

**Medical Care Collection Fund (MCCF) Electronic Data
Interchange (EDI) Transaction Applications Suite
(TAS) eBilling Build 3/4**

Integrated Billing IB*2.0*592

Version 2.0

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



October 2018

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

Revision History

Date	Version	Description	Author
December 2017	1.0	Initial Version	Vito D'Amico
October 2018	2.0	IOC changes	MCCF EDI TAS eBilling Development Team

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*592 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*592 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*81, IB*2.0*294, IB*2.0*405, IB*2.0*458, IB*2.0*492, IB*2.0*517, IB*2.0*530, IB*2.0*568, IB*2.0*574, IB*2.0*577, IB*2.0*591, IB*2.0*597, IB*2.0*601, IB*2.0*604, and IB*2.0*616 must be installed **before** IB*2.0*592.

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 Administration 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	
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*592 deployment.

3.2.1 Deployment Topology (Targeted Architecture)

This patch IB*2.0*592 is to be nationally released to all VAMCs.

¹ Project schedule (Ctrl+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:

- ALBUQUERQUE, NM
- BIRMINGHAM, AL
- HEARTLAND-WEST HCS
- MARTINSBURG, WV
- TOMAH, WI

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 each “TEST” site prior to deployment.

Table 2: TEST Site Preparation

Site/Other	Problem/Change Needed	Features to Adapt/Modify to New Product	Actions/Steps	Owner
Sites listed in section 3.2.2	Testers need to obtain access to the Test Environment(s)	N/A	Grant the assigned testers the necessary access to the Test Environment(s)	N/A

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

Table 3: 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 4: Facility-Specific Features

Site	Space/Room	Features Needed	Other
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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 5: 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 6: 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*81	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*294	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*405	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*458	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*492	N/A	Nationally released version	N/A	N/A	N/A

Required Software	Make	Version	Configuration	Manufacturer	Other
IB*2.0*517	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*530	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*568	N/A		N/A	N/A	N/A
IB*2.0*574	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*577	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*591	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*597	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
IB*2.0*604	N/A	Nationally released version	N/A	N/A	N/A
IB*2.0*616	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*592, 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 7: 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*592, 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*592 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*592 documentation on the NPM to find related documentation that can be downloaded. IB*2.0*592 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*592 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*592 installation.

4.6 Cron Scripts

No Cron scripts are needed for IB*2.0*592 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*592 patch or to Forum's NPM for downloading the nationally released IB*2.0*592 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*592 documentation on the NPM for detailed installation instructions.

4.9 Installation Verification Procedure

Refer to the IB*2.0*592 documentation on the NPM for specific and detailed installation instructions. These instructions include any post installation steps if applicable. The post installation routine will accomplish the following:

- Sets the default processing of Dental Claims to YES in Site Parameters.
- Adds several new Error Codes to the #350.8 file for Dental Claims.
- Adds several new Type of Service entries to the #353.2 file for Dental Claims.
- Adds a new IB Attachment Report Type to the #353.3 file for Dental Claims.

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 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.

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

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*592 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*592, 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

Create 837D Transaction:

- The IB System will create a proprietary 837D transmission with the data necessary to send to FSC a transaction that it can map to a X12n 00501-X224 Health Care claim: Dental (837D) when a user authorizes a dental claim.
- The IB System will place the proprietary 837D transaction in the extract queue.
- The IB System will transmit a proprietary 837D transaction to FSC at the times designated in the IB Site Parameters option.
- The IB System will provide the ability for a user to manually transmit a proprietary 837D transmission to FSC on demand.
- The IB System will provide the ability for a user to view the data that was transmitted in the most recent transmission of a specified dental claim.

Create Dental Form/Update Autobiller:

- Enter/Edit Billing Information – The system will make the Form Type J430D available to users when creating a new claim or editing an existing claim.
- Autobiller – The system will make the Form Type J430D available to the Autobiller when creating a new claim.
- Autobiller – The system will create dental claims with the Form Type J430D and the Charge Type of professional for entries in Claims Tracking for billable dental services.
- IB Site Parameters – The system will provide the ability for a user with access to MCCR Site Parameter Display/Edit [IBJ MCCR SITE PARAMETERS] to turn off the creation of J430D claims for dental services.

TPJI Indicator:

- Third Party Joint Inquiry [IBJ THIRD PARTY JOINT INQUIRY] - The IB System will display 'D' in the Type column for all entries on the list that are for dental claims.

Insurance Company Entry/Edit – Dental:

- Insurance Company Entry/Edit [IBCN INSURANCE CO EDIT] – The IB System will provide the ability for users to define a primary payer ID – EDI – Dental Payer Primary ID.
- Insurance Company Entry/Edit – The IB System will provide the ability for users to define a mailing address for Dental claims:
 - Pointer to another payer's address if dental claims are processed by another payer
 - Address Line 1 – Required
 - Address Line 2 – Optional
 - City – Required
 - State – Required
 - ZIP – Required (valid 9 character code)
- Insurance Company Entry/Edit – The IB System will provide the ability for users to define a FAX number associated with the Dental Address.
- Insurance Company Entry/Edit – The IB System will provide the ability for users to define a telephone number associated with the Dental Address.

Update Reports – Form Type J430D:

- The IB System will provide the ability for users to view/input the additional Form Type J430D or Form Type designation (I/P/D) when one of the following reports/options searches or displays the form type:
 - View/Print EOB [IBCE PRINT EOB]
 - EDI Claim Status Report [IBCED EDI CLAIM STATUS REPORT]
 - View/Resubmit Claims – Live or Test [IBCE PREV TRANSMITTED CLAIMS]
 - Ready for Extract Status Report [IBCE READY FOR EXTRACT REP]
 - HCCH Payer ID Report [IB HCCH PAYER ID REPORT]
 - View/Print EDI Bill Extract Data [IBCE EDI VIEW/PRINT EXTRACT]
 - Provider ID Query (CPAC) [IBCE PROVIDER ID QUERY]
- The IB System will provide the ability for users to continue to use the GEN Print Bill option [IB PRINT BILL] to view the screens of previously transmitted dental claims while preventing their ability to print those claims.

TAS eBilling System Errors in MRW [MEDICARE MANAGEMENT WORKLIST] and CBW [COB MANAGEMENT WORKLIST]:

- When a claim is on both the CSA – Claims Status Awaiting Resolution [IBCE CLAIM STATUS AWAITING] and the CBW – COB Management Worklist [IBCE COB MANAGEMENT]

worklists, the Biller should be able to address the CSA first without an error message occurring and the user's session unexpectedly ending.

- When a user selects Print MRA from the CBW – COB Management Worklist [IBCE COB MANAGEMENT] and enters a “^” instead of selecting a claim, the option should gracefully exit and not generate an error condition.

5.3 Back-Out Criteria

The project is canceled, the requested changes implemented by IB*2.0*592 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

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 Product Support (HPS) Application Coordinator, developers (both project and Tier 3 HPS), and if appropriate, external trading partners such as the VA Financial Service Center (FSC) or Change Healthcare.

5.6 Back-Out Procedure

The back-out procedure 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 development team can quickly address via a new software version. If the site is unsure who to contact they may log a ticket of contact Health Product Support - Management Systems Team.

The IB*2.0*592 patch contains the following build components.

- Routines
- Modifications to Templates:
 - Input Templates
 - List Templates
- Protocols
- Modifications to the following files:
 - Insurance File [#36]
 - 277EDI ID NUMBER Sub-file [#36.017]
 - IB Error File [#350.8]
 - IB Site Parameters File [#350.9]
 - Bill Form Type File [#353]

- Type of Service File [#353.2]
- IB Attachment Report Type File [#353.3]
- EDI Transmission Batch File [#364.1]
- IB EDI Transmission Rule File [#364.4]
- IB Data Element Definition File [#364.5]
- IB Form Skeleton Definition File [#364.6]
- IB Form Field Content File [#364.7]
- Bill/Claims File [#399]
- Bill/Claims Provider Sub-file [#399.0222]
- Bill/Claims Procedures Sub-file [#399.0304]
- Bill/Claims Line Provider Sub-file [#399.0404]
- Bill/Claims Occurrence Code Sub-file [#399.041]
- Bill/Claims Tooth Number Sub-file [#399.096]
- Bill/Claims Tooth Information Sub-file [#399.30491]

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 National Service Desk (NSD) 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 EPMO development 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 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 5.7.

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.