

VistA Application Programming Interface (API) Exposure 2.0

Requirements Specification Document



Department of Veterans Affairs

Version 1.0

November 2014

Revision History

Note: The revision history cycle begins once changes or enhancements are requested after the Requirements Specification Document has been baselined.

Date	Version	Description	Author
11/07/2014	0.1	Original Draft	VistA API 2.0 Team
11/07/2014	0.2	TWR	
11/12/2014	0.3	Peer Review	VistA API 2.0 Team
11/14/2014	0.4	Peer Review Updates	Dean Ostergaard
11/24/2014	1.0	Final	VistA API 2.0 Team

Artifact Rationale

The Requirements Specification Document (RSD) records the results of the specification gathering processes carried out during the Requirements phase. The RSD is generally written by the functional analyst(s) and should provide the bulk of the information used to create the test plan and test scripts. It should be updated for each increment.

The level of detail contained in this RSD should be consistent with the size and scope of the project. It is not necessary to fill out any sections of this document that do not apply to the project. The resources necessary to create and maintain this document during the life cycle of a large project should be acknowledged and clearly reflected in project schedules. Do not duplicate data that is already defined in another document or a section in this document; note in the section where the information can be found.

Instructions

Activity	New Capability (1)	Feature Enhancement (2)
Field Deployment (A)	Yes	Yes
Cloud/Web Deployment (B)	Yes	Yes
Mobile Application (C)	Yes	Yes

Table of Contents

1	Introduction	1
1.1	Purpose.....	1
1.2	Scope	1
1.2.1	Test Harness & Tests.....	1
1.2.2	Scope of Services in the Immunization Domain	2
1.3	References	3
2	Overall Description	3
2.1	Accessibility Specifications	3
2.2	Business Rules Specification	3
2.3	Design Constraints Specification	4
2.4	Disaster Recovery Specification.....	6
2.5	Documentation Specifications.....	6
2.6	Functional Specifications	7
2.6.1	Immunization Domain	7
2.7	Graphical User Interface (GUI) Specifications	10
2.8	Multi-divisional Specifications	10
2.9	Performance Specifications	11
2.10	Quality Attributes Specification.....	11
2.11	Reliability Specifications	11
2.12	Scope Integration	11
2.13	Security Specifications	12
2.14	System Features	12
2.15	Usability Specifications	12
3	Applicable Standards	12
3.1	Immunization Domain	12
4	Interfaces	12
4.1	Communications Interfaces.....	12
4.2	Hardware Interfaces	12
4.3	Software Interfaces	13
4.4	User Interfaces.....	13
5	Legal, Copyright, and Other Notices	13
6	Purchased Components	13
6.1	Defect Source (TOP 5).....	13
7	User Class Characteristics	13
8	Estimation	13
8.1	Project Software Functional Size and Size-Based Effort and Duration Estimate.....	14

9 Approval Signatures	16
Appendix A. Use Case 1 – Send Immunization Data	17
A.1. Brief Description	17
A.2. Use Case Trigger	17
A.3. Use Case Context Diagram	17
A.4. Use Case Actors	17
A.5. Preconditions	17
A.5.1. Precondition 1	18
A.6. Basic Flow of Events	18
Appendix B. Use Case 2 - Receive Immunization Data	19
B.1. Brief Description	19
B.2. Use Case Trigger	19
B.3. Use Case Context Diagram	19
B.4. Use Case Actors	19
B.5. Preconditions	19
B.6. Basic Flow of Events	20
Appendix C. UC3 – Vaccine Manufacturer Service	21
C.1. Brief Description	21
C.2. Use Case Trigger	21
C.3. Use Case Context Diagram	21
C.4. Use Case Actors	21
C.5. Preconditions	21
C.6. Basic Flow of Events	22
Appendix D. UC4 – Vaccine Manufacturer Service	23
D.1. Brief Description	23
D.2. Use Case Trigger	23
D.3. Use Case Context Diagram	23
D.4. Use Case Actor	23
D.5. Preconditions	23
D.6. Basic Flow of Events	24
Appendix E. Acronym List and Glossary	25

List of Tables

Table 1: Immunization Domain Requirements	7
Table 2 - VistA API 2.0 Dependencies	10
Table 3: Project Software Functional Size	14
Table 4: Software Size-based Effort Estimates	14

Table 5: Software Size-based Duration Estimates	14
Table 6: Use Case One Actors	17
Table 7: Use Case Two Actor.....	19
Table 8: Use Case Three Actor	21
Table 9: Use Case Four Actor	23
Table 10: Acronyms Used in this Document.....	25

List of Figures

Figure 1: VistA SOA Design Pattern	4
Figure 2: Technology Stack and Infrastructure for VistA API 2.0 Services.....	5
Figure 3: Technology Stack Platform Capabilities.....	6
Figure 4: Respond to a Request for Vaccination Records (Temp-1).....	8
Figure 5 - Accept Unsolicited Update to Vaccination Record (Temp-2).....	8
Figure 6 - Vaccine Manufacturer Service.....	9
Figure 7 Vaccine Data Service	9
Figure 8: Cumulative Probability (“S-curve”) Chart	15
Figure 9: Use Case One Context Diagram – Send Immunization Data	17
Figure 10: Use Case One Flow of Events.....	18
Figure 11: Use Case Two Context Diagram – Receive Unsolicited Vaccine History	19
Figure 12: Use Case Two Flow of Events	20
Figure 13: Use Case Three Context Diagrams.....	21
Figure 14: Use Case Three Flow of Events	22
Figure 15: Use Case Four Context Diagrams.....	23
Figure 16: Use Case Four Flow of Events.....	24

1 Introduction

On February 5, 2013, the Secretary of Veterans Affairs (VA) announced that VA had committed to utilizing the Veterans Health Information Systems and Technology Architecture (VistA) technology as its “Evolution” for the interoperable Electronic Health Record (iEHR). VistA was chosen as VA’s “Evolution” technology to help reduce costs, minimize risks, and to allow VA to continue utilizing and improving the VistA technology.

To prepare VistA to serve as the evolution of the iEHR, VistA must be updated to modernize the way in which other products connect to it. By creating accessible services out of key pieces of VistA functionality, VA will create entry points for other products to connect to VistA. These services must be compliant with VA Office of Information and Technology (OI&T) Enterprise Architecture, be accessible through an enterprise Messaging Infrastructure (eMI) formerly the Enterprise Service Bus (ESB) and secured using Identity and Access Management (IAM) Services.

1.1 Purpose

This document describes the requirements for the development, standardization, and modernization of Remote Procedure Calls (RPC), Application Programming Interfaces (API), and Web Services necessary to achieve an iEHR based upon VistA.

The intended audience for this RSD is:

- VistA Evolution business stakeholders and technical team
- VA Office of Information Technology, Product Development
- Architecture Strategy and Design (ASD) – Enterprise Shared Services Center of Excellence (CoE)

1.2 Scope

The VistA API 2.0 project is being executed using Agile practices and methods. As is typical in Agile projects, a project backlog will be developed and maintained for the duration of the project. Items on the backlog will be prioritized periodically and the top priority items will be selected for the upcoming sprint.

The current backlog consists of several domains, each of which will require API services to be specified and developed:

- Immunization Information
- Clinical Warnings and Directives
- Allergies Adverse Reaction Tracking
- Problem List
- Vitals
- Imaging

1.2.1 Test Harness & Tests

To support continuous testing during development and collect performance data of the various service components, the scope includes development of test harnesses for testing web services and M code RPCs.

1.2.2 Scope of Services in the Immunization Domain

Two services have been identified for the Immunization domain. The scope for those is described here.

Important Note:

The VIMM 2.0 RSD states clearly in its introduction, “the VistA Immunization (VIMM) project was created to enhance VA IT systems capability to display, store and share standardized immunization data in a uniform manner.” The VIMM 2.0 RSD also declares, “Immunization data will be transmitted and shared using the International HL7 messaging.”

It is important to note that the VistA API 2.0 team has not received any requirements from potential consumers regarding the immunization services. Given the lack of any service consumer, the VistA API 2.0 team originally attempted to define the service requirements based on healthcare interoperability standards with the goal to define a service that would be highly reusable, widely applicable, and broadly adopted. The immunization services are designed according to the direction given us by the VIMM 2.0 team, and negative feedback from the VIMM 2.0 team and lack of any feedback from the ASD reviewers have forced us to abandon standards-based service requirements at this time.

*The release of the VistA RSD defines narrowly specified immunization services that deliver and accept data from the VistA immunization files only. **These services will provide only a fraction of the data required for a standards-compliant patient immunization history record.***

1.2.2.1 Immunization Data Service

The Immunization Data service addresses the exchange of Immunization Data between the immunization subsystems of VistA and systems or services external to VistA. Specifically this service is intended to facilitate the exchange of immunization records between different systems including:

- Receive request to get VistA Immunization Data for a specified patient. (i.e., a patient specified in the request)
- Respond to request for immunization histories with combined Immunization Data from each treating facility VistA system where the specified patient has immunization data.
- Requesting immunization data for individuals (i.e., a patient specified in the request)
- Acknowledging receipt of immunization data and requests for immunization data
- Receive unsolicited immunization data
- Reporting errors in the messaging process
 - Part of the message may contain errors, but these errors are not sufficient to reject the entire message.
 - Note that all errors in processing a message should be communicated back to the sending system unless the initiating system has indicated that no response is desired.

Out of scope items include:

- Performing identity management or identity resolution since it is required that clients will perform identity resolution prior to invoking the Immunization Data service.
- Business rules not implicit to the messaging infrastructure such as might be applied when creating a message

- Business rules not implicit to the messaging infrastructure such as might be applied when processing a received message
- Business rules and capabilities provided and/or implemented automatically by the tools and platforms used to support service development, deployment, and hosting such as:
 - Business rules used to de-duplicate clients or events (provided by VSA)
 - Business rules used to determine service federation such as which instances of VistA will receive data for or about a patient (provided by VSA)

1.2.2.2 Vaccine and Vaccine Manufacturer Data Service

The vaccine and vaccine manufacturer data services retrieve vaccine data (CVX) and vaccine manufacturer data (MVX) from VistA vaccine and vaccine manufacturer related files – Immunization (#9999999.14) Imm Manufacturer (#9999999.04) files.

- Vaccine Service
 - Read vaccine data from VistA
 - Write / Update vaccine data in VistA
- Vaccine Manufacturer Service
 - Read vaccine manufacturer data from VistA
 - Write / Update vaccine manufacturer data in VistA
- Report and process errors in the messaging process

1.3 References

- VistA API 2.0: Business Requirements Document
- VistA Immunizations Enhancements (VIMM 2.0): Requirements Specification Document, Version 2.1
- VistA Immunizations (VIMM) v2.0: System Design Document, Version 1.9
- VCAMP Analysis of VistA Services – (Current Immunizations Information Exchange v120140523_MITRE Provided.xlsx)

2 Overall Description

The VistA API 2.0 project supports the design, configuration, integration, testing and implementation required to modernize a suite of existing (legacy) VistA Services. These services rely upon application programming interfaces (APIs) and remote procedure calls (RPCs) for the transaction of data sharing requests within VA as well as to external Users.

2.1 Accessibility Specifications

The services that will be developed by the VistA API Exposure 2.0 project represent machine-to-machine interfaces with no direct user interaction. Therefore accessibility is not an issue and this section is not applicable.

2.2 Business Rules Specification

Figure 2 describes the technology stack and infrastructure that will be used to develop services under the VistA API 2.0 project.

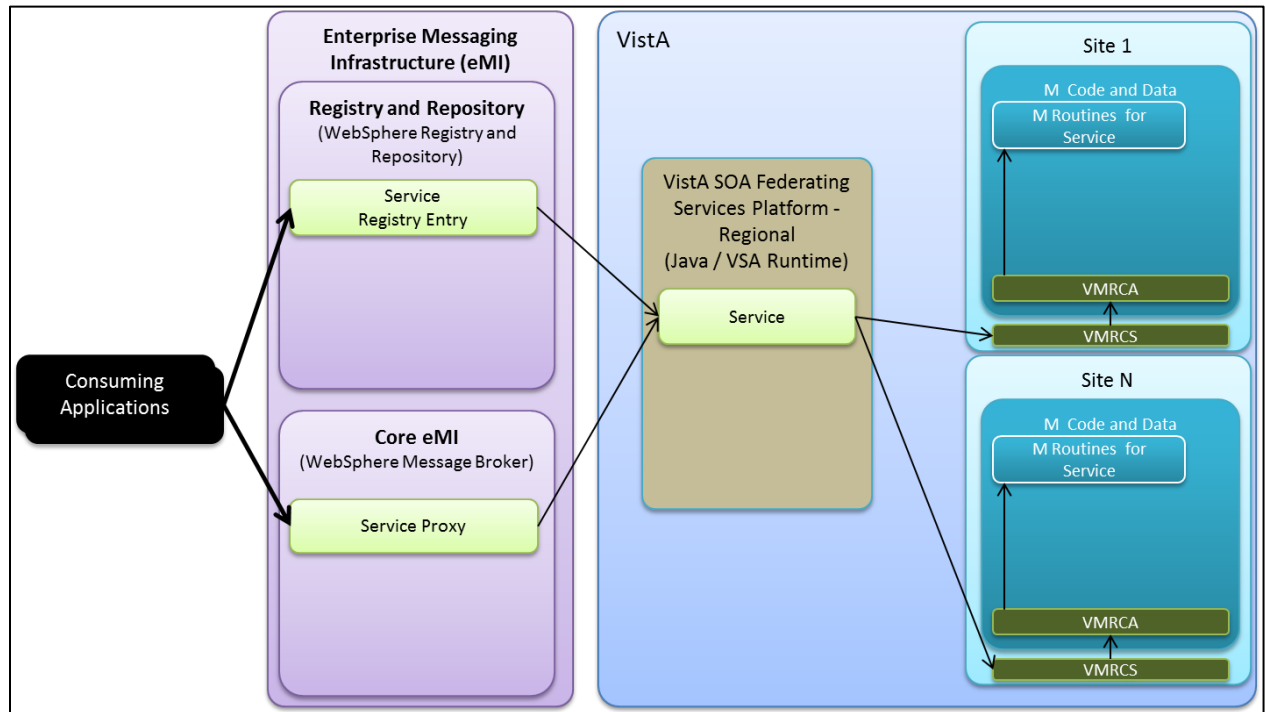


Figure 2: Technology Stack and Infrastructure for VistA API 2.0 Services

Figure 3 describes the features and capabilities each of the components in the architecture will provide and which services developed by the VistA API 2.0 project will utilize as appropriate.

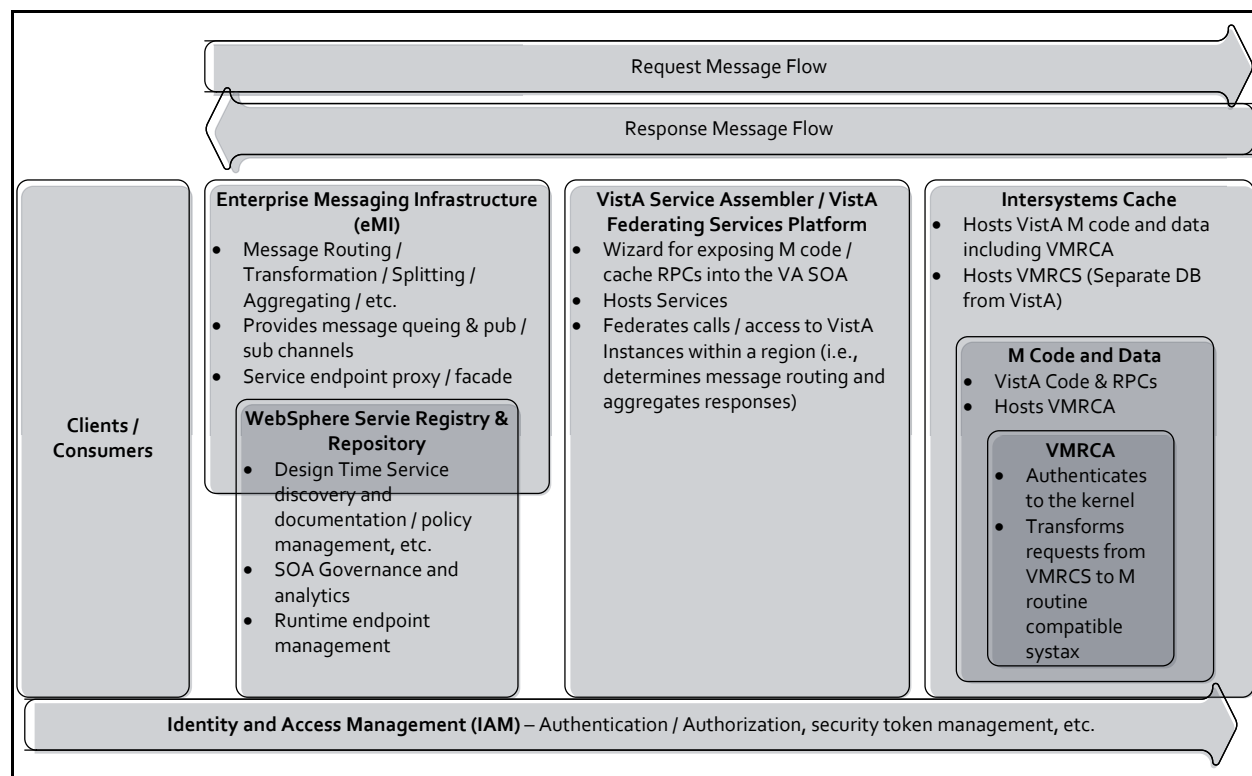


Figure 3: Technology Stack Platform Capabilities

2.4 Disaster Recovery Specification

Services are deployed into the VA SOA infrastructure and are covered by the disaster recovery plans and capability of those systems and platforms. Therefore this section is not applicable for this project.

2.5 Documentation Specifications

Services do not have a user interface (UI). However developers use services in the construction of their application and processes. Service Description documents contain the details needed for a developer to use a service. Metadata describing a service and the methods of interface that is maintained in a service registry / repository also provides documentation for developers to select and use a service. WebSphere Service Registry & Repository (WSRR) will be used to publish the metadata associated with the services produced by the VistA API 2.0 project.

2.6 Functional Specifications

The following subsections describe the specific functional specifications of the system.

2.6.1 Immunization Domain

Table 1 presents the immunization domain requirements.

Table 1: Immunization Domain Requirements

Req. ID	Requirement	Comment
Temp -1	The system shall respond to a request for Immunization Data by returning the Immunization Data for the patient identified in the request or with an appropriate error response in case there is a system error or if the patient identified in the request has no information in the system.	References: VIMM 2.0 System Design Document Tables 5 & 6 IDs I 12 & I13 VistA Files containing the data to be exchanged via this service: V IMMUNIZATION (#9000010.11), IMMUNIZATION (#9999999.14), IMMUNIZATION LOT (#9999999.41), IMM MANUFACTURER (#9999999.04)
Temp -2	The system shall accept Unsolicited Update to Immunization Data messages and update the identified patient's data as appropriate.	References: VIMM 2.0 System Design Document Tables 5 & 6 IDs I 12 & I13 VistA Files containing the data to be exchanged via this service: V IMMUNIZATION (#9000010.11), IMMUNIZATION (#9999999.14), IMMUNIZATION LOT (#9999999.41), IMM MANUFACTURER (#9999999.04)
Temp -3	The system shall provide vaccine manufacturer data from VistA in response to a read request and write / update vaccine manufacturer data in response to a write request.	VistA files containing data to be exchanged via this service: IMM MANUFACTURER (#9999999.04) files.
Temp -4	The system shall provide vaccine data from VistA in response to a read request and write / update vaccine data in response to a write request.	VistA files containing data to be exchanged via this service: IMMUNIZATION (#9999999.14)

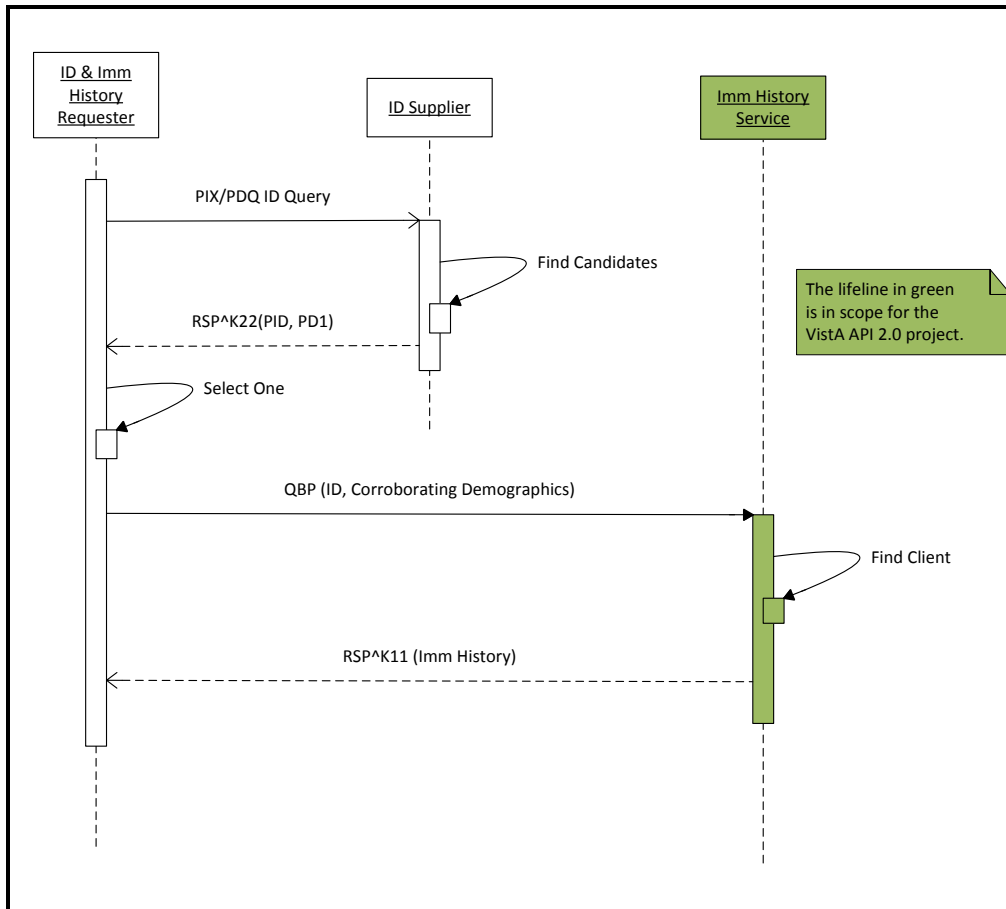


Figure 4: Respond to a Request for Vaccination Records (Temp-1)

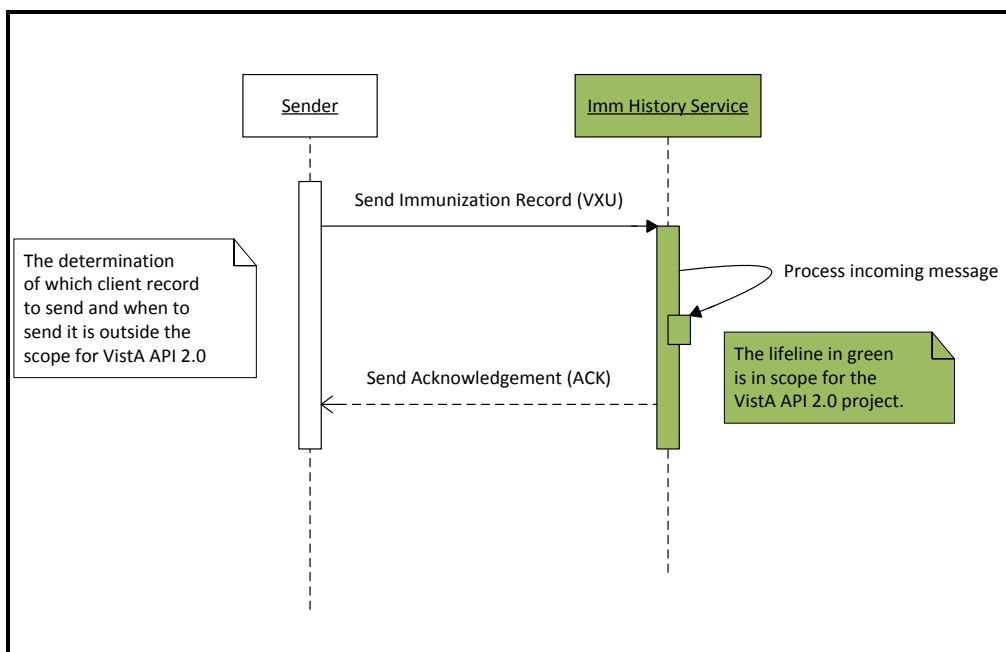


Figure 5 - Accept Unsolicited Update to Vaccination Record (Temp-2)

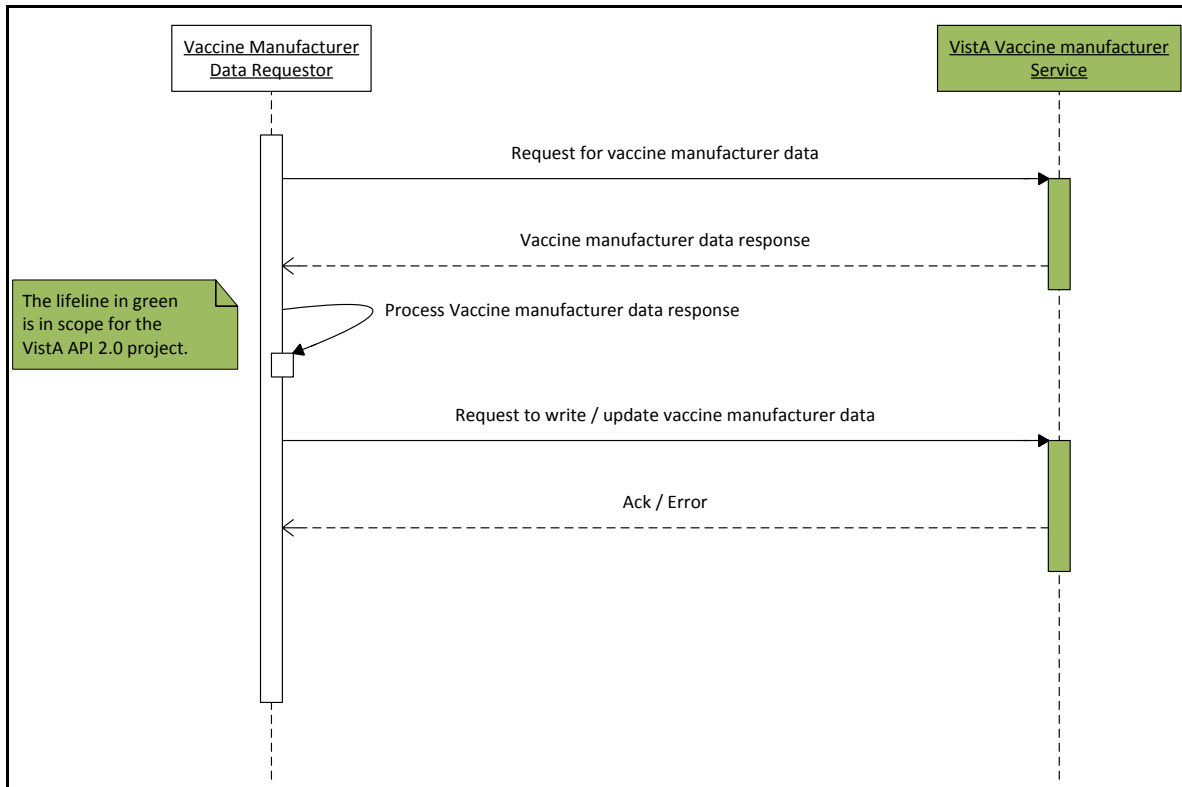


Figure 6 - Vaccine Manufacturer Service

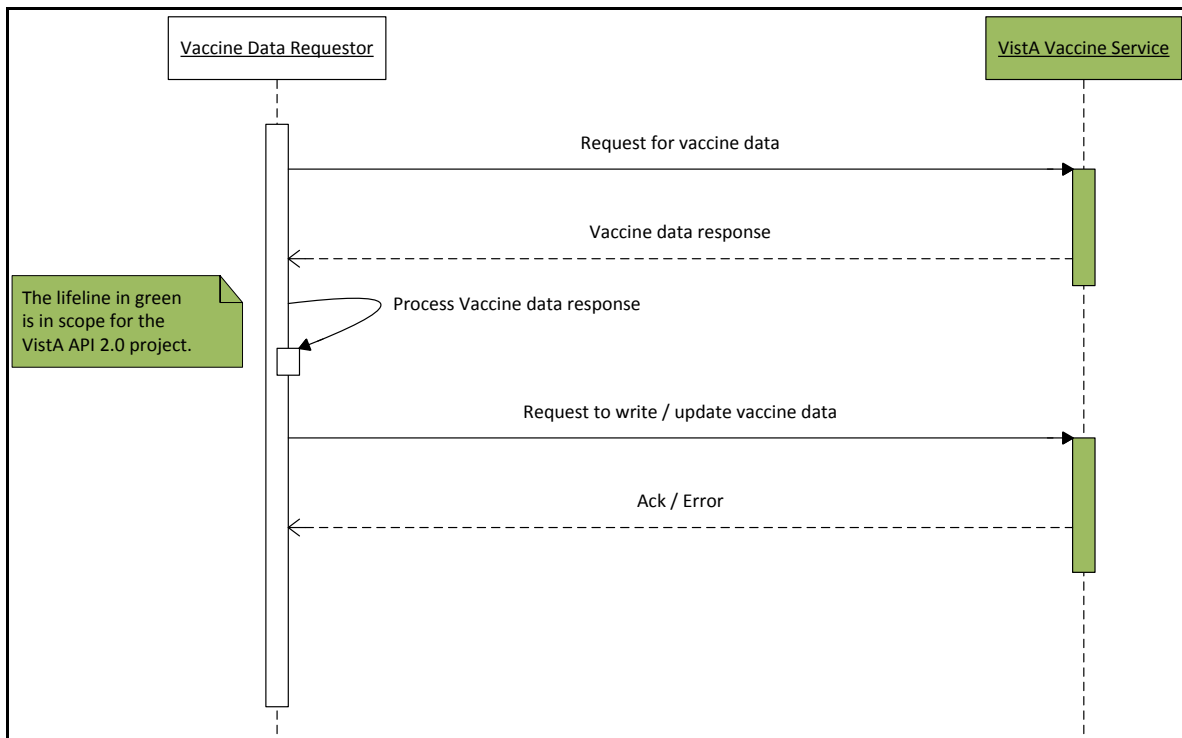


Figure 7 Vaccine Data Service

2.7 Graphical User Interface (GUI) Specifications

This section is not applicable to development of services.

2.8 Multi-divisional Specifications

Once deployed the services are intended to be used by any authorized client or consuming system according to the interface contract. The development, testing, and deployment of services depend on coordination and collaboration among many projects and systems.

Table 2 - VistA API 2.0 Dependencies

Project	Component/Feature	Description	Upstream / Downstream
eMI	Message Routing & Xform	A normal function of an ESB is to route requests and responses between the "public" endpoint to one or more implementation or instance service endpoints.	Upstream
eMI	Message Queuing & Pub / Sub	Various message patterns are needed to move messages between services including publish / subscribe for notification messages or "events."	Upstream
eMI	Service Endpoint Proxy	A universal endpoint that remains stable is provided by the eMI (ESB) for access by enterprise clients / consumers while the requests are routed to the actual location where the service implementations reside.	Upstream
eMI	Registry / Repository	A repository of meta-data about services that includes documentation and descriptions so that client/consumer application developers can locate and understand the services they need to use to support their system's features and capabilities.	Upstream
VSA	Service Federation	In the case of VSA the federation mechanism forwards requests to one or more VistA instances in a region where the requested data may be obtained.	Upstream
VSA	VSA Wizard	Used to develop the SOAP or RESTful service façade for the VistA RPCs that access and manipulate data in the M routines within VistA M code.	Upstream
VSA	VSA Service Hosting	VSA developed services are deployed to the VSA Regional Federating Services Platform.	Upstream
VSA	VMRCS	Cache Server Pages code that interfaces between the VSA Java service and the VMRCA for a particular VistA instance.	Upstream

Project	Component/Feature	Description	Upstream / Downstream
VSA	VMRCA	Translates messages and data to and from the formats needed by the M routines	Upstream
IAM	Authentication	Security	Upstream
IAM	Authorization	Security and Privacy	Upstream
IAM	Security Token Management	One possible method to pass security credentials between the various service layers and platforms	Upstream
VistA	Full Environment	Where the M code for VistA as well as the VMRCA and VMRCS resides and executes.	Upstream

2.9 Performance Specifications

Population size is estimated to be 130,000 VA clinical users. These estimates are based on an evaluation of Medical Single Sign-On (SSO) and Context Management (CM) Tools, 17 May 2011. Although peak usage would occur between 0800 Eastern and 1930 Eastern, the system will be in use 24/7. In 2012, the MHV patient-facing web portal supported over 4,000 concurrent users.

The system will support the same number of users as the current system, but shall be scalable enough to support additional users as new end user functionality is introduced.

According to “Veteran Population Projections 2010-2040” the Veteran population is expected to decrease by approximately 1% per year between 2010 and 2040, and it might be inferred that the number of clinical users would decrease by a similar percentage over this time frame. However, Veterans may become more technologically savvy and wish to interact via patient facing systems such as MHV. Over 45,000 new users registered for an MHV account in April 2012, which represents a 47% increase over April of 2011; therefore, it is estimated that over 500,000 new users will access the MHV portal each year.

2.10 Quality Attributes Specification

In order to enhance the supportability, maintainability, and reusability, VistA API 2.0 services will be designed and developed according to the following guidelines.

- Utilize the VistA SOA design pattern prescribed by ASD and OneVA-EA
- Where health industry standards are not available use other recognized national or international standards.

2.11 Reliability Specifications

ReqPro Tag NONF1571: The application must be available 24 hours a day, 7 days a week, consistent with Veterans Health Information Systems and Technology Architecture (VistA) uptime at 99.99%.

2.12 Scope Integration

Services developed under the VistA API 2.0 project . . .

- Support the delivery of standard, interoperable data for exchange with the DoD for Initial Operating Capability (IOC).

- Comply with the VE SOA Design Pattern and OneVA Enterprise Technical Architecture (ETA)
- Leverage eMI and the VistA Service Assembler tools and platforms to expose data and APIs from VistA for consuming systems and services to access via the eMI.

2.13 Security Specifications

Services developed by the VistA API 2.0 project must adhere to and implement security capabilities and specifications as prescribed by ASD and the VistA SOA Architecture Design patterns. It is assumed that VA Enterprise platforms including eMI and VSA will provide security framework support that integrates Identity and Access Management (IAM) capabilities allowing services to meet all applicable security and privacy requirements.

All applicable VA and VHA security requirements will be adhered to. Cross-cutting security requirements are contained in the VA Enterprise Requirements Repository (ERR). Additionally, all applicable VA and VHA Privacy requirements will be adhered to. Efforts that involve the collection and maintenance of individually identifiable information must be covered by a Privacy Act system of records notice.

Federal security specifications are documented in the Federal Information Processing Standard (FIPS) 199 and National Institute of Standards and Technology (NIST) SP 800-60.

Minimum security control requirements are addressed in NIST SP 800-53 and VA Handbook 6500, Appendix D.

2.14 System Features

The system features are outlined in Table 1 of this document.

2.15 Usability Specifications

Since services are not intended to be accessed or used directly by end-users this section is not applicable.

3 Applicable Standards

3.1 Immunization Domain

- Immunization Information System (IIS) Code Sets:
<http://www.cdc.gov/vaccines/programs/iis/code-sets.html>

4 Interfaces

Not applicable to the development of services since a service is an interface.

4.1 Communications Interfaces

Services developed by the VistA API 2.0 project will utilize SOAP Web Service and / or RESTful interfaces, both of which communicate over HTTP / HTTPS utilizing standard ports.

4.2 Hardware Interfaces

Services utilize standard Ethernet networking hardware.

4.3 Software Interfaces

Services are themselves “software interfaces” and are described in detail in the service description documents.

4.4 User Interfaces

Not applicable to the development of services.

5 Legal, Copyright, and Other Notices

Not applicable to this document.

6 Purchased Components

Other than the standard SOA infrastructure platform software (Operating System, Application Servers, and SOA products) the services will not require any purchased components.

6.1 Defect Source (TOP 5)

Not applicable to this document.

7 User Class Characteristics

Users will be application developers both internal and external to the VA.

8 Estimation

The VistA API 2.0 project team is working with the ProPath process team for services to identify an appropriate method for estimation because we feel Function Point Analysis would yield misleading results. When an appropriate estimation method is determined this section of the RSD will be updated to reflect that.

8.1 Project Software Functional Size and Size-Based Effort and Duration Estimate

Application

Table 3: Project Software Functional Size

Item	A	B	C	D	E	Total
Counted Function Points						
Estimated Scope Growth						
Estimated Size at Release						

Table 4: Software Size-based Effort Estimates

Size-Based Effort Estimates	Labor Hours	Probability
Low-Effort Estimate – With indicated probability, project will consume no more than:		
High-Effort Estimate – With indicated probability, project will consume no more than:		

Table 5: Software Size-based Duration Estimates

Size-Based Duration Estimates	Work Days	Probability
Low-Duration Estimate – With indicated probability, project will consume no more than:		
High-Duration Estimate -- With indicated probability, project will consume no more than:		

Figure 8: Cumulative Probability (“S-curve”) Chart

[Insert Cumulative Probability (“S-curve”) Charts here]

9 Approval Signatures

REVIEW DATE: November 5, 2014

SCRIBE: [REDACTED]

12/3/2014

X [REDACTED] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

Appendix A. Use Case 1 – Send Immunization Data

In the following use cases VIMM represents an Immunization Information System (IIS).

A.1. Brief Description

Goal: To send an Immunization Data for an individual patient from one system to another. In addition to EHR-S and IIS, other systems such as vital records systems or billing systems could use this message to send immunization histories.

A.2. Use Case Trigger

A user or other actor requests that the sending system send an Immunization Data.

A.3. Use Case Context Diagram

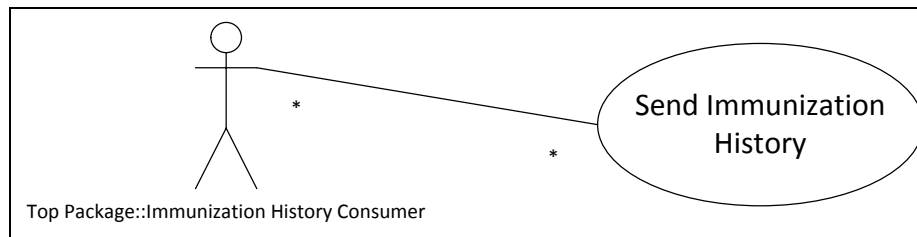


Figure 9: Use Case One Context Diagram – Send Immunization Data

A.4. Use Case Actors

Table 6: Use Case One Actors

Actor	Responsibility	Messaging Goals
Immunization Data Supplier	Provide access to a complete, consolidated immunization record for each person in its catchment area Supply individual immunization records to authorized users and systems	<ul style="list-style-type: none">• Receive immunization histories and updates• Receive requests for individual records• Send immunization records to other systems• Acknowledge receipt of message• Report processing errors from receipt of message
Immunization Data Consumer	Request Immunization Data records for patients	<ul style="list-style-type: none">• Request Immunization record• Receive Immunization record in response to a request.• Report processing errors from receipt of message

A.5. Preconditions

A.5.1. Precondition 1

The Immunization Data consumer must have completed any necessary identity resolution.

A.6. Basic Flow of Events

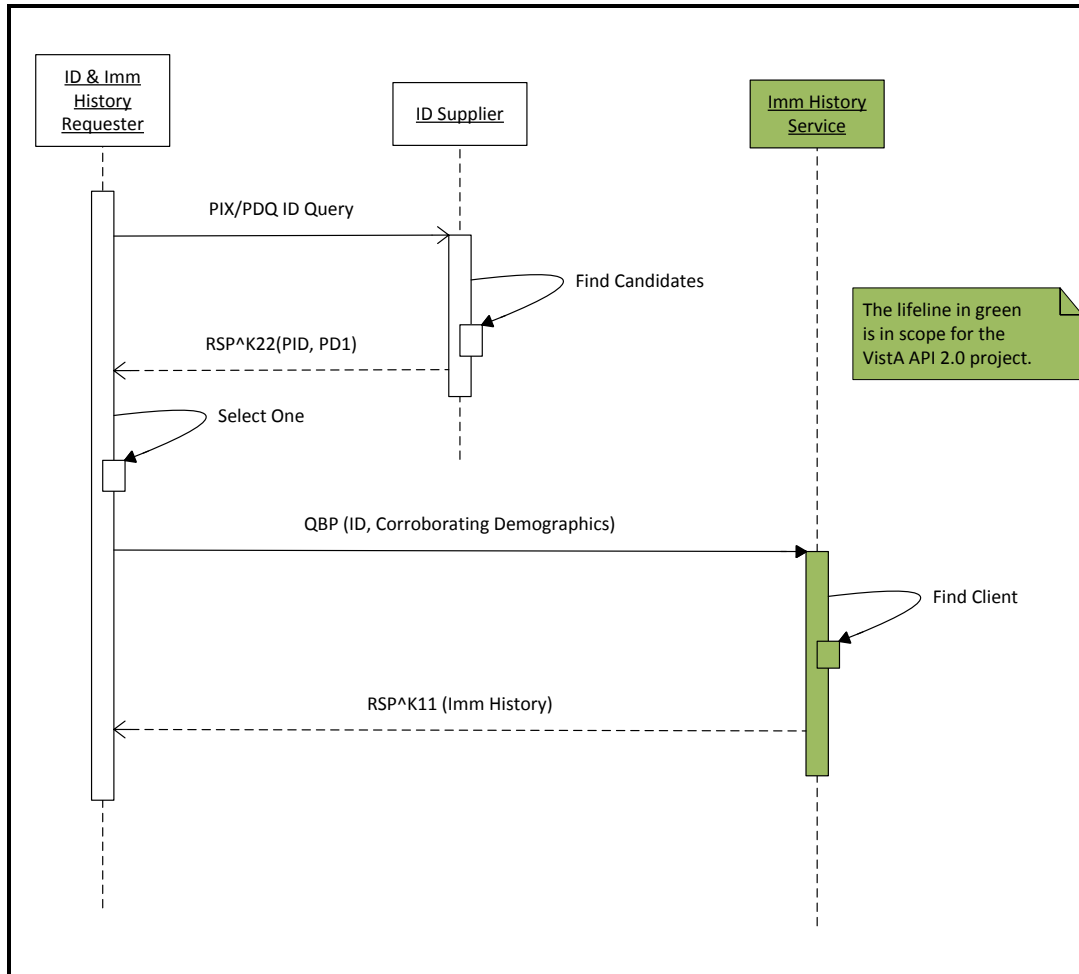


Figure 10: Use Case One Flow of Events

Appendix B. Use Case 2 - Receive Immunization Data

B.1. Brief Description

Goal: To receive an unsolicited Immunization Data. It may be an update or a new record. This use case does not have responsibility for the processing of the message. The receiving system may review and accept the Immunization Data if it chooses, but this outside the scope of this use case.

B.2. Use Case Trigger

A VXU (unsolicited vaccine history) is received by the receiving system.

B.3. Use Case Context Diagram

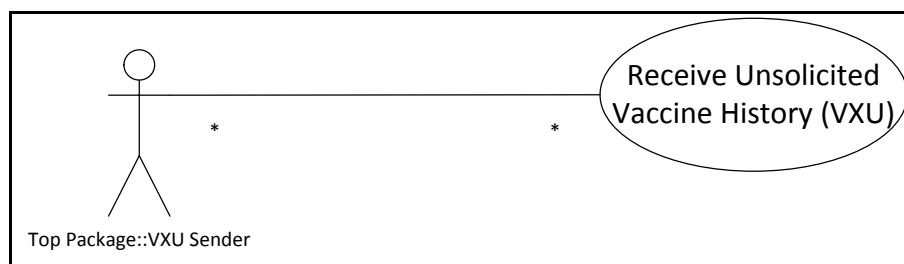


Figure 11: Use Case Two Context Diagram – Receive Unsolicited Vaccine History

B.4. Use Case Actors

Table 7: Use Case Two Actor

Actor	Responsibility	Messaging Goals
VXU Sender	Send unsolicited vaccine history for a patient	Send Immunization Data records for a patient

B.5. Preconditions

There are none.

B.6. Basic Flow of Events

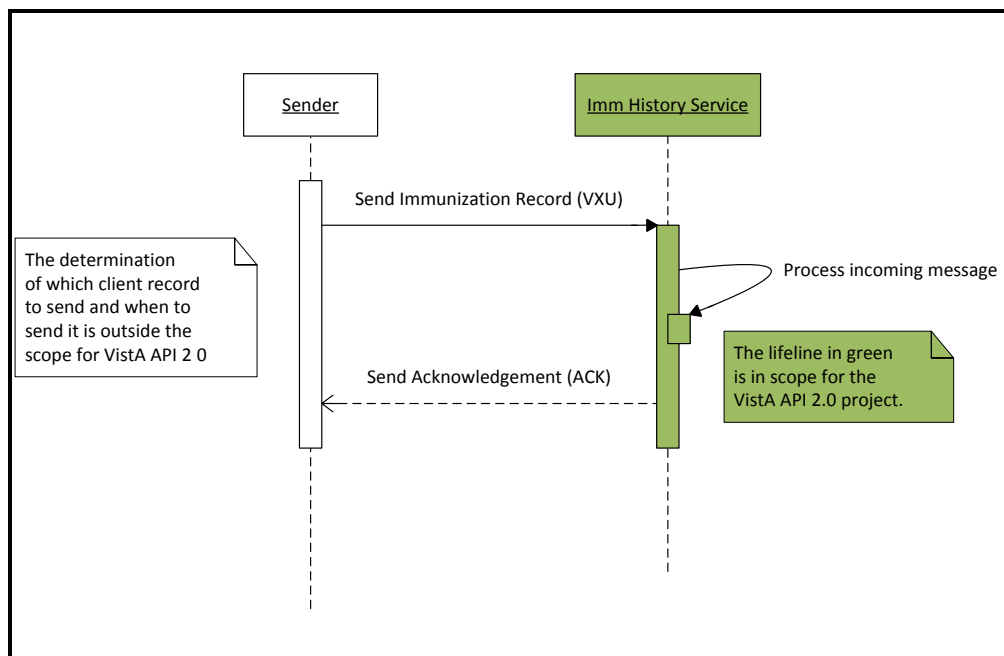


Figure 12: Use Case Two Flow of Events

Appendix C. UC3 – Vaccine Manufacturer Service

C.1. Brief Description

Goal: To retrieve vaccine manufacturer data (MVX) from VistA.

C.2. Use Case Trigger

A user or system requests vaccine manufacturer data.

C.3. Use Case Context Diagram

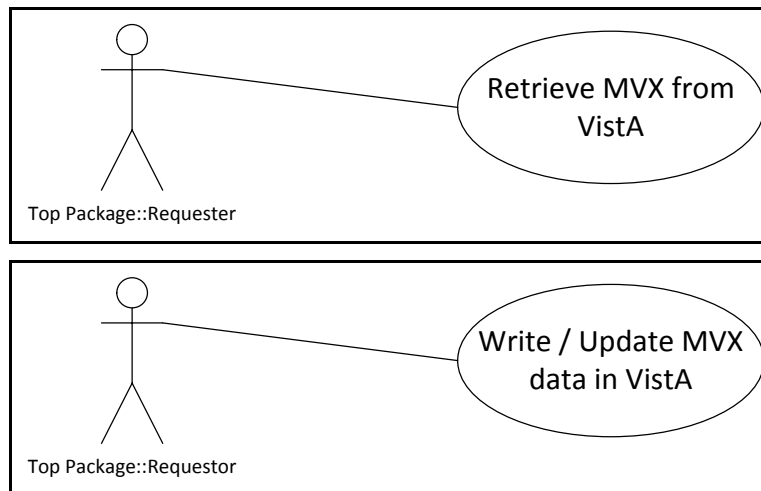


Figure 13: Use Case Three Context Diagrams

C.4. Use Case Actors

Table 8: Use Case Three Actor

Actor	Responsibility	Messaging Goals
Requester	<ul style="list-style-type: none">Initiate the request for vaccine manufacturer dataReceives and processes the responses and any errors	Retrieve vaccine manufacturer data from VistA

C.5. Preconditions

There are none.

C.6. Basic Flow of Events

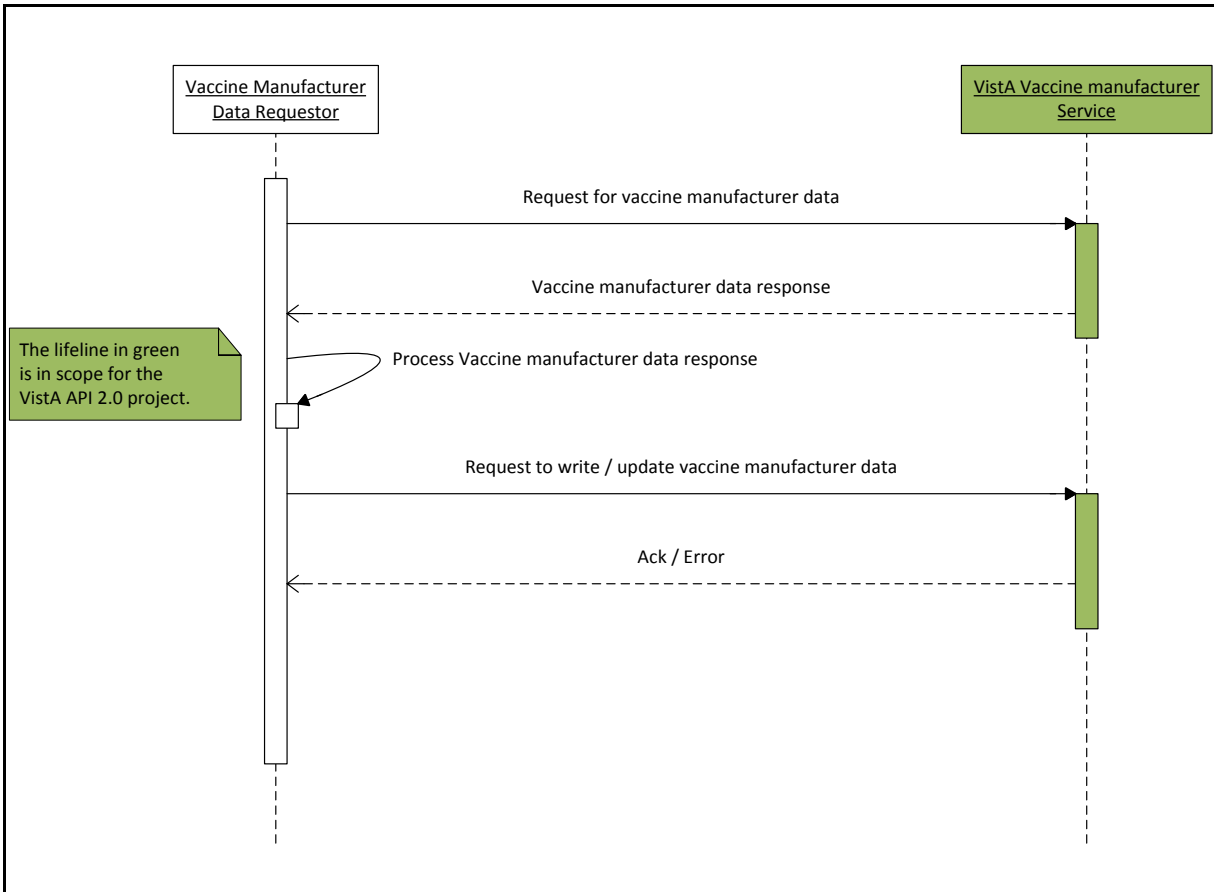


Figure 14: Use Case Three Flow of Events

Appendix D. UC4 – Vaccine Manufacturer Service

D.1. Brief Description

Goal: To retrieve vaccine data (CVX) from VistA

D.2. Use Case Trigger

A user or system requests vaccine data

D.3. Use Case Context Diagram

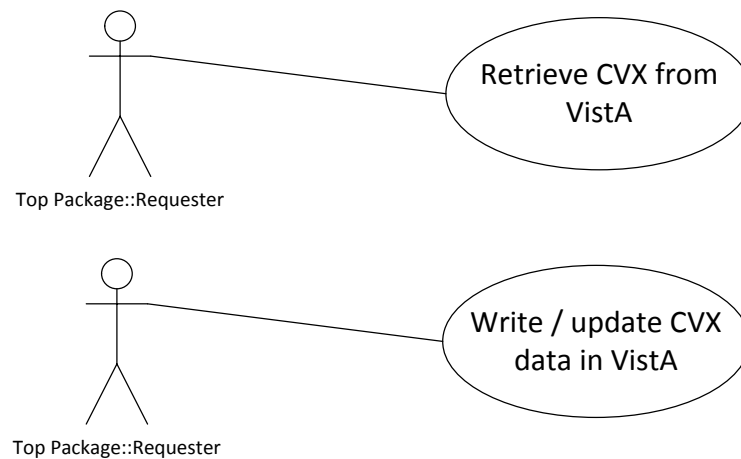


Figure 15: Use Case Four Context Diagrams

D.4. Use Case Actor

Table 9: Use Case Four Actor

Actor	Responsibility	Messaging Goals
Requester	<ul style="list-style-type: none">Initiate the request for vaccine dataReceives and processes the responses and any errors	Retrieve vaccine data from VistA

D.5. Preconditions

There are none.

D.6. Basic Flow of Events

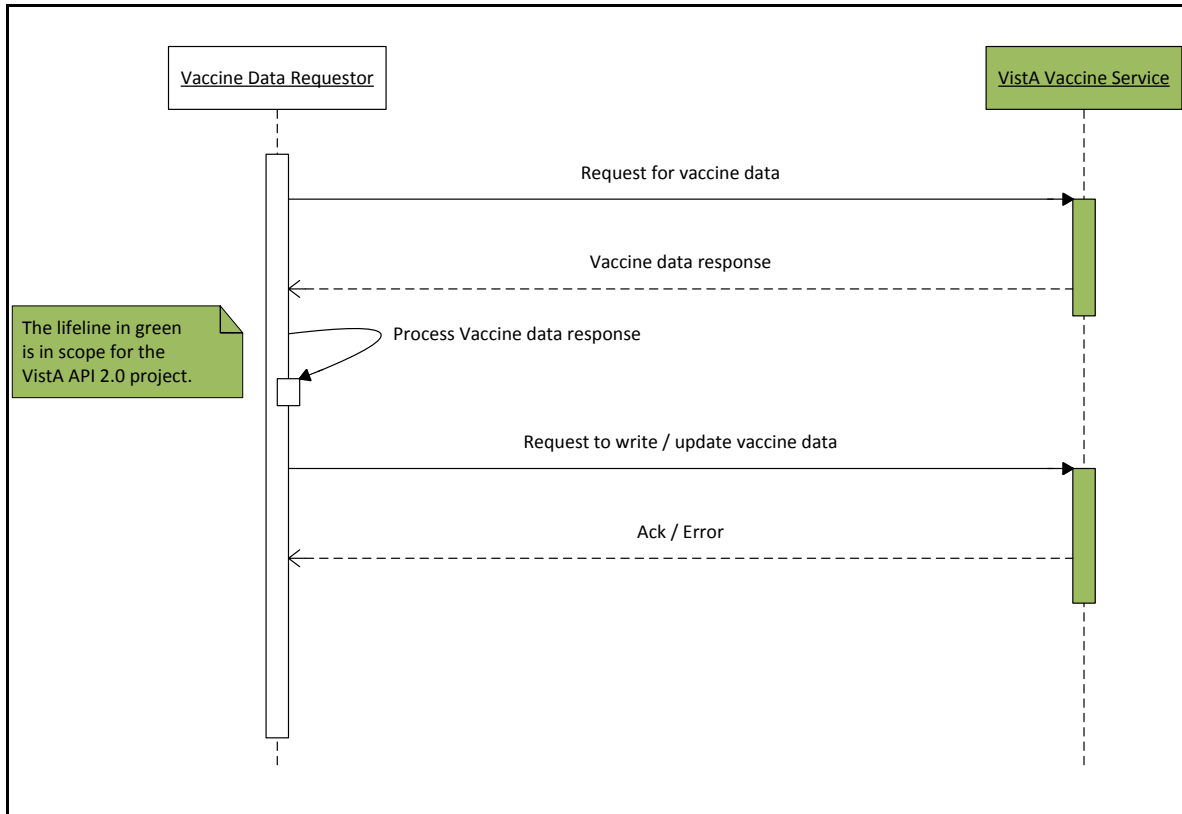


Figure 16: Use Case Four Flow of Events

Appendix E. Acronym List and Glossary

This plan uses the following acronyms.

Table 10: Acronyms Used in this Document

Term	Definition
API	Application Program Interface
ASD	Architecture Strategy and Design
CDC	Centers for Disease Control
CM	Context Management
CoE	Enterprise Shared Services Center of Excellence
CVX	Vaccine Data
DOD	Department of Defense
EHR	Electronic Health Record
eMI	Enterprise Messaging Infrastructure
ESB	Enterprise Service Bus
ETA	Enterprise Technical Architecture
EVO	VistA Evolution
GUI	Graphical User Interface
HL7	Health Level 7
IAM	Identity Access Management
iEHR	Interoperable Electronic Health Record
IHE	Healthcare Enterprise
IIS	Immunization Information System
IOC	Initial Operating Capability

Term	Definition
MVX	Vaccine Manufacturer Data
OI&T	Office of Information & Technology
RPC	Remote Procedure Call
RSD	Requirements Specification Document
SOA	Service Oriented Architecture
SOAP	Simple Object Access Protocol
SSO	Single Sign On
UI	User Interface
VA	Veterans Administration
VIMM	VistA Immunizations Enhancements
VistA	Veterans Health Information Systems and Technology Architecture
VXU	Unsolicited Vaccine History
WSDL	Web Service Definition Language
WSRR	WebSphere Registry & Repository

Template Revision History

Date	Version	Description	Author
May 2014	1.3	Reordered cover sheet to clarify results of artifact searches	Process Management
May 2013	1.2	Add Appendix for acronyms and glossary	Process Management
March 2013	1.1	Formatted to current ProPath documentation standards and edited to conform with latest Alternative Text (Section 508) guidelines	Process Management
January 2013	1.0	Initial Version	PMAS Business Office