



# ADOA - ASET

Arizona Strategic Enterprise Technology

## Project Investment Justification

Version 01.01

A Statewide Standard Document for Information Technology Projects

### Project Title:

**Data Center Network Managing and Monitoring**

Agency Name:	ADOA-ASET
Date:	October 22, 2013
Agency Contact Name:	Mike Lettman
Agency Contact Phone:	602-542-0030
Agency Contact Email:	Mike.Lettman@azdoa.gov

[Hover for Instructions](#)

## I. Management Summary\*

In Fiscal Year 2014 (FY14), a number of transformation initiatives were prioritized by Governor Janice K. Brewer, proposed in her budget and subsequently codified into law. Included in the initiatives are a series of measures designed to further protect the State against the ever-increasing threats to its systems and data from a wide range of internal and external sources.

In support of these objectives, the Arizona Department of Administration's Arizona Strategic Enterprise Technology Office (ADOA-ASET) will utilize security assessment information collected in FY13 to analyze and prioritize critical firewall security gaps within the State. In partnership with other State agencies, ADOA-ASET will also research and evaluate firewall technologies currently available in the marketplace. With the information gathered as part of this initiative, a comprehensive firewall solution will be selected and implemented to address identified security gaps.

## II. Project Investment Justification (PIJ) Type\*

Yes  No Is this document being provided for a Pre-PIJ / Assessment phase?

If Yes,

Identify any cost to be incurred during the Assessment phase.	\$
Based on research done to date, provide a high-level estimate or range of development costs anticipated for the full PIJ.	\$

Explain:

Yes  No Will a Request for Proposal (RFP) be issued as part of the Pre-PIJ or PIJ?

## III. Business Case

### A. Business Problem\*

While assessment data collected in FY13 identified security vulnerabilities in a subset of State systems and web applications, additional information is needed regarding the firewall capabilities currently in place across the State. Firewall technologies, which are used to restrict or prevent potentially malicious network traffic, have continued to evolve. However, information regarding where and how these are being used is lacking. In order to assess and address potentially critical gaps in firewall protections, ADOA-ASET will identify and partner with State agencies with similar security needs that:

- Lack this technology, thereby exposing the Agency and interconnected State systems to potential risks
- Require more current or advanced technology capable of providing more secure protections
- Have implemented firewall solutions with high maintenance costs and sustainability issues
- Require life cycle replacement to avoid product malfunctions

### B. Proposed Business Solution\*

In alignment with ADOA-ASET's strategic goals, this project will identify currently available firewall technologies that can further protect the State from external threats to its systems and

data. Implementation of comprehensive and up-to-date firewall security devices and software will provide ADOA and other State agencies with additional protective barriers against malicious internet traffic and unauthorized access.

Key efforts of this project will include an analysis of current State agency firewall protections to identify and prioritize security gaps, as well as research and selection of leading edge or “next-generation” firewall technologies capable of addressing those gaps. With the information gathered, ADOA-ASET will propose specific implementations of selected firewall protections, where feasible and most cost-effective for the State.

**C. Quantified Benefits\***

<input checked="" type="checkbox"/>	Service enhancement
<input type="checkbox"/>	Increased revenue
<input checked="" type="checkbox"/>	Cost reduction
<input checked="" type="checkbox"/>	Problem avoidance
<input checked="" type="checkbox"/>	Risk avoidance

Explain:

This project will enhance services, reduce costs, avoid problems and mitigate risks by:

- Adding firewall technology that is not currently in place
- Reducing future maintenance, support, and life cycle replacement costs
- Implementing advanced cyberattack detection and prevention capabilities offered by next-generation firewall technologies

**IV. Technology Approach**

**A. Proposed Technology Solution\***

ADOA-ASET will evaluate and select vendors capable of providing a comprehensive suite of leading edge firewall technologies that can meet the wide-ranging security needs across the State. These technologies provide active monitoring and filtering capabilities that can restrict internet traffic based on content.

While the selected tools will be implemented initially within the ADOA environment, they are expected to offer a standardized and cost-effective solution for other State data centers that may require firewall protection. Costs in this PIJ reflect the acquisition of firewall hardware devices, also known as “appliances,” as well as licensing for the selected vendor’s software suite, including maintenance and support for two (2) additional years.

The breakdown of costs is based on limited research conducted by ADOA-ASET and partner agencies regarding these technologies, as well as the likely number of implementations that can be accommodated with available funding. The proposed solution will be re-evaluated for renewal or replacement with new technology prior to the end of the three (3) year period.

**B. Technology Environment**

Although firewall technologies exist within the ADOA environment, some of these may need to be replaced with next-generation firewall technologies to provide appropriate levels of security

control. In other State data centers, firewall protections are likely to be lacking or outdated, which presents potential security risks throughout State systems and web applications. The selected firewall technologies will need to be integrated into the established data center environments.

**C. Selection Process**

The Security, Privacy and Risk team within ADOA-ASET (ASET/SPR) will work in partnership with State agency leadership to identify business needs and security gaps, and subsequently select a group of firewall technologies that can help to address those gaps based on the Gartner Magic Quadrant.<sup>®</sup> Leading Magic Quadrant<sup>®</sup> vendors that are on State contract will be asked to provide demonstrations of their proposed solutions to help further define business requirements and selection criteria. Gartner is a respected research and advisory firm that produces qualitative analysis and performance information about technologies currently available in the marketplace.

Upon review of the available options and costs, the State’s Chief Information Security Officer (CISO) will recommend a single vendor’s solution to the State Chief Information Officer (CIO) for further consideration and approval. Once approved, deployment will be determined based on a prioritization of security risks that can be addressed within the project’s budget and time constraints.

**V. Project Approach**

**A. Project Schedule\***

**Project Start Date:** 11/04/13      **Project End Date:** 6/13/14

**B. Project Milestones**

Major Milestones	Start Date	Finish Date
Initial gap analysis conducted	11/04/13	12/31/13
Magic Quadrant <sup>®</sup> vendors on State contract identified	11/04/13	12/31/13
Vendor products demonstrated and requirements established	1/06/14	2/07/14
Bid process completed and vendor selected	2/10/14	3/07/14
State leadership collaboration and solution determined by CISO	3/10/14	3/28/14
Vendor selection presented by CISO to CIO and approval received	3/31/14	4/11/14
Specific vendor technologies purchased and deployed	4/14/14	6/13/14

**VI. Roles and Responsibilities**

**A. Project Roles and Responsibilities**

**Agency Director:** Brian C. McNeil, ADOA Director

**Agency Chief Information Office (CIO):** Aaron V. Sandeen, ADOA Deputy Director, State CIO

**Project Sponsor:** Mike Lettman, Chief Information Security Officer (CISO), ADOA-ASET

**Project Manager:** Nancy Brister, Project Manager, ADOA-ASET

**Technical Project Manager:** Hector Virgen, Information Security Manager, ADOA-ASET

**Firewalls Implementation Lead:** Ken Dworshak, Networking Analyst, ADOA-ASET

**NOTE:** Above individuals may be replaced with group members with equivalent skill set.

**B. Project Manager Certification**

- Project Management Professional (PMP) Certified
- State of Arizona Certified
- Project Management Certification not required

**c. Full-Time Employee (FTE) Project Hours**

<b>Total Full-Time Employee Hours</b>	250
<b>Total Full-Time Employee Cost</b>	\$

**VII. Risk Matrix, Areas of Impact, Itemized List, PIJ Financials**



Project Investment  
Justification.xlsx

## VIII. Project Approvals

### A. Agency CIO Review\*

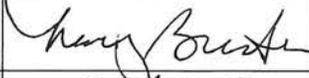
Key Management Information	Yes	No
1. Is this project for a mission-critical application system?	X	
2. Is this project referenced in your agency's Strategic IT Plan?	X	
3. Is this project in compliance with all agency and State standards and policies for network, security, platform, software/application, and/or data/information as defined in <a href="http://aset.azdoa.gov/security/policies-standards-and-procedures">http://aset.azdoa.gov/security/policies-standards-and-procedures</a> , and applicable to this project? If <b>NO</b> , explain in detail in the "XI. Additional Information" section below.	X	
4. Will this project transmit, store, or process sensitive, confidential or Personally Identifiable Information (PII) data? If <b>YES</b> , in the "XI. Additional Information" section below, describe what security controls are being put in place to protect the data.		X
5. Is this project in compliance with the Arizona Revised Statutes (A.R.S.) and GRRC rules?	X	
6. Is this project in compliance with the statewide policy regarding the accessibility to equipment and information technology for citizens with disabilities?	X	

### B. Project Values\*

The following table should be populated with summary information from other sections of the PIJ.

Description	Section	Number or Cost
Assessment Cost (if applicable for Pre-PIJ)	II. PIJ Type - Pre-PIJ Assessment Cost	\$
Total Development Cost	VII. PIJ Financials tab	\$499,805
Total Project Cost	VII. PIJ Financials tab	\$499,805
FTE Hours	VI. Roles and Responsibilities	250

### C. Agency Approvals\*

Contact	Printed Name	Signature	Email and Phone
Project Manager:	Nancy Brister		<a href="mailto:Nancy.Brister@azdoa.gov">Nancy.Brister@azdoa.gov</a> 602-364-4775
Agency Information Security Officer:	Mike Lettman		<a href="mailto:Mike.Lettman@azdoa.gov">Mike.Lettman@azdoa.gov</a> 602-542-0300
Agency CIO:	Aaron V. Sandeen		<a href="mailto:Aaron.Sandeen@azdoa.gov">Aaron.Sandeen@azdoa.gov</a> 602-364-4770
Project Sponsor:	Mike Lettman		<a href="mailto:Mike.Lettman@azdoa.gov">Mike.Lettman@azdoa.gov</a> 602-542-0300
Agency Director:	Brian C. McNeil		<a href="mailto:Brian.McNeil@azdoa.gov">Brian.McNeil@azdoa.gov</a> 602-542-1500

IX. Optional Attachments

**A. *Vendor Quotes***

X. Glossary

XI. Additional Information

Links:

[ADOA-ASET Website](#)

[ADOA-ASET Project Investment Justification Information Templates and Contacts](#)

Email Addresses:

[Strategic Oversight](#)

[ADOA-ASET\\_Webmaster@azdoa.gov](mailto:ADOA-ASET_Webmaster@azdoa.gov)

**ADOA-ASET - Arizona Strategic Enterprise Technology  
Project Investment Justification - Risk Matrix**

Project ID:

To Be Provided by ADOA-ASET

Date Accepted:

To be Provided by ADOA-ASET

**Project Information**

Agency Name	Project Name	Date Submitted
Arizona Department of Administration	Data Center Network Managing and Monitoring	10/22/13

Project Questions	Agency Response (Y/N)
Does the project involve customized software not previously implemented by your agency?	N
Does the project involve a customized application not previously developed by your agency?	N
Does the project involve any technology that is new and/or unfamiliar to your agency?	Y
Does the project involve multi-agency and/or multiple vendor coordination?	Y
Is there any possibility that project implementation costs could reach \$1 million or more? (Include professional services, hardware, software, license fees, taxes, shipping, etc.)	N
Will the project require that a Request for Proposal (RFP) be issued?	N
Are there any known schedule or budget constraints?	Y
Does this system interface among 2 or more applications?	Y
Will the implementation involve major end user view or functionality changes?	N
Will the project involve the use of any Personally Identifiable information (PII) or Protected Health Information (PHI)?	N
Are there other high risk project items not identified? If so, please explain below:	N
Does the project fall into one of the following categories: - hardware technology refresh, e.g., PCs, laptops, radios, peripherals, etc.? - software version refresh, e.g., MS Office 2010 replacing 2007? - enhancements to an existing application, e.g., web app, internal system?	N
Will the technology and all required services be acquired off existing State contract(s)?	Y
Does the project have the correct skillset and number of in-house resources assigned to meet the objectives?	Y
Will a dedicated Project Manager (PM) be assigned?	Y
Does your agency have experience with the vendor (if used), and does the vendor have professional experience with similar projects?	Y

Investment Sustainability Questions	Agency Response (Y/N)
Are ongoing/5-year support costs, once the project has been implemented, reflected in the operational costs for the PIJ?	N
Has your agency addressed supporting components to ensure the investment can be sustained, e.g., documentation, application ownership, portability, plans upon contract/support termination?	Y
Does the production site have sufficient failover and disaster recovery plans in place to assure your agency will be able to recover from an unplanned incident?	N
Does your agency and/or the proposed vendor have the resources and supporting infrastructure currently in place to sustain the proposed investment?	Y

Agency Questions	Agency Response (Y/N)
Are all current agency projects in "Green" status, with no outstanding issues that ADOA-ASET is monitoring?	N
Does your agency currently have any projects that are in "Red" status?	N
Has your agency demonstrated a consistent reporting relationship with ADOA-ASET Oversight, e.g. reports submitted on time and accurate (verified by CIO)?	Y
Is this your agency's first PIJ?	N
Has it been more than 2 years since your agency submitted a PIJ?	N
Does your agency have a formal project methodology in place?	Y

# ADOA-ASET - Arizona Strategic Enterprise Technology

## Areas of Impact

Please check which of the following technology areas will be included in the proposed solution - check all that apply:

### Application Systems

- Application Enhancements
- New Application Development

### Database Systems

- Data Warehouse/Mart
- Database Consolidation/Migration/Extract Transform and Load Data
- Database Products and Tools

### Hardware

- LAN/WAN Infrastructure
- Mainframe Infrastructure
- PC Purchases, Peripherals
- Public Safety Radios, Systems
- Storage Area Network Devices
- All Other Hardware

### Software

- COTS Application Acquisition
- COTS Application Customization
- Mainframe Systems Software
- Open Source
- PC/LAN Systems Software
- All Other Software

### Telecommunications

- Network Communications Infrastructure
- Telephony Upgrade-Business-Specific
- Telephony Upgrade-EIC Solution
- Videoconferencing

### Web

- az.gov Web Portal Interface
- Internal Use Web Application
- Mobile App Business-Specific Acquisition
- Mobile App Development

### Specialty Products

- Business Intelligence System
- Disaster Recovery/ Business Continuity Plan
- Document Management/Imaging
- eLicensing
- E-Signatures
- Geographic Information System
- Management Systems - Financial, Grants, Asset
- Multi-agency project

- Other Imaging - Photos, Fingerprints, etc.
- RFP Required
- Security
- Statewide/Enterprise Solution
- Thin Client/Virtual
- Wireless
- All Other

Services

- Contract Project Mgmt
- Contractor Support Services
- Install/Configuration Contract Services
- Outsource/Hosting
- All Other

Other - Please specify:

- Enter text below.

Network security devices
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**ADOA-ASET - Arizona Strategic Enterprise Technology  
Project Investment Justification - Itemized List**

Project ID: To Be Provided by ADOA-ASET

Date Accepted: To be Provided by ADOA-ASET

**Project Information**

Project Name	Agency Name	Date Submitted
Data Center Network Managing and Monitoring	Arizona Department of Administration	10/22/13

**Project Cost - Itemized**

Item	Description	Category	Development or Operational	Qty or Hours	Unit Cost	Tax (if app)	Extended Cost
1	Firewall devices (including first year maintenance)	Hardware	Development	10	\$30,700.00	\$25,481.00	\$332,481.00
2	Support and maintenance for firewall devices	License & Maint Fees	Development	2	\$46,050.00	\$7,644.30	\$99,744.30
3	Firewall software suite licensing (including first year support)	Software	Development	1	\$48,000.00	\$3,984.00	\$51,984.00
4	Support and maintenance for firewall software suite licenses	License & Maint Fees	Development	2	\$7,200.00	\$1,195.20	\$15,595.20
5							\$0.00
6							\$0.00
7							\$0.00
8							\$0.00
9							\$0.00
10							\$0.00

Total of Development Cost	\$499,804.50
Total of Operational Cost	\$0.00
<b>Total Itemization of Costs:</b>	<b>\$499,804.50</b>

**ADOA-ASET - Arizona Strategic Enterprise Technology  
Project Investment Justification - Financials**

Project ID:

To Be Provided by ADOA-ASET

Date Accepted:

To be Provided by ADOA-ASET

**Project Information**

Agency Name	Project Name	Date Submitted
Arizona Department of Administration	Data Center Network Managing and Monitoring	10/22/13

**PIJ Development & Operational Cost Summary**

Description	Type	Year 1	Year 2	Year 3	Year 4	Year 5	Extended Cost
Professional & Outside Services	Development						\$0.00
	Operational						\$0.00
Hardware	Development	\$332,481.00					\$332,481.00
	Operational						\$0.00
Software	Development	\$51,984.00					\$51,984.00
	Operational						\$0.00
Communications	Development						\$0.00
	Operational						\$0.00
Facilities	Development						\$0.00
	Operational						\$0.00
Licensing & Maintenance Fees	Development	\$115,339.50					\$115,339.50
	Operational						\$0.00
Other	Development						\$0.00
	Operational						\$0.00

**Development Cost:** \$499,804.50  
**Operational Cost:** \$0.00  
**Total Cost:** \$499,804.50

**Project Funding (add sources as appropriate)**

Funding Source Category	Fund Name	Development Budget (\$)		Operational Budget (\$)		Total (\$)
		Currently Available	New Request	Currently Available	New Request	
General Funds						\$0.00
Federal Funds						\$0.00
Other Appropriated Funds	Automation Projects Fund	\$499,804.50				\$499,804.50
Other Non-Appropriated Funds						\$0.00
<b>Total Funding</b>		\$499,804.50	\$0.00	\$0.00	\$0.00	\$499,804.50