Project Investment Justification

Inventory Management Initiative - Phase II

AD21007

Department of Administration

Contents

ADOA-ASET
Arizona Strategic Enterprise Technology

1. GENERAL INFORMATION

PIJ ID: AD21007
PIJ Name: Inventory Management Initiative - Phase II
Account: Department of Administration
Business Unit Requesting: ADOA-ASET-SPR
Sponsor: Tim Roemer
Sponsor Title: State Chief Information Security Officer
Sponsor Email: timothy.roemer@azdoa.gov
Sponsor Phone: (602) 206-4427

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…):

Due to the COVID-19 pandemic, more than 41% of employees for the State of Arizona are working remotely. Some agencies have almost 100% of their workforce working remotely without an ability to manage their devices. Currently there is no enterprise solution for Asset Inventory & Management for hardware or software. With the sustained onslaught of current cyber threats and the newly expanded threat surface (and the known vulnerabilities) posed from teleworking, the State cannot continue to assume this elevated risk. We have an obligation to the citizens of the State of Arizona to safeguard and protect their information in this new threat environment. Without understanding what is in your environment, it is impossible to accurately identify risks and successfully defend the enterprise against potential vulnerabilities.

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

Tanium's greatest strength is the visibility it provides into our own assets and network. Without understanding what is in your environment, it is impossible to accurately identify risks and successfully defend the enterprise against potential vulnerabilities.

Having the transparency that Tanium brings us allows for more coordinated responses to discovered risks and in turn increased overall security.

The Tanium tool provides automation of tasks thereby expanding existing staff capacity.

The Tanium solution will identify opportunities for cost savings through software license reclamation. We have already identified thousands of licenses for thousands of applications that have not been used in 90+ days and may be eligible for removal or re-allocation.

2.3 Describe the proposed solution to this business need.

The Tanium tool is the result of the Governor's Goal Council 5 - Cloud Operations committee work relating to desktops and asset management. The Tanium Client is a service installed on endpoint devices. There are multiple modules within Tanium that discover and report both static and dynamic real-time data pertaining to the endpoint. Depending on the modules selected, Tanium satisfies several of the Center for Internet Security (CIS) Top 20 Critical Security Controls. The CIS Top 20 is the framework that Enterprise Security Program Advisory Council (ESPAC) approved as the measurement standard for Enterprise cybersecurity. The CIS Top 20 are best practices and guidance to implement and improve an organization's cyber defenses. The first five controls are considered basic and critical due to its ability to automate inventory of hardware and software (CIS #1 and #2).   Without understanding what is in your environment, it is impossible to accurately identify risks and successfully defend the enterprise against potential vulnerabilities. Tanium can patch vulnerabilities from Operating System and 3rd party applications, (CIS #3), both on and off the State's network which current agency-based tools do not. Tanium identifies the users with administrative rights and most device access that represent the greatest risk if compromised (CIS #4). Creating cybersecurity policies is only the first step; Tanium ensures compliance and secure configurations of hardware (CIS #5). Tanium provides automation of these tasks thereby expanding existing staff capacity. Tanium's greatest strength is the visibility it provides into our own assets and network. The CIS Top 5 controls are needed to form the basis of the Enterprise Security platform to protect against the increased threats and vulnerabilities that are outpacing our current capabilities.

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).

ADOA is responsible for the distribution of the licences to the various state agencies who choose to participate.

The various state agencies participating in the project are responsible for the deployment and management of the licenses.

The vendor is responsible for providing the licenses.

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?

No

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
11/19/2020 12:00:00 AM	6/21/2021 12:00:00 AM

5.3 How were the start and end dates determined?

Based on project plan

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
ITAC Approval	11/18/20	11/18/20
Upgrade Tanium Modules	11/20/20	11/30/20
External Communication Phase	11/27/20	12/16/20
ADOA Tanium Client Deployment	12/02/20	12/10/20
ADOA Configuration	01/04/21	01/29/21
Push Client to other Agencies	01/04/21	05/28/21
Lessons Learned	06/07/21	06/18/21
Project Team Final Meeting	06/15/21	06/15/21
Project Close out meeting	06/21/21	06/21/21

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

Yes

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?

Yes

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

Yes

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?

No

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

No

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.

The project is using a statewide enterprise solution

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?

Yes

8.3a Describe how the software was selected below:

Technical requirements were drafted and provided to all vendors on state contracts - Network, SVAR, and Cloud. The vendors made recommendations of 9 products. Those tools were demoed by the team. Two vendors were selected for proof of concept. One of the vendors tools was not successful in the environment and the POC was canceled. The other tool is Tanium. An initial limited scope POC was conducted in December on ADOA and Managed Agencies. The results of that POC were provided to the Governor's Office at which time they authorized an expanded POC for all agencies and modules. This was completed from March - August of 2020. The feedback from the agencies was provided to the Governor's Office and it was approved for production.

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?

No

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

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

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?

We are currently deployed to 23K clients. We have several agencies that have not fully onboarded, so estimates were made based on information available - number of FTEs, Number of Servers. We also used existing Enterprise solutions for device counts.

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?

No

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

No

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

Not needed

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?

Yes

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?

Yes

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

State Data Center (SDC)

9.2b Were vendor-hosted options available and reviewed?

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

No Vendor Hosted Options available. On Prem self hosted only.

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:

10. AREAS OF IMPACT

Application Systems

Database Systems

Software

COTS Application Acquisition

Hardware

Other

Server provided by the vendor, already racked at State Hosted Data Center

Hosted Solution (Cloud Implementation)

State Data Center

Security

Security Controls/Systems - Other

CIS Top 20, #1-5

Telecommunications

Enterprise Solutions

Other

Contract Services/Procurements

11. FINANCIALS

Description	PIJ Category	Cost Type	Fiscal Year Spend	Quantity	Unit Cost	Extended Cost	Tax Rate	Tax	Total Cost
TAN - CORE - S - Interact, Trends, Connect	License & Maintenance Fees	Development	1	37500	$32	$1,186,125	860.00 %	$102,007	$1,288,132
TAN-OPS-S - Asset, Deploy, Patch, Discover	License & Maintenance Fees	Development	1	37500	$27	$1,027,125	860.00 %	$88,333	$1,115,458
TAN-COMP-S	License & Maintenance Fees	Development	1	37500	$9	$354,750	860.00 %	$30,509	$385,259
TAN-PREM-ESR-REMOTE-1D Training	Professional & Outside Services	Development	1	2	$51,094	$102,187	0.00 %	$0	$102,187
TAN-PREM-ESR-REMOTE Configuration Support	Professional & Outside Services	Development	1	1	$255,469	$255,469	0.00 %	$0	$255,469
ASET IT Administrative Support	Other	Operational	2	1	$100,000	$100,000	0.00 %	$0	$100,000
ASET IT Administrative Support	Other	Operational	3	1	$100,000	$100,000	0.00 %	$0	$100,000

Base Budget (Available)	Base Budget (To Be Req)	Base Budget % of Project
$0	$0	0%
APF (Available)	**APF (To Be Req)**	**APF % of Project**
$0	$0	0%
Other Appropriated (Available)	**Other Appropriated (To Be Req)**	**Other Appropriated % of Project**
$3,146,504	$0	100%
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
$3,146,504	$3,146,504
Total Budget To Be Req	**Total Operational Cost**
$0	$200,000
Total Budget	**Total Cost**
$3,146,504	$3,346,504

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

We will improve cybersecurity by 100% by allowing visibility into the assets. This is a CIS Top 20 #1-5 security metric.

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.

14. OVERSIGHT SUMMARY

Project Background

ADOA is responsible for ensuring state employees within agencies are taking the proper precautionary measures in securing state data on state issued devices. With the pandemic forcing state employees to work remotely, ADOA discovered agencies are providing equipment without the ability to manage devices making state data vulnerable. As the number of employees working in virtual or telecommute environments increases, cyber threats and potential attacks increase. With the lack of visibility into the state's network ADOA is unable to accurately identify security risks and vulnerabilities.

Business Justification

This solution will provide transparency into participating agencies' networks allowing ADOA the ability to identify and mitigate cyber threats and or potential attacks resulting in the vulnerability drastically decreasing. Additionally, the solution will provide the opportunity to identify unused license software that are eligible for removal and provide a cost savings to the state.

Implementation Plan

The vendor is responsible for providing the licenses.
ADOA is responsible for the distribution of the licences to the various state agencies who choose to participate. The various state agencies participating in the project are responsible for the deployment and management of the licenses.

Vendor Selection

Nine state vendors were selected to participate in providing demos to the agencies participating in the pilot project. Two of the nine vendors have a partnership with the manufacturer and provided quotes to the agency. Both vendors provided a proof of concept and one solution was not successful which lead to the selection of the vendor.

Budget or Funding Considerations

The project will be funded by Enterprise Security budget.

The project is funded through June 2022. The licenses will be re-evaluated during the final year to determine if the solution will be continue to required and is funding is available.

15. PIJ Review Checklist

Agency Project Sponsor
Gary Hensley

Agency CIO (or Designee)
JR Sloan

Agency ISO (or designee)
Tim Roemer

OSPB Representative

ASET Engagement Manager

ASET SPR Representative

Agency SPO Representative
Michael Hillebrand

Agency CFO
Ashley Ruiz