ADOA-ASET

Project Investment Justification

Version 01.01

A Statewide Standard Document for Information Technology Projects

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Project Title:

Core switch replacement

Agency Name:	**Arizona Department of Water Resources**
Date:	**3/6/2015**
Agency Contact Name:	**Jorge Cano**
Agency Contact Phone:	
Agency Contact Email:	

Hover for Instructions

I.   Management Summary*

Arizona Department of Water Resources has a data center that consists on 40+ servers. This equipment is utilized to support the databases, file storage, web services and computer

administration needs for the agency. Our backbone network relies on a core switch that supports all network traffic in and out of this servers. This switch is a Cisco 4507.

II. Project Investment Justification (PIJ) Type*

| | Yes | X | 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:
We have contacted Cisco to find a proper replacement for this switch and they have the next generation of the exact same switch, a 4507RE

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

III. Business Case

A. Business Problem*

Arizona Department of Water Resources requires a reliable and redundant core switch to provide internal network services to the 150 stations in our building. This switch allows ADWR employees to connect to databases, web services, shared folders and administration tools in our data center. If this switch were to fail, people in the agency would not be able to authenticate or get DHCP and DNS services, which will result in the inability to utilize any network services (e.g. Web, Databases, network shared drives, etc.). The current core switch will not be supported by cisco at the end of this year.

B. Proposed Business Solution*

We are proposing to buy a new generation Cisco 4507RE that has redundant capabilities and will be supported by the manufacturer for many years to come. By replacing the switch with a new one, we will ensure the availability of network services for all the employees of the agency.

C. Quantified Benefits*

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

Explain:

The main benefit of this replacement will be problem and risk avoidance, since the new switch not only is supported but has redundant capabilities

IV.   Technology Approach

A.   *Proposed Technology Solution**

For the last 10 years ADWR has been using a Cisco 4507 switch to fulfill this job. This switch has reached the end of life and will be unsupported at the end of the current year. The department want to buy a new generation switch with similar capabilities than the one we currently own, we reached out to Cisco to find a replacement and it turns out they have a new version of the same equipment with upgraded capabilities.

The proposed new switch will be a Cisco 4507RE with dual power supplies, dual supervisor cards and extra bays for possible expansion of services.

B.   *Technology Environment*

ADWR currently has a backbone that interconnects all of our backend services, from network administration, databases, file servers and web servers. The following diagram depicts the overall environment.

C.   *Selection Process*

Due to the leadership of Cisco in the network market we contacted them first, because they happened to have their new generation of the same switch we immediately decided that this would be the preferred choice since it would post a little learning curve for a known top of the line device

V.   Project Approach

A.   *Project Schedule**

Project Start Date: 3/16/2015   **Project End Date**: 5/31/2015

B.   *Project Milestones*

Major Milestones	Start Date	Finish Date
Get quotes for the new switch	3/16/2015	3/30/2015
Order the equipment and wait for delivery	3/30/2015	4/30/2015
Prepare the switch with configuration	5/01/2015	5/15/2015
Production deployment	5/30/2015	5/31/2015

VI.   Roles and Responsibilities

A. Project Roles and Responsibilities

This is a highly technological project that requires little oversight, the majority of the time will be consumed by the ordering and delivery of the equipment. Once the equipment is received we are contracting a cisco engineer to help with the configuration, this process should not take for that a few days (a week tops).

Role	Responsibility	Assigned
Project Manager	Oversee and direct project	Jorge R Cano
Project Team	Configure, install, and test hardware	David B. Watkins James Chang
ADOA Consultant	Configuration support	TBA

B. Project Manager Certification

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

C. Full-Time Employee (FTE) Project Hours

Total Full-Time Employee Hours	
Total Full-Time Employee Cost	$

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

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 https://aset.azdoa.gov/security/policies-standards-and-procedures, and applicable to this project? If **NO**, 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 **YES,** 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	$48,423.00
Total Project Cost	VII. PIJ Financials tab	$55,312.46
FTE Hours	VI. Roles and Responsibilities	

C.   Agency Approvals*

Contact	Printed Name	Signature	Email and Phone
Project Manager:	Jorge R Cano		
Agency Information Security Officer:			
Agency CIO:	Jorge R Cano		
Project Sponsor:			
Agency Director:	Thomas Buschatzke		

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