identifying attacks to provide zero-day and pre-patch protection
- Detecting traffic from compromised machines
- Detecting and preventing violations of policy
- Verifying protection
- Protecting network security zone boundaries
- Controlling network access for unmanaged devices

Implementing intrusion prevention technology will produce compliance for all cabinet agencies with controls stipulated by the Consensus Audit Guidelines (CAG) and the National Institute of Standards and Technology (NIST) Special Publication 800-53.

II. Benefits Overview:

- **Increases Efficiency:** IDS/IPS increase efficiency by improving the security of systems, thereby reducing downtime due to system intrusions. Alerts are sent to a security management platform, which then notifies the appropriate personnel of potentially malicious activity. Efficiencies will also be gained by leveraging a common solution set instead of several disparate systems as is the case today. These efficiencies will be both in economies of scale and ease of administration.
- **Improves Service:** IDS/IPS capabilities will be more widely deployed, thus providing greater visibility into the security threats that can affect the enterprise as a whole.
- **Reduces Complexity:** Using a common solution set makes for easier management of the system. Fewer personnel are needed to manage the sensors because duplicate efforts are voided. The same management console can now control many sensors throughout the enterprise.
- **Delivers Savings:** Similarly, by preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Enterprise Shared Solutions

Security Information and Event Management (SIEM)

Sponsor: David Brown, State Chief Information Security Officer (CISO), Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: David Brown, State CISO, DAS OIT

I. General Description: Security Information and Event Management (SIEM) technology establishes a consolidation point for all forms of security monitoring and can be used to detect targeted attacks in their early phases to minimize damage. SIEM tools collect security logs from many different sources and provide real-time event correlation and alerting to potential attacks and security violations. Implementing SIEM technology will make it possible for all cabinet agencies to comply with the controls stipulated in the Consensus Audit Guidelines (CAG) and the National Institute of Standards and Technology (NIST) Special Publication 800-53.

II. Benefits Overview:

- **Increases Efficiency:** The use of SIEM technology increases the security of state information systems by providing rapid automated assessment of security events and alerting to potential attacks. The volume of logs processed by this system far surpasses what a group of human beings could analyze. By having better visibility into security threats, the proper response can be rapidly initiated, thereby reducing the likelihood of a loss of state data.
- **Improves Service:** Through the implementation of SIEM technology, the State of Ohio and their customer's would be able to come into compliance with CAG and NIST. Further, SIEM will serve to be an extension of the current customer service offerings that will give them a greater range of weapons with which they can fight today's Web threats.
- **Reduces Complexity:** The State will use a standardized solution for the SIEM technology, thereby preventing silo approaches using disparate products that result in duplicative maintenance agreements and manpower expenditures. This approach will also provide easier implementation of communications between systems and security devices to the SIEM for log collection.
- **Delivers Savings:** Similarly, by preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Enterprise Shared Solutions

Web Application Firewall

Sponsor: David Brown, State Chief Information Security Officer (CISO), Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: David Brown, State CISO, DAS OIT

I. **General Description:** A Web application firewall (WAF) is an appliance, server plugin, or filter that applies a set of rules to a hypertext transfer protocol (HTTP) conversation. Generally, these rules cover common attacks such as Cross-site Scripting and SQL Injection. By customizing the rules to your application, many attacks can be identified and blocked. Implementing WAF technology will allow all cabinet agencies to comply with the controls stipulated by the Consensus Audit Guidelines (CAG) and the National Institute of Standards and Technology (NIST) Special Publication 800-53.

II. Benefits Overview:

- **Increases Efficiency:** Web applications are a common attack point for government agencies. Web application firewalls protect the application from a wide range of attack methods, and they are capable of virtually patching an application whose vulnerabilities have not been mitigated. This is especially important to legacy applications that cannot be updated because of cost or because the application is no longer under support.
- **Improves Service:** A centralized WAF solution will be able to provide a customized solution to customer agencies that will provide a greater range of protection.
- **Reduces Complexity:** A standardized solution set is utilized instead of several disparate types of solutions that were used by agencies in the past. This allows for more expertise to be developed by multiple people to provide a greater level of support. It reduces the number of people that are needed to manage Web application firewalls, and it ensures consistent application of security policy across the enterprise.
- **Delivers Savings:** Similarly, by preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Enterprise Shared Solutions

Mobile Platform (Strategy)

Sponsor: To Be Determined
Service Line Manager: To Be Determined

I. **General Description:** The goal of this initiative is to establish a set of recommended frameworks and strategies that outline what state agencies should consider when they are designing, building, implementing, and managing mobile applications. The output of the initiative enables agencies to quickly start mobile application development and will create the groundwork for a Mobile Application Competency Center that will serve to further assist agencies in need.

II. **Benefits Overview:**

- **Increases Efficiency:** By establishing set of guidelines and standards for the use of mobile devices and mobile application development, both the provisioning and proliferation of mobile devices throughout the state is greatly aided. Users are able to more quickly and securely consume devices.
- **Improves Service:** An established, repeatable process for the release of mobile devices throughout the state will improve customer interaction, making experiences more common and predictable.
- **Reduces Complexity:** An established process removes consumer confusion around who to engage regarding the procurement of a mobile device and the support of a multitude of platforms further eliminates confusion. Further, a consumer facing Mobile Application Competency Center will provide agencies with guidance and support for their mobile application development needs.

Enterprise Shared Solutions

SharePoint

Sponsor: Glen Coleman, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: Matt Popovich, DAS OIT

I. **General Description:** The creation of an enterprise SharePoint presence would enable consumers to collaborate and work together, regardless of distance, through a centralized, Web based interface. SharePoint provides a central repository for sharing documents, content, calendars, and information. It supports the creation of unique workflows that can automate the movement of information through a defined business process. Features, such as alerts, help keep consumers informed as to when information is modified. In addition, built-in security helps content owners ensure that information remains confidential and is not modified or accessed without the appropriate permissions.

II. Benefits Overview:

- **Increases Efficiency:** SharePoint consolidation will eliminate redundant activities and develop reusable templates and workflows that can be easily deployed throughout the enterprise.
- **Improves Service:** The enterprise consumer will benefit from the recommended SharePoint frameworks and strategies, which provide a common starting point for implementing collaboration tools.
- **Reduces Complexity:** A centralized SharePoint presence would help reduce licensing challenges. In addition, the creation of reusable templates and workflows will simplify and standardize SharePoint implementations throughout the State.
- **Delivers Savings:** SharePoint consolidation will generate savings for Ohio. A larger pool of SharePoint consumers will give Ohio increased leverage in vendor negotiations. In addition, consolidation of the service should result in decreases in hardware, software and staffing costs.

Enterprise Shared Solutions

Virtual Desktop Infrastructure

Sponsor: To Be Determined
Service Line Manager: To Be Determined

I. **General Description:** Enterprise virtual desktop infrastructure (VDI) is an ideal IT Transformation initiative. There are many opportunities for increased savings, security, reliability, and availability that are not readily available in an individual agency focused implementation.

II. **Benefits Overview:**

- **Increases Efficiency:** With the implementation of an enterprise VDI solution the state will adopt improved management practices that can be applied consistently across all agencies. The improvement in management will allow staff to focus more time on other efforts that increase the efficiency of the user environment.
- **Improves Service:** Enterprise VDI service consumers will be provided with a secure, reliable, and managed service to allow them to concentrate on core business functions. This will allow the consumer to provide increased service to the Ohio taxpayers.
- **Reduces Complexity:** Reduced complexity is gained by centralizing the infrastructure and providing redundancy and fail-over capabilities to the consumer. This will ensure the ability to concentrate on core business functions instead of managing an agency-implemented solution.
- **Delivers Savings:** The provisioning of enterprise grade hardware procured in large volumes and shared across the state, where possible, is more reliable and less costly than smaller, agency-implemented environments. VDI cost decreases are also realized through the reduction of the hardware and software infrastructure.

Private Cloud Expansion

SOCC Remediation

Sponsor: Stu Davis, State Chief Information Officer / Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Ralph Barber, DAS OIT SOCC Remediation Manager

I. General Description: This project is designed to:

- **Consolidate State IT and data processing facilities** to reduce or eliminate real estate and power costs associated with maintaining disparate data processing centers on an agency by agency basis;
- **More aggressively virtualize computing environments** (e.g., servers, storage, network devices, software) to reduce the duplication, cost and complexity of obtaining, operating and maintaining these environments;
- **Standardize computing environments to drive operating and maintenance agility, reduce agency computing costs and drive synergies in asset procurement** (buying power), operations (labor effectiveness), maintenance (automation), software licensing and administration (aggregation) and other outcomes associated with IT standards;
- **Consolidate IT Infrastructure elements**, effectively from the “floor of the data center” to the “operating system prompt” to minimize or eliminate duplication of hardware, networking, software, support and maintenance services;
- **Implement modern IT Infrastructure Management practices** (i.e., ITIL®, CoBIT®) to both increase service levels and reduce manual efforts associated with the operation and maintenance of IT Infrastructure elements; and
- **Reduce the State’s data processing risk profile** as it pertains to maintaining IT Infrastructure assets in a physically secure, fault tolerant and robust facility (i.e., the SOCC).

II. Benefits Overview:

- **Increases Efficiency:** By reducing the number of State staff required to operate the State’s data center and IT Infrastructure and providing the State the opportunity to redeploy IT assets to application and service focused offerings. In addition, the SOCC Remediation project will focus on driving higher levels of server, storage and network utilization via virtualization and a reduction in overlapping computing assets (e.g., purchases, maintenance, licenses, etc.).
- **Improves Service:** By implementing modern IT practices, tools and automation in the context of committed service level agreements.
- **Reduces Complexity:** By reducing the physical counts for servers, storage devices, security appliances, network ports and routes, software deployed and managed.
- **Delivers Savings:** Over the 10 year term of the agreement with the Contractor, the State anticipates savings in excess of \$300,000,000.

Private Cloud Expansion

Data Center / LAN Implementation

Sponsor: Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Greg Gicale, DAS OIT

- I. **General Description:** The State of Ohio Computer Center (SOCC) is the State’s primary data center, which currently houses approximately 1,200 applications and 3,800 server images. This represents more than half of all servers in State government. The SOCC is also a termination point for virtually all network service providers used by the State. However, the SOCC is underutilized as a data center.

The Data Center Local Area Network (LAN) implementation will support the One Network in the SOCC and other data center(s) or co-locations sites when designated. This LAN will enable the migration of agencies to the second floor of the SOCC.

II. Benefits Overview:

- **Increases Efficiency:** Standardization and reduction in duplication of IP addresses and security controls will reduce complexity in the network which will allow for more efficient management of the network.
- **Improves Service:** By standardizing data center and local area network communications on the One Network, consumer agencies will have greater ability to provide better, more robust and reliable data communications services for themselves and across agency boundaries where needed.
- **Reduces Complexity:** The Data Center LAN implementation will reduce complexity by implementing a single authority for owning, assigning, authorizing, and maintaining IP address assignments for distributed agency use.
- **Delivers Savings:** Standardization within the data center and local area network leverages collective buying power and supports a streamlined maintenance and support program for telecomm and networking equipment, services, and supports.

Private Cloud Expansion

Mainframe Consolidation

Sponsor: Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Greg Pennington, DAS OIT

I. **General Description:** While the overall number of mainframe based applications continues to decrease within the State of Ohio, many large and critical applications still run on mainframes. As of the writing of this document, three IBM mainframe environments exist that are being explored for consolidation.

II. Benefits Overview:

- **Increases Efficiency:** As overall centralization of the mainframe environment is achieved, a pool of dedicated mainframe talent can be shared among agencies allowing consumers a greater degree of access and quicker resolution of operational issues.
- **Improves Service:** Centralization of the current mainframe environment will provide customer agencies with a wider range of services that they would not have been able to enjoy in a federated environment. Specifically, disaster recovery and software maintenance contracts can be leveraged as a centralized entity.
- **Reduces Complexity:** Consolidation of mainframe resources provides consumers with a single point of contact to assist in resolving operational issues.
- **Delivers Savings:** The cost of maintaining multiple mainframes exceeds the cost of maintaining one or two. As overall utilization improves, monitoring and administration costs will be reduced, and a pool of dedicated mainframe talent can be shared among multiple agencies.

Private Cloud Expansion

Storage Consolidation

Sponsor: Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Greg Pennington, DAS OIT

I. **General Description:** The Storage Consolidation project seeks to build repeatable processes that support the migration of various physical and virtual server topologies to a centralized data center. This includes a template for adoption along with sets of standards and procedures to make the process as replicable and as quick as possible.

II. **Benefits Overview:**

- **Increases Efficiency:** Rapid provisioning of storage reduces potential outages as a result of storage out-of-space conditions. Storage virtualization reduces other system outages by enabling applications to be moved seamlessly to other storage platforms. It also prevents consumers from having to make long term investment in storage by providing capacity in an as-needed basis.
- **Improves Service:** Modern virtualized storage systems can be rapidly provisioned, cutting the time to resource utilization and resolution of out-of-space conditions. Centralized storage monitoring will also reduce the number of these incidents.
- **Delivers Savings:** Storage systems are often underutilized due to overprovisioning and dispersion of storage arrays. Consolidation of storage, when combined with efficiency measures such as thin provisioning, de-duplication and compression should result in significant savings in this very expensive aspect of data center infrastructure.

Private Cloud Expansion

WAN Core Implementation (Ohio One Network)

Sponsor: John Conley, Chief Information Officer, Ohio Board of Regents and Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Spencer Wood, Chief Operating Officer, DAS OIT

I. **General Description:** The goal of this effort is to bring customer agencies to the One Network WAN service as a method to consolidate the current network infrastructure around the state. By creating a single network, it reduces the complexity of managing a broad agency network, while creating an economy of scale that allows for agency cost savings.

II. **Benefits Overview:**

- **Increases Efficiency:** The WAN Core will leverage the existing network operations centers and service/support organizations in place at OARnet and the Department of Administrative Services (DAS) Office of Information Technology (OIT) and supplement them with consumer agency staff, skills, knowledge, and abilities as they come onto the One Network WAN service.
- **Improves Service:** Consumer agencies will have greater ability to reach their remote sites to provide better, more robust and reliable data communications services for themselves and across agency boundaries where needed. Standardization across the WAN also leverage collective buying power and supports a streamlined maintenance and support program for telecomm and networking equipment
- **Reduces Complexity:** By having a singular network with similar management, customer agencies won't have to deal with the complexities of management, support and contract negotiations for their network support.
- **Delivers Savings:** Based upon preliminary results from two agencies, the Network Operations team believes net 30%-50% savings are possible on WAN core consolidation.

Private Cloud Expansion

Database Activity Monitoring

Sponsor: David Brown, State Chief Information Security Officer (CISO), Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: David Brown, State CISO, DAS OIT

I. **General Description:** Database activity monitoring technology records access to database tables and fields and issues inappropriate access or activity alerts when certain predefined thresholds are exceeded. The system is designed to prevent access to sensitive data by unauthorized parties and to record all access attempts to protected data. This technology helps state agencies comply with Ohio Revised Code Section 1347.15.

II. **Benefits Overview:**

- **Increases Efficiency:** This technology reduces the amount of time it takes to identify security policy violations caused by inappropriate access. It will also prevent access to sensitive data by unauthorized persons. Features within the technology can assist agencies with data classification to identify sensitive data stores.
- **Improves Service:** Security policy violations are identified in real-time and appropriate actions such as blocking and/or alerting can then occur. This technology is capable of monitoring many databases at one time, which is not possible with human efforts alone.
- **Reduces Complexity:** This technology is designed to reduce the performance impacts to systems caused by other forms of security logging and monitoring. By using a common solution set, administration is simplified and security policies can be uniformly applied.
- **Delivers Savings:** Similarly, by preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Private Cloud Expansion

Disaster Recovery

Sponsor: Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Spencer Wood, Chief Operating Officer, DAS OIT and Tim Nguyen, Chief Information Officer, Opportunities for Ohioans with Disabilities
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I. **General Description:** In order to meet the requirements for synchronous data replication, a Metro site will be located within 50 km of the SOCC. The site will be the first line of defense in protecting SOCC based applications. In the Metro site, all power, cooling, network, storage, servers, and facilities support are in place at all times. Because of the near proximity of the metro site to the SOCC, critical applications requiring short or zero RPO and RTO can be accommodated, a capability that would not be possible in a remote DR site-only configuration. The Metro site should also be the primary source for data transfer to the Remote site. As the data in the metro site is for the most part inactive, there will be no impact on production applications in performing a data transfer.

II. Benefits Overview:

- **Improves Service:** Consolidated and established disaster recovery services will result in quicker return to operation and less potential for data loss.
- **Reduces Complexity:** Having a limited number of disaster recovery locations (one or two) reduces the possibility that the disaster recovery site can be compromised, and allows better focus of attention by disaster recovery team members.
- **Delivers Savings:** Consolidated disaster recovery has the economic value of eliminating the time and expense of maintaining multiple independent disaster recovery sites. Multiple contracts with many different vendors for disaster recovery resources are eliminated. The State can negotiate with a single vendor to provide a constant standard for disaster recovery, resulting in cost saving through economy of scale.

Private Cloud Expansion

Incident Response

Sponsor: David Brown, State Chief Information Security Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: To Be Determined

I. **General Description:** Incident response is the detection, containment, remediation, and resolution of security and privacy incidents. Incident response is coordinated by a well-trained incident response team which results in quick containment, accurate determination of root-cause, and proper remediation, all of which limit data loss and resultant costs to the State of Ohio. The incident response team uses forensic equipment to accurately identify attack methods and sources without compromising important electronic evidence. The team partners with law enforcement agencies to provide greater potential for successful prosecution.

II. Benefits Overview:

- **Increases Efficiency:** The incident response team improves security of state data by rapidly identifying, containing, and remediating security and privacy incidents, thereby reducing the potential consequences of the incident, saving money and preventing large volumes of data loss. An in-house forensics capability dramatically reduces the amount of time to determine root-cause analysis of the events so that proper security controls can be instituted and the affected system restored to service.
- **Improves Service:** The analysis of the incident response team provides feedback to security architects to help ensure the effectiveness of security controls. The incident response team also provides support for HR investigations of employee misuse of computer systems by performing forensic analysis, log data, and other electronic evidence.
- **Reduces Complexity:** A well planned and exercise incident response capability reduces the likelihood of random reactions to security incidents. Team members know their roles and responsibilities, react in a predictable, coordinated, and well organized manner, and the incident is resolved much faster. Random actions that are not well planned can have significant impact on the investigation and result in much higher costs to the state as well as greater loss of data.
- **Delivers Savings:** By efficiently responding to security and privacy incidents early and in an organized well-planned approach, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Costly downtime due to remediation of damaged infrastructure and systems

Private Cloud Expansion

VM Cluster Consolidation

Sponsor: Spencer Wood, Chief Operating Officer, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Matt Popovich, DAS OIT

I. **General Description:** This project involves utilizing the current processes for onboarding agencies into new virtual server environments and continuing to centralize the State of Ohio virtual server environment.

II. **Benefits Overview:**

- **Increases Efficiency:** The expected build by the Data Center Operations team of private cloud delivery systems will allow consumers access to customized applications on servers deployed within minutes as opposed to days or weeks. This emphasis on speed of delivery and standardized offerings will permit Agency application development teams to explore alternatives in design which otherwise would have been prohibited by project timelines.
- **Improves Service:** By establishing enterprise agreements for cloud-based infrastructure to ensure the statewide enterprise consumes cloud services in a way that is consistent, secure, and robust. This will allow the State to establish enterprise-wide strategic cloud partnerships.
- **Reduces Complexity:** The project seeks to build a repeatable process to support the migration of various physical and virtual servers to the central virtual environment along with a template and support services. This will help to guide agencies through the complexities of a server migration and eliminate barriers.
- **Delivers Savings:** The concept of server virtualization takes advantage of the incredible gains made in CPU processor performance and the underutilized nature of these processors. By having a single physical server run multiple ‘virtual’ servers, server costs can be dramatically reduced. Private cloud provisioning extends these same virtualization gains to storage and the network, reducing costs drastically and providing many operational advantages as well.

Operational Support Initiatives - Security

Vulnerability Management

Sponsor: David Brown, State Chief Information Security Officer (CISO), , Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: David Brown, State CISO, DAS OIT

I. **General Description:** Vulnerability management is the application of processes and tools used to detect, prevent, and correct security vulnerabilities. The primary objective for the Vulnerability Management project is to identify an enterprise solution to manage the process of identifying, assessing, and remediating information vulnerabilities across the state.

II. Benefits Overview:

- **Increases Efficiency:** A vulnerability management program reduces risk to state information assets. Systems are less likely to be attacked, which increases system availability and maintains the confidentiality of state data. Vulnerabilities in applications and systems can be corrected before the application or system is placed in production. Application developers can identify weaknesses in code to prevent vulnerable code from being reused in subsequent projects.
- **Improves Service:** Remediation of vulnerabilities in a timely fashion prevents attacks and resultant system outages and data loss.
- **Reduces Complexity:** An enterprise vulnerability management system reduces complexity by providing a common administration console, reports that are able to indicate vulnerable software packages in use by many state agencies and common coding errors that exist in multiple applications throughout state government. This makes it possible to rapidly identify systems and applications in all agencies that may be vulnerable to new exploits and remediate these vulnerabilities before an attack is launched, saving tremendous amounts of time because multiple vulnerability scanning solutions would not be needed to obtain this information.
- **Delivers Savings:** Similarly, by preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Operational Support Initiatives - Security

Data Loss Prevention

Sponsor: David Brown, State Chief Information Security Officer (CISO), Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: David Brown, State CISO, DAS OIT

I. General Description: Data loss prevention technology is designed to detect and prevent data exfiltration (unauthorized copy, transfer or retrieval of data), unauthorized transmission of sensitive data or clear-text transmission of sensitive data. Monitors data in use, in transit, and at rest. This will help prevent the loss of sensitive information. Implementing data loss prevention technology will produce compliance for all cabinet agencies with controls stipulated by the Consensus Audit Guidelines (CAG) and the National Institute of Standards and Technology (NIST) Special Publication 800-53.

II. Benefits Overview:

- **Increases Efficiency:** DLP technology increases the security of state data helps prevent the loss of sensitive data that would otherwise impair government operations and potential result in identify theft for affected individuals.
- **Improves Service:** DLP technology automatically encrypts sensitive data and takes other pre-defined actions to prevent situations that could result in regulatory violations that would subject the state to significant fines or other ramifications. It also warns users about potentially dangerous actions to help them change behavior and reduce security risk.
- **Reduces Complexity:** By using a common solution set, administration is simplified and security policies can be uniformly applied.
- **Delivers Savings:** Similarly, by preventing, or by catching security and privacy incidents early, the State of Ohio will be able to avoid or reduce:
 - Costly damage to applications and infrastructure
 - Cost of remediation of security incidents
 - Fees for noncompliance on security and privacy regulatory requirements
 - Costly downtime due to remediation of damaged infrastructure and systems

Operational Support Initiatives – Financial Management

IT Asset Management Plan

Sponsor: Steve Boudinot, Business Manager, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: Stacey Green, DAS OIT Business Office
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I. **General Description:** Currently all OIT assets are physically and financially accounted for per administrative rule and agency policy. In order to successfully complete this project, the Asset Management Team will develop an Asset Management Plan that takes into consideration not only the physical and financial aspects of assets but also takes into account the operational and other aspects of assets such as maintenance and software. The plan will include policies and procedures to accurately account for and track enterprise technology assets.

II. Benefits Overview:

- **Increases Efficiency:** Managing IT assets in a comprehensive manner will not only track the assets physically and financially, but avoid buying unnecessary equipment and software, duplicative maintenance, and ensure license compliance for software. Also, a comprehensive view of an asset will give total cost of ownership of an asset, which affects the cost of an IT service. An asset management system that includes software and license compliance will ensure the proper software security is installed on assets.
- **Improves Service:** Having one asset management plan that tracks the IT asset throughout the lifecycle will improve the monitoring and control of the asset. This control will enhance the process used to resolve outages and system issues in a timelier manner.
- **Reduces Complexity:** Establishing a process for transferring Assets to OIT throughout the project will reduce confusion and allow for faster decision making.
- **Delivers Savings:** Identifying options to capture all defined and managed centralized assets will provide the Enterprise with comprehensive data to capture total cost of ownership for management decision making.

Operational Support Initiatives – Financial Management

IT Cost Recovery

Sponsor: Steve Boudinot, Business Manager, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: Doug Forbes, DAS OIT Business Office

I. **General Description:** A rate model will be created that is transparent, SWCAP compliant that includes cost recovery, market based benchmarks and a model that is dynamic in nature.

II. **Benefits Overview:**

- **Increases Efficiency:** The new rate model will allow OIT to quickly determine the rate for new services and to be flexible and adaptable to quickly adjust rates for existing services.
- **Improves Service:** By creating a model that utilizes market analysis, OIT management will be better informed to make decisions regarding each service.
- **Reduces Complexity:** Developing a rate model that is utilization based, bundled, adaptable and stable will allow agencies to closely estimate their expenses and control costs.

Operational Support Initiatives – Financial Management

IT Expenditure Model

Sponsor: Steve Boudinot, Business Manager, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager:

I. **General Description:** With the launching of IT Transformation, it is important for the initiative to measure IT expenditures of the State of Ohio. This project team serves to create an automated process for the timely reporting of operational and development spending. The IT Expenditure Model will enable consistent and automated reporting of enterprise IT spending, that will be used to document and report on IT expenditures and Transformation progress.

II. **Benefits Overview:**

- **Increases Efficiency:** Reduce complexity in expense account codes by providing up to date expense account codes that are current, accurate and allow expenses to be broken down by type (i.e. Operational vs. Development). This will provide the State of Ohio with the ability to clearly understand costs in order to better manage and control expenses.
- **Improves Service:** Provides greater insight to executives about the success of the IT Transformation effort and an understanding of statewide savings created through the initiative. The report would allow executives to make decisions about the direction of both IT transformation and the enterprise IT unit.
- **Reduces Complexity:** Creating an automated process for the timely reporting of operational and development spending will enable consistent and reliable reporting of enterprise IT spending that will be used to document and report on IT expenditures and Transformation progress.

Operational Support Initiatives – Financial Management

IT Reinvestment Model

Sponsor: Steve Boudinot, Business Manager, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager:

I. **General Description:** Design a model for investing state resources in information technology. The model may add to or replace existing funds, charges, and mechanisms for supporting IT development. The IT Investment model will be flexible enough to provide resources where needed in the IT Optimization effort and extend the efficiencies realized through IT Optimization.

II. **Benefits Overview:**

- **Increases Efficiency:** Identifying funding methods and sources for investment in IT to drive future savings achieved through consolidation including utilizing IT savings realized from the Transformation Program.
- **Improves Service:** This process will serve to improve all services for the State of Ohio as it will create available money for the improvement and expansion of current and in development services offered to the customers.
- **Reduces Complexity:** The state will have a source of funds upon which to draw to continuously improve and enhance its IT systems in order to achieve the state's goals.
- **Delivers Savings:** The IT reinvestment model will extend the efficiencies realized through IT Transformation and be flexible enough to provide resources where needed in the IT Optimization effort. As a result of consolidation, the enterprise will spend less on IT, and an opportunity will be lost if the state fails to reallocate and reinvest the savings realized.

Operational Support Initiatives – Strategic Planning, Sourcing and Portfolio Management

Enterprise IT Smart Sourcing

Sponsor: Katrina Flory, Chief Administrator, Department of Administrative Services (DAS) Office of Information Technology (OIT)

Service Line Manager: Curtis Brooks, DAS General Services Division and Eric Glenn, DAS OIT

I. General Description: This project is to continually initiate, execute, and manage enterprise sourcing options, contracts, and agreements, and manage vendor relations that will support agencies business needs and mission.

II. Benefits Overview:

- **Increases Efficiency:** Standardized contracts, management practices, products, and services that are delivered to state agencies will reduce system support costs and result in more effective and consistent services being delivered to state entities. Additional benefits include:
 - Enterprise agreements that leverage the state’s collective buying power and create economies of scale
 - Reduction in the number of steps in the new procurement process
 - Reduction in the procurement time between service request and fulfillment
- **Improves Service:** This initiative will improve customer interaction with the central IT provider through the offering of enhanced solutions and services for consumers with regard to IT acquisition and investment.
- **Reduces Complexity:** Simplicity and effectiveness will be gained through a reduction in the number of steps in the procurement process. Additionally, complexity is reduced by providing enhanced process documentation and training. Multiple separate procurement processes that are redundant and often compete in some steps will be combined and streamlined to further remove complexity.

Enhanced relationships characterized by open communication and clear expectations between Department of Administrative Services, colleague agencies, and IT vendors will increase transparency and remove ambiguity in process.

- **Delivers Savings:** Customers will benefit from this project’s outputs as there will be a reduction of duplicative IT investments being made by state entities and the State will be able to centralize and consolidate its buying power and develop economies of scale. This will allow State entities to devote their attention to fulfilling their missions and serving the Citizens of Ohio.

Operational Support Initiatives – Strategic Planning, Sourcing and Portfolio Management

Enterprise IT Strategic Planning

Sponsor: Katrina Flory, Chief Administrator, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: Carolyn Chavanne, DAS OIT
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- I. **General Description:** This project will strengthen Ohio’s IT strategic planning and IT investment planning capabilities, establish the necessary strategy management structure within OIT, and drive statewide IT planning through restructuring and functionally aligning people, process, technology, and policy factors within the Department of Administrative Services (DAS) Office of Information Technology (OIT) and across state agencies.

The project recommends necessary additions, enhancements and changes to the current planning and ancillary processes, including training and implementation guidance.

II. **Benefits Overview:**

- **Increases Efficiency:** Through a functional realignment, Office of Information Technology will eliminate redundancy and conflicting and competing work cycles present in the current planning process for the State and all its agencies. A refocus on priorities important to the citizens of Ohio will enable OIT to define and develop the capabilities and competencies that directly meet agencies business objectives and the needs of their constituencies.
- **Improves Service:** The introduction of a comprehensive and integrated IT strategic planning process will establish a decision-making framework for the State’s CIO and leadership offices. This framework will enable DAS OIT and the State of Ohio to determine whether its programs are successful and effectively meeting the needs of its consumers.
- **Reduces Complexity:** Complexity is eliminated through enhancing Enterprise IT Strategic Planning in direct alignment with the agencies’ business objectives and providing ample clarity in roles and responsibilities of resources creating an increase in the velocity of processes and remove unnecessary layers of idle and bureaucratic steps.
- **Delivers Savings:** Cost savings will primarily be achieved through the implementation of appropriate consolidation initiatives, solution standardizations around shared services, and aggregating procurement through effective sourcing strategies.

Operational Support Initiatives – Strategic Planning, Sourcing and Portfolio Management

Enterprise Application Organization Build

Sponsor: Deven Mehta, Deputy Director, Department of Administrative Services (DAS) Office of Information Technology (OIT)
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Service Line Manager: Deven Mehta, Deputy Director, DAS OIT
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I. **General Description:** The build out of the enterprise applications organization will establish the vision, approach, standards, and organizational structure for enterprise applications and service delivery across the state enterprise. This delivery organization and governance model will be responsible for developing a strategy for application rationalization, designing a center of excellence responsible for establishing standards and processes, and creating domain specific service delivery organizations to ensure the expanded and efficient use of enterprise applications throughout the State.

II. Benefits Overview:

- **Increases Efficiency:**
 - Promote efficient delivery of solutions.
 - Increase resource savings through economies of scale, resource pooling, and the elimination of duplicative technologies allowing effective use of State professionals/assets.
- **Improves Service:**
 - Reduce technology gaps in specific categories of applications that detract from efficient and effective service delivery in key areas.
 - Increase the achievement of baseline performance objectives for specific categories of applications.
- **Reduces Complexity:**
 - Reduce the number of agency applications through consolidation, migration, and retirement activities to improve the business value delivered by the application portfolio.
- **Delivers Savings:**
 - Reduce overall IT cost by extending existing enterprise applications to serve state agencies.
 - Reduce the number of languages, architectures, and runtime environments in agency application portfolios.
 - Eliminate duplicative applications that serve the same business function.

Operational Support Initiatives - Network

Enterprise Internet Protocol Address Resolution

Sponsor: John Conley, Ohio Board of Regents & Spencer Wood, Department of Administrative Services
Office of Information Technology

Service Line Manager: Jack Taylor, Department of Transportation

I. **General Description:** This project will pave the way to making enterprise IT shared solutions accessible to all state agencies. Ohio’s decentralized IT environment currently makes this goal a challenge. The Enterprise Internet Protocol (IP) Address Resolution project is a key technical infrastructure initiative that will help ensure that all of the computing devices in Ohio can be uniquely identified, which will enable all entities to take advantage of enterprise services and more easily communicate with one another. (Please note that the IP address is a number given to each computer on the Internet. It is like a postal address or telephone number, but for the computer. IP defines how communication from one address to another works. Each computer has at least one IP address that identifies it to all other devices.)

II. **Benefits Overview:**

- **Increases Efficiency:** Agencies that have overlapping IP addresses cannot fully participate in the enterprise shared solutions that will be delivered as a result of the IT Optimization program. This project will eliminate any overlapping IP addresses and make it possible for all parties to take advantage of the efficiencies that will be realized through the new enterprise offerings. Standards will be implemented to provide predictable and reliable service.
- **Improves Service:** In order to avoid any disruptions in service, this project will identify and resolve IP addressing conflicts prior to integrating agency networks² onto the newly designed enterprise wide area network (WAN)³. This project is critical to being able to integrate certain networks and data centers into the new enterprise model.
- **Reduces Complexity:** By ensuring that all agencies have unique IP addresses, communications between governmental entities will be simplified. In addition, resolving any IP conflicts will allow agencies to take full advantage of enterprise services, allowing them to re-focus their internal IT resources on work that is directly related to accomplishing their core mission.
- **Delivers Savings:** Agencies with conflicting IP addresses will not be able to recognize the savings from IT Optimization initiatives, such as WAN and Voice over Internet Protocol (VoIP), until the IP conflicts are resolved.

² A network is a system of computers and other devices (such as printers) that are connected to each other and used to access and share information.

³ A WAN spans a large geographic area, such as a state, and connects multiple smaller networks. The Internet is an example of the most commonly known WAN.

Appendix B: NASCIO 2014 State CIO Top 10



Priority Strategies, Management Processes and Solutions	NASCIO PRIORITY	OHIO PRIORITY
1. Security: risk assessment, governance, budget and resource requirements, security frameworks, data protection, training and awareness, insider threats, third party security practices as outsourcing increases, determining what constitutes “due care” or “reasonable”	✓	✓
2. Consolidation / Optimization: centralizing, consolidating services, operations, resources, infrastructure, data centers, communications and marketing “enterprise” thinking, identifying and dealing with barriers	✓	✓
3. Cloud Services: scalable and elastic IT-enabled capabilities provided “as a service” using internet technologies, governance, service management, service catalogs, platform, infrastructure, security, privacy, data ownership, vendor management, indemnification, service portfolio management	✓	✓
4. Project and Portfolio Management: project management discipline, enterprise portfolio management (EPM), oversight, portfolio review, IT Investment Management (ITIM), training/certification of staff, traceability to mission and strategy, scope management, execution	✓	✓
5. Strategic IT Planning: vision and roadmap for IT, recognition by administration that IT is a strategic capability; integrating and influencing strategic planning and visioning with consideration of future IT innovations; aligning with Governor’s policy agenda	✓	✓
6. Budget and Cost Control: managing budget reduction, strategies for savings, reducing or avoiding costs, dealing with inadequate funding and budget constraints	✓	✓
7. Mobile Services/Mobility: devices, applications, workforce, security, policy issues, support, ownership, communications, wireless infrastructure, BYOD	✓	✓

⁴ “State CIO Priorities for 2014.” NASCIO.org. 2013. National Association of State Chief Information Officers. 5 November 2013 <http://www.nascio.org/publications/documents/NASCIO_StateCIOTop10For2014.pdf>.

Priority Strategies, Management Processes and Solutions	NASCIO PRIORITY	OHIO PRIORITY
8. Shared Services: business models, sharing resources, services, infrastructure, independent of organizational structure, service portfolio management, service catalog, marketing and communications related to organizational transformation, transparent charge back rates, utility based service on demand	✓	✓
9. Interoperable Nationwide Public Safety Broadband Network (FirstNet): planning, governance, collaboration, defining roles, asset determination	✓	✓
10. Health Care: the Affordable Care Act, health information and insurance marketplaces, health enterprise architecture, assessment, partnering, implementation, technology solutions, Medicaid Systems (planning, retiring, implementing, purchasing), eligibility determination	✓	✓

Priority Technologies, Applications and Tools	NASCIO PRIORITY	OHIO PRIORITY
1. Cloud computing: software as a service	✓	✓
2. Security enhancement tools: continuous diagnostic monitoring (CDM), digital forensics	✓	✓
3. Mobile Workforce: technologies and solutions	✓	✓
4. Enterprise Resource Planning (ERP)	✓	✓
5. Virtualization: servers, desktop, storage, applications, data center	✓	✓
6. Legacy application modernization/renovation	✓	✓
7. Business Intelligence (BI) and Business Analytics (BA): applications, big data	✓	✓
8. Disaster Recovery/Business Continuity	✓	✓
9. Identity and access management	✓	✓
10. Networking: voice and data communications, unified	✓	✓