ADOA-ASET

Project Investment Justification

Version 03.31.15

A Statewide Standard Document for Information Technology Projects

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Project Title:

Backup Infrastructure Enhancement

Agency Name:	AHCCCS
Date:	5/28/2015
Agency Contact Name:	Joanne Obenour
Agency Contact Phone:	
Agency Contact Email:	

Hover for Instructions

I.   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:

Click here to enter text.

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

II.   Business Case

A.   *Business Problem**

With the rapid growth caused by new and changing business objectives, the Backup environment is no longer keeping pace. To be able to meet the backup needs of our growing capacity we need to change technologies. The impact to business application performance is hindering productivity for staff. We also are unable to complete multiple days of incremental backups due to the full backups running for multiple days. There is also increased long term costs of licenses as we continue to grow. The current tape process allows for a transfer rate slower than the system can transfer the information to the tape, resulting in a bottleneck. The current license model is based on the number of clients and modules. As we continue to grow the quantity of clients increase as well as the modules needed increase

Today the AHCCCS Backup environment consists of:
          1 Veritas NetBackup server used to manage all of the backup policies and retention schedules.
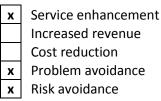   1 SpectraLogic Tape Library With the current tape process our capacity is virtually unlimited as we simply reuse or buy new tapes as needed to meet demand.

An attempt was made last year to solve this problem with an EMC solution but due to incomplete information provided by EMC and a failed POC facilitated by EMC we are seeking a different solution.

B.   *Proposed Business Solution**

Implement a disk based backup solution that will include the capacity to meet our current data retention requirements and replace our current tape storage system. This includes the amount of data backed up daily/weekly, our retention of that data for 90 days and 9 years for FTP data and future growth. We would also like to switch our current traditional licensing model to a capacity based license. This will allow us to license all of our clients and all of the product modules under a single capacity based license as determined by how much data we are backing up.

C.   Quantified Benefits*

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

Explain:

The expected outcome is a backup solution that will allow us to maintain our backups within a nightly backup window and minimize the performance impacts to the production environment. We are also expecting to avoid the risk of not being able to complete backups which will allow us to provide more reliable options to recover data when requested or in the event of a disaster.

III.   Technology Approach

A.   Proposed Technology Solution*

1.   Convert existing traditional based client licenses to Veritas capacity licensing model.
2.   QTY 2 – Veritas NetBackup 5230 76TB Appliance

There will be one NetBackup Appliance located at the State Data Center for the main backup operations. A 2nd Appliance will be located at AHCCCS Offices and the data will be duplicated from the primary device for purposes of DR.

We are expecting the proposed capacity to cover our needs for the next 3-5 years. Current storage requirements are 40TB with 36 TB projected for retention and growth over the next 3 to 5 years. Additional capacity can be added in the future as needed by growth. Cutover will involve existing backups remaining on tape for 90 days. All new backups will be on the new system.

B.   Existing Technology Environment

We currently use a SpectraLogic LTO4 Tape library. The library contains 6 LTO4 tape drives and capacity for 120 tapes. Max capacity if the rack is full would be 480TB. Current storage device is located at the state data center. Software will not be changed as the new system is brought in. No specific updates will be needed to make the change.

C.   Selection Process

We are upgrading/expanding functionality of our existing solution. We felt this was the best solution as the learning curve will be minimal since we already use the product. The product has also evolved since the last time we evaluated products and now includes all of our requirements.
- Encrypted

- Disk based
- DR Option
- Growth
- Performance

Veritas is also providing Trade-in credit for the EMC product.

IV. Project Approach

A. *Project Schedule**

Project Start Date: 6/8/2015   **Project End Date**: 10/30/2015

B. *Project Milestones*

Major Milestones	Start Date	Finish Date
Procurement and receipt of equipment/licenses	6/8/2015	6/30/2015
Install	7/1/2015	7/31/2015
Configuration	7/1/2015	7/31/2015
Testing	8/1/2015	8/31/2015
Production Cutover	8/1/2015	8/31/2015
Configure DR Operations	9/1/2015	9/30/2015
Decommission Tape	10/1/2015	10/30/2015

C. *Project Roles and Responsibilities*

ISD Network Services with the assistance of the vendor will be responsible for this project to install, test and implement the equipment.

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

Symantec/Veritas is going through a re-branding right now, & Veritas is the new brand. The project financials show 3 years of maintenance to match the quotes.

VI. Project Approvals

A. Agency CIO/ISO Review and Initials Required*

Key Management Information	Yes	No	Inits
1. Is this project for a mission-critical application system?	Y		
2. Is this project referenced in your agency's Strategic IT Plan?	Y		
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.	Y		
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.**	Y		
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.**		N	
6. Is this project in compliance with the Arizona Revised Statutes and GRRC rules?	Y		
7. Is this project in compliance with the Statewide policy regarding the accessibility to equipment and information technology for citizens with disabilities?	Y		

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	$434,737.87
Total Project Cost	V. PIJ Financials tab	$661,985.93
FTE Hours	See Hover text for FTE Hours	200

C. Agency Approvals*

Approver	Printed Name	Signature	Email and Phone
Project Manager:	Mike Upchurch		
Agency Information Security Officer:	Jim Wang		
Agency CIO:	Dan Lippert, Acting		
Project Sponsor:	Dan Lippert		
Agency Director:	Tom Betlach		

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*

The backup solution is intended to backup all agency data (excluding AHCCCS mainframe data hosted by ADOA). The backup solution is hosted within the State Data Center and the DR solution will be located within the AHCCCS Central Office. All data stored on the backup solution will be encrypted using built-in technology of Veritas NetBackup.

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