Deployment, Installation, Back-Out, and Rollback Guide

Medical Care Collection Fund (MCCF) Electronic Data Interchange (EDI) Transaction Applications Suite (TAS) Phase 1

eInsurance IB*2.0*595

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Revision History

Date	Version	Description	Author
June 2018	1.1	IOC Exit, added IOC test sites	Daniel Moran
March 2018	1.0	IOC Entry IB*2.0*595	Daniel Moran
January 2018	0.1	Initial Version - Draft	Daniel Moran

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 of these activities. Its purpose is to provide clients, stakeholders, and support personnel a smooth transition to the new product or software. This document should be structured to reflect the application of these procedures to either a single site or to multiple sites.

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 IB*2.0*595 patch and how to back-out the product and rollback to a previous version or data set.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom IB*2.0*595 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.

1.2 Dependencies

The following patches must be installed **before** IB*2.0*595:

- IB*2*399
- IB*2*554
- IB*2*601

1.3 Constraints

This patch is intended for a fully patched VistA system.

2 Roles and Responsibilities

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

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	VA OI&T, VA OI&T Health Product Support & PMO (Leidos)	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 Product Support Testing & VIP Release Agent Approval	Deployment	Test for operational readiness	Testing
4	Health Product Support and Field Operations	Deployment	Execute deployment	Deployment

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
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	Installation	Coordinate training	Deployment
9	VIP release Agent, Health Product Support & 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

3 Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

3.1 Timeline

The deployment and installation is scheduled to run for 30 days, as depicted in the master deployment schedule[1].

3.2 Site Readiness Assessment

This section discusses the locations that will receive the IB*2.0*595 deployment.

3.2.1 Deployment Topology (Targeted Architecture)

This patch IB*2.0*595 is to be nationally released to all VAMCs.

[1] Project schedule (right click and select open hyperlink to access)
http://vaww.oed.portal.va.gov/pm/hape/ipt_5010/EDI_Portfolio/TAS%20Interim%20Repository/MCCF%20TAS%20Schedule.zip

3.2.2 Site Information (Locations, Deployment Recipients)

The test sites for IOC testing are:

- CINCINNATI, OH
- MONTANA HCS

  - These sites will not be defined here until the sites have signed the Memorandum of Understanding (MOUs) and testing has completed as sometimes a site has to stop testing prior to the end of IOC.

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

3.2.3 Site Preparation

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

Table 2: 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

3.3 Resources

3.3.1 Facility Specifics

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

Table 3: Facility-Specific Features

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

3.3.2 Hardware

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

Table 4: 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.

3.3.3 Software

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

Table 5: 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*399	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*554	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*601	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.

3.3.4 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.

3.3.4.1 Deployment/Installation/Back-Out Checklist

The Release Management team will deploy the patch IB*2.0*595, 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

Activity	Day	Time	Individual who completed task
Back-Out	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

IB*2.0*595, 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.

4.2 Platform Installation and Preparation

Refer to the IB*2.0*595 documentation on the National Patch Module (NPM) on Forum for the detailed installation instructions. These instructions will include any pre installation steps if applicable.

4.3 Download and Extract Files

Refer to the IB*2.0*595 documentation on the NPM to find the location of related documentation that can be downloaded. IB*2.0*595 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.

4.4 Database Creation

IB*2.0*595 does modify the VistA database. Changes can be found in the NPM documentation for this patch on Forum.

4.5 Installation Scripts

No installation scripts are needed for IB*2.0*595 installation.

4.6 Cron Scripts

No Cron scripts are needed for IB*2.0*595 installation.

4.7 Access Requirements and Skills Needed for the Installation

The following staff need access to the PackMan message containing the IB*2.0*595 patch or Forum's NPM in order to download the nationally released IB*2.0*595 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[2].

4.8 Installation Procedure

Refer to the IB*2.0*595 documentation on the NPM for the detailed installation instructions.

4.9 Installation Verification Procedure

Refer to the IB*2.0*595 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

4.10 System Configuration

No system configuration changes are required for this patch.

4.11 Database Tuning

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

5 Back-Out Procedure

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

5.1 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 OI&T 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.

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[2] "Enterprise service lines, VAD" for short. Formerly known as the IRM (Information Resources Management) or IT support.

5.2 Back-Out Considerations

It is necessary to determine if a wholesale back-out of the patch IB*2.0*595 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*595, this patch should be assigned status of "Entered in Error" in Forum's NPM.

5.2.1 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.

5.2.2 User Acceptance Testing

1. Modified VistA to properly file an eligibility response when that response is associated with a payer name that begins with numeric characters.

2. Modified the excel version of the eIV Payer Link Report [IBCNE IIV PAYER LINK REPORT] option to display the correct value for the locally active status column, LOCAL ACTIVE (#365.12, .03), so that eInsurance users have an accurate report and know what payers they may need to update.

3. On the first of the month, the nightly job will automatically purge eIV related inquiries and responses so that outdated responses are removed and database space is maximized. If the automatic purge process can't be completed, the proper authorities will be notified via email message to mailman group "IBCNE EIV MESSAGE" and outlook address **VHAEINSURANCERR@va.gov**.

4. Modified VistA to display the additional one letter Source of Information (SOI) codes associated with the SOURCE OF INFORMATION FILE (#355.12) on the screens for the Process Insurance Buffer [IBCN INSURANCE BUFFER PROCESS] option (insurance buffer). This allows the user to determine how the insurance buffer entry was created and assist with worklist sorting. The help text has been updated to include the new SOI codes.

5. Removed the ability to directly create insurance policies on the patient's insurance records from outside of the IB package. Disallowed users from creating an entry in the INSURANCE TYPE sub-file (#2.312) within the PATIENT file (#2) via the Fee Patient Inquiry [FBAA PATIENT INQUIRY] option, via the Preregister a Patient [DGPRE PRE-REGISTER OPTION] option and via the Register a Patient [DG REGISTER PATIENT] option. Using those same options, users can now create an insurance buffer entry for any insurance company, including "MEDICARE (WNR)".

6. Enhanced the ability to manage auto match entries, a user holding security key IBCNE EIV MAINTANENCE can access the Enter/Edit Auto Match Entries [IBCNE AUTO MATCH ENTER/EDIT] option to delete existing entries within that option.
Users who do not hold security key IBCNE EIV MAINTANENCE cannot access the Enter/Edit Auto Match Entries [IBCNE AUTO MATCH ENTER/EDIT] option.

7. In the IIV RESPONSE (#365) file, capture the patient's internal entry number for the INSURANCE TYPE sub-file (#2.312) within the Patient (#2) file to accurately track when an auto-update successfully updates a patient's policy. The eIV Auto Update Report [IBCNE EIV UPDATE REPORT] option will

utilize the data to more accurately report on all auto updated policies for a given time frame. Manual user verification will no longer impact the report results. Adjusted the daily Financial Service Center (FSC) registration message to report only yesterday's data to protect against duplication.

8. Modified VistA to update the VERIFIED BY field (#2.312, 1.04) and the LAST EDITED BY field (#2.312, 1.06) in a timely manner with accurate data so that downstream processes and reports contain the proper information.

9. Persisted the Source of Information (#2.312, 1.09) field so that it always reflects the original SOI specifying how the policy was identified. This will facilitate generating return on investment reports that associate dollars collected with the source used to identify the insurance policy. Added a unique SOI identifier, "MYVA HEALTH JOURNAL", that may be utilized to augment source reporting.

10. Modified VistA to generate a SOI of "eIV" from the eIV Appointment extract to be saved in the IIV TRANSMISSION QUEUE (#365.1) file in field SOURCE OF INFORMATION (#3.02) so that outbound Health Level Seven messages can carry the SOI and FSC can persist the data accurately and use it for data analysis.

11. When moving subscribers to a different insurance plan, VistA allows the user to add/edit the BANKING IDENTIFICATION NUMBER (#355.3, 6.02) and the PROCESSOR CONTROL NUMBER (#355.3, 6.03) to ensure that those fields are populated in the destination group insurance plan.

12. Vista was updated to prevent the Insurance buffer from being auto-updated when the Source of Information code (#2.312, 1.09) is "Contract Services".

5.3 Back-Out Criteria

The project is canceled or the requested changes implemented by IB*2.0*595 are no longer desired by VA OI&T and the eBusiness eInsurance sub-team, or the patch produces catastrophic problems.

5.4 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.

5.5 Authority for Back-Out

The order would come jointly from: release coordinator (product support), portfolio director and health product support. This should be done in consultation with the development team and external trading partners such as FSC and the HCCH to determine the appropriate course of action. eInsurance is tightly integrated with these external partners and a back-out of the patch should not be a standalone decision.

5.6 Back-Out Procedure

The rollback plan for VistA applications is complex and not a "one size fits all" solution. The general strategy for a VistA rollback 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. If not, the site should contact the

Enterprise Program Management Office (EPMO) team directly for specific solutions to its unique problems.

The IB*2.0*595 patch contains the following build components.
- Enhancement
- Data Dictionary
- Routine

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, the back-out procedure for global, data dictionary and other VistA components is more complex and requires issuance of a follow-up patch to ensure all components are properly removed and/or restored. All software components (routines and other items) must be restored to their previous state at the same time and in conjunction with the restoration of the data.

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

5.7 Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully installed.

6 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.

6.1 Rollback Considerations

Not applicable.

6.2 Rollback Criteria

Not applicable.

6.3 Rollback Risks

Not applicable.

6.4 Authority for Rollback

Not applicable.

6.5 Rollback Procedure

Not applicable.

6.6 Rollback Verification Procedure

Not applicable.

Template Revision History

Date	Version	Description	Author
March 2016	2.2	Changed the title from Installation, Back-Out, and Rollback Guide to Deployment and Installation Guide, with the understanding that Back-Out and Rollback belong with Installation.	VIP Team
February 2016	2.1	Changed title from Installation, Back-Out, and Rollback Plan to Installation, Back-Out, and Rollback Guide as recommended by OI&T Documentation Standards Committee	OI&T Documentation Standards Committee
December 2015	2.0	The OI&T Documentation Standards Committee merged the existing *"Installation, Back-Out, Rollback Plan"* template with the content requirements in the OI&T End-user Documentation Standards for a more comprehensive Installation Plan.	OI&T Documentation Standards Committee
February 2015	1.0	Initial Draft	Lifecycle and Release Management