



ADOA-ASET

Project Investment Justification

Version 03.31.15

A Statewide Standard Document for Information Technology Projects

Project Title:

Wireless Controller and VM Host Upgrade

Agency Name:	Arizona Dept. of Juvenile Corrections
Date:	06/01/2015
Agency Contact Name:	John Young
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 wireless controllers are 9 years old and support from Cisco ends June 2016. Our SmartNet support contract covers the equipment until February 2016 and they stopped issuing support contracts for our two controllers.

The VM Host for our Central Office location is approaching five years old, at which point maintenance extensions to cover potential hardware failures would be required and the agency wants to be as cost neutral as possible in the next several years.

B. **Proposed Business Solution***

Replace existing controllers with Cisco 5508 Wireless Controller connecting up to 250 wireless access points.

Replace existing Central Office VM Host containing user folders, file shares, two domain controllers, and servers in the DMZ with a Dell PowerEdge R820 server licensed with 2 Microsoft Windows Server 2012 Datacenter licenses one for each processor.

C. **Quantified Benefits***

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

Explain:

Provide wireless coverage for all laptops along with the wireless scanners used by our Mobile Movement, Inventory, PBIS, and Canteen applications.

Provide an updated robust solution for all staff working at the Central Office location.

III. Technology Approach

A. **Proposed Technology Solution***

Replace Cisco 4408 Wireless Controller with AIR-CT5508-250-K9 Cisco 5508 Wireless Controller. The existing wireless access points are compatible with the new controller.

Upgrade the Central Office VM Host with Dell Server 2012 R2 OS, five year warranty, 4 processors, and 128 GB of RAM.

B. **Existing Technology Environment**

Nine year old Cisco 4408 Wireless Controllers.

Dell PowerEdge Server 720 with only one processor.

C. **Selection Process**

Alternative process considered is “do nothing”. Continue to support and maintain a wireless system that is 9 years old and will no longer be supported after June 2016. ADJC selected Cisco wireless controllers since the agency currently has experience with Cisco products, this make/model supports the existing wireless access point infrastructure.

In lieu of continuing to support and maintain the existing server system after the five year warranty expires, ADJC selected a replacement Dell Server with the additional capacity to meet the needs of current and future staff growth through 2020.

IV. Project Approach

A. **Project Schedule***

Project Start Date: 6/1/2015 **Project End Date:** 7/31/2015

B. **Project Milestones**

Major Milestones	Start Date	Finish Date
Creation of PIJ	6/01/2015	6/01/2015
Submission of PIJ and Approval	6/01/2015	6/01/2015
Purchase and Delivery of Equipment	6/08/2015	6/30/2015
Installation of Wireless Controller	07/15/15	07/15/15
Upgrade WAP's IOS Via the New Controller	7/15/2015	7/15/15
Installation, configuring, and patching Dell Server	7/06/15	7/17/15
Migration of servers from host to host	7/31/15	7/31/15

C. **Project Roles and Responsibilities**

Jim Viersen, Project Manager
John Young, Project Sponsor

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	\$
Total Development Cost	V. PIJ Financials tab	\$112,228.59
Total Project Cost	V. PIJ Financials tab	\$112,228.59
FTE Hours	See Hover text for FTE Hours	40

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

Wireless connectivity is accomplished via WPA-2 Enterprise (WiFi Protected Access II) to included Radius/Active Directory User access and Active Directory computer access. All SSID's are not broadcasted and require encrypted profiles on the computer to be able to access the network resources. There are NO guest networks within our enterprise. Once user and computers are authenticated, access to PII and PHI information has encrypted access starting at the SHA256RSA bit SSL certificate at the IIS layer. 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. All emails are scanned for PII and PHI information and are subjected to further encryption via Secure email gateway.

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:

Not Applicable

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:

Not Applicable

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