DE23006 DTS DCDR - Data Center Disaster Recovery

State of Arizona – Department of Economic Security

P (PIJ)

DEPARTMENT OF ECONOMIC SECURITY
Your Partner For A Stronger Arizona

Agency Vision

All Arizonans who qualify receive timely DES services and achieve their potential

Agency Mission

DES will ensure the strength and economic stability of Arizona by providing timely, temporary benefit assistance, and aid to vulnerable, qualifying Arizonans.

Team Introduction

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Roles Present at ITAC

- Mark Darmer DTS CIO
- Clayton Sikes - DTS Deputy CIO
- Deborah Foley - Operations Senior Program Manager
- Steven Pickering - Cloud and infrastructure Senior Manager
- Lori Cunningham - Disaster Recovery Manager

Project Introduction

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Stated Operational/Business Issue

- The Department of Economic Security (DES) is responsible for hosting mission critical open systems applications that support vulnerable Arizonans.
- These systems, while redundant and highly available, do not presently have the level of disaster recovery required by federal audits.
- The agency is presently in non-compliance with state and federal regulations governing the protection of sensitive data where disaster recovery procedures must be in place.

Benefit to the State Agency and Constituents

- The solution selected will back up our infrastructure and server data to the Amazon Web Services (AWS) cloud using VMware Cloud Disaster Recovery (VCDR) software as a solution (SaaS) from VMWare allowing for a 4 hour recovery time.
- By utilizing the VMWare/AWS solution, all DES business units that serve Arizona citizens would be able to continue their critical services despite loss of the physical infrastructure located at Iron Mountain.
- Implementation of the VMWare/AWS solution would provide Risk Avoidance through the ability to mirror the DES systems to an offsite, cloud-based solution.
- The solution overall would be in keeping with the the State's goal of a cloud first approach.

Proposed Solution

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Due Diligence and Method of Procurement

DES utilized a Task Order to solicit solution recommendations. Multiple vendors responded, with VMware being selected as the only Vendor that met the selection criteria. DES already utilizes VMware to host our internal infrastructure, which will allow for a more seamless integration with the current infrastructure.

Technology

The VCDR solution gives DES the ability to mirror the configuration and data of our current production infrastructure without loss of data to AWS. Once mirrored, DES businesses will have the ability to select the appropriate level of DR support based on federal requirements specific to their business need.

Proposed Solution

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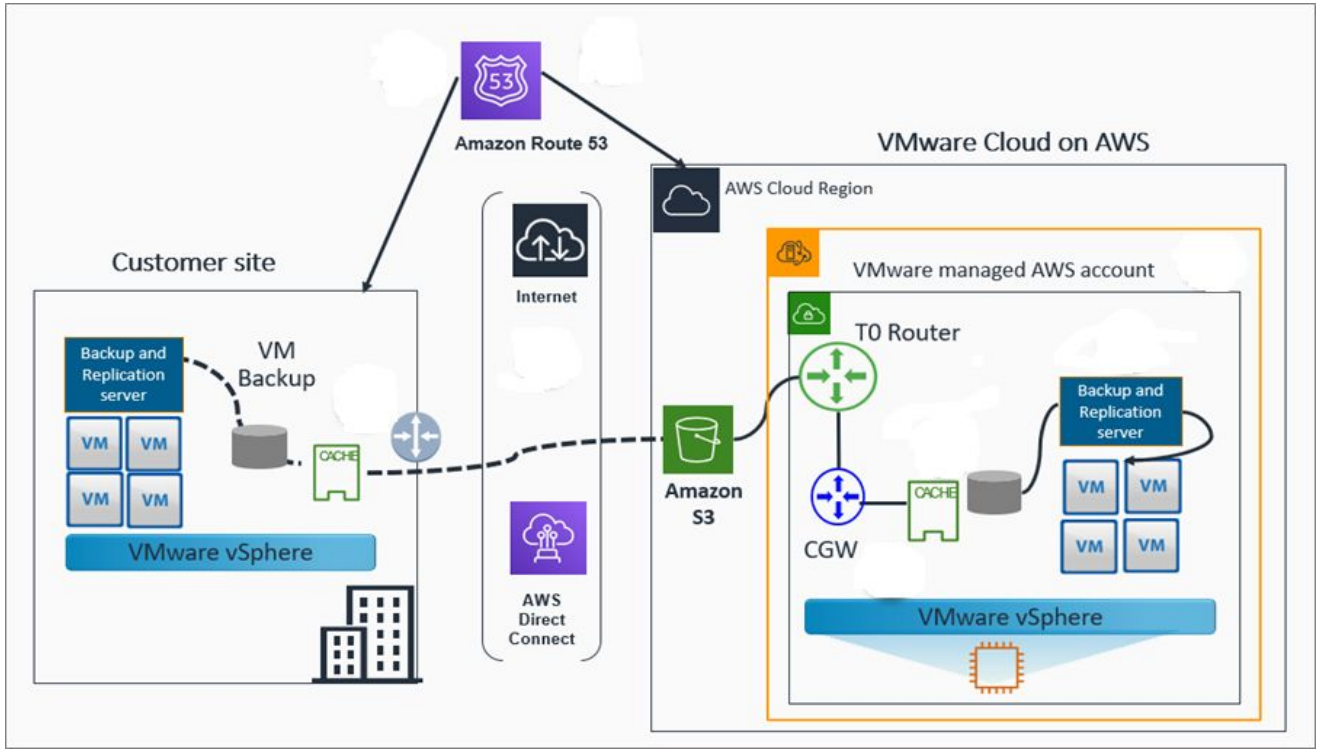
Overview of Proposed Solution



Project Responsibilities

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Identify Proposed Solutions Responsibilities

Agency

1. Contract Oversight
2. Provide Key Info
3. User Acceptance Testing
4. Review and Acceptance of Milestone Deliverables

Shared

1. Project Management
2. Training
3. Disaster Recovery Testing
4. Configuration

Vendor/Contractor

1. Configure and implementation of Software
2. Hosting

Project Timeline

Date	Nov 2022	Dec 2022	Jan 2023	Feb 2023	March 2023	April 2023	May 2023	June 2023

Planning Phase

vRealize Operations Cloud requirements validation
Identification of VMs to be migrated
Identification of network segment to be extended

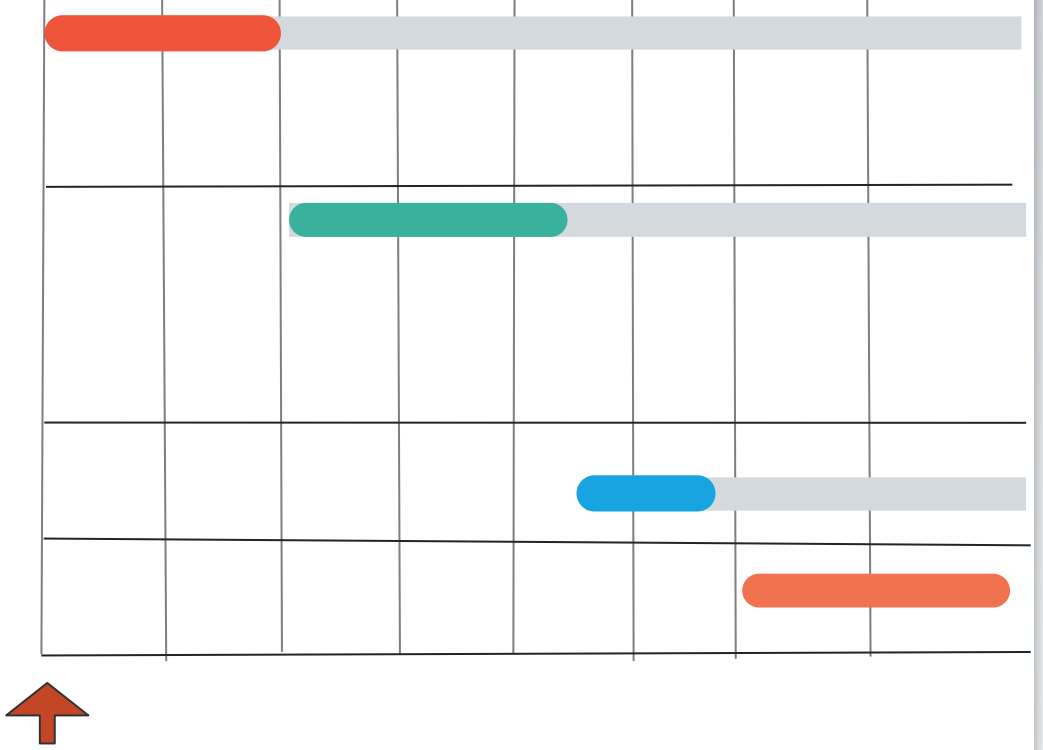
Deploy Phase

Finalizes the Configuration Workbook
Executes a single migration wave (up to 15 VMs)
Configure vRealize Log Insight Cloud dashboard
Configure vRealize Network insight Cloud
Configure vRealize Operations Cloud dashboard
Configure vRealize Automation Cloud service catalog
Executes service component functional test validation
Training

Close Phase

Project status, reviewing completions,
next steps VM Support

Steady State



Project Costs

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Project Costs by Category	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Software	$1,186,955.78	$1,023,865.70	$1,023,865.70	$1,023,865.70	$1,023,865.70	$5,282,418.59
Total Development	$1,186,955.78	$0.00	$0.00	$0.00	$0.00	$1,186,955.78
Total Operational	$0.00	$1,023,865.70	$1,023,865.70	$1,023,865.70	$1,023,865.70	$4,095,462.82
Total						$5,282,418.59

What Success Looks Like

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- Upon completion of the VCDR project, DES will have the ability to recover all production servers that host critical DES applications within a maximum of 4 hours by utilizing the VMWare/AWS solution.
- DES Divisions would be able to continue to provide critical services statewide
- Address repeat findings from the Center for Medicare and Medicaid Services, Minimum Acceptable Risk Standards for Exchanges (MARS-E) audits
- Address federal requirements for DR capability such as, IRS Publication 1075, Tax Information Security Guidelines
- Ensure compliance with the National Institute of Technology (NIST) guidance, NIST Special Publication (SP) 800-34, Revision 1, Contingency Planning Guide for Federal Information

Q & A Session

Appendix

Financial Impact (If Applicable)

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Breakdown of Financial Impact

Project Development Funding	
Base Budget - Available	$768,276.19
Base Budget - To Be Requested	0
APF Budget - Available	0
APF Budget - To Be Requested	0
Other Appropriated - Available	$43,404.13
Other Appropriated - To Be Requested	0
Federal - Available	$2,082,238.68
Federal - To Be Requested	0
Other Non-Appropriated Available	$2,388,499.59

Total Development Project Funding	
Available Budget	$5,282,418.59
To Be Requested Budget	0