Mental Health YS*5.01*129

Deployment, Installation, Back-Out, and Rollback Guide

May 2018
Department of Veterans Affairs
Office of Information and Technology (OI&T)
Revision History

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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 particulars of 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.
# 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) ....................................... 7  
    3.2.3 Site Preparation .................................................................................................... 7  
  3.3 Resources ....................................................................................................................... 7  
    3.3.1 Facility Specifics .................................................................................................... 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 Download and Extract Files ...................................................................................... 8  
  4.4 Access Requirements and Skills Needed for the Installation .................................. 8  
  4.5 Installation Procedure ................................................................................................. 8  
    4.5.1 YS*5.01*129 KIDS Installation .......................................................................... 8  
    4.5.2 YS*5.01*129 GUI Installation ............................................................................ 9  
    4.5.3 Setting MHA on the CPRS Tools Menu ............................................................ 10  
    4.5.4 Setting an Alternate DLL Location (optional) .................................................. 12  
    4.5.5 Installation for Off-line Usage (optional) ............................................................. 12  
  4.6 Installation Verification Procedure ........................................................................... 13  
  4.7 System Configuration ................................................................................................. 14  
  4.8 Database Tuning .......................................................................................................... 14  
5 Back-Out Procedure ......................................................................................................... 14  
  5.1 Back-Out Strategy ....................................................................................................... 14  
  5.2 Back-Out Considerations ........................................................................................... 14  
  5.3 Back-Out Criteria ........................................................................................................ 14  
  5.4 Back-Out Risks .......................................................................................................... 14
5.5 Authority for Back-Out ................................................................. 14
5.6 Back-Out Procedure .................................................................. 14
5.7 Back-out Verification Procedure ............................................... 15

6 Rollback Procedure ................................................................... 15
  6.1 Rollback Considerations ......................................................... 15
  6.2 Rollback Criteria ................................................................... 15
  6.3 Rollback Risks ........................................................................ 16
  6.4 Authority for Rollback ............................................................ 16
  6.5 Rollback Procedure ............................................................... 16
  6.6 Rollback Verification Procedure ............................................. 16
1 Introduction

This document describes how to deploy and install the Mental Health Assistant Two-Factor Authentication Update (MHA 2FA Update) which is patch YS*5.01*129 of the Mental Health package. Also described is how to back out the product and rollback to a previous version. The main purpose of patch YS*5.01*129 is to update the MHA client software to support two-factor authentication.

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*129 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 VistA system. In particular, patch YS*5.01*119 must be installed prior to the installation of this patch. There are also files related to the graphical user interface (GUI) component of MHA that must be deployed to client Windows computers.

1.3 Constraints

Patch YS*5.01*129 is expected to be installed on existing, up-to-date VistA platforms. The hardware may reside at local or regional data centers.

2 Roles and Responsibilities

The following describes the roles and responsibilities associated with the testing and release of YS*5.01*129. Critical Decision Point representatives (commonly referred to as the three in the box), following the Veteran-focused Integration Process (VIP), will meet and approve deployment from an OI&T perspective. The following table provides role information for the YS*5.01*129 project.

<table>
<thead>
<tr>
<th>ID</th>
<th>Team</th>
<th>Phase / Role</th>
<th>Tasks</th>
<th>Project Phase (See Schedule)</th>
</tr>
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<tbody>
<tr>
<td></td>
<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>
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<tr>
<td></td>
<td>SQA, Test Sites</td>
<td>Deployment</td>
<td>Test for operational readiness</td>
<td>Test</td>
</tr>
<tr>
<td>ID</td>
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<td>----</td>
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<td>------------------------------</td>
</tr>
<tr>
<td></td>
<td>Project Manager, Release Agent, Business Owner</td>
<td>Deployment</td>
<td>Execute deployment</td>
<td>Release</td>
</tr>
<tr>
<td></td>
<td>Site personnel with IT support (may be local or regional)</td>
<td>Installation</td>
<td>Plan and schedule installation</td>
<td>After Release</td>
</tr>
<tr>
<td></td>
<td>IT support to install KIDS build and personnel to deploy the GUI files</td>
<td>Installation</td>
<td>Execute Deployment</td>
<td>After Release</td>
</tr>
<tr>
<td></td>
<td>IT support and Release Manager</td>
<td>Back-out</td>
<td>Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)</td>
<td>After Release</td>
</tr>
<tr>
<td></td>
<td>MHA Development team during the compliance period, then transition to Sustainment Team</td>
<td>Post Deployment</td>
<td>Software Support</td>
<td>Sustain</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*129 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
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 YS*5.01*129 deployment.

#### 3.2.1 Deployment Topology (Targeted Architecture)
MHA 2FA Update (YS*5.01*129) 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 IOC sites for verification of functionality. Once testing is completed and approval is given for national release, MHA 2FA Update (YS*5.01*129) will be deployed to all VistA systems.

The Production (IOC) testing sites are:

- Milwaukee 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

N/A

3.3.2 Hardware

N/A

3.3.3 Software

N/A

3.3.4 Communications

When MHA 2FA Update (YS*5.01*129) is released, the notification of the released patch 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

MHA 2FA Update (YS*5.01*129) assumes a fully-patched VistA system.

4.2 Platform Installation and Preparation

There are both VistA and Windows client components that must be installed for the MHA 2FA Update.

For the VistA portion of the install, Mental Health patch YS*5.01*119 must be installed prior to the installation of YS*5.01*129. The environment check for YS*5.01*129 will verify this. The VistA KIDS install should be done during non-peak hours and should take less than 5 minutes.
The time to deploy the GUI updates to Windows clients will vary depending on the method the size uses for running the MHA executable (network share, Citrix, etc.).

**4.3 Download and Extract Files**

MHA 2FA Update (YS*5.01*129) is being released as two host files.

The preferred method is to retrieve files from download.vista.med.va.gov. 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 OI Field Offices:

- Hines: fo-hines.med.va.gov
- Salt Lake City: fo-slc.med.va.gov

Documentation can also be found on the VA Software Documentation Library at: [http://www.va.gov/vdl/](http://www.va.gov/vdl/)

<table>
<thead>
<tr>
<th>MHA 2FA Update files</th>
<th>File Contents</th>
<th>Download Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>YS_501_129.KID</td>
<td>M changes for MHA 2FA</td>
<td>ASCII</td>
</tr>
<tr>
<td>YS_501_129.ZIP</td>
<td>MHA executable and supporting files</td>
<td>Binary</td>
</tr>
</tbody>
</table>

**4.4 Access Requirements and Skills Needed for the Installation**

Installation of MHA 2FA Update (YS*5.01*129) 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.

**4.5 Installation Procedure**

**4.5.1 YS*5.01*129 KIDS Installation**

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.
1. From the Kernel Installation and Distribution System Menu, select the Installation menu.

2. Next, select ‘Load a Distribution’. When prompted “Enter a Host File: “, enter
   <directory>YS_501_129.KID (where <directory> represents the location where you stored the
   KIDS file).

3. From the Kernel Installation and Distribution System Menu, select the Installation menu.

4. From this menu, you may elect to use the following options
   a. Backup a Transport Global
   b. Compare Transport Global to Current System
   c. Verify Checksums in Transport Global

5. Use the Install Package(s) options and select the package: YS_501_129.KID

6. When prompted “Want KIDS to Rebuild Menu Trees Upon Completion of Install?” respond NO.

7. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//' respond NO.

8. When prompted ‘Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//',
   respond NO.

9. If prompted 'Delay Install (Minutes): (0 - 60): 0//' respond 0.

4.5.2 YS*5.01*129 GUI Installation

The ZIP file contains the MHA GUI executable and supporting files. Download the ZIP file and
extract all the files.

The following methods of installation 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
  MHA GUI executable (YS_MHA.exe) across the LAN.

  The MHA executable (YS_MHA.exe), along with the other files that are included in
  YS_501_129.ZIP, are copied to a network shared location. Since MHA is launched
  from CPRS, the item that starts up MHA on the ORWT TOOLS MENU should reflect the
  network location of YS_MHA.exe. Similarly, the parameter that specifies the location of
  the supporting DLL, YS_MHA_AUX_DLL LOCATION, needs to be edited to reflect the
  network location. See the section, File Location Parameters, to see examples of editing
  these parameters.

- **Citrix installation:**
The MHA executable (YS_MHA.exe) and supporting 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 the manual installation method outlined below.

- **Manual install:**
  This method is used primarily for advanced users and at testing locations.

  **Note:** You may need to have a user with Administrator rights complete this step.

The following steps will update an existing installation of MHA, if one exists on the workstation. These steps use the default file locations.

1. Locate the YS_501_129.ZIP file and unzip it.
2. Copy the following files to the C:\Program Files (x86)\Vista\YS\MHA folder:
   a. YS_MHA.exe
   b. borlndmm.dll
   c. YS_MHA.GID
   d. YS_MHA.HLP
3. Copy the following file to the C:\Program Files (x86)\Vista\Common Files folder:
   a. YS_MHA_AUX.dll

If desired, you may use different directories than those specific above, but you must also update the ORWT TOOLS MENU and YS MHA_AUX DLL LOCATION parameters to reflect the file locations.

4. **SCCM Install**
   An SCCM package is available for deployment to workstations at a site. To deploy via SCCM, request that the “Mental Health Assistant – R03” program be deployed.

4.5.3 **Setting MHA on the CPRS Tools Menu**

This procedure configures VistA so that “Mental Health Assistant” appears as a choice on a user’s Tools menu on the CPRS desktop software. Unlike previous versions of MHA, where this was optional, Version 3 of VistA MHA MUST be started from the CPRS Tools Menu. Selecting this choice from the CPRS Tools menu will offer the user full MHA3 functionality, based on a user’s particular access permissions in VistA.
The basic steps for setting up VistA MHA3 on the Tools menu are no different from doing it for other applications. The main difference lies in how the Name=Command entry is formatted. The following text capture is taken from the CPRS Setup documentation, to serve as an example of how to perform this step for MHA3:

**Example:** Setting up VistA MHA3 on the CPRS Tools menu, GUI Parameters [ORW PARAM GUI]

```
Select GUI Parameters Option: tm GUI<ENTER> Tool Menu Items
CPRS GUI Tools Menu may be set for the following: <ENTER>
  1 User USR [choose from NEW PERSON]
  2 Location LOC [choose from HOSPITAL LOCATION]
  3 Division DIV [REGION 5]
  4 System SYS [OEX.ISC-SLC.VA.GOV]
Enter selection: 1<ENTER> User NEW PERSON
Select NEW PERSON NAME: MHPROVIDER,ONE <ENTER>------- Setting CPRS GUI Tools Menu for User: MHPROVIDER,ONE--------
Sequence: ? <ENTER>
Enter the sequence in which this menu item should appear.
Select Sequence: 2
Are you adding 2 as a new Sequence? Yes//<ENTER> YES
Sequence: 2// <Enter>
Name=Command: Mental Health Assistant="C:\Program Files (x86)\Vista\YS\MHA3\YS_MHA.exe" s=%SRV p=%PORT c=%DFN u=%DUZ m=%MREF
```

From the previous example, adjust according to your own system’s settings, such as directory path, New Person Name and other parameters—consult the CPRS Setup Guide for the meaning of these parameters. The pertinent portion of the example is the “Name=Command:” field. This field should be entered in a single line—no line-breaks allowed, including all the % parameters that follow the filename and path to the MHA3 executable file.

The path shown represents a typical path used during a default installation. If your path is different, adjust accordingly. **All five parameters must be included as shown above, in the precise order in which they are found in the example.** Here is what the Name=Command line should look like:

```
Mental Health Assistant="C:\Program Files (x86)\Vista\YS\MHA3\YS_MHA.exe" s=%SRV p=%PORT c=%DFN u=%DUZ m=%MREF
```

Sequence number 2 is shown in the example, but, if you have other entries in the Tools Menu, then the next free sequence number will do just fine. (Sometimes when cutting and pasting, unseen control characters can be included in the text and will cause the command line to malfunction.)

After this step is completed, a new choice will appear in the user’s CPRS Tools Menu labeled “Mental Health Assistant”. Clicking on this menu entry will start MHA3 with a selected patient synchronized to the one currently selected in CPRS.

Refer to the Computerized Patient Record System (CPRS) Setup Guide for more information about this procedure.
4.5.4 Setting an Alternate DLL Location (optional)

The default locations for the MHA auxiliary DLL is:

```
YS_MHA_AUX.dll  C:\Program Files (x86)\Vista\Common Files
```

If you put the file in this location, no further action is necessary. If you wish to locate
YS_MHA_AUX.dll in another location, you may edit the YS_MHA_AUX_DLL_LOCATION
parameter to set your preferred location. This may be done once for a site or division if all users
have the same path in common. It may also be done at the individual user level. You can use
General Parameter Tools to edit the parameter.

Select PARAMETER DEFINITION NAME: YS_MHA_AUX_DLL_LOCATION  YS_MHA_AUX path
and name

YS_MHA_AUX_DLL_LOCATION may be set for the following:

- 2 User USR [choose from NEW PERSON]
- 5 Division DIV [choose from INSTITUTION]
- 8 System SYS [MHA-DEVA.FO-SLC.MED.VA.GOV]

Enter selection: 2 User NEW PERSON
Select NEW PERSON NAME: MHPROVIDER,ONE

--------- Setting YS_MHA_AUX_DLLLOCATION for User: MHPROVIDER,ONE ---------
AUX DLL: G:\Vista\Common\YS_MHA_AUX.dll Replace

In the case shown above, the pertinent portion is what is entered at AUX DLL. In the example,
YS_MHA_AUX.dll is located on a network drive at G:\Vista\Common\YS_MHA_AUX.dll.
When MHA runs, it will look in that location for the DLL.

4.5.5 Installation for Off-line Usage (optional)

Some limited use of MHA is available when a connection to VistA is not possible. This may be
useful in settings such as home health care. To use MHA in off-line mode, auxiliary DLL must
be in the default directory, as follows:

```
C:\Program Files (x86)\Vista\Common Files\YS_MHA_AUX.dll
```

It is also necessary to start MHA directly, since CPRS does not run in off-line mode. To set up a
shortcut so you can start MHA, do the following:

1. Find the file, YS_MHA.exe, which is usually in the directory:
   
   C:\Program Files (x86)\Vista\YS\MHA.

2. Select the file with the mouse.

3. While holding the ALT key, drag the file to the desired location (usually the Desktop)
   and release the mouse.

4. This will create a link that will allow you to start MHA directly.

When MHA is started directly, it will warn you that you are running in off-line mode and verify
that you want to do that.
4.6 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.
- As MHA starts you should see the splash screen with version 1.0.0.72 displayed in the lower right corner.

- When MHA prompts for user credentials, it should us the prompt for PIV PIN, rather than access/verify codes.

If MHA prompts for a PIV PIN as it is starting, the software has been installed properly. (If the SSOi servers are not available, you will see the usual access/verify prompt.)
4.7 System Configuration
N/A

4.8 Database Tuning
N/A

5 Back-Out Procedure

5.1 Back-Out Strategy
The MHA 2FA Update (YS*5.01*129) is primarily an update to the Windows client executable, with very minor changes to the VistA system. Backing out the patch would consist primarily of re-installing the previously distributed GUI (YS*5.01*105) and modifying the option in VistA to reflect the appropriate version numbers.

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 minor updates in place, so it is important to ensure that the need for back-out is not related to the database updates. All MHA client workstations must be running the version of the MHA executable that matches the YS BROKER1 option in VistA.

5.3 Back-Out Criteria
A back-out should only be considered if there is a patient safety issue, if Mental Health Assistant no longer functions, or if there is some other catastrophic failure.

5.4 Back-Out Risks
This patch brings MHA into compliance with current VA policies related to user authentication. Backing out the patch would risk non-compliance with VA security policies.
An error in any of the file edits required to back out the patch may result in MHA unable to function until the error is corrected.

5.5 Authority for Back-Out
The Facility CIO has the final authority to require the back-out and accept the associated risks.

5.6 Back-Out Procedure
These steps assume that the only reason to consider a back-out for YS*5.01*129 is in the event of a catastrophic failure.

- In the OPTION file (#19), edit the MENU TEXT field such that the version number matches the version from YS*5.01*105. Change the value
  From: YS BROKER1 version 1.0.3.60~1.0.5.4~1.0.3.72
Back to: YS BROKER1 version 1.0.3.60~1.0.5.4~1.0.3.60

- Navigate to https://www.va.gov/vdl, select “Clinical” under “Browse Section”, then select “Mental Health”.
- Download the MHA3 Installation Guide (Patch YS*5.01*105).
- Following the instructions in that guide, re-install the MHA executable on each client workstation.

### 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:

![Mental Health Assistant](image)

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

### 6 Rollback Procedure

#### 6.1 Rollback Considerations

There are very few changes made to VistA components by the MHA 2FA update (YS*5.01*129). The patch disables some older instruments and modifies the choices for the PHQ9 instrument so that they begin with 0 instead of 1.

#### 6.2 Rollback Criteria

A rollback might be considered if there are serious problems administering mental health instruments after installation of YS*5.01*129. 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. The facility could be left in a state inconsistent with the nationally deployed Mental Health instruments, possibly affecting national roll-ups.

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

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*129 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 change the PHQ9 choice numbering back to starting with “1”, contact the Mental Health development team for a routine that can find the appropriate records and make the replacement.

6.6 Rollback Verification Procedure

Verify the rollback by checking to see that the instrument behaves as it did prior to the install.