



ADOA-ASET

Project Investment Justification

Version 03.31.15

A Statewide Standard Document for Information Technology Projects

Project Title:

YouthBase Database and Web Server

Agency Name:	Arizona Dept. of Juvenile Corrections
Date:	04/03/15
Agency Contact Name:	Jim Viersen
Agency Contact Phone:	
Agency Contact Email:	

[Hover for Instructions](#)

I. 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:

[Click here to enter text.](#)

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

II. Business Case

A. Business Problem*

Our current YouthBase (database) Server and Web server are nearing end of life for both hardware and operating system. The current hardware is approaching 5 years old requiring maintenance extension costs to cover potential hardware failures which would be cost prohibitive. In addition the operating systems on both are Server 2008 which is currently 7 years old, with Microsoft ending full support in 2015. ADJC over the last 2 years has been redesigning old 32bit based programs into the latest web applications, in order to meet the additional demand on current web server applications; we need to upgrade the web server in conjunction with the database server.

B. Proposed Business Solution*

Purchase latest hardware and software to bring us up to current standards. Microsoft Server 2012 will be licensed and installed onto both servers, ensuring Microsoft support through new hardware end of life.

C. Quantified Benefits*

- Service enhancement
- Increased revenue
- Cost reduction
- Problem avoidance
- Risk avoidance

Explain:

YouthBase, an in-house custom built system, is a heavily used application by staff on a daily basis. By procuring new hardware and software technologies it will improve the end user experience, avoid down time, and mitigate risks. We have researched the hardware and OS specifications to ensure all existing SQL and web applications that reside on the existing platforms will work without any modifications.

III. Technology Approach

A. **Proposed Technology Solution***

Purchase two new servers (one database and one web server) licensed with Microsoft Server 2012. Professional & Outside Services will be used to configure the servers and migrate to the new database platform.

B. **Existing Technology Environment**

Current server technology for the database server is a Dell R910 server with dual X7542, 2.66/5.86l processors and 64 Gb of RAM. The web server is a Dell R610 with dual X5690, 3.46/6.4 processors and 32 BG of RAM. Both servers are running Microsoft Server 2008 R2 which is at end of life per Microsoft. New server configuration for the database server will be a Dell R920 with quad X5690, 3.46/6.4 processors 512 GB RAM. The web server is a Dell R430 with dual X5690, 3.46/6.4 processors and 64 GB RAM. Both servers will be licensed with Microsoft Server 2012 where support will be available through 2019.

C. **Selection Process**

Alternative process considered is “do nothing”. The cost to extend warranty for a fifth year would be approximately \$5,000. Next year Microsoft 2008R2 will no longer be supported by Microsoft with the exception of security updates so the decision to migrate the SQL server platform to Server 2012 with 40 core processors. This newer hardware technology and increased RAM will provide greatly enhanced performance for both SQL and web server.

IV. Project Approach

A. **Project Schedule***

Project Start Date: 4/8/2015 **Project End Date:** 6/30/2015

B. **Project Milestones**

Major Milestones	Start Date	Finish Date
PIJ Requirements entered	04/08/2015	04/08/2015
Submission and approval of PIJ	04/09/2015	04/19/2015
Purchase and delivery of new servers	04/22/2015	05/15/2015
Installation and Configuration of new servers	05/18/2015	06/01/2015
Move SQL databases and switch over to new web server	06/30/2015	06/30/2015

C. *Project Roles and Responsibilities*

Jim Viersen, System Network Supervisor, responsible for Project Management, installations and configuration of new servers.

Emanuel Villasano, System Network Engineer, responsible for installation and configuration of new servers.

John Young, CIO and Project Sponsor, responsible for managing technician support, analyses, and ensuring quality control.

V. Risk Matrix, Areas of Impact, Itemized List, PIJ Financials

VI. Project Approvals

A. Agency CIO/ISO Review and Initials Required*

Key Management Information	Yes	No	Initials
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. Have you reviewed and is this project in compliance with all applicable Statewide policies and standards for network, security, platform, software/application, and/or data/information located at https://aset.az.gov/resources/psp ? If NO , explain in detail in section "VIII. Additional Information" below.	x		
4. Will any PII, PHI, or other Protected Information as defined in the 8110 Statewide Data Classification Policy located at https://aset.az.gov/resources/psp be transmitted, stored, or processed with this project? If YES , the Protected Data section under "VII. Security Controls" below will need to be completed.	x		
5. Will this project migrate, transmit, or store data outside of the agency's in-house environment or the State Data Center? If YES , the Hosted Data section under "VII. Security Controls" below will need to be completed.		x	
6. Is this project in compliance with the Arizona Revised Statutes and GRRC rules?	x		
7. 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)	I. PIJ Type - Pre-PIJ Assessment Cost	\$0
Total Development Cost	V. PIJ Financials tab	\$44,420.76
Total Project Cost	V. PIJ Financials tab	\$44,420.76
FTE Hours	See Hover text for FTE Hours	\$1615.00

C. Agency Approvals*

Approver	Printed Name	Signature	Email and Phone
Project Manager:	Jim Viersen		
Agency Information Security Officer:	Emanuel Villasano		
Agency CIO:	John Young		
Project Sponsor:	John Young		
Agency Director:			

VII. Security Controls

Collaboration with the ADOA-ASET Security, Privacy and Risk (SPR) team may be needed to complete this section, which is only required for those projects that involve data that is Protected or Hosted outside of the Agency or State Data Center. Additional information can be found in the NIST FRAMEWORK section under RESOURCES at <https://aset.az.gov/resources/psp> or you may wish to contact ASET-SPR directly at secadm@azdoa.gov for assistance.

A. Protected Data

All access to PII information has encrypted access starting at the SHA256RSA bit SSL certificate at the IIS layer. Network access lists provide IP specific information from all of our external customers. In addition, SSN information in the database is encrypted using MS Server 2008 Encrypted File System (EFS) default encryption is set at 2048 bit encryption and PII specific at the SQL database layer using TDE encryption.

B. Hosted Data

Check here if the <https://aset.az.gov/arizona-baseline-security-controls-excel> spreadsheet is attached. Otherwise explain below what information/ support is needed to complete the spreadsheet and/or why no sheet is attached:

Click here to enter text.

Check here if a Conceptual Design / Network Diagram is attached. Otherwise explain below what information/support is needed to complete the diagram and/or why no diagram is attached:

Click here to enter text.

VIII. Additional Information

IX. Attachments

The following are examples of supporting documents that should be sent as email attachments when required:

- A. *Vendor Quotes*
- B. *Arizona Baseline Security Controls spreadsheet*
- C. *Conceptual Design / Network Diagram*
- D. *Other*

X. Glossary

Other Links:

[ADOA-ASET Website](#)

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

Email Addresses:

[Strategic Oversight](#)

ADOA-ASET_Webmaster@azdoa.gov