

These comments reference a document prepared by HSITES called “Projects to Improve Software Patch Installation Efficiency”. The document discussed the VistA Maintenance Challenge and the New Service Request for an “Installation Wizard”.

As a first comment, we recommend the two initiatives be pursued as separate projects. This is primarily because each is focused on a different software environment. Following a summary of those differences, considerations and recommended actions for each are discussed.

## **Separate Initiatives**

HSD&D recommends that these two software installation requests be handled separately for the following reasons:

- Stability and understanding of target software domain
  - VistA Maintenance Challenge is focused on M-based VistA code which is a well-understood and relatively stable software domain
  - Installation Wizard is focused on HealtheVet-VistA which is still a domain that is not fully formulated and is thus a far less-stable domain
- Installation on multiple architectural tiers
  - VistA Maintenance Challenge is focused on a single-tier installation – the M code of VistA
  - Installation Wizard is focused on multiple tiers; for Care Management it was the User Interface tier and the Java Virtual Machine, ancillary systems (e.g., Context Vault), and supporting M-code.
- Reuse of IRM skills and practices
  - VistA Maintenance Challenge builds upon skills and practices the field executes daily and is a well understood process
  - Installation Wizard will probably not match one-for-one to the installation process used today for VistA and its GUIs (e.g., CPRS) and is expected to require new skills and practices

## **VistA Maintenance Challenge**

Background: The VistA Maintenance Challenge initially consisted of two proposals – A and B. Proposal A was a more modest solution and HSD&D was tasked to focus on it for delivery. As work progressed, the proposal submitters continued to discuss the proposals and it became clear that they really wanted to advance not only Proposal B, but an enhanced version of that proposal. As a result, the scope of the deliverable became unclear to HSD&D. As a result, HSD&D placed Proposal A “on hold” pending recommendations from HSITES in early June 2004. Today, the VistA Maintenance Challenge effort remains in an “on hold” status. It was placed in this status because HSD&D had not received concurrence from HSITES on the work outlined for Proposal A. During the work on Proposal A, Proposal B continued to shift in scope – as is described now as Proposal B Enhancements. HSD&D had been working on the initial approach to complete Proposal A and then, if HSITES advised, to move to Proposal B (but not the enhancements). As HSD&D’s efforts progressed, it appeared that the activity and energy of Proposal B Enhancements would create a duplicate work effort and require that Proposal A be reworked.

Recommendation: In the paper, HSITES makes a good case to combine all three proposals (Proposal A, Proposal B and Proposal B Enhancements). HSD&D recommends that HSITES confirm that it wants HSD&D to concentrate its efforts solely on Proposal B Enhancements, thereby achieving the full scope of patch enhancements for VistA M-based software. With such a recommendation, HSITES agrees, as the customer for this work, to also manage the scope creep for Proposal B Enhancements to ensure that a final specification can be documented as a key initial step of the work effort. From these specifications, HSD&D will complete its effort to ensure the software is compliant with VistA software regulations and HSITES can establish its project plans to perform testing of the product and advance it to release.

Proposed Timeline for Proposal B: This timeline reflects the full scope of effort for HSD&D to have Proposal B ready for field testing; HSITES is responsible for overseeing all field testing. At this time, HSD&D has not seen the full scope of Proposal B so the timeline is based on an earlier version of Proposal B combined with what we

could extrapolate from the paper titled “Projects to Improve Software Patch Installation Efficiency”. We have used the timeline for Proposal A as our baseline; Proposal A was well detailed and smaller in scope than Proposal B and smaller still than Proposal B Enhanced. Proposal A’s work effort for HSD&D was planned to take 4 months. Thus, we project that the milestones for Proposal B Enhanced would minimally be as follows. The project start date is dependent on HSD&D receiving a full description of Proposal B. HSD&D may need to adjust these dates when the full scope of Proposal B is available. HSD&D also notes that the developer who worked on Proposal A has since left OI; a new developer needs to be identified and “come up to speed”.

- Project Start 10/4/04
- Specifications Complete 11/15/04
- Coding Complete 1/17/05
- Unit Testing Complete 3/1/05
- Release to HSITES for field testing 3/1/05

## Installation Wizard

Background: HSD&D first saw this proposal as a memo HSITES sent to the IDMC (dated 5/18/04). Via e-mail exchanges, HSD&D indicated that this effort would be done as part of the overall Foundations and Desktop work. The Foundations work essentially creates Kernel-like support for HealtheVet-VistA and the Desktop effort creates the user “shell” for GUI-based support. Just as KIDS is a part of Kernel, we see a deployment tool for HealtheVet-VistA as part of the Foundations work. Deployment of a HealtheVet-VistA application will involve Desktop (workstation) modules, business/application layer software (Java on the server) and database software (Cache SQL). This architecture presents more complex deployment needs than VistA, and we expect the deployment solution will be developed incrementally both in scope and level of automation. At this time, we are prioritizing deployment work to support the rollout of CPRS-R with the HealtheVet Desktop, in order to ensure that the CPRS-R project meets its milestones for FY05. CPRS-R will not use all the layers of HealtheVet-VistA (e.g., it will not use Cache SQL), so the initial deployment support will focus on the near term needs.

Recommendation: HSD&D should to pursue the Installation Wizard as a separate initiative (HSD&D refers to this initiative as the Deployment Toolset). We find that the HSITES white paper does a very good job of laying out the kind of research needed to look at the big picture solution (or solutions). As noted above, some of that research may fall out of the drive to do the CPRS Rehosting/Desktop deployment; other topics will probably have to wait. HSD&D would very much like to partner with HSITES as this effort makes progress to leverage the experience HSITES has with the field operations.

Proposed Timeline for development of specifications for the HealtheVet Deployment Toolkit: The overall approach should be to evolve the deployment toolset process based on emerging needs, driven by application rollouts. The emphasis is on incremental development of deployment tools eventually leading to a comprehensive deployment platform. This approach allows the deployment platform to evolve with the evolving customer needs, and allow the application of lessons learned to later work. After an initial effort on some general work, two parallel efforts need to be active: a detailed specifications track to define near term work, and a “vision” track to document long term needs. Overall, the entire specifications effort is expected to take 16-18 weeks. During this time, HSD&D will continue to development a deployment approach for CPRS ReHost and will adapt that, to the extent feasible, to meet all near-term specifications.

- Project Start (assumed date) 10/4/04
- Identify high-level long-term needs 10/18/04
- Identify near-term deployment needs 11/1/04
- Identify industry standards to leverage 11/15/04
- Hold stakeholders meeting 12/13/04
- Hold stakeholders meeting focus for near-term 1/10/04
- Publish final specs for near-term 1/24/04
- Validate near-term against architecture 2/7/04
- Document specs for long-term 1/10/04
- Validate long-term against architecture 2/7/04