# Oracle Identity and Access Management Upgrade - Technical Proposal

Speridian Technologies, LLC
2400 Louisiana Blvd Building 3
Albuquerque, New Mexico 87110

| Part IA – **TECHNICAL PROPOSAL** | |
|---|---|
| RFP Title: | Oracle Identity and Access Management Upgrade |
| RFP: | 3490 |
| Vendor Name: | Speridian Technologies, LLC |
| Address: | 2400 Louisiana Blvd Building 3<br>Albuquerque, New Mexico 87110 |
| Opening Date: | November 1, 2017 |
| Opening Time: | 2:00 PM |

## TABLE OF CONTENTS

1. Vendor Information Sheet ..... 4
2. State Documents ..... 5
ATTACHMENT A – CONFIDENTIALITY AND CERTIFICATION OF INDEMNIFICATION ..... 5
ATTACHMENT B – VENDOR CERTIFICATIONS ..... 6
ATTACHMENT J – CERTIFICATION REGARDING LOBBYING ..... 8
3. System Requirements ..... 9
4. Scope of Work ..... 9
4.1 Assumptions ..... 10
4.2 Proposed Upgrade Methodology, Approach & Solution ..... 11
4.2.1 Oracle IDM Functional Reference Architecture ..... 14
5. Company Background and References ..... 14
5.1 Company Profile ..... 14
5.2 Relevant Project Experience ..... 17
5.3 State of Hawaii – IDM Case Study ..... 18
6. Proposed Staff Resumes ..... 20
7. Project Plan ..... 26
7.1.1 Project Management Methodology ..... 27
7.1.2 Project Control ..... 28
7.1.3 Cost Control ..... 29
7.1.4 Scheduling ..... 30
7.1.5 Project Manager – Tasks ..... 30
7.1.6 Change Request Management ..... 31
7.1.7 Quality Assurance Approach ..... 32
8. Other Informational Material ..... 33
8.1.1 Identity Management Roadmap ..... 33

# 1. Vendor Information Sheet

| | | |
|---|---|---|
| V1 | Company Name | Speridian Technologies, LLC |

| | | | |
|---|---|---|---|
| V2 | | Street Address | 2400 Louisiana Blvd Building 3 |

| | | |
|---|---|---|
| V3 | City, State, ZIP | Albuquerque, New Mexico 87110 |

| | | | |
|---|---|---|---|
| V4 | Telephone Number | | |
| | Area Code: 505 | Number: 217 3725 | Extension: |

| | | | |
|---|---|---|---|
| V5 | Facsimile Number | | |
| | Area Code: 505 | Number: 242 6036 | Extension: |

| | | | |
|---|---|---|---|
| V6 | Toll Free Number | | |
| | Area Code: N/A | Number: N/A | Extension: |

| | |
|---|---|
| V7 | **Contact Person for Questions / Contract Negotiations, including address if different than above** |
| | Name: Sujith Nair |
| | Title: Director – Public Sector |
| | Address: 2400 Louisiana Blvd Building 3, Albuquerque, New Mexico 87110 |
| | Email Address:Sujith.nair@speridian.com |

| | | | |
|---|---|---|---|
| V8 | **Telephone Number for Contact Person** | | |
| | Area Code: 951 | Number: 515 612 | Extension: |

| | | | |
|---|---|---|---|
| V9 | **Facsimile Number for Contact Person** | | |
| | Area Code: 505 | Number: 242 6036 | Extension: |

| | | |
|---|---|---|
| V10 | **Name of Individual Authorized to Bind the Organization** | |
| | Name: Ali Hasan | Title: Chief Operating Officer |

| V11 | Signature (Individual shall be legally authorized to bind the vendor per NRS 333.337) | |
|---|---|---|
| | Signature: | Date: 10/28/2017 |

## 2. State Documents

**ATTACHMENT A – CONFIDENTIALITY AND CERTIFICATION OF INDEMNIFICATION**

Submitted proposals, which are marked "confidential" in their entirety, or those in which a significant portion of the submitted proposal is marked "confidential" **shall not** be accepted by the State of Nevada. Pursuant to NRS 333.333, only specific parts of the proposal may be labeled a "trade secret" as defined in NRS 600A.030(5). All proposals are confidential until the contract is awarded; at which time, both successful and unsuccessful vendors' technical and cost proposals become public information.

In accordance with the submittal instructions of this RFP, vendors are requested to submit confidential information in separate files marked

**"Part IB Confidential Technical" and "Part III Confidential Financial".**

The State shall not be responsible for any information contained within the proposal. If vendors do not comply with the labeling and packing requirements, proposals shall be released as submitted. In the event a governing board acts as the final authority, there may be public discussion regarding the submitted proposals that shall be in an open meeting format, the proposals shall remain confidential.

By signing below, I understand it is my responsibility as the vendor to act in protection of the labeled information and agree to defend and indemnify the State of Nevada for honoring such designation. I duly realize failure to so act shall constitute a complete waiver and all submitted information shall become public information; additionally, failure to label any information that is released by the State shall constitute a complete waiver of any and all claims for damages caused by the release of the information.

This proposal contains Confidential Information, Trade Secrets and/or Proprietary information.

**Please initial the appropriate response in the boxes below and provide the justification for confidential status.**

| Part IB – Confidential Technical Information | | | |
|---|---|---|---|
| YES | | NO | AH |
| Justification for Confidential Status | | | |

| Part III – Confidential Financial Information | | | |
|---|---|---|---|
| YES | | NO | AH |
| Justification for Confidential Status | | | |

**Speridian Technologies LLC**

Company Name

Signature

**Ali Hasan** **10/28/2017**

Print Name Date

**ATTACHMENT B – VENDOR CERTIFICATIONS**

Vendor agrees and shall comply with the following:

1. Any and all prices that may be charged under the terms of the contract do not and shall not violate any existing federal, State or municipal laws or regulations concerning discrimination and/or price fixing. The vendor agrees to indemnify, exonerate and hold the State harmless from liability for any such violation now and throughout the term of the contract.
2. All proposed capabilities can be demonstrated by the vendor.
3. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, agreement or disclosure with or to any other contractor, vendor or potential vendor.
4. All proposal terms, including prices, shall remain in effect for a minimum of 180 days after the proposal due date. In the case of the awarded vendor, all proposal terms, including prices, shall remain in effect throughout the contract negotiation process.
5. No attempt has been made at any time to induce any firm or person to refrain from proposing or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal. All proposals shall be made in good faith and without collusion.
6. All conditions and provisions of this RFP are deemed to be accepted by the vendor and incorporated by reference in the proposal, except such conditions and provisions that the vendor expressly excludes in the proposal. Any exclusion shall be in writing and included in the proposal at the time of submission.
7. Each vendor shall disclose any existing or potential conflict of interest relative to the performance of the contractual services resulting from this RFP. Any such relationship that might be perceived or represented as a conflict shall be disclosed. By submitting a proposal in response to this RFP, vendors affirm that they have not given, nor intend to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant or any employee or representative of same, in connection with this procurement. Any attempt to intentionally or unintentionally conceal or obfuscate a conflict of interest

shall automatically result in the disqualification of a vendor's proposal. An award shall not be made where a conflict of interest exists. The State shall determine whether a conflict of interest exists and whether it may reflect negatively on the State's selection of a vendor. The State reserves the right to disqualify any vendor on the grounds of actual or apparent conflict of interest.

8. All employees assigned to the project are authorized to work in this country.
9. The company has a written equal opportunity policy that does not discriminate in employment practices with regard to race, color, national origin, physical condition, creed, religion, age, sex, marital status, sexual orientation, developmental disability or handicap.
10. The company has a written policy regarding compliance for maintaining a drug-free workplace.
11. Vendor understands and acknowledges that the representations within their proposal are material and important, and shall be relied on by the State in evaluation of the proposal. Any vendor misrepresentations shall be treated as fraudulent concealment from the State of the true facts relating to the proposal.
12. Vendor shall certify that any and all subcontractors comply with Sections 7, 8, 9, and 10, above.
13. The proposal shall be signed by the individual(s) legally authorized to bind the vendor per NRS 333.337.

**Speridian Technologies LLC**

Vendor Company Name

Vendor Signature

**Ali Hasan** **10/28/2017**

Print Name Date

**ATTACHMENT J – CERTIFICATION REGARDING LOBBYING**

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or shall be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federally appropriated funds have been paid or shall be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including subcontracts, sub grants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

By: **10/28/2017**

Signature of Official Authorized to Sign Application — Date

For: **Speridian Technologies LLC**

Vendor Name

**Chief Operation Officer**

Project Title

## 3. System Requirements

Speridian recommends the following hardware configuration for implementing the new upgraded Oracle Identity and Access Management Solution.

| Environment | | Processor | RAM | Disk | Operating System | DB | Java |
|---|---|---|---|---|---|---|---|
| Development | | 10 (1.5 GHz or greater) | 64 GB | 150 GB | OEL 6 (UL1+) 64 bit | Oracle 12.1.0.1+ | 1.6.0_35+ |
| Test 1 | Cluster | 12 (1.5 GHz or greater) | 76 GB | 200 GB | OEL 6 (UL1+) 64 bit | Oracle 12.1.0.1+ | 1.6.0_35+ |
| Test 2 | | 12 (1.5 GHz or greater) | 76 GB | 200 GB | OEL 6 (UL1+) 64 bit | Oracle 12.1.0.1+ | 1.6.0_35+ |
| Production 1 | Cluster | 16 (1.5 GHz or greater) | 76 GB | 200 GB | OEL 6 (UL1+) 64 bit | Oracle 12.1.0.1+ | 1.6.0_35+ |
| Production 2 | | 16 (1.5 GHz or greater) | 76 GB | 200 GB | OEL 6 (UL1+) 64 bit | Oracle 12.1.0.1+ | 1.6.0_35+ |

Note: The above estimations were made from the information obtained from RFP and based on our current understanding of the State's requirements.

## 4. Scope of Work

Department of Employment, Training and Rehabilitation (DETR)'s installed Oracle Identity and Access Management (IAM) 11g R1 (Release 11.1.1.5) as the security provider to reduce the risk of data breach and improper data access by internal and external users. The existing Oracle Identity and Access management software need to be upgraded to newer version to resolve the known bugs and to take advantages of the latest features included on the latest release of Oracle IAM. This document will emphasis the detailed implementation approach carried out by Speridian Technologies in upgrading and migrating the existing Oracle Identity and Access Management suite.

The primary objectives of this engagement include installation and configuration of three (3) IAM environments using DETR supplied and managed infrastructure including: Oracle IAM software, network, load balancer, database, servers, operating system software, and storage; and migration of existing IAM configurations and data to the new environments.

The following requirements will be covered in the scope of Project Planning and Management:

- Project planning including Work plan, resource plan, defining project milestones and deliverables schedule.
- Change management plan and strategy for controlling the changes.
- Participation in all project related meetings.
- Semi-monthly status reports.

The following requirements will be covered in the scope of the Oracle Identity and Access management Upgrade:

- Evaluate the current IAM environments and configurations.
- Make upgrade and configuration recommendations based on evaluations of current IAM environments and configurations in-line with IAM and Oracle best practices.
- Installing and configuring Oracle Internet Directory (OID), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Identity Manager (OIM), Oracle supplied Business Intelligence Publisher Reports for IAM and Integration of above products on three environments (DEV, Test and PROD).
- Migration of artifacts, policies and configuration (OAM, OAAM, OIM and OID)
- Provide support for troubleshooting and testing of custom API and integration points with business applications
- Acceptance Test Support
- Configuration of secure communication channel between IAM components, web Serve and load balancer using SSL
- Go-Live and post go–live Production Support
- Knowledge Transfer
- Provide Architecture and Environment Documentation for IAM environments.
- Oracle IAM System Run-Book

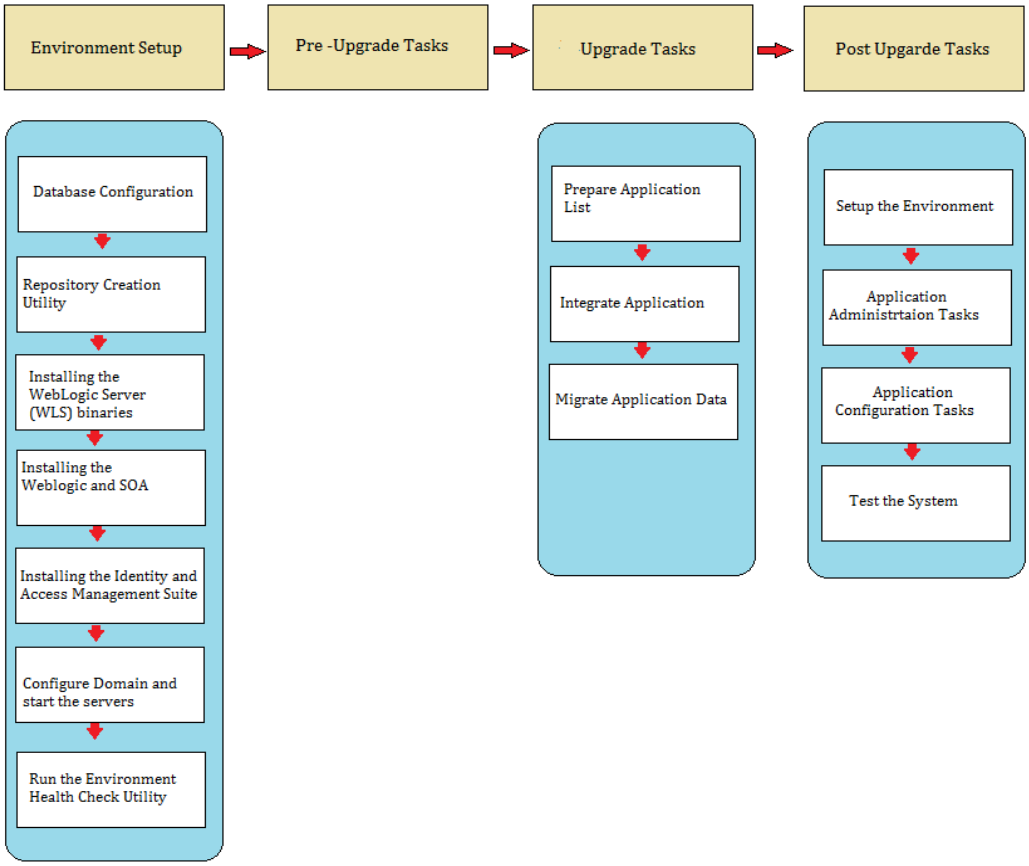
## 4.1 Assumptions

- The scope of this project is to upgrade the current IDM solution to Oracle IDM 11gR2 PS3 version.
- The timeline outlined below is aggressive and will require the State's cooperation. Delays in timeline caused due to dependencies on other applications will be managed by DETR and any delays resulting from this will be addressed via change request process.
- Hardware environment setup, OS installation or patching work is not part of the scope.

- Database patching and upgrade is not a part of the scope.
- Changes to the custom Java applications which are integrated into the existing Oracle Identity and Access Management and not related to IDM integration are not part of the scope.
- Any change in timeline or delays or changes in design after signoff will need to be re-estimated.
- Any change to scope or schedule will be addressed using a change request process.
- Oracle product defects may impact the project schedule. We will work with Oracle to address any Oracle IDM product defects as they occur. Such delays are not accounted in our scope and estimate and will have to be addressed via a change request process.
- Existing SSL certificates will be migrated to new IDM environment. DETR will acquire new certificates if needed and it will be DETR's responsibility to provide these in a timely fashion such that the overall project schedule is not impacted.

## 4.2 Proposed Upgrade Methodology, Approach & Solution

The flow of the Implementation process is outlined in the figure below.



**Upgrade the Infrastructure**

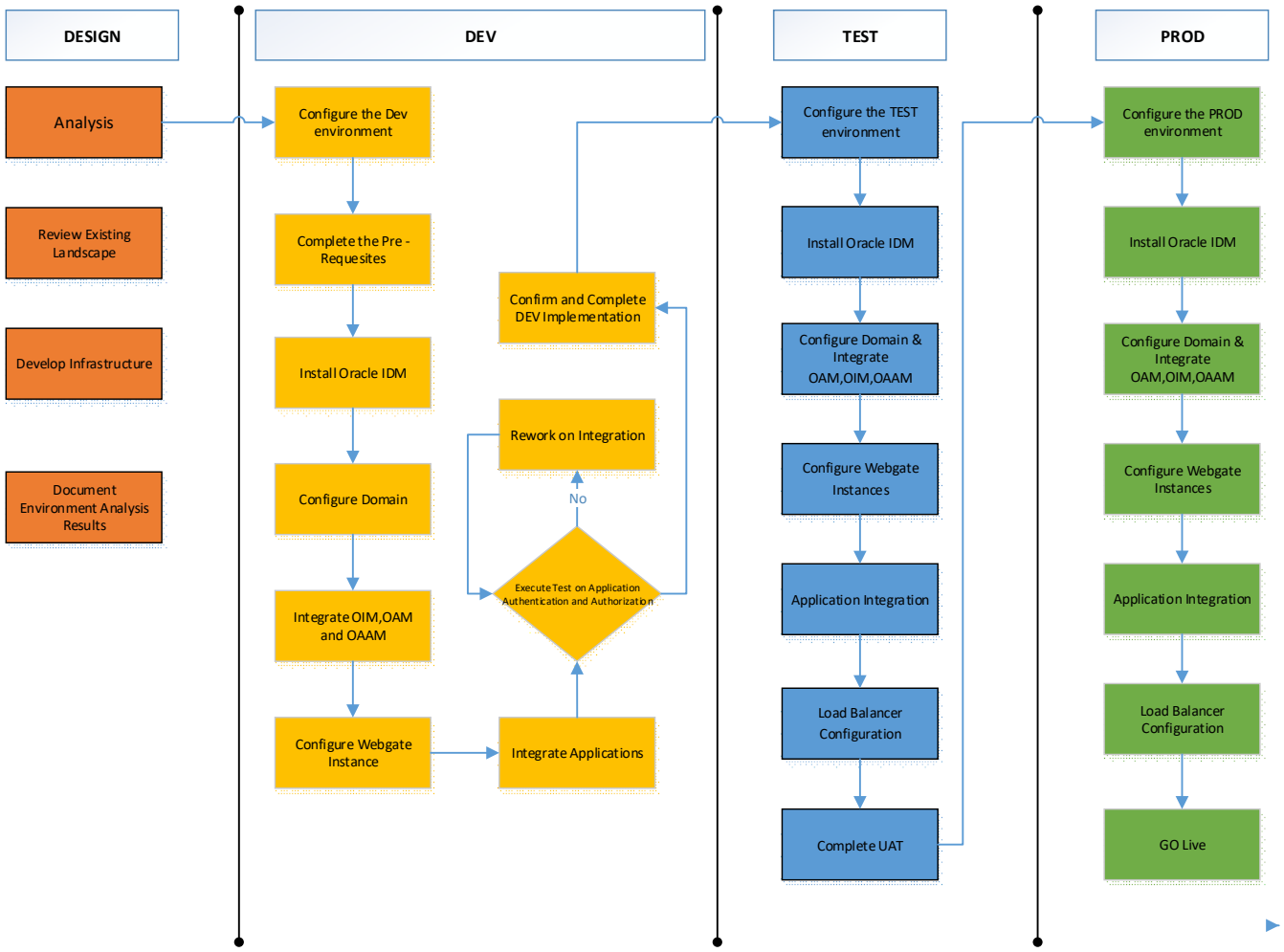
The first phase of the initiative is to create a new infrastructure with Oracle recommended standards install and configure Identity and Access Management suite, configure the domain and integrate OIM, OAM and OAAM.

**Perform Pre-Upgrade Tasks**

This phase prepares the setting the WebGate for the Applications to be integrated with updated Oracle IDM.

**Perform Upgrade Tasks**

Speridian' s solution calls for an 18-week implementation effort to upgrade the existing Oracle Identity and Access Management and covers six (3) environments: DEV, TEST, and PRODUCTION to the Oracle certified latest Oracle IAM release 11gR2 PS3 (including patch set updates and patch set bundles available from Oracle at time of installation). Speridian will follow our proven best practices from similar upgrades that are based upon, and adhere to, Oracle recommendations.




Speridian will upgrade the Oracle Identity and Access Management with the following tasks:

1. Analyze the existing  and IAM Environment

    a. Review Existing Landscape
    b. Develop Infrastructure and Sizing Recommendations
    c. Document Environment Analysis Results

2. Installation and Migration in DEV environment

    a. Setup the Dev environment with Oracle recommended standards.
    b. Install Oracle IDM software
    c. Configure Domain
    d. Integrate OIM,OAM and OAAM
    e. Application Integration
    f. Set up Environment & Apps Admin tasks

3. Fix all configuration issues tied to  upgrade in DEV Environment

    a. Execute Test and perform applications authentication and authorization testing
    b. Resolve all issues which arise out of the upgrade that are reported from testing
    c. Resolve any issues in applying patch by working with Oracle Technical Support
    d. Perform regression testing and close all open issues
    e. Do performance testing on DEV servers and confirm system stability
    f. Confirm and Complete DEV Implementation

4. Installation and Migration in TEST environments

    a. Setup the TEST environment with Oracle recommended standards.
    b. Install Web logic and Oracle IDM software
    c. Configure Domain
    d. Integrate OIM,OAM and OAAM
    e. Application Integration
    f. Set up Environment & Apps Admin tasks
    g. Complete the High availability configurations
    h. Work with Infrastructure Team on Load balancer configurations
    i. Start the testing

5. User Acceptance Testing

    a. Publish INT URL and User Credentials to DETR's Team to perform UAT
    b. Resolve all issues arising out of upgrade that are reported from user acceptance testing.
    c. Perform regression testing and close all open issues.
    d. Do performance testing on TEST servers and confirm system stability.
    e. Confirm and Complete TEST IAM Implementation.
    f. UAT Signoff.

6. Installation and Migration in PROD environments

    a. Setup the PROD environment with Oracle recommended standards.
    b. Install Web logic and Oracle IDM software
    c. Configure Domain

d. Integrate OIM,OAM and OAAM
e. Migrate Code changes from TEST to PRODUCTION servers

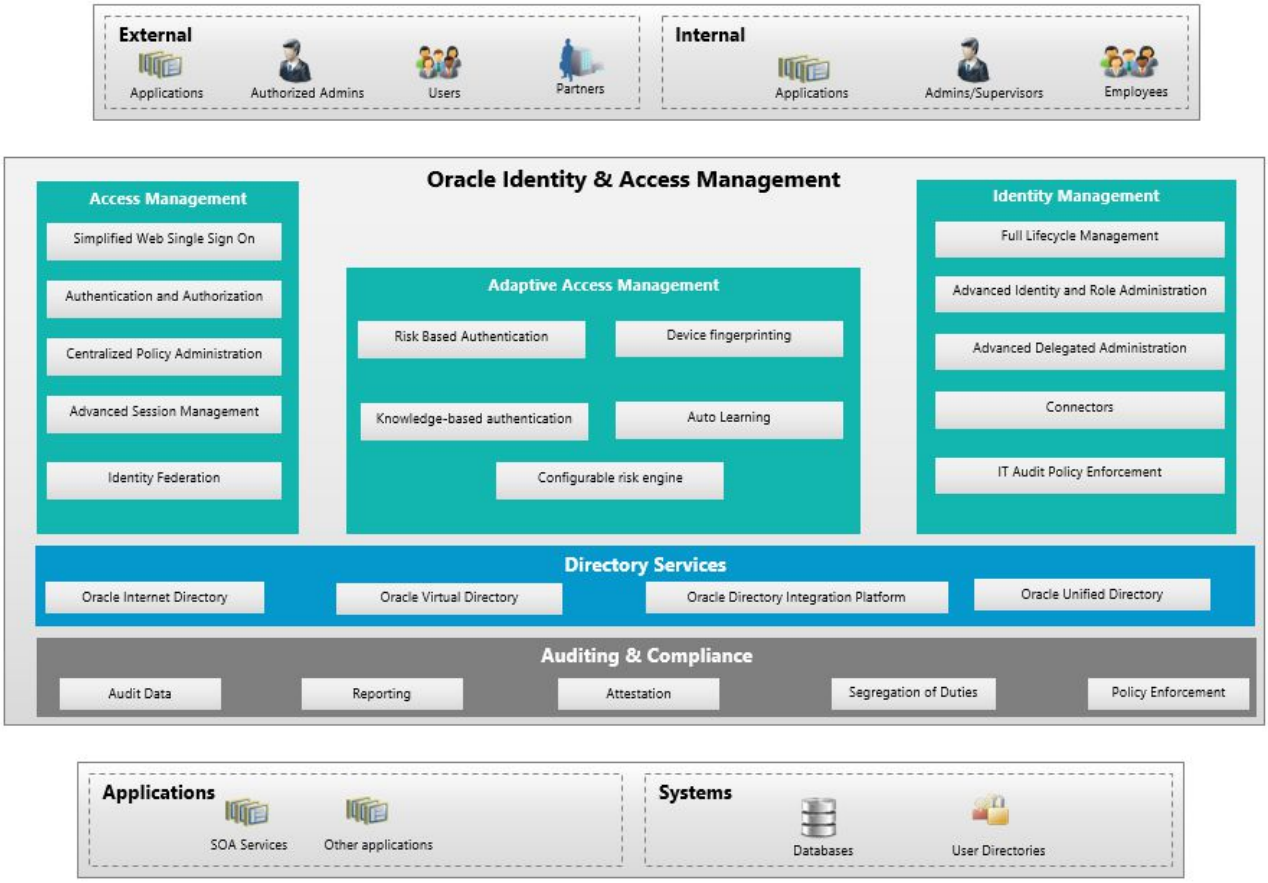
f. Smoke test production application
g. Confirm Deployment Completion
h. Go Live

7. Project Closure

a. Project Closure and Signoff

### 4.2.1 Oracle IDM Functional Reference Architecture

The Figure below depicts the Functional reference architecture for latest Oracle IDM Suite.




# 5. Company Background and References

## 5.1 Company Profile

Speridian is a public sector focused Systems Integrator and a global provider of quality, cost-effective technology services to public sector and private sector clients. Speridian was founded in 2003, is headquartered in Albuquerque, New Mexico; and is a CMMI 5 company. Over the last decade, it expanded technology capabilities

to include Systems Integration, Business Intelligence, Mobility and Application Support and Maintenance. Speridian is an "Oracle Platinum Partner" and has over 1,100 global employees.

**Figure 1 - Speridian Overview**

We offer State of Nevada a unique blend of focused experience and technology expertise across clients in public and private sectors illustrated by:

- Significant experience in successful public sector DDI and M&O for public sector initiatives in Hawaii, Oregon, Connecticut, California and New York.
- Speridian is an Oracle Platinum Partner
- We have extensive experience on the Oracle Identity Management Suite from installation through configuration, customization, integration and upgrade.

Our longstanding expertise and understanding of clients' needs enable us to develop effective, customized recruiting programs. Our goal is to provide a more consultative approach through the development and refinement of our services for the needs of the State.

| Question | Response |
|---|---|
| Company name: | Speridian Technologies LLC |
| Ownership (sole proprietor, partnership, etc.): | Limited Liability Corporation |
| State of incorporation: | Delaware |
| Date of incorporation: | 7/23/2003 |
| # of years in business: | 14 |
| List of top officers: | Girish Panicker, Chief Executive Officer<br>KP Hari, Chief Financial Officer<br>Ali Hasan, Chief Operating Officer |

| Question | Response |
|---|---|
| Location of company headquarters, including City and State: | 2400 Louisiana Blvd Building 3, Albuquerque, New Mexico 87110 |
| Location(s) of the office that shall provide the services described in this RFP: | 2400 Louisiana Blvd Building 3, Albuquerque, New Mexico 87110 |
| Number of employees locally with the expertise to support the requirements identified in this RFP: | 10+, We plan to relocate our employees to NV as needed for execution. |
| Number of employees nationally with the expertise to support the requirements in this RFP: | 20+ |
| Location(s) from which employees shall be assigned for this project: | 2400 Louisiana Blvd Building 3, Albuquerque, New Mexico 87110 |

**Why Speridian**

Speridian started its journey with CRM implementations for Healthcare Payers and Providers such as MD Anderson Cancer Center, United Health Group, Blue Cross Blue Shield (BCBS) associations in New York, Vermont and Florida, among others. Over the last 14 years, it expanded the technology capabilities to include Systems Integration, Business Intelligence, Mobility and Application Support and Maintenance. Speridian is an "Oracle Platinum Partner" and has over 1,100 employees globally.

Some of Speridian's achievements that are the key for the State of Nevada include

- Successfully delivered multiple projects on the Oracle over the last decade. We are the industry experts on Oracle Siebel, SOA, IDM and BI.
- We have specific detailed implementation and upgrade experience on Oracle IDM Suite at Hawaii, Vermont and Oregon. We have private sector IDM implementation and maintenance expertise as well.
- We have a workforce of over 500 who are skilled on various Oracle technologies.

We would also like to address some of the specific questions from the State here.

- Speridian is not registered with the State of Nevada.
- Speridian will register with the State of Nevada, Secretary of State's Office as a foreign corporation before a contract can be executed between the State of Nevada.
- Speridian has never worked with the State of Nevada or any of its agencies.
- Speridian has no ongoing contract failures, contract breaches, civil or criminal litigation in which the vendor has been alleged to be liable or held liable in a matter involving a contract with the State of Nevada or any other governmental entity.
- Speridian has reviewed and will provide if awarded a contract the insurance requirements as specified in Attachment D, Insurance Schedule for RFP 3490.

## 5.2 Relevant Project Experience

Speridian brings significant depth and experience in implementations and M&O in the Public Sector. Over the past decade, Speridian has been implementing leading case management and CRM solutions and Business Intelligence solutions that have made a positive impact for our clients by improving customer interaction, and improving operational efficiency, while significantly reducing the client's overall IT support and maintenance expense.

In the Public Sector Systems Integration space, Speridian played an integral role in the success of Medicaid modernization for the State of Hawaii and the Health Exchanges at Connecticut and New York. It is a premier implementation partner for large scale System Integrators such as Oracle, KPMG, Unisys, CGI and Maximus. Below is a synopsis of some of these engagements.

| | |
|---|---|
| CMS CENTERS for MEDICARE & MEDICAID SERVICES<br>2009-Present | Speridian co-developed the Medicare Appeals System (MAS) and Medicare Beneficiary System, in partnership with CGI. MAS incorporates the development of a universal schema for end-to-end Medicare appeals case management and tracking, built on Oracle Siebel CRM (http://www.medicare.gov). The MAS would be a comprehensive and centralized appeals case control and tracking system. |
| access health CT<br>Connecticut's Official Health Insurance Marketplace<br>2013 | Speridian has provided design and implementation services for an integrated Oracle Siebel-based Consumer Support Solution to support the Connecticut's health insurance exchange initiative and implemented the Appeals and Grievances Service Request Processes. |
| Hixny℠<br>2013-Present | Speridian provides project management and support services for the State's Call Center for its "Healthcare Information Exchange" project. It also provides Business Intelligence and Data Warehousing Development support for all analytical requirements to do with Case Analytics and Consumer Support Analytics. |
| VERMONT<br>**2012-Present** | Speridian provides Project Management, Business Analytics Services and System Integrator services which includes design, development, implementation and Support of the Vermont Health Benefit Exchange. |

| | |
|---|---|
| **2012 – Present** | The Hawaii Medicaid implementation is one of the successful implementations of Medicaid Modernization in 2013.<br><br>Speridian was hired by KPMG (prime vendor) as the end to end delivery partner for the State of Hawaii Medicaid Modernization project. Our scope of work included end to end system design, development and deployment across all technology stacks including client portal, caseworker portal for case management, SOA based integration, data conversion, data warehouse and reporting, identity and access management, external interfaces and customer notices. |
| 2015- Present | Speridian is engaged to cleanse data stored in the Covered California CRM database. Speridian's Enterprise Data Quality team is engaged in the first phase of this effort that started in September 2015. |
| **2012- Present** | The Oregon Health Exchange implementation was one of the earliest exchange implementations. Speridian was originally involved in the development of all external interfaces.<br><br>Due to several reasons, Cover Oregon decided not to further develop the system and rolled off all vendors from the project. Speridian was the only vendor retained from the original team to provide end-to-end Maintenance and Operations support to the existing Cover Oregon system and its integration with the Medicaid system at the Oregon Health Authority. In 2014 Speridian was tasked with developing solution for Data Archival from the Oracle Stack and creating 1095a and 1095b reporting solutions. At present, Speridian operates a 40 person BPO call center to handle all Tax related questions. |

## 5.3 State of Hawaii – IDM Case Study

Speridian implemented KOLEA, the State of Hawaii's Integrated Eligibility System with KPMG. The solution was developed with Oracle Middleware products such as Siebel, SOA, OPA, Oracle IDM and OBIEE. Middleware includes integration with OPA, Oracle IDM, Siebel, Liferay, Federal systems and Legacy System. Legacy work deals with inbound and outbound interfaces which interact between Siebel and FTP network.

**Speridian Responsibility on the IDM Integration includes**

The Oracle Identity and Access Management suite enables the Single Sign on, authentication and Authorization for the State of Hawaii Application. Speridian configured the Oracle IDM suite handled the on boarding and off boarding of employees, broker and uses in the State Market Place application.

The Liferay portal, Siebel and other application was integrated with Oracle Identity Manager (OIM) for user, broker and employee registration which is synced with Oracle Internet Directory (OID) will hold employees details like name, designation, enterprise roles, application specific roles, security credentials like password, based on rule set in the OIM the roles and responsibility assigned will be set and the users will be provisioned with different application. When the user, broker or employee try to access an application, Oracle Access manager (OAM) will provide the Authentication and Authorization for the application.

An authentication Scheme was set in the Oracle Access Manger to provide authorization on the portal and other application resources. Oracle Adaptive and Access manager (OAAM) properties were configured to use KBA (Knowledge based Access) to enable the two factor authentication.

- Configuring Oracle Identity and Access Management Suite.
- Integrate OAM, OAAM and OIM
- Installing and configuring Web tier, WebGate installation and registering the WebGate with Web tier SSO agent.
- OAM Setup Authentication and Authorization policy Configurations, Single Sign On implementation and Integration with OHS.
- Mapping Portal and other application resources in OAM, Managing Policies to Protect Resources and Enable SSO.
- Configured OAM and enabling SSO (Single Sign on) in applications like Siebel, OBIEE and Liferay (A portal software).
- Oracle Adaptive Access Manager was configured for two factor authentication.
- Provisioning, Reconciliation, Approvals and Single Sign On
- Creating and managing Users, User Groups and Organizations.
- Sync the roles in OIM for applications like Portal and Siebel.
- Configure the role bases access in Portal by setting the authorization policy in OAM.
- Configured Authentication policy, Authorization policy, Authentication modules, and Authentication schemas for Liferay Portal.
- Extend Connector for Target Application like Siebel and OID
- Defined IT Resources to establish a connections between OIM and Target applications.
- Customize the Login pages and Self registration pages using Java and Sandbox.

## 6. Proposed Staff Resumes

The team performing the Project shall consist of SPERIDIAN project team and (ii) State of Nevada project stake holders (collectively, the "Project Team" or "project team"). DETR and SPERIDIAN agree to provide qualified personnel to perform their responsibilities and to use practical and diligent efforts to maintain the continuity of their respective personnel assigned to the Project. SPERIDIAN Roles for this engagement are listed below:

| Name | Role | Area of Work |
|---|---|---|
| **Ginu Thomas** | Project Manager | Manages overall project delivery from project initiation through project closure. |
| **Devanand Devarajan** | Implementation Lead | Overall solution and upgrade process owner covering all aspects of the Upgrade |

**PROPOSED STAFF RESUME FOR RFP 3490**

| | |
|---|---|
| **Company Name Submitting Proposal:** | **Speridian Technologies, LLC** |

| ***Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.*** | | | |
|---|---|---|---|
| **Contractor:** | | **Subcontractor:** | |

| ***The following information requested pertains to the individual being proposed for this project.*** | | | |
|---|---|---|---|
| **Name:** | **Ginu Thomas Uthup** | **Key Personnel: (Yes/No)** | **Yes** |
| **Classification; i.e., Project Manager, Implementation Lead, etc.** | **Project Manager** | | |
| **# of Years in Classification:** | **10 years** | **# of Years with Firm:** | **11 years and 1 month** |

| **BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE** |
|---|
| ***Information should include a brief summary of the proposed individual's professional experience.*** |

- 12 years and 10 months of **project and program management** and **implementation** experience of **Planning, Systems Design, Development, Implementation, Testing and Support** of complex IT systems.
- Managed the development life cycle involving cross functional teams, release management and hosting of the Hawaii **MAGI and Non-MAGI Medicaid Modernization** and **Eligibility** Project in the State of Hawaii (KOLEA) .
- Managed development life cycle of products in Corporate and Retails sales of Health, Life, Travel and Student International insurance.
- Experience of managing the **end-to-end development life cycle** of Oregon HIX Interfaces development.
- Experience of managing multiple projects and programs at the same time.
- Excel at **strategic planning, high-performance team building, project management, resource management** (allocation, ramp up and ramp down) **and implementation of best practice methodologies**.
- Has good experience in executing projects based on milestones in **Waterfall, SCRUM and Agile, Exchange Life Cycle methodologies**.
- Experience in **driving large & complex initiatives**, which involves **distributed teams**, **vendors** and **conflicting requirements**.
- Expertise in prioritizing, steering and delivering work packages in conflicting situations and interests making effective and efficient use of **Project Steering** and **Project Governance** processes.
- Diligent in executing project plans, implement mechanisms to **measure, record progress**, and conduct ongoing **analysis of variances (effort, cost, schedule, scope), risks, and changes**.
- Experience of conducting **impact analysis** to schedule and cost for change requests.
- Excels at **communicating with stakeholders** to provide accurate reporting and information regarding the ongoing projects, schedules, cost, risks, initiatives, executive communication, articulation, presentation, issue escalation and resolution
- Good working knowledge of implementing projects in compliance with process improvement standards such as **CMMI, ISO 9001:2008 and ISO 27001**.
- An **effective communicator, quick thinker and rapid problem solver**; Strong work ethic and excels at turnaround scenarios; Have provided vision and leadership to resolve challenges and move the team forward.
- Experience in **coordinating, planning, negotiating and training** offshore/onsite resources in support of timeline and IT project deliverables.
- Has experience of **managing large teams.**

**RELEVANT EXPERIENCE**

***Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.***

Project : Archer 2.0 –Insurance Management System

| | | |
|---|---|---|
| Timeframe | : | July 2015 to till date |
| Company Name | : | Global Benefits Group, Inc. |
| Company Location | : | Foothill Ranch, California |
| Position | : | Project Manager |
| Tools/Software | : | MS Project, MS Visio, MS Power Point, MS Excel, MS SharePoint, MS Word, SVN, Tortoise VN, Cisco VPN Client, Microsoft .Net, MS SQLServer, JIRA, DOMO, SSRS |
| Project | : | KRIS – Medicaid, SNAP, TANF, LIHEAP Eligibility System – Product Development –Phase 1 |
| Timeframe | : | May 2015 – June 2015 |
| Company Name | : | KPMG LLC |
| Company Location | : | Sacramento, CA, USA |
| Position | : | Project Implementation Manager |
| Tools/Software | : | MS Project, MS Visio, MS Power Point, MS Excel, MS SharePoint, MS Word, SVN, Tortoise SVN, Cisco VPN Client, Employee Self Service Portal, JIRA, Enterprise Architect, Siebel IP 2015 CRM, Oracle Business Intelligence Publisher, Oracle Business Intelligence Enterprise Edition, Oracle Policy Automation, Oracle Service Oriented Architecture, Liferay Portal, Oracle Identity Management Suite. |
| Project | : | Kauhale On-Line Eligibility Assistance (KOLEA), Hawaii Integrated Eligibility System |
| Timeframe | : | April 2013 to May 2015 |
| Company Name | : | MedQuest Department of Health and Human Service, The State of Hawaii |
| Company Location | : | Honolulu, Hawaii |
| Position | : | DDI (Design, Development and Implementation) Manager |
| Tools/Software | : | MS Project, MS Visio, MS Power Point, MS Excel, MS SharePoint, MS Word, SVN, Tortoise SVN, Cisco VPN Client, Employee Self Service Portal, HP Application Lifecycle Management, Enterprise Architect, Siebel 8.2.2 CRM, Oracle Business Intelligence Publisher, Oracle Business Intelligence Enterprise Edition, Oracle Policy Automation, Oracle Service Oriented Architecture, Liferay Portal, Oracle Identity Management Suite. |
| Project | : | Oregon HIX Interfaces Development |
| Timeframe | : | April 2012 – March 2013 |
| Company Name | : | Cover Oregon, The State of Oregon |
| Company Location | : | Portland, Oregon |
| Position | : | Project Manager |
| Tools/Software | : | MS Project, MS Visio, MS Power Point, MS Excel, Alfresco, MS Word, SVN, Tortoise SVN, Cisco VPN Client, JIRA, SoapUIPro |
| Project | : | Acumen 2011 GA |
| Timeframe | : | March 2011 – June 2011 |
| Company Name | : | Fiserv |
| Company Location | : | Portland, Oregon |
| Position | : | Project Manager/Technical Architect |
| Tools/Software | : | MS Project, MS PowerPoint, MS Visio, IBM ClearCase, IBM ClearQuest, Cisco VPN, Java, Glassfish. |
| Project | : | Simpli Remit International Money Transfer |
| Timeframe | : | September 2006 – March 2012 |

| | | |
|---|---|---|
| Company Name | : | Pay Lynxs Inc. |
| Company Location | : | Albuquerque, New Mexico |
| Position | : | Project Manager/Technical Architect |
| Tools/Software | : | MS Project, MS PowerPoint, MS Visio, MindMap, SVN, Jenkins, Trac, Java, MySQL, Struts, Spring Framework. |

**EDUCATION**

***Information required should include: institution name, city, state, Degree and/or Achievement and date completed/received.***

**Master of Computer Applications**, Anna University, Chennai, Tamil Nadu, India 2005

**Bachelor of Computer Applications**, MCRPV University, Bhopal, Madhya Pradesh, India 200

**CERTIFICATIONS**

***Information required should include: type of certification and date completed/received.***

N.A

**HARDWARE/SOFTWARE SUMMARY (BE SPECIFIC)**

***Information required should include: environments, hardware, software, tools and databases.***

**OS:** Windows, RedHat Linux, Solaris, UNIX

**Software and Tools :** MS Project, MS Visio, MS SharePoint, Alfresco, Employee Self Service Portal, HP ALM, JIRA, Bugzilla, IBM ClearQuest, IBM ClearCase, Oracle Siebel CRM, Oracle SOA, OSB, OBIEE, Oracle BIP, Oracle IDM, Liferay Portal, OPA, Oracle Webcenter, IBM Websphere Portal, Java, J2EE, Continuous Integration tools, SVN, CVS.

**Databases:** Oracle 11g, MS SQLServer, MySQL

**REFERENCES**

***A minimum of three (3) references are required, including name, phone number, fax number and email address.***

- Kenneth Lentz, CIO, GBG Inc., ken.lentz@gbg.com (GBG: June 2015 – Present)
- Anthony Montero, Managing Director, KPMG - armontero@kpmg.com (KOLEA: April 2013 – May 2015)
- Matthew Conine President and CEO, Pay Lynxs Inc. – mconine@paylynxs.com (Oregon HIX Interfaces Development: Apr 2012- Mar 2013)

**PROPOSED STAFF RESUME FOR RFP 3490**

| **Company Name Submitting Proposal:** | **Speridian Technologies, LLC** |
|---|---|

| ***Check the appropriate box if the proposed individual is prime contractor staff or subcontractor staff.*** | | | |
|---|---|---|---|
| **Contractor:** | | **Subcontractor:** | |

| ***The following information requested pertains to the individual being proposed for this project.*** | | | |
|---|---|---|---|
| **Name:** | **Devanand Devarajan** | **Key Personnel: (Yes/No)** | **Yes** |
| **Classification; i.e., Project Manager, Implementation Lead, etc.** | **Implementation Lead** | | |
| **# of Years in Classification:** | **10 years** | **# of Years with Firm:** | **4 years and 10 month** |

| **BRIEF SUMMARY OF PROFESSIONAL EXPERIENCE**<br>***Information should include a brief summary of the proposed individual's professional experience.*** |
|---|

- Information Technology and Security professional with over 11+ years of experience in architecting and deploying **Identity Management and Access Management, LDAP Directories, Single/Reduced Sign-On (SSO), Provisioning and Provisioning/Identity Workflows, RBAC (Role-Based Access Control), Compliance and Auditing Technologies, Enterprise System Architecture, Security Infrastructure Design, Authentication and Authorization technologies,** as well as custom-built security and technology frameworks.
- Extensive knowledge of migration and Implementation of Identity and Access Management.
- Experienced administrator of application.
- Document major projects for technical and functional design.
- Superb trouble-shooting and tenacious problem solving skills.
- Strong Experience in Oracle IDM, **LDAP Directories**, CAS and **Linux.**
- Hands on experience with several databases like **Oracle**, MS-Access and SQL Server.
- Broad knowledge of version control systems.
- Creative, hard-working, strong sense of responsibility, efficient team player with ability to complete a task with minimum supervision.
- Resourceful, Committed, and Initiative.
- Open to learn new technologies.
- Fast learner with Excellent analytical, interpersonal and communication skills.

**RELEVANT EXPERIENCE**

***Information required should include: timeframe, company name, company location, position title held during the term of the project/position and software/hardware used during the project engagement.***

| | | |
|---|---|---|
| Project | : | EATON Portal OAM Web Gate Upgrade |
| Timeframe | : | July 2017 to till date |
| Company Name | : | EATON. |
| Company Location | : | Ohio, United States. |
| Position | : | IDM Implementation Lead |
| Tools/Software | : | Oracle Identity and Access Manager 11gR2 PS3, Oracle Access Manger 11.1.2.3.0, Active Directory, Oracle Internet Directory (OID), Oracle Database 11g |
| Project | : | Operation Regulatory Standardization Development |
| Timeframe | : | July 2016 to July 2017 |
| Company Name | : | State of Vermont |
| Company Location | : | Waterbury, Vermont, USA |
| Position | : | IDM Technical Specialist |
| Tools/Software | : | Oracle Identity Manager (Versions 11gR1, 11gR2),Oracle Access Manager (Versions 11gR1, 11gR2), Oracle Adaptive Access Manager (Versions 11gR1, 11gR2), Oracle Internet Directory (OID), Oracle Database 11g, MS Word, SVN, Tortoise SVN, Cisco VPN Client, Employee Self Service Portal, JIRA, Enterprise Architect, Siebel IP 2015 CRM, Oracle Business Intelligence Publisher, Oracle Business Intelligence Enterprise Edition, Oracle Policy Automation, Oracle Service Oriented Architecture, Liferay Portal. |
| Project | : | Kauhale On-Line Eligibility Assistance (KOLEA), Hawaii Integrated Eligibility System |
| Timeframe | : | Apr 2014 to July 2016 |

**EDUCATION**

***Information required should include: institution name, city, state, Degree and/or Achievement and date completed/received.***

**Bachelor of Engineering in Computer Science**, Madurai Kamaraj University, Madurai, Tamil Nadu, India 2004

**CERTIFICATIONS**

***Information required should include: type of certification and date completed/received.***

N.A

**HARDWARE/SOFTWARE SUMMARY (BE SPECIFIC)**

***Information required should include: environments, hardware, software,tools and databases.***

**OS:** Windows, RedHat Linux, Solaris, UNIX

**Software and Tools :** Oracle Identity Manager (Versions 11gR1, 11gR2),Oracle Access Manager (Versions 11gR1, 11gR2), Oracle Adaptive Access Manager (Versions 11gR1, 11gR2), Oracle Internet Directory (OID), Microsoft Active Directory,Open LDAP, Central Authentication Service, Jboss Portal IDM, Alfresco, HP ALM, JIRA, Bugzilla, Oracle Siebel CRM, Oracle SOA, OSB, OBIEE, Oracle BIP, Liferay Portal, OPA, Java, J2EE, Continuous Integration tools, SVN.

**Databases:** Oracle 11g, MS SQLServer, MySQL

**REFERENCES**

***A minimum of three (3) references are required, including name, phone number, fax number and email address.***

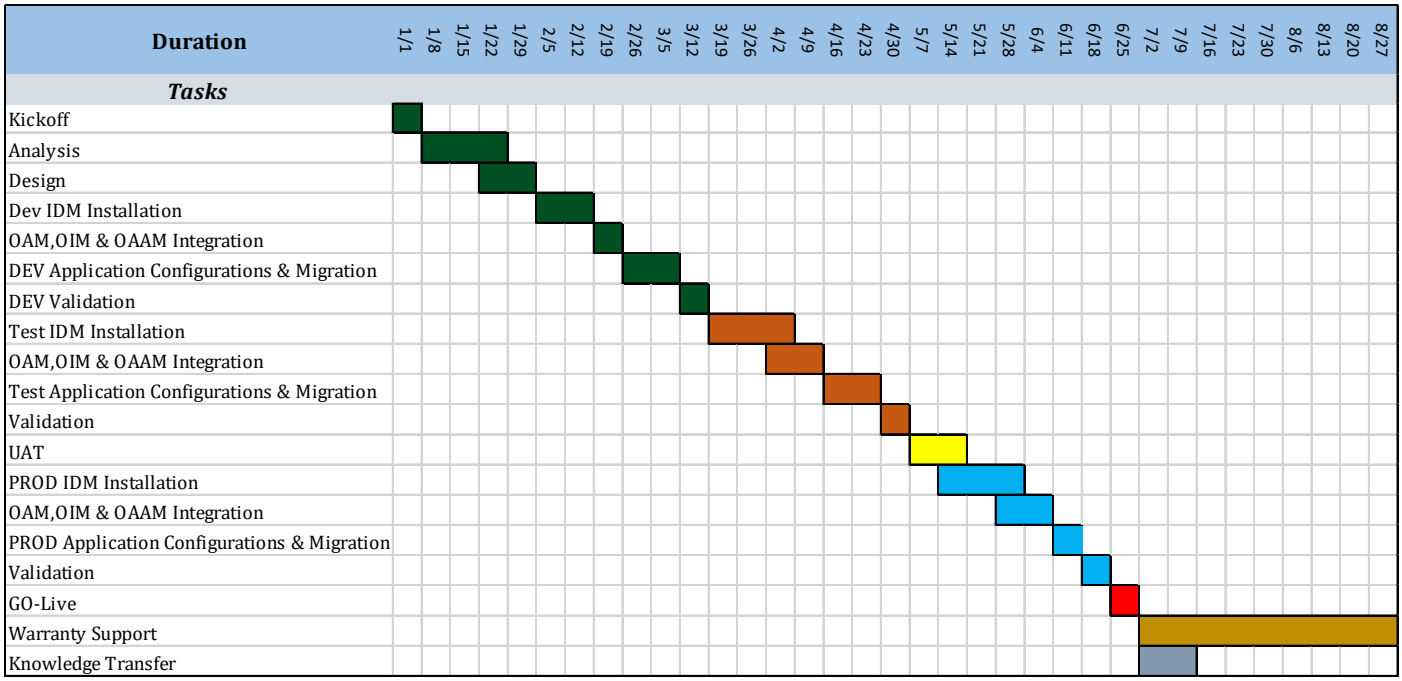
- Jon-Eric Eliker, IT Solution Architect, EATON Corporation, Jon-EricEliker@Eaton.com (EAATON: July 2016 – Present)
- Anthony Montero, Managing Director, KPMG - armontero@kpmg.com (KOLEA: Apr 2014 - July 2016)

## 7. Project Plan

Speridian proposes the upgradation of IDM Suite into seven main phases and/or milestones.

- Project Kickoff: Presenting the project, expectations and the team to stakeholders and each other.
- Analysis: Analysis of current IDM solutions, IDM integration points and identifying the configurations/data that needs to be migrated. Also the impact the custom application that are integrated with IDM.
- Design: Designing the upgrade path, settings the needs to be configured and the changes that needs to be done to the custom applications that are integrated with IDM.
- Implementation: Installing, configuring the latest version of IDM Suite in Dev, Test and Production followed by migration, validation and UAT.
- Go-Live
- Warranty & Knowledge Transfer: Production support after the Go-Live with knowledge transfer sessions to identified personal.

A detailed timeline for the upgrade is outlined below.




### 7.1.1 Project Management Methodology

Speridian is a global systems integrator and we maintain long-term relationships with our clients as a trusted advisor and provider of solutions and services. We have excelled at implementing Identity and Access Management and integration with legacy internal and external agency systems. This experience and commitment translate to lower risk and higher quality for the DETR project. We believe that our experienced and knowledgeable personnel who understand the unique situation of this platform as it stands now will improve the quality of the support and lead to achieving a much stable platform and systems.

Project Management can be seen as a monitoring system that continuously compares performance against plan and objectives to identify problems so corrective actions can be developed to address them as required. It includes a collection of skills and knowledge needed to plan, monitor, and manage the project's successful execution. Project Management encompasses a number of skill sets or disciplines that include:

- Project Planning
- Schedule Management
- Financial Management
- Issue and Risk Management
- Contract Management
- Change Control
- Third-party Management
- Measuring, assessing, and reporting performance.

From the experience of delivering high-quality complex solutions for our clients, Speridian developed processes and standards that are aligned with the Project Management Institute's Guide to Project Management Body of Knowledge (PMBOK) – Fourth Edition and PMI best practices. It provides the platform to consistently deliver projects that reliably meet success criteria and contains core delivery methodologies and work product artifacts and focuses on defined best practices.

There are four fundamental tenets that define our methodology to Project Management:

- Project management process – the project team completes a scope definition and planning phase to ensure the scope of the project and its accompanying risk factors are understood and agreed.
- Project organization and responsibilities – members of the project team define and agree on the key project team members, their roles and responsibilities, and appropriate client sponsorship and involvement to ensure project results are achieved.
- Project phases – work is phased to provide the opportunity to reassess risks at key milestones throughout the project.
- Project management control system – a management and control system is established to define and apply the appropriate governing processes for all project activities.

### 7.1.2 Project Control

Speridian's project management approach is based on tried and true procedures to assure projects are delivered on time and within budget. We believe that continuous engagement between Speridian and the Client is critical to the success of the project. Pro-active communication and issue/risk mitigation techniques are stressed upon throughout the life cycle of the project. Speridian collaborates with its clients to ensure meeting the project goals and follows a deliverable-based approach. Regular status meetings ensure that all resources stay informed of the progress of the project.

Multiple project control mechanisms and tasks are put in place to ensure successful delivery of the project within time and budget. Key control mechanisms are highlighted below:

- Quality Management
- Testing Approach
- Communication Management
- Risk Management
- Schedule Management
- Scope and Change Management
- Issue Communication
- Issue Escalation Process

**Figure 2 - Project Control Chart**

These control mechanisms and Speridian's approach to ensuring control is described in detail below:

### 7.1.3 Cost Control

We have established a disciplined cost and budget management through a very detailed Project Budget tracker which serves as the basis for project costs tracking and communication with the State. During the planning phase the approved project budget will be updated in the Project Budget Tracker and baselined.

The Project Budget tracker that we prepare is a detailed, time-phased budget. A list and sum of cost elements and revenue, when appropriate, showing the total amounts for each category of expenditure and revenue, such as staff, hardware, software, and others, and distributed over one or more periods of time.

This artifact is owned by Speridian Project Manager and the data from this artifact is presented in the weekly and monthly reports and will show the estimated and budgeted amounts for project expenditure and revenue by expenditure type and accounting period. The project and budget tracker will be updated on a weekly basis and the project financials may be presented at several levels of detail, depending both on the stage of the project at which it is produced, and on the intended audience.

The different categories of costs that are tracked include

- Labor costs, both in-house and contractors, are derived from the human resource and staffing plans
- Travel costs
- Hardware and Software costs
- Third-party supplier costs are either in the appropriate agreements or must be estimated

- Any risk contingency reserve and/or insurance as detailed in the risk management plans.

The accuracy and completeness of the project budget tracker is verified by inspection and by ensuring its consistency.

### 7.1.4 Scheduling

Scheduling is the easiest way of managing project time. Utilizing this approach, the activities of the project are estimated and the durations are determined based on the resource utilization for each activity. Following are the key steps in the project time management process that Speridian utilizes. Each addresses a distinct area of time and schedule management in a project.

- Defining Activities: The high-level requirements are broken down into high-level tasks or deliverables. Then, based on the task granularity, the high-level tasks/deliverables are broken down into activities and presented in the form of WBS (Work Breakdown Structure).
- Sequencing Activities: In order to manage the project time, it is critical to identify the activity sequence. The activities identified in the previous step will be sequenced based on the execution order. When sequencing, the interdependency of activities will be considered.
- Resource Requirement for Activities: The estimation of amount of time needed and the types of resources required for activities is done in this step. Depending on the number of resources allocated for an activity, its duration varies. Therefore, the project management team will develop a clear understanding about the resources allocation in order to accurately manage the project time.
- Duration and Effort Estimation: This is one of the key steps in the project planning process. Since estimates are all about the time (duration), this step will be completed with the highest accuracy possible. Speridian will follow WBS based estimation in this step. Once the activity estimates are completed, critical path of the project will be identified in order to determine the total project duration. This will be one of the key inputs for the project time management.
- Development of the Schedule: The parameters from the previous steps would be used to create a project schedule. Activity sequence, duration of each activity and the resource requirements/allocation for each activity will be the key factors. Microsoft Project Plan will be used to develop the tasks break down, work schedule and resource allocation. As part of the MS Project Plan, a Gantt chart will be developed in order to track and visually monitor the activities and milestones.
- Schedule Control: We will plan ahead, but the project management document would be a living document, so as to cater to the evolving needs of the project during implementation. Therefore, we will actively monitor and update our project schedule with ongoing changes and communicate these regularly.

### 7.1.5 Project Manager – Tasks

Speridian's Project Management team will meet with the Client Project Manager to discuss and evaluate the program timelines, metrics, results and successes factors, address relevant issues, and institute strategies, as needed. During these meetings, benchmarks, satisfaction levels and financial data are reviewed, and continuous process improvements to our service delivery are reviewed.

Speridian will provide weekly status reports that highlight-

1. Weekly Accomplishments
2. Planned Activities for the next week
3. Overall Project Plan Updates
4. Issues/Risks
5. Open Items
6. Escalations (if any)

| PROJECT STATUS REPORTS | | |
|---|---|---|
| REPORTS | FREQUENCY | MODE OF COMMUNICATION |
| STATUS REPORT | DAILY | EMAIL |
| STATUS DELIBERATIONS | WEEKLY | PHONE |
| PROGRESS REVIEW | MONTHLY | WEB EX |

**Figure 3 - Project Status Reports**

### 7.1.6 Change Request Management

Speridian utilizes the Change Request Process to ensure that each change introduced to the project environment is appropriately defined, evaluated and approved prior to implementation. Change Requests will be introduced to this project through the implementation of five key processes:

- Suggestion and Submission of change request
- Logging of change requests and its review
- Analysis and Feasibility study on change request
- Change request approval
- Implementation and completion of change request.

The following diagram describes the roles, processes and procedures to follow upon receiving a change request for an ongoing project.

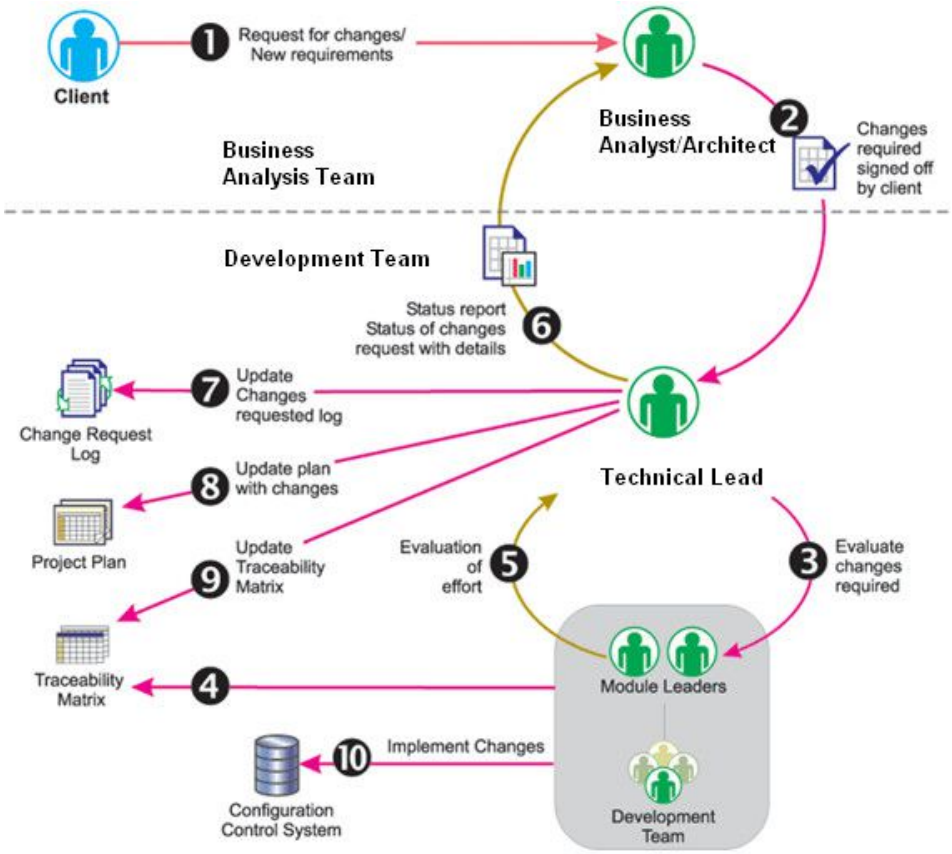



Figure 4 - Change Request Management

### 7.1.7 Quality Assurance Approach

Team Speridian believes in a positive and constructive approach to quality, focusing on what has been achieved and what can be accomplished. During the System Testing phase, the team will develop a system test plan and this plan will cover System, Integration, and Compliance and Usability testing. System test progress measurement metrics for the purpose of monitoring testing status will be defined with inputs from client. The team will ensure that all system test cases are executed in an environment which is closer to production environment in terms of data and integration touch points. We ensure Application Quality by categorizing our testing methods into Functional, Non-functional, integration and Security Testing.

Our QA team will work with the State to define the UAT acceptance criteria and ensure that UAT is comprehensive enough to cover all functionality and defects delivered as part of the release. Product training sessions and walkthrough sessions will be conducted prior to the UAT so that users are well versed with the product before UAT.

Our QA process guiding principles are

- **Do it right the first time**
  By preventing defects early, we provide a sound foundation for ensuing development activities.

- **Eliminate defects early**
  The cost of a resolving a defect increases dramatically over the development cycle.
- **Use data to manage quality**
  Data provides an objective view of how we are doing and what we need to improve.

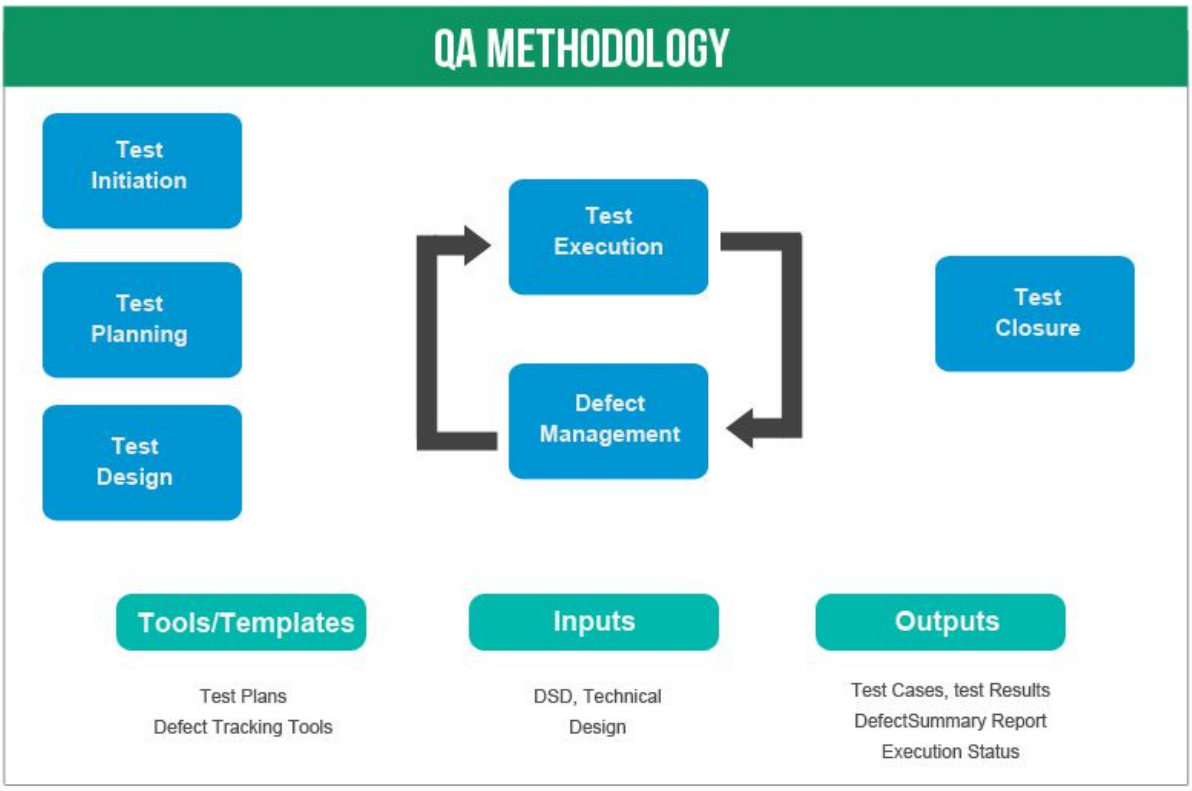



Figure 5 - QA Assurance Approach

# 8. Other Informational Material

## 8.1.1 Identity Management Roadmap

The proposed latest IDM Suite upgrade comes with extended features and functionality for Identity management. Nevada Department of Employment, Training and Rehabilitation (DETR) can leverage these additional features and functionality to enhance state's system security policies.

Here is a list of extended features available with latest Oracle IDM Suite (11gR2 PS3) that can be leveraged by the State subsequent to the upgrade.

**Easy & Accurate Identity Certifications**

Identity Certifications in OIM 11gR2PS3 rely on live data. Certification leverage analytics to expedite low and highlight high risk. It also highlights provisioning context so that more informed decisions can be made. OIM supports time or event based certification campaigns with quick closed loop remediation. Certifications can also be completed in offline mode.

**Rapid and Scalable Fulfillments**

OIM 11gR2PS3 supports both automated and manual fulfillment processes. Identity Connector Framework automates the provisioning to popular on-premise and cloud apps. OIM now has browser based, simplified application on-boarding & management. Oracle is the only vendor to feature a comprehensive, end-to-end strategy to manage Oracle Applications

**Flexible and Modular Architecture**

OIM 11gR2PS3 has flexible modular architecture which fits with your governance requirements. It has single data store for all phases of identity governance. You can easily customize and model your identity governance projects. There are multiple points of entry to begin like building an access catalog to enable request process, automating access certification and automating provisioning to key applications

**Identity Federation**

The Identity Federation service is an integral part of the Oracle Access Management platform, leveraging the authentication core services, such as credential collectors and authentication plug-ins. Identity Federation services can protect both on-premise and cloud resources leveraging several industry standards:

- SAML-based federation (authentication, attribute sharing)
- OpenID-based federation (delegated authentication)
- OAuth-based federation (delegated authorization)
- Social-identity-based federation (redirected authentication)
- Form-fill-based federation (Access Portal)

**Mobile Security**

Lightweight mobile, cloud, and social networks interface to access corporate resources via industry standards such as OAuth. The Mobile and Social service allows mobile clients such as smart phones to leverage the backend Access Management infrastructure for adaptive authentication, SSO, fine-grained authorization, risk analysis and fraud detection.

**Adaptive Access and Fraud Detection**

Strong, multi-factor authentication and heuristic fraud detection.

**Auto learning**

A mixture of real-time and predictive auto-learning technology is used to profile behavior and detect anomalies (recognize high risk activity and proactively take actions to prevent fraud and misuse). Auto-learning automates risk evaluations and keeps track of changing behaviors.

**Configurable risk engine**

Flexible architecture supporting three methods of risk evaluation that work concurrently to evaluate risk in real-time: configurable rules, real-time behavioral profiling, and predictive analysis.

**Virtual authentication devices**

Server-driven services (i.e., no client-side software or logic that can be compromised by key-loggers and other common malware – personalized images and phrases are known only to the server and the end user). The security of the user credentials during entry is ensured by not capturing or transmitting the actual credential of the end user (strong authentication). Virtual authentication devices include TextPad, a personalized device for entering a password or PIN using a regular keyboard (defends against phishing); PinPad, a lightweight authentication device for entering a numeric PIN; QuestionPad, a personalized device for entering answers to challenge questions using a regular keyboard and KeyPad, a personalized graphics keyboard used to enter alphanumeric and special characters

**OTP Anywhere**

Risk-based challenge mechanism consisting of a server-generated one-time password (OTP) delivered to an end user via SMS, email, or instant messaging. The challenge processor framework supports custom risk-based challenge solutions combining third-party authentication products with Adaptive Access real time risk evaluations.

**Detached Credential Collector**

Extends 11g WebGate with an option to enable Credential Collection capability (Authentication Gate)

- Back Channel communications use OAP protocol whilst Front channel uses HTTPS
- Decouples credential collection from Server
- Provides flexibility to place DCC anywhere in the DMZ
- More security. End-user HTTP sessions get terminated at DMZ
- Reduces overhead on server. Improves performance