CAPRI Enhancements and Platform Upgrade Phase 2 Work Effort # 20150420

Requirements Specification Document

**CAPRI\_DVBA\_27\_193**

**PMAS Increment 1/ VIP Build 1**



October 2016

Version 1.14

Department of Veterans Affairs

Revision History

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

| Date | Version | Description | Author |
| --- | --- | --- | --- |
| 12/9/2015 | 1.0 | Initial Draft | Farah Lowe-Bey |
| 12/15/15 | 1.1 | Incorporated feedback from Developer | Farah Lowe-Bey  Eileen Fairbrother |
| 12/18/15 | 1.2 | Incorporated feedback from Project Manager | Farah Lowe-Bey  Ricky Stephens |
| 01/25/2016 | 1.3 | Updated section 2.6 for requirements elaboration of items scheduled for Patch 193/Increment 1 based on feedback from business owners. Reviewed document for accuracy and updated various sections. | Gina Johnson |
| 2/11/2016 | 1.4 | Updated 2.6.2 to reflect unique identifier 608794. Updated 2.6.3.1 as existing functionality. | Gina Johnson |
| 4/6/2016 | 1.5 | Updated 2.6.1.4 Request Statuses based on feedback from stakeholders. Updated 2.6.1.5 with adding CAPRI and AMIE report and function names based on stakeholders feedback. | Gina Johnson |
| 7/12/2016 | 1.6 | Updated 2.6.1.1(Added Business Requirement Number) and 2.6.1.4 (Added more details to the statuses) | Gina Johnson |
| 7/21/2016 | 1.7 | Updated 2.6.1.1 added a note that VBA cannot Re-Route. Updated 2.6.1.4 statuses for destination facility. | Gina Johnson |
| 7/28/2016 | 1.8 | Updated 2.6.1.1 to state route/re-route requests to any **active** C&P facility within the VA. Updated requirement 2.6.1.6 pertaining to the CDW. Added 2.6.4 and 2.6.5 for additional functionality pertaining to versioning. Added section 2.6.6 which list 8 Remedy and CA SDM tickets being added in Patch 193. | Gina Johnson |
| 7/29/2016 | 1.9 | Updated section 2.6.6 with the 9th CA SDM remedy ticket being added in Patch 193. | Gina Johnson |
| 9/13/2016 | 1.10 | Removed “Print New C&P Requests” AMIE Report from section 2.6.1.5 as it does not exist based on SME feedback and research. Added the name of the email group when a Re-Route Rejection occurs in section 2.6.1.2. For the status of Re-Routed Rejected, updated section 2.6.1.4 with additional details pertaining to status updates at the sending facility. | Gina Johnson |
| 9/21/2016 | 1.11 | Added details pertaining to re-routing to a local facility in section 2.6.1.7. Updated section 2.6.1.5 Pending C&P Exams filter and report. | Gina Johnson |
| 9/23/2016 | 1.12 | Updated AMIE report section 2.6.1.5. Added “Accept Re-Route Request” details to section 2.6.1.2. Updated a status to “New” in section 2.6.1.4. | Gina Johnson |
| 9/28/2016 | 1.13 | Updated requirement 2.6.1.1: The forwarding email notification sent to the original sender (VBA) will exclude the **Reroute Description** field and details. Data entered in the GUI will remain visible within the CAPRI application.  Updated requirement 2.6.1.2 The forwarding email notification sent to the facility that re-routed the request will exclude the **Rejected Reason** field and details. Data entered in the GUI will remain visible within the CAPRI application.  Corrected entries in the revision history for version 1.8, 1.9 and updated section 2.6.6 for Remedy and CA SDM tickets to reflect accurately. #s 1-6 are remedy tickets, #s 7-9 are CA SDM tickets. Submitted for final signatures. | Gina Johnson |
| 10/05/2016 | 1.14 | Updated section 2.6.6. Remedy Tickets have been replaced by CA SDM. Remedy no longer exists. Updated section 2.6.1.5 pertaining to the Cancellation Comment and Cancellation Reason fields for the Request Status by Date Range Report CSV format. | Gina Johnson |

Artifact Rationale

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

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

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# Introduction

The Compensation and Pension Record Interchange (CAPRI) project is an Information Technology (IT) initiative to improve service to disabled Veterans by promoting efficient communication between the Veterans Health Administration (VHA) and Veterans Benefits Administration (VBA). Online access to medical data enhances the timeliness of the benefits determination. The CAPRI software acts as a bridge between the VBA and VHA information systems. It offers VBA Rating Veteran Service Representatives and Decision Review Officers help in building the rating decision documentation through online access to Electronic Health Record (EHR) data found in the Computerized Patient Record System (CPRS). It also offers VHA Compensation and Pension (C&P) staff an easy, standardized way of recording C&P Examination reports.

Currently CAPRI is the only C&P exam management system available to track VBA exam requests and VHA exam fulfillment. It is the VHA clinicians' primary tool to provide VBA the medical evidence used to adjudicate Veterans disability claims. Without the necessary modifications to CAPRI, VHA computable Disability Benefits Questionnaires (DBQ) data will also not be ingestible by the Veteran Benefit Management System (VBMS), thus hindering efforts to eliminate the claims backlog. Therefore, the Department of Veterans Affairs (VA), Veterans Health Administration (VHA), and Office of Disability and Medical Assessment (DMA) request additional enhancements and updates to the Compensation and Pension Record Interchange (CAPRI) application in support of processing medical disability claims (and other services like Vocational Rehabilitation and Employment (VR&E) and exam requests.

The enhancements sought by this request include: Exam requests processing mostly for timely access to appointments for medical reviews and claims initiation, usability improvements within exam/request processing workflows, DBQ updates, and miscellaneous updates to include updates to technology to support the functional capabilities.

The scope of this request encompasses providing enhancements and platform updates to CAPRI that will improve the capabilities and functionalities used throughout the disability claims/exams processing workflows. This will provide more centralized technologies, making information more accessible to users for processing/review and ensuring that Veterans are receiving accurate examinations without delays.

## Purpose

The purpose of this Requirements Specification Document (RSD) is to define functional requirements for the requested changes to the Compensation and Pension Record Interchange (CAPRI) application in the [CAPRI Phase 2 Business Requirement Document](http://vista.med.DNS   /nsrd/Tab_LinksView.asp?RequestID=20150420). This document will cover requirements for user functionality for CAPRI\_DVBA\_27\_193.

The target audience of this RSD is CAPRI Stakeholders to include: Development staff, Software Quality Assurance, and CAPRI end users. CAPRI end users include: Veterans Services Officers (VSO), Veterans Benefits Administration (VBA), Veterans Health Administration (VHA), and the Department of Defense (DoD).

## Scope

The scope of this effort is limited to the design, development, testing and release of the requirements identified in the Business Requirement Document, Requirement Elaboration Document, Business Use Cases and New Service Request. Links to these documents are located in section 1.3 and 2. There are four main categories of functionality in scope for this request:

There are four main categories of functionality in scope for the overall project:

* Exam requests/medical services processing, to include streamlining the access/entry points to be more centralized in application location to other workflow processes, and ensuring the exam request/medical services priorities and exam locations are clearly delineated and appropriately routed so that Veterans receive care in a timely manner.
* Improving the user experience (navigation and documenting/saving data) within the exam request processing, fulfillment, medical exam completion processes (to include processing contract referrals).
* Improve examination request template (DBQs) so that updated requirements based on legal, policy, or clinical guidelines are incorporated in a timely manner.
* Miscellaneous needs, including updating technology and ensuring harmony between legacy applications and to improve user workflows through streamlining capabilities without losing functionality until these newer technologies are proven to be stable and reliable.

## References

* Business Requirement Document click link below. [20150420 CAPRI\_Enhancements\_and\_Platform\_Upgrade\_Phase\_2 BRD](http://DNS   www3/warboard/ProjectDocs/CAPRI_Enhancements_and_Platform_Upgrade_Phase_2/20150420%20CAPRI%20Enhancements%20and%20Platform%20Upgrade%20Phase%202_BRD.pdf)
* Requirements Elaboration Document click link below. [NSR 20150420 CAPRI Enhancements and Platform\_Upgrade\_Phase\_2\_RED.docx](file:///C:/Users/DNS   lowef/Documents/20150420_CAPRI_Enhancements_and_Platform_Upgrade_Phase_2_RED.docx)
* New Service Request: NSR 20150420 CAPRI Enhancements and Platform Upgrade Phase 2 click link below. [http://vista.med.DNS /nsrd/Tab\_GeneralInfoView.asp?RequestID=20150420](http://vista.med.DNS   /nsrd/Tab_GeneralInfoView.asp?RequestID=20150420)
* NSR 20141002 C&P Exam Request Routing/Re-Routing click link below.  
  [http://vista.med.DNS /nsrd/Tab\_GeneralInfoView.asp?RequestID=20141002](http://vista.med.DNS   /nsrd/Tab_GeneralInfoView.asp?RequestID=20141002)
* TSPR/Project Notebook: CAPRI Enhancements and Platform Upgrade NSR 20150420 click link below.

[http://DNS .med.DNS /warboard/anotebk.asp?proj=1702&Type=Active](http://DNS       .med.DNS   /warboard/anotebk.asp?proj=1702&Type=Active)

* NSR 20141002 C&P Exam Request Routing/Re-Routing click link below.  
  [http://vista.med.DNS /nsrd/Tab\_GeneralInfoView.asp?RequestID=20141002](http://vista.med.DNS   /nsrd/Tab_GeneralInfoView.asp?RequestID=20141002)
* Presidential Directive Executive Order 13426 (March 6, 2007): Establishing a Commission on care for America’s Returning Wounded Warriors and a Task Force on Returning Global War on Terror Heroes. Retrieved from the below link:   
  <http://www.gpo.gov/fdsys/pkg/FR-2007-03-08/pdf/07-1137.pdf>
* Request for Information (RFI) Examination Assessment Source Sought VA-13-0002335. Click link below.   
  [https://www.vendorportal.ecms.DNS /FBODocumentServer/DocumentServer.aspx?DocumentId=680154&FileName=VA118-13-I-0202-001.docx](https://www.vendorportal.ecms.DNS   /FBODocumentServer/DocumentServer.aspx?DocumentId=680154&FileName=VA118-13-I-0202-001.docx)
* Care and Benefits for Veterans Strengthened by $169 Billion VA Budget: click link here [http://www.DNS /opa/pressrel/includes/viewPDF.cfm?id=2675](http://www.DNS   /opa/pressrel/includes/viewPDF.cfm?id=2675)
* M21-1MR, Part III, Subpart v, Chapter 6, Section G click link below. [http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CDgQFjAD&url=http%3A%2F%2Fwww.benefits.DNS %2FWARMS%2Fdocs%2Fadmin21%2Fm21\_1%2Fmr%2Fpart3%2Fsubptv%2Fch06%2FM21-1MRIII\_v\_6\_SecG.doc&ei=H7tLVdaaAce2sAW4ioEI&usg=AFQjCNEZX3VAT3GVshNyNN1E7HMAFCE\_ag&bvm=bv.92765956,d.b2w](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CDgQFjAD&url=http%3A%2F%2Fwww.benefits.DNS   %2FWARMS%2Fdocs%2Fadmin21%2Fm21_1%2Fmr%2Fpart3%2Fsubptv%2Fch06%2FM21-1MRIII_v_6_SecG.doc&ei=H7tLVdaaAce2sAW4ioEI&usg=AFQjCNEZX3VAT3GVshNyNN1E7HMAFCE_ag&bvm=bv.92765956,d.b2w)
* VA Handbook 6500 – Information Security Program, click link below.  
  [http://DNS DNS /vapubs/viewPublication.asp?Pub\_ID=793&FType=2](http://DNS  DNS   /vapubs/viewPublication.asp?Pub_ID=793&FType=2)
* Veterans Benefits Management System click link below.  
  [http://vbaw.vba.DNS /vbms/](http://vbaw.vba.DNS   /vbms/)
* VHA Blueprint for Excellence click link below.  
  [http://www.DNS /HEALTH/docs/VHA\_Blueprint\_for\_Excellence.pdf](http://www.DNS   /HEALTH/docs/VHA_Blueprint_for_Excellence.pdf)
* VHA Mission Statement click link below.  
  <http://www.va.gov/health/aboutVHA.asp>
* VHA Strategic Goals and Power of Performance Goals: click link below   
  [http://DNS ush.DNS /docs/crosswalk\_strategic\_framework.pdf](http://DNS  ush.DNS   /docs/crosswalk_strategic_framework.pdf)

# Overall Description

Themes, epics, user narratives, user stories, and acceptance criteria are captured in the Requirements Traceability Matrix (RTM). In addition, the requirements table below provides a list of the epics that are detailed in the RTM for the CAPRI Enhancements and Platform Upgrade Phase 2 project. The RTM, Use Cases and Interface report can be accessed via the links displayed below.

Requirement Traceability Matrix

Click here:[http://vista.med.DNS /pasdocs/traceability/20150420\_CAPRI Enhancements and Platform Upgrade Phase2\_RTM.xlsx](http://vista.med.DNS   /pasdocs/traceability/20150420_CAPRI%20Enhancements%20and%20Platform%20Upgrade%20Phase2_RTM.xlsx)

Use Case for Fulfill C& P Exam Report:

Click here: [Use Case#20150420 CAPRI Enhancements Upgrade.Fulfull Comp and Pen Exam Report](file:///C:/Users/DNS   lowef/Documents/20131213_20140801_VE_Microbiology_RSD_v%203.FLB.docx)

Use Case for Write C&P Exam Request:

Click here: [Use Case#604536 CAPRI Enhancements Upgrade.Write CP Exam Requests](file:///C:/Users/DNS   lowef/Documents/20150420_Write%20CP%20Exam%20Requests_BUC.docx)

Use Case#604539 for Re-Route Vocational Rehabilitation (VR&E) Request for medical services:

Click here: [Use Case#604539 CAPRI Enhancements Upgrade.Re-Route VRE Requests for Medical Services](file:///C:/Users/DNS   lowef/Documents/20150420_Re-Route%20VRE%20Requests%20for%20Medical%20Services_BUC.docx)

Use Case#604539 for Write/Route VR&E Request for medical services:

Click here: [Use Case#604539 CAPRI Enhancement Upgrade.Write Route VRE Requests for Medical Services](file:///C:/Users/DNS   lowef/Documents/20150420_Write%20Route%20VRE%20Requests%20for%20Medical%20Services_BUC.docx)

**CAPRI Enhancements and Platform Upgrade Phase 2 Requirements Table**

| **Identifier** | **Epic** |
| --- | --- |
| 513608 | As a user involved with the disability claims/exam request process, I need improvements to the scheduling, routing and processing of requests for medical services, so that Veteran claims can be processed without delays to examination fulfillment. |
| 608696 | Based on the BHIE transition, disable the DoD Tab within CAPRI. Regression test and update applicable documentation. As BHIE functionality is being removed, the DoD tab as it currently exists, cannot be used |

**Data Sources**

This is the business community’s best understanding of known/existing data sources and may not be a comprehensive listing.

| **Name of Application** | **Description of current application** |
| --- | --- |
| Master Veteran Index (MVI) | Source of VA person identity information |
| VISTA packages – Imaging, Web, AMIE, Scheduling, Text Integration Utility (TIU), Computerized Patient Record System (CPRS) | VistA legacy applications are used to schedule appointments for C&P Exams, AMIE contains functionality similar to CAPRI for processing medical services and documenting performance of medical exams; TIU and CPRS both are used by VHA clinicians to view the outcomes of the DBQ reports. |
| V/VA | Repository for all C&P exam report information from CAPRI  Access through CAPRI to View VVA |
| CLAIMS server | Read only users authenticated |
| Bi-Directional Health Information Exchange (BHIE)/Federal Health Information Exchange (FHIE) | Source of DoD data |
| Proxy Server | Allows for secure transfer of data to DAS |
| DAS – VBMS, Vendor systems, DEAP | Allows for transfer of data across multiple systems |
| Corporate Data Warehouse (CDW) | Centralized data warehouse used for reporting needs across VA |
| Electronic Health Record (EHR) | Medical treatment providers use to manage medical treatment documentation and orders |

## Accessibility Specifications

**2.1.1. Section 508 Compliance**

The CAPRI application is developed in compliance with VA requirements for section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794d). These requirements are allocated to projects through the Requirements Development and Management, Strategic Investment Management (RDM) team. This team is part of the VHA Office of Informatics and Analytics. This team is responsible for the allocation of enterprise-level requirements to the project team for the purposes of enterprise-wide cross project coordination. This team utilizes a repository to maintain enterprise-wide requirements that can be found by clicking on the below links:

[http://DNS webr1:81/ReqWeb/Login\_Page.jsp](http://DNS   webr1:81/ReqWeb/Login_Page.jsp)

The complete set of 508 Compliance standards may be found at:

<http://www.section508.gov/index.cfm?FuseAction=Content&ID=12>

## Business Rules Specification

There are new business rules required for exam transfer functionality and are encapsulated in the exam transfer section of the BRD.

## Design Constraints Specification

Design must be in accordance with the Enterprise Technical Architecture.

In order to accommodate adding new vendors to the system to help with disability medical exam fulfillment:

* Electronic exam request transmissions with CAPRI must be able to receive, process, perform and provide exam results to CAPRI.
* OI&T likely should consider developing a future plan for on boarding of new vendors, since this will be an ongoing business need.

## Disaster Recovery Specification

There are no disaster recovery specifications unique to this development. The application disaster recovery specifications follow the standard for local VistA systems. CAPRI is a GUI front-end for the VistA AMIE system, which runs on individual VistA instances.”

## Documentation Specifications

All documentation specifications follow the standards set forth by the organization and 508 standards.

## Functional Specifications

***Business Need:*** As a userinvolved with the disability claims/exam request process (C&P Exam Requests) improvements are required to the scheduling, routing and processing of exam requests so that Veteran claims and requests can be processed without delays in care or fulfillment.

* + 1. **Narrative:** As a user involved with processing exam requests (C&P Exam Requests) I need to be able to route/re-route requests to any **active** C&P facility within the VA so that the request does not have to be cancelled and re-initiated. (**Business ID 513608)**

***Note:***  The following requirements are valid for exam requests whether the receiving facility site is the original recipient of the request or a re-routed recipient of the request.

* + - 1. **Requirement:** CAPRI shall display exam request processing for **Re-routing** options as listed below: (**Business Requirements 487783, 604543, 604545, 604546, 604547, 604549, 604550, 604554)**

***Note:***  VBA users will not have access to Re-Route a 2507 Exam Request.

* As a CAPRI user, I want an option titled “Re-Route Request” displayed on the C&P Exams screen that will enable the system to re-route the exam request at the request level to another facility/site.
* As a CAPRI user, I want to ensure that if an exam request has already been re-routed to another facility/site then the option to re-route will be disabled. An existing re-routed request cannot be re-routed.
* As a CAPRI user, I want the re-routing option to display the below items:
  + Destination Facility/Site (Required)
  + Re-routing Reason (Required)
  + Free text field of 250 characters for further explanation to the recipient as to the reason for the re-routing (**Optional unless a re-routing “reason” of OTHER is selected then it will be required.**)
* As a CAPRI user, for the **Destination Facility/Site** option, I want the system to display a list of facilities (names)/site (names) and location numbers to which the request can be re-routed. This will require a two-step process listed below:
  + Step 1: A list box for the facility name will display and the user will select the VistA instance.
  + Once the VistA instance displays, the routing location details can be selected, retrieved and displayed in the Routing Location list box.

***Note:***  Population of the location list box may experience some delay based on connectivity of the VistA instance.

* As a CAPRI user, I want the display option to list the facilities (names)/site ( names) and location numbers in the following order:
  + Alphabetically
  + State
  + Location number
* As a CAPRI user, I do not want the facility or site options to be limited by the existing VistA instance that I may be connected to.
* As a CAPRI user I want the option to select facilities/sites within other regions and VistA instances.
* As a CAPRI user, I want the system to display re-routing reason options that can be selected as listed below:
  + INCORRECT JURISDICTION
  + VETERAN IS AN EMPLOYEE
  + VETERAN REQUEST/PREFERENCE
  + OTHER
* As a CAPRI user, I want the system to allow the re-routing reason options (Veteran is an employee, incorrect jurisdiction, Veteran request/preference, and other) as editable at the National level by central office personnel which will include the following details:
  + A new option will be added that will allow users the ability to add/inactivate/activate the list of reasons within the exam cancellation window.
  + A security key added for the new option display and shall be named “**DVBA CAPRI REROUTEREASONS**”
  + The new option will be available on the CAPRI Help menu and visible to users who have been assigned the security key.
  + The new option will display in the GUI named “Manage Routing Reasons”.
  + A new GUI screen created that will allow the user to add/inactivate/activate re-routing reasons.
* As a CAPRI user, after all re-routing options have been selected; I want the system to allow the submission of the re-routing request.
* As a CAPRI user, I want the system to re-route the request.
* As a CAPRI user, I want the system to notify the **original sender** (VBA user/forwarding email address) via email of the re-routing information. The email notification will include the following details:
  + Identifier (e.g., Data File Number [DFN]) that can be used for accessing the patient record on the original routing VistA instance.
  + Re-route destination: VistA instance (facility/site)
  + Drop down reason for re-route.
  + Free text description of re-route. (Will be excluded from the email but will be visible in the CAPRI GUI)

***Note:*** The notification will be similar to the email notification that is sent to a requester when the status of an exam request occurs.

* + - 1. **Requirement:** CAPRI shall display exam request processing for **Accept** and **Reject Re-routing** options as listed below: (**Business Requirements 606462, 606466, 606468, 606470)**
* As a CAPRI user, I want an option titled “Accept Re-Routed Request ” displayed on the C&P Exams screen that will enable the system to accept the exam request at the request level from another facility/site.
* As a CAPRI user I want the system to process the accepted re-routed request (e.g., update status).
* As a CAPRI user, I want to ensure that an option to accept the exam request is **ONLY** available if the exam request was re-routed to my facility.
* As a CAPRI user, I want an option titled “Reject Re-Routed Request ” displayed on the C&P Exams screen that will enable the system to reject the exam request at the request level to another facility/site.
* As a CAPRI user, I want to ensure that an option to reject the exam request is **ONLY** available if the exam request was re-routed to my facility.
* As a CAPRI user, I want the system to display a free text field of 250 characters when selecting the reject option.
* As a CAPRI user, I want to enter text in the free text field so that I can explain why the re-route request is being rejected.
* As a CAPRI user I want the system to enable the submit reject option once all text has been entered in the free text field so that I can submit the rejection.
* As A CAPRI user want the free text field to be mandatory when the reject option is selected.
* As a CAPRI user I want the system to process the rejection (e.g., update status).
* As a CAPRI user I want the system to notify **the facility that re-routed the request** of the rejection information.
* As a CAPRI user I want the notification to include the following:
  + Identifier (e.g., DFN) that can be utilized for accessing the patient record on the original routing VistA instance.
  + Free text description of the reject reason. (Will be excluded from the email but will be visible in the CAPRI GUI)
* The name of the email group will be **DVBA C 2507 REROUTE.**
  + The facility will be responsible for adding members to this group who should receive information concerning the 2507 Request Reroute status.

***Note:*** The notification can be similar to the email notification that is sent to a requester when the status of an exam request occurs.

* + - 1. **Requirement:** CAPRI shall utilize the patient information contained in the **original routed record** to create the patient record within the re-routed VistA instance when a patient record does not exist. **(Business Requirements 604552)**
* As a CAPRI user, I want the patient information in the original routed record to be utilized to create a record with the re-routed VistA instance when a patient record does not exist.
* As a CAPRI user, I want this process to be automatic or in the case of data integrity issues, the process should be facility so that the user does not need to retype or copy and paste information.
  + - 1. **Requirement:** CAPRI shall maintain the request information on all VistA instances that the request has been routed. This information will also be utilized for reporting purposes. **(Business Requirements 604565)**
* The routing information will include the following:
  + Exam request status
  + Routing information
  + Identifiers that can be used for accessing the patient record information.
* The request status will be maintained. The exam request statuses will include existing exam request statuses and new statuses to represent the following:
  + If an exam has been re-routed, the below statuses are possible on the instance **from where (Sending Facility)** the request was re-routed.
    - Re-Routed – Pending Acceptance
    - Re-Routed – Accepted \*\*When the Destination Facility accepts the request the status updates to this\*\*
    - New- (After a nighlty job runs, this status is updated to PENDING REPORTED and will include rejection comments.)
  + If an exam has been re-routed, the below statuses are possible on the instance **to which (Destination Facility)** the request was re-routed.
    - New - Re-Routed
    - Re-Routed – Pending Acceptance (After a nightly job runs, this is the updated status)
    - PENDING REPORTED (If the site Accepts the Re-Routed request)
    - Re-Routed – Rejected
* The re-routing information will be maintained and is thought to include the following:
  + - Facility/Site information indicating to where the request has been re-routed (if applicable)
    - Facility/Site information indicating from where the request was re-routed (if applicable)
    - Drop down reason for re-route (if applicable).
    - Free text description of re-route or rejection (if applicable).
    - Date information:
* If an exam has been re-routed, the following dates will be stored as applicable on the instance **from which (Sending Facility)** the request was re-routed.
  + - * + Date Re-Routed Out
        + Date Re-Route Accepted
        + Date Re-Route Rejected
* If an exam has been re-routed, the following dates will be stored as applicable on the instance **to which** **(Destination Facility)** the request was re-routed.
  + - * + Date Re-Routed In (Create Date/Time)
        + Date Re-Route Accepted
        + Date Re-Route Rejected
* As a CAPRI user, I want the system to maintain Identifiers for accessing patient record information on the original VistA instance **from which** the request was re-routed if applicable.
* As a CAPRI user, I want the system to maintain Identifiers for accessing patient record information on the VistA instance **to which** the request was re-routed (if applicable)
  + - 1. **Requirement:** CAPRI shall provide the ability to report on the re-routed requests within existing CAPRI and Automated Medical Information Exchange (AMIE) reporting. **(Business Requirements 604556, 604566)**
* As a CAPRI user, I want CAPRI and AMIE reporting that displays the status of the request to allow for the additional statuses (e.g., Re-Routed – Pending Acceptance, Re-Routed – Accepted, Re-Routed – Rejected and New – Re-routed).

**CAPRI** reports and filters that will display the additional statuses:

* + **Pending C&P Exams** report – has a status report filter on the GUI. The statuses of  Re-Routed – Accepted, and Re-Routed – Rejected will not display in the filter.
  + Re-Route Date**Request Status by Date Range** report – has a status report filter on the GUI.
  + **C&P Exams Tab>Status Inquiry** screen, the Reports tab displays the details of the **C&P Exam Detail** report. The field named **Status of request** will need to display all new statuses when applicable.
  + **Pending C&P Exams** – Report detail in both txt and csv will need to include displaying all new statuses when applicable. The statuses of  Re-Routed – Accepted, and Re-Routed – Rejected will not display on the report.
  + **Exam Request by Date Range** - Report detail in both txt and csv will need to include displaying all new statuses when applicable.
  + **Request Status by Date Range** - Report detail in both txt and csv will need to include displaying all new statuses when applicable.

***Note:***  For the Request Status by Date Range Report-CSV format, the Cancellation Reason and Cancellation Comment fields will be truncated to 50 characters. When ‘\*’ displays to the front of the field, users will know that the field has been truncated.

**AMIE** reports and functions that will display the additional statuses:

**AMIE** Function

* **Edit C&P Request Information** – Function

**AMIE** C&P Reports Menu

* **Pending C&P Exams Report**

**AMIE** Regional OfficeReports Menu

* **Pending C&P Exams Report**

* As a CAPRI user, In the case of re-routed statuses, I want the report to indicate the re-routed location and the date on which it was re-routed.
* As a CAPRI user, for all existing CAPRI and AMIE reporting for which the status can be utilized as a report filter, I want the additionally defined statuses to be listed within the statuses that can be selected.
* As a CAPRI user, for all existing CAPRI and AMIE reporting for which a resolved column exists and for the status inquiry screen, I want the resolved column to indicate that the request was resolved on the VistA instance if the status of the request is **re-routed - accepted**.

* + - 1. **Requirement:** New fields shall be added in the Standard Data Dictionary #396.34 for the 2507 Re-Route Exam Request process to support informatics reporting in the CDW (e.g., tracking re-route rejection rates for an office that has re-routed to more than one VistA). **(Business Requirements 606458)**

***Note:*** Verification will need to occur outside of CAPRI by working with the Corporate Data Warehouse (CDW) organization to ensure they receive the necessary data that meets their needs.

* + - 1. **Requirement:** CAPRI shall provide capabilities to re-route requests within the same VAMC (Locally).
* Requirement: As a CAPRI user, I want the system to provide the ability to locally re-route a 2507 Exam Request so that I can re-route within the same VAMC/VistA Instance.
  + 1. **Narrative:**  As a user involved with managing the processing of exam requests, I need to manually activate new C&P routing locations identified within VistA, so that users processing requests cannot select invalid routing locations that do not process the C&P Exam requests. **(Business Requirements 608794, CR 96)**

***Business Need:*** Current functionality in CAPRI is that whenever a new division is added to the local VistA site CAPRI defaults the new division as a new routing location and automatically sets the routing location to active. Modifications are needed to prevent the default from being set to active. This will assist VBA with accidentally misrouting C&P exams to locations that do not accept C&P exams and prevent further processing delays.

* + - 1. **Requirement:** CAPRI shall be modified so that when new routing locations are added to VistA the newly routed locations in CAPRI will by default be set to **inactive**. **(Business Requirements 608794, CR 96)**
* As a CAPRI user, I want new routing locations that are added to VistA to no longer **default to active** in CAPRI.
* As a CAPRI user, I want new routing locations added to VistA that is picked up by CAPRI to automatically **default to inactive** in CAPRI.
* As a CAPRI user, I want an option provided that will give me the ability to manually activate in CAPRI new routing locations that have been added from VistA and defaulted to inactive. This is currently managed within “edit exam list parameters-MAS”.
  + 1. **Narrative:**  As a user processing requests (e.g., after Bidirectional Health Information Exchange (BHIE) has been disabled), I need to access a Service Member or Veteran’s DoD information (e.g., within a VistA Web tab) so that the information is available for defining or updating exam requests or requests for medical services**. (Business Requirements 608696)**

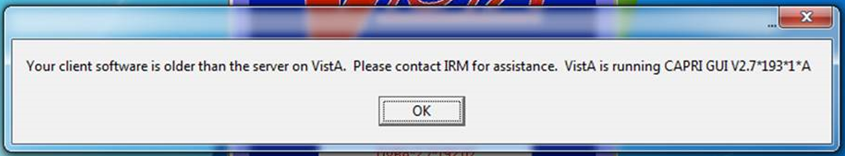
.

* + - 1. **Requirement:** CAPRI shall be modified during the BHIE transition to have the DoD tab disabled within CAPRI. The business will notify the development team when the disabling should occur. **(Business Requirements 608696)**
* As a CAPRI user, I want CAPRI to no longer display the DoD tab.
* As a CAPRI user, I want the link to the VistA Web tab active. (Existing functionality)
* As a CAPRI user, I want the patient selection screen where the display of DoD information is located to be removed. (i.e., station 200 details will no longer exist)

.

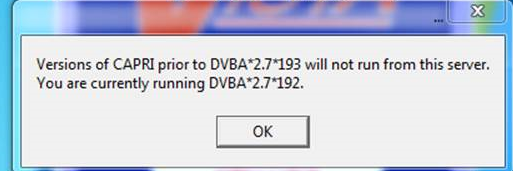
***Note:***  Currently when a patient is selected, the software checks station 200 to see if there is DoD data available for the veteran. Station 200 is where data for the DoD tab is located. The portion of the patient selection screen where DoD information is available will be removed. There will no longer be a way to access whether a veteran has DoD information in CAPRI.

* + 1. **Narrative:**As a user of CAPRI, I need to know that the correct GUI and VistA patch versions are current and that backwards compatibility exists for Patch 193 GUI with VistA Patch 192.
       1. **Requirement:** Modifications shall be made so that when a VistA patch is installed, a CAPRI user attempting to use an older version of the GUI cannot run that version.
       2. **Requirement:** When running the GUI version of CAPRI that does not match the current version of the VistA patch, the message shown below shall display on the screen. The message will state the following:
* Your client software is older than the server on VistA.
* Please contact IRM for assistance.
* VistA is running CAPRI GUI v2.7\*193\*1\*A



**Example of Message Displayed in the GUI**

* + - 1. **Requirement:** After the user clicks on the OK button displayed above, the below message shall also appear:



**Example of Message Displayed in the GUI**

* + - 1. **Requirement:** After the user clicks on the OK button displayed above, CAPRI shall be disabled and will not run.
      2. **Requirement:** CAPRI shall be backwards compatible for Patch 193 GUI to work with the VistA Patch 192 with no errors.
    1. **Narrative**:  As a user of CAPRI, I need to have the capability to determine if a site has the necessary patched installed.
       1. **Requirement:** The CAPRI GUI shall have the ability to determine if a Re-Route is possible at the destination site prior to Re-Routing. When choosing a VAMC in the drop down box, the GUI will check to see if the VAMC is Patch 193. If the VAMC is not Patch 193 the GUI will show a blank VAMC selection. A message will also display stating “This site cannot accept Re-Routed requests at this time”.

**2.6.6 The below 9 items are CA SDM tickets.**

1. I9147004FY16 CAPRI - Authorized Patient:

Problem:

--------

This particular issue happens because the low internal entry number (ien) of

the patient in the PATIENT file (example 719). This becomes problematic

during a call to retrieve the patients exam requests because it passes the ien

and looks for PARTIAL matches. Because of this it returns all requests and tries to

return all the requests for every patient ien that contains 719. Assuming

there 719,000 patients it tries to return exams for ien 719000-719999.

Resolution:

-----------

This is controlled by the "NUMBER" property for the FMExamRequestLister1

component which is currently "\*". The “\*” tells the FILEMAN call to retrieve

every match. This will be modified to return up to 250 results which should be

more than enough to account for every 2507 Request related to the patient.

2. I9130238FY16 CAPRI - Other: 2507 e-mails erroneous

Problem:

--------

CAPRI sends Outlook notification e-mails to end users notifying them when a

2507 is released, individual exams are released, or exams are cancelled.

Users have identified an issue where in the right circumstances, some exams

on a 2507 can be cancelled, other exams on the same 2507 can be

completed/released, and the only e-mail the end users receives is a message

stating that all exams on the 2507 are cancelled. This is an erroneous and

misleading e-mail.

Resolution:

-----------

When a mix of canceled or completed exams lead to the release of a 2507

request, the email will reflect that both actions led to the release.

3. I6482663FY16 CAPRI - Other: (RA)

Problem:

--------

When signing off on CAPRI templates and selecting a "TITLE", if there are two

options that have matching text then CAPRI can potentially select the incorrect

TIU DOCUMENT DEFINITION when creating the TIU DOCUMENT.

Resolution:

-----------

Change the matching process so that it no longer allows partial matching and

fully evaluates the entire name of the "TITLE" being selected.

Routine(s)

4. I9148176FY16 CAPRI - DBQs/Worksheets: (RA)

Problem:

--------

While in a 2507 Request, users are able to add a duplicate/existing exam type on

the same 2507 Request if the preceding 2507 Exam is no longer open even though

two of the same exam types on a single 2507 Exam is not supposed to be allowed.

Resolution:

-----------

Filter out existing exam types on that 2507 Request when presenting the user exam

type options when they are adding additional exams to that 2507 Request.

Routine(s)

5. I9127755FY16 CAPRI - Other: clinical documents search issue (RA)

Problem:

--------

The issue occurs because regardless of the report criteria selected (Date Range,

# Records, All) the code unconditionally passes the last selected “max number”

value to the Remote procedure code - 'TIU DOCUMENTS BY CONTEXT' which restricts the number of returned records regardless of the report format specified.

Resolution:

-----------

Only restrict the number of records if that criteria is selected when running the

report

6. I7698322FY16 CAPRI - Other: 2507s not closing out correctly (RA)

Problem:

--------

If a user cancels the only exam on a request and then exits the "View C&P Exam" form

by clicking the "X" in the upper right hand corner rather than utilizing the

"Close Window" button the code to update the 2507 record is not executed and the

status is not updated.

Resolution:

-----------

Remove the ability to click the "X" and force the user to close the form/window

using the available "Close Window".

7. I6587267FY16 CAPRI: patching the provider signature function (RA)

Problem:

--------

When signing off on a CAPRI template and linking it to a 2507 Exam, CAPRI fails to

populate the CAPRI TEMPLATE ID field ((#1) in the 2507 EXAM file (#396.4).

Resolution:

-----------

Add logic so that when the 2507 EXAM record is being updated, it also updates the

CAPRI TEMPLATE ID field ((#1).

8. I8233197FY16 CAPRI freezing

Problem:

--------

When signing off on a CAPRI template if the main form is pushed off the screen, when

the "Virtual VA" transmission form is displayed it is displayed at the center of the

form that is currently pushed off the screen and since that is the active screen and

the user is unable to manipulate it (click buttons etc) it gives the impression that

CAPRI has frozen.

Resolution:

-----------

Rather than displaying the "Virtual VA" transmission form in the center of the main

form, it will display in the middle of the screen so the user will always be able

to respond and complete the signature process.

9. I9000823FY16 CAPRI - cannot close exams on one patient

Problem:

--------

While opening the "Manage C&P Request" form for a patient, the application

makes a call to retrieve all partial matches by patient for all 2507 requests using

the patient internal entry number. This could potentially lead to thousands of

irrelevant records being returned which also causes CAPRI to freeze while processing

the extra records.

Resolution:

-----------

Rather than pulling all partial matches the number of results will be limited to 250

which should be more than enough to pull in all related results.

## Graphical User Interface (GUI) Specifications

For patch 193/Increment 1, updates to existing screen may occur however

no additional GUI screens will be added.

## Multi-divisional Specifications

* CAPRI operates in a multi-site environment.
* CAPRI allows a CAPRI remote user to view data across location domains according to the user’s permissions.
* CAPRI filters data according to a user’s permissions.

## Performance Specifications

### Number of Simultaneous Users

There is no known limitation on the number of simultaneous users that can be supported by the CAPRI application. CAPRI currently supports approximately 10,000 simultaneous users.

### Memory Constraints

A minimum of 1 GB of RAM is recommended, but there is no established minimal amount of memory requirement.

.

## Quality Attributes Specification

The developed product should be at least 98% defect free.

## Reliability Specifications

**2.11. Availability**

* With the exception of scheduled downtime, the CAPRI application should be available 100% percent of the time.
* The CAPRI application has a dependency on an active server connection for Vista and the Proxy servers to which it connects.

## Scope Integration

* The VA’s Remote Procedure Call (RPC) Broker application will be used for communication between the client and the VistA system.
* FILEMAN Components for Delphi for retrieval and loading of data in AMIE files in VistA are used.
* Computerized Patient Record System (CPRS) broker calls for which there are integration agreements established.
* Text Integration Utility (TIU) broker calls for which there are integration agreements established.
* Web services provided by Virtual VA will be used to connect and transfer documents.
* Secure FTP and or DAS will be used to connect and transfer documents between CAPRI and the contracted vendors for CCR.
* Web services provided by DAS will be used to connect and transfer computable XML data from CAPRI to VBMS.
* Secure FTP will be used to connect and transfer documents between CAPRI and contracted vendors (CCR CAPRI module).

## Security Specifications

.

The CAPRI application is developed in compliance with VA requirements for security and privacy as defined in VA Directive 6500, and Office of Management and Budget (OMB) Circular A-130. The requirements imposed by these standards are allocated to projects through the Requirements Development and Management (RDM) team. The RDM team utilizes a repository to maintain enterprise-wide requirements that can be found at:

[http://DNS webr1:81/ReqWeb/Login\_Page.jsp](http://DNS   webr1:81/ReqWeb/Login_Page.jsp)

## System Features

CAPRI is a large application developed over many years. There a large number of RSD’s

that have been created over the years. This RSD document only lists the changes introduced

in this patch and references the relevant CodeCR numbers. For a full list of CAPRI System

Features reference CAPRI Users Guide and other CAPRI documents.

Features introduced with this patch include:

The ability to route/reroute exam requests between facilities

The ability to create a patient record in the event the patient associated with a re-routed

request does not exist on the receiving system

The ability of a receiving facility to reject/process/complete the exam request

Maintenance of all routing information for reporting purposes (status, routine

information, patient identifiers, comments)

Send/receive notifications related to rerouting

Create reports related to exam rerouting in AMIE and CAPRI

## Usability Specifications

There are no additional usability specifications unique to this development. Usability specifications associated with Section 508 compliance are covered in “Section 2.1.1, 508 Compliance”.

# Purchased Components

There are no purchased components for this development.

# Estimation

A request for the Function Point Count (FPC) estimate was completed for all enhancements covered under the new contract. The results can be located under “CAPRI Enhancements and Upgrade Phase 2” in the Technical Services Project Repository (TSPR).

[http://DNS www3/warboard/anotebk.asp?proj=1826&Type=Active](http://DNS   www3/warboard/anotebk.asp?proj=1826&Type=Active)

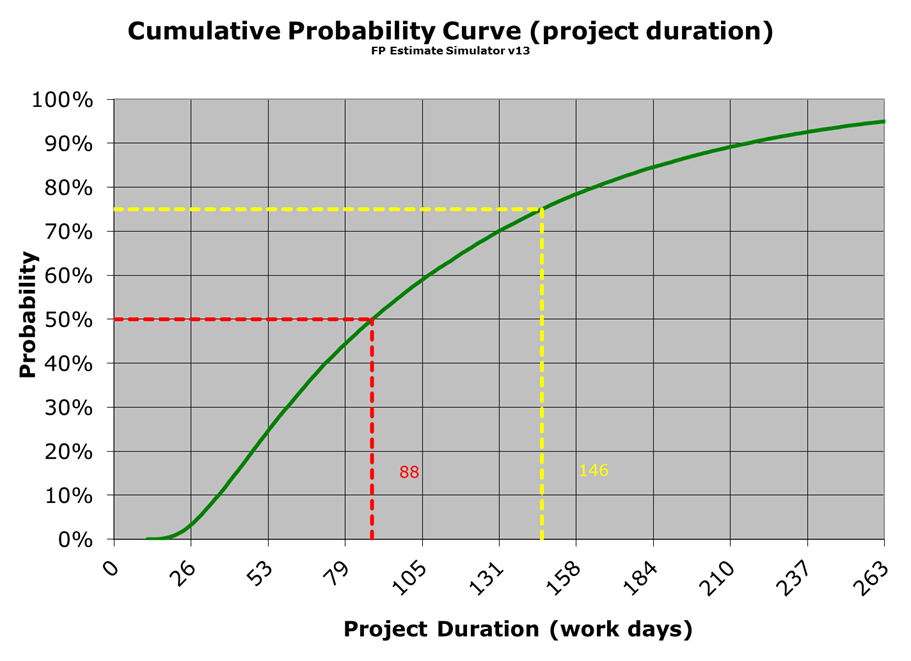
Project Software Functional Size and Size-Based Effort and Duration Estimate

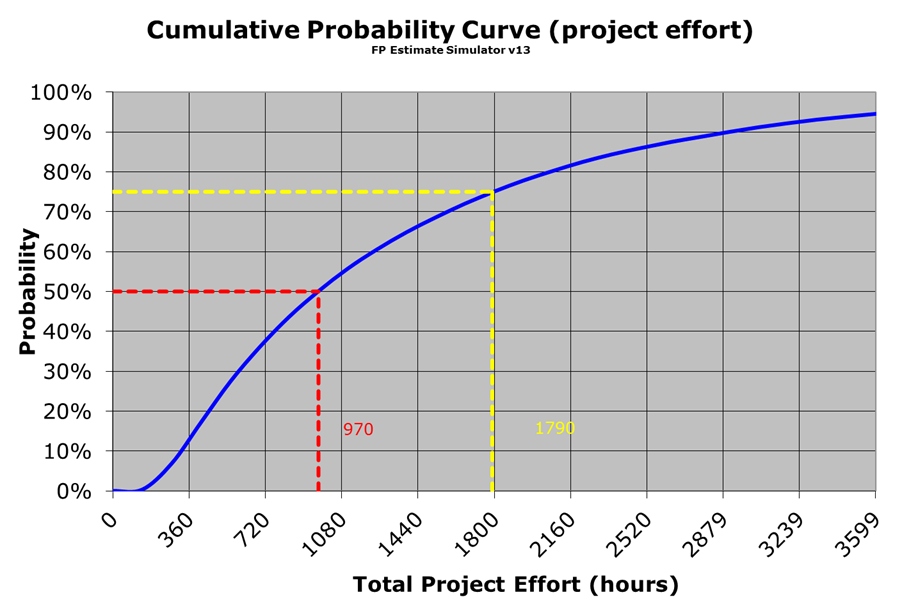
CAPRI Enhancements Phase 2

| Item | A | B | C | D | E | Total |
| --- | --- | --- | --- | --- | --- | --- |
| **Counted Function Points** | 28 | N/A | N/A | N/A | N/A | 28 |
| **Estimated Scope Growth** | 0 | N/A | N/A | N/A | N/A | 0 |
| **Estimated Size at Release** | 28 | N/A | N/A | N/A | N/A | 28 |

| Size-Based Effort Estimates | Labor Hours | Probability |
| --- | --- | --- |
| **Low-Effort Estimate – With indicated probability, project will consume no more than:** | 970 | 50% |
| **High-Effort Estimate – With indicated probability, project will consume no more than:** | 1790 | 75% |

| Size-Based Duration Estimates | Work Days | Probability |
| --- | --- | --- |
| **Low-Duration Estimate – With indicated probability, project will consume no more than:** | 88 | 50% |
| **High-Duration Estimate -- With indicated probability, project will consume no more than:** | 146 | 75% |

Figure 1: Cumulative Probability (“S-curve”) Chart



# Approval Signatures

REVIEW DATE: 9/27/2016

SCRIBE:

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Carlos Arroyo, Integrated Project Team (IPT) Chair Date Date

**From:** Arroyo, Carlos   
**Sent:** Thursday, September 29, 2016 9:27 AM  
**To:** Johnson, Gina (HP)  
**Cc:** Stephens, Ricky; Ruffley, Kevin  
**Subject:** RE: CAPRI\_DVBA\_27\_193\_RSD\_FINAL \*\*Final Approval Request\*\* Needed by Thursday COB

Approved.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Charlie Stroup, NDS Business Sponsor Date

**From:** Stroup, Charlie   
**Sent:** Wednesday, September 28, 2016 11:11 AM  
**To:** Johnson, Gina (HP); Stephens, Ricky; Ruffley, Kevin; Gren, Christopher, VBAVACO  
**Cc:** Keller, John F. - SRA  
**Subject:** RE: CAPRI\_DVBA\_27\_193\_RSD\_FINAL \*\*Final Approval Request\*\* Needed by Thursday COB

Approved.

Thank you.

-Charlie

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Earl Hutchinson, Acting Assistant Director, DEMO Compensation Service (VBA) Date

**From:** Hutchinson, Earl, VBAVACO   
**Sent:** Thursday, September 29, 2016 9:21 AM  
**To:** Johnson, Gina (HP); van Gaalen, Michael, VBAVACO  
**Cc:** Stephens, Ricky  
**Subject:** RE: CAPRI\_DVBA\_27\_193\_RSD\_FINAL \*\*Final Approval Request\*\* Needed by Thursday COB

I see you have already addressed the comments.  Therefore, you have my approval.  Let me know if you need anything further from me.’

Earl Hutchinson

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ricky Stephens, Project Manager Date

**From:** Stephens, Ricky   
**Sent:** Tuesday, September 27, 2016 4:14 PM  
**To:** Johnson, Gina (HP); Stroup, Charlie; Ruffley, Kevin; Gren, Christopher, VBAVACO  
**Cc:** Keller, John F. - SRA  
**Subject:** RE: CAPRI\_DVBA\_27\_193\_RSD\_FINAL \*\*Final Approval Request\*\* Needed by Thursday COB

I approved

**Appendix A. Enterprise Requirements**

Below is a subset of Enterprise-level Requirements that are of particular interest to the business community. These requirements MUST be addressed within each project resulting from this work effort. If OIT cannot address these Enterprise-level requirements, the Business Owners responsible for each area MUST be engaged in any waiver discussions prior to any decisions being made. This section is not meant to be a comprehensive list of all Enterprise-level requirements that may apply to this work effort and should not preclude the technical community from reviewing all Enterprise-level requirements, and identifying others that should apply to this work effort as well.

| **ReqPro Tag** | **Requirement Type** | **Description** |
| --- | --- | --- |
| ENTR99 | Security | All VA security requirements will be adhered to. Based on Federal Information Processing Standard (FIPS) 199 and National Institute of Standards and Technology (NIST) SP 800-60, recommended Security Categorization is High.  The Security Categorization will drive the initial set of minimal security controls required for the information system. Minimum security control requirements are addressed in NIST SP 800-53 and VA Handbook 6500, Appendix D. |
| ENTR10 | Privacy | All VA Privacy requirements will be adhered to. Efforts that involve the collection and maintenance of individually identifiable information must be covered by a Privacy Act system of records notice. |
| ENTR95 | 508 Compliance | All Section 508 requirements will be adhered to. Compliance with Section 508 will be determined by fully meeting the applicable requirements as set forth in the VHA Section 508 checklists (1194.21, 1194.22, 1194.24, 1194.31 and 1194.41) located at: [http://www.ehealth.DNS /508/resources\_508.html](http://www.ehealth.DNS   /508/resources_508.html) or as otherwise specified. Checkpoints will be established to ensure that accessibility is incorporated from the earliest possible design or acquisition phase and successfully implemented throughout the project. |
| ENTR7 | Executive Order | All executive order requirements will be adhered to. |
| ENTR8 | Identity Management | All Enterprise Identity Management requirements will be adhered to. These requirements are applicable to any application that adds, updates, or performs lookups on persons. |

Appendix B: Non-Functional Requirements

The following non-functional requirements should be reviewed and accessed while developing the requirements for the project.

This section describes the non-functional requirements from a business need perspective. Only Non-Functional Requirements that have been changed will be listed. All other Non-Functional Requirements in the approved BRD/RTM not listed here are still valid.

| **Identifier** | **Brief Name** | **Non-Functional Requirements (NONF) Category** |
| --- | --- | --- |
|  |  | **Operational Environment Requirements** |
| 392114 | Platform Support | Update the Delphi Version 2006 to the most current version of Delphi that is listed in the Technical Reference Manual (TRM) for the Compensation and Pension Record Interchange application. |
| 608696 | BHIE Transition DoD Tab | Based on the BHIE transition, disable the DoD Tab within CAPRI. Regression test and update applicable documentation. As BHIE functionality is being removed, the DoD tab as it currently exists, cannot be used. |

System Performance Reporting Requirements

(Note: Each system developed by the Department of Veterans Affairs (VA) Office of Information and Technology (OI&T) must comply with the following mandatory requirements.)

1. Include instrumentation to measure all performance metrics specified in the Non-Functional Requirements section of the Requirements Traceability Matrix (RTM). At a minimum, systems will have the ability to measure reporting requirements for Responsiveness, Capacity, and Availability as defined in the non-functional requirements section of the RTM.
2. Make the performance measurements available to the Information Technology (IT) Performance Dashboard to enable display of “actual” system metrics to customers and IT staff.

Operational Environment Requirements

1. System response times and page load times are unknown at this time and may not apply with this development; however, if systems responses are impacted they will be identified within next version of this document.
2. Maintenance, including maintenance of externally developed software incorporated into the CAPRI application(s), shall be scheduled during off peak hours or in conjunction with relevant maintenance schedules. The business owner should provide specific requirements for establishing system maintenance windows when planned service disruptions can occur in support of periodic maintenance.
3. Information about response time degradation resulting from unscheduled system outages and other events that degrade system functionality and/or performance shall be disseminated to the user community within 30 minutes of the occurrence. The notification shall include the information described in the current Automated Notification Reporting (ANR) template maintained by the VA Service Desk. The specific business impact must be noted in order for OIT to provide accurate data in the service impact notice of the ANR.
4. Provide a real-time monitoring solution to report agreed/identified critical system performance parameters.
5. Critical business performance parameters shall be identified e.g., transaction speed, response time for screen display/refresh, data retrieval, etc. in a manner that data capture can occur to support metric reporting and support the OI&T performance dashboard display. If no such performance metrics are required or provided there will be no program specific Service Level Agreements (SLA) created, nor shall there be any active/real time monitoring through OI&T Performance Dashboard to provide the business owners any performance metrics.
6. Notification of scheduled maintenance periods that require the service to be offline or that may degrade system performance shall be disseminated to the business user community a minimum of 48 hours prior to the scheduled event.

Documentation Requirements

1. The training curriculum shall state the expected training time for primary users and secondary users to become proficient at using the CAPRI application(s).
2. All training curricula, user manuals and other training tools shall be developed/updated by VBA Compensation Service and delivered to all levels of users. Training tools will be delivered 2 weeks prior of release of enhancement. The curricula shall include all aspects of the enhanced CAPRI application(s) and all changes to processes and procedures.
3. The training curriculum developed by the Program Office shall state the expected task completion time for primary and secondary users.
4. User manuals and training tools shall be developed. If they already exist, updates shall be made, as necessary, to them and they shall be delivered to all levels of users.
5. IT will provide the level of documentation required to support the system and maintain operations and continuity. Documentation shall represent minimal programmatic and lifecycle operations support documentation artifacts as defined by VA standards in ProPath and as required by the VA Enterprise System Engineering Lifecycle and Release Management office for sustained operations, maintenance, and support (http://DNS eie.DNS /lifecycle/default.aspx) prior to approval by any VA change control board and release into production.

Implementation Requirements

1. Technical Help Desk support for the application shall be provided for users to obtain assistance with the CAPRI application.
2. The IT solution shall be designed to comply with the applicable approved Enterprise SLA.
3. The implementation is dependent on the roll-out process which has not been determined yet. A standard release could take 30-40 days.  A controlled release could require 6-12 months therefore, the tentative implementation date could be between July and August 2016. However, the final implementation date will be identified within the next version of this document.

Data Protection/Back-up/Archive Requirements

1. Based upon the criticality of the system, provide a back-up and data recovery process for when the system is brought off-line for maintenance or technical issues/problems.
2. Data protection measures, such as back-up intervals and redundancy shall be consistent with systems categorized as routine (30 day restoration), mission essential (72 hour restoration), or mission critical (12 hour restoration).

Business owners are required to state the mission criticality of the IT services required in order to assist the planners and developers in determining best strategies for engineering an IT solution to meet their business objectives/needs. The business owner needs to state the criticality of the data and the impact to the business during a service disruption so appropriate technologies can be considered.

Levels for Disaster Recovery

Classification Recovery Time Objective Recovery Point

Objective Routine 30 day restoration TBD

Mission Essential 72 hour restoration 24 hours

Mission Critical 12 hour restoration 2 hours

Recovery Time Objective (RTO) – RTO defines the maximum amount of time that a system resource can remain unavailable before there is an unacceptable impact on other system resources, supported mission/business processes, and the MTD.

Maximum Tolerable Downtime (MTD) - The MTD represents the total amount of time the system owner/authorizing official is willing to accept for a mission/business process outage or disruption and includes all impact considerations.

Recovery Point Objective (RPO) - The RPO represents the point in time, prior to a disruption or system outage, to which mission/business process data can be recovered (given the most recent backup copy of the data) after an outage.

CAPRI uses the VistA Disaster Recovery Plan. -The CAPRI application is developed in compliance with VA requirements for security and privacy as defined in VA Directive 6500, and Office of Management and Budget (OMB) Circular A-130.

Data Quality/Assurance Requirements

A monitoring process shall be provided to ensure that data is accurate and up-to-date and provides accurate alerts for malfunctions while minimizing false alarms.

User Access/Security Requirements

Ensure the proposed solution meets all Veterans Health Administration (VHA) Security, Privacy, and Identity Management requirements including VA Handbook 6500 (see the Enterprise Requirements section of the RTM).

Usability/User Interface Requirements

Adhere to good User Interface/User Centered Design (UI/UCD) principles as outlined in the Usability Appendix of the BRD.

Conceptual Integrity

Provide standards based messaging and middleware infrastructure needed to support both Legacy Veterans Health Information Systems Technology Architecture (VistA) and future VistA 4 deployments.

Availability

1. Maintenance window, including maintenance of externally developed software incorporated into the VistA 4 application(s), will be by mutual agreement between OI&T and the VHA Point of Contact (POC) for the affected facility and or facilities. VHA will provide POCs for each facility.
2. VistA application unavailability due to an unplanned outage or planned outages that exceed the defined maintenance window will not exceed 8.76 hours per year and will not exceed 43.8 minutes per month (99.9% availability).
3. The application shall be available 24 hours a day, seven days a week, with an uptime of 99.9%.
4. All system updates and scheduled maintenance should occur between the hours of 1800 and 0600 (per local time zone), when clinical usage would be lightest.

Interoperability

1. The system shall support all recognized health system standards i.e., Health Level 7 (HL7), Fast Healthcare Interoperability Resources (FHIR).

2. Systems must be heterogeneous and agnostic for operating systems and code bases.

3. Provide the ability to securely transfer large files (of 4-8 gigabyte) from an external source to VA systems.

4. Provide access to the system over a remote access solution.

Manageability

1. Provide Service Desk/Incident and Problem Management tracking related to maintenance events of patient care systems with priority over non-patient care systems.
2. Provide data related to maintenance events, both routine and exceptional, including key metadata:

* Predicted routine work
* Occurrences where maintenance is completed, including restart from down time
* Identity of the organization performing maintenance
* User performing maintenance (if available)
* Identity of the system
* Date/time, physical location
* Systems impacted
* Does it affect patient care
* Non-urgent or emergent

1. Provide audit capabilities for system access and usage with settings that are configurable to support internal and external audits based on federal and VHA mandates.
2. The system must comply with VA Directive 6300 Records and Information Management and with VHA Records Control Schedule (RCS) 10-1, in general and specifically with Electronic Final Version of Health Record: Destroy/Delete 75 years after last episode of patient care, or longer (if specified).

Performance

1. Provide an Info button Query Responder on all platforms with a response time of less than .5 seconds.
2. The system shall recognize, report, and retransmit data lost, with less than 0-1% chance of incomplete patient records.
3. Provide patient data (for data within the system) transactions (e.g., capture, search, request for data) within .5 seconds.
4. Mouse or key-based UI controls, e.g., menus, checkboxes shall provide instantaneous responsiveness (<90ms).
5. Part-screen refreshes after user action shall complete within a pro-rated interval between 200 ms and 1200 ms times a percentage of the screen area being refreshed. For example, a component 10% of the screen area would refresh in (1200 – 200) \* 0.10 + 200 = 300 ms.

Reliability

1. Provide system reliability:

* Threshold = 99.9%
* Objective = 99.99% system and application

1. Provide system reliability:

* Level 1 severity =<1 failure per month
* Level 2 severity =<2 failures per month
* Level 3 severity =<3 failures per month

Security

Provide management of electronic attestation of information including the retention of the signature of attestation (or certificate of authenticity) associated with incoming or outgoing information.

Supportability

1. Provide alerts (that extend beyond system messages to external systems like mobile devices) for malfunctions, while preventing false alarms for local, regional, and national evaluations in real time.
2. Provide reports on performance metrics as specified in the VistA 4 Effectiveness and Value / Benefits Framework on a bi-weekly basis.
3. Provide national, regional, and local reports on performance metrics as specified in the VistA 4 Effectiveness and Value / Benefits Framework.
4. Provide performance metrics (from request for information to receipt of information on the screen) monitored by the system and system administrators so they know what the user experience is like without users having to call them and tell them the system is running very slow.
5. Provide the ability for VHA and IT staff to create standard and ad-hoc reports of usage, bandwidth, response time, login time, and other variables with a verification process for measuring the capabilities of the system.
6. Provide end-user training on how to generate the various system performance reports (e.g., in standard file formats such as Comma Separated Values [CSV], Portable Document Format [PDF], or Excel) depending on the user's needs.
7. Provide the ability to view system statistics (e.g., information on the specific network environment) and identify areas that are having issues or are beyond capacity, in near-real-time (to be quantified at a later time).
8. Technical Help Desk support for the application via instant message, on-line, phone, and remote desktop access support, shall be provided for users to obtain assistance 24/7.
9. The IT solution shall be designed to comply with the applicable approved Enterprise SLAs.
10. Data protection measures, such as back-up intervals and redundancy shall be consistent with systems categorized as mission critical (1hr restoration, 2hrs backup recovery). Impact of system failure must be monitored on a near real time basis.
11. Provide the ability to set thresholds and notification type (e.g., email or text alerts) when alerting the user about response time degradation and unscheduled outages.
12. Disaster Recovery Plans (DRP) and Continuity of Operations Plan (COOP) will be updated and tested semi-annually to address the VistA 4 product (see National Security and Homeland Security Presidential Directive: National Continuity Policy. NSPD-51/HSPD-20, May 9, 2007 <http://www.fas.org/irp/offdocs/nspd/nspd-51.htm>)

Usability

1. Provide view ability/usability of VistA 4 applications on mobile devices.
2. User prompts and screen help shall be embedded into the system to guide use of the solution.

Documentation

1. The training curriculum shall be provided in two hours or more of training time for primary users and secondary users to become proficient at using the VistA 4 application(s).
2. All training curricula, user manuals and other training tools shall be developed/updated by the VE Program Office and delivered to all levels of users 4 weeks in advance of the release of the enhancement through mediums that will best support the sharing of information to all affected staff.
3. Provide follow-up training classes tailored to VHA workflow 4 weeks after the users have begun to use the system.