Veteran-focused Integration Process (VIP)

Release Process Guide

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Table of Contents

1. Introduction

The **Veteran-focused Integration Process (**VIP**) Release Process Guide** is intended for IT project team members, especially Project Managers, Project Configuration Managers, and Project Testing Managers.

VIP provides a single entry point for all IT releases to production. The intake vehicle is the VIP Request or VIPR. Requestors submit Epics and User Stories that describe the requirements for the product. Three decision makers (the Triad), the **Portfolio Director**, the **Product Owner**, and the **Receiving Organization**, decide whether the request will become a project at Critical Decision #1 (CD#1). CD#1 is followed by a three-month Build and Development phase managed under the Agile Project Management Methodology. At Critical Decision #2 (CD#2) which occurs at the end of the Build and Development phase, the Triad either approves or does not approve the product's release into production.

The VIP Release Process is the single, simplified path from Build Planning to release. ***It replaces all other release compliance processes and removes all other, formal release reviews.*** Your project team will place a single set of required data in centrally located, configuration-controlled repositories in the tool. Your team will upload each data element only once and update, as necessary. This will allow you to create reports or other information items using data elements that are common across multiple user groups or topics without having to enter any of those data elements more than once, each.

A **Release Agent** from the Release Readiness Office (RRO) will be assigned to the planned release to guide you and your team through the new process as you develop the IT solution, produce the required work products, and manage your project in the mandated tool. The central repositories will enable you to review your project's status dynamically, throughout development. At regular intervals during development, your Release Agent will monitor the contents of the product repositories and provide feedback to you and your team. This regular feedback will support your ability to fulfill requirements at a steady pace.

All releases into the production environment must come through the VIP Release process. That includes hardware, software, IOCs, full deployments, pilots that use production data or that integrate with production systems, new products, subsequent releases, maintenance releases, defect repairs, security patches, other types of patches, and any other sort of release to production.

Please Note:

☞Current RRO staffing limitations preclude assignment of Release Agents to Sustainment Releases.

☞To view data associated with the RRO metrics, visit http://go.va.gov/dw5e. For additional information about the RRO, contact the Release Agents at OIT EPMO TRS RRO Release Agents or visit the RRO site at http://go.va.gov/rahl.

☞In this document, all references to the ***tool*** refer to the IBM Rational Collaborative Application Lifecycle Management Toolset which is currently mandated for use for all VA OI&T projects. Contact rational@va.gov to set up product repositories in the tool and for training requests and questions. For more information, visit the Rational Tools Team's document library at http://go.va.gov/r3fa.

☞To obtain information about VIP configuration management guidelines, contact the EPMO Configuration Management Team at VA OIT EPMO Configuration and visit the EPMO Configuration Management site at http://go.va.gov/365o.

☞To obtain additional information about VIP Agile guidelines, contact the EPMO Agile Mentoring Team at AgileTeamSupport2@va.gov and visit the EPMO Agile Mentoring site at http://go.va.gov/mlq4.

2. Roles and Responsibilities

Release Agent: The Release Agent is at the center of the new VIP Release Process. The Release Agent is assigned to a release soon after Initiation. The primary role of the Release Agent is to monitor, audit, and report on the status of the product data and traceability associated with the release. The Release Agent provides information about release requirements, provides feedback about the status of the product data to the project team and other stakeholders, and collects metrics at certain points and intervals.

Configuration Manager/Specialist: The Project Team's Configuration Manager understands the key fundamentals of change and configuration management and has the skill set to use and navigate the tool adeptly. The Configuration Manager's responsibilities are to add product data to the repositories in an appropriate and timely manner and to ensure that the data elements are appropriately linked among the repositories in a manner that facilitates product review, change tracking, and defect tracking activities.

Testing Manager/Specialist: The Project Team's Testing Manager is well versed in Quality Assurance and Quality Control and is a skilled user of the tool. The Testing Manager's responsibilities are to ensure that testing personnel perform tests as planned and appropriately link data among the repositories, in order to provide traceability among release requirements, development deliverables, and testing constructs (test plan, test cases, test results).

Requirements Manager/Specialist: The Project Team's Requirements Manager analyzes and manages the product requirements and ensures that they are appropriately entered and managed in the tool's appropriate repository.

Scrum Master: The Project Team's Scrum Master establishes the frequency of and conducts the Daily Scrums, the Scrum of Scrums, and other Agile ceremonies throughout the Build and Development phase.

Project Manager: In addition to the usual duties of project management, the Project Manager is responsible for ensuring that the appropriate team members are trained in the use of the tool. The Project Manager is also responsible for obtaining product repositories in the tool and for approving account access to the assigned Release Agent and other key stakeholders who require notifications of product data status.

Portfolio Director: Management of the full lifecycle of a particular suite of related programs or products is the responsibility of the Portfolio Director. The Portfolio Director is responsible for operational oversight and management of long term sustainment strategy and IT portfolios. The Portfolio Director is one of the three decision-makers for CD#1 and CD#2.

Product Owner: The Product Owner is the organization representative, customer, or individual served by the product, who provides the product's business requirements (epics, sub-epics, user stories, and so on). This is often the Project/Product Sponsor. The Product Owner is one of the three decision-makers for CD#1 and CD#2.

Receiving Organization: The Receiving Organization is responsible for the support of the product. In rare cases in which the release does not include software, the Receiving Organization can be an operations group. VIPR collects information that helps identify the appropriate Receiving Organization. The Receiving Organization is one of the three decision-makers for CD#1 and CD#2.

3. Definition of Terms

Below are definitions for terms used in this guide, terms in the Release Process, and some of the terms that are associated with the Agile Project Management Methodology.

Term	Definition
Acceptance Criteria	Quality attributes that apply to Epics and User Stories; validate that the intent has been met; are expressed in clear and simple language that is actionable
Agile Project Management Methodology	An iterative approach to software and product development that features short development cycles (Sprints) within the Build and Development phase
Backlog	The list of User Stories that are yet to be completed; the Backlog continues to be maintained after a product is released; User Stories are prioritized and scheduled for future Sprints, in future Build and Development phases, with future releases
Backlog Grooming	An Agile Ceremony in which team members prioritize User Stories from the Backlog for the upcoming Sprint; add, subtract, and refine Epics, User Stories, and Acceptance Criteria; determine the level of effort for User Stories
Build	Term used to denote the phase during which the product is produced, a three-month period; also widely defined as a package of functionality: product code or components that deliver a portion of or the complete solution or product
Ceremony	Agile term for standard, structured meetings such as Scrums, Sprint Planning, Backlog Grooming, and so on
Critical Decision (CD)	Key approval points in the VIP Process; made by the Portfolio Director, the Product Owner, and the Receiving Organization; CD#1 determines Project acceptance; CD#2 determines Release acceptance and Product acceptance
Defect Resolution Period	The 90-day period following the final release to production of the final package produced by the final Build and Development phase of a project. During this period, the deliverer of the product maintains a presence to address issues, transfer product knowledge, and ensure successful transition of the product into sustainment; the Defect Resolution period covers everything stated in the product requirements
Epic	Required by VIPR; captures a large body of work to be completed during development; typically too large to complete within a Sprint; is further decomposed into smaller Sub-epics and workable User Stories
EPMO	Enterprise Program Management Office
IOC	Initial Operating Capability; release into a small number of production sites for final evaluation (typically required only for releases of products in the Health Product Portfolio, but this model can be used for other releases

Term	Definition
Package	Components included in the product being developed or obtained and planned for release; includes software, hardware, middleware, firmware, documentation, and any other items that are part of the product to be released
POLARIS	Planning and On-Line Activity/Release Integration Scheduler (POLARIS), the VA OI&T Enterprise Release Calendar; the single, authoritative release calendar for all of OI&T
Release	Installation into Production Environment—includes IOC, full deployment, subsequent releases, maintenance releases, defect repairs, security and other patches, and any changes that are released into production; also used to refer to the package (hardware, software, middleware, documentation, other components) being deployed
Release Candidate	The package (sometimes referred to as a “build”) that is destined for the initial release into production
Scrum	A collaborative Agile development framework for managing projects that features brief, daily status meetings
Sprint	A short cycle of work (usually 2 weeks) during the Build and Development phase; each Sprint focuses on completing a defined subset of project deliverables
Sub-epic	Slightly smaller body of work than an epic, but still too large to complete within a Sprint
Task	A discrete portion of work that is required to finish a User Story; each User Story has at least one, but usually more than one task
Tool	In this document, all references to the ***tool*** refer to the IBM Rational Collaborative Application Lifecycle Management Toolset which is currently mandated for use for all VA OI&T projects.
Triad	The three voting entities at the CD#1 and CD#2: the Product Owner, the Portfolio Director, and the Receiving Organization
User Story	Brief statement of a product requirement, clearly identifying who, what, and why; Business User Stories are owned by the Product Owner, compliance user Stories are owned by the particular compliance Subject Matter Experts [Security, Section 508, Release, DE&A (Design, Engineering, and Architecture), and others]; specific Acceptance Criteria are attached to each User Story
VIP	Veteran-focused Integration Process; single path, from beginning to end, for IT releases in the VA
VIPR	Veteran-focused Integration Process Request or portal that receives requests for projects that produce products for release

4. Data and Process Compliance Requirements

4.1. Pre-Initiation to Critical Decision #1

Data elements required to initiate a project via the VIP Request (VIPR) include requirements for each area of concern for IT projects. In the Agile Methodology, Compliance Epics and Business Epics express these requirements. As soon as the Project Manager is identified, an Enterprise Project Structure (EPS) number is assigned to the project, and funding is approved, the Release Readiness Office assigns a Release Agent, and Project Planning begins.

4.2. Critical Decision #1 to Critical Decision #2

Project Teams manage data elements and artifacts in the tool as they produce them, during the Build and Development phase. To comply with process requirements, teams must ensure that requirements, deliverables, test plans, test cases, test execution, defects, and so on, are appropriately linked among the tool's repositories.

Releases that are enhancements to existing products in sustainment, defect repairs, VistA maintenance releases, and other types of releases that do not involve the delivery of a new product to the production environment might have fewer requirements.

5. High-level Timeline

Initiation: The VIP Release Process begins shortly after Initiation, when the assignment of the Project Manager and verification of funding occur. The Release Agent acts as a mentor for the Project Manager, to ensure that the PM understands the VIP data requirements and process compliance requirements. During this phase, the Project Manager ensures that the Product repositories have been established and that appropriate personnel have access to the Product repositories.

Project Planning: During this phase, the Project Manager ensures that the Product repositories exist in the tool, ensures that Project Team members are trained in the use of the tool, and ensures that Project Team members, the Release Agent, and all others who require it have access to the Product repositories in the tool. The Project Manager completes high-level plans for the project.

CD#1: The Triad approves the start of the project at Critical Decision 1. For products that do not go through CD#1, such as defect repairs, the VIP Release Process begins when the decision is made to start work on the package.

Contract Award and On-boarding: The Project Manager and other Project Team members refine and tailor the Compliance Epics, create User Stories, create Tasks, plan the first Sprint and its Tasks, and set up the first Sprint in the tool. The Project Team ensures that the Sprint plan and all requirements (Epics, User Stories, Tasks) are input in the tool and that Work Items are created and assigned to both the Project Team members (creation of deliverables) and the Release Agent (reviews of deliverables).

Build and Development: During this phase, the Project Team manages the product data in the tool during each Sprint. The Release Agent monitors the data and degree of process compliance throughout this phase.

CD#2: Near the end of the 3-month Build and Development phase, the Project Manager schedules the meeting for Critical Decision 2 and ensures that all key stakeholders are invited, including the Release Agent. At least five (5) business days before the CD#2 or the release date, the Project Team ensures that final test results, data, and artifacts are available in the tool for the Release Agent's audit. The Release Agent publishes the Release Readiness Report (RRR) by noon, one (1) business day before the scheduled CD#2 or the release date. The detailed RRR is summarized by a "recommended for release" or "not recommended for release" status. This informs the Triad of the results of the objective audit, but does not infer acceptance or rejection. The Triad reviews the RRR, in advance of the CD#2 meeting. At the CD#2 meeting, the Triad either approves or does not approve the request to release the product.

IOC and National Release: As necessary, the Project Team continues to add data to the repositories during an IOC evaluation in a limited number of production sites. At the end of the IOC evaluation, the Release Agent again audits the data and traceability and provides an updated RRR to the Triad. This additional notification provides decision-makers an opportunity to reassess the forward progress of the Release Candidate, based on IOC results. If no significant defects or changes occurred during the IOC, the Release Candidate continues on to National Release.

End of Defect Resolution Period: When the product is successfully released nationally, the 90-day Defect Resolution period begins. At regular intervals and at specific points during this period, the Release Agent reviews the product data. If significant problems occur during transition, the Program Manager and the Project Manager determine a course of action. If the Project Team creates a defect patch, the Release Agent creates another RRR for the Triad prior to the patch release date. If the transition was successful, the Product Owner transfers product ownership to the Receiving Organization, and the Receiving Organization accepts ownership. This transfer is recorded in the tool itself.

6. Step-by-Step

VIP begins in the Demand Management phase, but the VIP Release Process begins at Initiation. Consult the VIP Guide, available at http://go.va.gov/k2s9, for information about Demand Management.

1. At Initiation, the IT Account Manager requests an IT product via the VIP Request or VIPR, submits one or more Business Epics, and (if IOC is planned) presents MOUs for at least two IOC sites. The VIPR indicates the EPS number for the project, the name of the PM, and funding approval.
2. The Release Readiness Office assigns a Release Agent who invites the Project Manager and other Stakeholders to the Release Readiness Kick-off meeting. If required, the invitation includes pre-meeting homework and a Questionnaire for the Project Team.
3. The Project Manager requests or confirms that product repositories are established in the tool, understands the training requirements for the Project Team, and ensures that all appropriate personnel have access. If requested by the Release Agent, the Project Manager completes the pre-meeting homework and Questionnaire.
4. The Release Agent conducts the Release Readiness Kick-off meeting for the Project Manager and other stakeholders. The meeting provides information about the Release and process compliance requirements.
5. The Project Manager ensures that the Project Team has entered the Business Epic(s), Sub-epics, and User Stories into the requirements repository.
6. At CD#1, the Triad approves the project.
7. The Project Manager completes Contract Award and On-boarding activities.
8. The Project Team tailors the Compliance Epics, creates User Stories, creates a high-level plan for the Build and Development phase, identifies the tasks (Work Items) for the first Sprint, and links them to the appropriate requirements.
9. The Release Agent, the Project Manager or Scrum Master, the Project Testing Manager, the Project Requirements Manager, and the Project Configuration Manager confirm the product data that must be available in the Product repositories during the Build and Development phase.
10. The three-month Build and Development phase begins. This phase is punctuated by two-week Sprints, during which the Project Manager or Scrum Master, via the Configuration Manager, ensures that the appropriate data elements are introduced into and managed in the Product repositories.
11. Periodically, as warranted, the Release Agent provides feedback to the Project Manager concerning the status of data and process compliance. This feedback alerts the Project Manager to any deficiencies. The Release Agent also may attend the Daily Scrum or the Scrum of Scrums to announce any impediments.
12. At least five business (5) days prior to the scheduled CD#2 or release date, the Project Team ensures that all final testing results, data, and artifacts are in the tool repositories.

☞A thorough audit of data and process compliance requires time. Project teams can increase the likelihood of a positive RRR status by ensuring availability of test results, data, and artifacts at least five (5) business days prior to the CD#2 or release date. The lead time allows the Release Agent to communicate deficiencies to the team and allows the team to address those deficiencies before the final RRR is published.

13. By noon, one (1) business day before the CD#2 or release date, the Release Agent publishes the RRR and distributes it to the Triad and all other stakeholders. The RRR contains the most recent status of all product data and the status of the Project Team's process compliance. The RRR informs, but does not make the Triad's decision at CD#2.
14. At CD#2, the Triad decides if the product can be released into production.
    a. If the decision is "no," the Release Candidate returns to the appropriate stage in the process.
    b. If the decision is "yes," the Release Candidate moves into the Release Preparation and Execution phase.
15. During Release Preparation and Execution, the Project Team and the Receiving Organization execute the deployment plan or standard deployment process.
    a. If the Release Candidate will have an Initial Operating Capability (IOC), continue to step 16, below.
    b. If the Release Candidate will be fully deployed to production, skip to step 18, below.
16. Personnel install the Release Candidate into two production sites. A third IOC evaluation is performed concurrently by Health Product Support, if appropriate.
17. Personnel track issues, changes, and the significance of changes during the IOC, and record these data elements in the repositories.
    a. If significant defects result in changes to the requirements, personnel execute the back-out and return to the appropriate phase of the process.
    b. If defects or changes are not significant, personnel conclude the IOC and prepare for full deployment into production.

☞The Release Agent performs another audit at the end of IOC and publishes an updated RRR.

18. Personnel execute the steps for full deployment of the Release Candidate into the production environment.
    a. If deployment is unsuccessful, personnel execute the back-out and return to the appropriate phase of the process.
    b. If deployment is successful, the Defect Resolution Period begins.
19. During the 90-day Defect Resolution Period, the deliverer of the product maintains a presence in the Receiving Organization to ensure agreed-upon level of service, to ensure knowledge transfer, to repair defects, and to ensure successful transition of the product into sustainment. The Project Manager notifies the Release Agent of any defect patches created during this period, so that the Release Agent can create an updated RRR and distribute it to the Triad prior to the patch release.
20. The Project Manager ensures, via the Configuration Manager and Testing Manager, that all defects, repairs, testing, and other changes to the product are recorded in the repositories.
21. At the end of the Defect Resolution Period, the official transfer of product ownership occurs and is recorded in the tool.
22. The Release Agent evaluates and records the release metrics and lessons learned during the release process.
23. The Configuration Manager records details of the "as-built" system in the tool and executes the Project Close Out process, in order to properly archive the project data in the tool.

7. Summary of Key Points on the VIP Release Timeline

When	Event	Result
Intake and Initiation	VIPR submission (includes EPS#, PM name, funding approval)	Release Readiness Office assigns Release Agent
Project Planning Phase	Invitation to Release Readiness Kick-off Meeting	Project Team completes pre-meeting homework and Questionnaire
At the end of Project Planning Phase	CD#1 approval	Product Phase begins
Approximately one (1) week after Kick-off meeting invitation is received	Release Readiness Kick-off Meeting occurs	Project team presents status/nature of project, sprint timelines, release date(s); Release Agent explains Release Data Requirements, the Work Item review process, and RRR findings; PM invites Release Agent to Scrums
At least two (2) weeks before the first planned installation	Project Manager completes POLARIS entry	The Project Manager can add the planned release to POLARIS at any time after CD#1, but no later than two weeks before the first planned product installation.
Build and Development Phase	Release Agent collaborates with Project Team, as necessary	Project team manages product data in the tool
At least five (5) business days before CD#2 or release date	Release Readiness Audit	Project team ensures that final test data, other data, and artifacts are in the tool, ready for the Release Agent's audit
By noon, one (1) business day before CD#2 or release date	Release Readiness Report	Release Agent publishes final Release Readiness Report