

Memorial Benefits Management System

Presidential Memorial Certificates Processing Capability



System Design Document Version 1.0
Created May 2014 (Updated August 2014)

Department of Veterans Affairs
Office of Information and Technology
Product Development

Revision History

Date	Version	Description	Author
08/19/2014	1.0	This version is base-lined and the PDF will be signed.	OI&T PD MBMS

Artifact Rationale

The System Design Document (SDD) is a dual-use document that provides the conceptual design as well as the as-built design. This document will be updated as the product is built, to reflect the as-built product. Per the Project Management Accountability System (PMAS) Guide, the SDD as a conceptual design is required prior to the Milestone 1 Review. (Sections 1, 2, 3, 4, 5, 7, 9 need to be populated, as applicable.) The as-built design for each delivery must be incorporated prior to the Milestone 2 Review. (The entire document needs to be populated or updated, as applicable.)

Instructions

The System Design Document (SDD) is a general purpose document that is use to specify the design of new systems including Custom Development, Software as a Service, Hosted Services; modifications or updates to an existing system. Therefore, all sections may not apply to system being designed. Any sections not applicable to the current effort must be marked N/A.

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1. INTRODUCTION

A Presidential Memorial Certificate (PMC) is an engraved paper certificate, bearing the signature of the sitting President of the United States, to honor the memory of Veterans who have been lost or honorably discharged from the Armed Forces of the United States.

A single PMC is automatically generated for the Veteran's family, loved ones or next of kin when a Veteran burial is completed and entered into the Burial Operational Support System (BOSS). The BOSS program is used to support and help manage burials in National Cemeteries and in most State Veteran Cemeteries.

PMC's may also be requested for Veterans who are deceased but have chosen not to be buried in a State or National Cemetery, but do choose to order a government furnished headstone or marker using the VA Form 40-1330 or a Medallion using the VA Form 40-1330M. "Burial" is not a requirement for Veteran eligibility as it is with a headstone or marker. Requests are sent directly to the PMC program and are processed using the Automated Monument Application System (AMAS) order screen. Eligibility is established using Veteran documents provided with each application request form. Multiple copies may be requested for each request received.

After receipt of the original PMC, additional certificates may be requested by the Next of Kin PMC recipients using an inserted re-order request form which is then sent to the PMC program office for processing using the AMAS / PMC order function.

1.1. Purpose of the SDD

The purpose of this document is to describe in sufficient detail how PMC processing capability will be designed to add PMC status tracking and monitoring capabilities to the existing system. It will include the ability for the PMC Office to check on the status of the PMC at every step in the process and identify where a PMC Application is in the process. The System Design Document (SDD) translates the Requirement Specifications into a document from which the developers can create the actual system. It identifies the top-level system architecture and identifies hardware, software, communication, and interface components.

1.2. Identification

This document outlines the scope, the changes in design and level of effort involved in implementing the change/enhancements requested for enhancing the Presidential Memorial Certificates Processing Capability.

1.3. Scope

The purpose of this requirement is to create Case processing system to allow end-Users to follow PMC processing steps such as: Establishing a Case (EC), Suspending a Case (SU) when additional information is required or not initially submitted with the request, noting Other Actions Taken (OT) through the use of comments Recorded, or Disapproving a Case (DC) if the Veteran is found to be ineligible. The scope of the PMCP project includes the following.

- Sufficient data will be available to create tracking reports.

- Additional tracking-related PMC data will be added to the corporate database. Functionality will also allow PMC Case Managers to query (search) for the Veteran's name and ensures that two Records with duplicate information will not be entered into the system.
- PMC replacement requests will allow PMC Case Managers to access existing Veterans' Records to place replacement orders.
- Enhancing the order tracking and reports functionality for the PMC processing screens will add a vigorous and far more structured set of order tracking capabilities to a system.
- It will track when the weekly PMC file was compiled by Quantico and made available for printing.
- It will allow the PMC Office to enter data (date, quantity).
- It will allow the PMC Supervisor to track the number of certificate requests entered in the PMC subsystem by an individual PMC Case Manager or by all PMC Case Managers during any date parameters entered.

1.4. Constraining Policies, Directives and Procedures

VA policies and procedures applicable to design and implementation will be used. The technology stack to develop Presidential Memorial Certificate application to meet the project requirements will be selected from the permissible range of technologies listed in One-VA TRM. All VA privacy, security, and 508 compliance requirements will be adhered to.

1.5. User Characteristics

The intended users affected by this CR will be existing AMAS Users that have experience using the common PMC features. The following table lists the stakeholders

Table 1: PMC PC User Characteristics

Role	Title	Organization	Contact
End User	Supervisor	Presidential Memorial Certificate Program	
Stakeholder	Case Managers	Presidential Memorial Certificate Program	
Stakeholder	Site Supervisors	Presidential Memorial Certificate Program	
Stakeholder	Remote Users	Presidential Memorial Certificate Program	

1.5.1. User Problem Statement

The current PMC Screen lacks the functionality to provide case tracking, productivity reporting, and document tracking reports for the PMC Program.

1.5.2. User Objectives

The quality of PMCs provided by VA will be rated as excellent by 100 percent of respondents. Enhancing the order tracking and reports functionality for the PMC processing screens will add a vigorous and far more structured set of order tracking capabilities to the PMC system.

1.6. Relationship to Other Documents and Plans

This document was derived from the Requirements Specification Document (RSD). This document also references:

- [Presidential Memorial Certificate Processing Capability Project Business Requirements Document Version 1.0](#)
- Presidential Memorial Certificate Processing Capability Project Requirements Specification Document Version 1.0
- PMC Processing Capability Requirements Traceability Matrix (RTM)

1.7. Definitions, Acronyms, and Abbreviations

Table 2: PMC PC Acronyms

Term	Meaning
AITC	Austin Information Technology Center
AMAS	Automated Monument Application System
APP	Application
BIN	Binary
BOSS	Burial Operational Support System
BRD	Business Requirements Document
C/O	Care Of
CO	Certificate Ordered
CR	Change Request
DC	Disapproving a Case
EC	Establishing a Case
FNOD	First Notice of Death
FTP	File Transfer Protocol
FY	Fiscal Year
ID	Identification
LOE	Level of Effort
MAPUE	Memorial Affairs Performance and Usability Enhancements
MPS	Memorial Programs Service
N	No
NCA	National Cemetery Administration
NOK	Next of Kin
NUM	Number

Term	Meaning
OED	Office of Enterprise Development
OT	Other Actions Taken
PMC	Presidential Memorial Certificate
PMCID	Presidential Memorial Certificate Identification
QITC	Quantico Information Data Center
QRPC	Quantico Regional Processing Center
RSD	Requirements Specification Document
RTM	Requirements Traceability Matrix
SDD	System Design Document
SDLC	Software Development Life Cycle
SU	Suspending a Case
TBD	To Be Determined
TRM	Technical Reference Model
UAT	User Acceptance Testing
U.S.	United States
USPS	United States Postal Service
VA	Department of Veterans Affairs
VACO	VA Central Office
VBA	Veterans Benefits Administration
VLER	Virtual Lifetime Electronic Record
Y	Yes
ZIP	Zone Improvement Plan

1.8. References

The following documents were referenced for the creation of this SSD.

Note: TSPR links in the table below will be provided once they become available.

Table 3: PMC PC SDD References

Document	Published by	Date
PMC PC Business Requirements Document	National Cemetery Administration	May 2014
Memorial Benefits Management System (MBMS) Program Charter	OI&T PD	June 2014
PMC PC Requirements Specifications Document	OI&T PD	August 2014

Document	Published by	Date
PMC PC Acceptance Criteria Plan	OI&T PD	August 2014
PMC PC Requirements Traceability Matrix	OI&T PD	August 2014

2. BACKGROUND

2.1. Overview of the System

The PMC Subsystem contains information on PMCs whether created due to a burial in a National or State Veteran cemetery, created from an application for a marker or headstone, or requested by phone, e-mail, fax, or sent via United States Postal Service mail. The data from Veterans buried in a National or State Veteran cemetery or a request for a marker or headstone is compiled weekly through a routine that reviews the BOSS Database and captures all necessary and associated information from Veteran burial records that can be used to generate a PMC (Veteran Name, NOK Name, Address, City, State/Zone Improvement Plan (ZIP) Code). Each Veteran record is assigned a unique Presidential Memorial Certificate Identification (PMCID) and a PMC Record is created with the appropriate information. When the PMC Record is established, this information becomes an integral part of the system as a “created but not yet released record.” When the PMC Print Order information is compiled each week, this information becomes an integral part of that file as a “created but not yet released record.” After the file is compiled and released for printing, the process automatically generates a PMC for the NOK of the associated BOSS/AMAS Veteran burial. The records within this file are sent to the PMC Supervisors Office and reviewed for accuracy.

The information is reviewed for obvious errors, such as missing address information or extraneous information that should not be included in the record. When these errors are found, the PMC Office accesses their database and makes the necessary corrections.

All PMC requests submitted by mail, e-mail, telephone, or fax are entered by Case Managers or the PMC Office. The Decedent Name, Number of Certificates, Recipient Name, Address, and ZIP Code are entered and stored in the database. Each week a file is compiled containing the necessary information for printing certificates. This file is placed on a File Transfer Protocol (FTP) server and made available to the VA Central Office (VACO) print shop. The print shop prints the certificates on pre-embossed paper, error checked by the PMC Unit, and sent from the VACO Print Shop.

2.2. Overview of the Business Process

Enhance the current PMC Screen to improve case processing functionality, to provide case tracking, productivity reporting, and document tracking reports for the PMC Program. Enhancements will also provide the PMC Unit Supervisor or upper levels of MPS/NCA Management with the ability to determine at which step in the process any particular PMC request is located, and will also allow the Case Manager to suspend or disapprove any received request for just cause.

Case processing functionality will allow the user to follow processing steps such as EC and SU when additional information is required or not initially submitted with the request, noting OT through the use of comments recorded, or DC if the Veteran is found to be ineligible.

The Productivity Report will allow the supervisor to track the number of certificate requests entered in the PMC Subsystem by an individual user or by all users, during any date parameters entered.

The Order Tracking Report will allow the PMC Program to determine when the weekly PMC File was compiled by Quantico and made available for print processing. It will enhance the order tracking and reports functionality for the PMC Processing Screens and will add a vigorous and far more structured set of order tracking capabilities to a system that has few.

The following diagram below outlines the new PMC processing capability work flow.

Figure 1: Proposed MPS PMC Business Process and Data Flow

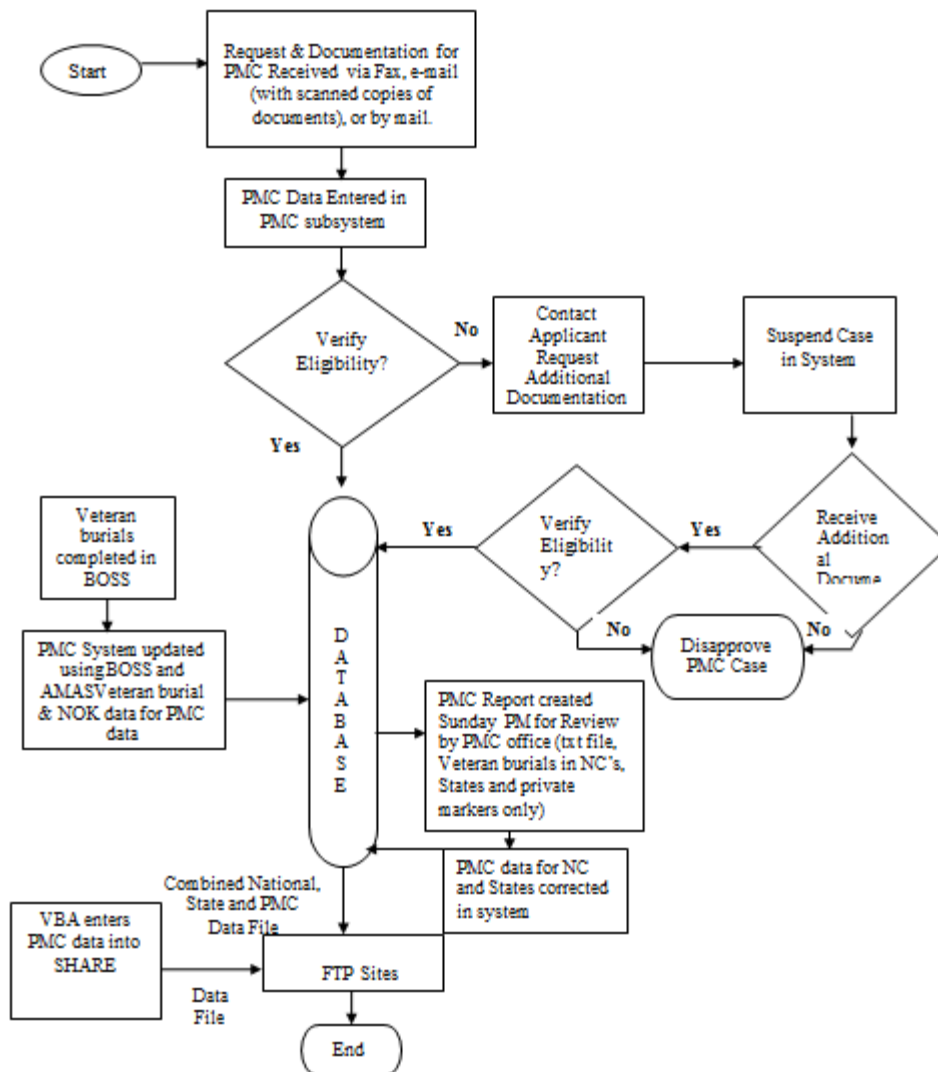
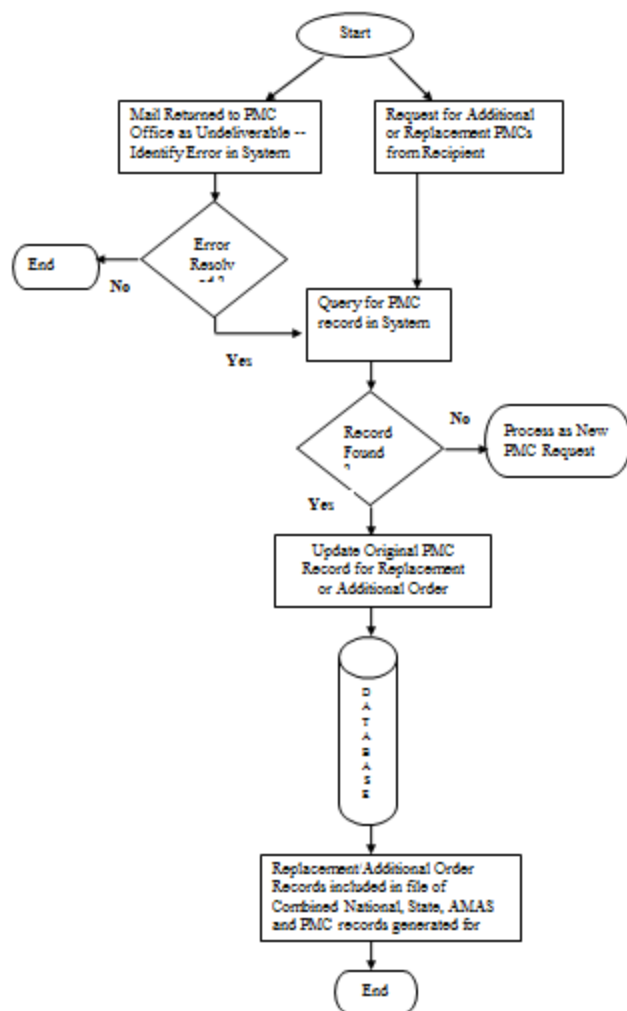


Figure 2: Proposed PMC Error and Replacement Process



2.3. Business Benefits

This project will improve on the current PMC Process and provide the capability to track the request for certificates through the various stages of processing.

2.4. Assumptions and Constraints

This section describes the assumptions, and constraints that impacted the design of the system.

2.4.1. Design Assumptions

Analysis has to be conducted to determine any new design assumptions. This section will be updated accordingly during the development phase.

2.4.2. Design Constraints

Development is constrained by the technical standards and tools guidelines identified in the One-VA TRM.

2.4.3. Design Trade-offs

Analysis has to be conducted to determine any new design trade-offs. This section will be updated accordingly during the development phase.

2.5. Overview of the Significant Requirements

The material in this section is not to replace either the existing functional or technical requirements documents, nor serve as the basis for the PMC PC Requirements Traceability Matrix, but only to inform non-project personnel reading this document , the basis for the design.

2.5.1. Overview of Significant Functional Requirements

The system will provide the capability to track the request for certificates through the various stages of processing. A tracking report for the movement of the certificates through the generation, quality check, and printing will be created.

For the proposed functionality, the system will be able to track the various case statuses such as case establishment, suspension, and cancelation. A mechanism that allows the user to reorder a certificate that was canceled previously, or was processed with incorrect information will be provided. The system will provide the capability to order additional certificates from original PMC Data.

Reporting information on the number of certificates processed by a Case Manager within a specified time frame will be available. Date and time reporting on the generation of the error checking and PMC Processing Files will be provided. The ability to track the certificates through the various generation, printing, error checking, and mailing processes will be included.

Table 4: PMC PC Functional Requirements

ID	Requirement
RSD – US0001	PMC Case Manager can select next request from within PMC application, the application will allow associated images for Record, apply unique indicator and allow User to enter information directly in to application and allow viewing of imaged documents.

ID	Requirement
RSD – US0002	<p>System will allow entry of Veteran's name</p> <ul style="list-style-type: none"> ▪ The system will provide a PMC screen in order to process a PMC Request ▪ The system will allow PMC Case Managers and PMC Supervisors the ability to enter Case information in order to establish a PMC Request. ▪ The system will allow the User to create a new PMC Record using the Veteran information entered in the query. ▪ The system will allow the Veteran's name to be entered into four separate fields: <ul style="list-style-type: none"> ○ Last Name - Mandatory ○ First Name - Mandatory ○ Middle Name - Optional ○ Suffix – Optional ▪ The system will allow entry of Veteran Information, including: <ul style="list-style-type: none"> ○ SSN ○ Service Number ○ Claim Number
RSD – US0003	System will perform duplicate checks to verify whether Records already exist in the BOSS/AMAS system.
RSD – US0004	The PMC application will allow for Verified Eligibility Status entry.
RSD – US0005	The PMC application will allow Applicant information entry.
RSD – US0006	The PMC Application will allow entry of Honorific pick of optional data.
RSD – US0007	<p>The PMC application will allow tracking of one or more recipient mailing addresses</p> <ul style="list-style-type: none"> ▪ The system shall allow a PMC to be sent to multiple addresses in varying PMC amounts. ▪ The system shall allow for the quantity of PMCs to be entered for each Recipient. ▪ The system will allow the recipient mailing address information to be tracked for one or multiple addresses.
RSD – US0008	<p>The PMC application will allow one same as Applicant address to exist without error.</p> <p>If the mailing is same as Applicant address, no further data entry is required, the Applicant address and Recipient address are the same.</p>

ID	Requirement
RSD – US0009	<p>PMC application behavior and tracking for mailing addresses different than applicant address</p> <ul style="list-style-type: none"> ▪ If the mailing address is different than the Applicant address, information for the Recipient, it will be tracked ▪ If the mailing address is different than the applicant address, Mailing Name for the recipient, it will be tracked. ▪ Mailing Name may be either an Individual or a Business. ▪ If the mailing address is different than the Applicant address for the Recipient (Mailing Address Line 1, Line 2 or Line 3), it will be tracked. ▪ If the mailing address is different than the Applicant address, Mailing City for the Recipient, it will be tracked. ▪ If the mailing address is different than the Applicant address, Mailing State for the Recipient, it will be tracked. ▪ If the mailing address is different than the Applicant address, Mailing Zip Code (optional) for the Recipient, it will be tracked. ▪ The system will auto-populate the City and State into separate fields once a User enters a Zip Code into the Zip Code field. ▪ The auto-populated City and State fields will not be editable. ▪ If the mailing address is different than the applicant address, Mailing Postal Code (optional) for the recipient will be tracked. ▪ If the mailing address is different than the applicant address, Foreign City (optional) for the recipient will be tracked. ▪ If the mailing address is different than the applicant address, State/Province (optional) for the recipient will be tracked. ▪ If the mailing address is different than the applicant address, Country (optional) for the recipient will be tracked. ▪ The system will auto-populate the City, Province and Country in to four separate fields when a User enters a Postal Code in the Postal Code field. ▪ City, Province or Country automatically populated by the system will not be editable by the User. ▪ If the mailing address is different than the applicant address, Phone Number (optional) for the recipient will be tracked. ▪ Format for the Phone Number will include both Foreign and Domestic formats. ▪ If the mailing address is different than the applicant address, Fax Number (optional) for the recipient will be tracked. ▪ Format for the Fax Number will include both Foreign and Domestic formats. ▪ If the mailing address is different than the applicant address, E-mail Address (optional) for the recipient will be tracked. ▪ Format for the E-mail Address will include at least one '@' symbol and one period.

ID	Requirement
RSD – US0010	Streamline the PMC Case establishment process The PMC Case Processing work flow will be streamlined to eliminate multiple screens and clicks in establishing a PMC Case.
RSD – US0011	Improve PMC Recipient detail visibility for the User.
RSD – US0012	Provide additional detail in PMC request Records.
RSD – US0013	Special Requests should be allowed by the PMC Application
RSD – US0014	The PMC application will allow PMC Case Managers to query the database using Applicant data.
RSD – US0015	<p>PMC application behavior for entered name if match is found.</p> <ul style="list-style-type: none"> ▪ If a match is found on the entered name data, specific fields will be displayed. ▪ If a match is found on the entered name data, the following fields will be displayed: <ul style="list-style-type: none"> ○ Full Veteran Name ○ SSN ○ Service Number ○ Claims Number ○ NOK/Recipients/Applicant Name ○ City ○ State/Province ○ Zip/Postal Code
RSD – US0016	PMC application will allow PMC Case Manager or PMC Supervisor access to view and change information
RSD – US0017	<p>PMC application behavior upon query where no match is found</p> <ul style="list-style-type: none"> ▪ If no match is found, the PMC Case Manager may continue to open a PMC Record. ▪ The information entered in the Veteran name will be carried over to the PMC opening screen. ▪ The PMC Case Manager can update the Veteran name entered. ▪ The PMC Case Manager can populate the necessary PMC request information.
RSD – US0018	<p>PMC application behavior when queried using specific data</p> <ul style="list-style-type: none"> ▪ The system will allow the PMC Case Manager the ability to query the system for Recipient. ▪ The system will allow the PMC Case Manager the ability to query the system for Recipient Name ▪ A wildcard may be used may be used for the Recipient query ▪ The system will allow the PMC Case Manager the ability to query the system for Recipient Name and Zip Code ▪ The system will allow the PMC Case Manager the ability to query the system for Recipient Name and Postal Code

ID	Requirement
RSD – US0019	Provide system notification to User <ul style="list-style-type: none"> ▪ The system will provide a system notification to the User when a PMC Record has been created or updated.
RSD – US0020	PMC application will allow name search <ul style="list-style-type: none"> ▪ The Recipient Name Search will include specific entries. ▪ The Recipient Name Search will include entries identified as: <ul style="list-style-type: none"> ○ Next of Kin ○ Applicant Name ○ Recipient Name ○ Authorized Agent ○ Veteran Service Office
RSD – US0021	PMC application behavior if a match is found during query <ul style="list-style-type: none"> ▪ If a match is found on the entered Applicant or Recipient search, the system will display specific fields. ▪ If a match is found on the entered data, the following field will be displayed: <ul style="list-style-type: none"> ○ Applicant Name ○ Recipient Name ○ Recipient Address ○ City, State, Zip Code or City, Province, Country, Postal Code ○ Veteran Name
RSD – US0022	PMC application query by PMC Case Manager <ul style="list-style-type: none"> ▪ The PMC Case Manager can query the system for Released Date. ▪ The system will allow the PMC Case Manager to query the system for Combination of Veteran Name and Released Date
RSD – US0023	Improve system usability for the User. <ul style="list-style-type: none"> ▪ The system will shade any fields which are not editable.
RSD – US0024	Improve stored data and system usability by limiting field size of text boxes <ul style="list-style-type: none"> ▪ The system will limit the field size of all text boxes based on the maximum number of characters allowed in the field.
RSD – US0025	<ul style="list-style-type: none"> ▪ The PMC application should manage and keep status code history
RSD – US0026	The PMC application should allow manual update of status

ID	Requirement
RSD – US0027	<p>The PMC Application Certificate display</p> <ul style="list-style-type: none"> ▪ The PMC Case Manager will have the ability to view the Veteran name as it will be printed on the certificate. ▪ The review page will display the same font and font size that is printed on the PMC so that spacing is shown. The font used to print the certificates is FleurishScript – Font size 42. ▪ The Veteran’s name will be spelled out in upper and lowercase lettering as appropriate. ▪ The system will not allow all capital letters to be used for the Veteran’s name on the certificate. ▪ The system will allow one space between the Veteran’s First Name, Middle Name, and Last Name. ▪ The system will allow a comma to be used between the Veteran’s last name and “Jr.” or “Sr.” ▪ The system will allow suffixes such as “Jr” and “Sr” to always have a period after the lowercase “r.” ▪ The system will not allow commas between the Veteran’s Last Name and II, III, IV, etc. ▪ If a middle initial is used in lieu of a Middle Name, there will be a period used after the initial and a space before the Last Name. ▪ The User may design, edit and/or modify a graphical representation of a PMC. ▪ A graphical PMC preview which will auto-adjust based on text will be provided by the system. ▪ The system will provide a graphical preview of a PMC to show what it will look like. <p>A graphical PMC preview will auto-adjust based on the font and size.</p>
RSD – US0028	<ul style="list-style-type: none"> ▪ The PMC application should allow a PMC Case Manager to correct PMC certificate information
RSD – US0029	PMC application management of Records in Reorder Status
RSD – US0030	PMC application will update a Released Date when a print file is created
RSD – US0031	PMC application will allow PMC Case Status in Certificate Ordered
RSD – US0032	The PMC application will manage additional certificates

ID	Requirement
RSD – US0033	<p>PMC application return errors to PMCs management</p> <ul style="list-style-type: none"> ▪ The system will be able to track errors identified when a certificate is returned to the PMC Office. ▪ The system will allow the PMC Case Manager or PMC Supervisor to enter the error identification for returned PMCs. ▪ The system will allow errors to be identified for returned PMCs. ▪ The system will allow an error to be identified for returned PMCs, including: <ul style="list-style-type: none"> ○ Name misspelled (PMC Case Manager error during Case entry) ○ Name misspelled (Incorrect information provided by Applicant) ○ The PMC delivered to the recipient was damaged ○ Returned as Undeliverable by the United States Postal Service (USPS) ○ Bad address (no such number, no such street, Zip code) ○ Incomplete address (missing information or not entered) ○ No mail receptacle ○ Moved no forwarding address / forward expired ○ Addressee deceased ○ Refused ○ Not received per Applicant / Recipient <p>Returned, not MPS original Case</p>
RSD – US0034	<ul style="list-style-type: none"> ○ The system will allow the PMC Case Manager or PMC Supervisor to be able to identify the PMC Case Manager who caused the need for replacement.
RSD – US0035	<p>The PMC application will allow a replacement Case to be established if there are errors on the certificate and allow a PMC Case Manager to resolve the issues and update the Case.</p>

ID	Requirement
RSD – US0036	<p>PMC application behavior with file printing in regards to data elements and status codes.</p> <ul style="list-style-type: none"> ▪ The system will allow the generation of the print file to occur on the standard Thursday evenings (same as the current process). ▪ The system will allow the file to contain Records with specific status codes. ▪ The system will allow the print file to contain Records with specific status code of: <ul style="list-style-type: none"> ○ Approved Case (will have a blank released date) ○ Reorder Established (will have a blank released date) ○ Additional Order Established (will have a blank released date) ○ Replacement Requested (if the date is after the Order Released Date). ▪ The system will not allow the print file to contain to contain Records identified as a Special Request. ▪ The system will allow the print file to repeat information in separate rows for each PMC that is to be printed as reflected in the PMC Count field. For example, if a Recipient is supposed to receive three PMCs (PMC Count field on Recipient Detail Screen), the full Record for that Recipient should display as three discrete rows in the print file, and contain all the same data elements. (See sample report in PMCpc BRD) ▪ The system will allow the print file to contain the following specific data elements: <ul style="list-style-type: none"> ○ PMC ID Number ○ Honorific ○ Veteran Name ○ Recipient Name ○ Address (Line One, Line Two, Line Three) ○ City ○ State ○ ZIP or Foreign City ○ State/Province ○ Country <p>Postal Code</p>
RSD – US0037	<ul style="list-style-type: none"> ○ The PMC application will update the Case status when the print files are created and placed on the sFTP site.
RSD – US0038	<p>PMC application management of Release Date with date the print file is created</p> <p>The system will allow the Released Date be populated with the date the print file is created.</p>

ID	Requirement
RSD – US0039	<ul style="list-style-type: none"> The system will allow the PMC Activity report to provide a listing of the number of PMC requests input by use rid by hour for a specified date.
RSD – US0040	<p>PMC application Return PMC Error Report capabilities and behavior</p> <ul style="list-style-type: none"> The system will allow the Returned PMC Error Report identifying the error codes and counts to be available to the PMC Supervisor. The system will allow the following data fields to be displayed on the Returned PMC Error Report, including: <ul style="list-style-type: none"> User ID Error Code Number of Requests Number of Certificates The system will allow the Returned PMC Error report to be sorted by how many errors each PMC Case Manager had on a specific date. The system will allow the PMC Supervisor to be able to request a Returned PMC Error report using parameters. The system will allow the PMC Supervisor to be able to request a Returned PMC Error report using parameters, including: <ul style="list-style-type: none"> Beginning Date to be a mandatory parameter End Date to be an optional parameter Beginning Date to be earlier than an End Date End Date to be earlier than or equal to Today's Date A PMC Supervisor can request a Returned PMC Error report based on Beginning Date – cannot be a future date. If only a Beginning Date is entered, the Returned PMC Error report will pull data for any Record with an error code and status date greater than the Beginning Date. If both parameters are entered, the Returned PMC Error report will pull data for any Record with an error code and corresponding status date equal to or older than the Beginning Date and earlier than or equal to the End Date. The system will allow the following for the Returned PMC Error report: if no data is available for the parameters entered, "No Data Found" will be displayed. The system will allow the Returned PMC Error report to be viewed on the screen. The Returned PMC Error report can be printed. <p>The system will use the format of the Returned PMC Error Report as displayed in BRD Appendix 4.3.</p>

ID	Requirement
RSD – US0041	<p>PMC application PMC Print and Mail Report capabilities and behavior</p> <ul style="list-style-type: none"> ▪ A PMC Case Manager or PMC Supervisor will be able to generate a PMC Print and Mail Report. ▪ A new screen will be provided to be used by a PMC Case Manager or PMC Supervisor to select a date the system generated the print file and manually enter the date that the print shop printed the PMCs (format: mm/dd/yyyy) ▪ The system will automatically store the date the system-generated PMC file was sent to the print shop. ▪ The system will automatically store the corresponding total quantity of PMC included in the generated print file. ▪ The system will store the date that the print shop printed the PMCs as entered on the new print report screen by the PMC Case Manager or PMC Supervisor for each automatically generated PMC file. ▪ The PMC Case Manager or PMC Supervisor can enter the number of PMCs printed for each automatically generated PMC file. ▪ The system will store the number of PMCs printed, as entered on the new print report screen by the PMC Case Manager or PMC Supervisor for each automatically generated PMC file. ▪ The PMC Print and Mail Report will provide ‘from’ and ‘to’ date parameters – will be mandatory (format: mm/dd/yyyy) ▪ The PMC Print and Mail report will display data for print files created on or after the From date. ▪ The PMC Print and Mail report ‘To Date’ will be mandatory. ▪ The system will allow the PMC Print and Mail report date display data for print files created on or before the To date. ▪ The system will allow for the PMC Print and Mail report, if no date is available for the parameters entered, “No Data found” will be displayed. ▪ The system will allow the PMC Print and Mail report be viewed on the screen. ▪ The system will allow the PMC Print and Mail report be printed. <p>The system will allow the format of the PMC Print and Mail report be the format displayed in PMCpc BRD Appendix 4.4.</p>

ID	Requirement
RSD – US0042	<p>The PMC application Suspended More than 10 Days Report capabilities and behavior</p> <ul style="list-style-type: none"> ▪ The system will, for the Suspended more than 10 days report, display the Cases that have been in a suspense status more than 10 days. (A Case is in a suspense status if the Case entered into a suspense status and has not been either released or denied). ▪ The system will, for the Suspended more than 10 days report, display specific data. ▪ The system will, for the Suspended more than 10 days report, display specific data, including: <ul style="list-style-type: none"> ○ PMCID ○ Name of the Case ○ PMC Case Manager ○ Date the Case entered into a suspense status ▪ The system will allow the Suspended more than 10 days report to be requested by a PMC Supervisor. ▪ The system will allow the Suspended more than 10 days report to be requested by a PMC Case Manager. ▪ The system will allow a PMC Supervisor to request a Suspended more than 10 days report for all employees at a site. ▪ The system will allow a PMC Supervisor to request a Suspended more than 10 days report for an individual employee. ▪ The system will allow a PMC Case Manager to request a Suspended more than 10 days report only for himself/herself. ▪ The system will allow the Suspended more than 10 days report to be viewed on the screen. <p>The system will allow the Suspended more than 10 days report to be printed.</p>
RSD – US0043	<ul style="list-style-type: none"> ▪ PMC application will have PMC Timeliness Report availability
RSD – US0044	System will allow generation, viewing and printing of a PMC Processing Report.
RSD – US0045	The system will allow the generation, viewing and printing of a PMC Log Report.
RSD – US0046	The system will process PMC Records from HINES and BOSS AMAS cron jobs
RSD – US0047	The system will provide an Output File of all PMCs generated from loaded Cases.
RSD – US0048	The system Record history status Records for each Case and allow them to be viewable.
RSD – US0049	The system will allow the PMC Activity report to provide a listing of the number of PMC requests input by use rid by hour for a specified date.

ID	Requirement
RSD – US0050	<p>Improve system readability</p> <ul style="list-style-type: none"> ▪ The system will ensure that all fonts and font sizes are consistent throughout the system. <p>The system will ensure that all fonts and font sizes are consistent in all reports.</p>
RSD – US0051	<p>Improve User notification for Approved PMC Records</p> <ul style="list-style-type: none"> ▪ The system will generate a PMC Text file (weekly batch) for Approved PMC Records.
RSD – US0052	<p>Improve reporting efficiency</p> <ul style="list-style-type: none"> ▪ The system should provide a menu of reports that are commonly used by the PMC Unit Workers.

2.5.2. Overview of Functional Workload / Performance Requirements

PMC is not expected to add any new users to the system because the business process is already in place and this is an automated effort. PMC does not anticipate growth at this time but capability should be allowed should this demand change in the future due to backlogs.

PMC application is developed with a goal of no more than 30 seconds response time for any action performed. This will be a goal of the design and implementation, but not a requirement.

2.5.3. Overview of Operational Requirements

Table 5: PMC PC Operational Requirements

ID	Requirement
	Covering multiple time zones, the BOSS enterprise system and its component PMC will need to be up a minimum of 7 days per week.

2.5.4. Overview of the Technical Requirements

The PMC sub-system may be developed using the following set of Tools and technologies.

- Oracle Weblogic Server 10.3.6
- Oracle Database 11G
- Apache Formatting Objects Processor 1.1
- iText Core 5.4
- Java 7.0

These tools are compliant with the Product Development (PD) software engineering TRM.

2.5.5. Overview of the Security or Privacy Requirements

The web component of Presidential Memorial Certificate processing capability (PMCpc) was implemented using Secure Socket Layer (SSL) for the encryption of web content. Users will be authenticated using Oracle Database accounts, and authorization will be controlled using role based

access. The VA 6500 requirements for “moderate” categorized systems and the following business-specific security requirements for User Access control:

2.5.6. Overview of System Criticality and High Availability Requirements

The PMC must be available 99.9% of the time. The system needs to be available on a 24-hours-per-day basis, 7 days per week. While the administrative staff will be working business hours, non-VA providers may want to return results to the VA at alternative times of the day. The system needs to be available to accept results at any time.

2.5.7. Single Sign-on Requirement

Features planned for the current release of the PMC system support NCA’s Eligibility office personnel business needs and enhance the existing legacy system capabilities. Single Sign-on is not considered as requirements to enhance the existing legacy PMC application.

2.5.8. Requirement for Use of Enterprise Portals

Features planned for the current release of the PMC system support NCA’s Eligibility office personnel business needs and enhance the existing legacy system capabilities. Usage of Enterprise Portals is not considered as requirements to enhance the existing legacy PMC application.

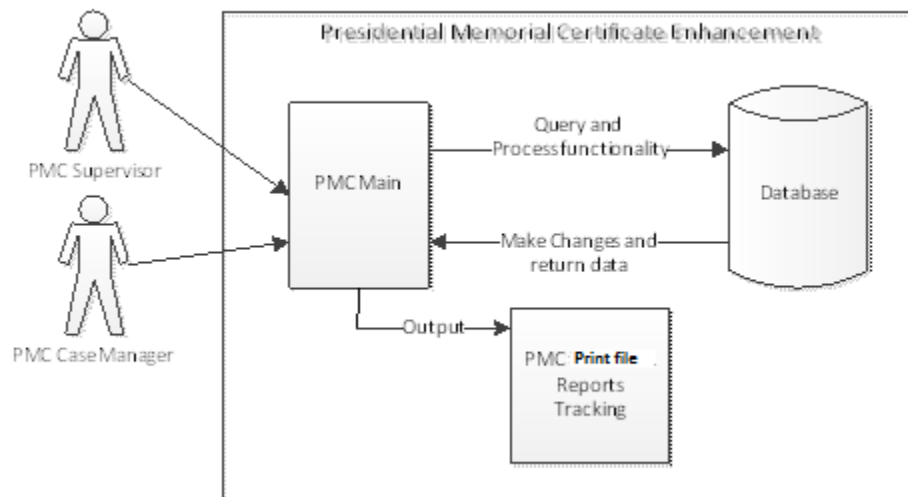
2.5.9. Special Device Requirements

Features planned for the current release of the PMC system support NCAs office personnel business needs and enhance the existing legacy system capabilities. No special devices have been identified as requirements to enhance the existing legacy PMC application.

2.6. Legacy System Retirement

Currently planned enhancements of the legacy PMC application will reduce or eliminate data entry errors, help users meet performance standards, provide accurate reports, and allow management to review work performance, delegate assignments, and manage overtime.

Figure 4: PMC High Level Design

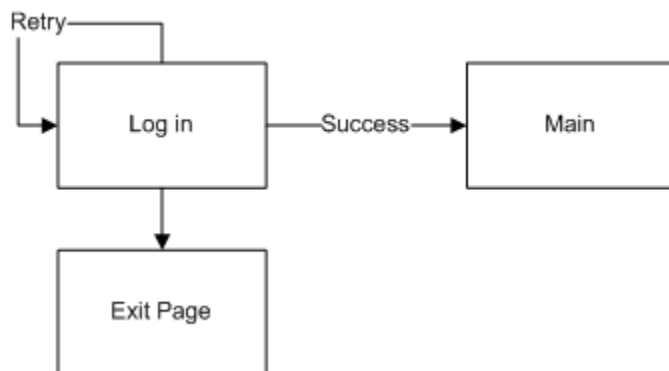


3.1.2. High-Level Application Design

The following diagrams depict the screen flows, as they will be presented to the user when performing the appropriate functions that have been described in the activity diagrams, and represent the high-level application design.

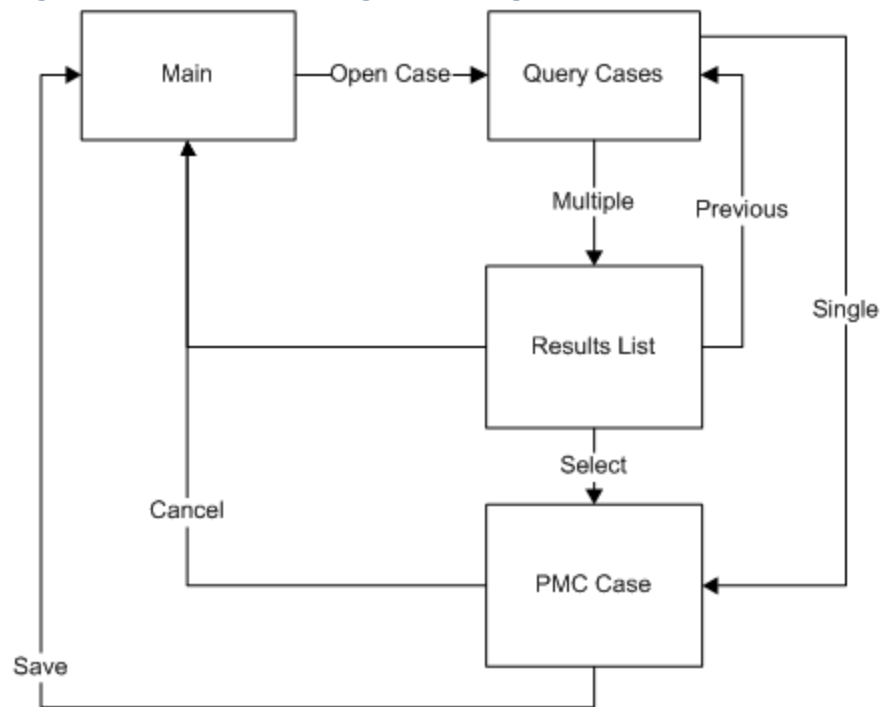
These following screen flow depicts the screens that will be presented to the user during the Login, which is the first step in the PMC process.

Figure 5: PMC Login Diagram



This flow depicts the screens that will be presented to the user when the user is processing an existing case including Update Record, Process Canceled, Process Suspended, Error Tracking, Change Special Request Status, Reorder, Process Additional, and Cancel Case from the Activity Diagrams.

Figure 6: Process Existing Case Diagram



The following flow depict the screens that will be presented to the user when the user is processing a new case.

Figure 7: Process New Case Diagram

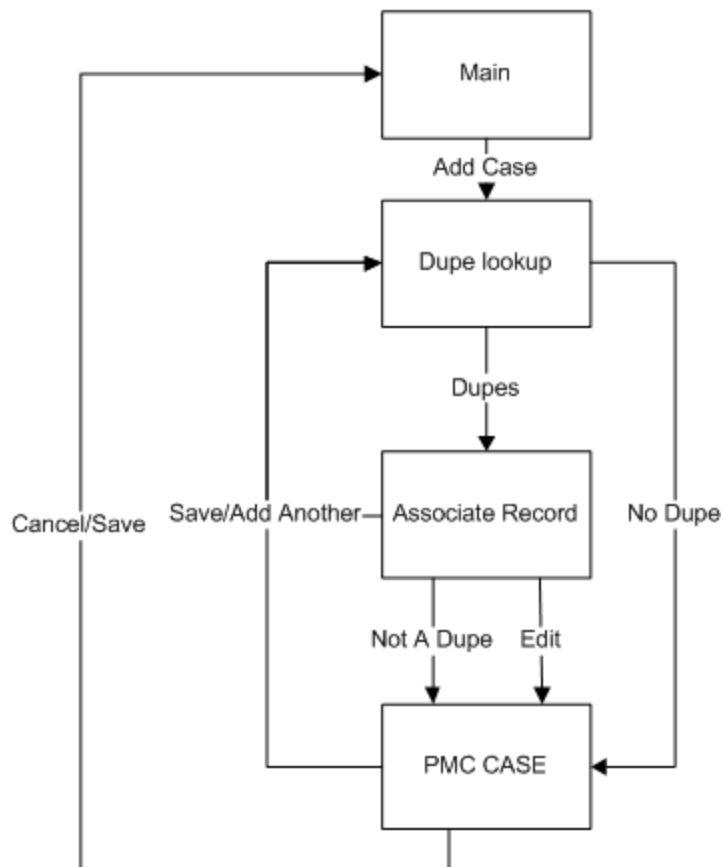
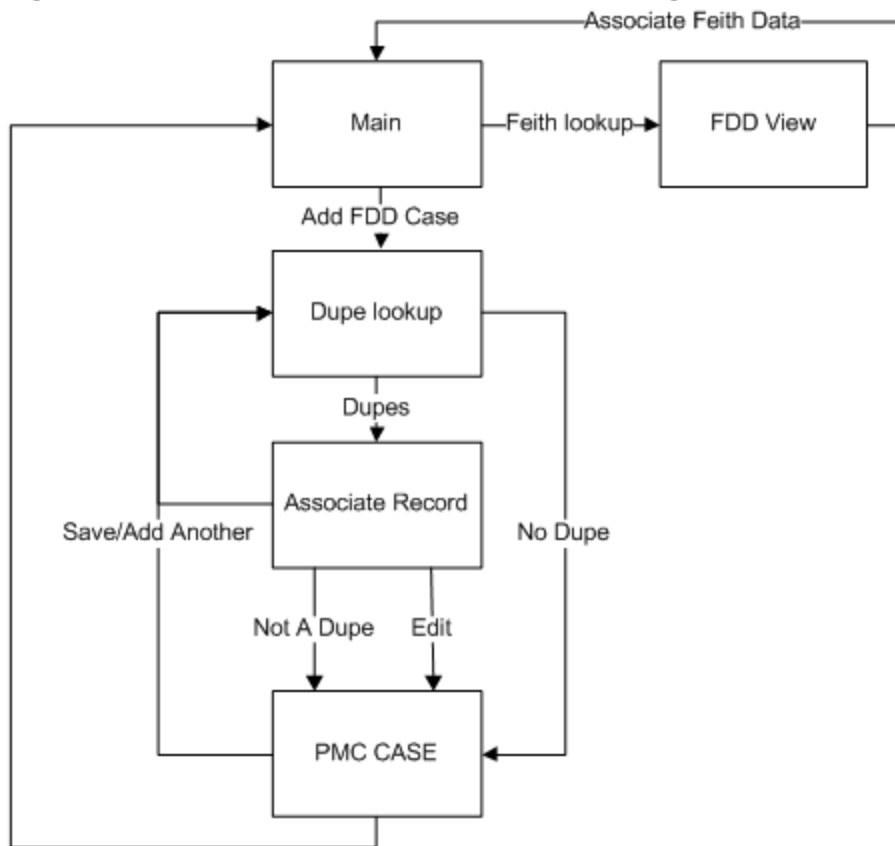
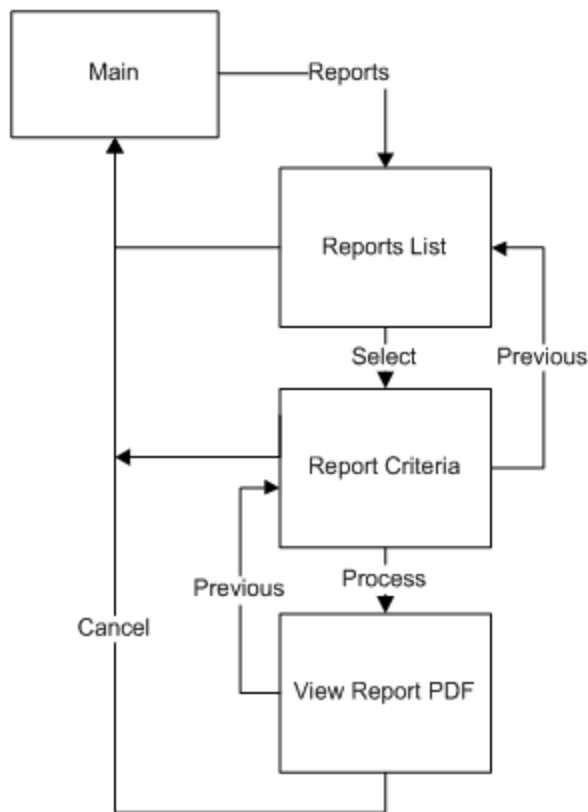


Figure 8: Process New Case with Feith Data Diagram



The following flow depicts the screens presented to the user when the user chooses to display a report.

Figure 9: Reports Diagram



The following table shows the screen flow and the corresponding functions managed in these screen flows.

Table 6: PMC PC Screen Flows and Functions

Screen Flow diagram	Achieved Functions
Figure 3 - Log in through PMC	PMC.0 Login
Figure 4 - Process Existing Case	PMC.1 Query Database PMC.4 Reorder PMC PMC.5 Change Special Request Status PMC.6 Process Suspended/Disapproved Case PMC.7 Process Canceled Case PMC.8 Process Order for Additional PMC Copies PMC.9 Status Tracking PMC.10 Error Tracking PMC.11 Cancel PMC Case
Figure 5 - Process New Case	PMC.2 Validate PMC Case PMC.3 Process New PMC Case
Figure 6 - Process New Case with Feith Data	PMC.2 Validate PMC Case PMC.3 Process New PMC Case
Figure 7 - Reports	PMC.12 Generate Reports

Screen Flow diagram	Achieved Functions

3.1.3. Application Locations

The BOSS/AMAS Application currently is hosted at the Quantico Information Data Center (QITC) in Quantico, VA.

Table 7: PMC PC Application Locations

Application Component	Description	Host Location	Type
PMC Enterprise Application	Enterprise application that bundles the different application components.	QITC	Enterprise Application
PMC Web Application	The web application used by staff to support the PMC business processes.	QITC	Web Application
BOSS database	The database that stores and provides the PMC data.	QITC	Database

Table 8: PMC PC Application Users

Application Component	Location	User
PMC	Not Applicable	PMC Supervisor
PMC	Not Applicable	PMC Case Manager

3.2. Conceptual Data Design

3.2.1. Project Conceptual Data Model

Currently the PMC data is stored in the PRESIDENTIAL-MEMORIAL-CERTIFICATE table within the BOSS database.

- The Decedent name as one field will no longer be valid for the PMC Data Entry Screen.
- PMCID, Created by, on, Updated by, on, Released Y/N, Released Date, and Number (NUM) Copies will still be valid fields. All existing query system functionality applies to these fields.
 - Applicant Name - Currently exists will be mandatory
 - Address Line 1 - Currently exists will be mandatory
 - Applicant Address Line 2 - Optional
 - City - Optional
 - State - Optional
 - ZIP Code - Optional
 - There will be either a city, state and zip, or a foreign address

The following data fields are added to support the new requirements of PMC processing capability.

Table 9: PMC_Record

Field Name	Field Status	Column Name
PMC ID	Mandatory	PMC_ID
Veteran First Name	Mandatory	Veteran_First_Name
Veteran Middle Name	Optional	Veteran_Middle_Name
Veteran Last Name	Mandatory	Veteran_Last_Name
Veteran Suffix	Optional	Veteran_Suffix
Verified Eligibility	Mandatory	Verified_Eligibility
SSN	Mandatory	Social_Security_Number
Claims Number	Mandatory	Claims_Number
Service Number	Mandatory	Service_Number
Applicant Name	Mandatory	Applicant__Name
Applicant Honorific	Optional	Applicant_Honorific
Applicant Relationship to Veteran	Optional	Applicant_Relationship_to_Veteran
Honorific	Optional	Honorific
Address Line 1	Mandatory	Address_Line_One
Address Line 2	Mandatory	Address_Line_two
Address Line 3	Mandatory	Address_Line_three
City	Mandatory	City
State	Mandatory	State
Zip Code	Mandatory	Zip_Code
Postal Code	Optional	Postal_Code
Foreign City	Optional	Foreign_City
State/Province	Optional	State_Province
Country	Optional	Country
Phone Number	Optional	Phone_Number
Fax number	Optional	Fax_number
E-Mail Address	Optional	EMail_Address
Recipient Name	Mandatory	Recipient_Name
Recipient Honorific	Optional	Recipient_Honorific
Recipient Address	Optional	Recipient_Address
Recipient City	Optional	Recipient_City

Field Name	Field Status	Column Name
Recipient State	Optional	Recipient_State
Recipient ZIP	Optional	Recipient_ZIP
Recipient Postal Code	Optional	Recipient_Postal_Code
Recipient Foreign City	Optional	Recipient_Foreign_City
Recipient State/Province	Optional	Recipient_State_Province
Recipient Country	Optional	Recipient_Country
Recipient Number	Optional	Recipient_Number
Recipient Fax Number	Optional	Recipient_Fax_Number
Recipient E-mail Address	Optional	Recipient_Email_Address
Quantity	Optional	Optional
Status Code	Mandatory for each status	Status_Code
Status Date	Mandatory for each status	Status_Date
Special Request	Optional	Special_Request
Comments Field	Optional	Comments_Field
Name Verification Field	Mandatory	Name_Verification_Field
INSERT_USER_ID	Mandatory	PMC User who created the record in PMC system
INSERT_DT	Mandatory	Date and Time PMC user created the record in PMC system
LAST_UPDATE_USER_ID	Optional	PMC User who updated the record in PMC system
LAST_UPDATE_DT	Optional	Date and Time PMC user updated the record in PMC system
ORIGIN_CD		Origination Code (AMAS , BOSS, Manual)
Replacement Cause user	Optional	Replacement_Cause_user
Date Print File Created	Optional	Date_Print_File_Created
Number of PMCs in Print File	Optional	Number_of_PMCs_in_Print_File
Date PMCs Printed	Optional	Date_PMCs_Printed
Number of PMC Printed	Optional	Number_of_PMC_Printed
Feith id	Optional	Feith_ID

Table 10: PMC_Report Table

Field Name	Field Status	Column Name
PMC Report ID	Mandatory	PMC_Report_ID

Field Name	Field Status	Column Name
Number of PMCs in Print File	Optional	Number_of_PMCs_in_Print_File
Date PMCs Printed	Optional	Date_PMCs_Printed
Number of PMC Printed	Optional	Number_of_PMC_Printed
Print File From Date	Optional	Print_File_From_Date
Print File To Date	Optional	Print_File_To_Date

The following tables will be used in the implementation of this enhancement: To Be Determined (TBD).

3.2.2. Database Information

Table 11: PMC PC Database Information

Database Name	Description	Type	Steward
BOSS	Development database instance hosted at the QITC contains PMC information used by the PMC application.	Oracle 11g	MBMS
BOSS	Test database instance hosted at the QITC contains PMC information used by the PMC application.	Oracle 11g	MBMS
BOSS	Pre-production database instance hosted at the QITC contains PMC information used by the PMC application.	Oracle 11g	MBMS
BOSS	Production database instance hosted at the QITC contains PMC information used by the PMC application.	Oracle 11g	MBMS
BOSSCOOP	Production COOP database instance.	Oracle 11g	MBMS

3.2.3. User Interface Data Mapping

This section describes and defines the format and information that will be available for users of the PMC PC product to be able to enter data into the database or to retrieve information from the database.

3.2.3.1. Application Screen Interface

The following section provides the application screen interfaces designed and the mapping of the data to the PMC PC database schema.

3.2.3.1.1. PMC Login Screen

All PMC System users must log in and be authenticated prior to accessing the application. Users access the PMC system by logging in to the PMC URL. The system displays the PMC Login screen.

Figure 10: PMC Login Screen

UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS

PMC Login

Username:

Password:

Login

Table 12: PMC Login Screen Description

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
UserName	ACCOUNT_INFORMATION	USERNAME	Username to login to System
Password	ACCOUNT_INFORMATION	PASSWORD	Password to login to System

3.2.3.1.2. PMC Success Login Screen

Entering a valid username and password, the system displays the PMC System Welcome Page.

Figure 11: PMC Main Menu and Welcome Page

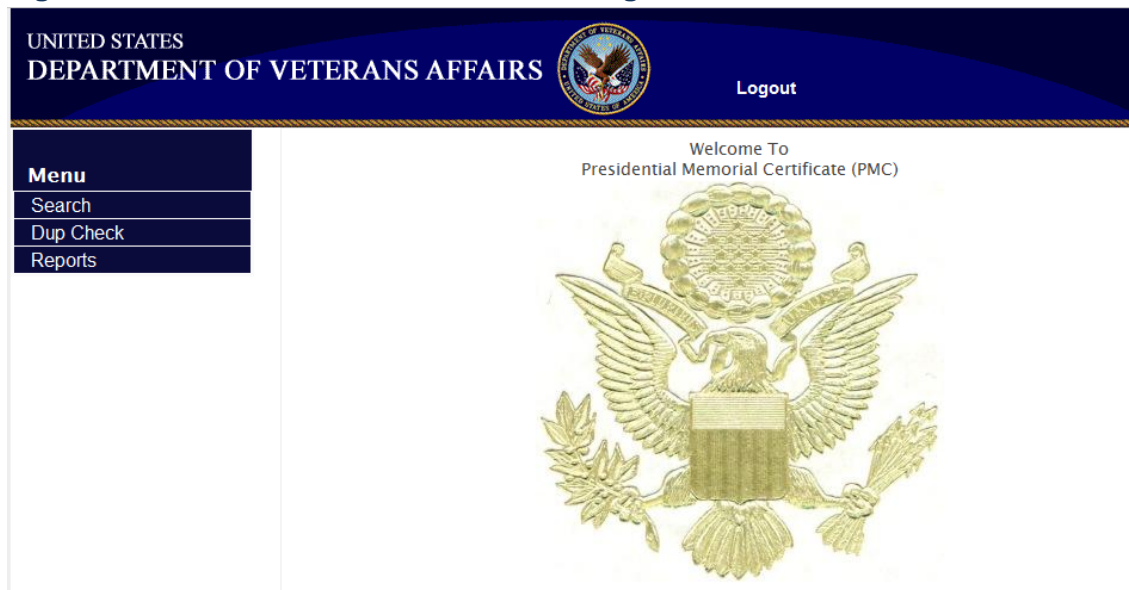


Table 13: Description of PMC Main Menu and Welcome Page

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
UserName	ACCOUNT_INFORMATION	USERNAME	Username to login to System
Password	ACCOUNT_INFORMATION	PASSWORD	Password to login to System

3.2.3.1.3. PMC Login Failure Screen

If the user fails to enter a valid Username and Password three consecutive times, the user is presented the PMC Login Error screen.

Figure 12: PMC Login Error Screen



PMC Login Error

3.2.3.1.4. Query existing PMC records Screen

After logging in, at the Main Menu, click **Search**. The system displays the PMC Search screen.

Figure 13: PMC Search Screen

Note: To cancel the operation, click the Cancel button.

The UI will be updated to merge Applicant name fields depicted in the figure above into a single applicant name field. The UI will be updated to merge Recipient name fields depicted in the figure above

into a single Recipient name field. At a minimum, enter a veteran's first and last name, or an applicant's name, or a recipient's name. Enter appropriate query criteria and click **Search**.

Table 14: PMC Search Screen Description

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	
Released Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Date_PMCs_Printed	
Applicant Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Name	
Recipient Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Name	
Recipient Zipcode	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_ZIP	

3.2.3.1.5. Query existing PMC records Results Screen

The system displays the PMC Search Results screen.

Figure 14: PMC Search Results List

Select	PMCID	Veteran	Applicant	Recipient
<input type="radio"/> Select	420	VETERAN, TEN SourceSystem: PMC Id: 315	APPLICANT, ONE 1 APPLICANT AVE ,	RECIPIENT, ONE 1 RECIPIENT RD , Released Date: ,
<input type="radio"/> Select	421	VETERAN, TEN SourceSystem: PMC Id: 315	APPLICANT, ONE 1 APPLICANT AVE ,	RECIPIENT, TWO 2 RECIPIENT RD , Released Date: ,
<input type="radio"/> Select	422	VETERAN, TEN SourceSystem: PMC Id: 315	APPLICANT, ONE 1 APPLICANT AVE ,	RECIPIENT, THREE 3 RECIPIENT RD , Released Date: ,

The UI will be updated to merge Applicant name fields depicted in the figure above into a single applicant name field. The UI will be updated to merge Applicant name fields depicted in the figure above

into a single applicant name field. Click the Select radio button for the appropriate case, then click the Select button at the bottom left side of the screen.

3.2.3.1.6. PMC Detail- Veteran Detail Screen

The PMC Record consists of two sections, the PMC Detail Screen and the PMC Errors Screen. The PMC Detail Screen consists of three sections: Veteran Detail, Applicant Detail, and Recipient Detail.

The Veteran Detail section of the PMC record is located at the top of the PMC Detail screen. The Veteran Detail lists the Veteran's Full Name and the source of the PMC record.

If the PMC record was originally created from a record in AMAS, the Source field will display: A. If the PMC record was originally created from a record in BOSS, the Source field display: B. If the PMC record was originally created in the PMC Application, the Source field will display: P. If the PMC record was originally created in the VBA Hines, the Source field will display: H. The Veteran Name is editable by the user on this screen. The Source field is not editable by the user.

The UI will be updated to merge Applicant name fields depicted in the figure above into a single applicant name field. The UI will be updated to merge Recipient name fields depicted in the figure above into a single Recipient name field.

Figure 15: PMC Detail Tab

The screenshot displays the 'PMC Detail' screen with two tabs: 'Detail' (selected) and 'Errors'. The 'Veteran' section at the top includes fields for First Name (THOMAS), Last Name (GEORGE), Middle Name, and Suffix Name, along with a Source dropdown set to 'P'. Below this are 'Update' and 'Cancel' buttons. The 'Applicants' section on the left shows a list with 'ONE PLUM' selected, and buttons for 'Select Applicant' and 'New Applicant'. The 'Recipients' section below it shows a list with 'THREE PLUM' selected, and buttons for 'Select Recipient' and 'New Recipient'. The 'Recipient Detail' section on the right contains fields for PMC ID (490), Honorific, First Name (THREE), Middle Name, Last Name (PLUM), Suffix, Address Line 1 (3245), Address Line 2, Address Line 3, City, Region/State/Province, Zip Code/Postal Code, Country, Phone, Fax, Email, and a Print button. At the bottom, it shows 'Print Veteran Name' as 'Thomas George' and a 'Name Proof' link, with a note 'No Feith link available for recipient.'

Table 15: PMC Detail Tab Description

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	
Source	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ORIGIN_CD	
Applicant	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Name,	
Recipient	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Name,	
PMCID	PRESIDENTIAL-MEMORIAL-CERTIFICATE	PMC_ID	
Honorific	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Honorific	
Recipient Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient _Name	
Address Line 1	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_One	
Address Line 2	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_two	
Address Line 3	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_three	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
City	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_City / Recipient_Foreign_City	
State /Province	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_State_Province	
Zip Code / Postal Code	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_ZIP / Recipient_Postal_Code	
Country	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Country	
Phone	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Number	
Fax	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Fax_Number	
Email	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Email_Address	

3.2.3.1.7. PMC Detail - Applicant Screen

The PMC Record consists of two sections, the PMC Detail Screen and the PMC Errors Screen. The PMC Detail Screen consists of three sections: Veteran Detail, Applicant Detail, and Recipient Detail.

The UI will be updated to merge Applicant name fields depicted in the figure above into a single applicant name field. The UI will be updated to merge Recipient name fields depicted in the figure above into a single Recipient name field.

The Applicant Detail screen lists the Applicant's name, address information, and Relationship to the Veteran. All information on the Applicant Detail screen is editable by the user. Each applicant will have one or more recipients associated.

Figure 16: PMC Detail - Applicant Screen

Table 16: Description of the PMC Detail - Applicant Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Source	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ORIGIN_CD	
Applicant	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Name	
Recipient	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient _Name	
PMCID	PRESIDENTIAL-MEMORIAL-CERTIFICATE	PMC_ID	
Honorific	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Honorific	
Applicant Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant _Name	
Address Line 1	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_One	
Address Line 2	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_two	
Address Line 3	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_three	
City	PRESIDENTIAL-MEMORIAL-CERTIFICATE	City / Foreign_City	
State /Province	PRESIDENTIAL-MEMORIAL-CERTIFICATE	State / State_Province	
Zip Code / Postal Code	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Zip_Code / Postal_Code	
Country	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Country	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Phone	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Phone_Number	
Fax	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Fax_number	
Email	PRESIDENTIAL-MEMORIAL-CERTIFICATE	EMail_Address	
RelationShip	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Relationship_to_veteran	

3.2.3.1.8. PMC Detail - Recipient Screen

The PMC Record consists of two sections, the PMC Detail Screen and the PMC Errors Screen. The PMC Detail Screen consists of three sections: Veteran Detail, Applicant Detail, and Recipient Detail. The Recipient Detail screen lists the following information.

- **PMC ID:** A system-generated unique identifier.
 - **Recipient Name and Address Information:** This information is used to mail the PMC.
 - **Print Veteran Name:** The Veteran Name formatted for printing on the PMC. This field is editable by the user. The user can preview the Veteran Name as it will print on the PMC by selecting the Name Proof link.
 - **Feith Link:** PMC records can be generated from PMC Applications that are scanned into the Feith Document Database. Once created, a Feith link displays on the PMC record. Clicking on the link will open a separate browser window with the associated image in Feith.
- Note:** If no Feith images are associated to the PMC record, the statement “No Feith link available for recipient” will display.

The UI will be updated to merge Applicant name fields depicted in the figure above into a single applicant name field. The UI will be updated to merge Recipient name fields depicted in the figure above into a single Recipient name field.

Figure 17: PMC Detail - Recipient Screen

PMC Detail

Veteran Name: TEN VETERAN

Applicants: **ONE APPLICANT**

Select Applicant New Applicant

Recipients: **ONE RECIPIENT**
TWO RECIPIENT
THREE RECIPIENT

Select Recipient New Recipient

Recipient Detail

PMC ID: 422

Honorific: ▼

* First Name: THREE

Middle Name:

* Last Name: RECIPIENT

Suffix:

* Address Line 1: 3 RECIPIENT RD

Address Line 2:

Address Line 3:

City:

Region/State/Province:

Zip Code/Postal Code:

Country:

Phone:

Fax:

Email:

* Print Veteran Name: Ten Veteran

[Name Proof](#)

No Faith link available for recipient.

Released Date:

Special Request: ☒ No ☐ Yes

PMC Count: 1

Relationship: UNKNOWN ▼

Status Date: 5/22/2013

Verified Eligibility: ▼

Status: Case Established ▼

Status Comment:

Update Cancel

Detail Errors

Main Page

Table 17: Description of PMC Detail - Recipient Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	
Source	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ORIGIN_CD	
Applicant	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Name	
Recipient	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient _Name	
PMCID	PRESIDENTIAL-MEMORIAL-CERTIFICATE	PMC_ID	
Honorific	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient _Honorific	
Recipient Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient _Name	
Address Line 1	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_One	
Address Line 2	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_two	
Address Line 3	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_three	
City	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_City / Recipient_Foreign_City	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
State /Province	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_State_Province	
Zip Code / Postal Code	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_ZIP / Recipient_Postal_Code	
Country	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Country	
Phone	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Number	
Fax	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Fax_Number	
Email	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Email_Address	
Released Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE		
Special Request	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Special_Request	
PMC Count	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Quantity	
Relationship	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Relationship_to_veteran	
Status Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Status_Date	
Status Code	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Status_Code	
Status Comment	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Comments_Field	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Verified Eligibility	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Verified_Eligibility	

3.2.3.1.9. Process New Case - Duplicate PMC Case Search Screen

On the PMC Main Menu, users click the Dup Check button. The system displays the Duplicate PMC Search screen where users can enter search criteria in the Veteran First and Last Name fields, then click the Check button. Additional Search Criteria fields will be added to the below user interface, to search using Social security number , Claims Number and Service Number.

Figure 18: Duplicate PMC Search Screen

Table 18: Description of the Duplicate PMC Search Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	

3.2.3.1.10. Process New Case - Duplicate PMC Case Search Result Screen

If a possible duplicate is found, the system displays the Duplicate PMC Search Results Screen as follows.

Figure 19: Process New Case - Duplicate PMC Case Search Result Screen

Select	PMCID	Veteran	Applicant	Recipient
<input type="radio"/> Select	420	VETERAN, TEN SourceSystem: PMC Id: 315	APPLICANT, ONE 1 APPLICANT AVE ,	RECIPIENT, ONE 1 RECIPIENT RD , Released Date:
<input type="radio"/> Select	421	VETERAN, TEN SourceSystem: PMC Id: 315	APPLICANT, ONE 1 APPLICANT AVE ,	RECIPIENT, TWO 2 RECIPIENT RD , Released Date:
<input type="radio"/> Select	422	VETERAN, TEN SourceSystem: PMC Id: 315	APPLICANT, ONE 1 APPLICANT AVE ,	RECIPIENT, THREE 3 RECIPIENT RD , Released Date:

If none of the possible duplicates match the record you want to create, select the No Dupe button.

Table 19: Description of the Process New Case - Duplicate PMC Case Search Result Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	
Applicant Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Name	
Recipient Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Name	
Recipient Zipcode	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_ZIP	

3.2.3.1.11. Process New PMC Case - Veteran Form Screen

New Veteran Screen displays after the user clicks No Dupe Button. This screen is used to capture the information related to the veteran.

Figure 20: Process New PMC Case - Veteran Form Screen

UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS

Logout

New Veteran

* First Name

Middle Name

* Last Name

Suffix

Verified Eligibility

Cancel Next

Table 20: Description of the Process New PMC Case - Veteran Form Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	

3.2.3.1.12. Process New PMC Case - Applicant Form Screen

New Applicant Screen displays after completing the Veteran Information and once the user clicks next. This screen is used to receive information regarding the applicant who requested the Presidential Memorial Certificate of the Veteran.

The UI will be updated to merge Applicant name fields depicted in the figure above into a single applicant name field. The UI will be updated to merge Recipient name fields depicted in the figure above into a single Recipient name field.

Figure 21: Process New PMC Case - Applicant Form Screen

**UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS**

 [Logout](#)

New Applicant

Also recipient? ☒ No ☐ Yes

Honorific

* First Name

Middle Name

* Last Name

Suffix

* Address Line 1

Address Line 2

Address Line 3

City

Region/State/Province

Zip Code/Postal Code

Country

Phone

Fax

Email

Relationship

Table 21: Description of the Process New PMC Case - Applicant Form Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Source	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ORIGIN_CD	
Applicant	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Name	
Recipient	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient _Name	
PMCID	PRESIDENTIAL-MEMORIAL-CERTIFICATE	PMC_ID	
Honorific	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Honorific	
Applicant Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant _Name	
Address Line 1	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_One	
Address Line 2	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_two	
Address Line 3	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_three	
City	PRESIDENTIAL-MEMORIAL-CERTIFICATE	City / Foreign_City	
State /Province	PRESIDENTIAL-MEMORIAL-CERTIFICATE	State / State_Province	
Zip Code / Postal Code	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Zip_Code / Postal_Code	
Country	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Country	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Phone	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Phone_Number	
Fax	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Fax_number	
Email	PRESIDENTIAL-MEMORIAL-CERTIFICATE	EMail_Address	
RelationShip	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Relationship_to_veteran	

3.2.3.1.13. Process New PMC Case - Recipient Form Screen

New Recipient screen displays. Enter information for Recipient from the PMC Application in the Feith BIN. A message displays at the bottom of the New Recipient screen stating that Feith Batch ID ##### will be indexed with this PMC. Click Next to continue.

The UI will be updated to merge Applicant name fields depicted in the figure above into a single applicant name field. The UI will be updated to merge Recipient name fields depicted in the figure above into a single Recipient name field.

Figure 22: Process New PMC Case - Recipient Form Screen

DetailErrors

PMC Detail

Veteran

First NameABCLast NameDEFSourceP

Middle NameSuffix Name

UpdateCancel

Applicants:APPLE GRAPES

Select ApplicantNew Applicant

Recipients:APPLE GRAPES

Select RecipientNew Recipient

Recipient Detail

PMC ID527

Honorific

First NameAPPLE

Middle Name

Last NameGRAPES

Suffix

Address Line 1234 NEW DRIVE

Address Line 2

Address Line 3

CityAUSTIN

Region/State/ProvinceTX

Zip Code/Postal Code78748

Country

Phone

Fax

Email

Print Veteran NameAbc Def

Name Proof

No Feith link available for recipient.

Released Date:

Special RequestNoYes

PMC Count1

RelationshipUNKNOWN

Status Date8/21/2013

Verified Eligibility

StatusCase Established

Status Comment

UpdateCancel

DetailErrors

Main Page

Table 22: Description of the Process New PMC Case - Recipient Form Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Veteran First Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_First_Name	
Veteran Middle Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Middle_Name	
Veteran Last Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Last_Name	
Veteran Suffix	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Veteran_Suffix	
Source	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ORIGIN_CD	
Applicant	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Name	
Recipient	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Name	
PMCID	PRESIDENTIAL-MEMORIAL-CERTIFICATE	PMC_ID	
Honorific	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Honorific	
Recipient Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Name	
Address Line 1	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_One	
Address Line 2	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_two	
Address Line 3	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Address_Line_three	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
City	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_City / Recipient_Foreign_City	
State /Province	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_State_Province	
Zip Code / Postal Code	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_ZIP / Recipient_Postal_Code	
Country	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Country	
Phone	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Number	
Fax	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Fax_Number	
Email	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient_Email_Address	
Released Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE		
Special Request	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Special_Request	
PMC Count	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Quantity	
Relationship	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant_Relationship_to_veteran	
Status Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Status_Date	
Status Code	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Status_Code	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Status Comment	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Comments_Field	
Verified Eligibility	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Verified_Eligibility	

3.2.3.1.14. Process PMC Case - PMC Error Tab Screen

The PMC Case screen contains the PMC Errors tab. A listing of all applicants and associated recipients displays for the selected record. Errors can be added at the recipient level. There are no restrictions to the number of errors that can be added.

Figure 23: PMC Error Tab

Clicking the Add link next to a recipient name results in the Error Entry Screen.

Table 23: PMC Error Tab Description

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Applicant Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Applicant _Name,	
Recipient Name	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Recipient _Name	

3.2.3.1.15. Process PMC Case - PMC Error Entry Screen

The PMC Error Entry screen is used to record error information related to the PMC application such as: a misspelled name, an incorrect address, undeliverable.

Figure 24: PMC Error Entry Screen

UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS

Logout

Mister Samuel, Jr.

* Error Type

Remark

Submit

Cancel

Table 24: Description of the PMC Error Entry Screen

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Error Type	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ERROR_TYPE	
Remarks	PRESIDENTIAL-MEMORIAL-CERTIFICATE	REMARKS	

3.2.3.2. Application Report Interface

PMC Supervisors have access to all five reports in PMC. In addition, for some reports, they have the ability to select to view information for all users or individual users. PMC Case Managers have access to four of the available reports in PMC, other than PMC Error Report. Users can access, view, and print reports from the PMC Main Menu clicking the Reports button. The system displays the Reports List.

3.2.3.2.1. PMC Report Screen

Figure 25: PMC Report Screen

UNITED STATES
DEPARTMENT OF VETERANS AFFAIRS

Select Report:

CANCEL

PMC Activity
PMC Print and Mail
Returned PMC Error
Suspended More Than 10 days
Timeliness

3.2.3.2.2. PMC Activity Report Screen

The PMC Supervisor has the ability to view the PMC Activity Report for all users or for an individual user.

Figure 26: PMC Activity Report Screen

Figure 27: PMC Activity Report Display (User Listing for a PMC Supervisor)

USER ID	WORK DATE	HOUR	PMCS
All	05/22/2013	03:00-04:00 PM	1
		04:00-05:00 PM	7

Table 25: Description of the PMC Activity Report Display (User Listing for a PMC Supervisor)

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
User Id	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_USER_ID	
Work Hour	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_DT	

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Work Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_DT	

3.2.3.2.3. PMC Print and Mail Report Screen

The PMC Print and Mail Report specific selection criteria are displayed below. The PMC Supervisor has the ability to enter a From Date and To Date. Both fields are mandatory.

Figure 28: PMC Print and Mail Report Screen

Table 29: Description of the PMC Activity Report Display (User Listing for a PMC Supervisor)

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
User Id	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_USER_ID	
Printed Hour	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Date_PMCs_Printed	
Printed Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	Date_PMCs_Printed	

3.2.3.2.4. PMC Error Report Screen

The Returned PMC Error Report specific selection criteria are displayed below. The PMC Supervisor has the ability to enter a Beginning Date and End Date. Beginning Date is a mandatory field.

Figure 29: PMC Error Report Screen

Table 30: Description of the PMC Activity Report Display (User Listing for a PMC Supervisor)

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
Error Entered Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ERROR_Date	
Error Type	PRESIDENTIAL-MEMORIAL-CERTIFICATE	ERROR_TYPE	
rEMARKS	PRESIDENTIAL-MEMORIAL-CERTIFICATE	REMARKS	

3.2.3.2.5. PMC Suspended More Than 10 Days Report Screen

The PMC Supervisor has the ability to view the Suspended More Than 10 Days Report for All Users or for an individual user. The Suspended More Than 10 Days Report specific selection criteria are displayed below.

Figure 30: Suspended More Than 10 Days Report Screen

Table 31: Description of the PMC Activity Report Display (User Listing for a PMC Supervisor)

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
User Id	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_USER_ID	
Work Hour	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_DT	
Work Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_DT	

3.2.3.2.6. PMC Timeliness Report Screen

The PMC Supervisor has the ability to enter a Beginning Date and End Date. The Timeliness Report specific selection criteria are displayed below.

Figure 31: PMC Timeliness Report Screen

Table 32: Description of the PMC Activity Report Display (User Listing for a PMC Supervisor)

GUI Field	Table (Database Table to which field connects)	Field (Field in Table to which GUI field connects)	Comments
User Id	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_USER_ID	
Work Hour	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_DT	
Work Date	PRESIDENTIAL-MEMORIAL-CERTIFICATE	INSERT_DT	

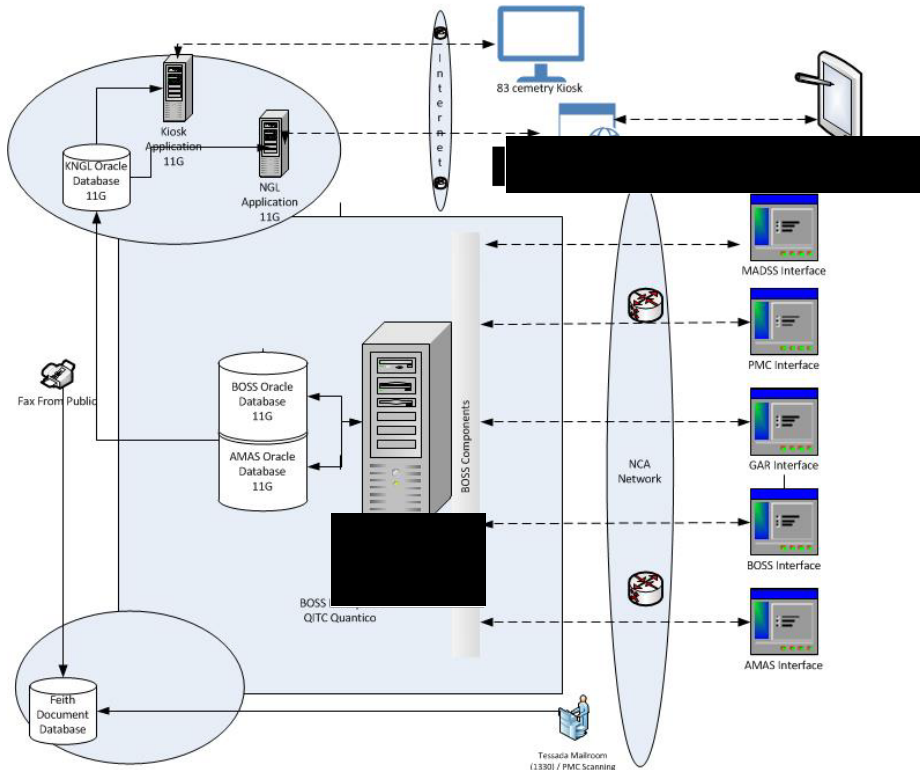
3.2.3.3. Unmapped Data Element

The following tables will be used in the implementation of this enhancement: To Be Determined (TBD).

3.3. Conceptual Infrastructure Design

The PMC subsystem, from a data standpoint, exists as part of the BOSS/AMAS enterprise Oracle database at the Quantico ITC. PMC presentation logic and business logic will be packaged and deployed in Oracle Form Application Servers.

Table 26: PMC PC Application Deployment Environment



3.3.1. System Criticality and High Availability

The PMC PC system will reside at QITC and will rely on the Disaster Recovery and Concept of Operations (CONOPS) plans in place to support systems that require continuous availability.

3.3.2. Special Technology

This section does not apply to the PMC PC project because there are no external communication interface requirements to be specified at this time.

3.3.3. Technology Locations

Table 27: Technology Location Details (Production 1)

Technology Component Production 1	Location	Usage
Workstations	PMC Office	Supervisor and Users

Technology Component Production 1	Location	Usage
Special Hardware		
Interface Processors		
Legacy Mainframe		
Legacy Application Server	QITC Quantico, VA	Production: PMC Application and other NCA Applications
Legacy Databases	QITC Quantico, VA	Production: PMC Database and other NCA Database
Other		

Table 28: Technology Location Details (Production 2)

Technology Component Production 2	Location	Usage
Application Server and Databases	Culpepper ITC, VA	Weblogic Server and PMC Database and other NCA Database

Table 29: Technology Location Details (Certification)

Technology Component Certification	Location	Usage

Table 30: Technology Location Details (Education)

Technology Component Education	Location	Usage

Table 31: Technology Location Details (Test)

Technology Component Test	Location	Usage
Application Server and Databases	QITC Quantico, VA	Weblogic Server and PMC Database and other NCA Database

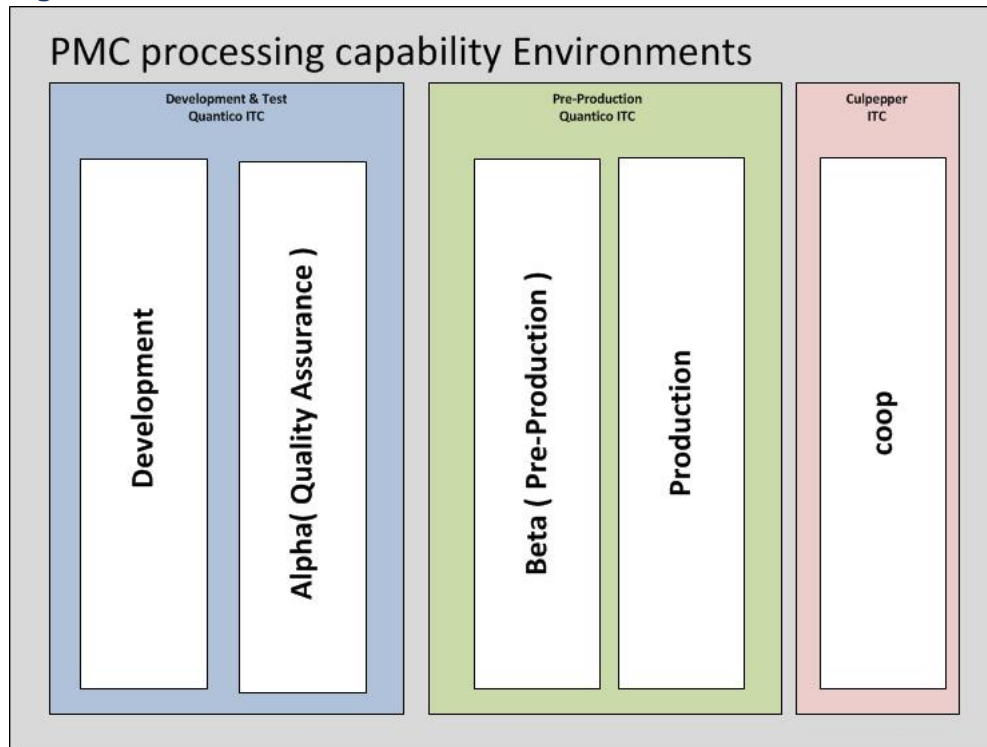
Table 32: Technology Location Details (Development)

Technology Component Development	Location	Usage
Application Server and Databases	QITC Quantico, VA	Weblogic Server and PMC Database and other NCA Database

3.3.4. Conceptual Infrastructure Diagram

3.3.4.1. Location of Environments and External Interfaces

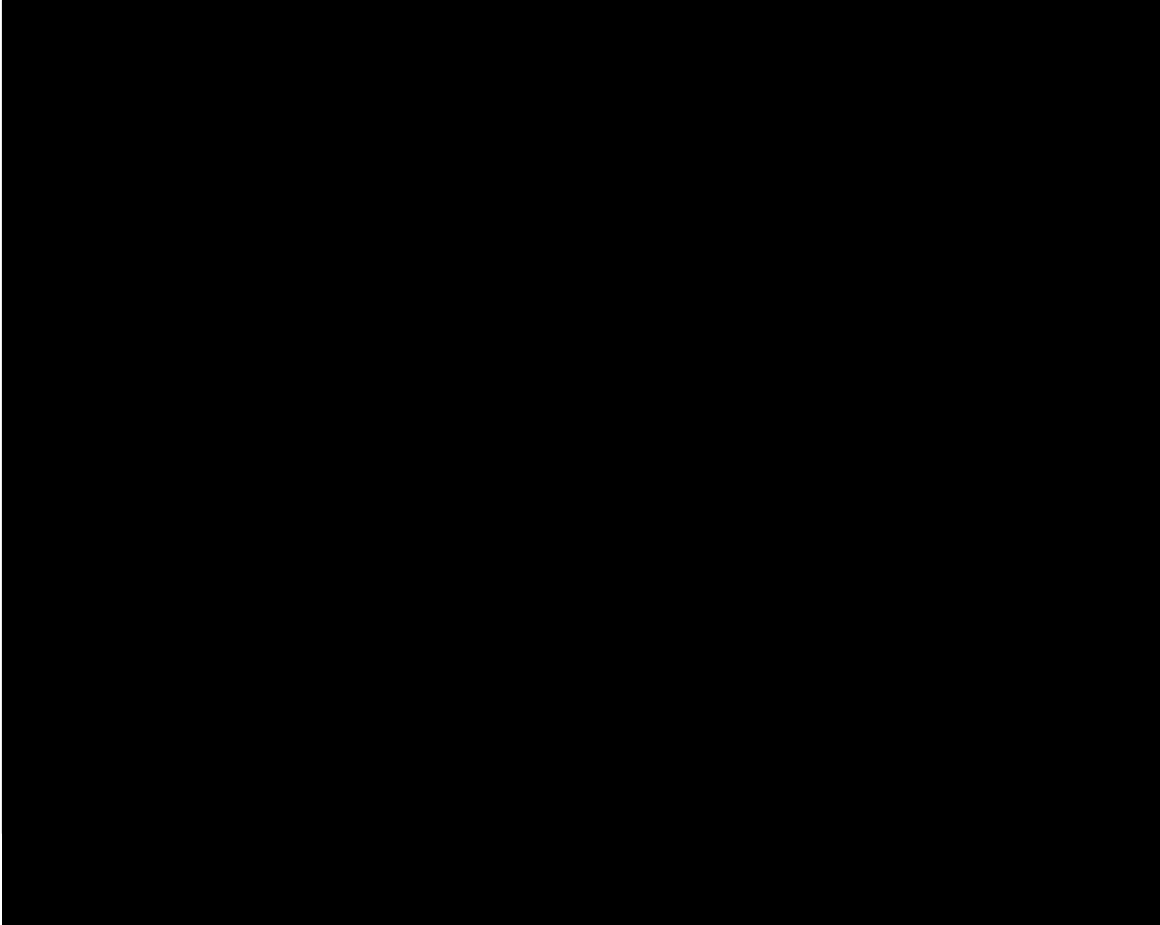
Figure 32: PMC PC Environments and External Interfaces



- **Development Environment:** Environment used internally by developers to perform integration testing of the system.
- **QA Test Environment:** Environment used to do independent verification and validation of the system's functionality.
- **Pre-Production Environment:** Environment used to do initial field testing of the system under development. Generally one or more test sites or partners are selected to test the capabilities of the system.
- **Production Environment:** Environment that hosts the full production system.
- **COOP Environment:** Environment that acts as a Failover or disaster recovery in case there is a failure in production systems.

The following diagram shows the NCA Network Topology and the servers which are part of the infrastructure of the BOSS enterprise. Also, the COOP environment located at Culpeper is shown below.

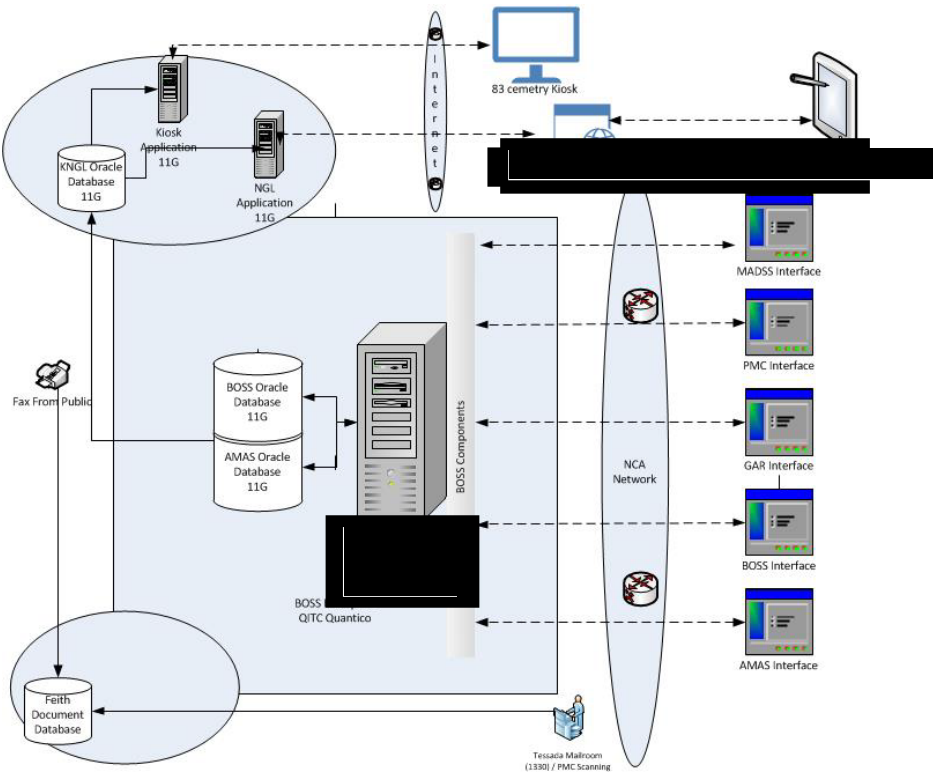
Figure 33: COOP at Culpepper Environment



3.3.4.2. Conceptual Production String Diagram

The PMC subsystem, from a data standpoint, exists as part of the BOSS/AMAS enterprise Oracle database at the Quantico ITC. PMC presentation logic and business logic will be packaged and deployed in Oracle Form Application Servers.

Table 32: PMC PC Application Deployment Environment



4. SYSTEM ARCHITECTURE

The Presidential Memorial Certificate (PMC) System is a sub-component of Burial Operations Support System (BOSS)/Automated Monument Application System (AMAS) Enterprise. The application is built using a Model View Controller (MVC) framework that will control service request and data calls made between client and backend databases. The services call's response for GET and PUT requests will use RESTful web services and will provide SOAP messages in XML and JSON format for all data exchanges. The application is designed to use Java and Oracle products. The application's compiled code is not limited to an Oracle platform and will function on any web application server that could host a Java application.

4.1. Hardware Architecture

The hardware is composed of several Oracle WebLogic web servers, one load balancer and a cluster database servers to support rapid and reliable data access. The application is supported by several IBM AIX 7 servers for the entire suite of MBMS applications with secure connections to database resources. Please see figure 33 for connection information between hardware devices and the use of the network resources. The PMC user capacity is approximately 10 users and throughput of transactions are minimal and will not be strained with growth.

4.2. Software Architecture

The application is designed using an MVC framework model. The Model contains the action calling element of the application. The controller manages the use and access to the model and the View provides the rendering of that data as a response to be consumed. PMC's model calls will perform the interaction between the database server and the user interface.

The PMC application is supported by software packages Hibernate, Java, Oracle database and WebLogic Server. Hibernate is a mapping tool for Java classes to database tables and provides data query and retrieval of data. It generates SQL calls and relieves the developer from manual result set handling and object conversion. The application is coded in Java and is deployed to the WebLogic server. The WebLogic is a web application hosting platform that serves up the application and facilitates access through a browser.

Software Diagram

4.3. Network Architecture

The PMC application uses TCP/IP for its primary communication on the network and with other applications. The database server will use UDP and TCP/IP to foster data communication between application and database. Applications or other resources that will leverage the services designed to support this application and access information will be communicated via TCP/IP and use URL's for services and either JSON or XML responses in SOAP messages. As outlined in figure 31, traffic between the application and the database over the network. The network is configured with routers, switches and load balancers to manage and control the flow of traffic between data points.

4.4. Service Oriented Architecture / ESS

The current design does not use SOA or consume any shared services. The to be design of PMC will use common services that the MBMS suite would use such as search, authentication, and CRUD (Create, Read, Update, Delete) functionality is provided as a shared service. These services will be secured at the application level to prevent unauthorized access of the information. The services can be configured and used by other applications that would access and use data collected in the BOSS and AMAS databases. These services are designed as RESTful services using SOAP to provide JSON and XML responses to the client interfaces. The current system is in-transition to the MVC framework architecture and will implement the use of common shared services.

4.5. Enterprise Architecture

The PMC application uses Oracle WebLogic 11g and Oracle Database 10 Server to support application functionality and user access to the MBMS data. These products are approved on the VA's TRM list. The PMC application applies the rules and guidelines that are outlined in the VA's 6500 series handbook. This application is a subset application of the MBMS Suite.

5. DATA DESIGN

The current design of the PMC application is one table within the BOSS database. The to be design will contain additional tables.

BOSSPROD.PMC		
Column Name	Datatype	Not Null
PMC_ID	VARCHAR2 (9 Byte)	True
DECEDENT_NME	VARCHAR2 (40 Byte)	False
RECIPIENT_NME	VARCHAR2 (40 Byte)	False
LINE_ONE_ADDR	VARCHAR2 (35 Byte)	False
LINE_TWO_ADDR	VARCHAR2 (35 Byte)	False
LINE_THREE_ADDR	VARCHAR2 (35 Byte)	False
CITY_NME	VARCHAR2 (30 Byte)	False
STATE_CD	VARCHAR2 (2 Byte)	False
ZIP_FIVE_CD	VARCHAR2 (5 Byte)	False
NUM_COPIES	NUMBER (2)	False
RELEASE_IND	VARCHAR2 (1 Byte)	False
RELEASE_DT	DATE	False
INSERT_USER_ID	VARCHAR2 (8 Byte)	False
INSERT_DT	DATE	False
LAST_UPDATE_USER_ID	VARCHAR2 (8 Byte)	False
LAST_UPDATE_DT	DATE	False
ORIGIN_CD	VARCHAR2 (1 Byte)	False

Table key for PMC application.

BOSSPROD.PMC		
Keys Type	Constraint Name	Columns
PK	PMC_ID_PK	PMC_ID

5.1. DBMS Files

If a database will be used list and describe the logical requirements that exist for data formats, storage capabilities, data retention, data integrity, etc.

The current “as-is” database design is one table within the BOSS database schema and stores all the information related to the functions within PMC. The PMC application data formats, storage capabilities, data retention and data integrity of the PMC database is managed by the BOSS schema. It is estimated that the application will perform 500 transactions a day.

5.2. Non-DBMS Files

Not applicable

5.3. Data View

A "Data View" should be included in the Architectural Representation whenever persistent data objects are included in the system (they are typically present in most software systems). The data view describes the logical data model of the system and includes an Entity Relationship Diagram (ERD). For a description of Entity Relationship diagramming please refer to the whitepaper

<http://www-106.ibm.com/developerworks/rational/library/content/03July/2500/2785/2785_uml.pdf>

6. DETAILED DESIGN

This section describes the proposed design in detail. Provide the necessary information for the development team to integrate the hardware components and write the software code, so that the hardware and software components will provide a functional product. This is the detailed design, based upon the conceptual design (high level) that was described in the document up to this point. Most sections prior to this are needed for Milestone 1, on a best effort basis as the design is visualized and refined. This section is needed for Milestone 2, this is where the design in described in the conceptual sections is refined and an in depth detailed design is documented.

Note: Every design item should map back to the Requirements Specification Document. These should be captured in the Requirement Traceability Matrix (RTM).

6.1. Hardware Detailed Design

The information requested in this section maybe provided by Engineering and/or the Developers. The information provided here is mainly for use by Engineering and Operations.

In this section, provide enough information for the developers to build and/or procure the system's hardware. The level of detail requested should be treated as a general guideline and can be omitted if it needs to be filled in by Engineering and Operations.

Note: If this section becomes too lengthy, consider incorporating it as an appendix or reference it in a separate document. Add additional diagrams, if necessary, to describe each component and its functions.

Include the following information (as applicable):

- *How much compute capacity? (MFLOPS, TPMs etc)*
- *System Memory*
- *Local and Shared storage*
- *Network requirements (Bandwidth, Latency etc.)*
- *Public or Private cloud*

6.2. Software Detailed Design

This section provides conceptual and final detailed information associated with the design of the software being delivered. This should be an extension of the corresponding section from Section 3.1, but should contain additional detail as the project progresses.

6.2.1. Conceptual Design

This section introduces the conceptual information that establishes the basis for how the software will be built.

6.2.1.1. Product Perspective

This subsection of the SDD should put the product into perspective with other related products. If the product is independent and completely self-contained, it should be stated here. If the SDD defines a product that is a component of a larger system, then this subsection should relate the requirements of that larger system to functionality of the software and should identify interfaces between that system and the software.

A block diagram showing the major components of the larger system, interconnections, and external interfaces can be helpful.

Sections of the Requirements Specification Document (RSD) can be referenced in the subsections, if applicable.

6.2.1.1.1. User Interfaces

This subsection should specify the logical characteristics of each interface between the software product and its users. This includes those configuration characteristics necessary to accomplish the software requirements (e.g., screens, roll and scroll, GUI interface).

Recommendation: Create a block diagram showing the user interfaces.

6.2.1.1.2. Hardware Interfaces

This subsection should specify the logical characteristics of each interface between the software product and the hardware components of the system. This includes configuration characteristics (for example, hardware platform or mainframe versus personal computer). It also covers matters such as what devices the system will support, how they will be supported, and protocols.

Examples include scanners, pen driven devices, and radio frequency devices.

Recommendation: Create a block diagram showing the hardware interfaces.

6.2.1.1.3. Software Interfaces

This subsection should specify the use of other required software products (e.g., VA Kernel, VA FileMan, Windows NT); and interfaces with other applications or other systems such as commercial off-the-shelf (COTS) or national databases. Specify the application interfaces (e.g., the linkage between an accounts receivable system and a general ledger system and a COTS software package that will be interfaced using an existing interface). This section should provide the following information for each required software product:

- *Name*
- *Version number*
- *Discussion of the purpose of the interfacing software as related to this software product*
- *Definition of the interface in terms of message content and format (e.g., Health Level Seven [HL7], electronic data interchange).*

6.2.1.1.4. Communications Interfaces

This subsection should specify the various interfaces to communications such as local network protocols, e-mail, Transmission Control Protocol (TCP), modems.

Recommendation: Create a block diagram showing the communications interfaces.

6.2.1.2. Product Features

This subsection should provide a summary of the major features of the software.

For example, an SDD for an accounting program might use this section to address customer account maintenance, customer statement, and invoice preparation without mentioning the vast amount of detail that each of those features requires.

Note: For clarity, remember these items when creating this section of the SDD:

- *The features should be organized in a way that makes the list of features understandable to the customer or to anyone else reading the document for the first time.*
- *Textual or graphical methods can be used to show the different features and their relationships.*
- *Such a diagram is not intended to show a design of a product, but simply shows the logical relationships among variables.*

6.2.2. Specific Requirements

6.2.2.1. Database Repository

The Database Repository section in the RSD can be referenced in this section.

If a logical database design is a part of the system, it should be listed here. Logical database design should specify the logical requirements for any information that is to be placed into a database. This may include:

- *Types of information used by various functions*
- *Frequency of use*
- *Accessing capabilities*
- *Data entities and their relationships*
- *Integrity constraints*
- *Data retention requirements.*

Recommendation: Create a block diagram showing the databases and where the data resides.

6.2.2.2. System Features

Describe the system features, functional requirements, sub-requirements, etc. which can be organized in an outline format that matches the RSD. Specific formatting and organization of the paragraphs (i.e., section numbering) is left to the discretion of the author and is dependent on the level of detail essential to fully describe the design. Some designs may only require two levels; others may require multiple levels. The information necessary to define the items or to specify modifications to the items affected by the functionality being designed should be provided in the appropriate design element tables. Where feasible, instead of duplicating the RSD, it can be referenced via a link, to avoid unnecessary duplication. The key goal is to provide traceability to requirements.

6.2.2.3. Design Element Tables

The design element tables are provided for your convenience. Copy each table as many times as necessary to address multiple items within each section. Add rows and headings to the tables to provide any additional required information to define the item or to specify the modifications to the item. Numbering of the design element tables to align them underneath the applicable requirement or sub-requirement is recommended, but is left to the author's discretion. For that reason they are not numbered in this template.

6.2.2.3.1. Routines (Entry Points)

Not applicable

6.2.2.3.2. Templates

Not applicable

6.2.2.3.3. Bulletins

Not applicable

6.2.2.3.4. Data Entries Affected by the Design

Not applicable

6.2.2.3.5. Unique Record(s)

Not applicable

6.2.2.3.6. File or Global Size Changes

Not applicable

6.2.2.3.7. Mail Groups

Not applicable

6.2.2.3.8. Security Keys

Not applicable

6.2.2.3.9. Options

Not applicable

6.2.2.3.10. Protocols

Not applicable

6.2.2.3.11. Remote Procedure Call (RPC)

Not applicable

6.2.2.3.12. Constants Defined in Interface

Provide the name and description.

Table 33: Constants Defined in Interface

Name	Description

6.2.2.3.13. Variables Defined in Interface

Provide the name, type, and description.

Table 34: Variables Defined in Interface

Name	Type	Description

6.2.2.3.14. Types Defined in Interface

Provide the name, type, and description.

Table 35: Types Defined in Interface

Name	Type	Description

6.2.2.3.15. GUI

The “to be” design of the PMC application’s GUI will be modified to accommodate changes outlined in the RTM.

Table 36: GUI

Unit Name	Description
PMC	The PMC interface.

6.2.2.3.16. GUI Classes

Table 37: GUI Classes (Instructions)

GUI Classes	Instructions
Class Name	<i>List the name of the class affected. The headers in the following tables have names for the information outlined. Note that only the new properties and methods for a class are listed below. All ancestor properties and methods are still available and unchanged.</i>
Derived From Class	<i>List the class that this is derived from, its parent and any interfaces listed as part of this class.</i>
Purpose	<i>Describe the functionality that users can access from this class and related form, if any.</i>

Table 38: GUI Classes

GUI Classes	Instructions
Class Name	
Derived From Class	
Purpose	

6.2.2.3.17. Current Form

Provide a screen capture or graphical representation of the current layout.

6.2.2.3.18. Modified Form

Provide a screen capture or graphical representation of the layout that the design will implement.

6.2.2.3.19. Components on Form

Table 39: Components on Form

Name	Type	Description

6.2.2.3.20. Events

Table 40: Events

Name	Type	Description

6.2.2.3.21. Methods

Table 41: Methods

Method Name	Procedure/Function	Description

6.2.2.3.22. Special References

Include references that are not listed elsewhere.

Special Reference Name	Type	Description

6.2.2.3.23. Class Events

Table 42: Class Events

Name	Type	Description

6.2.2.3.24. Class Methods

Table 43: Class Methods

Name	Procedure/Function	Description

6.2.2.3.25. Class Properties

Table 44: Class Properties

Class Properties Name	Type	Visibility	Description

6.2.2.3.26. Uses Clause

Not applicable

6.2.2.3.27. Forms

This section lists the forms that will be affected or created by the functionality being designed. A short description of the change that will be made to the forms should be included.

Table 45: Forms (Instructions)

Forms	Instructions
Form Name	<i>List the name of the form affected by the functionality being designed.</i>
Enhancement Category	<i>Check the appropriate box: New, Modify, Delete, or No Change.</i>
Form Functionality	<i>Describe the form's functionality and refer to the usage of the form. An example of such a description is "This form is used to enter patient demographic data."</i>
Current Form Layout	<i>Define the current form layout that the design will modify. If this is a new form, enter "N/A".</i>
Modified Form Layout (Changes are in bold)	<i>Define the form layout that the design will implement.</i>

Table 46: Forms

Forms	Description
Form Name	
Enhancement Category	<input type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
Form Functionality	

Current Form Layout

--

Modified Form Layout (Changes are in bold)

--

6.2.2.3.28. Functions

The functions affected by the capabilities being designed should be listed in this section. A short description of what change will be made to the functions and/or new functions should be included.

Table 47: Forms (Instructions)

Functions	Instructions
Function Name	<i>List the specific function affected by the capability being designed.</i>
Short Description	<i>List a short description of the change that will be made to the functions and/or new functions.</i>
Enhancement Category	<i>Check the appropriate box: New, Modify, Delete, or No Change.</i>
Related Options	<i>List the options that directly call or are called by the function.</i>
Related Routines	<i>List the routines that directly call or are called by the function.</i>
Data Dictionary (DD) References	<i>List the files that reference the function through input transforms, cross reference logic, etc.</i>
Related Protocols	<i>List the protocols that reference or are referenced by the function.</i>

Functions	Instructions
Related Integration Control Registrations (ICRs)	<i>List proposed new ICRs and subscribed ICRs. Also, list any obscure Supported ICRs.</i>
Data Passing	<i>Check the appropriate box. An event that would trigger the new/changed function should be included in this section. An example of such a description would be a note that the new/changed function will be invoked as part of a function call or it would be invoked through system protocols, HL7 Logical Links, etc. This section refers specifically to the change implemented with the design.</i>
Input Attribute Name and Definition	<i>List the input attributes passed into the new or changed function logic. Each attribute should be defined.</i>
Output Attribute Name and Definition	<i>List the output attributes returned from the new or changed function logic. Each attribute should be defined.</i>
Current Logic	<i>Define the current logic in the function that the design will modify. If this is new code, enter "N/A".</i>
Modified Logic (Changes are in bold)	<i>Define the logic in the function that the design will implement.</i>

Table 48: Forms

Function Name	Activities
Short Description	
Enhancement Category	<input type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
Related Options	

Related Routines	Routines "Called By"	Routines "Called"

Function Name	Activities
Data Dictionary (DD) References	
Related Protocols	
Related Integration Control Registrations (ICRs)	
Data Passing	<input type="checkbox"/> Input <input type="checkbox"/> Output <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input type="checkbox"/> Local Reference
Input Attribute Name and Definition	Name: Definition:

Function Name	Activities
Output Attribute Name and Definition	Name: Definition:

Current Logic

Modified Logic (Changes are in bold)

6.2.2.3.29. Dialog

Not applicable

6.2.2.3.30. Help Frame

Not applicable

6.2.2.3.31. HL7 Application Parameter

Not applicable

6.2.2.3.32. HL7 Logical Link

Not applicable

6.2.2.3.33. COTS Interface

Not applicable

6.3. Network Detailed Design

Provide enough detailed information about the communication requirements to build and/or procure the communication components for the system. This section should provide sufficient detail to support the procurement of hardware for the system installation. Include the following information in the form of detailed designs (as appropriate):

- *Details of servers and clients to be included on each area network*
- *Specifications for bus timing requirements and bus control*
- *Format(s) for data being exchanged between components*
- *Diagrams showing connectivity between components, data flow (if applicable), and distances between components*
- *LAN topology.*

6.4. Service Oriented Architecture / ESS Detailed Design

This section provides details of provided and consumed services as follows:

- *Consumed Services: Provide link to Service Description Document for each consumed service.*
- *Provided Services: Give service design for each provided service.*

The information you provide here will be used to upload to the ESS Registry and Repository. At some point in the near future, we do not expect these SOA artifacts such as SLA, Service Description, etc. to be static documents. They will be dynamically generated from the ESS Registry and Repository tool in the form of reports. Any application and service integration design is also documented here.

A list of currently available Enterprise Shared Services is available here: <insert link to ESS list>

6.4.1. Service Description for <Consumed Service Name>

Provide link to Service Description document for the consumed service. This section will repeat for each consumed service.

6.4.2. Service Design for <Provided Service Name>

This section should describe the detailed service design for each ESS and SOA service needed to obtain an intended result.

This section will repeat for each provided service.

6.4.2.1. Introduction

6.4.2.1.1. Purpose and Scope of Service

This service was described at a high level in the charter document. Please refer to it here via a link.

6.4.2.1.2. Links to Other Documents

Provide links to other documents created for this service so far in the SOA lifecycle. At a minimum, provide links to:

- *Service Charter*
- *Service Roadmap*
- *Service Description*

6.4.2.2. Service Details

6.4.2.2.1. Service Identification

This section will be written as a table to provide a quick reference to the service's what, where, why and how - cheat sheet.

Service Attribute	Value
<i>Name and Alias (if any)</i>	<i>Name of the service and other names for the service, which might be used by someone searching for this service. Please follow ESS naming standards.</i>
<i>Overview</i>	<i>Brief textual overview of the service.</i>

Service Attribute	Value
Version	<i>Version number of the service being described here</i>
Latest Status	<i>This field shows the latest status for the above referenced version of this service! The status of a service shows the progress of the service from initiation through development, deployment, and eventual retirement. The status also has a status date associated with the status - and we will be using the latest one here in this document. Valid values include: Inception, Design, Provisioning, Certification / Testing, Operation, Deprecated, Retired, Rejected - Owner has decided not to develop the service.</i>
Service Type	<i>Used to define applicable architecture patterns. Examples (from Open Group):</i> <ul style="list-style-type: none"> • <i>Interaction</i> • <i>Process</i> • <i>Information</i> • <i>Partner</i> • <i>Business Application</i> • <i>Access</i> • <i>Service Connectivity</i>
Architecture Layer	<i>Referred to as class in VA Service template. Used to define applicable architecture patterns and relationships to governing bodies. Examples:</i> <ul style="list-style-type: none"> • <i>Solution</i> • <i>Process</i> • <i>Information</i> • <i>Utility</i> • <i>Underlying</i>
Business Domain	<i>Business Vertical or Business Division where this service belongs.</i>
Service Domain	<i>The service or technical domain that the service belongs to. Can be used to establish the namespace.</i>
Business Organization and Owner	<i>Person who approves this service & any changes. Include email.</i>
Technical Organization and Owner	<i>Person responsible for provisioning (specifying, acquiring certifying) this service. Include email.</i>
Development Organization and Owner	<i>Person who is responsible for the development processes and activities for this service. Include email.</i>
Support Organization and Owner	<i>Person who is responsible for the support of this service while in production. Include email.</i>
Target Consumer Organization(s) and Owner(s)	<i>Organizations and/or developers roles that service is intended for.</i>

6.4.2.2.2. Service Versions

Version Numbers	Current Status of Version	A Brief Description of the change implemented in that version
<i>This version</i>	<i>Being Designed</i>	

<i>Example: version 2</i>	<i>Example: In production. Will be retired with this release.</i>	<i>Example: This release added the ability to look up a person by address. Provide a link to each version of the service.</i>
<i>Example: version 1</i>	<i>Example: Retired.</i>	<i>Example: This release provided the base minimum functionality to look up a person by name. Provide a link to each version of the service.</i>

6.4.2.2.3. Summary of Design and Platform Details

6.4.2.2.3.1. SOA Pattern(s) Implemented

Name of the SOA pattern implemented – for instance, this may be a Pub/Sub model. Just a name and reference to the document or book with the pattern is sufficient for popular patterns or VA's own patterns. If you are using some esoteric pattern, more details will help.

6.4.2.2.3.2. COTS Platform vendor names and versions for hosting platform

Example, TIBCO.

6.4.2.3. Dependencies

The Dependency Model identifies other services, systems, databases, etc. that [Service Name] is dependent upon or interacts with to perform its function.

This section should clearly identify all sources and external systems that are accessed by this service to fulfill the service consumers' request. This section should include diagrams to show as much detail as necessary to inform the developer. Provide a context diagram for the service.

Note: Here our primary audience includes the providers of the service. So this document in general will emphasize system components and sub-systems as much as external interactions.

6.4.2.4. Service Design Details

The next sub-section on Interface Technical Specs could be just a copy from the corresponding sub-section in Interface section in the Service Description Document. Here, you could provide more detail necessary for building this service but the interface spec needs to be consistent between this document and the Service Description Document. This section contains all information necessary to fully describe an interface published by this service..

6.4.2.4.1. Interface Technical Specs

The technical specification allows developers of service consumers to locate and discover the service for run time consumption.

6.4.2.4.1.1. Service Invocation Type

Such as: SOAP over HTTP, REST.

6.4.2.4.1.2. Service Interface Type

Such as: WSDL via Web Service 2.0

6.4.2.4.1.3. Service Name

Technical Service Name. Comply with ESS naming standards.

6.4.2.4.1.4. Interface

Link to WSDL or other interface document.

6.4.2.4.1.5. End Points

Provide if known! Calls that can be made into the service. Can be referenced to the WSDL or can be in a separate table.

6.4.2.4.1.6. Operations or Methods

In the table below, the technical names of the operations, inputs and outputs are used. Inputs and outputs, if parameters, must have a data type.

Non-primitive data types must be defined in the Service Information Model section.

This table could be generated automatically from the WSDL content or its equivalent.

Style can take any of these values: Parameters or Document; and One-way or Request-response or Solicit-response or Notification.

Use a separate column for the operation purpose if you wish.

You might use abbreviations in the Faults column and explain the abbreviations used below the table. For example, NF = Not Found, MI = Missing Input.

Operation Name	Inputs	Outputs	Transactional Qualities if relevant (Updating?, Atomic?, Can participate in transaction?)	Pre and Post Conditions	Exception (s)

Provide a link to the Service Information model so that the consumer of your system knows the schema for the input and output parameters.

6.4.2.4.1.7. Message Schemas

Provide definitions or links to definitions of the message(s) related to the service operations. These may be dependent on the implementation style and protocol binding of the interface.

6.4.2.4.2. Information Model

Even though this section looks similar to the corresponding section 3.2 in Service Description, remember that the primary objective here is to facilitate construction and to gain approvals from governing bodies. So you will provide more of a “white box” view of the design here to help your developers code the service.

6.4.2.4.2.1. Class Diagram and Description of Entities Involved

Map out all entities involved in the service: input, output, exceptions, entities manipulated in persistent media/DBs, intermediate entities created in memory etc.

6.4.2.4.2.2. Mappings from ELDM to Standards Based Schemas

Provide mappings from your native schema to any standards based schemas your service will use to communicate outside. For instance, if you are using HL7 based messages then you will show how data is converted from your native schema to HL7.

6.4.2.4.3. Behavior Model (AKA Use Case Realization)

The Behavior Model defines the actions and processes supported by the service. Actions and methods represented in the use cases and sequence diagrams shown below are further defined by the operation contracts and the message payloads.

6.4.2.4.3.1. Use Cases (Use Case Model)

*How does this service fit into the larger use case model of the consumer? You may need multiple models for multiple consumers. Focus is **not** on the internal workings of the new service instead of the calls made from external consumers. Just a summary or the Use Case Diagram may be sufficient. List the alternative and exception flows. Reference the detailed design documents via a URL.*

6.4.2.4.3.2. Interaction Diagrams

Cut and paste screen shot from RSA or similar tool or provide link to the model. Provide description to help developers build your service. The interaction diagrams should depict external interactions and internal sequences of calls between internal components. The sequence diagram should cut through all layers to show the main, alternate and exception flows.

6.4.2.5. Gap Analysis

Provide a Gap Analysis (Reference) to demonstrate compliance of this service with various standards, policies, guidelines and laws. The Gap Analysis may take the form of a matrix as shown in the sample below. This will help the governance boards expedite your request.

Design Elements→ Policies / SLD elements etc↓	Design Element A	Design Element B	Design Element C	Comment for non-conformance
<i>Policy X</i>	<i>Match</i>			
<i>Policy Y</i>		<i>Partial</i>		
<i>Policy Z</i>				<i>Commercial encryption server in prod will have to address this policy.</i>
<i>Policy A</i>				<i>Compliance with this policy not required until next year.</i>
<i>New / Additional Features</i>			<i>New element minimizes manual intervention</i>	

6.4.2.5.1. Variances from Enterprise Target Architecture

This list of “variances” will become a submission to the ESS dispensation process.

6.4.2.5.2. Variances from SLDs

This list of “variances” will become a submission to the ESS dispensation process.

6.4.2.5.3. Variances from Standards and Policies

This list of “variances” will become a submission to the ESS dispensation process.

6.4.2.5.4. Justification for Exceptions and Mitigation

This section will list out any non-functional and functional requirements that are not being met. The non-conformance may be in violation of elements of SLDs, enterprise architecture (TRM Technology Reference Model), privacy policies or guidelines. For each exception provide:

- 1. Reasons for non-conformance (cost, time, technology, etc)*
- 2. Mitigating actions taken to reduce the impact of non-conformance*
- 3. Plan (roadmap) to come back into conformance*

This list can grow depending on what the Review bodies may ask for.

7. EXTERNAL SYSTEM INTERFACE DESIGN

This section details interfaces external to system, that are NOT services (ESS/SOA). Typically, these may include, RPCs, Flat Data Files etc.

External systems are systems that are not within the scope of the system under development, regardless of whether the other systems are managed by the vendor or its client.

In this section, describe the interface(s) between the system under development (i.e., the system that is the subject of this SDD) and external systems and/or subsystem(s).

It is best to illustrate these sections with annotated diagrams to clearly identify the various elements of the interfaces.

Feith Data

Prudential Data Source

7.1. Interface Architecture

Describe the interface(s) between the system being designed and other systems. Include the interface architecture(s) being implemented, such as wide area networks, gateways, etc. Provide diagrams showing the communications path(s) between this system and other systems.

7.2. Interface Detailed Design

Provide sufficient detail about the interface requirements for the development team to format, transmit, and/or receive data across the interface.

Include the following information (as appropriate):

- *Data format requirements; if data must be reformatted before it is transmitted or after incoming data is received. Describe the tools and/or methods for the reformat process.*
- *Specifications for hand-shaking protocols between systems; content and format of hand-shake messages, timing for exchanging these messages, and errors handling.*
- *Format(s) for reports exchanged between the systems.*
- *Graphical representation of the connectivity between systems, showing the direction of data flow.*
- *Query and response descriptions.*
- *Describe the individual data elements that the interfacing entity(s) will provide, store, send, access, and receive, such as:*
- *Names/identifiers*
 - *Data Element Name*
 - *Data Format/Length*
 - *Data Type*
 - *Definition*

- *Non-Technical Name*
- *Non-Technical Synonyms*
- *Specifications*
- *Synonyms*
- *Range or enumeration of possible values (e.g., 0-99)*
- *Accuracy and precision (number of significant digits)*
- *Priority, timing, frequency, sequencing, and other constraints*
- *Security and privacy constraints*
- *Sources (setting/sending entities) and recipients (using/receiving entities).*

Describe the data element assemblies (records, messages, files etc.) that the interfacing entity(s) will provide, store, and send, such as:

- *Names/identifiers*
 - *Technical Name, e.g., data structure name*
 - *Non-technical Names, e.g. synonyms*
- *Data elements*
- *Medium/structure of data elements/assemblies*
- *Visual characteristics (e.g. layouts, fonts, icons etc.)*
- *Relationships among assemblies*
- *Security and privacy constraints*
- *Sources and recipients.*

Describe the communication methods that the interfacing entity(s) will use for the interface, such as:

- *Communication links, bands, frequencies, and media*
- *Message formatting*
- *Flow control (e.g. sequence numbering)*
- *Data transfer rate*
- *Routing*
- *Transmission services*
- *Safety*
- *Security and privacy considerations.*

Describe characteristics of the protocols that the interfacing entity(s) will use for the interface, such as:

- *Priority/layer of the protocol*
- *Packaging*
- *Legality checks, error control*
- *Recovery procedures*
- *Synchronization*

- *Status, identification, and other reporting features.*

Where appropriate describe other characteristics, such as physical compatibility of the interfacing entity(s) (dimensions, tolerances, loads, voltages, plug compatibility, etc.)

8. HUMAN-MACHINE INTERFACE

Describe the human-machine interface (i.e., GUI) relative to the user. Additional information may be added if the suggested headings are inadequate.

8.1. Interface Design Rules

Identify conventions and standards for designing the GUI.

8.2. Inputs

Identify the input media used by the user (i.e., operator) for providing information to the system, such as data entry screens, optical character readers, bar scanners, etc.

Identify the messages associated with operator inputs, including the following:

- *Form(s) if the input data is keyed or scanned for data entry*
- *Access restrictions*
- *Security considerations.*

8.3. Outputs

Describe the system output design relative to the user. System outputs include reports, data display screens, query results, etc.

Identify the following, if appropriate:

- *Access restrictions or security considerations*
- *Description of the purpose of the output*
- *Report requirements, including frequency of periodic reports*
- *Screen contents. (Provide a graphic representation of each layout. Define all data elements associated with the layout).*

8.4. Navigation Hierarchy

Provide a diagram of the navigation hierarchy that shows how a user moves through the GUI.

8.4.1. Screen [x.1]

Provide the layout of all input data screens or GUIs. Provide a graphic representation of each GUI, for example, a low-resolution screenshot. Define all data elements associated with each screen or GUI, or reference the data dictionary. Label each data input screen and/or GUI.

8.4.2. Screen [x.2]

Provide a graphic representation of each GUI, for example, a low-resolution screenshot. Define all data elements associated with each screen or GUI, or reference the data dictionary.

8.4.3. Screen [x.3]

Provide a graphic representation of each GUI, for example, a low-resolution screenshot. Define all data elements associated with each screen or GUI, or reference the data dictionary.

9. SECURITY AND PRIVACY

9.1. Security

Describe specific security mechanisms at the application level, as guided by NIST 800-53 revision 3 (or most current version). Also, summarize the security mechanisms to be provided by the VA GSSs. Reference the Security Risk Assessment.

The following information will be provided to address security controls:

A high-level description of the security controls, grouped according to the 18 control families identified in NIST 800-53 revision 3 (or most current version). A description of all 18 control families must be addressed; if a control family is not applicable, then state that control family does not apply and explain why it does not apply.

A description of the specific security controls that will be provided by existing VA infrastructure or VA GSSs.

Describe the planned use by the application of the infrastructure's centralized security mechanisms and VA GSSs (in particular, the identification and authentication, access control, and audit mechanisms), and infrastructure mechanisms, (e.g., Directory Services) to store user account information. Sufficient detail should be provided to show the feasibility of the integration and/or inter operation of application security mechanisms with infrastructure security mechanisms.

9.2. Privacy

Identify privacy design considerations. Describe specific privacy mechanisms at the application. Describe how the application's privacy requirements will be met. Reference the System Security Plan (SSP) and Privacy Impact Assessment (PIA).

A. ATTACHMENT A – APPROVAL SIGNATURES

This section documents the approval of the PMC PC SDD during Formal Review. Ideally, the review should be conducted face-to-face where signatures can be obtained ‘live’ during the review, however the following forms of approval are acceptable.

- Physical signatures obtained face to face or via fax
- Physical signature obtained in person or via fax
- Digital signature tied cryptographically to the signer

/es/ in the signature block, provided that a separate digitally signed e-mail indicating the signer’s approval is provided and kept with the document.

The Chair of the governing Integrated Project Team (IPT), Business Sponsor, IT Program Manager, Project Manager, and the Co-chairs of the Architecture, Strategy, and Design (ASD) IPT Representative are required to sign.

Signed: Dr. Timothy Godlove, NCA Business Sponsor and Integrated Project Team (IPT) Co-Chair

Signed: Dan Pate, IT Program Manager and IPT Co-Chair

Signed: Kristi Grabenstein, PMC PC Project Manager

Signed: Vijay R. Bakkem, ASD IPT Representative

B. ADDITIONAL INFORMATION

Attach any addition information that supplements the design specification.

B.1. RTM

Include an RTM that traces modules and data structures to the software requirements. A reference to the location of the RTM is also acceptable.

A.1. Packaging and Installation

Outline any special considerations for software packaging and installation.

A.2. Design Metrics

Describe all metrics to be used during the design activity.

A.3. Acronym List and Glossary

Identify and define all acronyms and terms that establish meaning within the context of the plan.

Table 59: Glossary

Term	Meaning

A.4. Required Technical Documents

The following documents must be submitted for review to support proper approval:

- *Conformance Validation Statement (CVS) - Section 508*
- *For additional information regarding how to obtain proper approval for this project, refer to the following documents:*
- *IT Infrastructure Standards*
- *Systems Engineering and Design Review (SEDR) process*
- *Enterprise Architecture Web page*
- *One-VA TRM*