# VistA Integration Adapter (VIA) VIAB 1\*14 Installation, Back-out and Rollback Plan/RELEASE NOTES



## Department of Veterans Affairs March 2019

Version 1.0

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### **Revision History**

**Note**: The revision history cycle begins once changes or enhancements are requested after the Installation, Back-out, Rollback Plan/RELEASE NOTES has been baselined.

Date	Version	Description	Author
March 2019	1.0	Updated for VIAB 1*14	<u>REDACTED</u>

## **Artifact Rationale**

The Installation, Back-out, Rollback Plan/ RELEASE NOTES defines the ordered, technical steps required to install the product, and if necessary, to back-out the installation, and to roll back to the previously installed version of the product.

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## 1. Introduction

This document provides installation instructions for VIAB 1\*14, as managed through the VistA Integration Adapter project. All installation and back-out instructions must be documented in the Installation Plan, unless the operations documents specific tasks in Change Orders in the Change Management system and uses installation scripts to install a product. The Installation Plan always includes details of items that cannot be covered in Change Orders or installation scripts, including the criteria for determining if a back-out is necessary, the authority for making that decision, the order in which installed components will be backed out, the risks and criteria for a rollback, and authority for acceptance or rejection of the risks.

This VIAB patch introduces changes to the legacy VIA package Modules.

APPLICATION/VERSION	РАТСН
VistA Integration Adapter V. 1.0	VIAB 1*14

This patch (VIAB 1\*14) is being released in the Kernel Installation and Distribution System (KIDS) distribution.

### **1.1 Documentation and Distribution**

VIAB 1\*14 patch is being released via the Kernel Installation and Distribution System (KIDS).

Documentation can also be found on the VA Software Documentation Library at: http://www.va.gov/vdl/application.asp?appid=221

# 2. System Requirements

There are no hardware interface features introduced with this project.

These enhancements are compatible with existing hardware. No hardware issues are involved with these enhancements.

### 3. Patch description and Installation Instructions

#### 3.1. Patch Description

 RUN DATE: MAR 13, 2019
 DESIGNATION: VIAB\*1\*14 TEST V2

 PACKAGE : VISTA INTEGRATION ADAPTOR
 PRIORITY : EMERGENCY

 VERSION : 1
 STATUS : UNDER DEVELOPMENT

ASSOCIATED PATCHES: (V)VIAB\*1\*13 <<= MUST BE INSTALLED BEFORE `VIAB\*1\*14'

SUBJECT: VIAB MISCELLANEOUS MODIFICATIONS

CATEGORY: ROUTINE OTHER

**DESCRIPTION:** 

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THE VISTA INTEGRATION ADAPTOR (VIA) SYSTEM IS A MIDDLEWARE USED TO TRANSPORT CLINICAL AND NON-CLINICAL ELECTRONIC INFORMATION BETWEEN PRODUCING AND CONSUMING APPLICATIONS IN VA SYSTEMS. VIA UTILIZES REMOTE PROCEDURE CALLS (RPCS) FOR DATA REQUESTED BY CONSUMING APPLICATIONS.

THIS PATCH CONTAINS MODIFICATIONS FOR IMMUNIZATION FUNCTIONALITY FOR THE CUSTOMER RELATIONSHIP MANAGEMENT (CRM) TEAM. THIS PATCH ALSO CONTAINS A MODIFICATION TO THE "LISTSCHEDULEDADMISSION" TARGET OF VIABMS, USED BY THE BED MANAGEMENT SYSTEM (BMS).

THE UPDATES FOR THIS PATCH ARE:

1. T<u>HE SEMANTICS OF</u> SDATE (<u>START</u> <u>DATE</u>) <u>AND</u> EDATE (<u>END</u> <u>DATE</u>) <u>IN</u> <u>THE</u> LISTSCHEDULEDADMISSION <u>TARGET</u> <u>OF</u> VIABMS (<u>ONLY</u>) <u>IS</u> <u>MODIFIED</u> <u>AS</u> <u>FOLLOWS</u>:

- \* SDATE AND EDATE ARE MANDATORY AND REPRESENT DATE/TIME VALUES, EVEN IF THE DATE IS EXACT.
- \* THE RANGE RETURNED IS THE INCLUSIVE RANGE OF TIMES (NOT DAYS) BETWEEN SDATE AND EDATE. (NOTE THAT THIS IS DIFFERENT FROM THE BEHAVIOR OF SOME OTHER TARGETS OF THE SAME RPC.)

2. VIAB GET IMMUNIZATION TYPE RPC <u>ENTRY</u> IN <u>THE</u> REMOTE PROCEDURE FILE (#8994) IS <u>POPULATED WITH</u> <u>ADDITIONAL</u> <u>DOCUMENTATION</u> INFORMATION.

3. R<u>ECONCILE THE</u> VIAB WEB SERVICES OPTION <u>OPTION WITH THE LIST OF</u> RPC<u>S</u> THAT VIA <u>HAS</u> <u>PERMISSION TO USE WITH THE</u> ICR<u>S</u> <u>THAT</u> <u>WERE</u> <u>APPROVED</u>.

PATCH COMPONENTS:

F<u>ILES</u> & F<u>IELDS</u> A<u>SSOCIATED</u>: F<u>ILE</u> N<u>AME</u> (N<u>UMBER</u>) F<u>IELD</u> N<u>AME</u> (N<u>UMBER</u>)

N<u>EW</u>/M<u>ODIFIED</u>/D<u>ELETED</u>

. N/A FORMS ASSOCIATED: FORM NAME FILE NUMBER NEW/MODIFIED/DELETED - - - - - - - - - -. . . . . . . . . . . ------N/A MAIL GROUPS ASSOCIATED: MAIL GROUP NAME NEW/MODIFIED/DELETED ------N/A OPTIONS ASSOCIATED: NEW/MODIFIED/DELETED OPTION NAME TYPE -----VIAB WEB SERVICES OPTION BROKER (CLIENT/SERVER) MODIFIED PROTOCOLS ASSOCIATED: PROTOCOL NAME NEW/MODIFIED/DELETED N/A SECURITY KEYS ASSOCIATED: SECURITY KEY NAME N/A TEMPLATES ASSOCIATED: 
 TYPE
 FILE
 NAME
 (NUMBER)
 NEW/MODIFIED/DELETED
 T<u>EMPLATE</u> N<u>AME</u> ---------N/A REMOTE PROCEDURES ASSOCIATED: REMOTE PROCEDURE NAME NEW/MODIFIED/DELETED VIAB GET IMMUNIZATION TYPE MODIFIED PARAMETER DEFINITIONS ASSOCIATED: PARAMETER NAME NEW/MODIFIED/DELETED N/A ADDITIONAL INFORMATION: NEW SERVICE REQUESTS (NSRS): N/A PATIENT SAFETY ISSUES (PSIS): N/A DEFECT TRACKING SYSTEM TICKET(S) & OVERVIEW: 1. INC3239832 - SCHEDULED ADMISSIONS COMING OVER FROM VISTA ON WRONG DAY.

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VIA Installation, Back-out, Rollback Plan/RELEASE NOTES

PROBLEM:

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WHEN START DATE AND END DATE WERE PASSING AS MIDNIGHT DATES TO RETURN ONE FULL DAYS WORTH OF SCHEDULED ADMISSIONS, TWO FULL DAYS OF SCHEDULED ADMISSIONS WERE RETURNING.

**RESOLUTION:** 

CALL TO DTCHK VIABMS1 HAS BEEN COMMENTED OUT.

T<u>EST</u> S<u>ITES</u>: NORTH T<u>EXAS</u> V<u>ETERANS</u> H<u>EALTH</u> C<u>ARE</u> S<u>YSTEM</u> I<u>NDIANAPOLIS</u> VA M<u>EDICAL</u> C<u>ENTER</u>

SOFTWARE AND DOCUMENTATION RETRIEVAL INSTRUCTIONS: DOCUMENTATION DESCRIBING THE NEW FUNCTIONALITY AND/OR A HOST FILE CONTAINING A BUILD MAY BE INCLUDED IN THIS RELEASE.

THE PREFERRED METHOD IS TO RETRIEVE THE FILES FROM <u>REDACTED</u>. THIS TRANSMITS THE FILES FROM THE FIRST AVAILABLE SERVER. SITES MAY ALSO ELECT TO RETRIEVE THE 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:

#### <u>REDACTED</u>

DOCUMENTATION CAN ALSO BE FOUND ON THE VA SOFTWARE DOCUMENTATION LIBRARY AT: HTTP://WWW.VA.GOV/VDL/APPLICATION.ASP?APPID=221

DOCUMENTATION TITLE FILE NAME FTP MODE

N/A

H<u>OST</u> F<u>ILE</u> N<u>AME</u> FTP M<u>ODE</u>

PATCH INSTALLATION:

P<u>RE/POST</u> I<u>NSTALLATION</u> O<u>VERVIEW</u>: T<u>HIS PATCH CONTAINS PRE INSTALLATION</u> <u>INSTRUCTIONS</u>.

PRE-INSTALLATION INSTRUCTIONS: THIS PATCH MAY BE INSTALLED WITH USERS ON THE SYSTEM. THIS PATCH SHOULD TAKE LESS THAN 5 MINUTES TO INSTALL.

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VIA Installation, Back-out, Rollback Plan/RELEASE NOTES

#### NO MENU OPTIONS NEED TO BE DISABLED.

INSTALLATION INSTRUCTIONS:

- 1. T<u>HIS RELEASE IS PROVIDED USING PACKMAN, CHOOSE THE PACKMAN</u> <u>MESSAGE CONTAINING THIS BUILD. SELECT THE</u> INSTALL/CHECK MESSAGE PACKMAN OPTION TO LOAD THE BUILD.
- 2. F<u>ROM THE KERNEL INSTALLATION AND DISTRIBUTION</u> SYSTEM MENU, <u>SELECT</u> <u>THE INSTALLATION MENU.</u> F<u>ROM THIS MENU</u>,
  - A. SELECT THE VERIFY CHECKSUMS IN TRANSPORT GLOBAL OPTION TO CONFIRM THE INTEGRITY OF THE ROUTINES THAT ARE IN THE TRANSPORT GLOBAL. WHEN PROMPTED FOR THE INSTALL NAME ENTER THE PATCH OR BUILD NAME VIAB\*1\*14.
  - B. SELECT THE BACKUP A TRANSPORT GLOBAL OPTION TO CREATE A BACKUP MESSAGE OF ANY ROUTINES EXPORTED WITH THIS PATCH. IT WILL NOT BACKUP ANY OTHER CHANGES SUCH AS DDS OR TEMPLATES.
  - C. YOU MAY ALSO ELECT TO USE THE FOLLOWING OPTIONS:
    - I. P<u>RINT</u> T<u>RANSPORT</u> <u>GLOBAL</u> T<u>HIS</u> <u>OPTION</u> <u>WILL</u> <u>ALLOW</u> <u>YOU</u> <u>TO</u> <u>VIEW</u> <u>THE</u> <u>COMPONENTS</u> <u>OF</u> <u>THE</u> KIDS <u>BUILD</u>.
    - II. 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 OF THE COMPONENTS OF THIS PATCH, SUCH AS ROUTINES, DDS, TEMPLATES, ETC.
  - D. S<u>ELECT THE</u> INSTALL PACKAGE(S) OPTION AND CHOOSE THE PATCH (VIAB\*1\*14) TO INSTALL.
    - I. IF PROMPTED 'WANT KIDS TO REBUILD MENU TREES UPON COMPLETION OF INSTALL? YES//', PRESS <ENTER>.
    - <u>II</u>. WHEN PROMPTED 'WANT KIDS <u>TO</u> INHIBIT LOGON<u>S</u> <u>DURING</u> <u>THE</u> <u>INSTALL</u>? NO//', <u>PRESS</u> <ENTER>.
    - III. WHEN PROMPTED 'WANT TO DISABLE SCHEDULED OPTIONS, MENU OPTIONS AND PROTOCOLS? NO//', PRESS <ENTER>.
      - <u>A. WHEN PROMPTED 'ENTER OPTIONS YOU WISH TO MARK AS 'OUT OF ORDER':', PRESS THE ENTER KEY</u>.
      - B. WHEN PROMPTED 'ENTER PROTOCOLS YOU WISH TO MARK AS 'OUT OF ORDER':', PRESS THE ENTER KEY.
      - <u>C. WHEN PROMPTED</u> 'D<u>ELAY</u> I<u>NSTALL</u> (M<u>INUTES</u>): (0 60): 0//', <u>ANSWER</u> 0.

POST-INSTALLATION INSTRUCTIONS:

N/A

ROUTINE INFORMATION:

T<u>HE SECOND LINE OF EACH OF THESE ROUTINES NOW LOOKS LIKE</u>: ;;1.0;VISTA INTEGRATION ADAPTER;\*\*[P<u>ATCH LIST]</u>\*\*;06-FEB-2014;B<u>UILD</u> 17 T<u>HE CHECKSUMS BELOW ARE NEW CHECKSUMS, AND</u> CAN <u>BE CHECKED WITH</u> CHECK1^XTSUMBLD. R<u>OUTINE NAME</u>: VIABMS1 <u>BEFORE</u>:B102618166 <u>AFTER</u>:B103511639 \*\*8,11,13,14\*\* R<u>OUTINE LIST OF PRECEDING PATCHES</u>: 13

### 3.2. **Pre-Installation Instructions**

Patch VIAB 1\*13 must be installed prior to installation of VIAB 1\*14.

This patch may be installed with users on the system. This patch should take less than 5 minutes to install.

No menu options need to be disabled.

### 3.3. Installation Instructions

INSTALLATION INSTRUCTIONS:

- 1. T<u>HIS RELEASE IS PROVIDED USING PACKMAN, CHOOSE THE PACKMAN</u> <u>MESSAGE CONTAINING THIS BUILD</u>. S<u>ELECT THE</u> INSTALL/CHECK MESSAGE PACKMAN OPTION TO LOAD THE BUILD.
- 2. FROM THE KERNEL INSTALLATION AND DISTRIBUTION SYSTEM MENU, SELECT THE INSTALLATION MENU. FROM THIS MENU,
  - A. SELECT THE VERIFY CHECKSUMS IN TRANSPORT GLOBAL OPTION TO CONFIRM THE INTEGRITY OF THE ROUTINES THAT ARE IN THE TRANSPORT GLOBAL. WHEN PROMPTED FOR THE INSTALL NAME ENTER THE PATCH OR BUILD NAME VIAB\*1\*14.
  - B. S<u>ELECT THE</u> BACKUP A TRANSPORT GLOBAL OPTION TO CREATE A BACKUP MESSAGE OF ANY ROUTINES EXPORTED WITH THIS PATCH. IT WILL NOT BACKUP ANY OTHER CHANGES SUCH AS DDS OR TEMPLATES.
  - C. YOU MAY ALSO ELECT TO USE THE FOLLOWING OPTIONS:
    - I. P<u>RINT</u> T<u>RANSPORT</u> <u>GLOBAL</u> T<u>HIS</u> <u>OPTION</u> <u>WILL</u> <u>ALLOW</u> <u>YOU</u> <u>TO</u> <u>VIEW</u> <u>THE</u> <u>COMPONENTS</u> <u>OF</u> <u>THE</u> KIDS</u> <u>BUILD</u>.
    - II. COMPARE TRANSPORT GLOBAL TO CURRENT SYSTEM THIS OPTION WILL

<u>ALLOW YOU TO VIEW ALL CHANGES THAT WILL BE MADE WHEN THIS</u> <u>PATCH IS INSTALLED. IT COMPARES ALL OF THE COMPONENTS OF</u> <u>THIS PATCH, SUCH AS ROUTINES, DDS, TEMPLATES, ETC</u>.

- D. S<u>ELECT THE</u> INSTALL PACKAGE(S) OPTION AND CHOOSE THE PATCH (VIAB\*1\*14) TO INSTALL.
  - I. IF PROMPTED 'WANT KIDS TO REBUILD MENU TREES UPON COMPLETION OF INSTALL? YES//', PRESS <ENTER>.
  - II. WHEN PROMPTED 'WANT KIDS TO INHIBIT LOGONS DURING THE INSTALL? NO//', PRESS <ENTER>.
  - III. WHEN PROMPTED 'WANT TO DISABLE SCHEDULED OPTIONS, MENU OPTIONS AND PROTOCOLS? NO//', PRESS <ENTER>. A. WHEN PROMPTED 'ENTER OPTIONS YOU WISH TO MARK AS 'OUT
    - A. WHEN PROMPTED 'ENTER OPTIONS YOU WISH TO MARK AS 'OUT OF ORDER':', PRESS THE ENTER KEY.
    - B. WHEN PROMPTED 'ENTER PROTOCOLS YOU WISH TO MARK AS 'OUT OF ORDER':', PRESS THE ENTER KEY.
    - <u>C</u>. W<u>HEN</u> <u>PROMPTED</u> 'D<u>ELAY</u> I<u>NSTALL</u> (M<u>INUTES</u>): (0 60): 0//', <u>ANSWER</u> 0.

Routine Information:

The second line of each of these routines now looks like: ;;1.0;VISTA INTEGRATION ADAPTER;\*\*[Patch List]\*\*;06-FEB-2014;Build 17

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

```
Routine Name: VIABMS1
Before:B102618166 After:B103511639 **8,11,13,14**
```

Routine list of preceding patches: 13

### 3.4. Post-Installation Instructions

N/A

### 3.5. KIDS Installation Example

```
Select Installation <TEST ACCOUNT> Option:
Select Kernel Installation & Distribution System <TEST ACCOUNT> Option:
INstallation
Select Installation <TEST ACCOUNT> Option: INstall Package(s)
Select INSTALL NAME: VIAB*1.0*14 3/12/19@10:04:31
=> VIAB*1*14 TEST v2
```

This Distribution was loaded on Mar 12, 2019@10:04:31 with header of VIAB\*1\*14 TEST v2 It consisted of the following Install(s): VIAB\*1.0\*14 Checking Install for Package VIAB\*1.0\*14 Install Questions for VIAB\*1.0\*14 Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO// Yes Want KIDS to INHIBIT LOGONs during the install? NO// Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO// Enter the Device you want to print the Install messages. You can queue the install by enter a 'Q' at the device prompt. Enter a '^' to abort the install. DEVICE: HOME// UCX/TELNET VIAB\*1.0\*14 \_\_\_\_\_ \_\_\_\_\_ Installing REMOTE PROCEDURE Installing OPTION Updating Routine file... Updating KIDS files... VIAB\*1.0\*14 Installed. Mar 12, 2019@10:20:45 Not a production UCI NO Install Message sent \_\_\_\_\_ \_\_\_\_\_ +---------+ 50 100% 25 75 Complete +-----+

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Install Completed

## 4. Backout and Rollback Procedure

## 4.1. Overview of Backout and Rollback Procedures

The rollback plan for VistA applications is complex and not able to be a "one size fits all." The general strategy for VistA rollback is to repair the code with a follow-on patch. The development team recommends that sites contact Enterprise Service Desk and log a ServiceNow ticket if it is a nationally released patch; otherwise, the site should contact the product development team directly for specific solutions to their unique problems.

### 4.2. Backout Procedure

During the VistA Installation Procedure of the KIDS build, the installer should have backed up the modified routines by the use of the 'Backup a Transport Global' action as specified in the Patch Description Installation Instructions. The installer can restore the routines using the MailMan message that were saved prior to installing the patch. The backout procedure for global, data dictionary and other VistA components is more complex and will require issuance of a follow-on patch to ensure all components are properly removed. All software components (routines and other items) must be restored to their previous state at the same time and in conjunction with restoration of the data. This backout may need to include a database cleanup process.

Please contact the product development team for assistance if the installed patch that needs to be backed out contains anything at all besides routines before trying to backout the patch. If the installed patch that needs to be backed out includes a pre or post install routine please contact the product development team before attempting the backout.

From the Kernel Installation and Distribution System Menu, select the Installation Menu. From this menu, you may elect to use the following option. When prompted for the INSTALL enter the patch #.

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.

## 5. Rollback Procedure

The rollback procedure for VistA patches is complicated and may require a follow-on patch to fully roll back to the pre-patch state. This is due to RPCs update and menu options updates.

Please contact the product development team for assistance if needed.

## **6. RELEASE NOTES**

The following features in VIA are affected by this effort:

- Bed Management System (BMS) Date/Time Changes
- VIAB GET IMMUNIZATION TYPE RPC Entry
- VIAB WEB SERVICE OPTION (Broker)

### 6.1. Bed Management System (BMS) Date/Time Changes

The range returned between SDATE and EDATE (which are mandatory) was modified to be an inclusive range of times (not days).

### 6.2. VIAB GET IMMUNIZATION TYPE RPC Entry

This enhancement is the addition of documentation information entered into the REMOTE PROCEDURE File (#8994).

Before: NAME: VIAB GET IMMUNIZATION TYPE TAG: IMMTYPE **ROUTINE: VIABRPC RETURN VALUE TYPE: ARRAY** AVAILABILITY: RESTRICTED APP PROXY ALLOWED: YES RETURN PARAMETER DESCRIPTION: RETURNS A LIST OF ACTIVE IMMUNIZATIONS. After: NAME: VIAB GET IMMUNIZATION TYPE TAG: IMMTYPE **ROUTINE: VIABRPC RETURN VALUE TYPE: ARRAY** AVAILABILITY: RESTRICTED APP PROXY ALLOWED: YES DESCRIPTION: RETURNS A LIST OF ACTIVE IMMUNIZATIONS. INPUT PARAMETER: RESULT PARAMETER TYPE: REFERENCE **REQUIRED: YES** SEQUENCE NUMBER: 1 **DESCRIPTION:** THIS FIELD IS PASSED BY REFERENCE AND THIS RPC POPULATES THE FIELD WITH IMMUNIZATION INFORMATION. INPUT PARAMETER: VIACVXS PARAMETER TYPE: LITERAL **SEQUENCE NUMBER: 2 REQUIRED: NO DESCRIPTION:** ONE OR MORE CVX CODE(S) SEPARATED BY COMMAS TO BE RETRIEVED. **RETURN PARAMETER DESCRIPTION:** RETURNS A LIST OF ACTIVE IMMUNIZATIONS FROM IMMUNIZATIONS FILE (#9999999.14). EXAMPLE:

\_\_\_\_\_

D IMMTYPE^VIABRPC(.RESULT,VIACVXS)

RETURNS: IMMUNIZATION IEN^SHORT NAME^CVX CODE^CPT CODE^CPT DESCRIPTION

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RESULT(1)="71^INFLUENZA, HIGH DOSE SEASONAL^135^90662^FLU VACC PRSV FREE

```
INC ANT IG"
RESULT(2)="1140^INFLUENZA, SEASONAL, INJECTABLE, PRESERVATIVE
FREE^140^90656^FLU VACCINE NO PRESERV 3 & >"
RESULT(3)="72^PNEUMOCOCCAL CONJUGATE PCV 13^133^90670^PNEUMOCOCCAL VACC 13
VAL I M"
VAL I M"
```

## 6.3. VIA WEB SERVICE OPTION (Broker) Option

Reconcile the VIAB WEB SERVICE OPTION option with the list of RPCs that VIA has permission to use with the ICRs that were approved.