Department of Veterans Affairs
Mental Health – Suicide Prevention
Suicide Prevention Package

August 2018
Version 1.2

Deployment, Installation, Back-Out, and Rollback Guide for YS*5.01*134

Submitted as CLIN 0001AX
Contract VA118-16-D-1007, Task Order VA11817F10070006
Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
<th>Description</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2018</td>
<td>1.2</td>
<td>YS<em>5.01</em>134 updates</td>
<td>Jeffrey Parnes</td>
</tr>
<tr>
<td>July 2018</td>
<td>1.1</td>
<td>YS<em>5.01</em>134 updates</td>
<td>Jeffrey Parnes</td>
</tr>
<tr>
<td>March 2018</td>
<td>1.0</td>
<td>Initial Version</td>
<td>Jeffrey Parnes</td>
</tr>
</tbody>
</table>

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Guide (DIBO&RG) for new products going into the Veterans Affairs (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 particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the DIBO&RG 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.
Table of Contents

1 Introduction ................................................................................................................... 5
  1.1 Purpose ..................................................................................................................... 5
  1.2 Dependencies .......................................................................................................... 5
  1.3 Constraints ................................................................................................................ 5

2 Roles and Responsibilities ............................................................................................... 5

3 Deployment .................................................................................................................... 6
  3.1 Timeline ..................................................................................................................... 6
  3.2 Site Readiness Assessment ....................................................................................... 6
    3.2.1 Deployment Topology (Targeted Architecture) ............................................... 6
    3.2.2 Site Information (Locations, Deployment Recipients) ..................................... 6
    3.2.3 Site Preparation ................................................................................................. 6
  3.3 Resources .................................................................................................................. 7
    3.3.1 Facility Specifics (optional) ............................................................................... 7
    3.3.2 Hardware ........................................................................................................... 7
    3.3.3 Software ............................................................................................................ 7
    3.3.4 Communications ............................................................................................... 7

4 Installation ...................................................................................................................... 7
  4.1 Pre-installation and System Requirements ............................................................ 7
  4.2 Platform Installation and Preparation ................................................................. 7
  4.3 Access Requirements and Skills Needed for the Installation ......................... 8
  4.4 Installation Procedure ......................................................................................... 8
  4.5 Installation Verification Procedure .................................................................... 9
  4.6 System Configuration ......................................................................................... 10
  4.7 Database Tuning ................................................................................................. 10

5 Back-Out Procedure .................................................................................................... 10
  5.1 Back-Out Strategy ................................................................................................. 10
  5.2 Back-Out Considerations ................................................................................... 10
  5.3 Back-Out Criteria ............................................................................................... 10
  5.4 Back-Out Risks ................................................................................................... 10
  5.5 Authority for Back-Out ....................................................................................... 10
  5.6 Back-Out Procedure ........................................................................................ 11
  5.7 Back-out Verification Procedure .................................................................. 11

6 Rollback Procedure .................................................................................................... 12
  6.1 Rollback Considerations ............................................................................... 12
  6.2 Rollback Criteria ............................................................................................. 12
6.3 Rollback Risks .............................................................................................................. 12
6.4 Authority for Rollback .................................................................................................. 12
6.5 Rollback Procedure ...................................................................................................... 12
6.6 Rollback Verification Procedure .................................................................................... 12
Appendix A - Acronyms ..................................................................................................... 13
1 Introduction

This document describes how to deploy and install the patch YS*5.01*134 of the Mental Health package, 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 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 Mental Health patch YS*5.01*134 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

It is assumed that this patch is being installed into a fully patched Veterans Health Information System and Technology Architecture (VistA) system. In particular, patch YS*5.01*121 must be installed prior to the installation of this patch.

1.3 Constraints

There are no constraints beyond the installation into an up-to-date VistA system.

2 Roles and Responsibilities

The following describes the roles and responsibilities associated with the testing and release of YS*5.01*134. This is a VistA patch that will be deployed via the normal Mailman route.

<table>
<thead>
<tr>
<th>Team</th>
<th>Phase / Role</th>
<th>Tasks</th>
<th>Project Phase (See Schedule)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Deployment</td>
<td>Determine and document the roles and responsibilities of those involved in the deployment.</td>
<td>Design</td>
</tr>
<tr>
<td>Software Quality Assurance (SQA), Test Sites</td>
<td>Deployment</td>
<td>Test for operational readiness</td>
<td>Test</td>
</tr>
<tr>
<td>Project Manager, Release Manager</td>
<td>Deployment</td>
<td>Execute deployment</td>
<td>Release</td>
</tr>
<tr>
<td>Individual VistA Sites</td>
<td>Installation</td>
<td>Plan and schedule installation</td>
<td>Release</td>
</tr>
</tbody>
</table>
3 Deployment

The deployment is planned as a simultaneous (National Release) rollout. Once approval has been given to nationally release, YS*5.01*134 will be available for installation and deployment at all sites.

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

3.1 Timeline

The deployment and installation are scheduled to run from April through August 2018 as depicted in the Master Deployment Schedule in the Suicide Prevention Program (SPP) Project Management Plan.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the YS*5.01*134 deployment.

3.2.1 Deployment Topology (Targeted Architecture)

MHA Update (YS*5.01*134) will be deployed to each VistA instance. This includes local sites as well as regional data centers. The executable and associated files will also be deployed to client workstations.

3.2.2 Site Information (Locations, Deployment Recipients)

The initial deployment will be to Initial Operating Capability (IOC) sites for verification of functionality. Once testing is completed and approval is given for national release, MHA Update (YS*5.01*134) will be deployed to all VistA systems.

The Production IOC testing sites are:

- Milwaukee Veterans Affairs Medical Center (VAMC)
- Orlando VAMC

3.2.3 Site Preparation

Other than a fully patched VistA system, there is no other preparation required.
3.3 Resources

3.3.1 Facility Specifics (optional)
N/A

3.3.2 Hardware
N/A

3.3.3 Software
N/A

3.3.4 Communications
When MHA Update (YS*5.01*134) is released, the released-patch notification will be sent from the National Patch Module to all personnel who have subscribed to notifications for the Mental Health package.

4 Installation

4.1 Pre-installation and System Requirements
Mental Health patch YS*5.01*121 must be installed prior to the installation of YS*5.01*134. The environment check for YS*5.01*134 will verify this.

4.2 Platform Installation and Preparation
See previous section for required Mental Health patches.

This patch installs new instruments that will consume about 2MB of disk space in the ^XTMP global during installation. The growth of the ^YTT global will be about 1MB.

This patch can be loaded with users in the system but it is recommended that it be installed when user activity is low. Installation time will be less than 5 minutes.

It is recommended that you use the “Backup a Transport Global” option that is referenced in the installation instructions. This will be useful should it be decided to back out the installation.

To ensure the integrity of the transport global, use the “Verify Checksums in Transport Global” to compare the checksums with the list that follows:

The checksums below are new checksums, and can be checked with CHECK1^XTSUMBLD.

Routine Name: YS134PST Before: n/a After: B1073474 **134**
Routine Name: YTQAPI2A Before: B20357821 After: 22322420 **121,134**
Routine Name: YTQAPI2B Before: n/a After: B119361091 **134**

Routine list of preceding patches: 76, 106, 119, 121
4.3 Access Requirements and Skills Needed for the Installation

Installation of MHA Update (YS*5.01*134) requires the following:

- 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 workstation installs – access/ability to push executable and supporting files to required work stations.

4.4 Installation Procedure

1. Choose the PackMan message containing this patch and invoke the INSTALL/CHECK MESSAGE PackMan option.

2. Start up the Kernel Installation and Distribution System Menu [XPD MAIN]:
   
   Edits and Distribution ...
   Utilities ...
   Installation ...

   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, you may elect to use the following options (When prompted for the INSTALL NAME, enter YS*5.01*134):

   a. Backup a Transport Global - This option will create a backup message of any routines exported with this patch. It will not backup any other changes such as DD's or templates.

   b. Compare Transport Global to Current System - This option will allow you to view all changes that will be made when this patch is installed. It compares all components of this patch (routines, DD's, templates, etc.).

   c. Verify Checksums in Transport Global - This option will allow you to ensure the integrity of the routines that are in the transport global.

4. Use the Install Package(s) option and select the package YS*5.01*134

   a. When prompted "Want KIDS to INHIBIT LOGONs during the install? NO/"", answer NO.

   b. When prompted "Want to DISABLE Scheduled Options and Menu Options and Protocols? NO/"", answer NO.
4.5 Installation Verification Procedure

To verify that everything is installed properly, do the following:

- Launch CPRS.
- From the CPRS menu, select Tools, then Mental Health Assistant (MHA).
- As MHA starts you should see the splash screen with version 1.0.3.72 displayed in the lower right corner.

When MHA prompts for user credentials, it should use the Personal Identity Verification (PIV) Personal Identification Number (PIN) prompt, rather than access/verify codes.

If MHA prompts for a PIV PIN as it is starting, the software has been installed properly. (If the Single Sign-On Integration (SSOi) servers are not available, you will see the usual access/verify prompt.)
After installation, notify mental health package users that the following new Suicide and Depression Screening instruments are available:

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Health Questionnaire-2 + Item9 (PHQ-2+I9)</td>
<td>PHQ-2+I9</td>
</tr>
<tr>
<td>PTSD SCREEN - (PC PTSD 5)</td>
<td>PC-PTSD-5</td>
</tr>
<tr>
<td>PC-PTSD-5+I9</td>
<td>PC-PTSD-5+I9</td>
</tr>
<tr>
<td>Patient Safety Screener 3 (PSS-3)</td>
<td>PSS-3</td>
</tr>
<tr>
<td>Columbia Suicide Severity Rating Scale (C-SSRS)</td>
<td>C-SSRS</td>
</tr>
<tr>
<td>World Health Organization Disability Assessment Schedule 2.0 - (12-item)</td>
<td>WHODAS2.0-12</td>
</tr>
</tbody>
</table>

4.6 System Configuration

N/A

4.7 Database Tuning

N/A

5 Back-Out Procedure

5.1 Back-Out Strategy

It is possible to partially back-out the installation of YS*5.01*134. This would involve restoring instrument specifications to their previous state and then restoring the saved routines. The back-out of changes to the data dictionary would require a patch to a patch.

5.2 Back-Out Considerations

Please contact VistA support and the development team before attempting a back-out. The back-out procedure will still leave some changes in place. In addition, the installation of subsequent patches may be problematic if YS*5.01*134 is not installed.

5.3 Back-Out Criteria

A back-out should only be considered if there is a patient safety issue, if MHA no longer functions, or if there is some other catastrophic failure.

5.4 Back-Out Risks

The risks vary depending on what is causing the failure of the system. The main risk is that the Mental Health package would be left in an unknown configured state.

5.5 Authority for Back-Out

The VistA system manager determines if a back-out of YS*5.01*134 should be considered.
5.6 Back-Out Procedure

If you wish to restore newly installed instruments to their previous state, you must do that before any other back-out steps. See the instructions for restoring the previous instrument state in the Rollback Procedure section to do this.

To back-out routines, you must have already selected the “Backup a Transport Global” option during the installation process. To restore the previous routines:

1. Choose the PackMan message containing the backup you created during installation.
2. Invoke the INSTALL/CHECK MESSAGE PackMan option.
3. Select Kernel Installation & Distribution System Option: Installation
4. Use the Install Package(s) option to install the previously saved routines.

If you need to back-out data dictionary modifications, remove protocols, options, or templates, you will need to contact the development team for a patch.

5.7 Back-out Verification Procedure

A successful back-out may be verified by running MHA and seeing a splash screen with the highlighted version number:

MHA should prompt for access/verify instead of PIV PIN and run successfully.

Verification of the back-out procedure would be the resolution of the problem that caused the need for the back-out.
6 Rollback Procedure

6.1 Rollback Considerations
YS*5.01*134 adds new and updates existing mental health instruments. It is possible to roll back these changes within one week of the installation.

6.2 Rollback Criteria
A rollback might be considered if the behavior of mental health instruments appears to be adversely affected after installation of YS*5.01*134. The VistA support and product development team should be contacted to determine if there is an alternative fix short of a rollback.

6.3 Rollback Risks
A rollback could adversely impact future installations of mental health instruments and cause problems with scoring existing mental health instruments.

6.4 Authority for Rollback
The VistA system manager determines if a rollback of mental health instruments distributed by YS*5.01*134 should be considered.

6.5 Rollback Procedure
These steps assume that there is a compelling reason to rollback specific instruments to their previous state.

For instruments that have been inactivated by YS*5.01*134 that need to be made active again:

- Using Fileman, edit the OPERATIONAL field (#10) and the LAST EDIT DATE field (#18) in the MH TESTS AND SURVEYS file (601.71). Select the instrument that requires re-activation.
- Change the value of the OPERATIONAL field from “Dropped” back to “Yes”
- Change the value of the LAST EDIT DATE field to ‘NOW’.

Should it be required to move instruments back to being scored in YS_MHA_AUX DLL, contact the Mental Health development team for a routine that can find the appropriate records and make the replacement.

Optionally, if you want to see how many records will be restored, choose “Trial Install” then select the number of the backup you wish to restore.

When you are ready to restore an instrument, choose “Install Exchange Entry” then select the number of the backup you want to restore.

6.6 Rollback Verification Procedure
Verify the restore by checking to see that the instrument behaves as it did prior to the install.
## Appendix A - Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAG</td>
<td>Citrix Access Gateway</td>
</tr>
<tr>
<td>CD</td>
<td>Critical Decision</td>
</tr>
<tr>
<td>DIBO&amp;RG</td>
<td>Deployment, Installation, Back-out, and Rollback Guide</td>
</tr>
<tr>
<td>IOC</td>
<td>Initial Operating Capability</td>
</tr>
<tr>
<td>MHA</td>
<td>Mental Health Assistant</td>
</tr>
<tr>
<td>PIN</td>
<td>Personal Identification Number</td>
</tr>
<tr>
<td>PIV</td>
<td>Personal Identity Verification</td>
</tr>
<tr>
<td>SPP</td>
<td>Suicide Prevention Package</td>
</tr>
<tr>
<td>SQA</td>
<td>Software Quality Assurance</td>
</tr>
<tr>
<td>SSOi</td>
<td>Single Sign-On Integration</td>
</tr>
<tr>
<td>VA</td>
<td>Department of Veterans Affairs</td>
</tr>
<tr>
<td>VAMC</td>
<td>Veterans Affairs Medical Center</td>
</tr>
<tr>
<td>VIP</td>
<td>Veteran-focused Integration Process</td>
</tr>
<tr>
<td>VistA</td>
<td>Veterans Health Information System and Technology Architecture</td>
</tr>
</tbody>
</table>