Medical Care Collection Fund (MCCF)

Electronic Data Interchange (EDI)

Transaction Applications Suite (TAS) Phase 2

eInsurance IB\*2.0\*737

Deployment, Installation, Back-out, and Rollback Guide



February 2023

Department of Veterans Affairs

Office of Information and Technology

Revision History

| Date | Version | Description | Author |
| --- | --- | --- | --- |
| 02/09/2023 | 1.1 | IOC Exit - Updated section 5.6 due to an indirect request from HPS. | MCCF EDI TAS eInsurance |
| 10/21/2022 | 1.0 | IOC Entry – Initial submission | MCCF EDI TAS eInsurance |
| 09/16/2022 | 0.1 | Draft version | MCCF EDI TAS eInsurance |

*Template v2.3, July 2021*

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 1](#_Toc126227642)

[1.1 Purpose 1](#_Toc126227643)

[1.2 Dependencies 1](#_Toc126227644)

[1.3 Constraints 1](#_Toc126227645)

[2 Roles and Responsibilities 1](#_Toc126227646)

[3 Deployment 2](#_Toc126227647)

[3.1 Timeline 2](#_Toc126227648)

[3.2 Site Readiness Assessment 2](#_Toc126227649)

[3.2.1 Deployment Topology (Targeted Architecture) 2](#_Toc126227650)

[3.2.2 Site Information (Locations, Deployment Recipients) 2](#_Toc126227651)

[3.2.3 Site Preparation 3](#_Toc126227652)

[3.3 Resources 3](#_Toc126227653)

[3.3.1 Facility Specifics 3](#_Toc126227654)

[3.3.2 Hardware 3](#_Toc126227655)

[3.3.3 Software 3](#_Toc126227656)

[3.3.4 Communications 4](#_Toc126227657)

[3.3.4.1 Deployment / Installation / Back-out Checklist 4](#_Toc126227658)

[4 Installation 4](#_Toc126227659)

[4.1 Pre-installation and System Requirements 4](#_Toc126227660)

[4.2 Platform Installation and Preparation 4](#_Toc126227661)

[4.3 Download and Extract Files 5](#_Toc126227662)

[4.4 Database Creation 5](#_Toc126227663)

[4.5 Installation Scripts 5](#_Toc126227664)

[4.6 Cron Scripts 5](#_Toc126227665)

[4.7 Access Requirements and Skills Needed for the Installation 5](#_Toc126227666)

[4.8 Installation Procedure 5](#_Toc126227667)

[4.9 Installation Verification Procedure 5](#_Toc126227668)

[4.10 System Configuration 5](#_Toc126227669)

[4.11 Database Tuning 5](#_Toc126227670)

[5 Back-out Procedure 6](#_Toc126227671)

[5.1 Back-out Strategy 6](#_Toc126227672)

[5.2 Back-out Considerations 6](#_Toc126227673)

[5.2.1 Load Testing 6](#_Toc126227674)

[5.2.2 User Acceptance Testing 7](#_Toc126227675)

[5.3 Back-out Criteria 7](#_Toc126227676)

[5.4 Back-out Risks 8](#_Toc126227677)

[5.5 Authority for Back-out 8](#_Toc126227678)

[5.6 Back-out Procedure 8](#_Toc126227679)

[5.7 Back-out Verification Procedure 9](#_Toc126227680)

[6 Rollback Procedure 9](#_Toc126227681)

[6.1 Rollback Considerations 9](#_Toc126227682)

[6.2 Rollback Criteria 9](#_Toc126227683)

[6.3 Rollback Risks 9](#_Toc126227684)

[6.4 Authority for Rollback 9](#_Toc126227685)

[6.5 Rollback Procedure 9](#_Toc126227686)

[6.6 Rollback Verification Procedure 9](#_Toc126227687)

List of Tables

[Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities 1](#_Toc126227543)

[Table 2: Site Preparation 3](#_Toc126227544)

[Table 3: Facility-Specific Features 3](#_Toc126227545)

[Table 4: Hardware Specifications 3](#_Toc126227546)

[Table 5: Software Specifications 3](#_Toc126227547)

# Introduction

This document describes how to deploy and install the IB\*2.0\*737 patch, as well as how to back-out the product and rollback to a previous version or data set.

## Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the IB\*2.0\*737 will be deployed and installed, as well as how the patches are 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.

## Dependencies

The following patches must be installed before IB\*2.0\*737:

* IB\*2.0\*713
* IB\*2.0\*732

## Constraints

This patch is intended for a fully patched VistA system.

# Roles and Responsibilities

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

| ID | Team | Phase / Role | Tasks | Project Phase (See Schedule) |
| --- | --- | --- | --- | --- |
| 1 | VA OIT, VA OIT Health Services Portfolio & PMO | Deployment | Plan and schedule deployment (including orchestration with vendors) | Planning |
| 2 | Local VAMC and CPAC processes | Deployment | Determine and document the roles and responsibilities of those involved in the deployment | Planning |
| 3 | Field Testing (Initial Operating Capability (IOC)), Health Services Portfolio Testing & VIP Release Agent Approval | Deployment | Test for operational readiness | Testing |
| 4 | Health Services Portfolio and Field Operations | Deployment | Execute deployment | Deployment |
| 5 | Individual Veterans Affairs Medical Centers (VAMCs) | Installation | Plan and schedule installation | Deployment |
| 6 | VIP Release Agent | Installation | Ensure authority to operate and that certificate authority security documentation is in place | Deployment |
| 7 | N/A for this patch as we are using only the existing VistA system | Installation | Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes | N/A |
| 8 | VA’s eBusiness team | Installations | Coordinate training | Deployment |
| 9 | VIP Release Agent, Health Services Portfolio & the development team | Back-out | Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out) | Deployment |
| 10 | No changes to current process – we are using the existing VistA system | Post Deployment | Hardware, Software and System Support | Warranty |

# Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

## Timeline

The deployment and installation is scheduled to run for 30 days, starting with the day after national release.

## Site Readiness Assessment

This section discusses the locations that will receive the IB\*2.0\*737 deployment.

### Deployment Topology (Targeted Architecture)

This patch IB\*2.0\*737 is to be nationally released to all VAMCs.

### Site Information (Locations, Deployment Recipients)

The test sites for IOC testing are:

* Maine VA HCS (Augusta, ME)
* Memphis VAMC (Memphis, TN)
* Orlando VAMC (Orlando, FL)

Upon national release all VAMCs are expected to install this patch within the compliance dates.

### Site Preparation

The following table describes preparation required by the site prior to deployment.

Table : Site Preparation

| Site / Other | Problem / Change Needed | Features to Adapt / Modify to New Product | Actions / Steps | Owner |
| --- | --- | --- | --- | --- |
| N/A | N/A | N/A | N/A | N/A |

## Resources

### Facility Specifics

The following table lists facility-specific features required for deployment.

Table : Facility-Specific Features

| Site | Space / Room | Features Needed | Other |
| --- | --- | --- | --- |
| N/A | N/A | N/A | N/A |

### Hardware

The following table describes hardware specifications required at each site prior to deployment.

Table : Hardware Specifications

| Required Hardware | Model | Version | Configuration | Manufacturer | Other |
| --- | --- | --- | --- | --- | --- |
| Existing VistA system | N/A | N/A | N/A | N/A | N/A |

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

### Software

The following table describes software specifications required at each site prior to deployment.

Table : Software Specifications

| Required Software | Make | Version | Configuration | Manufacturer | Other |
| --- | --- | --- | --- | --- | --- |
| Fully patched Integrated Billing package within VistA | N/A | 2.0 | N/A | N/A | N/A |
| IB\*2.0\*713 | N/A | Nationally released version | N/A | N/A | N/A |
| IB\*2.0\*732 | N/A | Nationally released version | N/A | N/A | N/A |

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

### Communications

The sites that are participating in field testing (IOC) will use the “Patch Tracking” message in Outlook to communicate with the eBusiness eInsurance sub-team, the developers, and product support personnel.

#### Deployment / Installation / Back-out Checklist

The Release Management team will deploy the patch IB\*2.0\*737, which is tracked in the National Patch Module (NPM) in Forum, nationally to all VAMCs. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed in the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch in their VistA production systems. Therefore, this information does not need to be manually tracked in the chart below.

Table 6: Deployment / Installation / Back-out Checklist

| Activity | Day | Time | Individual who completed task |
| --- | --- | --- | --- |
| Deploy | N/A | N/A | N/A |
| Install | N/A | N/A | N/A |
| Back-out | N/A | N/A | N/A |

# Installation

## Pre-installation and System Requirements

IB\*2.0\*737, a patch to the existing VistA Integrated Billing 2.0 package, is installable on a fully patched M(UMPS) VistA system and operates on top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities which communicate with the underlying operating system and hardware, providing Integrated Billing independence from variations in hardware and operating system.

## Platform Installation and Preparation

Refer to the IB\*2.0\*737 documentation on the NPM on Forum for the detailed installation instructions. These instructions will include any pre installation steps if applicable.

## Download and Extract Files

Refer to the IB\*2.0\*737 documentation on the NPM to find the location of related documentation that can be downloaded. IB\*2.0\*737 will be transmitted via a PackMan message and can be pulled from the NPM*.* It is not a host file, and therefore does not need to be downloaded separately.

## Database Creation

This patch does NOT introduce a new database. It uses the existing VistA database.

## Installation Scripts

No installation scripts are needed for IB\*2.0\*737 installation*.*

## Cron Scripts

No Cron scripts are needed for IB\*2.0\*737 installation.

## Access Requirements and Skills Needed for the Installation

The following staff need access to the PackMan message containing the IB\*2.0\*737 patch or Forum’s NPM in order to download the nationally released IB\*2.0\*737 patch. The software is to be installed by the sites or regions designated: VA OI&T IT OPERATIONS SERVICE, Enterprise Service Lines, and / or VistA Applications Division*[[1]](#footnote-1)*.

## Installation Procedure

Refer to the IB\*2.0\*737 documentation on the NPM for the detailed installation instructions.

## Installation Verification Procedure

Refer to the IB\*2.0\*737 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

## System Configuration

No system configuration changes are required for this patch.

## Database Tuning

No reconfiguration of the VistA database, memory allocations, or other resources is necessary.

# Back-out Procedure

Back-out pertains to a return to the last known valid instance of operational software and platform settings.

## Back-out Strategy

Although it is unlikely, due to care in collecting, elaborating, and designing approved user stories, followed by multiple testing stages (Developer Unit Testing, Component Integration Testing, SQA Testing, and User Acceptance Testing), a back-out decision due to major issues with this patch could occur during site Mirror Testing, Site Production Testing, or after National Release to the field (VAMCs). The best strategy is dependent on the stage during which the decision is made.

If during Mirror testing or Site Production Testing, a new version of a defect correcting test patch is produced, retested, and successfully passes development team testing, it would be resubmitted to the site for testing. If the patch produced catastrophic problems, a new version of the patch can be used to restore the build components to their pre-patch condition.

If the defect(s) were not discovered until after national release but during the designated support period, a new patch will be entered into the National Patch Module on Forum and go through all the necessary milestone reviews etc., as a patch for a patch. It is up to VA OIT and product support whether this new patch would be defined as an emergency patch or not. This new patch could be used to address specific issues pertaining to the original patch or could be used to restore the build components to their original pre-patch condition.

After the support period, the VistA Maintenance Program would produce the new patch, either to correct the defective components or to back-out the patch.

## Back-out Considerations

It is necessary to determine if a wholesale back-out of the patch IB\*2.0\*737 is needed or if a better course of action is to correct through a new version of the patch (if prior to national release) or through a subsequent patch aimed at specific areas modified or affected by the original patch (after national release). A wholesale back-out of the patch will still require a new version (if prior to national release) or a subsequent patch (after national release). If the back-out is post-release of this patch IB\*2.0\*737, this patch should be assigned status of “Entered in Error” in Forum’s NPM.

### Load Testing

N/A. The back-out process if necessary is executed at normal, rather than raised job priority, and is expected to have no significant effect on total system performance. Subsequent to the reversion, the performance demands on the system would be unchanged.

### User Acceptance Testing

1. Enhanced the API (Application Programming Interface) $$INSUR^IBBAPI that is associated with ICR #4419 to return the following additional fields if requested:
   1. Insured's Street 1 (#2.312,3.06)
   2. Insured's Street 2 (#2.312,3.07)
   3. Insured's City (#2.312,3.08)
   4. Insured's State (#2.312,3.09)
   5. Insured's Zip (#2.312,3.1)
   6. Insured's Phone (#2.312,3.11)
   7. Internal Entry Number (IEN) to subfile #2.312 for each policy returned
2. The ‘User Edit Report’ [IBCN USER EDIT RPT] was enhanced to track additional fields including information related to Interfacility Insurance Update (IIU) payers. The report layout was modified to improve readability when the report contains both insurance company and group level data. The additional fields available for this report are TYPE OF PLAN (#355.3,.09), RECEIVE IIU DATA (#365.121,5.01), STANDARD FTF (#36,.18), and STANDARD FTF VALUE (#36,.19).
3. VistA was modified to update the output of the ‘HL7 Response Report’ [IBCNE HL7 RESPONSE REPORT].
4. VistA was modified to remove references to the obsolete ‘Non-Verified’ eIV data extract, the obsolete ‘~NO PAYER’ entry from (#365.12), and the obsolete ‘MOST POPULAR PAYER’ code.
5. VistA was modified to prevent users from accidentally erasing the effective date of a policy on file when accepting an entry from the INSURANCE VERIFICATION PROCESSOR (aka Buffer) file (#355.33).
6. VistA has also been modified to remove all references that indicated a ‘Buffer’ entry was manually verified. This verification was indicated by the asterisk ‘\*’ symbol.
7. VistA was modified to enhance the PAYER file (#365.12) for looking up Payers by their full names. The PAYER file (#365.12) PAYER NAME field (#.01) had an additional index added that contains the Payer's complete name.

## Back-out Criteria

Back-out Criteria (any of the following):

* The project is canceled
* The requested changes implemented by IB\*2.0\*737 are no longer desired by VA OIT and the eBusiness eInsurance sub-team
* The patch produces catastrophic problems

## Back-out Risks

Since the eInsurance software is tightly integrated with external systems, any attempt at a back-out should include close consultation with the external trading partners such as the Financial Services Center (FSC) and the Health Care Clearing House (HCCH) to determine risk.

## Authority for Back-out

Any back-out decision should be a joint decision of the Business Owner (or their representative) and the Program Manager with input from the Health Services Portfolio (HSP) Application Coordinator, developers (both project and Tier 3 HSP), and if appropriate, external trading partners such as the VA Financial Service Center (FSC) or Health Care Clearing House.

eInsurance is tightly integrated with these external partners and a back-out of the patch should not be a standalone decision.

## Back-out Procedure

The back-out plan for VistA applications is complex and not a “one size fits all” solution. The general strategy for a VistA back-out is to repair the code with a follow-up patch. The development team recommends that sites log a ticket if it is a nationally released patch.

Back-out Procedure prior to National Release. If it is prior to national release, the site will be already working directly with the development team daily and should contact that team. The development team members will have been identified in the Initial Operating Capability (IOC) Memorandum of Understanding (MOU). As discussed in section 5.2, it is likely that the development team can quickly address via a new software version. If the site is unsure who to contact, they may log a ticket to contact Health Services Portfolio.

The IB\*2.0\*737 patch contains the following build components.

* Data Dictionaries
* Routines
* Option
* Protocols
* List Template

While the VistA installation procedure of the KIDS build allows the installer to back up the modified routines using the ‘Backup a Transport Global’ action, due to the complexity of this patch, it is not recommended for back-out, and a restore from a backup of the Transport Global should not be attempted. In the event that a site decides to back out this patch, the site should contact the Enterprise Service Desk (ESD) to submit a help desk ticket. The development team will need to issue a follow-on patch in order to comprehensively back-out this patch and / or to clean up corrupted data / remove data dictionary changes, if needed and restore the system to a functioning state.

Please contact the EPMD team for assistance since this installed patch contains components in addition to routines.

## Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully implemented. This includes successful installation and testing that the back-out acted as expected, as defined together with the team the site contacted in section 5.5.

# Rollback Procedure

Rollback pertains to data. The only data changes in this patch are specific to the operational software and platform settings and they are covered in the Back-out procedures detailed elsewhere in this document.

## Rollback Considerations

Not applicable.

## Rollback Criteria

Not applicable.

## Rollback Risks

Not applicable.

## Authority for Rollback

Not applicable.

## Rollback Procedure

Not applicable.

## Rollback Verification Procedure

Not applicable.

1. “Enterprise service lines, VAD” for short. Formerly known as the Information Resources Management (IRM) or IT support. [↑](#footnote-ref-1)