



VistA Blood Establishment Computer Software (VBECS) Version 1.5.1

Patch Installation Guide

February 2011

Department of Veterans Affairs
Product Development

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Unauthorized access or misuse of this system and/or its data is a federal crime. Use of all data must be in accordance with VA security and privacy policies.



The U.S. Food and Drug Administration classifies this software as a medical device. Unauthorized modifications will render this device an adulterated medical device under Section 501 of the Medical Device Amendments to the Federal Food, Drug, and Cosmetic Act. Acquiring and implementing this software through the Freedom of Information Act requires the implementer to assume total responsibility for the software and become a registered manufacturer of a medical device, subject to FDA regulations. Adding to or updating VBECS software without permission is prohibited.

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Revision History

| Date | Revision | Description | Author |
|----------|----------|---|----------|
| 06-16-10 | 1.0 | <p>Modified VistA Blood Establishment Computer Software (VBECS) Version 1.5.0.0, Version 5.0 for VBECS 1.5.1:</p> <p>Global: Replaced 1.4.0.0 with 1.5.0.4</p> <p>Global: Replaced 1.5.0.0 with 1.5.1.1</p> <p>Global: Replaced "...072409" with "...060910".</p> <p>Revised footer.</p> <p>Revised Title header and footer changed to from "1.5.1.0" to "1.5.1" and where applicable in the document.</p> <p>Introduction: Reworded the VBECS Version Numbers paragraph.</p> <p>Download the VBECS 1.5.1.1 Patch File section (Test and Prod): Revised the warning box message.</p> <p>Verify the Contents of the VBECS 1.5.1.1 Patch File section (Test and Prod): Revised the warning box message.</p> <p>Figure 1: Added Example of to the figure caption.</p> <p>Replaced Figures 6, 8, 9, 11, 12, 13, 16, 17, 30, 32, 33, 35, 37, 38, 40 and 41.</p> <p>Prerequisite for Installations Test Environment:</p> <p>Deleted step: Determine the Active and Passive Cluster Nodes</p> <p>Deleted step: Update the VBECS Test Services</p> <p>Deleted section: Patch Service Monitor</p> <p>Deleted section: Perform DTS Update</p> <p>Deleted section: Verify NIC Card Configuration</p> <p>Prerequisite for Installations Production Environment:</p> <p>Deleted step: Determine the Active and Passive Cluster Nodes</p> <p>Deleted step: Update the VBECS Prod Services</p> <p>Deleted section: Performance Improvement: Stopping VBECS Test Services (Optional).</p> <p>Updated Appendix B.</p> <p>Updated Appendix E.</p> <p>Updated Appendix F.</p> <p>Updated Appendix H.</p> | BBM team |
| 08-02-10 | 2.0 | <p>Modified VistA Blood Establishment Computer Software (VBECS) Version 1.5.1, Version 1.0:</p> <p>Global: Replaced "June 2010" with "August 2010" in the footer.</p> <p>Global: Replaced "1.0" with "2.0" in the footer.</p> <p>Global: Revised applicable warnings stating not to proceed or release VBECS for use until the Remedy ticket is resolved.</p> <p>Added a statement at the beginning of the Test and Production installation sections to use the .doc format of the document when copying and pasting sections of the document.</p> <p>Figures 2, 3, 9, 12, 13, 20, 23, 24, 26, 27, 33, 36, 37, 44, 47 and 48: Revised figure captions.</p> <p>Replaced Figures 7, 10, 13, 14, 19, 21, 31, 34, 37, 38, 43 and 45.</p> <p>Download the VBECS 1.5.1.1 Patch File (Test and Production):</p> <ul style="list-style-type: none"> • Revised Step 3 by changing "Complete Sub-steps a, b and c" to "Completes Sub-steps a through d". • Steps 3c and 3d: Changed "1.5.1.1" to "1.5.1". • Step 3d: Changed "VHAISHCLUZ1" to "VHAXXCLUZ1". • Step 3b: Revised to use the .doc format of the document for copying and pasting the appendix. <p>Verify the Contents of the VBECS 1.5.1.1 Patch File (Test and Production):</p> | BBM team |

| Date | Revision | Description | Author |
|------|----------|--|--------|
| | | <ul style="list-style-type: none"> • Revised Steps 7 and 20. • Steps 13, 16 and 19: Changed "1.5.1.1" to "1.5.1". • Step 11: Changed the "Step 6" reference to "Step 5". <p>Verify the Contents of the VBECS 1.5.1.1 Patch File (Production): Revised Steps 12 and 19.</p> <p>Execute VBECS Patch Scripts against the Cluster (Test and Production):</p> <ul style="list-style-type: none"> • Added a new warning box for 'Operations Manager Critical Error Alerts' generated during the patch installation. • Figure 19: Moved from Step 4 to Step 5. • Step 5: Revised Message Time out bullet point. • Revised Steps 11 and 12. <p>Prerequisites for Installation (Test):</p> <ul style="list-style-type: none"> • Revised Step 4. • Revised Step 5. <p>Prerequisites for Installation (Production):</p> <ul style="list-style-type: none"> • Revised Step 5. • Revised Step 6. <p>Delete Patch Files (Test and Production): Added Step 7. Execute VBECS Patch Scripts against the Cluster section (Test and Production): Revised Step 9 and added a new warning box stating "If a patch fails to successfully complete within 30 minutes, file a Remedy ticket immediately. Do not release VBECS for use until the ticket is resolved."</p> <p>Execute VBECS Patch Scripts against the Cluster section, Step 17 (Test and Production): Added a new warning box stating "By design, there may be non-fatal errors and warnings within the log file output. Ignore warnings and non-fatal errors upon successful completion of the VBECS patch process."</p> <p>Appendix E: Removed the hyperlink in the title "Installation Procedure for the Test Environment".</p> <p>Updated Appendix E and F.</p> <p>Appendix G: Troubleshooting Messages: Added error message and solution to address Remote Desktop disconnection when user applying the patch has an active session at the server (KVM) console.</p> | |

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| 11-08-10 | 3.0 | <p>Modified VistA Blood Establishment Computer Software (VBECS) Version 1.5.1, Version 2.0: Global: Replaced "August 2010" with "November 2010" in the footer. Global: Replaced "2.0" with "3.0" in the footer. Global: Replaced "...060910" with "...110510". Global: Changed number of bytes in Total Files listed from "200, 811, 979" to "200, 807, 883". Document title page: Changed "Office of Enterprise Development" to "Product Development". Delete Patch Files (Test): Step 7- Changed references to "Production" to "Test". Execute VBECS Patch Scripts against the Cluster (Test and Production): Step 10 - Added a new warning box. Replaced Figures 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40 and 41. Appendix B: Removed the extra "s" from the last column of the first row of Table 1. Appendix B: Removed the blank row from Row 8 of Table 1. Appendix B: Updated the Server Administrative Group. Appendix B: Changed "vhaV23VbecsServerAdmins" to "V23MINVbecsServerAdmins" in VISN 23 for Minneapolis. Appendix B: Changed "V23MinVbecsAdministrators" to "V23MINVbecsAdministrators" in VISN 23 for Minneapolis. Appendix B – Server Administrative Group and VBECS Admin AD Group table columns: Updated the columns and changed "TBD" to the actual group name for VISNs 1 through 5. Removed Appendix H and all references to Appendix H.</p> | BBM team |
| 1-28-11 | 4.0 | <ul style="list-style-type: none"> • Modified VistA Blood Establishment Computer Software (VBECS) Version 1.5.1, Version 3.0: • Global: Replaced "November 2010" with "February 2011" in the footer. • Global: Replaced "3.0" with "4.0" in the footer. • Reworded Step 3.b. in both Test and Production Installation, Download and Verify the Contents of the VBECS Patch, Section 1: Download the VBECS 1.5.1.1 Patch File. • Revised Steps 8-16 in both Test and Production Installation, Section 2 Verify the Contents of the VBECS 1.5.1.1 Patch File. • Revised Step 2 in both Test and Production Installation, Section 3: Prerequisites for Installation. • Revised warning text message after Step 7 in both Test and Production Installation, Section 5: Delete Patch Files. • Revised Step 2 in both Test and Production Installation, Section 5: Delete Patch Files. • Replaced Figure 22 and Figure 43. | BBM team |

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Table of Contents

| | |
|--|-----|
| REVISION HISTORY..... | III |
| TABLE OF CONTENTS..... | VII |
| INTRODUCTION | 1 |
| VBECs VERSION NUMBERS..... | 1 |
| RELATED MANUALS AND REFERENCE MATERIALS | 2 |
| ORIENTATION | 3 |
| HOW THIS INSTALLATION GUIDE IS ORGANIZED..... | 3 |
| WARNINGS..... | 3 |
| SCREEN SHOTS..... | 3 |
| PRODUCT SUPPORT..... | 3 |
| Problems?..... | 3 |
| INSTALLATION PROCEDURE FOR THE TEST ENVIRONMENT..... | 5 |
| DOWNLOAD AND VERIFY THE CONTENTS OF THE VBECs PATCH..... | 5 |
| 1 Download the VBECs 1.5.1.1 Patch File..... | 5 |
| 2 Verify the Contents of the VBECs 1.5.1.1 Patch File..... | 7 |
| 3 Prerequisites for Installation..... | 11 |
| 4 Execute VBECs Patch Scripts against the Cluster..... | 12 |
| 5 Delete Patch Files..... | 18 |
| INSTALLATION PROCEDURE FOR THE PRODUCTION ENVIRONMENT | 19 |
| DOWNLOAD AND VERIFY THE CONTENTS OF THE VBECs PATCH..... | 19 |
| 1 Download the VBECs 1.5.1.1 Patch File..... | 19 |
| 2 Verify the Contents of the VBECs 1.5.1.1 Patch File..... | 22 |
| 3 Prerequisites for Installation..... | 25 |
| 4 Execute VBECs Patch Scripts against the Cluster..... | 26 |
| 5 Delete Patch Files..... | 32 |
| GLOSSARY | 33 |
| APPENDICES | 35 |
| APPENDIX A: INSTALLATION LOGS..... | 35 |
| APPENDIX B: ACTIVE DIRECTORY SERVER ADMINISTRATOR GROUPS | 37 |
| APPENDIX C: INSTRUCTIONS FOR CAPTURING SCREEN SHOTS FOR INSTALLATION RECORDS | 41 |
| APPENDIX D: SETUP DETAILED FOLDERS VIEW | 43 |
| APPENDIX E: VBECs PATCH INSTALLATION RECORD FORM FOR THE TEST ENVIRONMENT | 45 |
| INSTALLATION PROCEDURE FOR THE TEST ENVIRONMENT..... | 45 |
| 1 Download the VBECs 1.5.1.1 Patch File..... | 45 |
| 2 Verify the Contents of the VBECs 1.5.1.1 Patch File..... | 45 |
| 3 Prerequisites for Installation..... | 45 |
| 4 Execute VBECs Patch Scripts against the Cluster..... | 45 |

| | | |
|---|--|----|
| 5 | Delete the Patch Files | 45 |
| | APPENDIX F: VBECS PATCH INSTALLATION RECORD FORM FOR THE PRODUCTION ENVIRONMENT .. | 47 |
| | INSTALLATION PROCEDURE FOR THE PRODUCTION ENVIRONMENT..... | 47 |
| 1 | Download the VBECS 1.5.1.1 Patch File..... | 47 |
| 2 | Verify the Contents of the VBECS 1.5.1.1 Patch File..... | 47 |
| 3 | Prerequisites for Installation | 47 |
| 4 | Execute VBECS Patch Scripts against the Cluster..... | 47 |
| 5 | Delete Patch Files | 47 |
| | APPENDIX G: TROUBLESHOOTING MESSAGES | 49 |
| | NOTES | 53 |
| | INDEX..... | 55 |

Introduction

The VistA Blood Establishment Computer Software (VBECS) system replaces the previous blood bank software (VistA Blood Bank v5.2) at the Department of Veterans Affairs (VA). The main purpose of VBECS is to automate the daily processing of blood inventory and patient transfusions in a hospital transfusion service.

VBECS is an improved Blood Bank application that facilitates ongoing compliance with Food and Drug Administration (FDA) standards for medical devices and enhances the VA Veterans Health Administration's (VHA's) ability to produce high-quality blood products and services to veterans. The system follows blood bank standards, standards of national accrediting agencies, FDA regulations, and VA policies.



Unauthorized access or misuse of this system and/or its data is a federal crime. Use of all data must be in accordance with VA security and privacy policies.



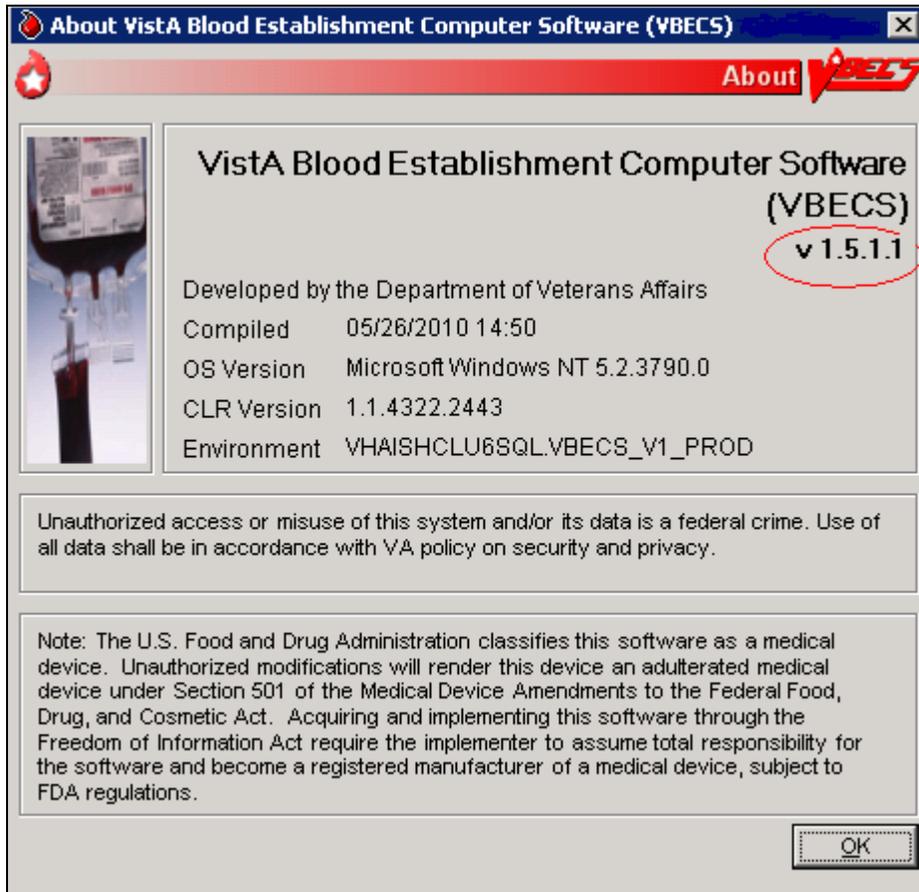
The U.S. Food and Drug Administration classifies this software as a medical device. Unauthorized modifications will render this device an adulterated medical device under Section 501 of the Medical Device Amendments to the Federal Food, Drug, and Cosmetic Act. Acquiring and implementing this software through the Freedom of Information Act requires the implementer to assume total responsibility for the software and become a registered manufacturer of a medical device, subject to FDA regulations. Adding to or updating VBECS software without permission is prohibited.

This document describes how server support staff members [Information Resource Management (IRM) or data center personnel] install VBECS. It describes the scripts that must be executed and the arguments that must be supplied. It specifies how to read script output and the actions that must be performed as a result of the output.

VBECS Version Numbers

The VBECS 1.5.1 patch release represents a change in how the application version will be displayed to you, the customer. In previous VBECS patch releases, the user documentation referred to the VBECS version in a 4-digit format (e.g., 1.5.0.4 – where 1.5.0 represents the patch version and 4 is the patch build number). The build number is used by VBECS support for diagnostic and troubleshooting purposes. In future releases, the VBECS version will be represented with only the first 3 digits (e.g., 1.5.1) and will appear that way in all user documentation to simplify readability. The full 4-digit version can still be found under the **Help, About** window in VBECS (Figure 1) and will appear in patch installation guides where build specific files are referenced.

Figure 1: Example of Help, About VBECS



Related Manuals and Reference Materials

None

Orientation

How This Installation Guide Is Organized

 *Maintain the order of the steps for successful installation.*

This guide is organized as follows:

See the Installation Procedure for the Test Environment section for installing the test environment.

See the Installation Procedure for the Production Environment section for installing the production environment.

See Appendix A: Installation Logs for the location of logs that may be useful in troubleshooting.

See Appendix G: Troubleshooting Messages for examples of troubleshooting messages.

A section for notes is included at the end of the document.

Warnings

Outlined text with a caution icon is used throughout the guide to highlight warnings, limitations, and cautions:

 *Warnings, limitations, cautions*

Read and follow these caution statements and warnings.

Screen Shots

Because VBECS is a medical device, screen shots must be captured at verification points throughout the installation to meet regulatory requirements for objective evidence and documentation.

A  (camera) at the beginning of each step that requires a screen capture will identify these points. For more information, see Appendix C: Instructions for Capturing Screen Shots for Installation Records.

 *Screen shots included in this guide are examples only and may not display actual data.*

Product Support

Problems?

Contact your Information Resource Management (IRM) or Laboratory Automated Data Processing Application Coordinator (ADPAC) if you encounter problems and for training support.

VA Service Desk Primary Contact

For Information Technology (IT) support, call the VA Service Desk (VASD), 888-596-HELP (4357) (toll free), 24 hours per day, 7 days per week. [Users with access to the VASD-supported request tool (e.g., Remedy) may file a ticket in lieu of calling the VASD.]

VA Service Desk Alternate Contacts

- During business hours: As an alternate to the toll-free number, call 205-554-4710 (or 205-554-4711 through 205-554-4725), Monday through Friday (excluding holidays), 8:00 a.m. to 7:30 p.m. (Eastern Time).
- Outside business hours: Call 205-554-3459 (or 205-554-3460 through 205-554-3465, 205-554-3472, 205-554-3475, or 205-554-3482 through 205-554-3485).
- Web site: http://vaww.itsupportservices.va.gov/vasd_home.asp [VA Service Desk (VASD)]
- Email: vhacionhd@va.gov

Installation Procedure for the Test Environment

 *Do not deviate from the instructions in this guide.*

 *No users are permitted on the system during the patch installation. Any users on the system at the start of the patch process will be disconnected.*

 *Coordinate the patch installation with the blood bank supervisor. Notify the supervisor that the patch installation requires one to two hours of downtime without interruption.*

Use the Microsoft Word .doc format of the document when copying and pasting sections of the document.

Download and Verify the Contents of the VBECS Patch

1 Download the VBECS 1.5.1.1 Patch File

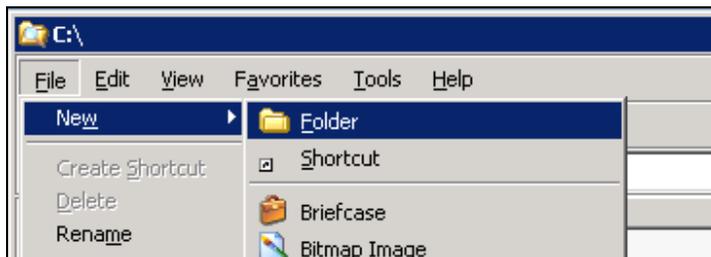
Prerequisites for VBECS FTP Download:

- The installer must be a server administrator in accordance with Appendix B: Active Directory Server Administrator Groups.
- The installer must be a member of the VBECS Admin AD Group in accordance with Appendix B: Active Directory Server Administrator Groups.

To download the VBECS 1.5.1.1 patch file from the VBECS FTP Site:

- 1) Open a remote desktop connection to the cluster being patched.
- 2) Using Windows Explorer, click the **C** drive. If a folder named “temp” does not exist, click **File, New, Folder**. Name this folder “temp” (Figure 2).

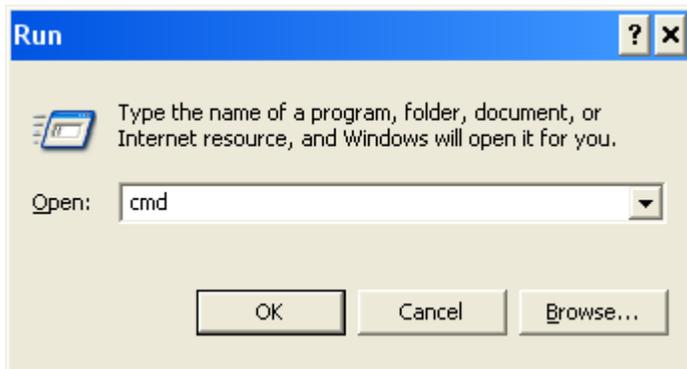
Figure 2: Creating the Temp Folder



- 3) Complete Sub-steps a through d to save a copy of Appendix E: VBECS Patch Installation Record Form for the Test Environment to the local workstation. Any reference to Appendix E after the document is initially saved will be referring to the saved copy.
 - a) Open VistA Blood Establishment Computer Software (VBECS) 1.5.1 Patch Installation Guide.

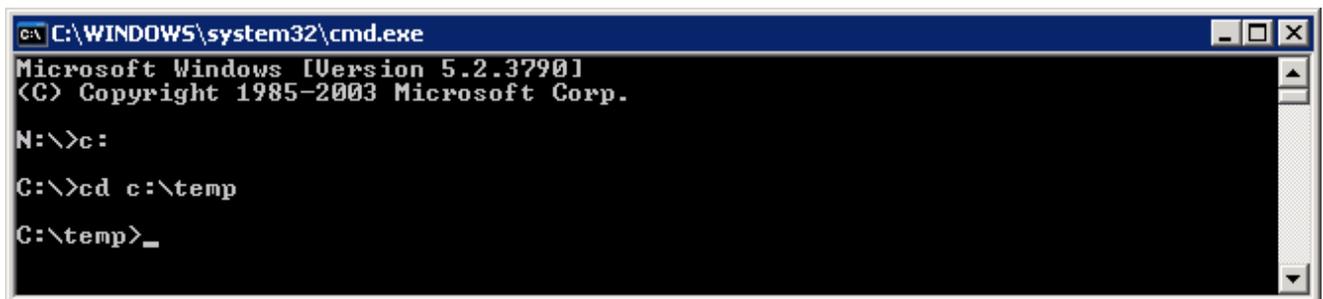
- b) Using the .doc format of this document, select the contents of Appendix E: VBECS Patch Installation Record Form for the Test Environment and copy and paste into a new Word document.
 - c) Add a header to the document as “**VBECS Patch Installation Record <Cluster_name> 1.5.1 Test <mmddy>**” and a footer containing “**Page X of Y**”.
 - d) Save Appendix E: VBECS Patch Installation Record Form for the Test Environment as “**VBECS Patch Installation Record <Cluster_name> 1.5.1 Test <mmddy>**” (e.g., VBECS Patch Installation Record VHXXXCLUZ1 1.5.1 Test 070809); <mmddy> represents the current date.
- 4) Click **Start, Run**. Type **cmd** and click **OK** (Figure 3). A command prompt window appears.

Figure 3: Run Window



- 5) In the command prompt window, type **c:** and press **Enter**.
- 6) Type **cd c:\temp** and press **Enter** (Figure 4).

Figure 4: Example of Changing to the Temp Directory



- 7) Type **ftp** and press **Enter** (See Figure 5 for Steps 8, 9 and 10).
- 8) Type **open 10.3.21.76 20001** and press **Enter**.
- 9) At the **User (10.3.21.76:(none))** prompt, type your domain and Windows login ID (e.g., VHAMASTER\YOUR_USER_NAME).
- 10) At the **Password** prompt, type your password. (**Note:** For security purposes, the cursor will not advance or display characters as you enter your password).

 *If access problems are encountered, please file a Remedy ticket. Do not proceed until the ticket is resolved.*

Figure 5: Example of FTP

```
C:\WINDOWS\system32\cmd.exe - ftp
C:\temp>ftp
ftp>open 10.3.21.76 20001
Connected to 10.3.21.76.
220-Microsoft FTP Service
220 VBECS FTP Site
User (10.3.21.76:(none)): your_domain\your_user_name
331 Password required for your_domain\your_user_name
Password:
230-Unauthorized access or misuse of this system and/or its data is a federal crime. Use of all data must be in accordance with VA security and privacy policies
230 User your_domain\your_user_name logged in.
ftp>
```

- 11) At the **ftp>** prompt, type **bin** and press **Enter**.
The following message will appear “200 Type set to I” (See Figure 6 for Steps 11 and 12).
- 12) Type **get VBECS_Patch_1.5.1.1_110510.zip** and press **Enter** (it may take several minutes for the download to complete, after which a “Transfer complete” message appears).

Figure 6: Example of FTP File Transfer

```
Visual Studio .NET 2003 Command Prompt - ftp
ftp>bin
200 Type set to I.
ftp>get VBECS_Patch_1.5.1.1_110510.zip
200 PORT command successful.
150 Opening BINARY mode data connection for VBECS_Patch_1.5.1.1_110510.zip(78397923 bytes).
226 Transfer complete.
ftp: 78397923 bytes received in 14.97Seconds 5237.35Kbytes/sec.
ftp> _
```

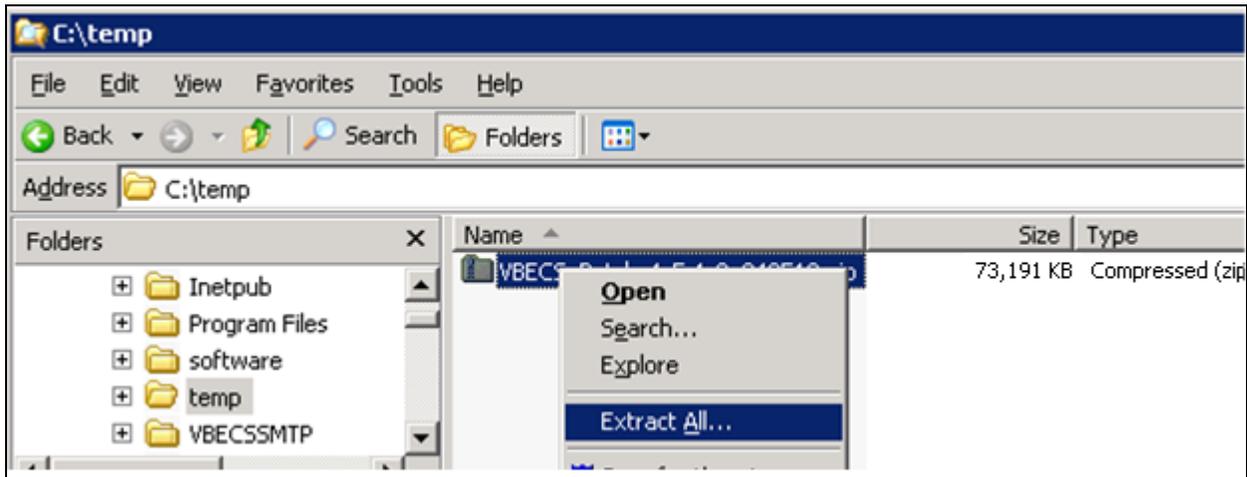
- 13)  Capture a screen shot of the transfer completed command prompt.
- 14) Insert the screen shot in Appendix E: VBECS Patch Installation Record Form for the Test Environment.
- 15) Stop the FTP session: At the **ftp>** prompt, type **quit** and press **Enter**.
- 16) Close the command prompt window.

2 Verify the Contents of the VBECS 1.5.1.1 Patch File

- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to the **c:\temp** folder.

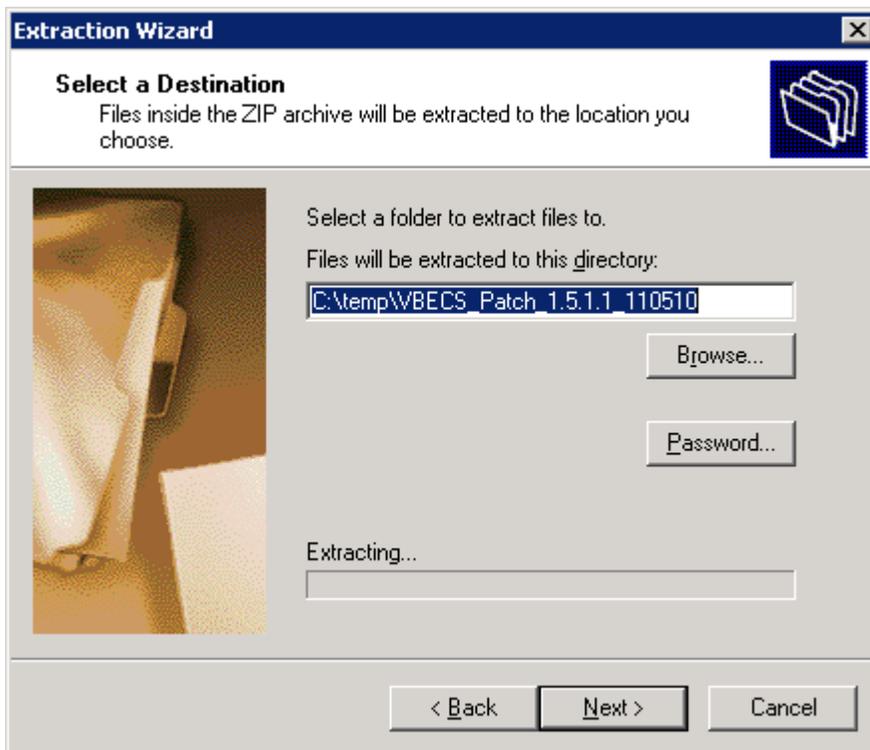
- 2) Right-click on the **VBECSSMTP_Patch_1.5.1.1_110510.zip** file and select **Extract All** (Figure 7).

Figure 7: Example of Extracting Patch Contents



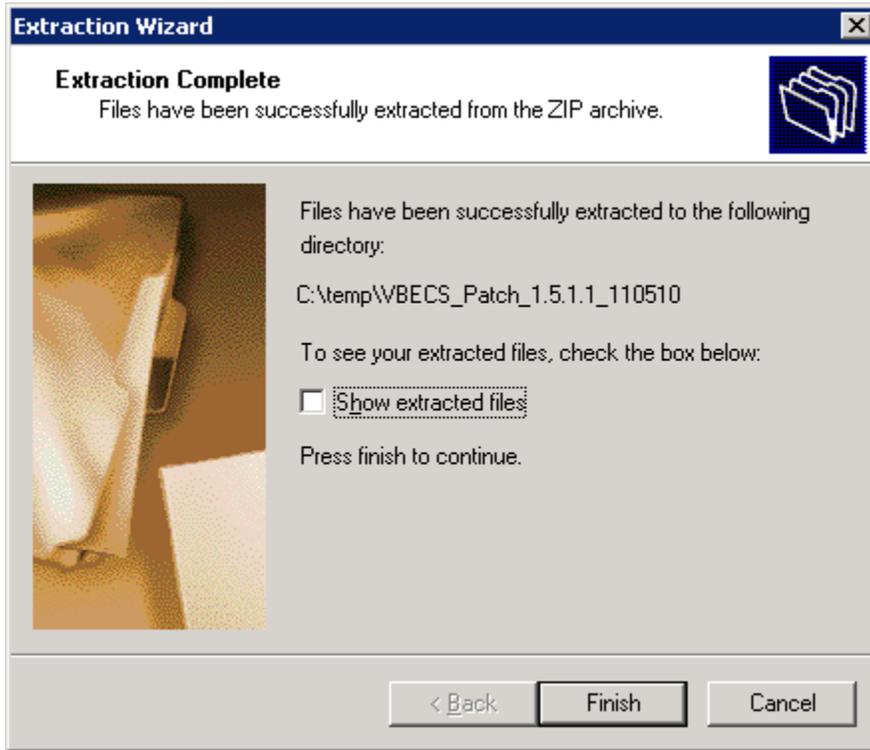
- 3) After the Extraction Wizard opens, click **Next**.
- 4) Click **Next** to extract the contents of the patch zip file to the temp directory (Figure 8).

Figure 8: Extraction Wizard



- 5) After the extraction completes, uncheck **Show extracted files** and click **Finish** (Figure 9).

Figure 9: Extraction Complete



- 6) Verify that the extraction completes and a **C:\temp\VBECS_Patch_1.5.1.1_110510** folder is created.
- 7) Using Windows Explorer, right-click on the **VBECS_Patch_1.5.1.1_110510** folder and select **Properties** (Figure 10).

Figure 10: Example of Folder Properties



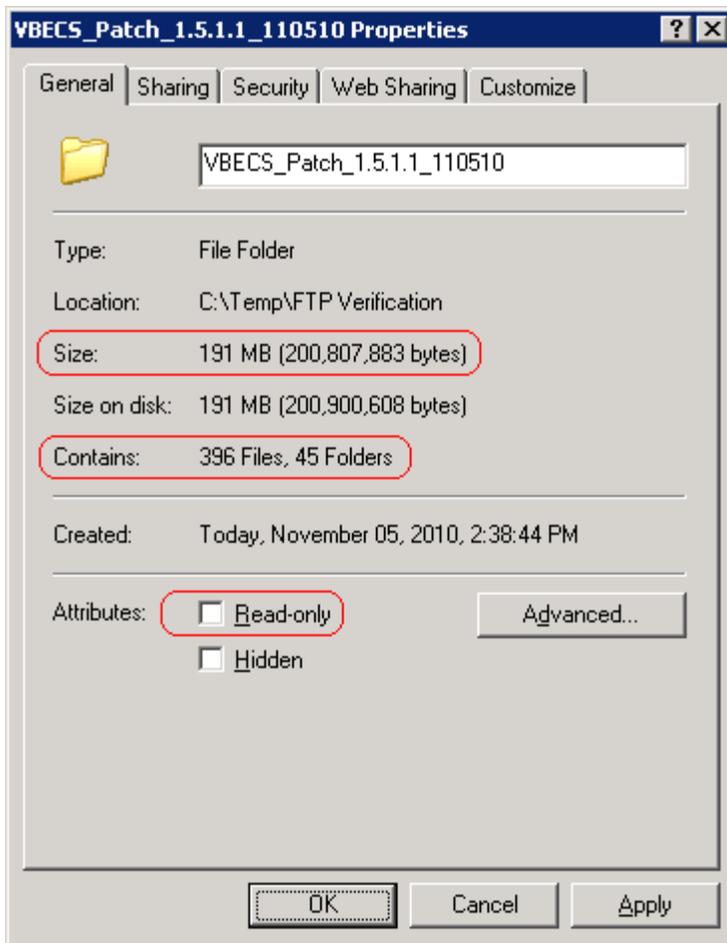
- 8) In the VBECS_Patch_1.5.1.1_110510 Properties window (Figure 11), verify:
- **Size is 191 MB (200, 807, 883 bytes)**
 - **Contains is 396 Files, 45 Folders**



If the number of files and number of bytes do not match, stop and file a Remedy ticket. Do not proceed until the ticket is resolved.

- 9) After verifying that the contents of the VBECS_Patch_1.5.1.1_110510 file match, check the box in Appendix E: VBECS Patch Installation Record Form for the Test Environment.
- 10)  Capture a screen shot of the VBECS_Patch_1.5.1.1_110510 Properties window.
- 11) Insert the screen shot in Appendix E: VBECS Patch Installation Record Form for the Test Environment.
- 12) In the Attributes section, uncheck the **Read-only** check box and click **OK** (Figure 11).

Figure 11: VBECS Patch Folder Properties



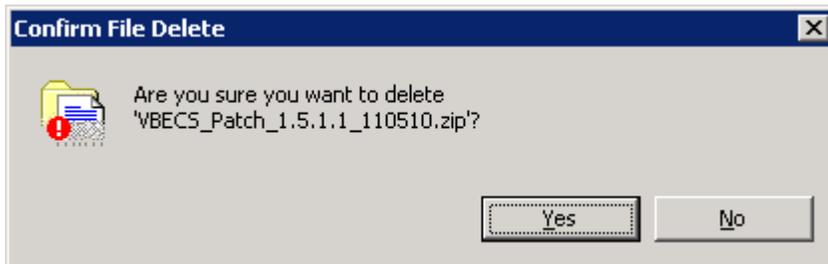
- 13) In the Confirm Attribute Changes window, select the **Apply Changes to this folder, subfolders and files** option if it is not selected, and click **OK** (Figure 12).

Figure 12: Confirm Attribute Changes



- 14) Using Windows Explorer to navigate to the **c:\temp** folder.
- 15) Select the **VBECS_Patch_1.5.1.1_110510.zip** file.
- 16) While holding the **Shift** key press the **Delete** key. Click **Yes** to confirm file deletion (Figure 13).

Figure 13: Delete Zip File



3 Prerequisites for Installation

- 1) VBECS 1.5.0.4 was installed.
- 2) Verify VistA Test has been patched with LR*5.2*401 and VBEC*1.0*10.
- 3) Verify that there are no active console (KVM) sessions on the servers.
- 4) Refer to the latest approved version of the VistA Blood Establishment Computer Software (VBECS) Installation Guide, Appendices titled Server Configuration and Password List for details on Server Names, IP addresses, passwords, etc.
- 5) On the remote desktop connection to the cluster already open, execute the steps in Appendix D: Setup Detailed Folders View to show file extensions on the installation workstation.

4 Execute VBECS Patch Scripts against the Cluster

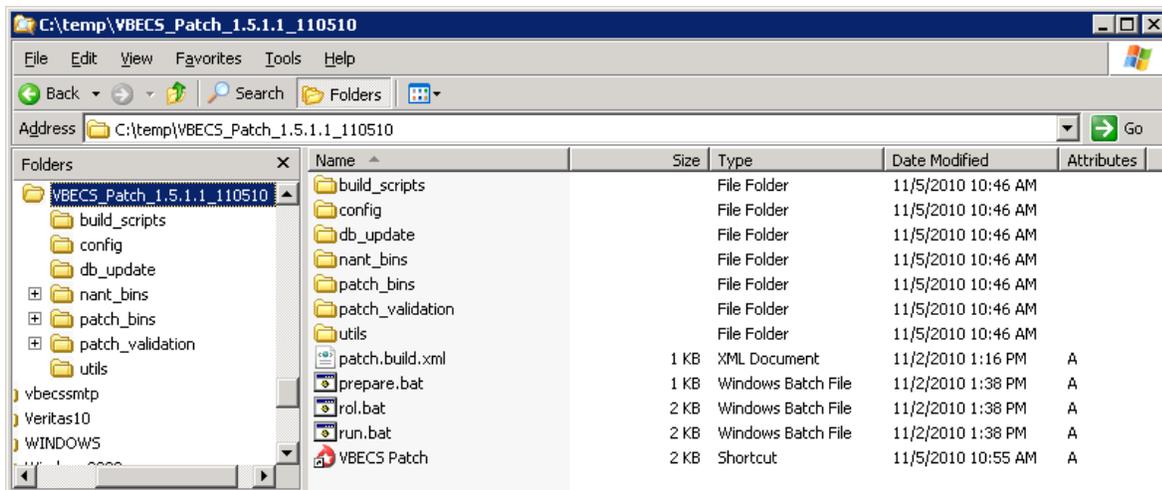
 Patching the servers will require a reboot. Plan to execute the VBECS patch scripts when no active users are on the servers. The system warns active users that they will be disconnected during the configured timeout period.

 After the upgrade, warning messages with the subject 'Operations Manager Critical Error Alert' are normal and should be ignored. They are merely noting that changes have been made to the various VBECS files which is expected during a software upgrade.

 Do not run any additional applications on the server while the patch is executing.

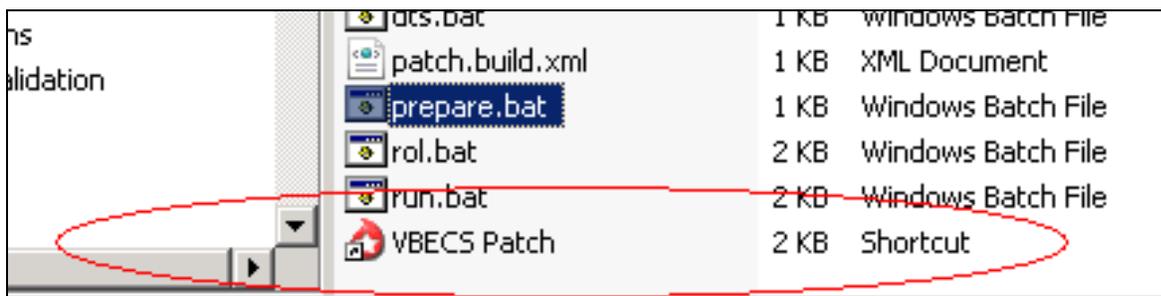
- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to the `c:\temp\VBECS_Patch_1.5.1.1_110510` folder and double-click the **prepare.bat** file (Figure 14).

Figure 14: VBECS Patch Folder



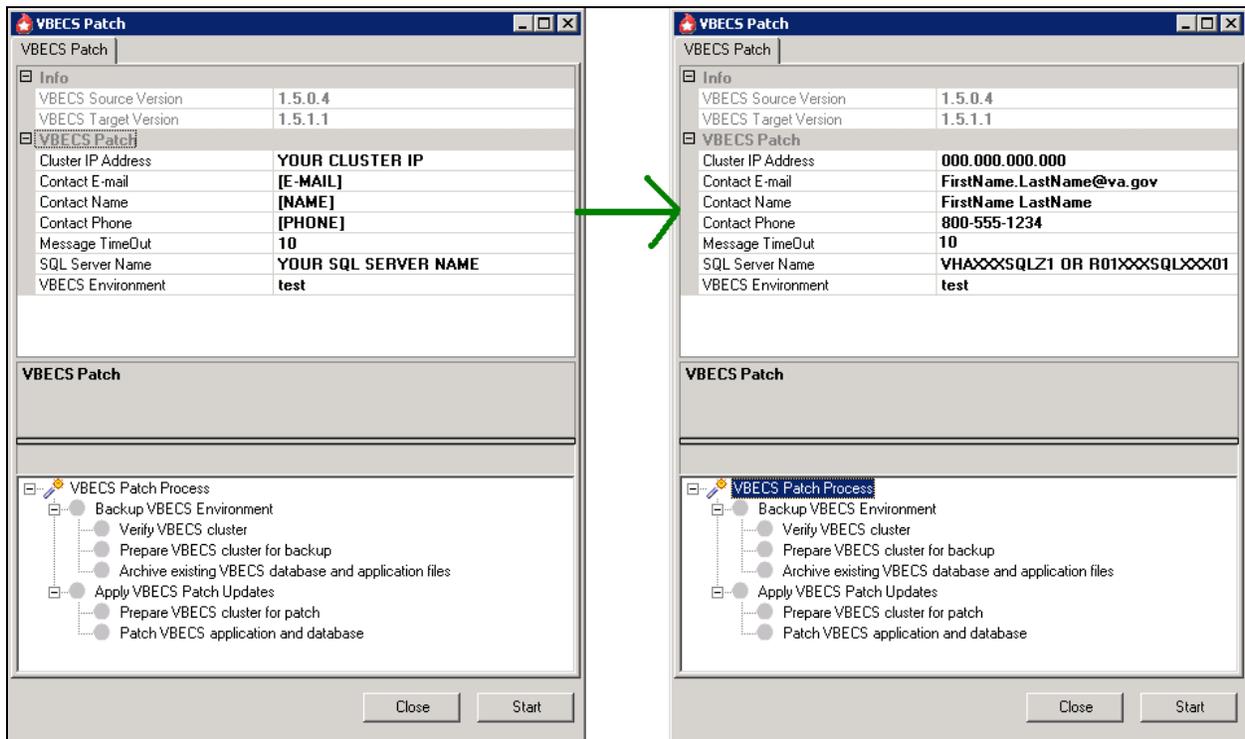
- 2) A VBECS Patch shortcut is created (Figure 15).

Figure 15: VBECS Patch Shortcut



- 3) Double-click on the **VBECS Patch** shortcut to initiate the VBECS patch configuration.
- 4) A VBECS Patch form will open.
- 5) Enter the following for the required fields (Figure 16).
 - **Cluster IP Address** – This is the IP address of the VBECS cluster [initially noted for installation on the Server Configuration Checklist in the *Vista Blood Establishment Computer Software (VBECS) Installation Guide*]. Verify this information with a system administrator. It will be used to identify the clustered servers on which the patch will be installed.
 - **Contact E-mail** – This is the email address of the contact person or group.
 - **Contact Name** – This is the full name (usually the patch installer) displayed in the patch installation shutdown message. Users will contact this person if the patch installation interferes with their work.
 - **Contact Phone** – This is the telephone number of the contact person.
 - **Message TimeOut** – This is the number of minutes current VBECS users will be warned they have to complete activities before patching disconnects their session. . If there are no users on the system override the default 10 minute value by entering **-1**. Users will not be warned if this value is **-1**.
 - **SQL Server Name** – This is the name of the VBECS SQL server [initially noted for installation on the Configuration Checklist in the *Vista Blood Establishment Computer Software (VBECS) Installation Guide*]. Verify this information with a system administrator. It will be used to identify the database to be patched.
 - **VBECS Environment** – This is the VBECS environment. Select **test** to patch VBECS Test environment.

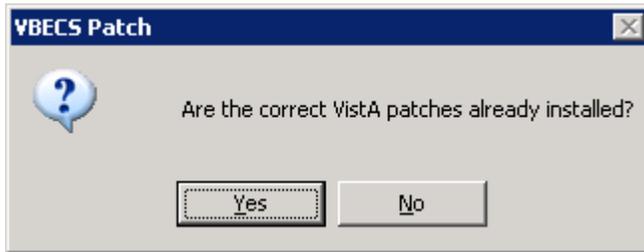
Figure 16: Example of VBECS Patch Form



- 6) Click **Start**.

7) A prompt to verify that all correct Vista patches are installed appears (Figure 17).

Figure 17: Required Vista Patches Dialog



- 8) After verifying that all required Vista patches are installed, check the box in Appendix E: VBECS Patch Installation Record Form for the Test Environment.
- 9) Click **Yes** to proceed on required Vista patches dialog. The VBECS Patch process starts. The patch will complete within 30 minutes.

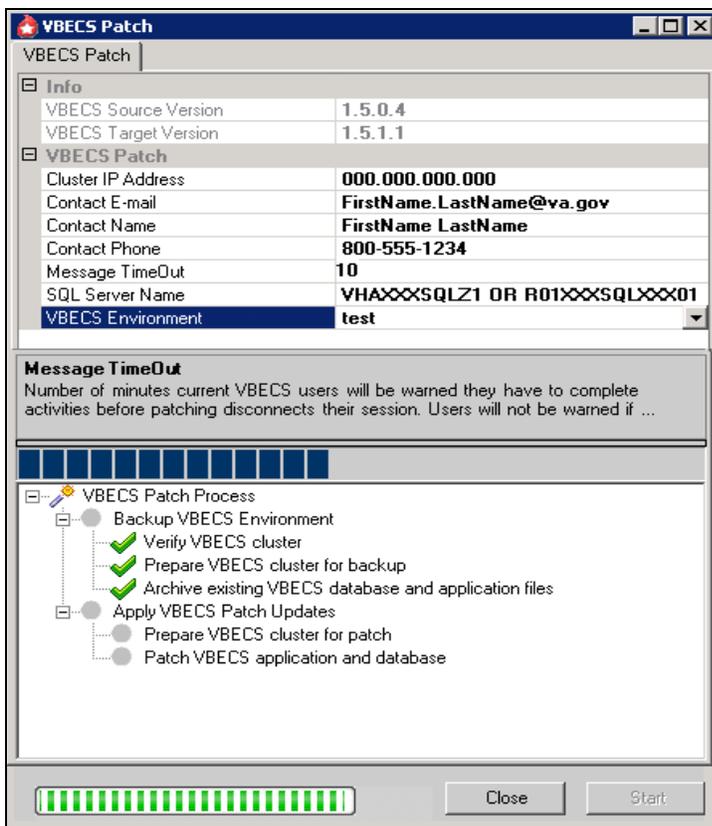
 *If a Patch fails to successfully complete within 30 minutes, file a Remedy ticket immediately. Do not release VBECS for use until the ticket is resolved.*

10) Refer to Figure 18 for the following:

- A green “patch is working” animation () in the bottom left of the VBECS Patch form will be in motion while the patching is in progress.
- The blue progress bar in the middle of form () will increment based on the overall patch progress.
- VBECS Patch Process checkpoints are displayed in the lower portion of the form. A green check mark  indicates that the VBECS Patch process step completed successfully.

 *If the patch takes longer than 5 minutes to complete the first 3 checks, file a Remedy ticket immediately. Do not release VBECS for use until the ticket is resolved.*

Figure 18: Example of VBECS Patch Process Form



The screenshot shows a window titled "VBECS Patch" with the following content:

- Info**
 - VBECS Source Version: 1.5.0.4
 - VBECS Target Version: 1.5.1.1
- VBECS Patch**
 - Cluster IP Address: 000.000.000.000
 - Contact E-mail: FirstName.LastName@va.gov
 - Contact Name: FirstName LastName
 - Contact Phone: 800-555-1234
 - Message TimeOut: 10
 - SQL Server Name: VHAXXXSQLZ1 OR R01XXSQLXX01
 - VBECS Environment: test
- Message TimeOut**

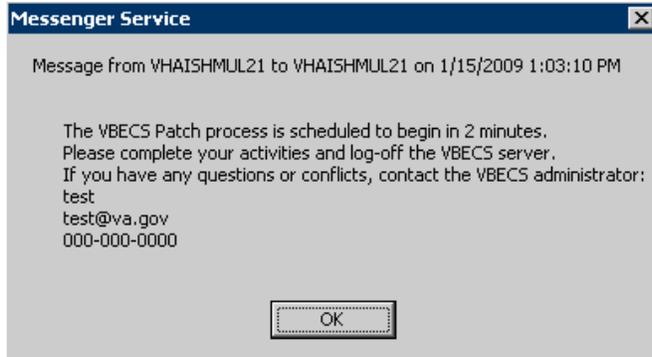
Number of minutes current VBECS users will be warned they have to complete activities before patching disconnects their session. Users will not be warned if ...
- Progress Bar**

A blue progress bar with 10 segments, the first segment is highlighted.
- VBECS Patch Process**
 - Backup VBECS Environment
 - Verify VBECS cluster 
 - Prepare VBECS cluster for backup 
 - Archive existing VBECS database and application files 
 - Apply VBECS Patch Updates
 - Prepare VBECS cluster for patch 
 - Patch VBECS application and database 

At the bottom, there is a green progress bar with 10 segments, the first segment is highlighted, and "Close" and "Start" buttons.

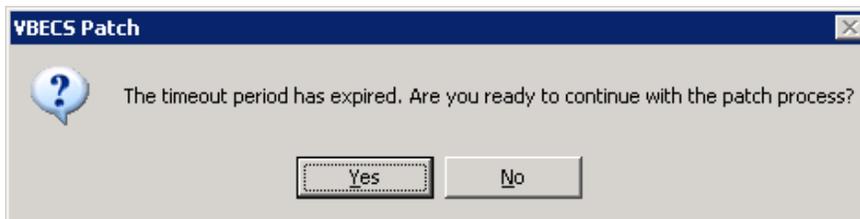
- 11) Active users (users connected to the system through remote desktop) will receive a message indicating the number of minutes they have to complete their work and log out (Message TimeOut argument entered in Step 5). The patch will not make any system changes during this timeout period (Figure 19).

Figure 19: Example of Messenger Service



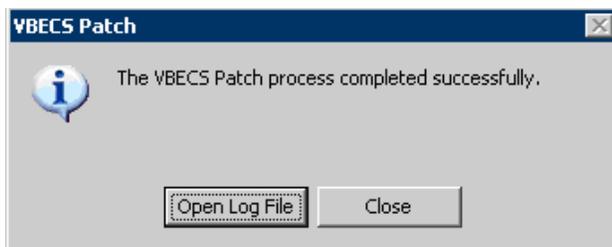
- 12) Click **OK**, after the timeout period had expired, a message signifying the final opportunity to abort the patch installation is displayed (Figure 20).

Figure 20: VBECS Patch: Continue Patch Message



- 13) Click **Yes** to continue with the patch installation. **IMPORTANT:** If active users exist, their sessions on the VBECS server will be automatically terminated. Click **No** to abort the current patching attempt and restart the patch process at a later time.
- 14) When the patch script finishes successfully a “**VBECS Patch process completed successfully**” message will be received (Figure 21).

Figure 21: VBECS Patch Process Complete Message



 *If a Patch Failure message is displayed, please file a Remedy ticket immediately. Do not proceed or release VBECS for use until the ticket is resolved.*

- 15)  Capture a screen shot of VBECS Patch process completed successfully.

- 16) Insert the screen shot in Appendix E: VBECS Patch Installation Record Form for the Test Environment.
- 17) A log file will be created in the **L:\VBECS_Archive\VBECSRecords\VBECS_<mmdyy>_1.5.0.4_to_1.5.1.1\test** directory, with **<cluster>.<nnn.med.va.gov>_VBECS_1.5.1.1_test_<hhmm>.log** as the file name, where:
- <mmdyy> represents the current date.
 - <hhmm> represents the hour and minute the patch began execution.
 - <nnn> represents 'vha' or 'region name' (e.g. RO1).
- For example, vhaxxxcluz1.vha.med.va.gov_VBECS_1.5.1.1_test_0928.log.



By design, there may be non-fatal errors and warnings within the log file output. Ignore warnings and non-fatal errors upon successful completion of the VBECS Patch process.

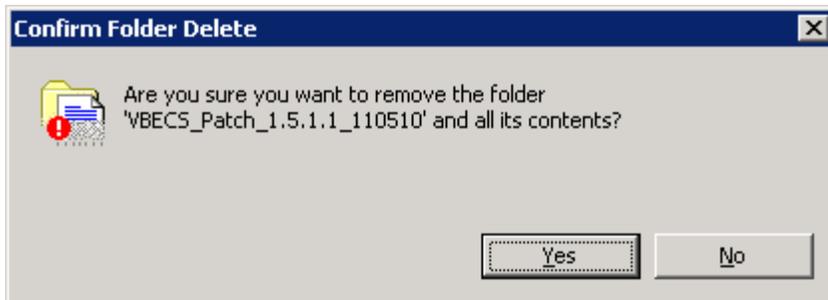
- 18) Record the name of the log file in Appendix E: VBECS Patch Installation Record Form for the Test Environment.
- 19) Click **Close** to close the VBECS Patch success message.
- 20) Click **Close** on the VBECS Patch main window to exit the patch application.

5 Delete Patch Files

To delete the VBECS 1.5.1.1 Patch files:

- 1) Open a remote desktop connection to the cluster, and use Windows Explorer to navigate to the **c:\temp** folder.
- 2) Select the **VBECS_Patch_1.5.1.1_110510** folder.
- 3) While holding down the **Shift** key, press the **Delete** key. Click **Yes** to confirm file deletion (Figure 22).

Figure 22: Example of Patch Files for Deletion



- 4) Check the box in Appendix E: VBECS Patch Installation Record Form for the Test Environment.
- 5) Print Appendix E: VBECS Patch Installation Record Form for the Test Environment and initial and date the printed copy. Save this with your records of previous VBECS installations.
- 6) Manually check the box on the printed copy of Appendix E: VBECS Patch Installation Record Form for the Test Environment verifying that the form was printed, initialed and dated.
- 7) Notify the blood bank that the patch has been successfully installed in the Test account and request the blood bank to verify that the Test account can receive orders.

For new VBECS installations: Begin VistA Database Conversion in accordance with Blood Bank Pre-Implementation Data Validation, Mapping, and Conversion ADPAC Guide if the conversion process has not already been completed.

Installation Procedure for the Production Environment



Do not deviate from the instructions in this guide.



No users are permitted on the system during the patch installation. Any users on the system at the start of the patch process will be disconnected.



Coordinate the patch installation with the blood bank supervisor. Notify the supervisor that the patch installation requires one to two hours of downtime without interruption.

Use the Microsoft Word .doc format of the document when copying and pasting sections of the document.

Download and Verify the Contents of the VBECS Patch

1 Download the VBECS 1.5.1.1 Patch File

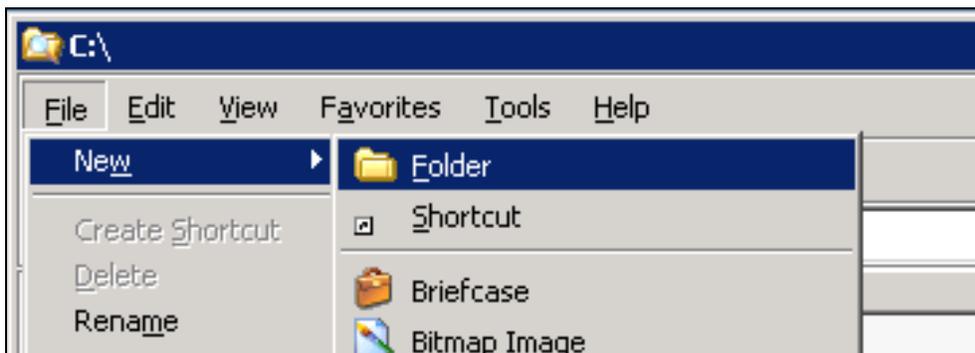
Prerequisites for VBECS FTP Download:

- The installer must be a server administrator in accordance with Appendix B: Active Directory Server Administrative Groups.
- The installer must be a member of the VBECS Admin AD Group in accordance with Appendix B: Active Directory Server Administrative Groups.

To download the VBECS 1.5.1.1 patch file from the VBECS FTP Site:

- 1) Open a remote desktop connection to the cluster being patched.
- 2) Using Windows Explorer, click the **C** drive. If a folder named “temp” does not exist, click **File, New, Folder**. Name this folder “temp” (Figure 23).

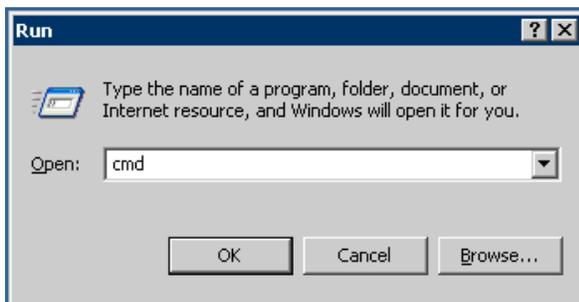
Figure 23: Creating the Temp Folder



- 3) Complete Sub-steps a through d to save a copy of Appendix F: VBECS Patch Installation Record Form for the Production Environment to the local workstation. Any reference to Appendix F after the document is initially saved will be referring to the saved copy.

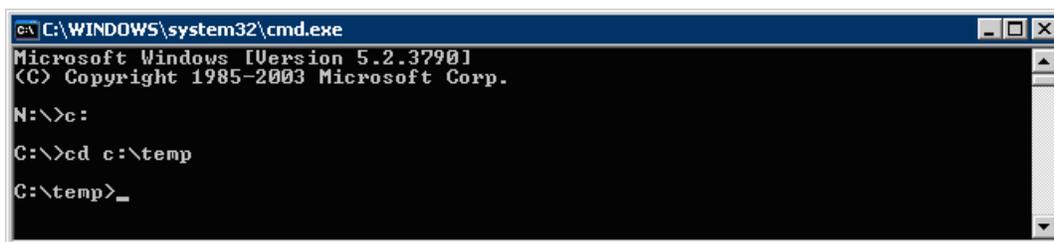
- a) Open VistA Blood Establishment Computer Software (VBECS) 1.5.1 Patch Installation Guide.
 - b) Using the .doc format of this document, select the contents of Appendix F: VBECS Patch Installation Record Form for the Production Environment and copy and paste into a new Word document.
 - c) Add a header to the document as “**VBECS Patch Installation Record <Cluster_name> 1.5.1 Prod <mmddy>**” and a footer containing “**Page X of Y**”.
 - d) Save Appendix F: VBECS Patch Installation Record Form for the Production Environment as “**VBECS Patch Installation Record <Cluster_name> 1.5.1 Prod <mmddy>**” (for example, VBECS Patch Installation Record VHAXXXCLUZ1 1.5.1 Prod 070809); <mmddy> represents the current date.
- 4) Click **Start, Run**. Type **cmd** and click **OK** (Figure 24). A command prompt window appears.

Figure 24: Run Window



- 5) In the command prompt window, type **c:** and press **Enter**.
- 6) Type **cd c:\temp** and press **Enter** (Figure 25).

Figure 25: Example of Temp Folder for Patch Download



- 7) Type **ftp** and press **Enter** (See Figure 26 for Steps 8, 9 and 10).
- 8) Type **open 10.3.21.76 20001** and press **Enter**.
- 9) At the **User (10.3.21.76:(none))** prompt, type your domain and Windows login ID (e.g., VHAMASTER\YOURNAME).
- 10) At the **Password** prompt, type your password.
(**Note:** For security purposes, the cursor will not advance or display characters as you type your password.)



If access problems are encountered, please file a Remedy ticket. Do not proceed until the ticket is resolved.

Figure 26: Example of FTP

```

C:\temp>ftp
ftp>open 10.3.21.76 20001
Connected to 10.3.21.76.
220-Microsoft FTP Service
220 UBECs FTP Site
User (10.3.21.76:(none)): your_domain\your_user_name
331 Password required for your_domain\your_user_name
Password:
230-Unauthorized access or misuse of this system and/or its data is a federal crime. Use of all data must be in accordance with VA security and privacy policies
230 User your_domain\your_user_name logged in.
ftp>

```

- 11) At the **ftp>** prompt, type **bin** and press **Enter**.
The following message will appear “200 Type set to I” (See Figure 27 for Steps 11 and 12).
- 12) Type **get VBECS_Patch_1.5.1.1_110510.zip** and press **Enter** (it may take several minutes for the download to complete, after which a “Transfer complete” message appears).

Figure 27: Example of FTP File Transfer

```

Visual Studio .NET 2003 Command Prompt - ftp
ftp>bin
200 Type set to I.
ftp>get VBECS_Patch_1.5.1.1_110510.zip
200 PORT command successful.
150 Opening BINARY mode data connection for VBECS_Patch_1.5.1.1_110510.zip(78397923 bytes).
226 Transfer complete.
ftp: 78397923 bytes received in 14.97seconds 5237.35Kbytes/sec.
ftp>_

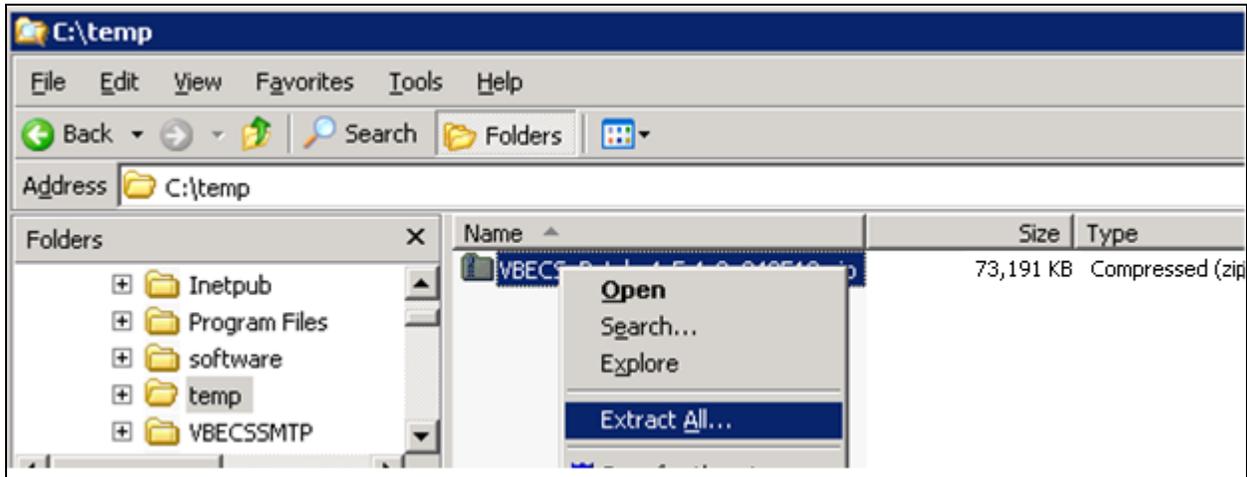
```

- 13)  Capture a screen shot of the transfer completed command prompt.
- 14) Insert the screen shot in Appendix F: VBECS Patch Installation Record Form for the Production Environment.
- 15) Stop the FTP session: At the **ftp>** prompt, type **quit** and press **Enter**.
- 16) Close the command prompt window.

2 Verify the Contents of the VBECS 1.5.1.1 Patch File

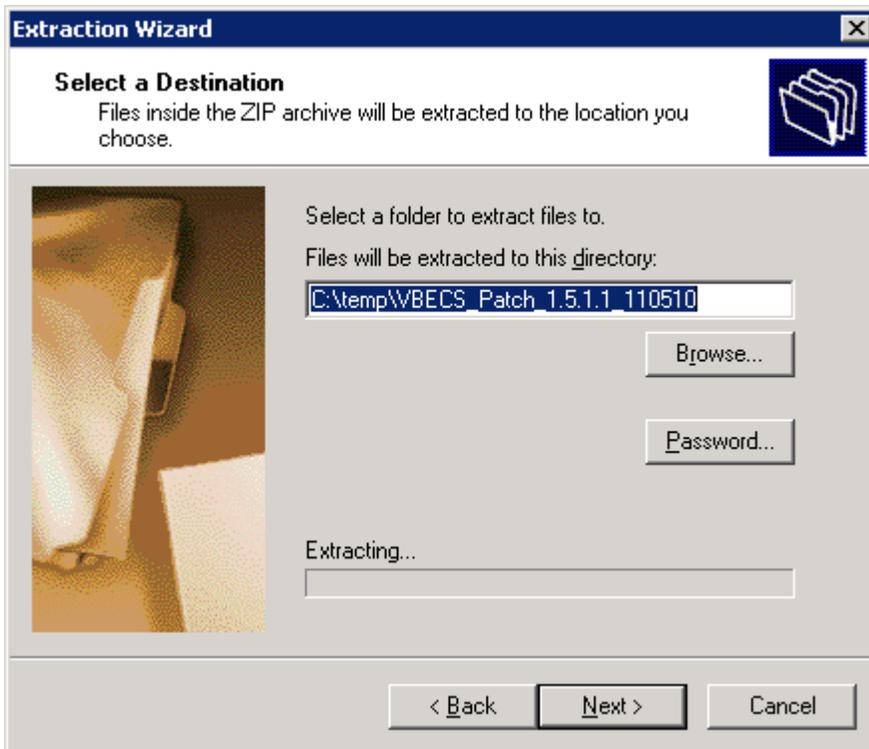
- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to the **c:\temp** folder.
- 2) Right-click on the **VBECS_Patch_1.5.1.1_110510.zip** file and select **Extract All** (Figure 28).

Figure 28: Example of Extracting Patch Contents



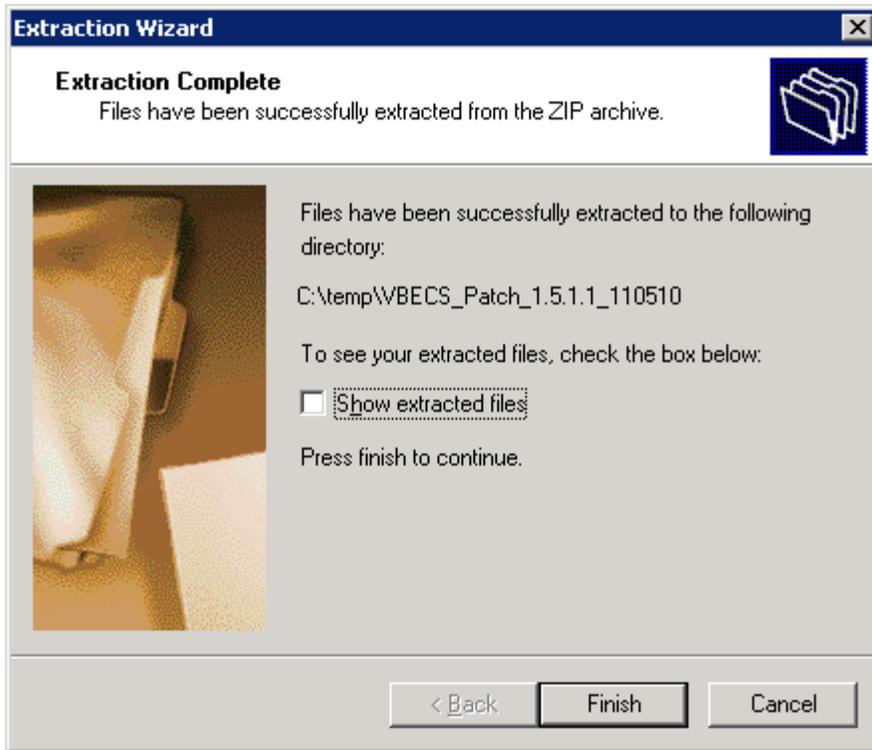
- 3) After the Extraction Wizard opens, click **Next**.
- 4) Click **Next** to extract the contents of the patch zip file to the temp directory (Figure 29).

Figure 29: Extraction Wizard



- 5) After the extraction completes, uncheck **Show extracted files** and click **Finish** (Figure 30).

Figure 30: Extraction Completed



- 6) Verify that the extraction completes and a **c:\temp\VBECS_Patch_1.5.1.1_110510** folder is created.
- 7) Using Windows Explorer, right-click on the **VBECS_Patch_1.5.1.1_110510** folder and select **Properties** (Figure 31).

Figure 31: Example of Folder Properties



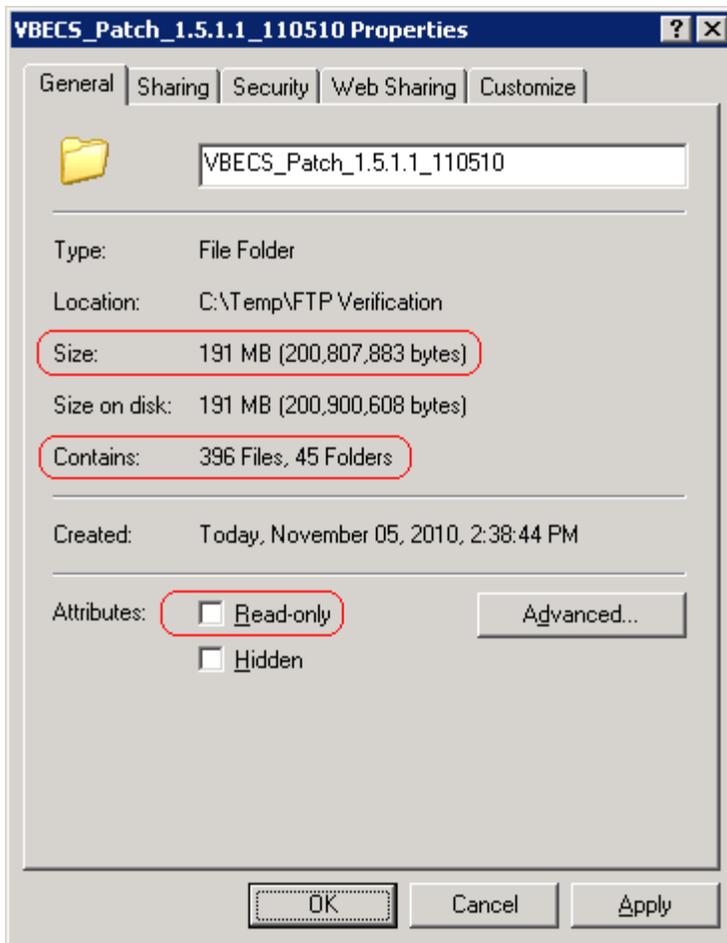
- 8) In the VBECS_Patch_1.5.1.1_110510 Properties window (Figure 32), verify:
- **Size is 191 MB (200, 807, 883 bytes)**
 - **Contains is 396 Files, 45 Folders**



If the number of files and number of bytes do not match, stop and file a Remedy ticket. Do not proceed until the ticket is resolved.

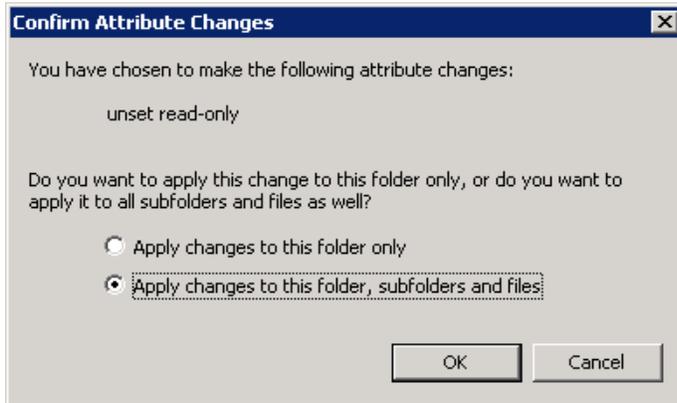
- 9) After verifying that the contents of the VBECS_Patch_1.5.1.1_110510 file match, check the box in Appendix F: VBECS Patch Installation Record Form for the Production Environment.
- 10)  Capture a screen shot of the VBECS_Patch_1.5.1.1_110510 Properties window.
- 11) Insert the screen shot in Appendix F: VBECS Patch Installation Record Form for the Production Environment
- 12) In the Attributes section, uncheck the **Read-only** check box and click **OK** (Figure 32).

Figure 32: VBECS Patch Folder Properties



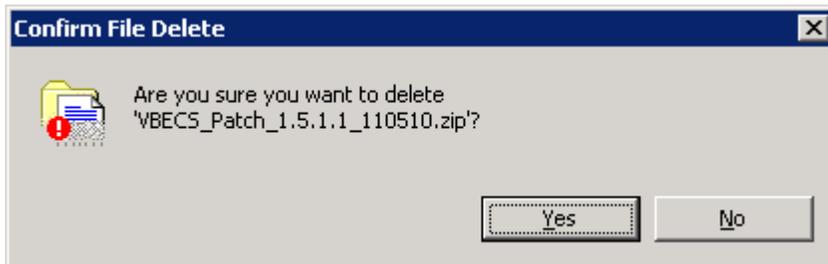
- 13) In the Confirm Attribute Changes window, select the **Apply Changes to this folder, subfolders and files** option if it is not selected, and click **OK** (Figure 33).

Figure 33: Confirm Attribute Changes



- 14) Using Windows Explorer to navigate to the **c:\temp** folder.
- 15) Select the **VBECS_Patch_1.5.1.1_110510.zip** file.
- 16) While holding the **Shift** key press the **Delete** key. Click **Yes** to confirm file deletion (Figure 34).

Figure 34: Delete Zip File



3 Prerequisites for Installation

- 1) VBECS 1.5.0.4 was installed.
- 2) VBECS 1.5.1.1 was installed in the Test Environment.
- 3) Verify Vista Test has been patched with LR*5.2*401 and VBEC*1.0*10.
- 4) Verify that there are no active console (KVM) sessions on the servers.
- 5) Refer to the latest approved version of the Vista Blood Establishment Computer Software (VBECS) Installation Guide, Appendices titled Server Configuration and Password List for details on Server Names, IP addresses, passwords, etc.
- 6) Using the remote desktop connection to the cluster already open, execute the steps in Appendix D: Setup Detailed Folders View to show file extensions on the installation workstation.

4 Execute VBECS Patch Scripts against the Cluster

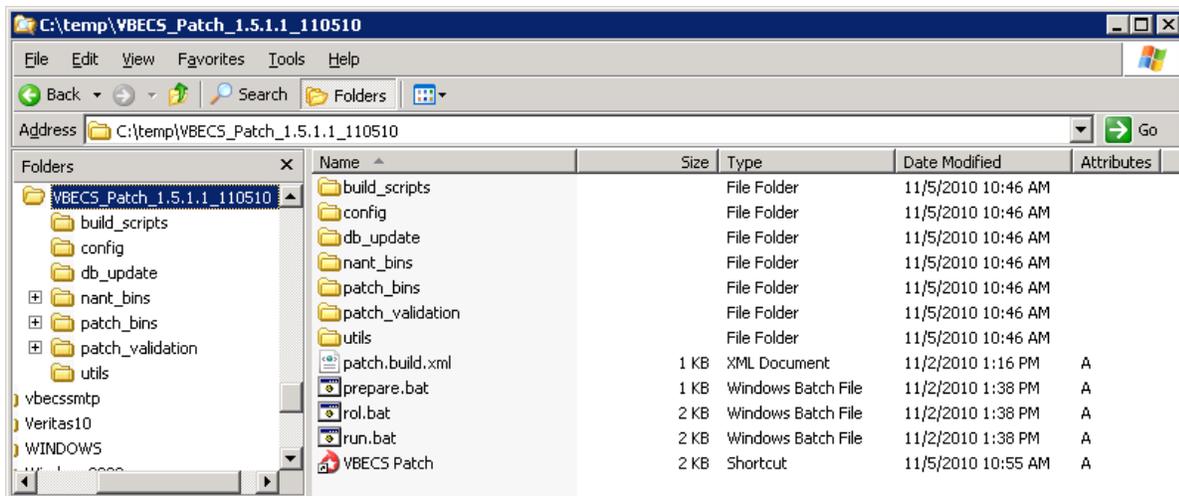
 Patching the servers will require a reboot. Plan to execute the VBECS patch when no active users are on the servers. The system warns active users that they will be disconnected during the configured timeout period.

 After the upgrade, warning messages with the subject 'Operations Manager Critical Error Alert' are normal and should be ignored. They are merely noting that changes have been made to the various VBECS files which is expected during a software upgrade.

 Do not run any additional applications on the server while the patch is executing.

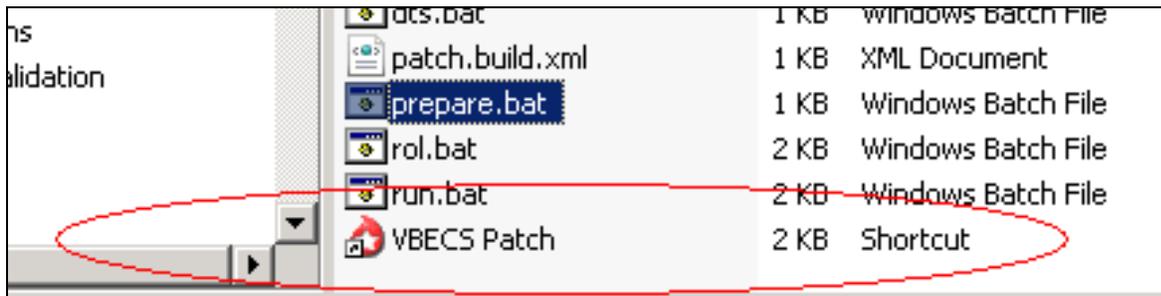
- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to the `c:\temp\VBECS_Patch_1.5.1.1_110510` folder and double-click the **prepare.bat** file (Figure 35).

Figure 35: VBECS Patch Folder



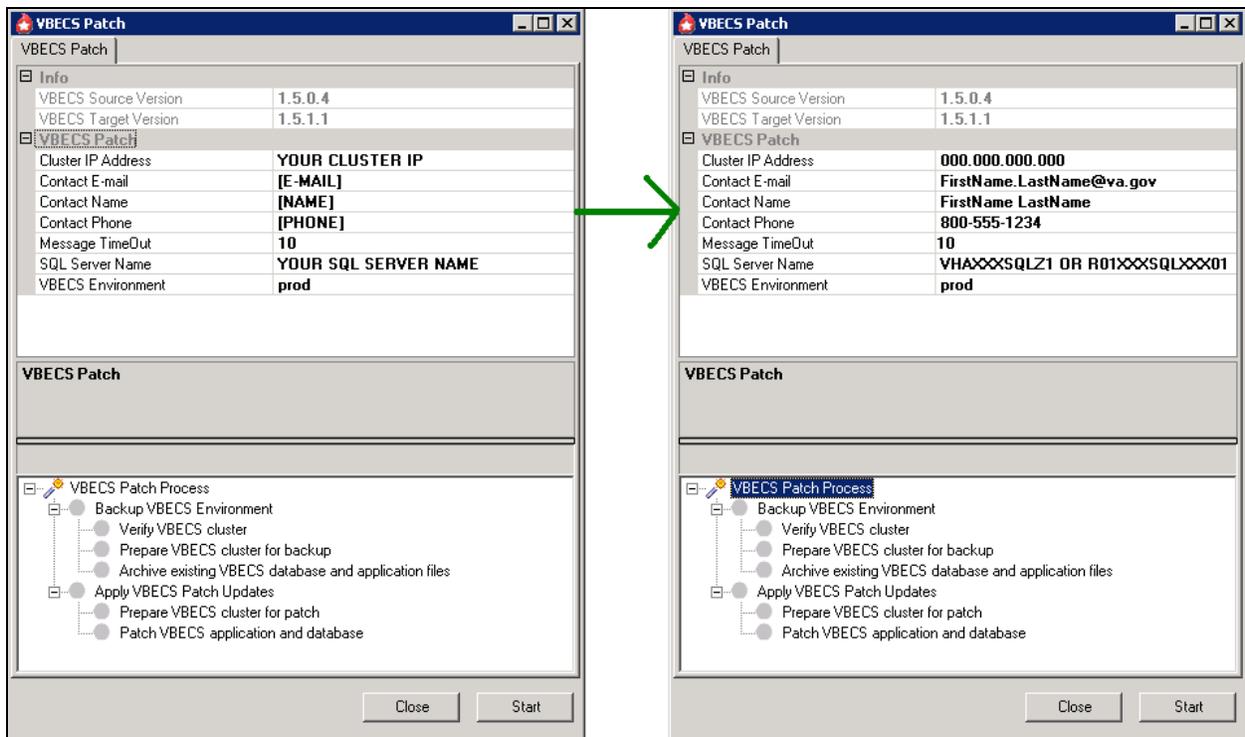
- 2) A VBECS Patch shortcut is created (Figure 36).

Figure 36: VBECS Patch Shortcut



- 3) Double-click on the **VBECS Patch** shortcut to initiate the VBECS patch configuration.
- 4) A VBECS Patch form will open.
- 5) Enter the following for the required fields (Figure 37).
 - **Cluster IP Address** – This is the IP address of the VBECS cluster [initially noted for installation on the Server Configuration Checklist in the *VistA Blood Establishment Computer Software (VBECS) Installation*]. Verify this information with a system administrator. It will be used to identify the clustered servers on which the patch will be installed.
 - **Contact E-mail** – This is the email address of the contact person or group.
 - **Contact Name** – This is the full name (usually the patch installer) displayed in the patch installation shutdown message. Users will contact him if the patch installation interferes with their work.
 - **Contact Phone** – This is the telephone number of the contact person.
 - **Message TimeOut** – This is the number of minutes current VBECS users will be warned they have to complete activities before patching disconnects their session. . If there are no users on the system override the default 10 minute value by entering **-1**. Users will not be warned if this value is **-1**.
 - **SQL Server Name** – This is the name of the VBECS SQL server [initially noted for installation on the Configuration Checklist under SQL Server Information in the *VistA Blood Establishment Computer Software (VBECS) Installation*]. Verify this information with a system administrator. It will be used to identify the database to be patched.
 - **VBECS Environment** – This is the VBECS environment. Select **prod** to patch VBECS Production environment.

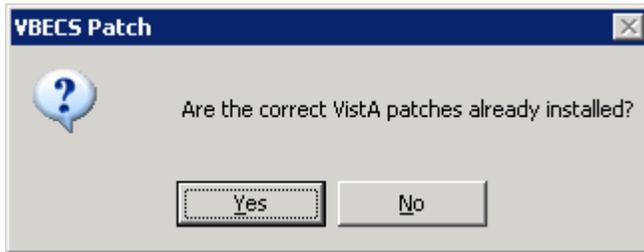
Figure 37: Example of VBECS Patch Form



- 6) Click **Start**.

7) A prompt to verify that all correct Vista patches are installed appears (Figure 38).

Figure 38: Required Vista Patches Prompt



- 8) Verify that all required Vista patches are installed. Check the box in Appendix F: VBECS Patch Installation Record Form for the Production Environment.
- 9) Click **Yes** to proceed on required Vista patches dialog. The VBECS Patch process starts. The patch will complete within 30 minutes.

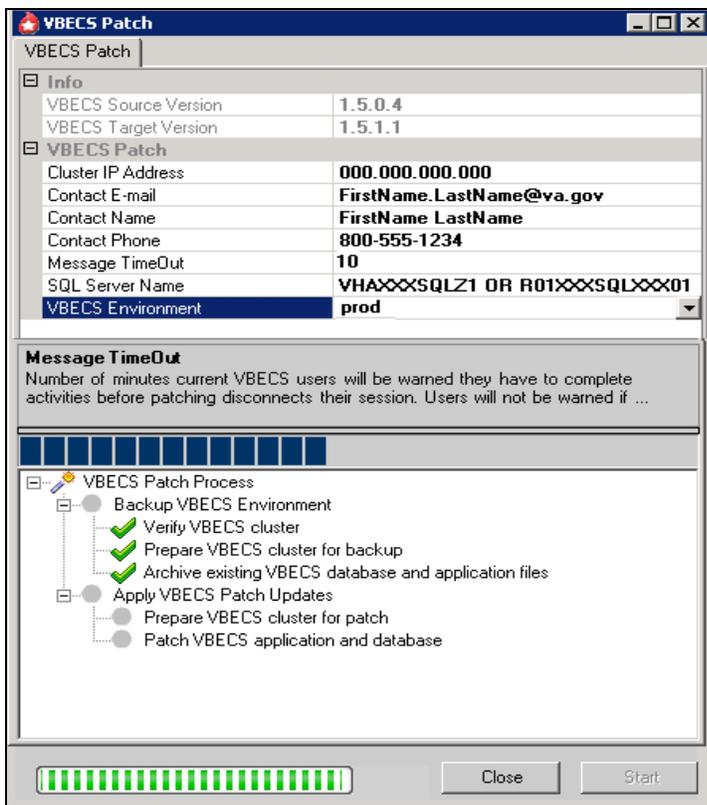
 *If a Patch fails to successfully complete within 30 minutes, file a Remedy ticket immediately. Do not release VBECS for use until the ticket is resolved.*

10) Refer to Figure 39 for the following:

- A green “patch is working” animation () in the bottom left of the VBECS Patch form will be in motion while the patching is in progress.
- The blue progress bar in the middle of form () will increment based on the overall patch progress.
- VBECS Patch Process checkpoints are displayed in the lower portion of the form. A green check mark  indicates that VBECS Patch process step completed successfully.

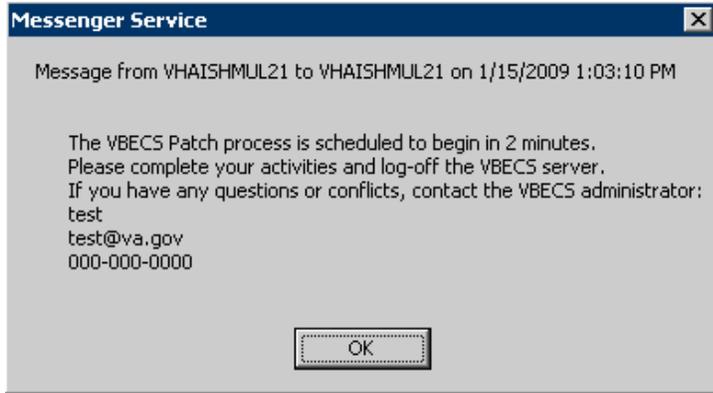
 *If the patch takes longer than 5 minutes to complete the first 3 checks, file a Remedy ticket immediately. Do not release VBECS for use until the ticket is resolved.*

Figure 39: Example of VBECS Patch Process Form



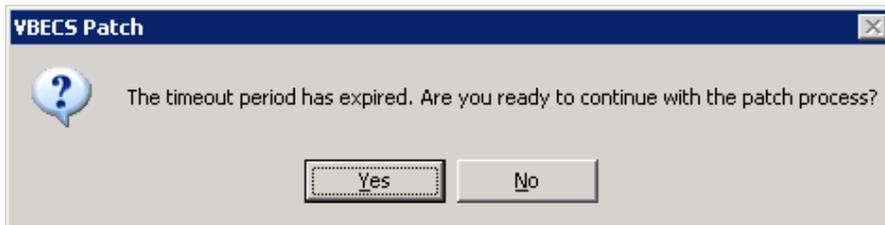
- 11) Active users (users connected to the system through remote desktop), will receive a message indicating the number of minutes they have to complete their work and log out (Message TimeOut argument entered in Step 5). The patch will not make any system changes during this timeout period (Figure 40).

Figure 40: Example of Messenger Service



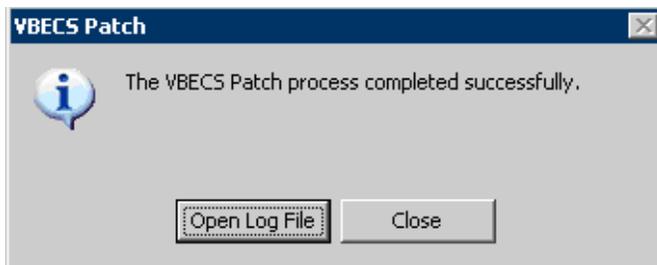
- 12) Click **OK**, after the timeout period had expired, a message signifying the final opportunity to abort the patch installation is displayed (Figure 41).

Figure 41: VBECS Patch: Continue Patch Message



- 13) Click **Yes** to continue with the patch installation. **IMPORTANT:** If active users exist, their sessions on the VBECS server will be automatically terminated. Click **No** to abort the current patching attempt and restart the patch process at a later time.
- 14) When the patch script finishes successfully a “**VBECS Patch process completed successfully**” message will be received (Figure 42).

Figure 42: VBECS Patch Process Complete Message



 *If a Patch Failure message is displayed, please file a Remedy ticket immediately. Do not proceed or release VBECS for use until the ticket is resolved.*

- 15)  Capture a screen shot of VBECS Patch process completed successfully.
- 16) Insert the screen shot in Appendix F: VBECS Patch Installation Record Form for the Production Environment.
- 17) A log file will be created in the
L:\VBECS_Archive\VBECSRecords\VBECS_<mmddy>_1.5.0.4_to_1.5.1.1\prod
directory, with <cluster>.<nnn.med.va.gov>_VBECS_1.5.1.1_prod_<hhmm>.log as the file name, where:
 - <mmddy> represents the current date.
 - <hhmm> represents the hour and minute the patch began execution.
 - <nnn> represents 'vha' or 'region name' (e.g. RO1).For example, vhaxxxcluz1.vha.med.va.gov_VBECS_1.5.1.1_prod_0928.log.



By design, there may be non-fatal errors and warnings within the log file output. Ignore warnings and non-fatal errors upon successful completion of the VBECS Patch process.

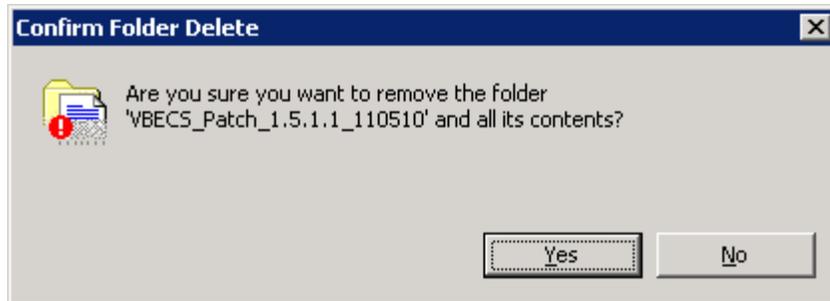
- 18) Record the name of the log file in Appendix F: VBECS Patch Installation Record Form for the Production Environment.
- 19) Click **Close** to close the VBECS Patch success message.
- 20) Click **Close** on the VBECS Patch main window to exit the patch application.

5 Delete Patch Files

To delete the VBECS 1.5.1.1 Patch files:

- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to **c:\temp** folder.
- 2) Select the **VBECS_Patch_1.5.1.1_110510** folder.
- 3) While holding down the Shift key press the **Delete** key. Click **Yes** to confirm file deletion (Figure 43).

Figure 43: Example of Patch Files for Deletion



- 4) Check the box in Appendix F: VBECS Patch Installation Record Form for the Production Environment.
- 5) Print Appendix F: VBECS Patch Installation Record Form for the Production Environment and initial and date the printed copy. Save this with your records of previous VBECS installations.
- 6) Manually check the box on the printed copy of Appendix F: VBECS Patch Installation Record Form for the Production Environment verifying that the form was printed, initialed and dated.
- 7) Notify the blood bank that the patch has been successfully installed in the Production account and request the blood bank to verify that the Production account can receive orders.

For new VBECS installations: Begin VistA Database Conversion in accordance with Blood Bank Pre-Implementation Data Validation, Mapping, and Conversion ADPAC Guide if the conversion process has not already been completed

Glossary

| Acronym, Term | Definition |
|--|---|
| .NET | Microsoft's framework for Web services and component software (pronounced "dot net"). |
| CPS (formerly EPS, formerly EVS) | Clinical Product Support. |
| IRM | Information Resource Management. |
| Remote Desktop Connection (formerly Terminal Services) | The connectivity tool used to access VBECS on the server. |
| VBECS | VistA Blood Establishment Computer Software. |
| Veterans Health Information Systems and Technology Architecture (VistA) | Formerly the Decentralized Hospital Computer Program (DHCP) of the Veterans Health Administration (VHA), Department of Veterans Affairs (VA). VistA software, developed by the VA, is used to support clinical and administrative functions at VA Medical Centers nationwide. It is written in M and, via the Kernel, runs on all major M implementations regardless of vendor. VistA is composed of packages that undergo a verification process to ensure conformity with name spacing and other VistA standards and conventions. |

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Appendices

Appendix A: Installation Logs

Parts of the installation produce logs, which can help resolve installation issues. The logs and their locations are as follows:

- VBECS Patch Scripts on the cluster.
 - When the patch is executed for the Test environment, a log file will be created in:
 - L:\VBECS_Archive\VBECSRecords\VBECS_<mmddy>_1.5.0.4_to_1.5.1.1\test\<cluster>.<nnn.med.va.gov>_VBECS_1.5.1.1_test_<hhmm>.log as the file name, where:
 - <mmddy> represents the date the patch was run.
 - <hhmm> represents the hour and minute the patch began execution.
 - <nnn> represents 'vha' or 'region name' (e.g. RO1).

For example, vhaxxcluz1.vha.med.va.gov_VBECS_1.5.1.1_test_1504.log.

- When the patch is executed for the Prod environment, a log file will be created in:
 - L:\VBECS_Archive\VBECSRecords\VBECS_<mmddy>_1.5.0.4_to_1.5.1.1\prod\<cluster>.<nnn.med.va.gov>_VBECS_1.5.1.1_prod_<hhmm>.log as the file name, where:
 - <mmddy> represents the date the patch was run.
 - <hhmm> represents the hour and minute the patch began execution.
 - <nnn> represents 'vha' or 'region name' (e.g. RO1).

For example, vhaxxcluz1.vha.med.va.gov_VBECS_1.5.1.1_prod_1504.log.

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Appendix B: Active Directory Server Administrator Groups

Each site has two user groups in Active Directory (VHA.med.va.gov\VBECs\VBECs Users) that support VBECs. Members of the administrative group can access the administrative component of VBECs. Members of the user group can access functional components of VBECs. Multidivisional sites share groups. Table 1 lists all group names.

Table 1: Group Names

| VISN | Facility # | Facility | Server Administrative Group | VBECs Admin AD Group |
|------|------------|--|-----------------------------|-----------------------------|
| 1 | 523 | Boston (Boston HCS) | vhaBHS VbecsServerAdmins | vhaBHS VBECs Administrators |
| | 608 | Manchester | vhaMANVbecsServerAdmins | vhaMANVBECsAdministrators |
| | 631 | Northampton | vhaNHMVbecsServerAdmins | vhaNHMVBECSAdministrators |
| | 650 | Providence | vhaPROVbecsServerAdmins | vhaPROVbecsAdminstrators |
| | 402 | Togus | vhaTOGVbecsServerAdmins | vhaTOGVbecs Administrators |
| | 689 | West Haven (Connecticut HCS) | vhaCONVbecsServerAdmins | vhaCONVbecsAdministrators |
| | 405 | White River Junction | vhaWRJVbecsServerAdmins | vhaWRJVbecsAdministrators |
| 2 | 528A8 | Albany (Upstate New York HCN) MC | VhaUNYVbecsServerAdmins | vhaUNYVbecsAdministrators |
| | 528A6 | Bath (Upstate New York HCN) | | |
| | 528 | Buffalo (Upstate New York HCN) | | |
| | 528A5 | Canandaigua VA Medical Center | | |
| | 528A7 | Syracuse (Upstate New York HCS) | | |
| 3 | 526 | Bronx | vhaBRXVbecsServerAdmins | vhaBRXVbecsAdministrators |
| | 620A4 | Castle Point (Hudson Valley HCS) | vhaHVHVbecsServerAdmins | vhaHVHVbecsAdministrators |
| | 561 | East Orange (New Jersey HCS) | vhaNJHVbecsServerAdmins | vhaNJHVbecsAdministrators |
| | 630 | New York (New York Harbor HCS) New York | vhaNYHVbecsServerAdmins | vhaNYHVbecsAdministrators |
| | 630A4 | New York (New York Harbor HCS) Brooklyn | | |
| | 632 | Northport | vhaNOPVbecsServerAdmins | vhaNOPVbecsAdminstrators |
| 4 | 503 | Altoona | vhaALTVbecsServerAdmins | vhaALTVbecsAdministrators |
| | 529 | Butler | vhaBUTVbecsServerAdmins | vhaBUTVbecsAdministrators |
| | 540 | Clarksburg | vhaCLAVbecsServerAdmins | vhaCLAVBECSAdministrators |
| | 542 | Coatesville | vhaCOAVbecsServerAdmins | vhaCOAVbecsAministrators |
| | 562 | Erie | vhaERIVbecsServerAdmins | vhaERIVbecsAdministrators |
| | 595 | Lebanon | vhaLEBVbecsServerAdmins | vhaLEBVbecsAdministrators |
| | 642 | Philadelphia | vhaPHIVBECS_ADM | vhaPhiladelphiaBBAdmin |
| | 646 | Pittsburgh University Drive (Pittsburgh HCS) | vhaPTHVbecsServerAdmins | vhaPTHVbecsAdministrators |
| | 693 | Wilkes-Barre | vhaWBPVbecsServerAdmins | vhaWBPVbecsAdministrators |
| | 460 | Wilmington | vhaWIMVbecsServerAdmins | vhaWIMVbecsAdministrators |
| 5 | 512 | Baltimore (Maryland HCS) | vhaBALVbecsServerAdmins | vhaBALVbecsAdministrators |
| | 512A5 | Perry Point (Maryland HCS) | | |
| | 613 | Martinsburg | vhaMWVVbecsServerAdmins | vhaMWVVbecsAdministrators |
| | 688 | Washington | vhaWASVbecsServerAdmins | vhaWAS VBECs Administrators |
| 6 | 637 | Asheville | vhaASHVbecsServerAdmins | vhaASHVbecsAdministrators |
| | 517 | Beckley | vhaBECVbecsServerAdmins | vhaBECVbecsAdministrators |
| | 558 | Durham | vhaDURAdmin | v06DURVbecsAdministrators |

| VISN | Facility # | Facility | Server Administrative Group | VBECs Admin AD Group |
|-------|-------------------------------------|---------------------------------------|-----------------------------|----------------------------|
| | 565 | Fayetteville NC | vhaFNCVbecsServerAdmins | vhaFNCVbecsAdministrators |
| | 590 | Hampton | vhaHAMVbecsServerAdmins | vhaHAMVbecsAdministrators |
| | 652 | Richmond | vhaRICVbecsServerAdmins | vhaRICVbecsAdministrators |
| | 658 | Salem | vhaSAMVbecsServerAdmins | vhaSAMVbecsAdmins |
| | 659 | Salisbury (Heffner) | vhaSBYVbecsServerAdmins | vhaSBYVbecsAdministrators |
| 7 | 508 | Atlanta | vhaATGVbecsServerAdmins | vhaATGVbecsAdministrators |
| | 509 | Augusta | vhaAUGVbecsServerAdmins | vhaAUGVbecsAdministrators |
| | 521 | Birmingham MC | vhaBIRVbecsServerAdmins | vhaBIRVbecsAdministrators |
| | 534 | Charleston | vhaHAVbecsServerAdmins | vhaHAVbecsAdministrators |
| | 544 | Columbia SC | vhaCMSVbecsServerAdmins | vhaCMSVbecsAdministrators |
| | 557 | Dublin | vhaDUBVbecsServerAdmins | vhaDUBVbecsAdministrators |
| | 619 | Montgomery (Central Alabama HCS) | vhaCAVVbecsServerAdmins | vhaCAVVbecsAdministrators |
| | 619A4 | Tuskegee (Central Alabama HCS) | | |
| 8 | 516 | Bay Pines MC | vhaBAYVbecsServerAdmins | vhaBAYVbecsAdministrators |
| | 573 | Gainesville (N Florida/S Georgia HCS) | vhaNFLVbecsServerAdmins | vhaNFLVbecsAdministrators |
| | 573A4 | Lake City (N Florida/S Georgia HCS) | | |
| | 672 | San Juan | vhaSAJVbecsServerAdmins | vhaSAJVbecsAdministrators |
| | 546 | Miami | vhaMIAVbecsServerAdmins | vhaMIAVbecsAdministrators |
| | 673 | Tampa | vhaTAMVbecsServerAdmins | vhaTAMVbecsAdministrators |
| | 548 | West Palm Beach | vhaWPBVbecsServerAdmins | vhaWPBVbecsAdministrators |
| 9 | 581 | Huntington | vhaHUNVbecsServerAdmins | vhaHUNVbecsAdministrators |
| | 596 | Lexington | vhaLEXVbecsServerAdmins | vhaLEXVbecsAdministrators |
| | 603 | Louisville | vhaLOUVbecsServerAdmins | vhaLOUVbecsAdministrators |
| | 614 | Memphis | vhaMEMVbecsServerAdmins | vhaMEMVbecsAdministrators |
| | 621 | Mountain Home | VhaMOUVbecsServerAdmins | vhaMOUVbecsAdministrators |
| | 626 | Nashville (Tennessee Valley HCS) | vhaTVHVbecsServerAdmins | vhaTVHVbecsAdministrators |
| 626A4 | Murfreesboro (Tennessee Valley HCS) | | | |
| 10 | 538 | Chillicothe | vhaCLLVbecsServerAdmins | vhaCLLVbecsAdministrators |
| | 539 | Cincinnati | v10CINAdmin | v10CinVbecsAdministrators |
| | 541 | Cleveland Wade Park | v10CLEAdmin | vHACLEVbecsAdministrators |
| | | Columbus | v10COSVbecsServerAdmins | v10COSVbecsAdministrators |
| | 552 | Dayton | v10DAYVbecsServerAdmins | vhaDAYVbecsAdministrators |
| 11 | 506 | Ann Arbor | vhaANN_VbecsServerAdmins | vhaANN_VbecsAdministrators |
| | 515 | Battle Creek | vhaBACVbecsServerAdmins | vhaBACVbecsAdministrators |
| | 550 | Danville (Illiana HCS) | vhaDANVbecsServerAdmins | vhaDANVbecsAdministrators |
| | 553 | Detroit Allen Park | vhaDETVbecsServerAdmins | vhaDETVbecsAdministrators |
| | 610 | Marion IN (Northern Indiana HCS) | vhaNINVbecsServerAdmins | VhaNinVbecsAdministrators |
| | 610A4 | Fort Wayne (Northern Indiana HCS) | | |
| | 583 | Indianapolis | vhaIND_VBECs_ADMIN | vhalindianapolisBBAdmin |
| 655 | Saginaw | vhaSAGVbecsServerAdmins | vhaSAGVbecsAdmin | |
| 12 | 537 | Chicago Westside (Chicago HCS) | v12CHSVbecsServerAdmins | v12CHSVbecsAdministrators |
| | 578 | Hines VA Hospital | v12HINVbecsServerAdmins | v12HINVbecsAdministrators |
| | 585 | Iron Mountain | vhaIROVbecsServerAdmins | vhaIROVbecsAdministrators |
| | 607 | Madison | v12MADVbecsServerAdmins | v12MADVbecsAdministrators |
| | 695 | Milwaukee | v12MIWVbecsServerAdmins | v12MIWVbecsAdministrators |
| | 556 | North Chicago | v12NCHVbecsServerAdmins | v12NCHVbecsAdministrators |

| VISN | Facility # | Facility | Server Administrative Group | VBECs Admin AD Group |
|-------|------------|---------------------------------------|---------------------------------|---------------------------|
| | 676 | Tomah | vhaTOMVbecsServerAdmins | vhaTOMVbecsAdministrators |
| 15 | 589 | Kansas City (Heartland West HCS) | v15KANVbecsAdministrator | v15KANVbecsAdministrator |
| | 589A4 | Columbia MO (Heartland West HCS) | | |
| | 589A5 | Topeka (Eastern Kansas HCS) | | |
| | 589A6 | Leavenworth (Eastern Kansas HCS) | | |
| | 589A7 | Wichita | | |
| | 657 | St. Louis (Heartland East HCS) | STL VBECs Server Administration | EasternOrbitVbecsAdmin |
| | 657A4 | Poplar Bluff (Heartland East HCS) | | |
| | 657A5 | Marion IL | | |
| 16 | 502 | Alexandria | vhaALXVbecsServerAdmins | vhaALXVbecsAdministrators |
| | 520 | Biloxi (VA Gulf coast HCS) | v16BILVbecsServerAdmins | v16BILVbecsAdministrators |
| | 564 | Fayetteville AR | v16FAVVbecsServerAdmins | v16FAVVbecsAdministrators |
| | 580 | Houston | vhaHOUVbecsServerAdmins | vhaHOUVbecsAdministrators |
| | 586 | Jackson | v16JACVbecsServerAdmins | v16JACVbecsAdministrators |
| | 598 | Little Rock (Central AR Veterans HCS) | v16LITVbecsServerAdmins | v16LITVbecsAdministrators |
| | 623 | Muskogee | vhaMUSVbecsServerAdmins | vhaMUSVbecsAdministrators |
| | 629 | New Orleans (SE Louisiana HCS) | | |
| | 635 | Oklahoma City | v16OKLVbecsServerAdmins | v16OKLVbecsAdministrators |
| | 667 | Shreveport | v16SHVVbecsServerAdmins | v16SHVVbecsAdministrators |
| 17 | 549 | Dallas (North Texas HCS) | v17NTXVbecsServerAdmins | v17NTXVbecsAdministrators |
| | 671 | San Antonio (South Texas HCS) | v17STXVbecsServerAdmins | v17STXVbecsAdministrators |
| | 671A4 | Kerrville (South Texas HCS) | | |
| | 674 | Temple (Central Texas HCS) | v17CTXVbecsServerAdmins | v17CTXVbecsAdministrators |
| 18 | 501 | Albuquerque (New Mexico HCS) | R01VBECSServerAdmins | R01ABQVbecsAdministrators |
| | 504 | Amarillo | R01VBECSServerAdmins | R01AMAVbecsAdministrators |
| | 519 | Big Spring (VA W Texas HCS) | R01VBECSServerAdmins | R01BIGVbecsAdministrators |
| | 644 | Phoenix | R01VBECSServerAdmins | R01PHOVbecsAdministrators |
| | 649 | Prescott (VA Northern Arizona HCS) | R01VBECSServerAdmins | R01PREVbecsAdministrators |
| | 678 | Tucson (VA Southern Arizona HCS) | R01VBECSServerAdmins | R01TUCVbecsAdministrators |
| 19 | 442 | Cheyenne | R01VBECSServerAdmins | R01CHYVbecsAdministrators |
| | 554 | Denver (Eastern Colorado HCS) | R01VBECSServerAdmins | R01DENVbecsAdministrators |
| | 436 | Fort Harrison (Montana HCS) | R01VBECSServerAdmins | R01FHMVbecsAdministrators |
| | 575 | Grand Junction | R01VBECSServerAdmins | R01GRJVbecsAdministrators |
| | 660 | Salt Lake City | R01VBECSServerAdmins | R01SLCVbecsAdministrators |
| | 20 | 531 | Boise | R01VBECSServerAdmins |
| 648 | | Portland (/Vancouver) | R01VBECSServerAdmins | R01PORVbecsAdministrators |
| 653 | | Roseburg (VA Roseburg HCS) | R01VBECSServerAdmins | R01ROSVbecsAdministrators |
| 663 | | Seattle (Puget Sound HCS) | R01VBECSServerAdmins | R01PugVbecsAdministrators |
| 663A4 | | American Lake (Puget Sound HCS) | | |
| 668 | | Spokane | R01VBECSServerAdmins | R01SPOVbecsAdministrators |

| VISN | Facility # | Facility | Server Administrative Group | VBECs Admin AD Group |
|-------------|-------------------|--|------------------------------------|-----------------------------|
| 21 | 570 | Fresno (VA Central California HCS) | R01VBECSServerAdmins | R01FREVBECsAdministrators |
| | 640 | Palo Alto (Palo Alto HCS) | R01VBECSServerAdmins | R01PALVbecsAdministrators |
| | 640A4 | Livermore (Palo Alto HCS) | | |
| | 612 | Martinez (Northern California HCS) | R01VBECSServerAdmins | R01MACVbecsAdministrators |
| | 612A4 | Sacramento (Northern California HCS) | | |
| | 654 | Reno (VA Sierra Nevada HCS) | R01VBECSServerAdmins | R01RenVbecsAdministrators |
| | 662 | San Francisco | R01VBECSServerAdmins | R01SFCVBECsAdministrators |
| 22 | 605 | Loma Linda | R01VBECSServerAdmins | R01LOMVbecsAdministrators |
| | 600 | Long Beach | R01VBECSServerAdmins | R01LONVbecsAdministrators |
| | 664 | San Diego | R01VBECSServerAdmins | R01SDCVbecsAdministrators |
| | 691 | West Los Angeles (Greater Los Angeles HCS) | R01VBECSServerAdmins | R01GLAVbecsAdministrators |
| | | | | |
| 23 | 636 | Omaha (NWIHS) | v23OMAVBECSServerAdmins | v23OMAVbecsAdministrators |
| | 636A6 | Des Moines (Central Plains Network) | | |
| | 636A8 | Iowa City | | |
| | 437 | Fargo | v23FARVbecsServerAdmins | v23FARVbecsAdministrators |
| | 568 | Fort Meade(Black Hills HCS) | v23BHHVbecsServerAdmins | v23BHHVbecsAdministrators |
| | 568A4 | Hot Springs (Black Hills HCS) | | |
| | 618 | Minneapolis | v23MINVbecsServerAdmins | v23MINVbecsAdministrators |
| | 438 | Sioux Falls | v23SUXVbecsServerAdmins | V23SUXVbecsAdministrators |
| | 656 | St. Cloud | v23STCVbecsServerAdmins | V23STCVbecsAdministrators |
| CPS | NA | Salt Lake City and Albany | R01VBECSServerAdmins | R01SLCVbecsAdministrators |

Appendix C: Instructions for Capturing Screen Shots for Installation Records

Throughout the installation guide, the user is asked to capture screen shots at various points in the installation to confirm that the installation was performed correctly. These points are indicated by the

camera icon:  .

To capture a screen shot:

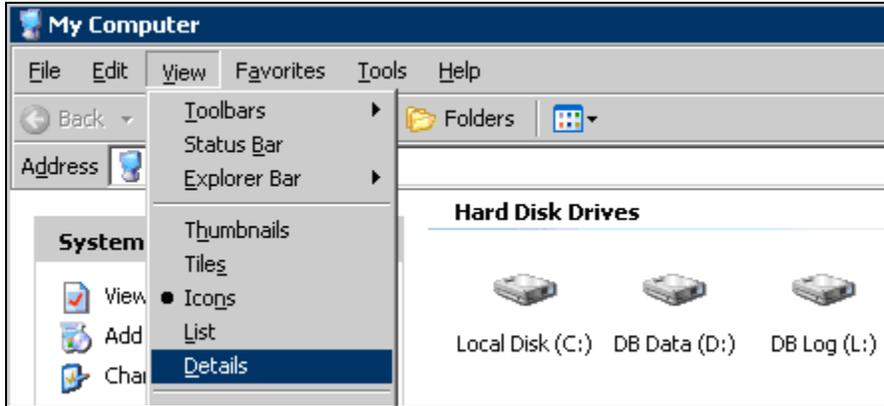
- 1) When the screen you wish to capture is displayed, press **Ctrl + Alt + Print Screen key**.
- 2) In the *VBECS Patch Installation Record Form for the Test (or Production) Environment*, place the cursor where you want to insert the picture.
- 3) Press **Ctrl + V** to paste.

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Appendix D: Setup Detailed Folders View

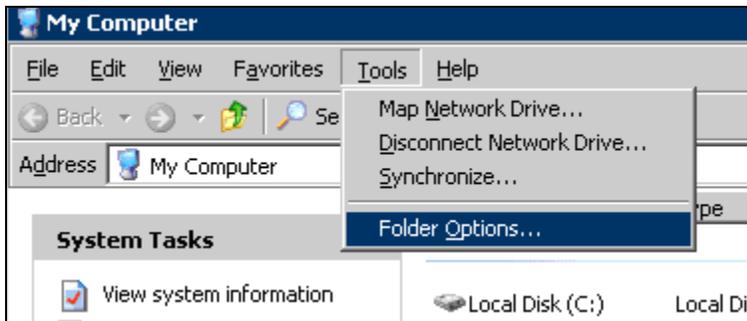
- 1) Click **Start, My Computer**.
- 2) Select **View, Details** (Figure 44).

Figure 44: Details Menu



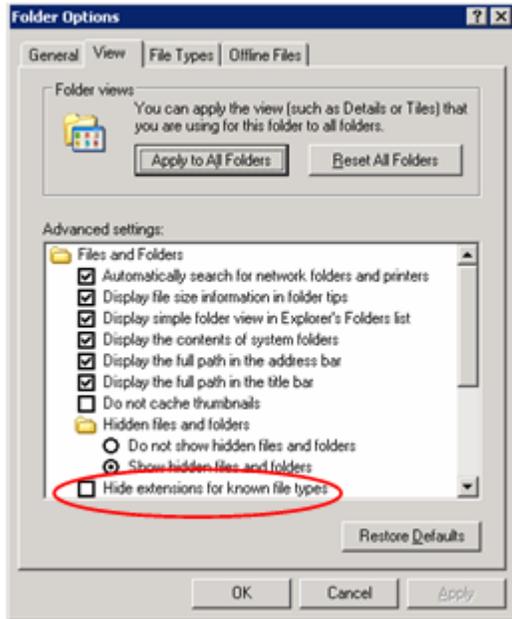
- 3) Select **Tools, Folder Options** (Figure 45).

Figure 45: Folder Options Menu



- 4) Select the **View** tab. Make sure the “Hide extensions for known file types” check box is clear (Figure 46).
- 5) Click **Apply to All Folders** (Figure 46).

Figure 46: Folder Options Dialog



- 6) At the prompt, click **Yes** to set the folders on your computer to match the current folder's view settings. Click **OK** to close the Properties dialog.

Appendix E: VBECS Patch Installation Record Form for the Test Environment

VBECS Patch Installation Record for the Test Environment

Complete each section of this installation record as you complete the corresponding installation steps:

- Insert screen shots, as indicated.
- Replace the text in angle brackets and delete the brackets.
- To select a check box, double-click it, and then click the **Checked** radio button under Default value.
- Copy and paste the contents of this appendix into a separate Word document.
- Print, sign and date the completed appendix.
- Add all printed documents related to Appendix E to the package for the Validation Records.

Installation Procedure for the Test Environment

1 Download the VBECS 1.5.1.1 Patch File

Step 14: Screen Shot: FTP Transfer Completed.

<Insert screen shot.>

2 Verify the Contents of the VBECS 1.5.1.1 Patch File

Step 9: Verified the VBECS_Patch_1.5.1.1_110510 file contents.

Step 11: Screen Shot: VBECS_Patch_1.5.1.1_110510 Properties

<Insert screen shot.>

3 Prerequisites for Installation

N/A

4 Execute VBECS Patch Scripts against the Cluster

Step 8: Verified that all required VistA patches are installed.

Step 16: Screen shot: VBECS Patch process completed successfully.

<Insert screen shot.>

Step 18: VBECS Patch Log Output File Name

| |
|-----------|
| Log File: |
|-----------|

5 Delete the Patch Files

Step 4: Deleted the VBECS 1.5.1.1 patch files on server.

Step 6: Verified that Appendix E was printed, initialed and dated.

List problems occurring in the installation process.

Name (Print.) Title

Signature Date

Give this patch installation record for the test environment to the blood bank supervisor, or follow your records retention policy.

Appendix F: VBECS Patch Installation Record Form for the Production Environment

VBECS Patch Installation Record for the Production Environment

Complete each section of this installation record as you complete the corresponding installation steps:

- Insert screen shots, as indicated.
- Replace the text in angle brackets and delete the brackets.
- To select a check box, double-click it, and then click the **Checked** radio button under Default value.
- Copy and paste the contents of this appendix into a separate Word document.
- Print, sign and date the completed appendix.
- Add all printed documents related to Appendix F to the package for the Validation Records.

Installation Procedure for the Production Environment

1 Download the VBECS 1.5.1.1 Patch File

Step 14: Screen Shot: FTP Transfer Completed.

<Insert screen shot.>

2 Verify the Contents of the VBECS 1.5.1.1 Patch File

Step 9: Verified the VBECS_Patch_1.5.1.1_110510 file contents.

Step 11: Screen Shot: VBECS_Patch_1.5.1.1_110510 Properties

<Insert screen shot.>

3 Prerequisites for Installation

N/A

4 Execute VBECS Patch Scripts against the Cluster

Step 8: Verified that all required VistA patches are installed.

Step 16: Screen shot: VBECS Patch process completed successfully.

<Insert screen shot.>

Step 18: VBECS Patch Log Output File Name

| |
|------------------|
| Log File: |
|------------------|

5 Delete Patch Files

Step 4: Deleted the VBECS 1.5.1.1 Patch files on server.

Step 6: Verified that Appendix F was printed, initialed and dated.

List problems occurring in the installation process.

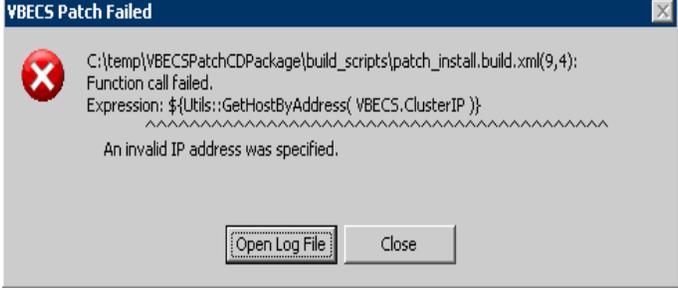
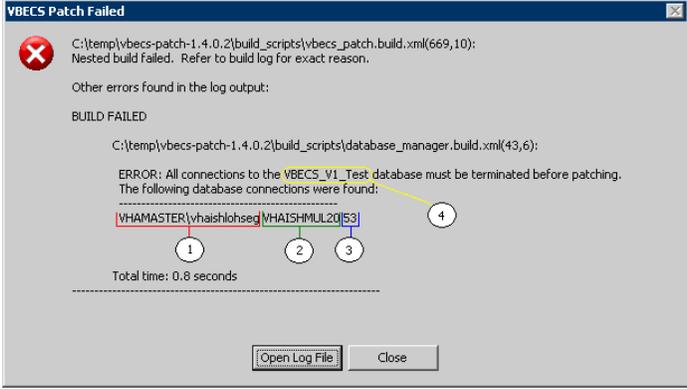
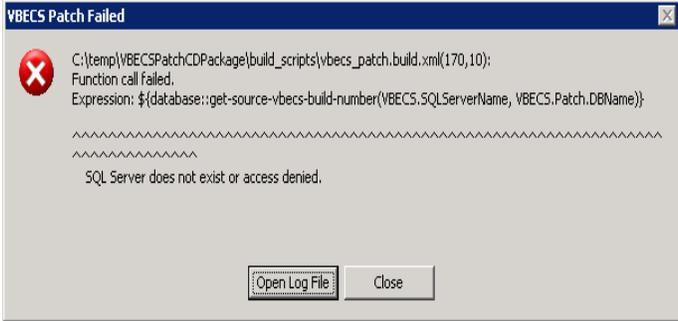
| |
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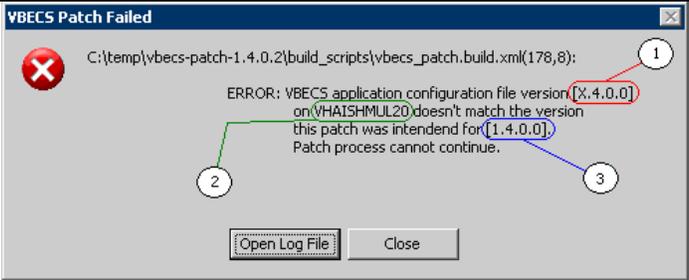
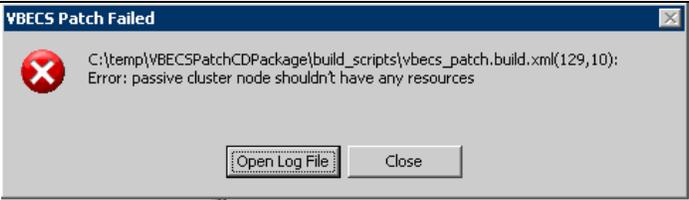
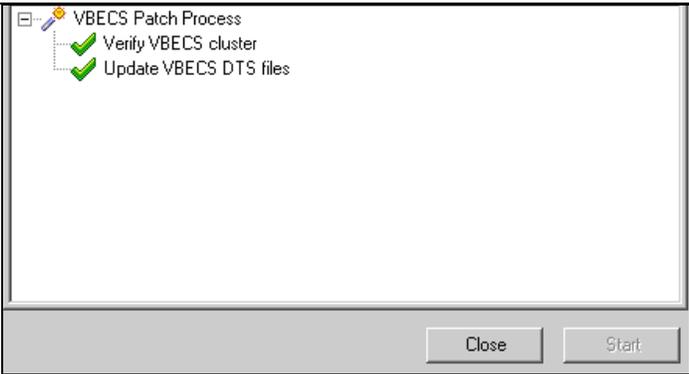
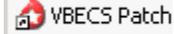
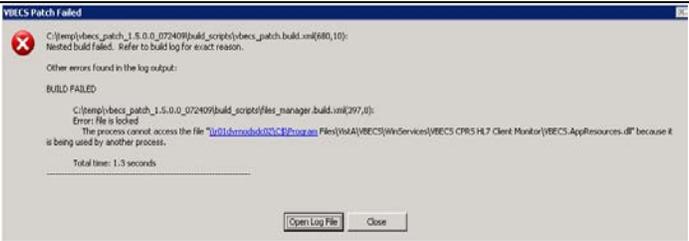
Name (Print.) Title

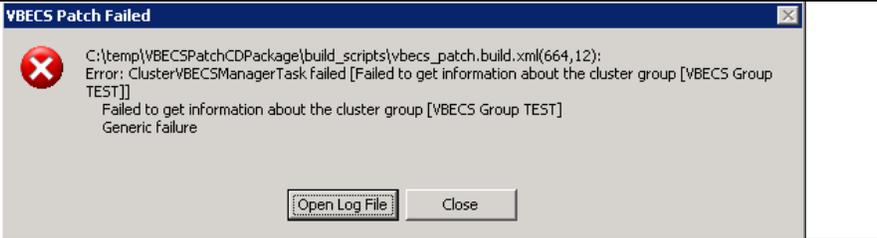
Signature Date

Give this patch installation record for the production environment to the blood bank supervisor, or follow your records retention policy.

Appendix G: Troubleshooting Messages

| Error Message | Example Screen Shot | Solution |
|--|--|--|
| <p>An invalid IP address was specified.</p> |  | <p>An invalid IP was supplied as an input argument.</p> <p>OR</p> <p>The IP address was formatted correctly, but does not point to a VBECs server.</p> <p>Provide the correct IP Address.</p> |
| <p>All connections to the <Database Name> database must be terminated before patching.</p> |  | <p>A user has an active connection to the Database of the target environment.</p> <p>The information listed for each open connection is:</p> <ol style="list-style-type: none"> 1. User Login ID 2. Computer Name 3. SQL Process ID 4. Database Name <p>Contact the Database Administrator. Ask the DB Admin to kill all user processes running on the server.</p> |
| <p>The SQL Server does not exist or access denied.</p> |  | <p>The SQL Server Name supplied does not exist, cannot be accessed or the patcher does not have permission to use it.</p> <p>Check the SQL Server Name and Verify patches Database rights with the DB Admin.</p> |

| Error Message | Example Screen Shot | Solution |
|---|--|--|
| <p>VBECs application configuration file version [S.S.S.S] on <ACTIVE CLUSTER NODE> doesn't match the version this patch was intended for [T.T.T.T] Patch Process cannot continue.</p> <p>** [S.S.S.S] - Source</p> <p>** [T.T.T.T] - Target</p> |  | <p>The database version does not match the version the patch was coded to update.</p> <ol style="list-style-type: none"> 1. BuildNumber version found in the VBECs.exe.config file. 2. Cluster node containing the suspect file. 3. Target Patch version. <p>Contact the VBECs Administrator to resolve build number discrepancies (i.e., this patch may already be installed).</p> |
| <p>The Passive Cluster node should not have active resources.</p> |  | <p>The Passive node has active resources.</p> <p>Contact the VBECs Administrator to resolve cluster configuration issues.</p> |
| <p>The Start button of the VBECs GUI Patch is disabled</p> |  | <p>Either the patch is running or the patch has completed.</p> <p>Click Close.</p> <p>Open a new VBECs Patch form by double-clicking  shortcut.</p> |
| <p>Access denied</p> |  | <p>The VBECs Services were not stopped or the patch files are Read-only.</p> |

| Error Message | Example Screen Shot | Solution |
|------------------------------------|--|---|
| <p>VBECs Patch Failed</p> |  | <p>The VBECs Group Test (VBECs Test Services) may have been stopped.</p> <p>Right click on VBECs Group Test and select Bring Online.</p> |
| <p>Remote Desktop Disconnected</p> |  | <p>The user applying the patch has an active session at the server (KVM) console. Log of the server console and repeat the patch process.</p> |

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Index

D

| | |
|--|-------|
| Delete Patch Files | |
| Prod..... | 32 |
| Test..... | 18 |
| Download and Verify the Contents of the VBECS Patch..... | 5, 19 |
| Download the VBECS 1.5.1.1 Patch File..... | 5 |
| Download the VBECS 1.5.1.1 Patch File..... | 19 |

E

| | |
|---|----|
| Execute VBECS Patch Scripts against the Cluster | |
| Prod..... | 26 |
| Test..... | 12 |

H

| | |
|---|---|
| How This Installation Guide Is Organized..... | 3 |
|---|---|

I

| | |
|---|----|
| Installation Logs..... | 35 |
| Installation Procedure for the Production Environment..... | 19 |
| Instructions for Capturing Screen Shots for Installation Records..... | 41 |
| Introduction..... | 1 |

P

| | |
|--------------------------------|----|
| Prerequisites for Installation | |
| Production..... | 25 |
| Test..... | 11 |
| Problems?..... | 3 |
| Product Support..... | 3 |

R

| | |
|--|---|
| Related Manuals and Reference Materials..... | 2 |
|--|---|

S

| | |
|-----------------------------------|----|
| Screen Shots..... | 3 |
| Set Up Detailed Folders View..... | 43 |

V

| | |
|--|----|
| VA Service Desk..... | 3 |
| VBECS Patch Installation Record Form for the Production Environment..... | 47 |
| VBECS Patch Installation Record Form for the Test Environment..... | 45 |
| Verify the Contents of the VBECS 1.5.1.1 Patch File..... | 7 |
| Verify the Contents of the VBECS 1.5.1.1 Patch File..... | 22 |

This is the last page of *VistA Blood Establishment Computer Software (VBECS) 1.5.1
Patch Installation Guide*.