



ADOA - ASET

Arizona Strategic Enterprise Technology

Project Investment Justification

Version 01.01

A Statewide Standard Document for Information Technology Projects

Project Title:

SDC Recovery Site Storage Solution

| | |
|------------------------------|--------------------------------------|
| Agency Name: | Arizona Department of Administration |
| Date: | November 15, 2013 |
| Agency Contact Name: | Patrick Cravens |
| Agency Contact Phone: | |
| Agency Contact Email: | |

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I. Management Summary*

The State Data Center (SDC) currently maintains an IBM TS7740 Virtual Tape Storage (VTS) system to house customer and system data. This device utilizes "virtual cache" for staging data prior to its being written to physical tapes, which are retained in the TS7740 for data retrieval. Unless this data is also copied to a backup tape for off-site storage, there is no backup for these "virtual tapes" today. In the event of a catastrophic incident impacting the SDC, most data on virtual tape within the IBM TS7740 VTS system would be unrecoverable. To reduce this exposure, an additional VTS located at an alternate recovery site is being proposed.

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*

The IBM TS7740 VTS system currently supporting the storage and retrieval of customer and mainframe system data in the SDC was acquired in 2009. At that time, the encryption capability for the device was not available, nor was the funding available to provide for replication and alternate site recovery of the 172 terabytes (TB) of data currently housed on "virtual tapes" in the VTS. With the exception of data which is also being copied to backup tape for off-site storage, there is no backup for these virtual tapes today, posing a serious business continuity risk. A catastrophic incident involving the SDC could result in a complete loss of data, regardless of the physical site restoration and hardware replacement.

B. Proposed Business Solution*

In order to mitigate the risk associated with the lack of recovery capability for the current TS7740 VTS system, an additional VTS system is required. Placing a second IBM TS7720 VTS system in another State agency data center facility will allow the SDC to provide backup for the virtual tapes housed in the current system while enhancing business continuity through the availability of an alternate site for recovering data currently stored on tape.

C. Quantified Benefits*

- Service enhancement
- Increased revenue
- Cost reduction

- Problem avoidance
- Risk avoidance

Explain:

It is essential that the SDC provide for the backup and recovery of data currently housed in the VTS system. Not maintaining replicated data at an off-site location for data housed on virtual tape in the SDC presents an unacceptable level of risk to the State. The proposed system will also provide additional security protections for SDC customers by ensuring that the virtual tape data housed in the new VTS is encrypted.

IV. Technology Approach

A. Proposed Technology Solution*

The Arizona Department of Administration’s Arizona Strategic Technology Office (ADOA-ASET) is proposing to acquire a new IBM TS7720 VTS system with 240 TB of usable storage and a three (3) year warranty package. This system will be housed in the Arizona Department of Economic Security (DES) data center facility, which ADOA-ASET currently uses as an alternate recovery site for its mainframe system. In addition to the TS7720, ADOA-ASET will acquire an IBM Converter Switch to enable the TS7740 and TS7720 systems to communicate, and also activate the enhanced “gridding” feature on the current IBM TS7740, which will support a faster, more reliable fiber connection. Additional development costs in the PIJ include IBM Tape Grid Services, to assist in connecting the systems, as well as an upgrade to a 24x7 IBM maintenance agreement from the current Mon-Fri 8:00 AM to 5:00 PM schedule, for a three (3) year period.

B. Technology Environment

The SDC has been utilizing the IBM TS7740 VTS system since 2009. The proposed technology will integrate seamlessly into the current SDC and DES computing environments.

C. Selection Process

The TS7720 VTS system supports encryption for data both in-flight and at-rest, providing a more secure solution for use at an alternate recovery site. While vendors other than IBM offer similar solutions, they are not compatible with the installed IBM TS7740, and would require a conversion of both systems to another technology solution.

V. Project Approach

A. Project Schedule*

Project Start Date: 12/9/2013 **Project End Date:** 3/28/2014

B. Project Milestones

| Major Milestones | Start Date | Finish Date |
|---|------------|-------------|
| Acquire hardware and services from vendor | 12/09/13 | 1/31/14 |
| Create implementation plan | 2/3/14 | 2/14/14 |
| Install hardware at DES facility | 2/18/14 | 2/25/14 |
| Test solution | 2/26/14 | 3/14/14 |

| | | |
|-----------------------------|---------|---------|
| Cutover to production | 3/18/14 | 3/21/14 |
| Project acceptance/Sign off | 3/24/14 | 3/28/14 |

VI. Roles and Responsibilities

A. *Project Roles and Responsibilities*

Agency Director: Brian C. McNeil, ADOA Director

Agency CIO: Aaron V. Sandeen, ADOA Deputy Director, State CIO

Project Sponsor: Donald Hennington, Assistant Director, Chief Operating Officer, ADOA-ASET

Project Manager (PM): Ken Roundtree, Project Manager, ADOA-ASET

Technical PM: Patrick Cravens, Manager, Mainframe Technical Support, ADOA-ASET

System Administrators: Larry Chapman, Linda Kepner, Howard Banks
Mainframe Technical Support, ADOA-ASET

Advisory Subject Matter Expert: Peter Falco, Levi, Ray, and Shoup, Inc. (LRS)

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*

| | |
|---------------------------------------|-----|
| Total Full-Time Employee Hours | 825 |
| 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 http://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 | \$680,000 |
| Total Project Cost | VII. PIJ Financials tab | \$680,000 |
| FTE Hours | VI. Roles and Responsibilities | 825 |

C. Agency Approvals*

| Contact | Printed Name | Signature | Email and Phone |
|--------------------------------------|------------------|-----------|-----------------|
| Project Manager: | Ken Roundtree | | |
| Agency Information Security Officer: | Mike Lettman | | |
| Agency CIO: | Aaron V. Sandeen | | |
| Project Sponsor: | Don Hennington | | |
| Agency Director: | Brian C. McNeil | | |

IX. Optional Attachments

A. Vendor Quotes

X. Glossary

XI. Additional Information

All data stored on the new TS7720 will be encrypted, and transmissions between the TS7720 and TS7740 will be protected via the use of existing dark fiber between the SDC and DES facilities.

Links:

[ADOA-ASET Website](#)

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

Email Addresses:

[Strategic Oversight](#)

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