

# VistA Blood Establishment Computer Software (VBECS) Version 2.2.1

Release Notes Version 3.0

Department of Veterans Affairs Enterprise Project Management Office

## **Revision History**

Date	Revision	Description	Author
			7 10101101
3/27/17	1.0	Initial version (Task 387866)	BBM Team
		VBECS Administrator, Configure Interfaces 209505: Moved from Changed Features and Functions to Untestable System-Level Corrections: VBECS Administrator, Configure Interfaces, the Patient Update and Patient Merge Facility ID is no longer accessible for update.	
5/11/17	2.0	Test Group One: indicated that Z, Inconclusive, is available for manual testing only. (Defect 510346)	BBM Team
3,11,11	2.0	PIV card Access IAM Authentication to VistALink in Production VBECS 375130: Added details on PIV exempt users and cancelling at certificate selection/PIN entry prompts.	DSM FOGIN
		Table 2: Removed the column "Detailed product code name"	
		VistA Software Dependencies: Added sentence that users must follow IAM instructions for "Link My Accounts"	
6/2/17	3.0	Blood Product Update: Added Revision B blood product information, I14240500FY17 and defects 349595, 367461, 375559, 389179, 417721, and 433576 (Task 524390)	BBM Team
0/2/17	3.0	1 417721, dilu 400070 (1858 024090)	DDIN LEGILI

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## Introduction

VistA Blood Establishment Computer Software (VBECS) Version 2.2.1 Release Notes contains information for changes and corrections made to VBECS in the 2.2.1 patch.

Perform a local evaluation and risk assessment of the changes to determine the requirements for local validation of the changes, including documentation of the assessment activities. See Appendix A: Validation Planning.

## **Changed Features and Functions**

VBECS 2.2.1 major changes are:

- Addition of the mandated use of Identity Authorization Management (IAM) two factor authentication using your PIV card to access VistA
- A new patch installation that allows patching VBECS TEST account without also requiring the Production account to have downtime
- A blood product update, which includes psoralen-treated blood product codes
  The psoralen-treated product codes can be used throughout VBECS; however, these psoralentreated products will not satisfy a transfusion requirement of "Irradiate cellular products". If a
  psoralen-treated unit is used for a patient who has a transfusion requirement of "Irradiate
  cellular products", the transfusion requirement will have to be overridden to issue the unit.

The next release of VBECS will deliver functionality to allow specific transfusion requirements to be satisfied with a psoralen-treated product.

Complete lists of the included changes are listed in the Updates by Option section in Changes and Corrections of Table 1.

## **Changes and Corrections**

This section lists changes and corrections to the existing VBECS application. Some items correspond to an item in *Known Defects and Anomalies*.

Resolution of Customer problem reports related to VBECS:

VBECS 2.2.1 will provide resolution of these CA SDM tickets:

I6103186FY16

I6134391FY16

I11941654FY17

17427826FY16

I7429165FY16

I9395437FY16

R8977244FY16

I14240500FY17

**Table 1: Updates by Option** 

Table 1: Updates by	Table 1: Updates by Option			
Option	Problem Summary	Change Summary	Validation Scenario	
Patch Installation changes	New configuration	The icon to access VBECS after remote desktop connection presents as a stoplight icon during patching and returns to the normal icon when the patch is complete and is VBECS available for use.  The stoplight icon appears above the text linked to the test/production account.	None provided.	
		Clicking on the stop light icon presents a pop-up and denies access to VBECS.		
		This VBECS is being upgraded to version 2.2.1.1 and is currently unavailable.  Your VBECS icons and access will return to normal after the patching has finished.  Close This dailog will automatically close in 19 seconds		
		See the <i>VBECS 2.2.1 User Guide</i> for more information.		
VBECS Administrator, Broker Configuration 453877	New fields to set up the IAM broker are required.	Use the VBECS Technical Manual Security Guide section, Broker Configuration for details.	Verify that the broker is identified and connected.  The broker must be configured prior to validation testing of the use of 2 FA.	
Audit Trail Report 385910 459214	New configuration of broker information.	Added display of the New fields to Maintenance: Interface Control section:  Broker IP Address or Server Name Broker Port Number	None provided.	

Table 1: Updates by Option			
Option	Problem Summary	Change Summary	Validation Scenario
Enter Transfusion Data, Transfusion Verification 236045	The VBECS and CareFusion Transfusion Verification software when the VBECS server times can drift apart by and may contain a transfusion start or end time that appears to be in the future to VBECS causing the rejection.	The system allows for the server time drift in the following Information:  Transfusion Start Time (required, future time allowed up to 5 minutes in the future)  Date/time transfusion completed or interrupted (required, future time allowed up to 5 minutes in the future)	None provided.
PIV card Access IAM Authentication to VistALink in Production VBECS 375130	New authentication method required to log into a Production account log onto VistALink based on PIV card logon information.	PIV card access credentials are used to access VistALink after logging into VBECS Production accounts.  Note: IAM service is not active in TEST accounts. Do not attempt to log into TEST account VistALink with a PIV card.  If you have a PIV exemption or use an e token, 2FA will not be required. Do not attempt to log into the VBECS server or VBECS using your PIV card. You will continue with access/verify codes by first selecting your certificate and then clicking Cancel when prompted to enter PIN.  Clicking Cancel when prompted to select your certificate cancels the VistALink connection attempt and allows you to access non-VistALink dependent options.	Demonstrate that PIV card access is in place in Production account.  Setup  1. After your first connection to VBECS using your access and verify codes.  2. Log off and Log in again with your PIV card.  3. Verify that you are able to log into VistALink using PIV certificate and PIN.  4. When the IAM service is not available or fails, you are allowed to enter your VistA Access and Verify codes to log onto VistALink.  If VistALink is not available, neither method of log in will allow you to connect VistALink.
VBECS Administrator, Configuration Division 340246	Selecting a custom time zone or setting start and end dates for daylight savings time may cause a system failure.	The options to configure a custom time zone or set start and end dates for daylight savings time are no longer available.	None Provided.

Table 1: Updates by Option			
Option	Problem Summary	Change Summary	Validation Scenario
VBECS Administrator, Configure Users. 213458	A user cannot log into the VBECS Administrator, Configure User option when VBECS application is in use.	VBECS Administrator, Configure User option allows a user to log to the VBECS Administrator when the VBECS application is in use.	None provided.
ABO/RH confirmation 234545	ABO/RH confirmation was not required by VBECS for the ICCBBA product types PLATELET-RICH BUFFY COAT and POOLED PLATELET-RICH BUFFY COAT.	ABO/RH confirmation is required by VBECS for the ICCBBA product types PLATELET-RICH BUFFY COAT and POOLED PLATELET-RICH BUFFY COAT in addition to GRANULOCYTES.	If this product code is supplied by your supplier, enter a buffy coat product code; Verify the status is Limited and requires ABO/Rh confirmation testing. Verify that the post ABO/Rh confirmation testing status changes to Available.
Automated Instrument Interface (AI) 379633	Choosing the wrong testing template on ProVue to send results causes a system failure; for example, sending a Unit ABO/Rh Confirmation test using a TAS template.	The Al test results transmission is rejected with no system failure occurs. The rejection message displays in Data Innovations Instrument Manager®. The correct VBECS instrument template must be selected and the results message must be resent.	<ol> <li>Choose the wrong testing template for a selected test ordered in VBECS,</li> <li>Transmit to VBECS.</li> <li>It does not appear as expected on the review screen.</li> <li>Check DI IM error log for the transmission failure message.</li> <li>Back to the instrument; align the test results with the correct template for the VBECS order.</li> <li>Transmit successfully to VBECS.</li> </ol>
Blood Units, Select Units 357455	A previously incompatible unit message appears when the associated unit was previously crossmatched on the selected patient with the result of Compatible – Don't Transfuse (D).	The incorrect message no longer appears.	Test Group One: Previously Crossmatch Incompatible Unit message displays properly
Blood Availability Report 434762 I11941654FY17	Units tested and resulted using the <b>Al</b> do not display on the Blood Availability, Antigen Typed Inventory report.	Units tested and resulted using the <b>Al</b> display on the Blood Availability, Antigen Typed Inventory report.	None provided.

Table 1: Updates by Option			
Option	Problem Summary	Change Summary	Validation Scenario
CPRS Order Dialog 210520 I6134391FY16	CPRS Order Dialog with an Urgency Pre-Op selected by a clinician in an Associated Institution was not displaying active MSBOS information.	CPRS Order Dialog when used in an Associated Institution will display active MSBOS information.	Verify in an Associated Institution order dialog and both changes can be verified.  Verify that the active MSBOS entries display
CPRS Order Dialog 334314 I9395437FY16	In the CPRS Order dialog, active VBECS MSBOS surgical procedures are not in alphabetical order in CPRS Surgery field selection list.	In the CPRS Order dialog, active VBECS MSBOS Surgical procedures are listed in alphabetical order for selection in the Surgery field with Pre-Op orders.	in the CPRS Surgery field in alphabetical order.  1. Create or verify that there are active MSBOS entries in VBECS (Tools, MSBOS).  2. CPRS Order dialog, create a Pre-Op order in an Associated Institution, and view the list in the Surgery field.
Server Report Folder Configuration Change 310050 I6103186FY16	Access to the division's VBECS server exported report folder to manage exported reports is limited and not available to VBECS Administrators.	Members of the VBECS Administrators Active Directory group will have permissions to delete reports and create sub- directories in the VBECS reports folder, now described in the Technical Manual Security Guide.	Members of the VBECS Administrators Active Directory group can create and delete the report from the server folder and create sub- folders.
Blood Product Update 215514	E7645 does not have a thawed target with 5-day expiration.	A secondary thawed target for E7645 is available.  E2218, Thawed Apheresis PLASMA ACD-A/XX/refg Irradiated is added and appears with E7754 Thawed Apheresis PLASMA ACD-A/XX/refg Irradiated RT<=24h frozen<=24h.	When your supplier supplies the product code, perform a thaw modification of a unit of E7645 to view the thawed target product codes.  Test Group Two: Generic Test Scenario for New Blood Product Codes
Blood Product Update 215516	Product Short Name is incorrect spelled PLAMSA: E7564, E8155, E8156, E8157, E8158.	Product Short Name spelling corrected to PLASMA; E7564, E8155, E8156, E8157, E8158.	When your supplier supplies the product code, look up the product code in Tools, Blood Products.  Test Group Two: Generic Test Scenario for New Blood Product Codes

Table 1: Updates by Option			
Option	Problem Summary	Change Summary	Validation Scenario
Blood Product Update 215651- I7429165FY16	ICCBBA product codes E8411 and E8412 are not available for entry.	ICCBBA product codes E8411(RED BLOOD CELLS CP2D>AS3/500mL/ref g Irradiated ResLeu:<5E6 Sup ernat rem) and E8412 (RED BLOOD CELLS CP2D>AS3/500mL/ref g ResLeu:<5E6 Supernat rem) are available for entry.	When your supplier supplies the product code, look up the product code in Tools, Blood Products.  Test Group Two: Generic Test Scenario for New Blood Product Codes
Blood Product Update 215571 17427826FY16 215619 R8977244FY16	Psoralen blood product codes are not available for entry.	See Table 2 Psoralen treated product codes request by CA SDM tickets.  The psoralen-treated product codes can be used throughout VBECS; however, these psoralentreated products will not satisfy a transfusion requirement of "Irradiate cellular products". If a psoralen-treated unit is used for a patient who has a transfusion requirement of "Irradiate cellular products", the transfusion requirement will have to be overridden to issue the unit.  The next release of VBECS will deliver functionality to allow specific transfusion requirements to be satisfied with a psoralen-treated product.	When your supplier supplies the product code, look up the product code in Tools, Blood Products.  Test Group Two: Generic Test Scenario for New Blood Product Codes

Table 1: Updates by Option				
Option		Problem Summary	Change Summary	Validation Scenario
Blood Prod Update 215509 215523 215527 215593 215636 215650 215679 215689 215698 215619 215716 227168 234801 260142 268784 288802 301513 319226 335944 349595 375559 417721	215510 215526 215578 215594 215638 215671 215680 215690 215699 215715 215721 234800 260137 268781 288800 301509 319220 335941 375057 367461 389179 433576	VBECS blood product table is missing product codes greater than E8159.	A blood product code update, (E8160 – E8898) which includes Blood Product Revisions from ICCBBA Version 4.34.0 April 24, 2014 through and including the ICCBBA Version 6.23.0 December 2, 2016.  Multiple psoralen treated product codes are included in this update in addition to those listed in Table 2.	Test Group Two: Generic Test Scenario for New Blood Product Codes See your local blood supplier's list of product codes selected for their use to identify the product codes applicable to your validation.

#### Table 2: Psoralen Product Codes requested by CA SDM ticket

This is a limited list of psoralen codes requested by CA SDM ticket. It is not all an inclusive list. Check Tools, Blood Products for product codes provided by your local blood supplier.

The psoralen-treated product codes can be used throughout VBECS; however, these psoralen-treated products will not satisfy a transfusion requirement of "Irradiate cellular products". If a psoralen-treated unit is used for a patient who has a transfusion requirement of "Irradiate cellular products", the transfusion requirement will have to be overridden to issue the unit.

The next release of VBECS will deliver functionality to allow specific transfusion requirements to be satisfied with a psoralen-treated product.

Table 2: Psoralen Product Codes requested by CA SDM ticket		
CA SDM Ticket	Product Code	
R8977244FY16	E8331	
R8977244FY16	E8332	
R8977244FY16	E8333	
R8977244FY16	E8334	
R8977244FY16	E8335	
I7427826FY16	E8340	
I7427826FY16	E8341	
I7427826FY16	E8342	
I7427826FY16	E8343	

Table 2: Psoralen Product Codes requested by CA SDM ticket		
CA SDM Ticket	Product Code	
I7427826FY16	E8344	
R8977244FY16	E8695	
R8977244FY16	E8696	
R8977244FY16	E8697	
R8977244FY16	E8698	

## Untestable System-Level Corrected Code Requests

VBECS Administrator, Configure Interfaces, the Patient Update and Patient Merge Facility ID field is no longer accessible for update. (209505)

## VistA Software Dependencies

• VistA Informational Patch VBEC\*2\*2

#### Required VistA Patches to enable the additional PIV log on functionality

The VBECS 2.2.1 release requires VistA patches from the Identity Access Management (IAM) team to implement PIV authentication. Initially, users must follow the IAM instructions 'Link My Accounts' for PIV to work with the VistA patch.

- VistA Patch XU\*8\*655
  - Make updates to NEW PERSON file to add a user's SecID from IAM User Provisioning (support for Link my Accounts)
- VistA Patch XU\*8\*659
  - VistA validates user based on IAM STS SAML Token
- XWB\*1.1\*64
  - o Enable IAM Binding application access to all users. (support for Link my Accounts)

#### **VBECS User Documents**

To update VBECS documents, retrieve the update packages for these guides from the VA Software Document Library (VDL):

See each guide's revision history for change details:

- VistA Blood Establishment Computer Software (VBECS) 2.2.1 Release Notes
- VistA Blood Establishment Computer Software (VBECS) 2.2.1 Technical Manual-Security Guide
- VistA Blood Establishment Computer Software (VBECS) 2.2.1 User Guide
- VistA Blood Establishment Computer Software (VBECS) Known Defects and Anomalies
- VistA Blood Establishment Computer Software (VBECS) Online Help

### Installation (IQ) Documentation

The patch installation process changes with the installation of VBECS 2.2.1.

The VBECS Test Account patch is installed as follows:

- No downtime to Production accounts.
- Since there is no related Production downtime, an expedited installation will be performed for all sites within the first weeks of release.
- List Serv messages will circulate with the TEST installation schedule.
- Local testing of VBECS TEST connectivity will not occur simultaneously with the patching. Each site will begin validation and if connectivity issues exist, file a CA SDM ticket immediately for assistance.

The VBECS Production account patch is installed in coordination with each Facility.

- Downtime will be coordinated as it has been with the recent patches.
- Connectivity will be verified at the completion of the patch installation with the assistance of Product Support.

A patch installation form (PIF) is no longer available to sites. Detailed documentation is not required for your transfusion service per review of the various regulations and guidance interpretations for installation qualification (IQ). Sites will document the date and version of VBECS installed as part of your functional verification (connectivity) conducted after patching is complete.

The recommended record of a successful installation of the patch is to take and save a screenshot of the **VBECS Help, About** window after Test and Production installation is performed. View the **VBECS Help, About** screen to display the VBECS updated version information.

An unsuccessful installation of a patch leaves VBECS in downtime until the problems are resolved and the installation is successfully completed.

A Facility can record evidence of successful installation of the patch:

- After the Test and Production installation, by viewing the VBECS Help, About screen that
  displays the VBECS updated version information. A screen shot to compare to the previous
  update is the evidence.
- A CA SDM ticket created for the Production installation. Product Support personnel document that the application is up and functional per site communication in the server/site's CA SDM ticket.
- The primary POC receives an email alert and link to the CA SDM ticket for review. The
  ticket has an available detailed report should you choose to save that as evidence of
  installation day verification that the patch successfully installed.
- The VBECS Team, as required by the Food and Drug Administration (FDA), maintains additional detailed installation information.

## **Customer Support**

#### **Problems?**

Contact your **Local** Information Resource Management (IRM) or Laboratory Automated Data Processing Application Coordinator (ADPAC) if you encounter VistA or CPRS connection problems and for training support **before** contacting the Enterprise Service Desk (SD), formerly known as the National Service Desk.

Please ensure local VistA Support contact information is available at all times. National Support will engage Enterprise Operations (EO) personnel as needed.

Problems with connectivity to VistA and CPRS may require personnel from EO with VBECS server administrator access and VistA IT support access.

<u>If the problem remains unresolved after local VistA triage</u>, contact the national Information Technology (IT) support service or request a region ticket to be reassigned to:

#### **Enterprise VA Service Desk Contact**

For Information Technology (IT) support, call the Enterprise Service Desk (SD), formerly known as the National Service Desk, 855-NSD-HELP (855-673-4357) toll free, 24 hours per day, 7 days per week. [Users with access to the VASD-supported request tool (e.g., CA SDM) may file a ticket in lieu of calling the NSD.]

#### **Enterprise VA Service Desk Alternate Contacts**

• Web site: REDACTED Email: REDACTED

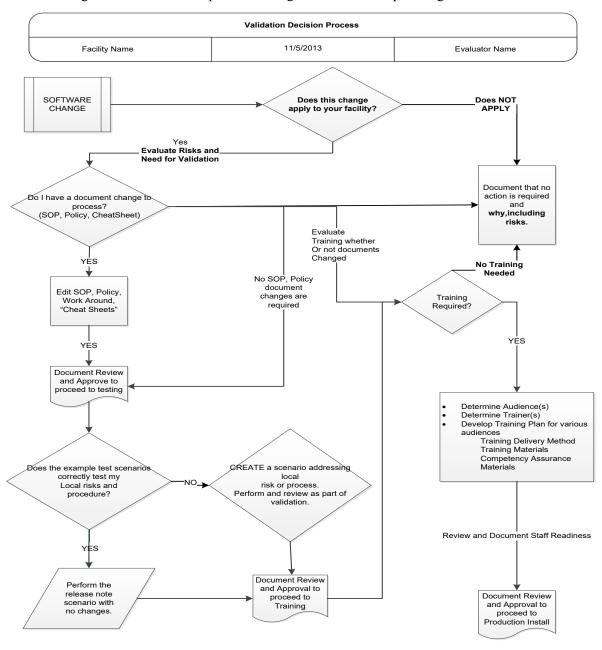
References

None.

## **Appendices**

## Appendix A: Validation Planning

The following is a flowchart to help assess changes for validation planning.



## **Test Group One: Previously Crossmatch Incompatible Unit message displays properly**

**Test Objective:** Demonstrate that a previously crossmatch incompatible unit message displays properly in the Select Units window only when the incompatible crossmatch was performed on the same patient.

The problem occurred in the Select Units window.

**Scenario 1:** Verify that the previously crossmatch incompatible unit message displays only when the incompatible crossmatch was performed on the same patient.

CIOSSITIATOR WAS	s periorifica	on the same patient.	
Data	CPRS: TAS and RBC orders for a patient.  VBECS:  Crossmatch five units each with one of the following statuses via either the Automated Instrument interface or manual serologic crossmatch testing:  • C: Compatible – Safe to Transfuse  • D: Compatible – Don't Transfuse (automatically released from assignment)  • G: Incompatible – Give only with Medical Director Approval  • I: Incompatible – Unsafe to Transfuse (automatically released from assignment)  • Z: Inconclusive (Applies to the manual serologic crossmatch test only)  Release all crossmatched units from patient assignment.		
User	1 user, an	y role	
Steps	<ol> <li>Select the RBC order.</li> <li>Select the five units crossmatched previously.</li> </ol>		
Expected Outcome*	Verify that only the historic crossmatch results of <b>G</b> and <b>I</b> display the crossmatch warning message when assigned again to patient.  Expected results:  Assigned Crossmatch test in DATA to patient Performed by manual serologic or AI crossmatch in DATA test.  1. B C: Compatible – Safe to Transfuse D: Compatible – Don't Transfuse (automatically released from assignment) G: Incompatible – Give only with Medical Director		Expected reaction  No warning  No warning  Previously Incompatible
	3. B	Approval  I: Incompatible – Unsafe to Transfuse (automatically	warning appears  Previously Incompatible
	4. B	released from assignment)	warning appears
	5. B	Z: Inconclusive	No warning

#### Test Group Two: Generic Test Scenario for New Blood Product Codes

(Generic Script, Repeat as needed for each product code that you may receive from your blood supplier.) VistA TEST is required as you will need VistALink for retrieval of HCPCS Codes, Accepting Orders, and Issuing Blood Products.

**Test Objective:** Demonstrate that the blood product code can be processed throughout VBECS for patient transfusion.

**Note:** An ISBT 128 blood product code is the full 8-digit product code as entered in Incoming Shipment. This includes the 5-digit product description, e.g. E7644 that has been added to VBECS, a 6<sup>th</sup> character which is the donation type, and the 7<sup>th</sup> and 8<sup>th</sup> characters that represent the divisions of the blood product.

**Scenario 1 (Incoming Shipment):** Verify the unit can be processed into the facility's inventory using Incoming Shipment.

Data	Associate the blood product codes at least one active facility, HCPCS Codes. (Tools, Blood Products)
User	No specific user role is required.
Steps	Add one or all blood unit(s) with the indicated product code to the facility inventory on a single invoice. (Shipments, Incoming Shipment).
Expected Outcome	The product code can be brought into the hospital's blood product inventory and its record retrieved.
Reports	Cost Accounting Report, Unit History Report, Blood Availability Report, review reports used at your facility

**Scenario 2 (Modification):** Verify the unit can be processed through enabled modification process(es). **Note:** Perform only real life modification patterns. Processing a single blood unit through multiple modifications may not present a target.

Data	Log in (Shipments, Incoming Shipment) a blood unit with the indicated product code.
	No specific user role is required.
User	Note: If the unit is to be modified repeatedly, a Traditional Supervisor may Remove the Final Status to allow use of the same blood unit in multiple modifications.
Steps	Modify one or all of the blood units in an applicable modification (specifically, THAW for the 1.6.1.2 codes).
Expected Outcome	Blood unit with the indicated product code can be modified to a transfusable product.
Reports	Unit History Report, Blood Availability Report, review reports used at your facility

#### Scenario 3 (Selection and Issue): Verify the unit can be processed through normal path for patient transfusion.

Data	Place and accession the appropriate orders for the patient. Accept the orders in VBECS (Orders, Accept Orders).
User	No specific user role is required.
Steps	<ol> <li>Assign the Unit (Blood Units, Select Units).</li> <li>Optionally, print the BTRF and Caution Tag.</li> <li>Issue the Unit (Patients, Issue Blood Components).</li> <li>Enter Post-Transfusion Information.</li> </ol>
Expected Outcome	Blood unit with the indicated product code can be issued for patient transfusion.     Blood unit with the indicated product code can be updated to a transfused status.
Reports	Unit History Report, Patient History Report, Blood Availability Report, review reports used at your

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