

VistA Blood Establishment Computer Software (VBECS) 1.6.0

Release Notes Version 6.0

Department of Veterans Affairs

Product Development

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# Revision History

| **Date** | **Revision** | **Description** | **Author** |
| --- | --- | --- | --- |
| 06/27/11 | 1.0 | Initial release. | BBM team |
| 09/27/11 | 2.0 | Revised to include all changes included in the 1.6.0 Release. | BBM team |
| 02/08/12 | 3.0 | Footer: Changed date to February 2012.  Global: format change. Put the HD or KDA CR number above the text in any row. CR/DR that are not published but related are in hidden text.  Removed the word ‘type’ as related to facility type.  Changed references from ‘form’ to ‘window’ as appropriate.  Introduction: Revised.  Validation Planning: Minor revisions. Added SharePoint reference.  New Features and Functions: Changed to read None. Transfusion Verification Interface information was edited and moved to Untestable System-Level Corrected Code Requests, VBECS Administrator with link to Test Scenario Group 7 for negative testing.  Removed Transfusion Verification Testing Scenario (Appendix B) as for sites without the vendor server to available to configure and test, Test Scenario Group 7. Renumbered the Appendices.  Global Change to all Verification and Validation Scenarios: “None” changed to read “None Provided” (DR 4367)  Enhancements and Modifications: Changed enhancements to corrections in header and text.  Added HD 378098, HD 481469, HD 510119, HD 510389, HD 511255, HD 518119, HD 521368, HD 522558, HD 581620.  VBECS Administrator: 1st row: Revised Problem Summary. Removed: old 2nd row, Problem Summary ”Copy of CR 2561” and revised sentence. 3rd row, Problem Summary and Resolution Summary changed “Test Button” to “Test Correction Button”.  Services: Problem and Resolution revised. Added a note that installation of 1.6.0 in Test immediately changes the Production reporting as well. Added Test Scenario Group 8 (DR 4359)  Throughout VBECS: 2nd row revised Problem and Resolution Summary (DR 4351).  Status Tray Changes: 2nd row: Moved “The interval was five seconds” to the Problem Summary.  Division Logon: Edited the option names to match GUI.  Daily Reagent QC:1st row: Revised Problem Summary and fixed typos. Resolution summary changed “computer” to “VBECS” in the last sentence.  Patient Search Utility: 2nd row Revised Resolution Summary (CR 2998). Problem Summary: Added HD 489699 and CR 3054 to compatibility percentage entry.  Patient Merge: Problem Summary revised.  Accept Orders Revised Problem and Resolution Summaries 1st row and added Verification Scenario (DR 4367).  Added 2nd row. See Patient Testing 1st row edit.  Patient Testing: Revised the Problems and Resolution Summary of the 1st row. Moved this row to Accept Orders as it refers to the Pending ORDER list.  Revised the Resolution Summary of the new 1st row.  5th row: Edited the Problem Summary.  6th row: Revised the Problem and Resolution Summary. Added KDA CR 2805 (DR 4357).  7th row: Revised the Resolution Summary.  8th row: Added HD 378098, KDA CR 2576 and CR 2787 and edited the Resolution summary.  9th row: Added HD 522558.  Invalidate Test Results: 1st row Problem Summary, removed “type‘.  3rd row: Added.  Transfusion Reaction Workup: Revised the Problem Summary and Resolution Summary. Revised the Verification Scenario per CR 3179 findings.  Blood Transfusion Record Form and Caution Tag: 1st row Resolution Summary: added Note.  2nd row: Edited the Resolution Summary.  5th row: edited Verification Scenario  Added 6th row for HD 518119, CR 3137.  Select Unit and Issue Unit: Added 2 rows for HD 510389, CR 3114 and HD 511255, CR 3119.  Blood Product Table Update: 2nd row: removed “FDA/AABB (Codabar). Appendix ID updated.  Incoming Shipment: 1st row: Edited the Resolution Summary.  3rd row: CR 1594 Edited the Resolution Summary and the Verification Scenario (DR 4314).  6th row for HD 366911: Edited the Problem and Resolution Summary.  Rearrange this area for improved printability.  Discard/Quarantine: 2nd row: Revised Problem Summary.  Outgoing Shipment: 1st row: Edited Resolution Summary.  Added 3rd row, CR 3193.  Unit Antigen Typing: Added a row for HD 353065, KDA CR 2724.  Remove Final Status: 1st row clarified all sections, DR 4315. Edited Verification or Validation Scenario.  Added a line for HD 481469 CR 3010.  Modification Update: 1st row: Added a verification of the Unit History Report (DR 4357).  KDA DR 2133, removed the entire line item due to CR 3135 is postponed.  Added row for KDA CR 2678.  Audit Trail Report: 1st row: Special Testing Cost Resolution Summary Added clarification text (DR 4349).  Administrative Data Report: 2nd row: Edited Problem and Resolution Summary (DR 4350).  Transfusion Complications: 1st row: Edited: Problem and Resolution Summary. Added CR 3194. Added verification instructions (DR 4353)..  CPRS Interface Order Dialog: 1st row: Edited Resolution Summary to include postponed CR 3184. Added explanatory notes.  3rd row: Edited Note in Resolution Summary.  CPRS Interface Reports: 1st row: Edited Problem Summary.  Added 4th row for CR 3161.  Untestable System Level Corrected Code Requests: Added VistaLink Connections section and a VBECS Administrator section.  Section heading changed: "Related Manuals and Materials" to "VBECS User Documents" separated the Product Support Section.  Test Scenario Group One, Scenario 3:Edited user information.  Test Scenario Group Two, Scenario 1: Edited Expected Outcome Transfusion Only.  Test Scenario Group Two, Scenario 3: Removed redundant step numbers and revised the Expected Outcome (DR 4352).  Test Scenario Group Three, Scenario 2: Added.  Test Scenario Group Three, Scenario 3: Added.  Test Scenario Group Four, Scenario 1: Removed “Note: Do NOT print the tags/forms during this testing scenario [(HD 0000000510389 (CR 3114) or HD 0000000511255 (CR 3119)].”  Test Scenario Group Five, Scenario 1: Steps corrected menu option.  Test Scenario Group Five, Scenario 3: Removed references to multiple users. Steps changed menu information.  Test Scenario Group Six, Scenario 1: Revised.  Test Scenario Group Six, Scenario 2: Added.  Test Scenario Group Seven and Eight: Added.  Appendix B: Edited 1st paragraph. | BBM team |
| 04/03/12 | 4.0 | DR 4,406 and DR 4,407:  VBECS Administrator, Resolution Summary, “Correction” changed to “Connection”.  Modify Unit: Rearranged line items to improve format and pagination.  Testing Worklist Report: HD 399388, Revised Resolution Summary to reflect all tests now display the specimen collection time not the accepted time.  Audit Trail: Rearranged line items to improve format and pagination.  HD 378098 KDA CR 2576: Problem Description: Added a Note to clarify this is a repeated change.  CR 2881: Added to Resolution Summary: The D Control portion of the grid is no longer ignored when validating Weak D results after the grid was previously invalidated via the “X” button.  CR 2724: Revised the Resolution Summary to reflect that invalid results cannot be saved in this scenario.  DR 4409: CPRS Interface Reports, HD366911: Problem description added, “*(released 11/29/2011)”.* Resolution summary, removed “This change is dependent on the installation of OR\*3\*332 and is not visible until that patch is also installed to display multiple portions of same collection in the order dialog.”  DR 4412: Clarified Resolution Summary and added a note to the Verification or Validation Scenario HD 337715, HD 396365, HD 402842, KDA CR 2252.  DR 4417: Edited Test Scenario Group Seven Scenarios 1 & 2.  Revised Services Resolution Summary to read, “System Center Operations Manager (SCOM) monitors the status of VBECS Services.”  Footer: Changed date to April 2012  Transfusion Complications report: Edited: “Note: Configuring to “Note: When configuring…”. | BBM team |
| 05/22/12 | 5.0 | DR 4440: Throughout VBECS:  An audible alert may not occur when VBECS prevents the user from accessing a selected option or proceeding with a process.  The following KDA are associated with entry of an invalid character in a testing grid.  Serologic Crossmatch: KDA CR 2,033  Unit Antigen Typing: KDA CR 1,893  Antibody Screen Test: KDA CR 2,045  Patient Antigen Typing: KDA CR 2,038  The following KDA are associated with security role restricts the user from selecting or issuing the unit or requires override to select or issue the blood unit. Select Unit: KDA CR 2,193  Issue Unit: KDA CR 2,115 , KDA CR 2,195 ,KDA CR 2,199  KDA CR 2,708 occurs in Discard/Quarantine when a user attempts to update a unit to a date/time that is before the last transaction in a different option.  CR 2,995: Edited Problem Summary. | BBM team |
| 07/13/12 | 6.0 | Document footer: Changed “May 2012” to “July 2012”.  DR 4450: Revision requests by Product Support 061512 | BBM team |

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# Introduction

*VistA Blood Establishment Computer Software (VBECS) 1.6.0 Release Notes* contains information and examples of test scenarios corresponding to corrections or relating to modifications in VBECS.

# Validation Planning

Document your local Validation Plan for any patch related to VBECS, including VistA namespace patches that are identified as an external dependency in the release notes such as LR, OR, VBEC. **The breadth of the validation is focused on the changes as related to YOUR facility’s processes, procedures and practices.**

* Each site is responsible for evaluating changes for their intended use and for establishing additional validation test scenarios (as appropriate).
* Each of the verification or validation scenarios are examples of a possible validation activity not mandated testing of the change by each facility.
* Execution of an example test scenario may not be appropriate at your facility based on your local procedures and policies.

Read the Release Notes or associated Patch Descriptions that describe the changes made and take time to evaluate each change:

Ask yourself, does the change apply to my site? “Yes” or “No”…OR “I don’t know”!

*If “I don’t know” applies, find a resource who does know and can make that assessment.*

IF the change does apply to your site, the next question is “HOW does it apply to my site?”

* If it does apply, do you want to test as described in the example scenario or perform a different scenario?
* Is the example scenario reflective of your LOCAL PROCESS? If not, remove or edit as needed.
* Do you need to test a different set of data or process?
* Do you have a list of your supplier’s product codes for evaluation of blood product updates?
* Does a blood product update require review of any workarounds or missing targets?
* Is a blood product name included in an SOP?
* Do you need to update any circulated documents or information? Workarounds? Procedures? Policies? Web or SharePoint sites?
* Do you need to perform any training for Blood Bank Staff, IT Staff, or Clinical Staff?

The VBECS SharePoint (http://vaww.oed.portal.va.gov/projects/vbecs/default.aspx) has multiple resources regarding validation planning.

# New Features and Functions

VBECS 1.6.0 implements the VBECS portion of the pre-transfusion interface to an independent/vendor transfusion verification application. This portion of the interface is not functional until the vendor application and interfaces are released and installed nationally. See the *Untestable System-Level Corrected Code Requests, VBECS Administrator* section as this cannot be fully tested at this time.

# Corrections and Modifications

This section lists corrections and modifications to VBECS 1.5.2 software. Items in the currently released *Known Defects and Anomalies* addressed in the VBECS 1.6.0 release are noted as ‘KDA CR or DR number’. Some corrections have an example validation scenario in Appendix A: Validation Planning and Example Test Scenarios.

Local validation is required as defined in your validation plan.

Resolution of:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| * New Service Request (NSR) – ID #20100407 | | | | |
| * PSPO #1881 is associated with HD 387437, HD 387849, HD 444539, and HD 456724. | | | | |
| * HD 335307 | * HD 396221 | * HD 456724 | * HD 521368 |
| * HD 337715 | * HD 396365 | * HD 457618 | * HD 522558 |
| * HD 339277 | * HD 396922 | * HD 459134 | * HD 534251 |
| * HD 339722 | * HD 399388 | * HD 464593 | * HD 535356 |
| * HD 341940 | * HD 399413 | * HD 474279 | * HD 535467 |
| * HD 346879 | * HD 399931 | * HD 475339 | * HD 535633 |
| * HD 352578 | * HD 400511 | * HD 475372 | * HD 536226 |
| * HD 353065 | * HD 402842 | * HD 476470 | * HD 538641 |
| * HD 354983 | * HD 409713 | * HD 481469 | * HD 540502 |
| * HD 356628 | * HD 410129 | * HD 488361 | * HD 555413 |
| * HD 357434 | * HD 415180 | * HD 489699 | * HD 573529 |
| * HD 366911 | * HD 421894 | * HD 490907 | * HD 588636 |
| * HD 372115 | * HD 432678 | * HD 494963 | * HD 595084 |
| * HD 373392 | * HD 432763 | * HD 495822 | * HD 599670 |
| * HD 377513 | * HD 438441 | * HD 504237 | * HD 608425 |
| * HD 378098 | * HD 439888 | * HD 510389 | * HD 608685 |
| * HD 378779 | * HD 444539 | * HD 511255 | * HD 616280 |
| * HD 381558 | * HD 446944 | * HD 512936 | * HD 620566 |
| * HD 381907 | * HD 453467 | * HD 513792 | * HD 621115 |
| * HD 387437 | * HD 454433 | * HD 515768 |  |
| * HD 387849 | * HD 454476 | * HD 516846 |  |
| * HD 388913 | * HD 454589 | * HD 517387 |  |
| * HD 394622 | * HD 456084 | * HD 518119 |  |

| 8BVBECS Administrator | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| When configuring an interface, entering a space before the IP address in that field causes a system error.  CR 2936 | The application no longer causes a system error when an extra space(s) precedes an IP address. | None Provided |
| Multiple Tool Tip messages associated with an enabled clear button are incorrect or missing causing potential user confusion.  CR 2954 | Tool tip messages display correctly. The clear button enables correctly. | None Provided |
| Enter a valid Interfaced Application IP Address and Port Number, the Test Connection Button does not enable.  CR 2949 | Entering a valid Interfaced Application IP Address and Port Number enables the Test Connection Button. | None Provided |

| 9BServices | | |
| --- | --- | --- |
| Problem Summary | Resolution Summary | Verification or Validation Scenario |
| The service monitor sends emails too frequently consuming server CPU usage. The send rate was every 5 seconds.  CR 2732 | System Center Operations Manager (SCOM) monitors the status of VBECS Services. If a service goes offline or fails to start after a reboot, SCOM will send an email alert to the administrators group.  Note: Installation of 1.6.0 in Test affects the Production reporting. | Test Scenario  Group 8 |

| 10BThroughout VBECS | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Online Help links are lost.  CR 2693 | The links to Online Help are intact and functioning. | None Provided |
| The VBECS databases are checked for integrity errors once every Sunday. This led to an issue at one site where the problem resulted in data loss due to the length of time that passed between the problem origin and detection.  CR 2808 CR 3178 | The VBECS databases are checked for integrity errors every night.  Email alerts are sent only when integrity errors are found. | None Provided |
| An audible alert may not occur when VBECS prevents the user from accessing a selected option or proceeding with a process.  The following KDA are associated with entry of an invalid character in a testing grid.  Serologic Crossmatch: KDA CR 2,033  Unit Antigen Typing: KDA CR 1,893  Antibody Screen Test: KDA CR 2,045  Patient Antigen Typing: KDA CR 2,038  The following KDA are associated with security role restricts the user from selecting or issuing the unit or requires override to select or issue the blood unit. Select Unit: KDA CR 2,193  Issue Unit: KDA CR 2,115 , KDA CR 2,195 ,KDA CR 2,199  KDA CR 2,708 occurs in Discard/Quarantine when a user attempts to update a unit to a date/time that is before the last transaction in a different option. | The audible alerts throughout VBECS occur. | None Provided. |

| 11BStatus Tray Changes | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The Pending Order alert and Order Count queries may cause overall performance issues.  DR 3679, DR 3680 | The total number of pending orders no longer displays in the status tray. | None Provided |
| The Patient Update/Merge alert queries cause overall performance issues The interval was five seconds.  CR 2755 | The patient update/merge alert interval is now five (5) minutes to further improve system responsiveness. | None Provided |

| 12BDivision Logon | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| An option to restore VistALink connection is not offered consistently in the VBECS options:   * Accept Orders * Return Issued Units to the Blood Bank * Post-Transfusion Information   HD 335307, HD 341940, HD 421894, HD 504237, KDA CR 2761, CR 2695, CR 1571, CR 2455, CR 2372 | The application provides an opportunity to restore the connection or informs the user that VistA is not available. The application will be able to differentiate between the options to restore a VistALink connection versus an unavailable VistA application. | Log on to VBECS without logging into VistALink. Attempt to open any menu option that requires a VistALink connection. The application displays an option to restore the connection or a message that VistA is unavailable. |

| 13BDaily Reagent QC | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Daily entry of quality control testing details are required to indicate that a rack is tested whether or not that QC configuration conforms to the facility’s testing protocol.  CR 2718, DR 3448 | A user may indicate that daily QC for a rack is documented off-line allowing use of the rack as QC tested.  Current functionality related to the successful completion of the daily reagent rack QC remains unchanged. Patient and unit testing overrides regarding rack QC testing apply when this check box is unchecked or testing is not documented in VBECS. | Test Scenario Group One  If you elect to mark a rack QC’ed offline, you must also test that the rack appears tested “yes” in the appropriate options; see Test Scenario Group One, Scenario Two. |
| The QC testing grid is not enabled when a secondary reagent lot number *(a tested with reagent)* is updated. Examples are the enhancement media or AHG sera when tested as part of the ABS QC.  KDA CR 2696 | The testing grid enables when a new lot number is selected during Enter Daily Reagent QC for all primary and secondary reagents. | If you perform daily QC online, change any reagent lot number on a tested rack to enable the corresponding reaction result cells in the testing grid. |
| An exception was not collected when a user enters a negative reaction when the expectation is positive and vice versa.  DR 2154 | The exception is generated for a test entry both when the entry is positive when negative is expected and vice versa for each reagent type by lot number in addition to a change in reactivity of 2 or more in reaction grades. | If you perform daily QC online, change an expected reaction to its opposite, process the override and review the exception report. |

| 14BPatient Search Utility | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The patient’s hospital location does not display in the patient search window.  DR 3735 | The patient search window now displays the most recent hospital location in VBECS for the selected patient. | None Provided |
| Compatibility percentage is not correct when one of the identified antibodies may exist individually or as a combination of antigen negative requirements, i.e. Anti-f, G, Ce etc. and the compatibility percentage was changed in Tools, Antibodies from no value to zero for one of the antibody specificities.  HD 489699, CR 3054 | The compatibility calculation is correct, regardless of the specificity origin( VistA Converted or VBECS entered), based on the values entered in Tools, Antibodies, whether the antigen may exist singularly or as a combination of antigen negative requirements, i.e. Anti-f, G, Ce, etc. | None Provided |

| 15BPatient Update | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| A patient update message was rejected incorrectly when the only update is to the patient’s SSN.  CR 2971 | The update message processes when a change to the SSN is the only change. | None Provided |

| 16BPatient Merge | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The merge process changes the "merge from" patient’s name to include the string "MERGING INTO" when the patient record is verified as a valid duplicate. The patient name is too long after Patient Merge because of the prepended string merging. This results in the patient name being too long.  HD 453467 CR 2931 | When the merge-from patient name includes the words “MERGING INTO” and exceeds the standard length, VBECS will no longer reject the message. | None Provided |

| 17BAccept Orders | | | |
| --- | --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** | |
| When data has been changed and not saved and the X button on the Accept Orders window is used to close the window, the window behaves differently than when the close button is used to exit the window and data may be lost.  CR 2909 | When data has been changed and not saved and the X button on the Accept Orders window is used to close the window, the confirmation popup displays to prevent data loss. | Select an order, enter the UID and click the X button to close the Accept Orders window. A message appears allowing user to return to the window and save the information or exit without saving the changes. | |
| The specimen collection date/time is the system date/time from when the TAS order was accepted in VBECS, not the real collection date/time for any diagnostic test.  Note: Maintain Specimen continues to displays the TAS collection date/time.  HD 399388, DR 3793, CR 2817 | The TAS test displays the specimen collection date/time rather than the date/time the order was accepted on the Pending Order List (POL) on the Testing Worklist Report and Single Order History Report.  This information does not display on the Pending Task List (PTL). | None Provided |

| 18BPatient Testing | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The PTL is slow to clear and move to the testing when 50 units or more are associated with the component order.  CR 2920 | The PTL closes and moves to the next window without any performance issues. | None Provided |
| The testing details ALL PHASES is the default.  CR 2717, DR 3099 | The default selection in the Patient Testing, Testing Details window displays a default as selected in the Configure Division, Configure Testing option. | None Provided |
| The ABO/Rh test comments from a patient are incorrectly carried over to the next patient test record when processing multiple patient orders in the same batch.  HD 381558, KDA CR 2777 | The free text comment entered for one patient’s ABO/Rh test comment does not appear related to the next patient selected in the same testing batch. | Select at least two (2) patients for batch testing of the ABO/Rh test.  Enter a free text comment in the ABO/Rh test comment of the first patient selected.  Move to the next patient and the ABO/Rh test comment field is blank. |
| Reflex test orders on an expired specimen cannot be selected and completed.  HD 432678, KDA CR 1843 | Patient reflex test results are allowed with appropriate overrides when the specimen is expired. | Order and result a reflex test on a test associated with an expired specimen. |
| When Special Instructions (SI) and Transfusion Requirements (TR) option is displayed by pressing the SI/TR button in Patient Testing, the testing grid freezes in the background and is hidden behind the SI & TR window.  CR 2845 | The SI or TR information window does not cause display problems with the Testing Grid window. | None Provided |
| Selecting a TAS that is partially tested and another that is “not started” (TAS, ABS or RBC order), does not allow the user to select a testing format for the “not started” order and does not allow the user to result the partially completed test.  HD 394622, HD 464593, HD 396221, HD 457618, HD 454433, HD 476470, HD 515768, CR 2805 | The testing details are forced to the testing pattern selected for the partially completed test. The user may complete both tests in this grid format. | Test Scenario Group Three, Scenario 1 |
| Invalidation of partial XM results in the All Phases grid (via "red X" button in the corner of the grid) does not fully invalidate all results. The Testing Worklist Report does not mark the invalidated entries with the “entered in error” comment. When re-opened the grid is forced to AHG Only format.  CR 2995 | The previously entered crossmatch results are cleared. | None Provided |
| When the user saves patient ABO and Rh interpretations separately, an ABO/Rh discrepancy was incorrectly defined.  Note: This problem has not reoccurred. This change automatically corrects any previously unknown instances of the problem.  HD 378098, KDA CR 2576, CR 2787 | A user is no longer able to save a patient ABO interpretation separately from its corresponding Rh typing. | None Provided |
| The warning message to notify the physician immediately regarding units that were emergency issued appears related to a released unit that was issued to another patient.  HD 522558, CR 3152 | The warning message regarding physician notification due to issuance of blood products related to incomplete testing appears appropriately for the correct patient order. | Test Scenario Group Three, Scenarios 2 and 3. |

| 19BInvalidate Test Results | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| In a Transfusion Only facility, invalidating a crossmatch interpretation caused a system error.  KDA CR 2674 | Invalidation of a crossmatch interpretation entry will no longer result in a system error. | None Provided |
| In a Full Service facility, invalidating crossmatch results from an AHG only data grid caused a system error.  CR 2996 | Invalidation of crossmatch results from an AHG only data grid will no longer result in a system error. | None Provided |
| When processing a test as ‘entered in error’, users do not check the checkbox triggering the corrected results entry. Tier 3 support is required to change the order status allowing corrected result entry by the user.  CR 3198, DR 4358 | The window is changed, the checkbox is always “checked “. This will default to require a result correction of the erroneous results unless the user UNCHECKS the box, indicating that they do not choose to enter “corrected results” for the test.  Note: A test that appears on the PTL for correction that is not needed may be cancelled. | None Provided |

| 20BPost-Transfusion Data | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The user could save a Post-Transfusion Information screen without confirming (overriding) errors at Transfusion Start Date, Transfusion End Date, and Volume fields.  CR 3002 | The option displays a message box and does not allow incorrectly formatted entries to be saved. | Create a transfusion record with erroneous data on the page in the specified fields. |

| 21BDocument ABO Incompatible Transfusion | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The OK button does not enable when all required fields have been completed.  CR 2976 | The option enables the OK button when all required information has been entered. | None Provided |

| 22BTransfusion Reaction Workup | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The current Transfusion Reaction types contain outdated terms.  DR 3747, DR 3833, DR 3845, CR 3049 | The list of selectable transfusion reaction types is modified by **removing:**   * Acute Hemolytic and Circulatory   and **adding:**   * Acute Hemolysis non ABO * Acute Hemolysis ABO Incompatibility * TACO (Transfusion Associated Circulatory Overload) * Transfusion Related Microbial Infection * Citrate Toxicity * Unrelated to Transfusion | View and select the reaction types when Finalizing a Transfusion Reaction Work-Up. |

| 23BBlood Transfusion Record Form (BTRF) and Caution Tag (Tag) | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| A longer patient name may print into the recipient blood type area of the tag.  KDA CR 2454 | The patient name and SSN have been switched to allow adequate space for a long patient name to print clearly.  Note: Also applies to the blank Caution Tag. | Print a Caution Tag for a blood unit assigned to a patient with name longer than 26 characters total. |
| The unspaced ISBT 128 donor identification number (DIN) is difficult to read.  NSR – ID #20100407, DR 3752 | A space is inserted between the Facility Identification Number (FIN) and the year as well as a space between the year and the sequential number assigned as part of the DIN. The full 13 character DIN number remains the full unit identifier.  Example: **W1234 11 654345** | Print a Caution Tag for a blood unit assigned to a patient. |
| The BTRF or Caution Tag does not include an eye readable product code.  KDA DR 1704, DR 4093, DR 3130, CR 3064 | The eye readable product code is printed on the Caution Tag next to the 2D barcode.  Note: The product code was not added to the BTRF, as that hard copy document becomes only a downtime form with the implementation of Transfusion Verification. | Print a Caution Tag for a blood unit assigned to a patient. |
| When the Caution Tag and BTRF are printed at the completion of patient testing (TAS and XM), they print without the current ABO/Rh test information.  Note: When the patient has previous testing on file that matches the entered ABO/Rh type, this is not evident.  KDA CR 2493 | The current blood type testing results is saved prior to allowing the generation of the Caution Tag and BTRF associated with selected units when the request to print them is made in Patient Testing. | Select a patient with No Record (NR) of an ABO/Rh test. Order a TAS and RBC for the patient. Perform and save the TAS and crossmatch testing of a unit in the SAME testing session. The Caution Tag and BTRF print the blood type saved with the TAS testing, not that the blood type is unknown. |
| A transferred blood unit's Caution Tag is printable.  CR 2908 | A unit in a status of Transferred cannot have a Caution Tag or BTRF printed. | Confirm a shipment of at least one blood unit (Shipment, Outgoing Shipment). Attempt to print the Caution Tag or BTRF from either menu option. |
| The tag failed to print when the unit is Rh Positive and the patient is Rh Negative.  HD 518119, HD 540502, CR 3137 | The Tag prints successfully when an Rh Positive unit is selected for an Rh Negative patient. | None Provided. |

| 24BSelect Unit and Issue Unit | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The locks created for previously assigned units when the Select Units window loads prevents those units from being issued to the patient.  KDA CR 2758, DR 3675 | The record lock created for a previously assigned unit that has already been crossmatched is released when selecting this unit in Issue Units. | Test Scenario Group 4 |
| Frozen products, within the product types PLASMA, Frozen Apheresis RED BLOOD CELLS and Frozen POOLED SERUM, may be issued.  KDA DR 1661, DR 3321, CR 3065 | The informational message that the selected unit requires additional processing displays for the product types PLASMA, Frozen Apheresis RED BLOOD CELLS and Frozen POOLED SERUM. | Select products of these product types to view the message. |
| In the warning message, the antibody and antigen test text is misplaced in the message when the unit is antigen positive.  CR 2997 | The warning message displays the antibody and antigen text correctly when the selected unit is antigen positive. | Select a unit that does not satisfy the patient’s antigen negative requirement as created by an antibody. (Do not use an antigen negative requirement only.) |
| A cryoprecipitate unit with a blood type of POOLED ABO or Rh cannot be selected for a patient.  HD 454476, HD 388913, DR 3972, DR 4130, CR 3097 | A unit of pooled cryoprecipitate with the mixed blood types is selectable. | Create or enter a cryoprecipitate pool with a POOLED ABO and/or Rh. Select the unit for a patient. |
| When prompted to print the caution tag and BTRF, click YES for a unit selected from the Emergency issue tab that requires a specimen association but does not have one at this time causes a system error forcing the tech off VBECS.  HD 510389, HD 513792, HD 516846, HD 534251, HD 535467, HD 536226,CR 3114 | The tag and BTRF prints as requested during an emergent blood issue. | None Provided. |
| Tech #2 crossmatches units for a selected patient and upon completing are asked if they want to print tags to which they respond **yes**. Tech #1 is reprinting tags for that patient. The system error forces tech #2 off VBECS.  HD 511255, CR 3119 | The tag and BTRF prints as requested when multiple users are processing the same patient‘s orders. | None Provided. |

| 25BBlood Product: Table Update | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Product codes were not added to the Blood Product table. DR 3665  CR 2765 | The following 12 product codes are added to the Blood Product Table: E6366, E6376, E6377, E6421, E6422, E6528, E6529, E6530, E6531, E6532, E6533, and E6534. | Tools, Blood Products, these product codes are available for configuration.  Test Scenario Group 5 |
| Additional available blood product codes from ICCBBA (ISBT128) are required additions to the Blood Product Table.  CR 3049, CR 3058, CR 3091, CR 3107, DR 3631, DR 3946, DR 3963, DR 3965, DR 3973, DR 4015, DR 4016, DR 4029, DR 4037, DR 4089, DR 4095, DR 4140, DR 4174, DR 4179, DR 4180, DR 4185. | An update to the VBECS blood product table includes addition of new product codes and attributes as well as edits to current product code entries. Blood product codes have been added from ICCBBA Blood Product Database updates, Version 3.45.0 (December 2010) through and including ICCBBA Version V 4.1.0, (July 2011) (E7168-E7417). | Tools, Blood Products, these product codes are available for configuration.  Test Scenario Group 5 (See Appendix B: Blood Product Table Updates) |

| 26BIncoming Shipment | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Revise confirmation message to remind the user to perform a visual inspection upon receipt of the blood product as required by policy and procedure.  CR 2740, DR 3109, 1.4.0.0 FTI 324 | The text of the confirmation message popup no longer presents a generic message.  The confirmation message states that by clicking OK and saving the unit record, the unit was visually inspected and is acceptable for use.  There is no documentation added to any report related to this change in message text.  The user may only enter visually acceptable blood products into VBECS at this time. | Test Scenario Group 2, Scenario 1, Step 5 |
| When entering a Codabar labeled blood product, scanning a 10 digit FDA registration number displays a ~ at the front of that number causing it to display an error message.  KDA CR 2759 | All lengths of a FDA Registration number barcode label on a Codabar blood product label scans into the FDA registration number field. | None Provided |
| The system does not allow the scan of a pooled/mixed ABO/Rh blood group label.  KDA CR 1594 | A pooled or mixed ABO/Rh blood product label can be scanned and moves the cursor to the expiration date field.  Note: Pooled FFP and Plasma cannot be entered with mixed/pooled ABO or Rh. | Enter a component that has a pooled ABO or Rh barcode label as allowed by component type (PLT or CRYO). |
| When a **Transfusion Only** receives a blood unit repeatedly, the site cannot update the restricted-to patient information at Incoming Shipment.  KDA DR 3605,CR 2741 | A unit has its Restricted-for patient information removed when it is “Transferred”. When the unit is subsequently received by the facility, the restricted for patient is blank and allows for the selection of a different restricted for patient at unit receipt. | Test Scenario Group 2, Scenario1, Transfusion Only outcome #1. |
| Codabar product code, 18451, cannot be saved to inventory during Incoming Shipment.  HD 494963, HD 474279, CR 2993, DR 4174 | The Codabar product code, 18451, can be used to enter a blood unit.  This is a blood product created by the American Red Cross blood suppliers that is not present on the AABB/FDA list of blood product codes. | None Provided |
| An ISBT labeled unit product code is saved without the unit’s product code division codes.  HD 366911, HD 475339 KDA DR 2735, CR 2824, CR 3068, CR 3104, DR 3632, DR 4170, | The user must enter a full eight-digit product code (five digit product code, donation type, and specific unit division information).  A unique blood unit record is defined by the following data elements:   * VBECS Division * Unit ID * Product type code (Codabar Only)   For example: Product Code: 12000 will present a choice of Product type code: Platelets or Washed Platelets   * Product code * Codabar (5 digits) * ISBT 128 (8 alphanumeric characters). * Expiration date.   When sufficient blood unit information is entered, additional checks are made to ensure its uniqueness. The unit status is checked and a message regarding the ability to re-enter the unit is displayed. | Test Scenario Group 2  Attempt to enter and save only the first 5 digits of an ISBT 128 product code as entering a unit. |

| 27BABO/Rh Confirmation | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The confirmation message window does not resize and hides the OK button when there is a large group of units in the testing batch.  KDA CR 2707 | A simple confirmation window displays prior to saving data changes. It does not include a listing of the blood units in the batch. | None Provided |

| 28BDiscard/Quarantine | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation**  **Scenario** |
| The confirmation message window does not resize and hides the OK button when there is a large group of units in the testing batch.  KDA CR 2706 | A simple confirmation window displays prior to saving data changes. It does not include a listing of the blood units in the batch. | None Provided |
| The incorrect date/time displays in the message when attempting to discard the unit prior to the last record change from testing or processing.  KDA CR 2708, CR 3195 | When a user attempts to change information on a unit before the last recorded update, the application provides an audible alert and a warning or override message per the logged on user’s security role. | None Provided |

| 29BOutgoing Shipment | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| In a Transfusion Only facility type, the Restricted-to patient information remains associated with a transferred blood unit and is displayed when that unit is subsequently received for a different patient.  HD 339722, CR 2739, KDA DR 3542 | The restricted-to patient information is cleared when the user removes the patient assignment when an invoice is confirmed.  **Does not apply to the Full Service type configured facility**. | None Provided |
| The division address is incorrect on the outgoing shipment invoice.  HD 352578, KDA CR 2722 | The division address displayed on the VBECS Outgoing is the address information as recorded in Tools, Local Facilities. | None Provided |
| The option does not allow the return of a unit to the original shipper after transfer to a different facility.  CR 3193 | A unit may be returned to the original supplier after recording interim shipments to other facilities and the unit is in the original facility’s inventory. | None Provided |
| A unit cannot be removed from an un-confirmed outgoing shipment invoice.  HD 399413, CR 2818, CR 2941 | A unit can be removed from an unconfirmed outgoing shipment invoice. | None Provided |

| 30BUnit Antigen Typing | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| A rack marked “not in use today” displays in the pick list.  DR 4169, CR 3069 | Racks marked as "Not In Use Today" are not included in the rack list presented to the user. | In Enter Daily QC, check a rack “not in use” today, create a worklist, view the selectable list of racks, and verify that the rack does not appear. |
| Unit testing for weak D forces the use of the D reagent lot number associated with the selected rack. When the selected rack is “QC’ed offline”, this is not possible.  DR 3613 | Unit testing for weak D requires the selection of the antisera lot number but does not force the use of the D reagent lot number associated with the selected rack. | Select a Reagent Rack that has been marked “QC’ed Offline”. Create a worklist for Unit antigen typing with weak D. Select a lot number for D antisera that is not associated with that rack. |
| A system error occurs if more than one unit antigen test is defined for a worklist and an existing specificity is not selected.  HD 381907, HD 495822, KDA CR 2754 | A user is able to select any worklist that has more than one unit antigen test defined. | Select any worklist in the top list view that has more than one unit antigen test defined and proceed to testing without incident. |
| The legend text does not refresh accurately as the cursor moves in the testing grid.  CR 2835 | The legend displays the allowed entries for the grid cell in which the cursor is placed. | Move the cursor into an interpretation cell of the test grid, the valid interpretations are displayed, not the words “Any Text”. |
| The weak D test does not allow an INCONCLUSIVE interpretation when expected.  CR 2881 | The weak D test allows the save of an Inconclusive interpretation with the entry of a negative D test and a positive control test. The D Control portion of the grid is no longer ignored when validating Weak D results after the grid was previously invalidated via the “X” button. | Result a weak D test with negative D and positive control, an inconclusive interpretation is saved. |
| When more than one antigen typing tab is used for the unit, entries are incorrectly cleared.  CR 2864 | Entered data remains unchanged when switching between the unit’s testing tabs, specifically lot numbers selected but not saved as one navigates to another tab to enter additional data. | None Provided |
| User may place the cursor in the row validation square (E, V or W area) in the unit testing grid section.  CR 2831 | The cursor cannot be placed in the row validation cell. | Place the cursor on the row validation square (E, V or W area), attempt to click into that square. The cursor cannot be placed in this square. |
| The testing entry validation is not working correctly for weak D antigen typing test allowing the system to save invalid results.  HD 353065, KDA CR 2724  This was also corrected by CR 2836 in VBECS 1.5.2.0. | The save of invalid weak D typing will not be allowed when multiple antigen typing are selected for unit or patient antigen type testing. This correction validates the results on a tab, whether alone or after switching to another antigen type. | None Provided |

| 31BRemove Final Status | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Invalidating a transfusion in VBECS increased the transfused units count appearing in the CPRS Transfusion Report as part of the CPRS Blood Bank Report or separately for that date.  HD 438441, HD 439888, HD 354983, HD 378779, HD 459134, HD 490907, HD 512936, HD 535356, HD 538641, CR 2589, CR 2901 | Removing the Final Status of “transfused” from a unit is correctly reflected in the CPRS transfused unit tally for that date. | Transfuse at least 2 blood units to create a tally on the CPRS Transfusion Report. Remove the final status of transfused from one of these units. The CPRS tally is changed. |
| Unable to remove the final status of a unit entered into VBECS prior to 1.5.1. The message "the unit has no previous unit status on file and cannot be selected." displays to the user when such a unit is selected.  HD 481469, CR 3010 | Units entered into inventory prior to 1.5.1 may be processed in Remove Final Status. | None Provided. |

| 32BModification Update | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The thawed PLASMA target expiration is incorrect.  Note: This change includes Plasma Frozen Within 24 Hours of Collection (FP24). FP24 can only be modified to a thawed plasma target with a 5-day expiration.  Where local policy is to use FP24 as FFP with 24-hour expiration, the 5-day expiration may be changed to 24 hrs without override during the modification to a thawed product.  KDA CR 2735, CR 3196 | A 5-day maximum storage time is displayed for PLASMA targets when thawed. | Thaw a plasma product. Displayed default expiration is 5 days.  Review the Unit History Report. |
| A previously divided unit can be divided.  CR 3071 | A unit may be split only once in the application as designed. | Split a blood unit. Take one of the targets and attempt to split it. |
| Missing target product codes for various modifications.  HD 432763, HD 357434, KDA CR 2691, CR 2746, CR 2773, CR 2745, DR 1942, DR 2092, DR 2998, DR 3423, DR 3433, DR 3579, DR 2163, DR 2616, DR 3262, DR 3360, DR 3596, DR 4050, DR 2150, DR 3818, DR 4108, DR 4116 | The modification type truth tables, TT\_26.02 Preamble rules and tables A-K, are updated. The update will include the addition of all known core conditions to each of the various tables that are approved for use in the USA, including PAS. | Test Scenario Group 6, Objective 2  Review your workarounds for missing targets for modifications performed at your facility.  If you continue to have missing targets, file a Remedy ticket with specific product code information. |
| THAW modification was missing targets.  HD 346879, HD 415180, HD 432763, DR 4189, CR 3070, CR 3109, CR 3110 | THAW modification is revised to display at least one target for ISBT 128 labeled units.  Note: No changes are made to Thaw /Pool modification. | None Provided  Review your workarounds for missing targets for modifications performed at your facility.  If you continue to have missing targets, file a Remedy ticket with specific product code information. |
| The following blood product codes do not display a valid THAW target in 1.5.2: 10100, 10120, 10140, 10200, 10300, 11100, 11120, and 11200.  HD 488361, CR 3031 | The product codes list THAW to a valid target. | Thaw any or all of these as a single unit modification and the corresponding target appears. |
| Volume Reduce modification method displays incorrect target products for previously manipulated platelet products.  KDA CR 2612 | Volume reduction of a previous manipulated blood product is disallowed for products other than Whole Blood and Red Blood Cells.  When a product volume needs change, use Edit Unit Information. | None Provided |
| An ISBT 128 labeled unit received via Incoming Shipment with a product code division code other than “00” cannot be split or pooled in VBECS modification.  HD 535633, KDA CR 2756, DR 1696, DR 3637, DR 3652, DR 3663 | A unit with a product code division code other than “00” can be split or pooled in VBECS modification. | Test Scenario Group 6, Objective 1, Scenario 1 |
| The Codabar product code 10191 did not display product code 10100as a valid target when thaw/pooling Codabar units.  KDA CR 2678 | The Codabar product code 10191 is presented as a valid target when thaw/pooling Codabar units of product code 10100. | None Provided |
| Modification option is not using the same logic as Incoming Shipment to determine uniqueness of a blood unit record.  HD 454589, KDA CR 2587, DR 3609 | Incoming Shipment and Modification will use the same rules to define a unique blood unit record:  A unique blood unit record is defined by the following data elements:   * VBECS Division * Unit ID * Product type code (Codabar Only)   + - For example:   Product Code: 12000 will present a choice of Product type code: Platelets or  Washed Platelets   * Product code * Codabar (5 digits) * ISBT 128 (8 alphanumeric characters) | Attempt to reenter a duplicate blood unit of either labeling type, when these items are the same for the second attempted entry, the unit is disallowed into inventory.  This can be done in Incoming Shipment and Modification |

| 33BAudit Trail Report | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| There is a new section to capture the Testing Details Configuration setting changes.  DR 3561 | This change is related to the requested Patient Testing configuration change. The report displays the initial selection and changes to the division configuration setting of “ABS and XM Testing Phases” in the Maintenance: Configure Division section of the report. | Configure Testing Details. Review the Audit Trail report section. |
| Audit trail incorrectly lists a Special Testing Cost change when a unit is entered in Incoming Shipment.  HD 399931, KDA CR 2714 | The report will no longer display information for a unit entered via the Incoming Shipment option where the Special Testing Cost field was not changed from the default $0.00.  Note: Special Testing Cost does not appear on the Audit Trail when entered during Incoming Shipment. A Special Testing Cost entered during initial receipt of a blood product appears on the Unit History Report and the Cost Accounting Report.  The application is unchanged in that a change to a previously saved Special Testing Cost entered in Edit Unit Financial Data appears on the Audit Trail Report. | Bring a unit into your inventory with NO special testing cost.  The unit does not appear on the Audit Trail report suggesting a change from blank to $0.00. Review the Audit Trail report. |
| The Audit Trail Report is missing Blood Unit Antigen changes.  HD 377513, KDA CR 2614, CR 2905 | Unit records display unit antigen typing changes made in the Edit Unit Information option. | Bring a unit into your inventory with antigen typing information. Change those antigen typings and view the Audit Trail section documenting the data changes. |

| 34BAdministrative Data Report | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| RBC and FFP counts are incorrect.  HD 373392, HD 421894, HD 446944, CR 2695, CR 2797 | The correct counts for RBC and FFP display for Incoming and Outgoing Shipment display. | None Provided |
| The sickle cell negative and CMV negative counts were incorrect as follows: The report counted that the units were SC neg and CMV neg when they were not. For the RBC, unit counts were removed from the incoming shipment count when they were shipped out.  For the FFP, units that were modified to THAW were removed from the incoming shipment count.  HD 373392, HD 399931, KDA CR 2105 | The sickle cell negative and CMV negative units received through Incoming Shipment are reported correctly. | None Provided |

| 35BTesting Worklist Report | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Users prefer to see the date/time specimen was collected rather than the date/time it accepted in VBECS on the Testing Worklist Report.  HD 399388, CR 2817, DR 3793 | The specimen collection date/time displays rather than the accepted date/time for ALL tests. | None Provided |

| 36BTransfusion Requirements Report | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Report scheduler is not working.  CR 2828 | The Transfusion Requirements cumulative report format allows the report to print at a future date and time as requested. | None Provided |

| 37BTransfusion Complications Report | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Multiple threshold values cannot be used to prepare the report for a single test.  Some results did not display on the report if thresholds were defined with text casing (upper case, lower case, etc.) that differed from VistA.  KDA CR 2247, CR 3194 | The requested change will allow multiple positive threshold values as selection criteria for a single test to prepare the report. VBECS will display all entries in upper case but will retrieve and display the returned results regardless of case in VistA (all upper, lower or mixed case).  Check the various forms of result in your local Lab Account, i.e., POS, Positive, P including all in the threshold settings test format. | Configure the report to return only Positive results. Select to create a report for a date range and review it. |
| A system error occurred when the retrieved data is unexpectedly non-numeric.  HD 337715, HD 396365, HD 402842, KDA CR 2252 | The requested change provides a report that includes a non-numeric result when a numeric result is expected to allow for canceled and other terms used in the field. | None Provided  Note: When configuring the report to find tests with the lower case alpha characters, the VistA name must match exactly. |

| 38BCPRS Interface Order Dialog | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| Unfilled component orders that are not associated with a specimen UID are not completed in CPRS when expired.  KDA DR 2883, KDA CR 2368, DR 2420,  DR 3626 | When a component order is not associated with a specimen, and the component order was never “Filled” (the number of units ordered was not prepared in full), the VBECS component order expires 10 days after acceptance and sends an update to CPRS to complete the VBECS child order.  Note: The order appears continues to appear active, as the parent order is not completed. There is no ‘expired’ order status available in the VistA Lab application. See KDA CR 3184.  See *FAQ CPRS VBECS Order Details* | None Provided  Note: CPRS order details: the VBECS child order will have an ‘e’ indicating that the order is ‘expired’. |
| A system error occurred when saving tests associated with an order where the Date/Time Wanted was not included in the CPRS Order message to VBECS.  PSPO#1881, HD 387849, HD 387437, HD 444539, HD 456724, HD 517387, KDA CR 2784 | A system error no longer occurs. | None Provided |
| Inactive MSBOS entries are displayed in the CPRS order dialog when an urgency of ‘Pre-Op’ is selected  DR 2821, CR 3078 | The CPRS order dialog displays only surgery names that are marked “active” by division in the VBECS MSBOS option.  Note: Alerts display only for active recommendations for a component type. When no recommendation is configured for a component class, other recommendations may be active, no warning appears when an order for the component with no active recommendation. | None Provided |
| CPRS order dialog MSBOS alert for No Blood Required does not work.  DR 3651, KDA CR 2742 | CPRS Order dialog displays a message for a blood component order when the selected order urgency is “PRE-OP” and the VBECS active MSBOS surgery name and its active component order recommendation is set to “No Blood Recommendation” or “Type and Screen Only” in VBECS. | None Provided |

| 39BCPRS Interface Reports | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| CPRS does not display multiple unit divisions of the same unit ID number.  *This aligns with the correction described in OR\*3\*332 (released 11/29/2011).*  HD 366911, *CR 2806* | VBECS transmits the ISBT 128 eight digit product code allowing CPRS to differentiate apheresis collections that have the same donor identification number. | View an ISBT unit on the CPRS reports or order dialog. |
| The converted transfusion reaction records do not display the date properly.  HD 396922, CR 2807 | An eye-readable Transfusion Reaction date for VistA converted records displays in the CPRS Blood Bank Report. | None Provided |
| The incorrect message text was displayed in the CPRS Blood Bank report in association with a positive antibody screen test result.  HD 372115, HD 410129, KDA CR 2435, DR 4025 | The informational message text displayed related to positive Direct Antiglobulin Tests and positive Antibody Screen Tests displays: *Preparation of red cell components for transfusion may be delayed due to serologic problems. Contact transfusion service for information on potential clinical significance and availability of blood components.* | None Provided |
| CPRS Blood Bank Report displays unit blood type of MX as "Y” CPRS Blood Bank Report displays a unit with No RH as "Z".  CR 3161 | CPRS Blood Bank Report displays mixed/pooled or blank Rh unit types as MX and blank respectively. | None Provided |

# Untestable System-Level Corrected Code Requests

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| 40BServices | | |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The patient update interface inhibited system responsiveness.  CR 2956 | Patient Update queries are revised to minimize effects on system response time. | None Provided |

| 41BVistaLink Connections | | |
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| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| VBECS does not release the VistALink session and may leave inactive sessions connected. This is unseen by the VBECS user unless there are too many VistA sessions running in the background.  HD 521368 CR 3121 | VBECS logs off the VistALink session when the user logs out of VBECS. | None Provided |

| 42BVBECS Administrator | | |
| --- | --- | --- |
| **Problem Summary** | **Resolution Summary** | **Verification or Validation Scenario** |
| The vendor’s transfusion verification software application and hardware are required to execute transfusion verification related changes in VBECS. The interface requires installation configuration to enable communication with the vendor server and application.  *No CR numbers are associated as all applied to internal development and were not software corrections* | VBECS 1.6.0 implements the VBECS portion of the pre-transfusion interface to an independent/vendor transfusion verification application. | Test Scenario Group 7 includes instructions for minimal negative validation testing. |

# VistA Software Dependencies

See the list in the *VistA Blood Establishment Computer Software (VBECS) 1.6.0 Patch Installation Guide* for the VistA patches that must be in place for VBECS 1.6.0 to function as designed.

1. VBEC\*1.0\*27
2. LR\*5.2\*412 bundled for installation with VBEC\*1.0\*27
3. OR\*3.0\*332 (Displays the ISBT 128 eight digit product code in CPRS’ Blood Bank reports.)
4. LR\*5.2\*382 is required to support the information and interface needed for the COTS system

BCE COTS Vendor Application availability.

The transfusion verification vendor application returns details of the blood unit administration to the patient’s Computerized Patient Record System (CPRS) record. This is an independent transmission and is not part of VBECS 1.6.0.

# VBECS User Documents

See each guide’s revision history for change details:

* *VistA Blood Establishment Computer Software (VBECS) 1.6.0 Patch Installation Guide*
* *VistA Blood Establishment Computer Software (VBECS) 1.6.0 Technical Manual-Security Guide*
* *VistA Blood Establishment Computer Software (VBECS) 1.6.0 Release Notes*
* *VistA Blood Establishment Computer Software (VBECS) Known* *Defects and Anomalies*
* *VistA Blood Establishment Computer Software (VBECS) 1.6.0 User Guide (*HD/ 339277 & HD 400511-DR 3762, HD 356628-DR 3597)

# Customer Support

See the Customer Support section of the VistA Blood Establishment Computer Software (VBECS) 1.6.0 User Guide.

# References

ICCBBA Blood Product Database updates, Version 3.45.0 (December 2010) through and including ICCBBA Version V 4.1.0, (July 2011)

# Appendix A: Validation Planning and Example Test Scenarios

The following is a flowchart to help assess any one change and plan accordingly.



These are examples of possible test scenario not step-by-step scripts. Each site is responsible for evaluating changes for their intended use and for establishing additional validation test scenarios (as appropriate).

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| 0BTest Scenario Group One | |
| --- | --- |
| **Test Objective:** Verify that the QC rack marked “QC Testing Documentation Offline” behaves as a rack where QC was entered online. | |
| **Scenario 1 (**Reagents 🡺 Enter Daily QC Results**):** Verify therack appears on the “retest rack” tab after saving it with a “QC Testing Documentation Offline” check box. | |
| **Data** | Select a rack from the Test Rack(s) tab.  Check the QC Testing Documentation Offline box.  Save the rack with the indication of “QC Testing Documentation Offline” box checked.  Click the close button to exit the option. (The OK button on the main window does not enable.)  This rack may or may not have previous online QC records. |
| **User** | No specific user role is required. |
| **Steps** | 1. Open Reagents 🡺 Enter Daily QC Results. |
| **Expected Outcome** | **⬜** The selected rack no longer appears on the Test Rack(s) tab.  **⬜** The selected rack appears on the Retest Rack(s) tab. |
| **Scenario 2 (Patient Testing):** Verify the rack displays as “yes” in Testing Details in Patient Testing. | |
| **Data** | Use the rack set up in Scenario 1 Data or set up a rack with those conditions.  Place a CPRS Order and accession at least 1 diagnostic test that is available for selection on the PTL.  Optionally, reflex tests or an RBC order where serologic crossmatch can be added (remember this order will appear on the Component order tab for selection. |
| **User** | No specific user role is required. |
| **Steps** | 1. Open Patients 🡺 Patient Testing, select an order that requires serologic testing. 2. View the Testing Details window. |
| **Expected Outcome** | **⬜** The selected rack appears in the rack list as Tested “Yes”. |
| **Scenario 3 (Unit Testing Options):** Verify the rack displays as “yes” in Testing Details in Unit Testing options. | |
| **Data** | Use the rack set up in Scenario 1 Data or set up a rack with those conditions.  View the Testing Details window in the unit testing options ABO/Rh Confirmation and Unit Antigen Typing that are required for review. |
| **User** | No specific user role is required. |
| **Steps** | 1. Open the Testing Details window in ABO/Rh Confirmation. 2. Open Unit Antigen typing, view the available racks for testing, the selected rack is displayed. |
| **Expected Outcome** | 1. **⬜** The selected rack appears in the rack list as Tested “Yes”. 2. **⬜** The selected rack appears in the rack list. |

| 1BTest Scenario Group Two | | |
| --- | --- | --- |
| **Test Objective:** Verify the messaging when attempting to bring a unit into inventory. When sufficient blood unit information is entered, the following additional checks are made to ensure its uniqueness in this order after the following fields are already the same as a record on file:   * VBECS Division * Unit ID * Product type code (Codabar Only)   For example: Product Code: 12000 will present a choice of Product type code: Platelets or Washed Platelets   * Product code * Codabar (5 digits) * ISBT 128 (8 alphanumeric characters). * Expiration date. | | |
| **Scenario 1:** Verify If a unit record in the division is found and the unit status is "Transferred,” additional checks are made to ensure that the ABO/Rh and unit expiration date are identical to the existing unit record. If they match, the existing unit record is made available, and a warning message is displayed asking if this is a "Re-entry" of a previously processed unit:  **Codabar Note:** If you use a product that displays normal and washed products, pick the same one as you shipped out. If you do not, you are not re-entering the same unit.  **Transfusion Only Note:** Select different patients as the restricted for patient prior to shipping out the unit and returning it in a second Incoming shipment event to allow you to verify that the record is correctly updated. | | |
| **Data** | | Process a unit with a donation type of “V” voluntary allogeneic through Shipments, Outgoing Shipment. Confirm the invoice to update the unit status to “transferred”. Verify the unit status by checking the unit status in the header of the Unit History Report. |
| **User** | | No specific user role is required. |
| **Steps** | | 1. Shipments🡺Incoming Shipment, enter in the unit from Data. 2. Enter all fields through the expiration date. 3. Transfusion Only facility: select a Restricted for Patient. The SAVE button enables. 4. The new confirmation message displays. 5. Click OK to save the unit record. |
| **Expected Outcome:**  **Full Service** | | Step 2: In a Full Service Facility Type, you will receive the following message: *You are attempting to reenter a unit in inventory. If this is not what you want to do, select No and clear the unit. If this is correct, select Yes and save the unit. \*\*\*Any changes to unit information must be done in Edit Unit Information. \*\*\** |
| **Expected Outcome:**  **Transfusion Only** | | Step 2: In a Transfusion Only Facility Type, you will receive the following message: *If this is not what you want to do, select No and clear the unit. If this is correct, select Yes and save the unit. You must select a Restricted For Patient at this time. \*\*\*Any additional changes to unit information must be done in Edit Unit Information.\*\*\** The following are available for data entry: Restricted For Patient.  Step 5: The unit record is updated with the newly selected restricted for patient. |
| **Reports:** | | Review the Unit History Report, Incoming Shipment section. The report documents each incoming shipment processing activity.  Transfusion Only Facility Type reports will also reflect the restricted for patient information for each incoming shipment processing activity. |
| **Scenario 2:** Verify that attempting to re-enter a unit with a past expiration date AND is in inventory is not allowed. The unit in inventory must have an active unit status, limited, available, assigned, crossmatched, transfused, modified, or discarded.  Note: The unit may not be inactivated or shipped out/transferred. *If you want to check this rule with the unit in various status as an expired unit, repeat this scenario with the unit statuses as you desire, with the exception of ‘transferred’ or ‘inactivated’.* | | |
| **Data** | | Select an expired unit. |
| **User** | | No specific user role is required. |
| **Steps** | | 1. Shipments🡺Incoming Shipment, enter in the unit from Data. 2. Attempt to enter that unit into inventory by entering data in all fields through the expiration date. |
| **Expected Outcome** | | The expected response is the same for either facility type setting.  If a unit record in the division is found and has an expiration date in the past, the system displays a warning message stating that the unit information already exists in the division and that this unit cannot be added: "The blood unit record already exists in the division." |
| **Scenario 3:** Optionally, attempt to re-enter a unit that is inactivated, a duplicate entry is allowed. | | |
| **Data** | | Select an inactivated unit from inventory. |
| **User** | | No specific user role is required. |
| **Steps** | | 1. Shipments🡺Incoming Shipment, enter in the unit information for the selected data unit. 2. Enter all fields through the expiration date. 3. Transfusion Only facility: select a Restricted for Patient. The SAVE button enables. 4. The new confirmation message displays. 5. Click OK to save the unit record. |
| **Expected Outcome:** | | Unit record is processed as a new unit. |
| **Reports:** | | Both the inactivated and new unit records are available.  Review the Unit History Report, Incoming Shipment section. The report documents each incoming shipment processing activity.  Transfusion Only Facility Type reports will also reflect the restricted for patient information for each incoming shipment processing activity. |
| **Scenario 4:** Optionally, attempt to re-enter a unit that is **transferred**, re-entry is allowed. | | |
| **Data** | Select a transferred unit from inventory. | |
| **User** | No specific user role is required. | |
| **Steps** | 1. Shipments🡺Incoming Shipment, enter in the unit from Data. 2. Enter all fields through the expiration date. 3. **Transfusion only facility:** select a Restricted for Patient. The SAVE button enables. 4. The new confirmation message displays. 5. Click OK to save the unit record. | |
| **Expected Outcome:**  **Full Service** | Step 2: In a Full Service Facility Type, you will receive the following message: You are attempting to reenter a unit in inventory. If this is not what you want to do, select No and clear the unit. If this is correct, select Yes and save the unit. \*\*\*Any changes to unit information must be done in Edit Unit Information. \*\*\* | |
| **Expected Outcome:**  **Transfusion Only** | Step 2: If this is not what you want to do, select No and clear the unit. If this is correct, select Yes and save the unit. You must select a Restricted For Patient at this time. \*\*\*Any additional changes to unit information must be done in Edit Unit Information.\*\*\*  In a Transfusion Only Facility Type: The following are available for data entry:   * Restricted For Patient   Step 5: The unit record is updated with the newly selected restricted for patient. | |
| **Reports:** | Review the Unit History Report, Incoming Shipment section. The report documents each incoming shipment processing activity.  Transfusion Only Facility Type reports will also reflect the restricted for patient information for each incoming shipment processing activity. | |

| 2BTest Scenario Group Three | |
| --- | --- |
| **Test Objective Scenario 1:** Verify that selecting a ‘not started’ and a partially completed order in the same batch allows the data to be saved normally for both orders.  Note: *Revise this scenario to mimic your variations in workflow.* Do not test this using multiple partially completed orders with different previously selected test methods (KDA CR 3118). | |
| **Scenario 1:** Verify that a partially completed order of either testing phase and a NOT STARTED order may be selected together and may be saved with different test methods. | |
| **Data** | Select two patients.  Process orders for testing that will require the selection of Testing Details (i.e., TAS, ABS, RBC).  Partially complete one of the orders. Note the Testing Details phase selected for validation records.  Do not start testing on the second. It must be available on the PTL (Patients, Patient Testing). |
| **User** | No specific user role is required. |
| **Steps** | 1. Patients🡺Patient Testing (if you use an RBC order and a TAS or ABS, you may need to select from both tabs) 2. Select orders 1 and 2 for testing. 3. Select the QC rack. The testing details (grid format) is grayed out 4. Complete both tests. Save the results. |
| **Expected Outcome:** | Step 3: The testing details grid format is already selected as saved with the partially completed test and is not editable.  Step 4: Both tests are saved successfully. |
| **Reports:** | Testing Worklist Report: Both tests are displayed as tested.  Patient History Reports: Testing is displayed as completed. |
| **Test Objective Scenario 2 and 3:** Verify that the system responses regarding physician notification due to issuance of blood products related to subsequently entered test results appears appropriately for the correct patient order.  Note: The scenario is written for a positive ABS entry only as this was the problem reported in the Remedy ticket though the message is triggered by other positive testing entries and may be varied to support that validation locally. The system responds to other testing interpretations such as a patient ABO/Rh discrepancy, the unit XM is incompatible with the patient, the patient ABS is positive, the patient DAT is positive, or the unit is antigen positive where antigen negative is required on the tested specimen. | |
| **Scenario 2:** Verify that the message does not appear for patient A when a test result indicating incompatibility is entered AFTER the unit was released from the patient with incomplete testing and issued to a different patient. | |
| **Data** | Two patients: Order a Type and Screen and RBC for each, accession and accept the orders.  Enter one or more blood units that is ABO/Rh compatible for both patients.  **Patient A:** Enter results for the TAS.   1. Enter the ABO/Rh results and interpretation. Do not enter ABS results or interpretation. 2. RBC order: Select a unit for patient A. *(It does not need to be crossmatched or issued, just selected.)*   **Patient B:** Enter unremarkable results and interpretations for TAS. |
| **User** | No specific user role is required. |
| **Steps** | Patient A:   1. Blood Units🡺Release Unit from Patient Assignment, release the unit assigned to patient A.   Patient B:   1. Blood Units🡺Select Units; select the unit released from patient A in Step 1. 2. Patients🡺Issue Blood Components, issue the unit.   Patient A:   1. Patients🡺Patient Testing, enter a positive ABS test interpretation. |
| **Expected Outcome:** | Step 4: No message or override appears when testing is entered, as the unit was not issued to the patient. |
| **Reports:** | Exception Report: no override captured related to Step 4.  Patient History Reports: Testing is displayed as completed. |
| **Scenario 3:** Verify that the message appears for patient A when a test result indicating incompatibility is entered and the unit is issued to the patient with incomplete testing. | |
| **Data** | Order a Type and Screen and RBC. Accession and Accept the order. Enter results for the TAS.   1. Enter the ABO/Rh results and interpretation. Do not enter ABS results or interpretation. 2. RBC order: Select and issue a RBCunit. |
| **User** | No specific user role is required. |
| **Steps** | 1. Patients🡺Issue Blood Components, issue the unit processing the overrides associated with incomplete testing at issue. 2. Patients🡺Patient Testing, enter a positive ABS test interpretation. |
| **Expected Outcome:** | Step 2: A message or override appears when the test interpretation is entered as the unit was issued to the patient. |
| **Reports:** | Exception Report: Exception type: Unit ER issued, testing problem was recorded properly.  Patient History Reports: Testing is displayed as completed. |

|  |  |
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| 3BTest Scenario Group Four | |
| **Test Objective:** Verify that multiple users can handle different units on the same component order in Select Unit and Issue Unit. | |
| **Scenario 1:** Verify that multiple staff members may handle various stages of a blood product order for the same patient order.  Note: *Revise this scenario to mimic your variations in workflow.* Attempts to use the same blood unit by multiple users will result in a data lock, which is expected functionality unrelated to this correction. | |
| **Data** | Select a patient; process at least one FFP, RBC, or PLT component order for the patient to the PTL.  Login the number of units required. |
| **User** | No specific user role is required.  Two users are required to perform the steps. |
| **Steps** | User one:   1. Assign half of the blood units to the order. 2. Hand off this batch to user two. 3. Coordinate with User two; assign the rest of the units to the order when they are issuing the units you selected previously.   User two:   1. Coordinate with User one, issue the first half of the order while they are selecting additional units for the order. |
| **Expected Outcome** | User one may add units to the selected component order while user two is issuing units.  User two may issue units while unit one is adding units to the component order. |

| 4BTest Scenario Group Five **(Generic Script, Repeat as needed for each product code that you may receive from your blood supplier.)** | |
| --- | --- |
| **Test Objective:** Demonstrate that the blood product code can be processed throughout VBECS for patient transfusion. | |
| **Scenario 1 (Incoming Shipment):** Verify the unit can be processed into the facility’s inventory using Incoming Shipment. | |
| **Data** | N/A |
| **User** | No specific user role is required. |
| **Steps** | Add a blood unit with the indicated product code to the facility inventory (Shipments, Incoming Shipment). |
| **Expected Outcome** | The product code can be associated with your shipper. |
| **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. |
| **User** | No specific user role is required.  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 the blood unit in an applicable modification. |
| **Expected Outcome** | Blood unit with the indicated product code can be modified to a transfusable product code. |
| **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** | 1. Assign the Unit (Blood Units, Select Units). 2. Optionally, print the BTRF and Caution Tag. 3. Issue the Unit (Patients, Issue Blood Components). |
| **Expected Outcome** | Blood unit with the indicated product code can be issued for patient transfusion. |

| 5BTest Scenario Group Six | |
| --- | --- |
| **Test Objective: Verify specific modification processes as detailed in each scenario.** | |
| **Scenario 1:** Verify that ISBT 128 labeled units with a product code containing divisions codes (7th and 8th characters of the product code) may be split (divided) in VBECS, for example E04210VA0, E04210VB0.  Note: Local policy may dictate which component class is used for testing. | |
| **Data** | Enter an ISBT 128 labeled unit with a product code division code in the product code of any component class.  Note: If you receive such product codes, use those. If you do not routinely receive multiple portions of a blood unit collection with product code division codes, the division is entered A0 ( zero), B0 (zero), etc. |
| **User** | No specific user role is required. |
| **Steps** | 1. Select Blood Units🡺Modify Units 2. Select Split modification. 3. Select the unit entered in Data (must have product code division codes in the product code) 4. Process the modification completely. (Optional: relabel verification) |
| **Expected Outcome** | The unit is successfully divided into multiple portions. The product code division code will reflect the split enumeration in the 8th digit of the product code as a lower case a-z. |
| **Reports:** | Select a Unit History Report, click the Find Button, review the select unit window for the original and created blood units where the portions appear on the list in one view. |
| **Scenario 2:** Verify that a missing target is presented where previously missing for your enabled modification methods.  Note: Local policy dictates the component class and modification method is used for testing. If you continue to have a missing target, contact the National Help Desk to report the specific processing performed on the unit prior to the final modification. | |
| **Data** | Enter a blood unit and process it to readiness for your modification.  Note: If you are performing sequential modifications on the unit, record your sequence should you encounter a missing target in the final modification. |
| **User** | No specific user role is required. |
| **Steps** | 1. Blood Units🡺Modify Units 2. Select the modification. 3. Select the unit entered in data. 4. Process the modification completely. (Optional: relabel verification) |
| **Expected Outcome** | The unit is successfully modified to a different product code. |
| **Reports:** | Review the Select Unit window for the report as you select a Unit History Report for the original and created blood units. |

| 6BTest Scenario Group Seven | |
| --- | --- |
| **Test Objective: Verify that errant enabling and configuration of the BCE COTS interface does not interfere with established messaging and secondly that errors are recorded for review.** | |
| **Scenario 1:** Verify that enabling and configuration of the BCE COTS interface when no vendor server is available does not stop established processing of HL7 messaging. Note: This scenario describes only CPRS order processing as patient update and merge are processed via the same HL7 processor and do not require independent testing to verify the processor continues to function normally.  🗣 Regarding viewing the Application Error Log entries: when you are supported by a regional support system, please alert the appropriate IT support members of your testing to minimize confusion and prevent alarm. Alternately, you may determine it is not necessary to test at this time and leave it unchecked.  🕬 Regarding viewing the interface related error emails: if you are part of a regional support system, please alert the appropriate IT support members of your testing or configure this test to send the email to you instead of the normal production support group. | |
| Data | Before beginning, verify current configuration, activity, and status of the existing interfaces, VistALink, CPRS, Patient Update and Patient Merge. Make sure that the VBECS-OERR HL7 link in VistA is not Shutdown.   1. Open VBECS Administrator, Select Configure Interfaces, CPRS. Record the values shown on the screen.   Interfaced Application: Connection Method:  IP Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Port \_\_\_\_\_\_\_\_\_\_\_  VBECS Application:  IP Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Port \_\_\_\_\_\_\_\_\_\_\_  Message Options: ACK Timeout: \_\_\_\_\_\_ Re-Transmit Attempts: \_\_\_\_\_\_  Purge Criteria: Completed Messages: \_\_\_\_\_ Messages in Error: \_\_\_\_\_\_  Interface Failure Alert Recipient: Email Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Logging Configuration:  Log Events and HL7 Messages to Event Log: Must be checked.   1. Open VBECS Administrator. Select Configure Interfaces, BCE COTS. Uncheck the Interface Disabled checkbox (lower left corner of the window). 2. 🕬 🗣 Fill in all required fields so that they match recorded values from the CPRS interface as above. Note: Logging Configuration must be checked or Scenario 2 will not work. 3. A confirmation message appears (*You are about to enable the BCE COTS interface. Please set all required interface properties and save them. Continue?)*, click yes. 4. Click the “Test Connection” button to enable the Save button. If the “Test Connection” fails, contact IRM to verify the VBECS-OERR link is running. 5. Click Save and then Yes. 6. Exit VBECS Administrator. |
| User | 🕬 🗣Server Administrator access is required to view the Event Log.  VBECS Administrator access is required to configure the BCE COTS interface.  No specific user role is required to process the unit in VBECS. |
| Steps | After the BCE COTS interface is enabled in Data.   1. Place at least one CPRS diagnostic test order. 2. Accession the order in Lab. 3. Accept the order in VBECS (Accept Orders). 4. Complete the order placed in Step 1 (Patient Testing). |
| Expected Outcome | 1. Verify the CPRS order details have a pending status for the VBECS and Lab order.  3. Verify the CPRS order details have an active (a) status for the VBECS order.  4. Verify the CPRS order details have a status of complete (c) for the VBECS order. |
| Reports: | See the CPRS order details as directed in Expected Outcome. |
| **Scenario 2:** Verify that enabling and configuration of the BCE COTS interface when no vendor server is available does not prohibit unit processing in VBECS and sends error messages and alerts as expected.  **Notes:** Updating Post Transfusion information for the unit in VBECS does not message the vendor product. That message is delivered from the vendor product and is not testable at this time.  🗣 Regarding viewing the Application Error Log entries: when you are supported by a regional support system, please alert the appropriate IT support members of your testing to minimize confusion and prevent alarm. Alternately, you may determine it is not necessary to test at this time and leave it unchecked.  🕬 Regarding viewing the interface related error emails: if you are part of a regional support system, please alert the appropriate IT support members of your testing or configure this test to send the email to you instead of the normal production support group. | |
| Data | Before beginning, verify current configuration, activity, and status of the existing interfaces, VistALink, and CPRS in your test account. Make sure that the VBECS-OERR HL7 link in VistA is NOT shutdown.   1. Create an RBC order in CPRS and accept it in VBECS. 2. Prepare a unit processing during the scenario. 3. Repeat Scenario 1 Data steps (2-7) to enable the BCE COTS interface, if it was disabled at the end of Scenario 1. |
| User | 🕬🗣 Server Administrator access is required to view the Event Log.  VBECS Administrator access is required to configure the BCE COTS interface.  No specific user role is required to process the unit in VBECS. |
| Steps | Log into VBECS:   1. Assign at least one unit associated with the RBC order.(Select Unit, XM as needed) 2. Optionally, Issue at least one unit associated with the RBC order. 3. Optionally, Return from Issue at least one unit associated with the RBC order. 4. Optionally, Release from Assignment one unit associated with the RBC order. 5. Ensure the error messages have been processed prior to proceeding.   Exit VBECS and Log into VBECS Administrator:   1. REMOVE all BCE COTS entries and disable the BCE COTS interface. 2. A message appears (*You are about to disable BCE COTS interface. It will cause VBECS to stop sending and receiving messages via that interface. Continue?), Click Yes.* 3. Close the window as all fields are disabled. |
| Expected Outcome | Email alerts with the Subject “Error Sending Message” are sent and events for unit processing event after Steps 1-4 are created.   * 🕬 🗣 Verify the email group receives an email alert when the order is processed for the patient in Steps 1-4. * 🕬 🗣 The BCE COTS interface creates Application Events in the Error log for each processing event in Steps 1-4. (See Event Viewer) * *Verify the BCE COTS interface disabled checkbox is checked.* |
| Reports: | 1. 🕬 🗣 Failure alert messages regarding the BCE COTS interface are sent and received. 2. 🕬 🗣 Application Error Log  (See Event Viewer) entries appear with sources reading: “Outbound message to BCE\_COTS” and “VBECS HL7 Client Monitor”. |

| 7BTest Scenario Group Eight | |
| --- | --- |
| **Test Objective: Verify the change in email notification regarding server errors.** | |
| **Scenario 1:** Verify that the email notification is received within 5 minutes of the error. | |
| **Data** | None. |
| **User** | VBECS Server Administrator |
| **Steps** | 1. Login to the cluster as a server administrator. 2. Open **Cluster Administrator.** 3. Select the **Active Resources** folder under the active node (it will be empty on the passive node). 4. Right click on **VBECS HL7 Multi Listener** and select **Take Offline**. |
| **Expected Outcome** | Within 5 minutes, you should receive an email similar to the one in **Figure 1**.  Figure 1: Example of alert email  P2192C11T45#yIS1 |
| **Closeout: Turn on the Multi Listener** | After you have verified the email receipt: bring the Listener on line for use.   1. Right click on **VBECS HL7 Multi Listener** and select **Bring Online**.   Figure 2: Bring Online  P2199C13T45#yIS1 |

# Appendix B: Blood Product Table Updates

The following product codes display abbreviated short names. The full name associated with the product code can be found in VBECS under Tools, Blood Products.

|  |  |
| --- | --- |
| **Table 1 Product Codes with Abbreviated Short Names** | |
| **Product code** | **Information** |
| E7094 | PLT Pool Thaw DMSO OPN LKPR PLS R/PA BFCT 4DNR DR 4185 |
| E7095 | PLT Pool Thaw DMSO OPN LKPR PLS R/PA BFCT 5DNR DR 4185 |
| E7096 | PLT Pool Thaw DMSO OPN IRD LKPR PLS R/PA BFCT 4DNR DR 4185 |
| E7097 | PLT Pool Thaw DMSO OPN IRD LKPR PLS R/PA BFCT 5DNR DR 4185 |

| The ICCBBA Product Description Database, Version 4.0.1 April 11, 2011, corrected spacing inconsistencies in the product description for those products containing attribute values of EF5 (>=200mL<400mL) and EF6 (>=400mL<600mL). VBECS is been updated to reflect the edits of the long names that do not affect the product code handling processes. |
| --- |

| **Table 2 Product Codes that had corrections to the full name** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E0845** | **E0846** | **E0847** | **E0848** | **E0860** | **E0861** | **E0862** | **E0863** |
| **E0885** | **E0886** | **E0887** | **E0888** | **E0900** | **E0901** | **E0902** | **E0903** |
| **E0925** | **E0926** | **E0927** | **E0928** | **E0940** | **E0941** | **E0942** | **E0943** |
| **E0965** | **E0966** | **E0967** | **E0968** | **E0980** | **E0981** | **E0982** | **E0983** |
| **E1005** | **E1006** | **E1007** | **E1008** | **E1020** | **E1021** | **E1022** | **E1023** |
| **E1045** | **E1046** | **E1047** | **E1048** | **E1060** | **E1061** | **E1062** | **E1063** |
| **E1085** | **E1086** | **E1087** | **E1088** | **E1100** | **E1101** | **E1102** | **E1103** |
| **E1125** | **E1126** | **E1127** | **E1128** | **E1140** | **E1141** | **E1142** | **E1143** |
| **E1168** | **E1169** | **E1170** | **E1171** | **E1172** | **E1173** | **E1187** | **E1188** |
| **E1189** | **E1190** | **E1191** | **E1192** | **E1207** | **E1208** | **E1209** | **E1210** |
| **E1211** | **E1212** | **E1226** | **E1227** | **E1228** | **E1229** | **E1230** | **E1231** |
| **E1256** | **E1257** | **E1258** | **E1259** | **E1260** | **E1261** | **E1275** | **E1276** |
| **E1277** | **E1278** | **E1279** | **E1280** | **E1295** | **E1296** | **E1297** | **E1298** |
| **E1299** | **E1300** | **E1314** | **E1315** | **E1316** | **E1317** | **E1318** | **E1319** |
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