ADOA-ASET
Arizona Strategic Enterprise Technology

Project Investment Justification

ADOR FY23 Technology Refresh

RV23007

Department of Revenue

Contents

1. General Information

PIJ ID: RV23007
PIJ Name: ADOR FY23 Technology Refresh
Account: Department of Revenue
Business Unit Requesting: AZ Dept of Revenue
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Sponsor Title: Chief Information Officer
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2. Meeting Pre-Work

2.1 What is the operational issue or business need that the Agency is trying to solve? (i.e....current process is manual, which increases resource time/costs to the State/Agency, and leads to errors…):

ADOR's one current storage (SAN) appliance (Dell vMax 450F) is end of life 10/31/2023 (see attachment).

ADOR's current compute systems (Dell M4) are end of life 2/29/2024 (see attachment).

2.2 How will solving this issue or addressing this need benefit the State or the Agency?

ADOR's storage and compute systems must be under OEM vendor support to comply with state and federal requirements. These devices are within ADOR's Federal Tax Information System boundary and are subject to audit by the IRS.

The one legacy storage system (Dell vMax 450F) will be replaced by one currrent model Dell PowerMax storage system with 5 years of licensing and support.

The legacy compute systems (Dell M4's 60 count) will be replaced by 44 current model Dell M6 compute blades.

Dell engineering has been consulted on the storage and compute replacement capacities based on the last 5 years of usage and projected growth over the next 5 years.

Gartner Consulting has been contracted and is currently engaged to conduct a Cloud Readiness Assessment at ADOR. Gartner has recommended "at least one technology refresh cycle for servers, storage, and network to maintain TAS operational and hosted at Iron Mountain Data Center". See attachment Gartner Statement on TAS. TAS (Tax Accounting System) is the legacy tax system of record for ADOR.

ADOR is also evaluating a potential move within the Iron Mountain Data Center to a location adjacent to ADOA's cage. Although not in the scope of this PIJ for FY23, the Data Center move may eliminate the need for the current 3rd party hosting contract and create efficiencies. This evaluation is expected to be completed in early FY24.

ADOR is also actively engaged in the STARS project. This is a cloud based hosting of all major ADOR tax applications including TAS. This project is projected to be completed in the next 5 years.

2.3 Describe the proposed solution to this business need.

The replacement storage and compute systems must be able to integrate into the existing Dell VxBlock 1000 converged infrastructure platform in order to eliminate the need for a complete system replacement with increased costs and timeline.

Dell engineering was consulted and provided recommendations based on the legacy systems, and anticipated furture growth.

This refrssh does align with ADOR IT Strategic Plan FY22/23 - Technology Refresh

See attachment "Arizona-Dept-Revenue-VMAX-450-SN678-Capacity-Performance-Requirements-Feb-2023-Rev1"

2.4 Has the existing technology environment, into which the proposed solution will be implemented, been documented?

Yes

2.4a Please describe the existing technology environment into which the proposed solution will be implemented.

2.5 Have the business requirements been gathered, along with any technology requirements that have been identified?

Yes

2.5a Please explain below why the requirements are not available.

3. Pre-PIJ/Assessment

3.1 Are you submitting this as a Pre-PIJ in order to issue a Request for Proposal (RFP) to evaluate options and select a solution that meets the project requirements?

No

3.1a Is the final Statement of Work (SOW) for the RFP available for review?

3.2 Will you be completing an assessment/Pilot/RFP phase, i.e. an evaluation by a vendor, 3rd party or your agency, of the current state, needs, & desired future state, in order to determine the cost, effort, approach and/or feasibility of a project?

No

3.2a Describe the reason for completing the assessment/pilot/RFP and the expected deliverables.

3.2b Provide the estimated cost, if any, to conduct the assessment phase and/or Pilot and/or RFP/solicitation process.

3.2e Based on research to date, provide a high-level cost estimate to implement the final solution.

4. Project

4.1 Does your agency have a formal project methodology in place?

Yes

4.2 Describe the high level makeup and roles/responsibilities of the Agency, Vendor(s) and other third parties (i.e. agency will do...vendor will do...third party will do).

Dell engineering will be contracted to de-install the legacy storage device and install the new storage device, with the assistance of ADOR IT personel. The new compute blades will also be installed by Dell engineering with the assistance of ADOR IT personel.. The professional services engagement is included in the attached CDWG quote NFSD625.

4.3 Will a PM be assigned to manage the project, regardless of whether internal or vendor provided?

Yes

4.3a If the PM is credentialed, e.g., PMP, CPM, State certification etc., please provide certification information.

4.4 Is the proposed procurement the result of an RFP solicitation process?

No

4.5 Is this project referenced in your agency's Strategic IT Plan?

Yes

5. SCHEDULE

5.1 Is a project plan available that reflects the estimated Start Date and End Date of the project, and the supporting Milestones of the project?

Yes

5.2 Provide an estimated start and finish date for implementing the proposed solution.

Est. Implementation Start Date	Est. Implementation End Date
2/10/2023 12:00:00 AM	6/30/2023 12:00:00 AM

5.3 How were the start and end dates determined?

Dates provided

5.3a List the expected high level project tasks/milestones of the project, e.g., acquire new web server, develop software interfaces, deploy new application, production go live, and estimate start/finish dates for each, if known.

Milestone / Task	Estimated Start Date	Estimated Finish Date
Procurement - Create PO	02/10/23	02/17/23
Iron Mountain Data Center Move Vendor Engagements	02/10/23	06/30/23
Order/Delivery of Storage Device	02/20/23	03/17/23
Order/Delivery of Compute Hardware	02/20/23	05/05/23
Install Storage Device	03/20/23	03/24/23
Update OS/Patches on Storage Device	03/27/23	03/31/23
Configure Storage Device	04/03/23	04/21/23
Gartner Cloud Readiness Assessment review results	04/19/23	06/30/23
Storage Data Migration	04/24/23	05/19/23
The agency will return to inform ITAC of the Cloud Assessment results.	05/01/23	06/30/23

Install Compute Hardware	05/08/23	05/19/23
Validate Storage Migration	05/22/23	06/02/23
Update OS and patch compute hardware	05/22/23	05/26/23
Configure compute hardware	05/29/23	06/09/23
Finalize Storage Migration	06/05/23	06/09/23
Storage Device Cutover/Go Live	06/12/23	06/23/23
Implement compute hardware	06/12/23	06/23/23
Validate compute hardware	06/26/23	06/30/23
Final Payment	06/30/23	08/31/23
Iron Mountain Data Center Move Risk/Benefit Analysis	07/03/23	08/31/23

5.4 Have steps needed to roll-out to all impacted parties been incorporated, e.g. communications, planned outages, deployment plan?

No

5.5 Will any physical infrastructure improvements be required prior to the implementation of the proposed solution. e.g., building reconstruction, cabling, etc.?

No

5.5a Does the PIJ include the facilities costs associated with construction?

5.5b Does the project plan reflect the timeline associated with completing the construction?

6. Impact

6.1 Are there any known resource availability conflicts that could impact the project?

No

6.1a Have the identified conflicts been taken into account in the project plan?

6.2 Does your schedule have dependencies on any other projects or procurements?

No

6.2a Please identify the projects or procurements.

6.3 Will the implementation involve major end user view or functionality changes?

No

6.4 Will the proposed solution result in a change to a public-facing application or system?

No

7. Budget

7.1 Is a detailed project budget reflecting all of the up-front/startup costs to implement the project available, e.g, hardware, initial software licenses, training, taxes, P&OS, etc.?

Yes

7.2 Have the ongoing support costs for sustaining the proposed solution over a 5-year lifecycle, once the project is complete, been determined, e.g., ongoing vendor hosting costs, annual maintenance and support not acquired upfront, etc.?

Yes

7.3 Have all required funding sources for the project and ongoing support costs been identified?

Yes

7.4 Will the funding for this project expire on a specific date, regardless of project timelines?

Yes

7.5 Will the funding allocated for this project include any contingency, in the event of cost over-runs or potential changes in scope?

Yes

8. Technology

8.1 Please indicate whether a statewide enterprise solution will be used or select the primary reason for not choosing an enterprise solution.

There is not a statewide enterprise solution available

8.2 Will the technology and all required services be acquired off existing State contract(s)?

Yes

8.3 Will any software be acquired through the current State value-added reseller contract?

No

8.3a Describe how the software was selected below:

8.4 Does the project involve technology that is new and/or unfamiliar to your agency, e.g., software tool never used before, virtualized server environment?

No

8.5 Does your agency have experience with the vendor (if known)?

Yes

8.6 Does the vendor (if known) have professional experience with similar projects?

Yes

8.7 Does the project involve any coordination across multiple vendors?

No

8.8 Does this project require multiple system interfaces, e.g., APIs, data exchange with other external application systems/agencies or other internal systems/divisions?

No

8.9 Have any compatibility issues been identified between the proposed solution and the existing environment, e.g., upgrade to server needed before new COTS solution can be installed?

No

8.9a Describe below the issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you.

8.10 Will a migration/conversion step be required, i.e., data extract, transformation and load?

No

8.11 Is this replacing an existing solution?

Yes

8.11a Indicate below when the solution being replaced was originally acquired.

The vMax 450F SAN device and the CIsco M4 compute servers were purchased as components of the ADOR Infrastructure Modernization Project in 2017.

8.11b Describe the planned disposition of the existing technology below, e.g., surplused, retired, used as backup, used for another purpose:

The legacy vMax 450F will be sanitized and surplused. The legacy Cisco M4 compute servers will be surplused.

8.12 Describe how the agency determined the quantities reflected in the PIJ, e.g., number of hours of P&OS, disk capacity required, number of licenses, etc. for the proposed solution?

Based off of historical SAN storage demands over the 5 year life span and forecasted growth.

8.13 Does the proposed solution and associated costs reflect any assumptions regarding projected growth, e.g., more users over time, increases in the amount of data to be stored over 5 years?

Yes

8.14 Does the proposed solution and associated costs include failover and disaster recovery contingencies?

Yes

8.14a Please select why failover and disaster recovery is not included in the proposed solution.

8.15 Will the vendor need to configure the proposed solution for use by your agency?

No

8.15a Are the costs associated with that configuration included in the PIJ financials?

8.16 Will any app dev or customization of the proposed solution be required for the agency to use the project in the current/planned tech environment, e.g. a COTS app that will req custom programming, an agency app that will be entirely custom developed?

No

8.16a Will the customizations inhibit the ability to implement regular product updates, or to move to future versions?

8.16b Describe who will be customizing the solution below:

8.16c Do the resources that will be customizing the application have experience with the technology platform being used, e.g., .NET, Java, Drupal?

8.16d Please select the application development methodology that will be used:

8.16e Provide an estimate of the amount of customized development required, e.g., 25% for a COTS application, 100% for pure custom development, and describe how that estimate was determined below:

8.16f Are any/all Professional & Outside Services costs associated with the customized development included in the PIJ financials?

8.17 Have you determined that this project is in compliance with all applicable statutes, regulations, policies, standards & procedures, incl. those for network, security, platform, software/application &/or data/info found at aset.az.gov/resources/psp?

Yes

8.17a Describe below the compliance issues that were identified and how they have been/will be resolved, or whether an ADOA-ASET representative should contact you:

8.18 Are there other high risk project issues that have not been identified as part of this PIJ?

No

8.18a Please explain all unidentified high risk project issues below:

9. Security

9.1 Will the proposed solution be vendor-hosted?

No

9.1a Please select from the following vendor-hosted options:

9.1b Describe the rationale for selecting the vendor-hosted option below:

9.1c Has the agency been able to confirm the long-term viability of the vendor hosted environment?

9.1d Has the agency addressed contract termination contingencies, e.g., solution ownership, data ownership, application portability, migration plans upon contract/support termination?

9.1e Has a Conceptual Design/Network Diagram been provided and reviewed by ASET-SPR?

9.1f Has the spreadsheet located at https://aset.az.gov/arizona-baseline-security-controls-excel already been completed by the vendor and approved by ASET-SPR?

9.2 Will the proposed solution be hosted on-premise in a state agency?

No

9.2a Where will the on-premise solution be located:

9.2b Were vendor-hosted options available and reviewed?

9.2c Describe the rationale for selecting an on-premise option below:

9.2d Will any data be transmitted into or out of the agency's on-premise environment or the State Data Center?

9.3 Will any PII, PHI, CGIS, or other Protected Information as defined in the 8110 Statewide Data Classification Policy be transmitted, stored, or processed with this project?

Yes

9.3a Describe below what security infrastructure/controls are/will be put in place to safeguard this data:

Encryption at rest at the hardware level

10. Areas of Impact

Application Systems

Database Systems

Software

Hardware

Storage Area Network Devices

Hosted Solution (Cloud Implementation)

Century Link - I/O Data Center

Security

Encryption

Telecommunications

Cabling

Enterprise Solutions

Contract Services/Procurements

11. Financials

Description	PIJ Category	Cost Type	Fiscal Year Spend	Quantity	Unit Cost	Extended Cost	Tax Rate	Tax	Total Cost
Hardware	Hardware	Development	1	1	$3,920,550	$3,920,550	860.00 %	$337,167	$4,257,717
License & Maintenance Fees	License & Maintenance Fees	Development	1	1	$193,744	$193,744	860.00 %	$16,662	$210,406
Installation Services	Professional & Outside Services	Development	1	1	$167,702	$167,702	0.00 %	$0	$167,702
Software	Software	Development	1	1	$14,476	$14,476	860.00 %	$1,245	$15,721
Software	Software	Operational	2	1	$14,476	$14,476	860.00 %	$1,245	$15,721
License & Maintenance Fees	License & Maintenance Fees	Operational	2	1	$193,744	$193,744	860.00 %	$16,662	$210,406
Software	Software	Operational	3	1	$14,476	$14,476	860.00 %	$1,245	$15,721
License & Maintenance Fees	License & Maintenance Fees	Operational	3	1	$193,744	$193,744	860.00 %	$16,662	$210,406
Software	Software	Operational	4	1	$14,476	$14,476	860.00 %	$1,245	$15,721
License & Maintenance Fees	License & Maintenance Fees	Operational	4	1	$193,744	$193,744	860.00 %	$16,662	$210,406
Software	Software	Operational	5	1	$14,476	$14,476	860.00 %	$1,245	$15,721
License & Maintenance Fees	License & Maintenance Fees	Operational	5	1	$193,744	$193,744	860.00 %	$16,662	$210,406

Base Budget (Available)	Base Budget (To Be Req)	Base Budget % of Project
$5,555,468	$0	100%
APF (Available)	**APF (To Be Req)**	**APF % of Project**
$0	$0	0%
Other Appropriated (Available)	**Other Appropriated (To Be Req)**	**Other Appropriated % of Project**
$0	$0	0%
Federal (Available)	**Federal (To Be Req)**	**Federal % of Project**
$0	$0	0%
Other Non-Appropriated (Available)	**Other Non-Appropriated (To Be Req)**	**Other Non-Appropriated % of Project**
$0	$0	0%

Total Budget Available	Total Development Cost
$5,555,468	$4,651,546
Total Budget To Be Req	**Total Operational Cost**
$0	$904,508
Total Budget	**Total Cost**
$5,555,468	$5,556,054

12. Project Success

Please specify what performance indicator(s) will be referenced in determining the success of the proposed project (e.g. increased productivity, improved customer service, etc.)? (A minimum of one performance indicator must be specified)

Please provide the performance objective as a quantifiable metric for each performance indicator specified.
Note: The performance objective should provide the current performance level, the performance goal, and the time period within which that performance goal is intended to be achieved. You should have an auditable means to measure and take corrective action to address any deviations.
Example: Within 6 months of project completion, the agency would hope to increase "Neighborhood Beautification" program registration by 20% (3,986 registrants) from the current registration count of 19,930 active participants.

Performance Indicators

Storage and compute systems refreshed and under OEM vendor support for the next 5 years.

ADOR able to respond to NIST Common Vulnerability Exposures (CVE)

ADOR able to pass security audits for system support.

13. Conditions

Conditions for Approval

Should development costs exceed the approved estimates by 10% or more, or should there be significant changes to the proposed technology scope of work or implementation schedule, the Agency must amend the PIJ to reflect the changes and submit it to ADOA-ASET, and ITAC if required, for review and approval prior to further expenditure of funds.

Monthly reporting on the project status is due to ADOA-ASET no later than the 15th of the month following the start of the project. Failure to comply with timely project status reporting will affect the overall project health. The first status report for this project is due on April 15, 2023.

Prior to the end of the fiscal year 2023 the agency will submit a report to ITAC with the information provided by the Gartner Infrastructure and the Cloud Assessment report. The agency shall present the information in the report to ITAC by June 2023.

14. Oversight Summary

Project Background

The Arizona Department of Revenue (ADOR) is responsible for administering and collecting taxes and ensuring the agency provides high quality performance to meet the needs of taxpayers. The agency is organized into four divisions which are: Taxpayer Services, Processing, Education and Compliance, and Support. Each division performs specific functions which are integrated to achieve efficient tax collection and processing, timely enforcement of tax laws, and accurate valuation of property.

ADOR works extensively to maintain and improve the current Tax Administration System (TAS) and external-facing portal (AZTaxes). The current tax administration process utilizes numerous databases, feeder systems, and manual spreadsheets to support operations which affect the data integrity, is costly to maintain, and creates frustrated taxpayers and/or employees. Preparation for the integrated tax system modernization project requires ADOR to

dedicate staff to the project and hire staff to backfill their positions to avoid interruption in business processes and services.

The agency will be replacing end of life equipment, the security vulnerability patching will not be available for the current hardware in place once they reach end of life. The current storage system (SAN) will reach end of life in October 2023. The current compute systems (Dell M4) will reach end of life in February 2024. The project will be able to replace these pieces of equipment prior to the end of life of the current solutions.

ADOA has been working with ADOR and Gartner Consulting in creating a Cloud Migration roadmap for the coming fiscal years. That roadmap planning will be presented to ITAC by June 2023. This plan will be presented to ITAC prior to the end of the fiscal year 2023.

Business Justification

This project will replace the outdated hardware for ADOR's storage and compute systems. The agency will have OEM vendor support for the next 5 years to ensure any security vulnerabilities are patched. This update will ensure ADOR's Federal Tax Information System (FTI) boundary, will be able to pass an audit by the IRS and OAG.

Implementation Plan

This project is for hardware refresh only. The data environment will not be changing not changing. Security will not require an AZRAMP or SSP condition.

Vendor Selection

The vendor was selected through a state contract provided under the CDW-G. The chosen vendor was Dell Engineering, the experience on the team is focused around System Architecture, Hardware Validation, System Updates and Production Support.

Budget or Funding Considerations

The project will be covered completely by agency base budget, there are no funding deadlines.

15. PIJ Review Checklist

Agency Project Sponsor

Tom Ferruccio

Agency CIO (or Designee)

Tom Ferruccio

Agency ISO (or designee)

Stacy Wallace

OSPB Representative

ASET Engagement Manager

ASET SPR Representative

Emily Gross

Agency SPO Representative

Bob Ryan

Agency CFO

Joie Estrada