



VistA Evolution Program

Immunization: ProPath and Open Source Applications

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Agenda

- **Background on ProPath**
- **Milestone Reviews and External Reviews**
- **Process to National Deployment**
- **Issues affecting Open Source software use by VA**





Background on ProPath

- **Background:**

An outcome of the failed VistA Scheduling project. Purchased in entirety from IBM in 2010 with no modifications to processes for Government use. Originally intended in the VA as the standard for Software Development Life Cycle (SDLC) projects. Requires a **Customer Facing Deliverable** at no more than **six (6) month** intervals. Projects are allowed to take **no more than two years** without a waiver.

Mandated by the VA CIO in 2010 as the Project Management Accountability System (PMAS) for Office of Information Technology (OIT) Product Development (PD) projects. Directive amended in 2011 to apply to all VA IT projects regardless of organization. Added hardware and infrastructure projects in late 2011.





Background on ProPath

- **Background (Continued):**

Currently in Version 22 as of 12/2014. Additional processes for all possible projects including Administration duties (Procurement, Contractor Onboarding, Open Source communications, etc.). In excess of 200 document and artifact templates for use.

- **PMAS and ProPath External Link:**

- www.voa.va.gov

- **PMAS and ProPath Internal Link:**

- <http://vaww.oed.wss.va.gov/process/home.aspx>





ProPath Process Map Example

Product Build

home overview goals raci help

Project Manager

Identity and Access Management Project Manager

Configuration Manager

Software Quality Assurance Analyst

Test Analyst

Developer

Technical Writer

BLD-7
Provide
to Open Source

Open
Source
Related?

TO: AAA
Assessment
and Authorization
Process

BLD-11
Conduct
User Functionality
Test

BLD-12
Prepare 508
Conformance
Validation
Package

BLD-13
Submit 508
Conformance
Validation
Package

BLD-5
Create
IAM Service
Integration Build

BLD-4
Create
Product Build

BLD-6
Create
System Build



BLD-8
Perform
Component
Integration Test

BLD-9
Perform
System Tests

BLD-10
Perform
VA SQA and VA
Development
Assessments

BLD-1
Develop
Product Component

BLD-2
Perform
Product Component
Test

All
Components
Complete?



BLD-3
Obtain
Integration Control
Registration (ICR)
Approval

BLD-14
Create
Release Notes



ProPath Process Example

Product Build: BLD-7 Provide to Open Source

☐ home ☒ process ☐ goals

Description

The Project Manager submits a list of required software code, system builds, and artifacts as described in the Open Source Submission Checklist to OIT PD Open Source, Configuration & Tools Management Division via the mail group **OIT Open Source Software Delivery** or OSSOFT@va.gov.

Artifacts Used

Product and Project Artifacts
Software Code
System Builds
Version Description Document

Artifacts Created

Updates to Open Source Community

Responsible Role

Project Manager

Tools and Websites

- IBM Rational ClearCase

For access to the above Tools and Websites and others associated with this process click [here](#).

Standards

- Open Source Code in Flight Communication Strategy Guide
- Open Source Submission Checklist

For access to the above Standards and others associated with this process click [here](#).

More Info....

The Open Source Submission Checklist lists different artifacts and/or system builds/codes that are to be submitted at certain intervals or milestones to OIT PD Open Source, Configuration & Tools Management Division, as a product is being built. As project managers are developing their project plans, providing code and artifacts to OIT PD Open Source, Configuration & Tools Management Division should be considered and incorporated into the plan both based on specific milestones and time intervals basis, as specified in the Open Source Submission Checklist.



Milestone Reviews

- **Milestone Reviews (MS) are designed as checks or gates to allow a project to continue.**
 - Consists of a review and approval Board including Deputy CIO, Section 508, System Design & Engineering (SDE), Product Support, Enterprise Architecture, and Budget. A Pre-Brief is required at least one week prior to each. **No allocation of funding will occur until MS approval for the specific period.**
 - MS Reviews are spread throughout the SDLC:
 - **MS0** authorizes Planning to begin. No more than 10% of total budget can be spent during this period. Permission required if in excess of two months.
 - **MS1** authorizes Increment 1 to begin, and any subsequent Increments must perform another MS1 Review.
 - **MS2** authorizes either National Deployment to begin (for VistA patches) or Production deployment of an application / enhancement. Sustainment of the delivery will not occur until MS2 is approved.
 - **MS3** is preparations for project completion. Production environment deliveries as briefed in the MS1 Review must be complete.
 - **MS4** is validation of the deliveries in Sustainment and the project was properly closed.





Process to National Deployment

Initial Operating Capability (IOC) Entry Request	VHA	10 business days processing
Product Support (HPS) Review	HPS	20 business days processing
IOC Start	Local VistA sites	Minimum total three sites of different sizes (small, medium, large)
IOC End	Local VistA sites	14 calendar days after Production install error free
MS2 Review	OIT	Must schedule one month in advance.
IOC Exit Request	VHA	10 business days processing
Post to FORUM	HPS	4 business days processing after VHA approval
National Deployment	All VistA instances	30 calendar days for compliance once posted to FORUM

This Waterfall process takes >90 days with no errors or delays





ProPath Issues affecting Open Source "Plug and Play"

- **Any errors in testing must be corrected in a timely fashion or the six month Increment will be exceeded.**
- **Testing environments must be able to support all applications used in the solution.**
- **All components of the solution must be Technical Reference Model (TRM) conformant, be at the latest National version for security and functionality, and pass the Enterprise Architecture review.**





ProPath Issues affecting Open Source "Plug and Play"

- **All applications with a Presentation Layer must be Section 508 Conformant. There is no waiver capability for this requirement.**
- **Worldspace is the preferred scan tool for VA 508 testing. Others are: Firebug, FireEyes, Java Ferret, Microsoft Object Inspector, Wave, etc.**
- **FireEyes results are displayed in priorities.**
 - Critical Violation, (1) (Can a user not perform the objective using an accessibility tool and the keyboard)
 - Serious Violation (2) (There is a work around, but it is difficult)
 - Critical Potential Violation (1)
 - Serious Potential Violation (2)
 - Moderate Violation (3)
 - Minor Violation (4)
 - Moderate Potential Violation (3)
 - Minor Potential Violation (4)

http://vaww.section508.va.gov/Audit_Tools_Resources.asp





508 Conformance for ProPath affecting Open Source Applications

Potential
Violation 090301-A

Node has a mouse event handler but no equivalent keyboard event handler
Mouse event: mouseover
handler: (function (cl){return typeof bl!==aC&&(!cl || bl.event.triggered!==cl.type)?
bl.event.dispatch.apply(cc.elem,arguments):undefined})
Node has a mouse event handler but no equivalent keyboard event handler
Mouse event: click
handler: (function (cl){return typeof bl!==aC&&(!cl || bl.event.triggered!==cl.type)?
bl.event.dispatch.apply(cc.elem,arguments):undefined})

Potential
Violation 090301-A

Node is not focussable or does not have an appropriate role
Mouse event: mouseover
handler: (function (cl){return typeof bl!==aC&&(!cl || bl.event.triggered!==cl.type)?
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Potential
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Node has a mouse event handler but no equivalent keyboard event handler
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bl.event.dispatch.apply(cc.elem,arguments):undefined})
Node has a mouse event handler but no equivalent keyboard event handler
Mouse event: dblclick
handler: (function (cl){return typeof bl!==aC&&(!cl || bl.event.triggered!==cl.type)?
bl.event.dispatch.apply(cc.elem,arguments):undefined})

Violation 7159 A link with the word 'Skip ' was not located on the page.

http://vaww.section508.va.gov/Audit_Tools_Resources.asp





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Questions?

