Mobile Electronic Documentation (TIU*1.0*315)

Deployment, Installation, Back-Out, and Rollback Guide

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Revision History

Date	Version	Description	Author
07/2018	1.0	Initial Release	HPS Clinical Sustainment Team

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

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1. Introduction

This document describes how to deploy and install the Mobile Electronic Documentation v2.3.315.1, as well as how to back-out the product and rollback to a previous version or data set. This document is a companion to the project charter and management plan for this effort. In cases where a non-developed COTS product is being installed, the vendor provided User and Installation Guide may be used, but the Back-Out Recovery strategy still needs to be included in this document.

1.1. Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the Mobile Electronic Documentation v2.3.315.1 will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2. Dependencies

The Mobile Electronic Documentation v2.3.315.1 project is for installation on a fully patched VistA system. There is also a Graphical User Interface (GUI) component that should be running on a Windows system.

1.3. Constraints

Mobile Electronic Documentation v2.3.315.1 and the associated M patch are expected to be installed on existing VistA platforms. The hardware may reside at local or regional data centers. Mobile Electronic Documentation v2.3.315.1 utilizes existing, nationally released security controls to control access.

2. Roles and Responsibilities

No one single entity oversees decision making for deployment, installation, back out and rollback of Mobile Electronic Documentation v2.3.315.1. Rather, the Release Agent and Release Coordinators under the Veterans In Process will meet and approve deployment and install from an OIT perspective. If an issue with the software arises, then the facility CIO and other site leadership will meet along with input from Patient Safety and Health Product Support to initiate a back out and rollback decision of the software along with Region and Site leadership. The following table provides Mobile Electronic Documentation v2.3.315.1 project information.

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

Team	Phase / Role	Tasks
Site personnel in conjunction with IT support – which may be local or regional.	Deployment	Plan and schedule deployment (including orchestration with vendors)
Site personnel in conjunction with IT support – which may be local or regional.	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.
Site personnel.	Deployment	Test for operational readiness

Team	Phase / Role	Tasks
Site personnel in conjunction with IT support – which may be local or regional. The IT support will need to include person(s) to install the KIDS build as well as the personnel to deploy the GUI – which may be done on each machine, a shared network and/or the Citrix access gateway	Deployment	Execute deployment
Site personnel in conjunction with IT support – which may be local or regional. The IT support will need to include person(s) to install the KIDS build as well as the personnel to deploy the GUI – which may be done on each machine, a shared network and/or the Citrix access gateway	Installation	Plan and schedule installation
N/A – will work under the VistA ATO and security protocols.	Installation	Ensure authority to operate and that certificate authority security documentation is in place
N/A – no equipment is being added.	Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes
N/A – no new functionality is being introduced.	Installations	Coordinate training
Facility CIO and IT support – which may be local or regional.	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)
Hardware and System support – no changes. Software support will be the HPS Clinical Sustainment team.	Post Deployment	Hardware, Software and System Support

3. Deployment

The deployment is planned as a standard VistA National Patch Module patch rollout. Once approval has been given to nationally release, the patch TIU*1.0*315 will be released from the National Patch Module. At this point, it will be available for installation and deployment at all sites.

Scheduling of test/mirror installs, testing and deployment to production will be at the site's discretion. It is anticipated there will be a 30-day compliance period.

3.1. Timeline

There is no timeline specifically for deployment. This is considered a maintenance release and installation will be at the site's discretion, within the constraints of the compliance period for the release.

3.2. Site Readiness Assessment

This section discusses the locations that will receive the Mobile Electronic Documentation v2.3.315.1 deployment.

3.2.1. Deployment Topology (Targeted Architecture)

Mobile Electronic Documentation v2.3.315.1 will be deployed to each VistA instance. That will include local sites as well as regional data processing centers. The executable will also be deployed to the Citrix Access Gateway.

3.2.2. Site Information (Locations, Deployment Recipients)

The initial deployment will be to IOC sites for verification of functionality. Once that testing is completed and approval is given for national release, Mobile Electronic Documentation v2.3.315.1 (TIU*1.0*315) will be deployed to all VistA systems.

The Production (IOC) testing sites are:

- Charlie Norwood VAMC (Augusta, GA)
- Central Plains HCS (Iowa City, IA)

3.2.3. Site Preparation

There is no special preparation required for Mobile Electronic Documentation v2.3.315.1. A fully patched VistA system is the only requirement.

3.3. Resources

N/A

3.3.1. Facility Specifics

N/A

3.3.2. Hardware

N/A

3.3.3. Software

N/A

3.3.4. Communications

Service Delivery and Engineering (SDE) Field Implementation Services will be sending out an Action item and National Change Order prior to the release of Mobile Electronic Documentation v2.3.315.1 advising them of the upcoming release.

Mobile Electronic Documentation v2.3.315.1 will be deployed using the standard method of patch release from the National Patch Module rather than a phased deployment. When patch TIU*1.0*315 is released, the National Patch Module will send a notification to all the personnel who have subscribed to those notifications.

3.3.4.1. Deployment/Installation/Back-Out Checklist

The deployment and installation will be performed by site support personnel once it is nationally released.

4. Installation

4.1. Pre-installation and System Requirements

Mobile Electronic Documentation v2.3.315.1 assumes a fully-patched VistA system.

4.2. Platform Installation and Preparation

[VistA] This patch should be loaded during non-peak hours to minimize disruption to users. Installation will take less than 5 minutes. Users may remain on the system.

[GUI] The time to deploy the GUI will depend on which method the site utilizes for running the executable (network share, Citrix, individual workstation installs, etc.)

4.3. Download and Extract Files

Mobile Electronic Documentation v2.3.315.1 is being released as a PackMan Message distributed through Forum combined with a .ZIP file containing the GUI file(s).

The preferred method is to retrieve files from REDACTED.

This transmits the files from the first available server. Sites may also elect to retrieve files directly from a specific server.

Sites may retrieve the software and/or documentation directly using Secure File Transfer Protocol (SFTP) from the ANONYMOUS.SOFTWARE directory at the following

Table 2: OI Field Offices

Location	Site
REDACTED	REDACTED
REDACTED	REDACTED

Documentation can also be found on the VA Software Documentation Library at:

http://www.va.gov/vdl/

Table 3: Mobile Electronic Documentation v2.3.315.1 Files to be Downloaded

File Name	File Contents	Download Format
TIU_1_315.ZIP	Mobile Electronic Documentation executable and fresh database	Binary
TIU_1_315_Upgrade.ZIP	Mobile Electronic Documentation executable	Binary

4.4. Database Creation

N/A

4.5. Installation Scripts

N/A

4.6. Cron Scripts

N/A

4.7. Access Requirements and Skills Needed for the Installation

Installation of Mobile Electronic Documentation v2.3.315.1 requires the following to install:

- Programmer access to VistA instance and ability to install KIDS build.
- Citrix Access Gateway (CAG) installs – access/ability to upload to the CAG.
- Network Share installs – access/ability to upload executable to the network share location.
- Individual work-station installs – access/ability to push executable to required work stations.

4.8. Installation Procedure

4.8.1. TIU*1.0*315 VistA Installation

1. Choose the PackMan message containing this patch and invoke the INSTALL/CHECK MESSAGE PackMan option.
2. Select Kernel Installation & Distribution System Option: Installation

    | 1 | Load a Distribution |
    | 2 | Verify Checksums in Transport Global |
    | 3 | Print Transport Global |
    | 4 | Compare Transport Global to Current System |
    | 5 | Backup a Transport Global |
    | 6 | Install Package(s) |
    | | Restart Install of Package(s) |
    | | Unload a Distribution |

3. From this menu, must use the [Backup a Transport Global] option to create a back out Patch
4. Also from this menu, you may elect to use the following options:
    - Compare Transport Global to Current System
    - Verify Checksums in Transport Global
5. Use the Install Package(s) options and select the package TIU*1.0*315
6. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//', respond NO.
7. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//', respond NO.

4.8.2. Mobile Electronic Documentation v2.3.315.1 GUI Installation

The ZIP files contain the Mobile Electronic Documentation GUI executable and associated files. Download the ZIP file and extract all the files.

Due to the nature of the bug presented in the prior TIU*1.0*311 patch, version 2.3.315.1 is being offered as two separate downloads.

One download is for current users of TIU*1.0*311 and allows them to retain their current notes. The prior bug would not allow for these notes to be imported into CPRS prior to the install. Because of this it is recommended for users of the prior software to keep their database and just use the new executable and import DLL.

The second method is for fresh installs and is more traditional. This will install both the GUI application as well as a fresh empty database.

4.8.2.1. Mobile Electronic Documentation GUI Methods of Installation

The following methods of installation of Mobile Electronic Documentation are available. Sites' choice of which method(s) to use will depend upon Regional/VISN policies, Local Area Network (LAN) performance or other local circumstances. User requirements, physical location and methods of connection to the VA network may warrant more than one of the options below to be used.

- Network (shared) installation:

  This method is typically the simplest to maintain, providing the local network infrastructure is robust enough to handle the additional traffic caused by users running the GUI executable (MED.exe) across the LAN.

  The GUI executable (MED.exe), and help file (MED.chm), are copied to a network shared location. Users are provided with a desktop shortcut to run MED.exe directly from the network shared drive. The necessary command line parameters (VistA server address or name and RPC Broker Port number) are entered in the "Target" field of the shortcut properties

  At the time of a Mobile Electronic Documentation version update the copy of MED.exe and the help file are simply replaced, on the network share, with the new version.

  Any users requiring access to another site's Mobile Electronic Documentation system can be given an alternate desktop shortcut with command line parameters appropriate to the intended target VistA system.

  If a user requires access to an older or newer version of Mobile Electronic Documentation (e.g. for testing purposes) a different version of MED.exe can be placed in a separate network location and the user be supplied with an appropriate alternate shortcut (different Target path and different VistA server command line parameters).

- Citrix installation:

  The GUI executable (MED.exe) and associated files are installed and run from a remote workstation, and the user views the remote workstation's screen on their local workstation.

  For the local site users, this method is on a similar level to the Network (shared) installation above. The users' workstations require only an appropriate shortcut (and the necessary Citrix Access Group (CAG) infrastructure).

  Note: For issues with CAG, please contact your local or national help desk.

  For the Citrix Farm administrator, this method involves installations on the host in a similar manner to either the Gold Path or the Direct Access methods outlined below.

- Local workstation installation:

  This is the "standard" method of installation where the GUI executable (**MED.exe**) and associated files are installed on and run from the user's local workstation. This method of installation initially requires the distribution and installation of a Microsoft Software Installation (MSI) file to each user's workstation, typically accomplished via SCCM. This is outside the scope

of the Sustainment team. A National package (**Mobile Electronic Documentation v2.3.315.1**) has been prepared and made available to Regional COR Client Technologies leadership.

- Manual install:

    This method is used for users who wish to have a production instance and a non-production instance running on the same machine. An example would be users who are testing this software or needs to have access to a pre-production (mirror) VistA instance.

1. Locate the TIU_10_315.ZIP and unzip the file.
2. Copy the contents of the zip archive to a test directory, for example, C:\MEDGUITest. You may need to create this new directory.
3. Run the MedBatch.bat file as outlined in Appendix A. The system needs to be set to test during the testing phase. This will adjust the registries to point to the test DLL instead of the production one.

    Note: You need to have a user with Administrator rights to this PC to complete these steps.
4. Create a Shortcut and name it "Test MEDv315". This is to give the user another visual cue that this is not the normal Mobile Electronic Documentation icon.
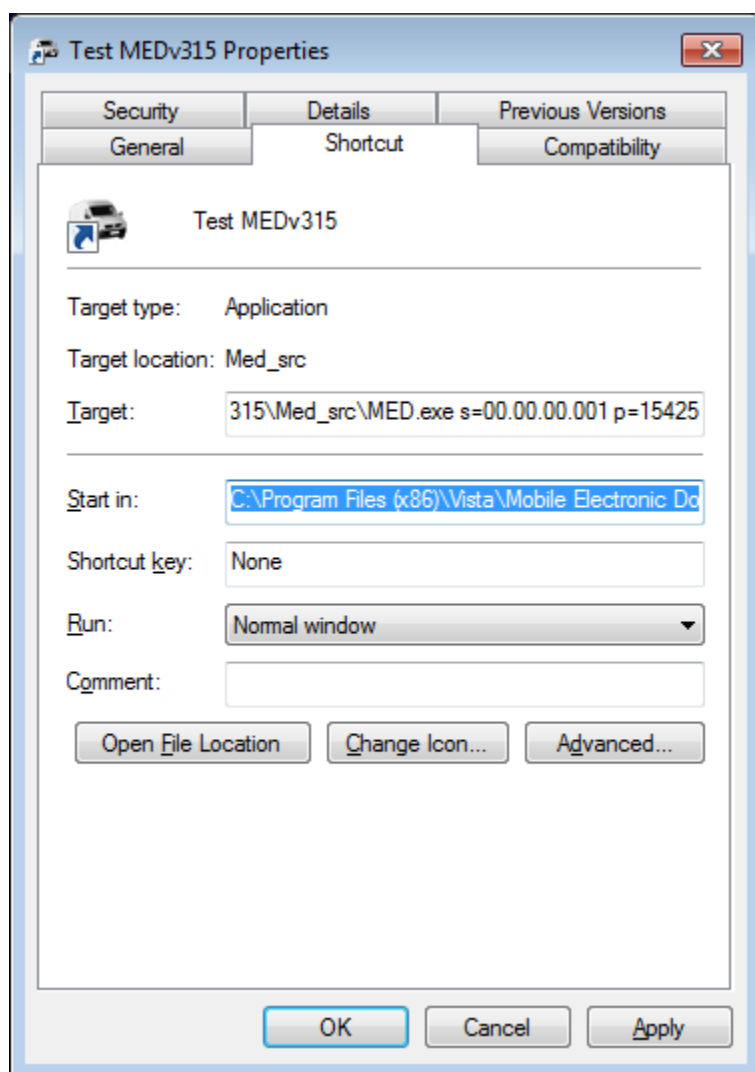
Figure 1: Shortcut Icon for Test MEDv315

5. Determine the DNS server name or IP address for the appropriate VistA server.
6. Determine the Broker RPC port for the VistA account.

7. Enter IP (or DNS name) and RPC port in the Target field of the Shortcut properties (or use ServerList.exe).

Figure 2: Test MEDv315 Properties

Note: The server and port number shown above are not real and are for example only.

4.9. Installation Verification Procedure

[VISTA] Verify the checksum of routine TIU315P is equal to the checksum listed on the patch description.

[GUI] Launch the Mobile Electronic Documentation GUI and verify the splash screen now announces that you are running version 2.3.315.1.

4.10. System Configuration

N/A

4.11. Database Tuning

N/A

5. Back-Out Procedure

5.1. Back-Out Strategy

[VistA] In section 8.4.1 (step 3) the individual installing the patch used option [Backup a Transport Global] to create a packman message that will revert the Mobile Electronic Documentation components to their pre-v2.3.315.1 state. This includes everything transported in the TIU*1.0*315 (Mobile Electronic Documentation v2.3.315.1) build. If for any reason that PackMan Message cannot be located, Contact HPS Sustainment: Clinical (see section 5.6)

[GUI] To revert to the Mobile Electronic Documentation GUI, the 2.3.311.6 GUI would have to be redistributed

5.2. Back-Out Considerations

5.2.1. Load Testing

No load testing was performed on Mobile Electronic Documentation v2.3.315.1. This was a maintenance release to correct defects discovered in Mobile Electronic Documentation 2.3.311.6. There was no additional functionality included.

5.2.2. User Acceptance Testing

User acceptance testing was conducted by the three test sites listed in section 3.2.2.

The sites followed the provided test plan and executed the test cases according to the plan for the first build of TIU*1.0*315. The sites either passed or failed any item based on testing. The tests were performed by Clinical Application Coordinators at each site who are familiar using the application. The test cases were then delivered with concurrence by the sites to the HPS Clinical Sustainment team. Any items that failed were re-developed and then sent back to the sites for the next build and further acceptance testing following the same process. Once in production, the same final test cases from the last build were tested in production. No subsequent builds were created as the test cases passed and sites signed off on concurrence for release of the product.

5.3. Back-Out Criteria

Back-out would only be considered if there was a catastrophic failure that causes loss of function for the application and a significant patient safety issue.

5.4. Back-Out Risks

Backing out Mobile Electronic Documentation v2.3.315.1 would result in the re-instatement of the issues addressed in Mobile Electronic Documentation v2.3.315.1.

In addition, there is a risk that the process, which would be performed only in an emergent situation, would significantly impact patient care due to the interruption.

5.5. Authority for Back-Out

The Facility CIO has the final authority to require the rollback and accept the associated risks

5.6. Back-Out Procedure

These steps assume that the only reason to consider a back-out for Mobile Electronic Documentation v2.3.315.1 is in the event of a catastrophic failure.

NOTE: The Vista Changes and GUI changes are independent of each other. In the case of a catastrophic failure of the GUI, the VistA Patch can remain in the system; consequently, if the catastrophic failure is in the VistA side, the site can back out the VistA patch and continue to use the updated GUI

1. Contact the HPS Clinical Sustainment implementation team to notify them there has been a catastrophic failure with Mobile Electronic Documentation v2.3.315.1. Use the following contacts:

Figure 3: HPS Clinical Sustainment Contacts

Name & Title	Email	Telephone Number
REDACTED	REDACTED	REDACTED
REDACTED	REDACTED	REDACTED

2. If the decision is made to proceed with back-out and rollback, the HPS Sustainment Clinical team be available to assist sites that have misplaced their backup PackMan message, as well as give you the instructions on downloading the executable.

3. [VistA] (if needed)

   a. Open the Backup MailMan Message

   b. At the "Enter message action (in IN basket): Ignore//" prompt Enter "X" for [Xtract PackMan]

   c. At the "Select PackMan function:" prompt select [INSTALL/CHECK MESSAGE]. The old routine is now restored

   d. [GUI] (if needed) Coordinate with the appropriate IT support, local and regional, to schedule the time to install TIU*1.0*311 and to push out / install the previous GUI executable.

4. Once TIU*1.0*311 and Mobile Electronic Documentation 2.3.311.6 have been installed, verify operations before making available to all staff.

5.7. Back-out Verification Procedure

1. Ensure the 2.3.311.6 executable launches properly.
2. Perform site-specific testing appropriate to the areas where the catastrophic failure was identified.

6. Rollback Procedure

6.1. Rollback Considerations

N/A

6.2. Rollback Criteria

N/A

6.3. Rollback Risks

N/A

6.4. Authority for Rollback

The Facility CIO has the final authority to require the rollback and accept the associated risks

6.5. Rollback Procedure

Back-out will automatically rollback version.

6.6. Rollback Verification Procedure

N/A

A. M.E.D. Batch

The M.E.D. Batch is used to help setup new users as well as assist in testing efforts. This tool will set the system up for testing or production by updating system registries as well as registering the import dll used by CPRS to import patient TIU notes. The test setup is required for any machine using production and test installs.

A.1. New User Install

1. Run MEDBatch.bat (administrative privileges required)
2. Choose if you are currently using a screen reader or not
3. Choose New Setup Tools
4. Choose Yes to create the new registries
5. Follow any prompts

A.2. Set system to test/production

1. Run MEDBatch.bat (administrative privileges required)
2. Choose if you are currently using a screen reader or not
3. Choose Testing Tools
4. Ensure that the production and test paths are correct. If not see the Setting system paths section below
5. To set the system to Test, choose Set system to test and follow any prompts
6. To set the system to Production, choose Set system to production and follow any prompts

A.3. Patch specific test

1. Run MEDBatch.bat (administrative privileges required)
2. Choose if you are currently using a screen reader or not
3. Choose Testing Tools
4. Choose Patch Specific Setup
5. Follow the prompts to perform patch specific test

*For TIU*1.0*315, this will copy the local production database over to the test folder to validate a fix for importing TIU documents via CPRS. This patch now moves the database to the user's AppData folder for use. Since there maybe times where this test may be re-ran, this process also renames the database that is out there so a new copy can be brought over. See the following path
c:\Users\[username]\AppData\Local\Mobile Electronic Documentation\db

A.4. Setting system paths

1. Run MEDBatch.bat (administrative privileges required)
2. Choose if you are currently using a screen reader or not
3. Choose Testing Tools
4. Choose Change file locations
5. Follow the prompts to either change the production or test location.

**Note, to make this change permanent you will need to edit the MEDBatch.bat and the MEDBatch508.bat file. Please make the change to the two variables at the top of the file (ProdLoc and TestLoc)