

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

Integrated Billing IB*2.0*576

Version 2.0

**Deployment, Installation, Back-Out, and Rollback
Guide**



July 2017

**Department of Veterans Affairs
Office of Information and Technology (OI&T)**

Revision History

Date	Version	Description	Author
April 2017	1.0	Initial Version	REDACTED
July 2017	2.0	Updated with IOC sites	REDACTED

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.

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1 Introduction

This document describes how to deploy and install the IB*2.0*576 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 the IB*2.0*576 will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

IB*2.0*371 and IB*2.0*547 must be installed **before** IB*2.0*576.

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
5	Individual Veterans Administration Medical Centers (VAMCs)	Installation	Plan and schedule installation	Deployment

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
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	
8	VA's eBusiness team	Installations	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 duration of deployment and installation is 30 days, as depicted in the master deployment schedule¹.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the IB*2.0*576 deployment.

3.2.1 Deployment Topology (Targeted Architecture)

This patch IB*2.0*576 is to be nationally released to all VAMCs.

3.2.2 Site Information (Locations, Deployment Recipients)

The test sites for IOC testing are:
REDACTED

¹ Project schedule (right click and select open hyperlink to access) REDACTED

Upon national release all VAMCs are expected to install this patch prior to or on the compliance date.

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
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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*371	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*547	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 eBilling eBusiness 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*576, which is tracked nationally for all VAMCs in the NPM in Forum. 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 the patch was installed in the VistA production at each site, and by whom. A report can also be run, to identify which sites have not currently installed the patch in their VistA production system.

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

4 Installation

4.1 Pre-installation and System Requirements

IB*2.0*576, a patch to the existing VistA Integrated Billing 2.0 package, is installable on a fully patched M(UMPS) VistA system and operates on the top of the VistA environment provided by the VistA

infrastructure packages. The latter provides utilities which communicate with the underlying operating system and hardware, thereby providing Integrated Billing independence from variations in hardware and operating system.

4.2 Platform Installation and Preparation

Refer to the IB*2.0*576 documentation on the National Patch Module (NPM) in Forum for the detailed installation instructions. These instructions would include any pre installation steps if applicable.

4.3 Download and Extract Files

Refer to the IB*2.0*576 documentation on the NPM to find related documentation that can be downloaded. IB*2.0*576 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*576 modifies the VistA database. All changes can be found on the NPM documentation for this patch.

4.5 Installation Scripts

No installation scripts are needed for IB*2.0*576 installation.

4.6 Cron Scripts

No Cron scripts are needed for IB*2.0*576 installation.

4.7 Access Requirements and Skills Needed for the Installation

The following staff will need access to the PackMan message containing the IB*2.0*576 patch or to Forum's NPM for downloading the nationally released IB*2.0*576 patch. The software is to be installed by the site's or region's designated: VA OI&T IT OPERATIONS SERVICE, Enterprise Service Lines, Vista Applications Division².

4.8 Installation Procedure

Refer to the IB*2.0*576 documentation on the NPM for detailed installation instructions.

4.9 Installation Verification Procedure

Refer to the IB*2.0*576 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.

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

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 good operational state of the software and appropriate 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. A decision to back out could be made during site Mirror Testing, Site Production Testing or after National Release to the field (VAMCs). The best strategy decision is dependent on the stage of testing during which the decision is made.

5.1.1 Mirror Testing or Site Production Testing

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 will be resubmitted to the site for testing. If the patch produces catastrophic problems, a new version of the patch can be used to restore the build components to their pre-patch condition.

5.1.2 After National Release but During the Designated Support Period

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 in Forum and will 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 be used to restore the build components to their original pre-patch condition.

5.1.3 After National Release and Warranty Period

After the support period, the VistA Maintenance Program would produce the new patch, either to correct the defective components or restore the build components to their original pre-patch condition.

5.2 Back-Out Considerations

It is necessary to determine if a wholesale back-out of the patch IB*2.0*576 is needed or if a better course of action is needed to correct through a new version of the patch (if prior to national release) or 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 patch IB*2.0*576, 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 would be 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

Concerning the Onset Date Correction user story, the following acceptance criteria should be anticipated:

- The system should not automatically populate the onset date with the service date for professional claims.
- The system should populate onset date with Occurrence code 11 when entered or Occurrence code 10 when entered and if 11 does not exist.
- The system should populate FL14 on the CMS 1500 with onset date with Occurrence code 11 when entered or Occurrence code 10 if entered and if 11 does not exist.
- The system should populate FL15 on the CMS 1500 with accident date with Occurrence code (1,2,3,4 or 5) when entered.
- The system should populate 2300DTP03 on the 837-P with onset date of Occurrence code 11 when entered or Occurrence code 10 if entered and if 11 does not exist.
- The system should populate 2300DTP03 on the 837-P with accident date of Occurrence code 1,2,3,4 or 5 when entered.

Concerning the Missing MRW Legend Indicator user story, the following acceptance criteria should be anticipated:

- The system should generate the MRW based upon the user criteria.
- The system should display all the data available for the MRW based upon the user criteria.
- The system should display indicators in front of or after the bill numbers appearing on the MRW.
- The system should display the legend below the listing on the MRW.
- The system should display two items in the legend. They include:
 - !=Data Mismatch/MSE, and
 - *=Review in Process.

Concerning the Printing of CMS 1500 user story, the following acceptance criteria should be anticipated:

- The system should display all the data available for the bill on the various billing screens.
- The system should allow the user to edit Section 1, Bill Type, Timeframe of Bill field on screen 7 by entering either a 7 (Replacement Claim) or an 8 (Void/Cancel Prior Claim).
- The system should allow the user to enter the original claim reference number (ICN/DCN) on billing screen 10 or the system auto populates the original claim reference number (ICN/DCN) when the COPY/CLONE function is used.
- The system should allow the user to authorize the bill.
- The system should allow the user to print the bill locally.
- The Printed claim form should populate FL22 with the appropriate bill frequency code in the first part of FL22 (Resubmission Code) and the original claim reference number (ICN/DCN) in the second part of FL22 (Original Reference Number).

Concerning the Payer Zip Code Field Adjustment user story, the following acceptance criteria should be anticipated:

- The user is able to enter or update the ZIP code for a third party payer in the appropriate VistA IB screen for each of the affected payer addresses.
- The user should not be able to enter 0000 or 9999 in the last 4 bytes of the ZIP code fields.

- The user is able to file the payer information when complete.
- The system should verify that the zip code is a 9 character numeric value.
- If the zip code value is not valid, the system should not save the value and, in turn, should provide the user with an error message stating the issue with the ZIP code.
- If the value is valid the system should store the payer ZIP code appropriately.

5.3 Back-Out Criteria

The project is canceled, the requested changes implemented by IB*2.0*576 are no longer desired by VA OI&T and the Integrated Billing eBusiness team, or the patch produces catastrophic problems.

5.4 Back-Out Risks

Since the eBilling 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 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. eBilling 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 their unique problems.

The IB*2.0*576 patch contains the following build components.

- Routines
- Billing Screen Input Template
- FileMan file entries used by the Forms Output Utility [IBCE OUTPUT FORMATTER]
- A file entry from IB ERROR (#350.8) file.
- Data Dictionary Changes

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. These data changes 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.