



VistA Blood Establishment Computer Software (VBECS) Version 1.6.0

Patch Installation Guide

July 2012

Department of Veterans Affairs
Product Development

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Revision History

Date	Revision	Description	Author
05-04-11	1.0	<p>Modified VistA Blood Establishment Computer Software (VBECS) Version 1.5.2, Version 4.0:</p> <p>Global: Replaced "April 2011" with "May 2011" in the footer.</p> <p>Global: Replaced "1.5.2" with "1.6.0".</p> <p>Global: Replaced "4.0" with "1.0" in the footer.</p> <p>Global: Replaced "...010311" with "...042911".</p> <p>Global: Changed 1.5.2.2 to 1.6.0.3.</p> <p>Global: Changed 1.5.0 to 1.6.0.</p> <p>Changed 1.5.0.4 to 1.5.2.2 where applicable.</p> <p>Global: Changed "Size is 190 MB (200, 054, 059 bytes)" to "Size is 225 MB (236, 807, 224 bytes)".</p> <p>Global: Changed "Contains is 396 Files, 45 Folders" to Contains 359 Files, 46 Folders".</p> <p>Global: Changed document names from regular font to italics.</p> <p>Introduction: Deleted section VBECS Version Numbers and Figure 1.</p> <p>Replaced Figures: 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 20, 24, 25, 26, 32, 33, 34, 35, 36, 37, 39, 40, 41, 42, 43, 44, 46, 50, 51 and 52.</p> <p>Download the VBECS 1.6.0.3 Patch File (Test and Prod), Step 7: Changed "Right-click Start, Explorer. In the address window type" to "Open Windows Explorer. In the address field, type".</p> <p>Figure 5 and Figure 31: Changed figure captions to "Example of FTP Log In".</p> <p>Verify the Contents of the VBECS 1.6.0.3 Patch File (Test and Prod): Moved Step 12 to after Step 9, making it the new Step 10 and renumbering the subsequent steps.</p> <p>Prerequisites for Installation (Test, Step 5 and Prod, Step 6) – Changed "file extensions on the installation workstation." to "file extensions on the server."</p> <p>Execute VBECS Patch Scripts against the Cluster (Test and Prod), Step 2 – Removed "to initiate the VBECS patch configuration".</p> <p>Execute VBECS Patch Scripts against the Cluster (Test and Prod) – In the 1st warning box, removed "Patching the servers will require a reboot."</p> <p>Added Section 4 to update configuration files on both cluster nodes for the Test & Prod environments.</p> <p>Added Section 6 to remove disabled listener services on both cluster nodes for the Test & Prod environments.</p> <p>Removed sentence and figures VBECS Patch Folder and VBECS Patch Shortcut from section 5 (Test and Prod) and add them to Section 4 (Test and Prod) Step1.</p> <p>Updated Appendices C, E and F.</p>	BBM team
		<p>Modified VistA Blood Establishment Computer Software (VBECS) Version 1.6.0, Version 1.0:</p> <p>Global: Changed "May 2011" with "July 2011" in the footer.</p> <p>Global: Changed "1.0" with "2.0" in the footer.</p> <p>Global: Changed "...042911" to "...070711".</p> <p>Global: Changed "1.6.0.3" to "1.6.0.4".</p> <p>Global: Changed "Size is 225 MB (236, 807, 224" to "Size is 172 MB (180, 399, 566 bytes)".</p> <p>Replaced Figures: 4, 7, 8, 9, 10, 13, 18, 20, 24, 25, 26, 30, 33, 34, 35, 36, 40, 44, 46 and 52.</p>	

Date	Revision	Description	Author
07-12-11	2.0	<p>Added "Example of" to figure captions for Figures 6, 8, 9, 13, 14, and 40.</p> <p>Installation Procedure for the Test and Production Environments: Added message 4th box "Server name representations in the document: For Region 1 sites; R01YYYNODXXX01, YYY represents the Data Center location (SCR or DVR) and XXX represents the Site Code. For all other sites; VHAXXXNODZ1, XXX represents the Site Code."</p> <p>Download the VBECS 1.6.0.6 Patch File (Test and Prod): Step 1d; added "or VBECS Patch Installation Record R01YYYCLUXXX01 1.6.0 Test 070809" to the example. Step 2: Changed "R01XXXNODXX01" to "R01YYYNODXX01". Step 5: Changed "R01XXXNODXX02" to "R01YYYNODXX02". Step 8: Changed "Windows login ID" to "your_user_name". Step 9: Changed "double-click the file" to "click and save the file". Step 9: After Figure 6 in Test and Figure 32 in Prod, added a message to refer to Appendix H if download errors are encountered. Verify the Contents of the VBECS 1.6.0.6 Patch File (Test and Prod): Step 13: Added "Click OK" to beginning of step. Executing Patch Script: VBECS Patch Main Script (Test and Prod): Step 8: Changed "60 minutes" to "30 minutes". Step 9 message box: Changed "60 minutes" to "30 minutes". Step 16: Revised the example after the bullet list. Delete Patch Files (Test and Prod): Added a new Step 7 about the LR*5.2"382 patch. Prerequisite for Installation (Test): Revised Step 2. Prerequisite for Installation (Prod): Revised Step 3. Delete Patch Files (Test and Prod), Step 7: Added steps to install Vista patch before proceeding. Appendix A: Updated the examples. Appendix G: Added VBECS FTP Download Security Alert. Added Appendix H: Adding VBECS FTP Site to the Trusted Sites in Internet Explorer.</p>	BBM team
		<p>Modified Vista Blood Establishment Computer Software (VBECS) Version 1.6.0 Patch Installation Guide, Version 2.0: Global: Changed "July 2011" with "September 2011" in the footer. Global: Changed "2.0" with "3.0" in the footer. Global: Changed "...070711" to "...090611". Global: Changed "1.6.0.4" to "1.6.0.5". Global: Changed "Size is 172 MB (180, 399, 566" to "Size is 173 MB (181, 497, 502 bytes)". Global: Removed Note: 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. The patch will not make any system changes during this timeout period. Global: Changed capturing a screen shot and inserting the screenshot in the appendix with having user check a check box in Appendices E and F Global: Changed the warning box regarding data conversion with one regarding BCE COTS Interface Configuration.</p>	

Date	Revision	Description	Author
09-06-11	3.0	<p>Added section VBECS 1.6.0 Patch Process Improvements. In warning boxes, change "After the update" to "During the upgrade".</p> <p>Removed Figures 4, 5, 7, 10, 17, 21, 22, 26, 27, 29, 32, 40, 41 and any references to them.</p> <p>Replaced renumbered Figures: 3, 4, 5, 7, 8, 9, 10, 11, 13, 14, 15, 18, 19, 20, 22, 23, 24, 25, 26 and 27</p> <p>Installation Procedure for the Test and Production Environment, third caution box, changed "one to two hours of downtime" to "up to 1 hour of downtime". (Test and Prod)</p> <p>Download and VBECS 1.6.0.6 Patch File (Test and Prod):</p> <p>Step 1d, moved "<mmddyy> represents the current date" to before the examples</p> <p>Deleted steps to verify the C:\temp folder on Server 1 and Server 2.</p> <p>Step 3, bolded and capitalized Address.</p> <p>Section Prerequisites for Installation, step 2, added that "VBECS*1*27" must be installed (Test)</p> <p>Added section: Patching Service Monitor (Test)</p> <p>Change "Executing Patch Script: VBECS Patch Main Script" to "Executing VBECS Patch: Application Updates".</p> <p>Executing VBECS Patch: Application Updates (Test and Prod)</p> <ul style="list-style-type: none"> - For Test only: Combined Steps 1 and 2. - For Prod only: Added sentence and figures VBECS Patch Folder and VBECS Patch Shortcut to Step1. - For Prod only: Reworked Steps 10, 11 and 12 and renumbered subsequent steps. - For Prod only: Removed contact information bullet points that do not have to be filled in. - For Test and Prod: Added steps to verify that all Vista patches are up to date <p>Section Prerequisites for Installation, step 3, added that "VBECS*1*27" must be installed (Prod)</p> <p>Removed section to update configuration files on both cluster nodes (Test & Prod).</p> <p>Removed section to remove disabled listener services on both cluster nodes (Test & Prod).</p> <p>Updated Appendices A, B, C, E, F and G.</p> <p>Removed the Notes section.</p>	BBM team
		<p>Modified VistA Blood Establishment Computer Software (VBECS) Version 1.6.0 Patch Installation Guide, Version 3.0:</p> <p>Global: Changed "September 2011" with "March 2012" in the footer.</p> <p>Global: Changed "3.0" with "4.0" in the footer.</p> <p>Global: Changed "...090611" to "...030112".</p> <p>Global: Changed "1.6.0.5" to "1.6.0.6".</p> <p>Global: Change "OED" to "PD" and "CPS" to "PS"</p> <p>Global: Changed "Size is 173 MB (181, 497, 502 bytes)" to "Size is 173 MB (182, 180, 076 bytes)".</p> <p>Global: Changed "Contains 365 Files, 44 Folders" to "Contains 363 Files, 43 Folders"</p> <p>Global – Change "c:" to "C:"</p> <p>Introduction: Changed "VA Veterans Health Administration's (VHA's)" to "VA's".</p> <p>Related Manuals and Reference Manuals: Added the VistA Blood Establishment Computer Software (VBECS) 1.6.0 Technical Manual-Security Guide and the VistA Blood</p>	

Date	Revision	Description	Author
03-12-12	4.0	<p>Establishment Computer Software (VBECS) Installation Guide.</p> <p>Prerequisites for Installation (Test and Prod): Moved from Section 3 to Section 1.</p> <p>Added steps to download the VBECS Patch Installation Record Form.</p> <p>Installation Procedure for the Test and Prod Environment, Prerequisites for Installation: Removed instructions to setup detailed folders view.</p> <p>Installation Procedure for the Test and Prod Environment, Download the VBECS 1.6.0.6 Patch File: Revised step.</p> <p>Download the VBECS 1.6.0.6 Patch File (Test and Prod): Deleted Step 1.</p> <p>Deleted steps that describe the location of the log files after patching in the following sections: Executing the VBECS Patch: Patching Service Monitor. Executing the VBECS Patch: Application Updates (Test and Prod).</p> <p>VBECS Patch Installation Record Form for Test.</p> <p>VBECS Patch Installation Record Form for Production.</p> <p>Executing the VBECS Patch: Patching Service Monitor: Revised this section.</p> <p>Executing the VBECS Patch: Application Updates (Test and Prod): Revised this section.</p> <p>Completing Patch Installation: Added warning box about not configuring interface until BCE COTS is available.</p> <p>Revised Glossary.</p> <p>Appendix A (Installation Logs): Revised.</p> <p>Appendix D (Troubleshooting Messages): Revised.</p> <p>Deleted Appendix E and changed all references to Appendix E to VBECS Patch Installation Record Form for the Test Environment.</p> <p>Deleted Appendix F and changed all references to Appendix F to VBECS Patch Installation Record Form for the Production Environment.</p> <p>Deleted Appendix D: Setup Detailed Folders View.</p> <p>Renamed Appendix G to the new Appendix D and updated all references to it.</p> <p>Renamed Appendix H to the new Appendix E and updated all references to it.</p>	BBM team
		<p>Modified VistA Blood Establishment Computer Software (VBECS) Version 1.6.0 Patch Installation Guide, Version 4.0:</p> <p>Global: Changed "March 2012" with "May 2012" in the footer.</p> <p>Global: Changed "4.0" with "5.0" in the footer.</p> <p>Global: Changed "10.3.21.76" to "10.3.9.181".</p> <p>Global: Changed "VBECS Patch Installation Record Form for the Test Environment" to "VBECS 1.6.0 Patch Installation Form for the Test Environment".</p> <p>Global: Changed "VBECS Patch Installation Record Form for the Production Environment" to "VBECS 1.6.0 Patch Installation Form for the Production Environment".</p> <p>Download the VBECS 1.6.0.6 Patch File (Test and Prod), Step 2: Added a note to refer to Appendix D if problems accessing the FTP site are encountered.</p> <p>Download the VBECS 1.6.0.6 Patch File (Test) – Reworded the bullets the prerequisites bullets.</p> <p>Updated Figures 1, 2, 3, 22, 23, 24 and 41.</p> <p>Appendix B: Updated to reflect current information.</p>	

Date	Revision	Description	Author
05/03/12	5.0	Appendix D: Updated fourth row Solution to inform the user to consult the VBECS Technical Manual-Security Guide to correct cluster group issues. Appendix D: Updated sixth row Error message text.	BBM team
07/27/12	6.0	Modified VistA Blood Establishment Computer Software (VBECS) Version 1.6.0 Patch Installation Guide, Version 5.0: Global: Changed "May 2012" to "July 2012" in the footer. Global: Changed "5.0" to "6.0" in the footer. Global: Changed "...030112" to "...072512". Global: Changed "1.6.0.6" to "1.6.0.7". Global: Changed "no" to "missing" in pre-filled values steps. General: Removed Figures 3, 7, 19, 28, 31, 32, 35, and 40. General: Updated all figures and captions. General: Combined multiple consecutive warning boxes. Introduction section, first paragraph, first sentence: Expanded "VBECS" and "VA" acronyms. Introduction section, second paragraph, first sentence: Expanded "FDA" acronym. Related Manuals and Reference Materials section: Removed reference to VistA Blood Establishment Computer Software (VBECS) Installation Guide. Orientation section: Added "Appendices" subsection. Product Support section: Updated second bullet under "VA Service Desk Alternate Contacts". Prerequisites sections (Test and Prod): Removed reference to VistA Blood Establishment Computer Software (VBECS) Installation Guide. (DR 4451) Prerequisites sections (Test and Prod): Revised all steps. Download the VBECS 1.6.0.7 Patch File sections (Test and Prod): Revised Step 3. Executing the VBECS Patch: Patching Service Monitor section: Revised this section. Executing the VBECS Patch: Application Updates section (Test): Revised Step 5 responding to required VistA patches prompt verification. (DR 4451) Executing the VBECS Patch: Application Updates sections (Test and Prod): Revised these sections. Executing the VBECS Patch: Application Updates section (Prod): Revised Step 6 responding to required VistA patches prompt verification. (DR 4451) Appendix A: Revised. Appendix C: Reworded Step 2. Appendix D: Revised. Appendix E: Revised.	BBM team

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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'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. FDA 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 1.6.0 Patch Process Improvements

The VBECS 1.6.0 patch contains enhancements designed to optimize installation performance and simplify the user experience. The most noticeable of these enhancements includes the automatic population of input fields, reducing the need for typing. In addition to these changes, this patch also uninstalls VBECS Service Monitor and its corresponding group, VBECS GROUP SM from Cluster Administrator. The VBECS Service Monitor is no longer needed due to the services being managed through Cluster Administrator and monitored through Systems Center Operations Manager (SCOM).

Related Manuals and Reference Materials

- *VistA Blood Establishment Computer Software (VBECS) 1.6.0 Technical Manual-Security Guide*

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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.

Appendices

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

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

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

VA Service Desk (VASD) Primary Contact

For Information Technology (IT) support, call the 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 through 3462 or 3464, 3465, 3475, 3476, or 3482 through 3484 or 708-547-4671 through 4674.
- Web site: http://vaww.itsupportservices.va.gov/vasd_home.asp [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 up to an hour of downtime without interruption.



Server name representations in the document:

For Region 1 sites; R01YYYNODXXX01, YYY represents the Data Center location (SCR or DVR) and XXX represents the Site Code.

For all other sites; VHAXXXNODZI, XXX represents the Site Code.

1 Prerequisites for Installation

- 1) VBECS 1.5.2.2 is installed and validated.
- 2) **VistA patch LR*5.2*382** and **VBEC*1*27** (includes **LR*5.2*412**) must be installed prior to the installation of VBECS 1.6.0 for all functionality to work.
- 3) Verify that there are no active user sessions on the servers.
- 4) Download the *VBECS 1.6.0 Patch Installation Form for the Test Environment* from either one of the following sites:
 - a) VA Software Document Library (VDL) Web site
<http://www.va.gov/vdl/application.asp?appid=182>.
 - b) Documentation is available for the VBECS package on the ANONYMOUS.SOFTWARE directory at one of the following Office of Information (OI) Field Offices. You will be able to utilize documentation in either the ".pdf" or ".doc" format after they extract the .zip file. The preferred method is to File Transfer Protocol (FTP) the files from: **download.vista.med.va.gov**. This transmits files from the first available FTP server. You may also elect to retrieve documentation directly from a specific server as follows:
 - **Albany** **[ftp.fo-albany.med.va.gov](ftp://fo-albany.med.va.gov)**
 - **Hines** **[ftp.fo-hines.med.va.gov](ftp://fo-hines.med.va.gov)**
 - **Salt Lake City** **[ftp.fo-slc.med.va.gov](ftp://fo-slc.med.va.gov)**

NOTE: The ZIP file listed below will be listed in each of the VBEC and LR patches that are part of the VBECS package and associated patches. It only needs to be downloaded once.

File Name

VBEC_1_6_0_DOCS_BUNDLE.ZIP

Retrieval format:

BINARY

2 Download the VBECS 1.6.0.7 Patch File

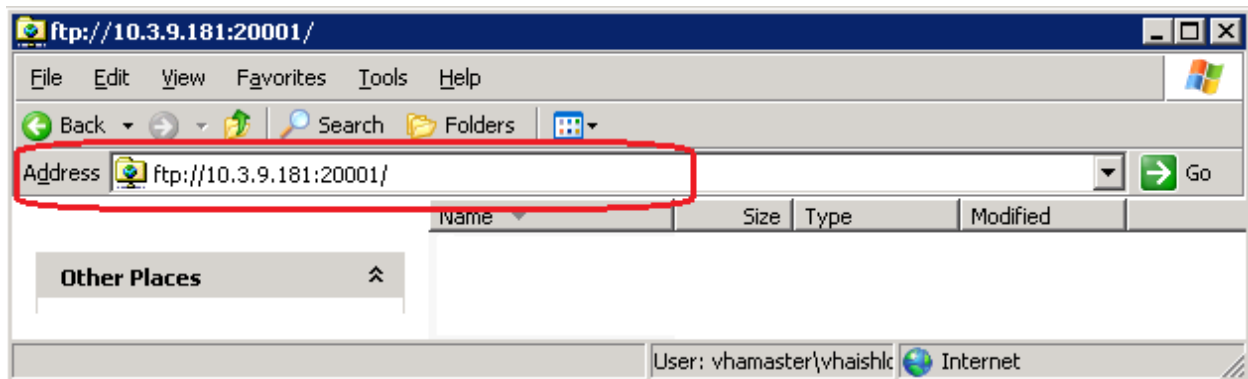
Prerequisites for VBECS FTP Download:

- 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 1.6.0.7 patch file from the VBECS FTP Site:

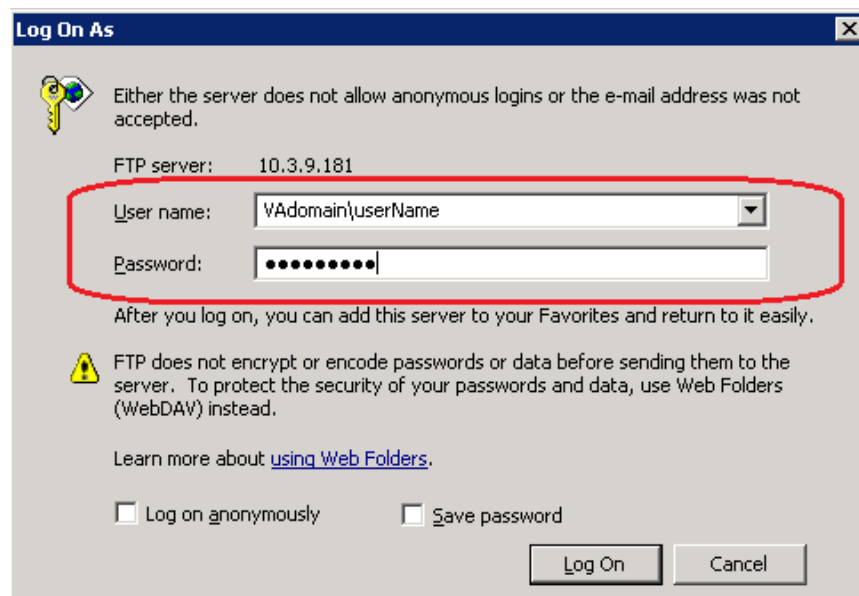
- 1) Open a remote desktop connection to the cluster being patched.
- 2) Open Windows Explorer. In the **Address** field, type **ftp://10.3.9.181:20001** (Figure 1) and press **Enter**. **Note:** If you encounter problems accessing the FTP site, refer to Appendix D: Troubleshooting Messages.

Figure 1: Connecting to VBECS FTP Site



- 3) On the Log On As dialog, enter your domain and NT user name and password (Figure 2).

Figure 2: Example of FTP Log In





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

- 4) Click the **Log On** button. Right-click the **VBECS_Patch_1.6.0.7_072512.zip** file and select **Copy** (** if the **VBECS_Patch_1.6.0.7_072512.zip** file appears as a link, click and save the file in **C:\temp**).



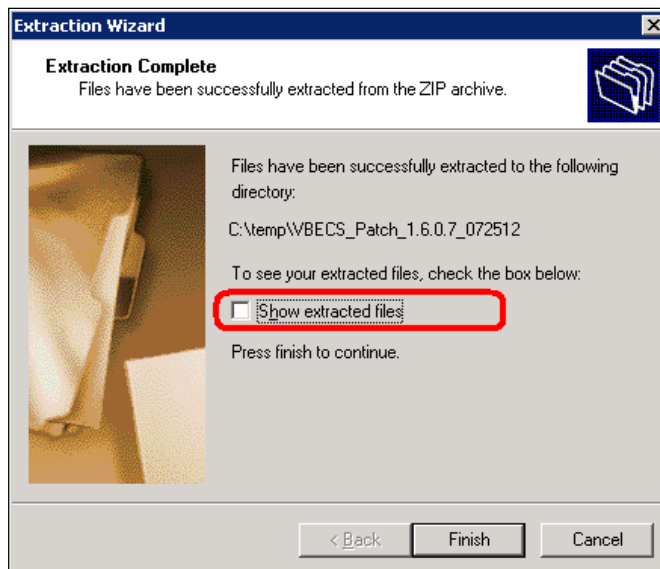
If you encounter the 'Your current settings do not allow you to download files from this location' error, see Appendix E: Adding VBECS FTP Site to the Trusted Sites in Internet Explorer for instructions on how to resolve this problem.

- 5) Using Windows Explorer, navigate to the **C:\temp** folder. Right-click and select **Paste**. The **VBECS_Patch_1.6.0.7_072512.zip** file will be copied to this location.

3 Verify the Contents of the VBECS 1.6.0.7 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_1.6.0.7_072512.zip** file and select **Extract All**.
- 3) After the Extraction Wizard opens, click **Next**.
- 4) Click **Next** to extract the contents of the patch zip file to the temp directory.
- 5) After the extraction completes, uncheck **Show extracted files** and click **Finish** (Figure 3).

Figure 3: Completing Zip File Extraction



- 6) Verify that the extraction completes and a **C:\temp\VBECS_Patch_1.6.0.7_072512** folder is created.
- 7) Using Windows Explorer, right-click on the **VBECS_Patch_1.6.0.7_072512** folder and select **Properties**.

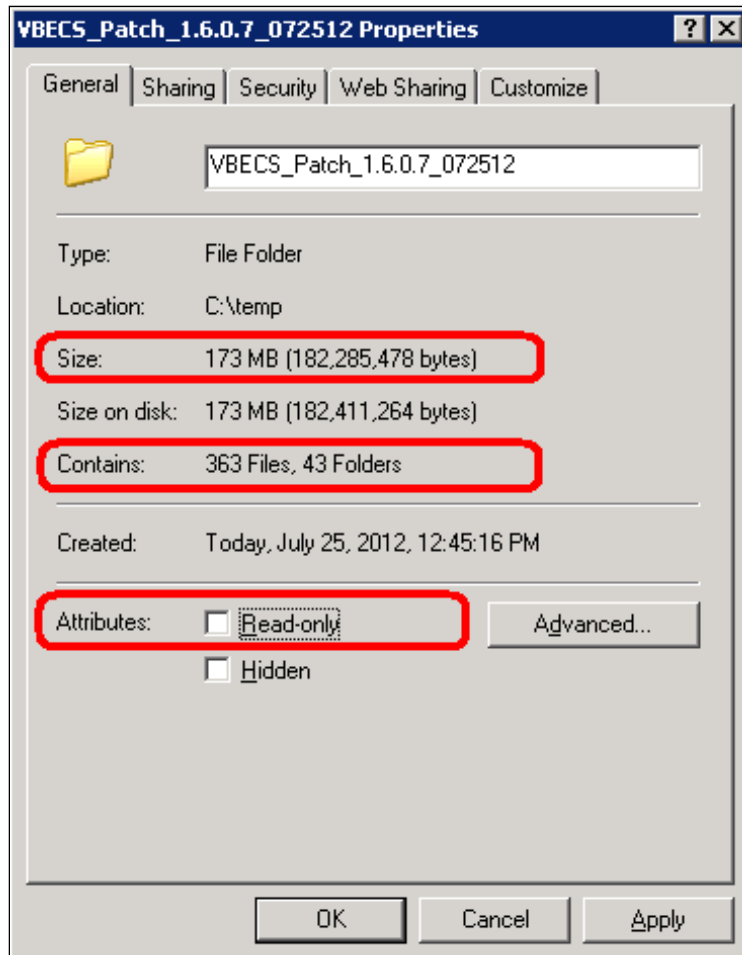
- 8) In the VBECS_Patch_1.6.0.7_072512 Properties window (Figure 4), verify:
- **Size is 173 MB (182, 285, 478 bytes)**
 - **Contains 363 Files, 43 Folders**



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_1.6.0.7_072512 file match, check the box in the *VBECS 1.6.0 Patch Installation Form for the Test Environment*.
- 10) In the Attributes section, uncheck the **Read-only** check box (Figure 4).

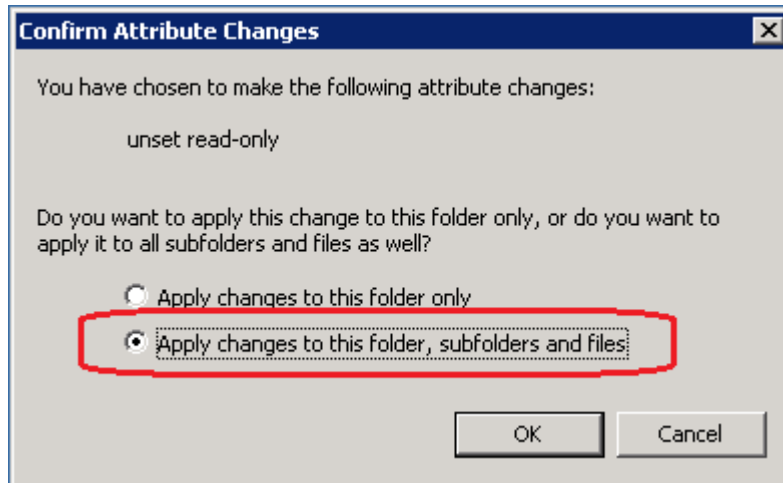
Figure 4: VBECS Patch Folder Properties



- 11)  Capture a screen shot of the VBECS_Patch_1.6.0.7_072512 Properties window.
- 12) Insert the screen shot in the *VBECS 1.6.0 Patch Installation Form for the Test Environment*.

- 13) Click **OK**. 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 5).

Figure 5: Removing Read-Only Attributes



- 14) Using Windows Explorer, navigate to the **C:\temp** folder.
- 15) Select the **VBECS_Patch_1.6.0.7_072512.zip** file.
- 16) While holding the **Shift** key, press the **Delete** key. Click **Yes** to confirm file deletion.

4 Executing the VBECS Patch: Patching Service Monitor



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.



*During the upgrade, warning emails 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.*

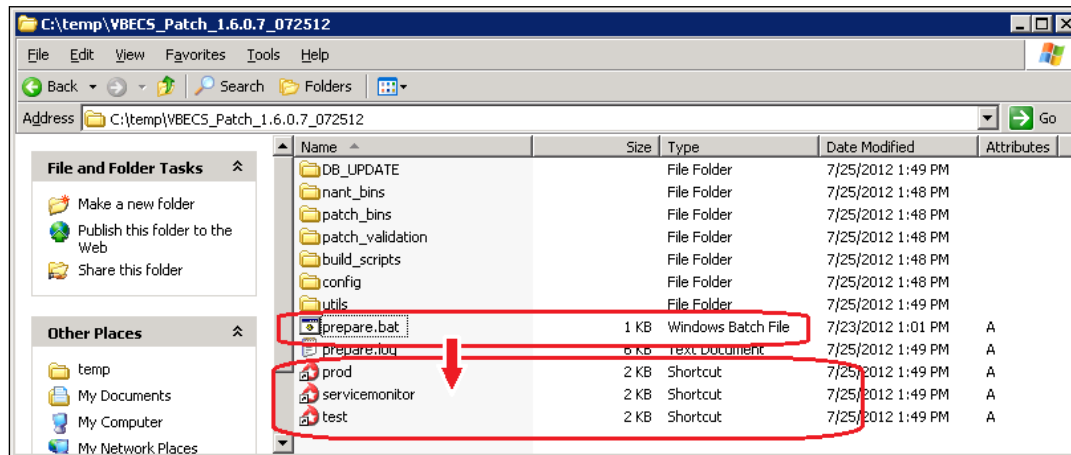


Do not run any additional applications on the server while the patch is executing.

- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to the **C:\temp\VBECS_Patch_1.6.0.7_072512** folder.

- 2) Double-click the **prepare.bat** file. Shortcuts for **prod**, **servicemonitor** and **test** are created (Figure 6).

Figure 6: Creating Patch Shortcuts



- 3) Double-click on the **servicemonitor** shortcut.
- 4) The VBECS Patch form will open with the contact information pre-filled for the user applying the patch.
- 5) If the form opens with missing pre-filled values for the contact information, enter the following for the required fields (Figure 7).
 - **Contact Name** – [NAME]: This is your full name.
 - **Contact E-mail** – [E-MAIL]: This is your email address.
 - **Contact Phone** – [PHONE]: This is your telephone number.

Figure 7: Example of VBECS Patch Form : Servicemonitor

VBECS Patch	
Info	
VBECS Source Build	1.5.2.2
VBECS Target Build	1.6.0.7
VBECS Environment	servicemonitor
SQL Server Name	VHAXXSQZ1 OR R01YYYSQZ1
VBECS Patch	
Message TimeOut	5
Contact Name	LastName, FirstName
Contact E-mail	FirstName.LastName@va.gov
Contact Phone	000-000-0000
VBECS Patch Process	
<ul style="list-style-type: none"> 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 	
<div>Close Start</div>	

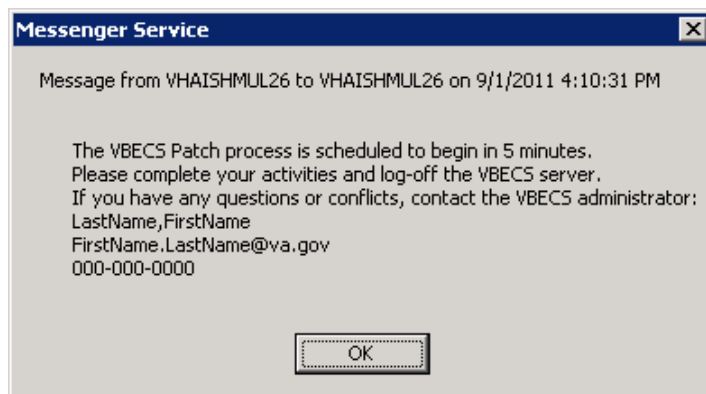
- 6) Click **Start**.



If the patch detects abnormalities with your system environment, you will be presented with additional screen prompts. Consult Appendix D: Troubleshooting Messages for further information on how to proceed if you encounter a prompt not described in this section.

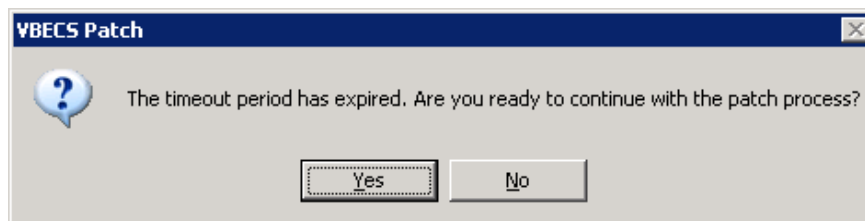
- 7) The cluster wide patch alert message is displayed. Click **OK** (Figure 8).

Figure 8: Example of Patch Alert Message







- 8) After the timeout period has expired, a message signifying the final opportunity to abort the patch installation is displayed (Figure 9).
- Click **Yes** to continue with the patch installation.
 - Click **No** to abort the current patching attempt and restart the patch process at a later time.

Figure 9: VBECS Patch: Continue Patch Message



9) Refer to Figure 10 for the following:

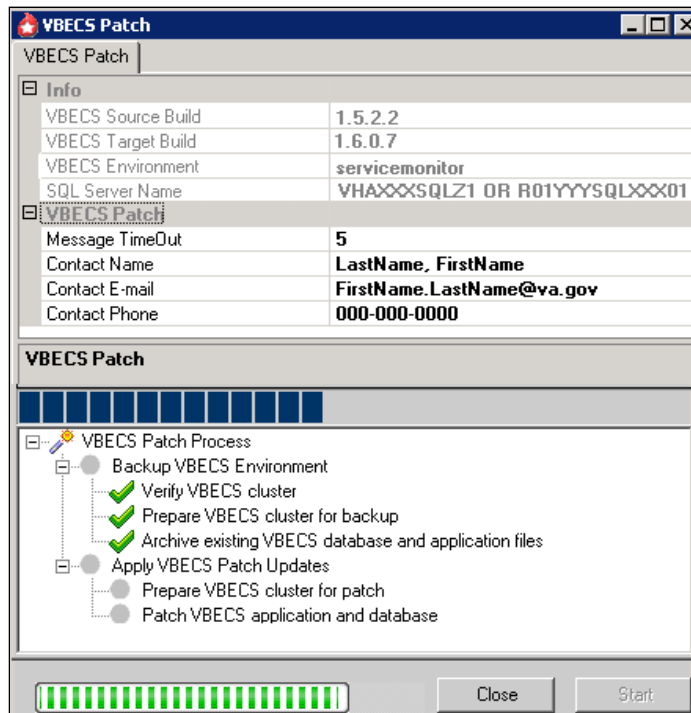
- A green “patch is working” animation () in the bottom left of the VBECS Patch form will be in motion while the patching is in progress.
- The blue progress bar in the middle of form () will increment based on the overall patch progress.
- VBECS Patch Process checkpoints are displayed in the lower portion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










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.

If a Patch fails to successfully complete within 10 minutes, file a Remedy ticket immediately. Do not stop the patch process and do not release VBECS for use until the ticket is resolved.

Figure 10: Example of Running VBECS Patch Form : Servicemonitor



VBECS Patch	
Info	
VBECS Source Build	1.5.2.2
VBECS Target Build	1.6.0.7
VBECS Environment	servicemonitor
SQL Server Name	VHAXXXSQLZ1 OR R01YYYSQLXXX01
VBECS Patch	
Message TimeOut	5
Contact Name	LastName, FirstName
Contact E-mail	FirstName.LastName@va.gov
Contact Phone	000-000-0000
VBECS Patch	
	
VBECS Patch Process <ul style="list-style-type: none"> Backup VBECS Environment <ul style="list-style-type: none">  Verify VBECS cluster  Prepare VBECS cluster for backup  Archive existing VBECS database and application files Apply VBECS Patch Updates <ul style="list-style-type: none">  Prepare VBECS cluster for patch  Patch VBECS application and database 	
	
<div>Close Start</div>	

10) When the VBECS patch finishes successfully, a “**VBECS Patch process completed successfully**” message will be received. Check the box in the *VBECS 1.6.0 Patch Installation Form for the Test Environment*.



If a Patch Failure message is displayed, go to Appendix D: Troubleshooting Messages. If no solution to the failure message is found, please file a Remedy ticket immediately. Do not proceed or release VBECS for use until the ticket is resolved.



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.

- 11) Click **Close** to close the VBECS Patch success message.
- 12) Click **Close** on the VBECS Patch main window to exit the patch application.

5 Executing the VBECS Patch: Application Updates



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.



*During the upgrade, warning emails 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_1.6.0.7_072512** folder.
- 2) Double-click the **test** shortcut. The VBECS Patch form will open with the contact information pre-filled for the user applying the patch.

- 3) If the form opens with missing pre-filled values for the contact information, enter the following for the required fields (Figure 11).
 - **Contact Name** – [NAME]: This is your full name.
 - **Contact E-mail** – [E-MAIL]: This is your email address.
 - **Contact Phone** – [PHONE]: This is your telephone number.

Figure 11: Example of VBECS Patch Form: Test Environment

The screenshot shows the 'VBECS Patch' application window. It has two tabs: 'VBECS Patch' (selected) and 'Info'. The 'Info' tab displays the following configuration:

VBECS Source Build	1.5.2.2
VBECS Target Build	1.6.0.7
VBECS Environment	test
SQL Server Name	VHA\SQLZ1 OR R01YYSQL\SQLZ1

The 'VBECS Patch' tab contains a red-bordered box around the following fields:


Message TimeOut	5
Contact Name	LastName, FirstName
Contact E-mail	FirstName.LastName@va.gov
Contact Phone	000-000-0000

Below the form is a 'VBECS Patch Process' section with a tree view showing the following steps:

- 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 of the window are 'Close' and 'Start' buttons.

- 4) Click **Start**.

 *If the patch detects abnormalities with your system environment, you will be presented with additional screen prompts. Consult Appendix D: Troubleshooting Messages for further information on how to proceed if you encounter a prompt not described in this section.*

- 5) A prompt to verify that the required Vista patches are installed is displayed (Figure 12).
 - Click **Yes** to begin the patch installation.
 - Click **No** to abort the current patching attempt and restart the patch process at a later time.

Figure 12: Required Vista Patches Prompt

The screenshot shows a 'VBECS Patch' dialog box with a question mark icon. The text inside reads:

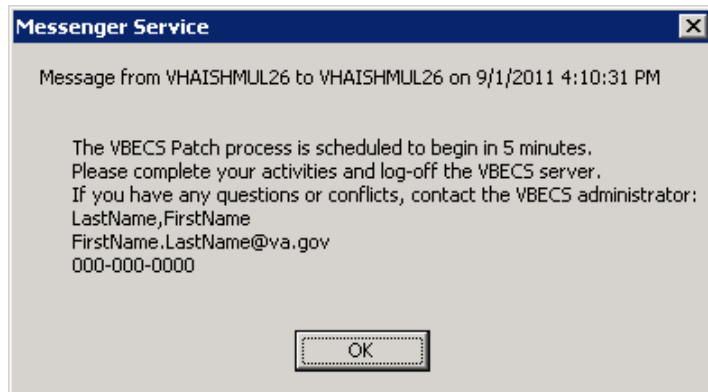
The following Vista patches are required before VBECS 1.6.0 can be installed:
 VBEC*1*27
 LR*5.2*382

Click YES if the patches are installed and you are ready to continue.
 Click NO to cancel VBECS 1.6.0 patch installation.

At the bottom are 'Yes' and 'No' buttons.

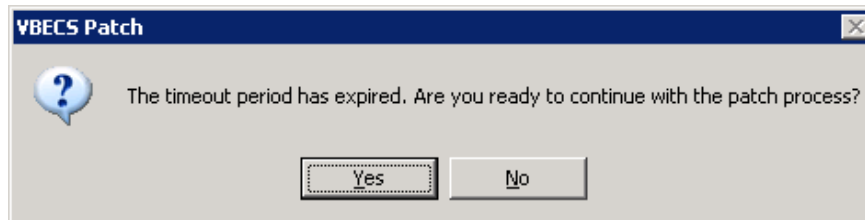
- 6) The cluster wide patch alert message is displayed. Click **OK** (Figure 13).

Figure 13: Example of Patch Alert Message







- 7) After the timeout period has expired, a message signifying the final opportunity to abort the patch installation is displayed (Figure 14).
- Click **Yes** to continue with the patch installation.
 - Click **No** to abort the current patching attempt and restart the patch process at a later time.

Figure 14: VBECS Patch: Continue Patch Message



8) Refer to Figure 15 for the following:

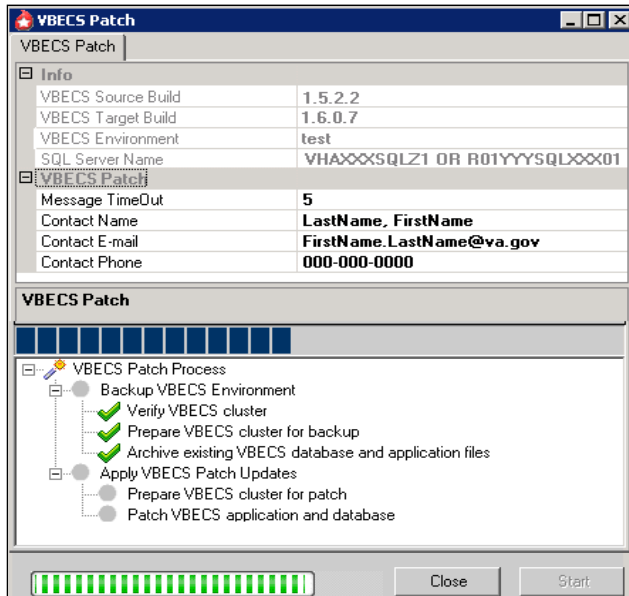
- A green “patch is working” animation () in the bottom left of the VBECS Patch form will be in motion while the patching is in progress.
- The blue progress bar in the middle of form () will increment based on the overall patch progress.
- VBECS Patch Process checkpoints are displayed in the lower portion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



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.

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

Figure 15: Example of Running VBECS Patch Form: Test Environment



9) When the VBECS patch finishes successfully, a “**VBECS Patch process completed successfully**” message will be received. Check the box in the *VBECS 1.6.0 Patch Installation Form for the Test Environment*.



If a Patch Failure message is displayed, go to Appendix D: Troubleshooting Messages. If no solution to the failure message is found, please file a Remedy ticket immediately. Do not proceed or release VBECS for use until the ticket is resolved.



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.

10) Click **Close** to close the VBECS Patch success message.

11) Click **Close** on the VBECS Patch main window to exit the patch application.

6 Completing Patch Installation

- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to the **C:\temp** folder.
- 2) Select the **VBECS_Patch_1.6.0.7_072512** folder.
- 3) While holding down the **Shift** key, press the **Delete** key. Click **Yes** to confirm file deletion.
- 4) Check the box in the *VBECS 1.6.0 Patch Installation Form for the Test Environment*.
- 5) Print the *VBECS 1.6.0 Patch Installation Form for the Test Environment* and initial and date the printed copy. Save this with your records of previous VBECS installations.
- 6) 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.



Do not configure the BCE COTS Interface until the Bar Code Expansion commercial off-the-shelf software (BCE COTS) is available.



For BCE COTS Interface Configuration, refer the VistA Blood Establishment Computer Software (VBECS) 1.6.0 Technical Manual-Security Guide (Configure Interfaces section) for Configuration Details.

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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 up to an hour of downtime without interruption



Server name representations in the document: For Region 1 sites; R01YYYNODXXX01, YYY represents the Data Center location (SCR or DVR) and XXX represents the Site Code. For all other sites; VHAXXXNODZ1, XXX represents the Site Code.

1 Prerequisites for Installation

- 1) VBECS 1.5.2.2 is installed.
- 2) VBECS 1.6.0.7 is installed and validated in the Test environment.
- 3) **VistA patch LR*5.2*382** and **VBEC*1*27** (includes **LR*5.2*412**) must be installed prior to the installation of VBECS 1.6.0.7 for all functionality to work.
- 4) Verify that there are no active user sessions on the servers.
- 5) Download the *VBECS 1.6.0 Patch Installation Form for the Production Environment* from either one the following sites:

- a) VDL Web site **<http://www.va.gov/vdl/application.asp?appid=182>**.
- b) Documentation is available for the VBECS package on the ANONYMOUS.SOFTWARE directory at one of the following OI Field Offices. You will be able to utilize documentation in either the ".pdf" or ".doc" format after you extract the ZIP file. The preferred method is to FTP the files from: **download.vista.med.va.gov**. This transmits files from the first available FTP server. You may also elect to retrieve documentation directly from a specific server as follows:

- **Albany** **[ftp.fo-albany.med.va.gov](ftp://ftp.fo-albany.med.va.gov)**
- **Hines** **[ftp.fo-hines.med.va.gov](ftp://ftp.fo-hines.med.va.gov)**
- **Salt Lake City** **[ftp.fo-slc.med.va.gov](ftp://ftp.fo-slc.med.va.gov)**

NOTE: The ZIP file listed below will be listed in each of the VBEC and LR patches that are part of the VBECS package and associated patches. It only needs to be downloaded once.

File Name

VBECs_1_6_0_DOCS_BUNDLE.ZIP

Retrieval format

BINARY

2 Download the VBECS 1.6.0.7 Patch File

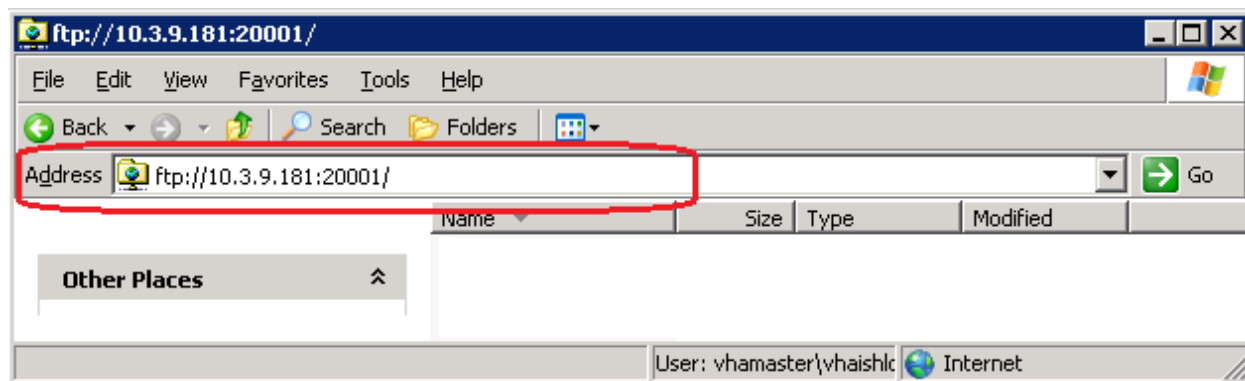
Prerequisites for VBECS FTP Download:

- 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 1.6.0.7 patch file from the VBECS FTP Site:

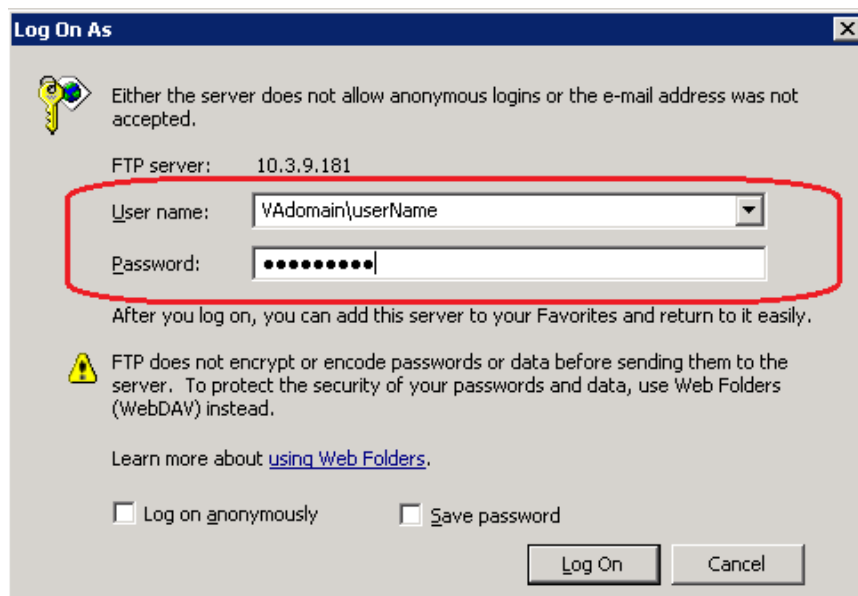
- 1) Open a remote desktop connection to the cluster being patched.
- 2) Open Windows Explorer. In the **Address** field, type **ftp://10.3.9.181:20001** (Figure 16) and press **Enter**. **Note:** If you encounter problems accessing the FTP site, refer to Appendix D: Troubleshooting Messages.

Figure 16: Connecting to VBECS FTP Site



- 3) On the Log On As dialog, enter your domain and NT user name and password (Figure 17).

Figure 17: Example of FTP Log In





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

- 4) Click the **Log On** button. Right-click the **VBECS_Patch_1.6.0.7_072512.zip** file and select **Copy** (** if the **VBECS_Patch_1.6.0.7_072512.zip** file appears as a link, click and save the file in **C:\temp**).



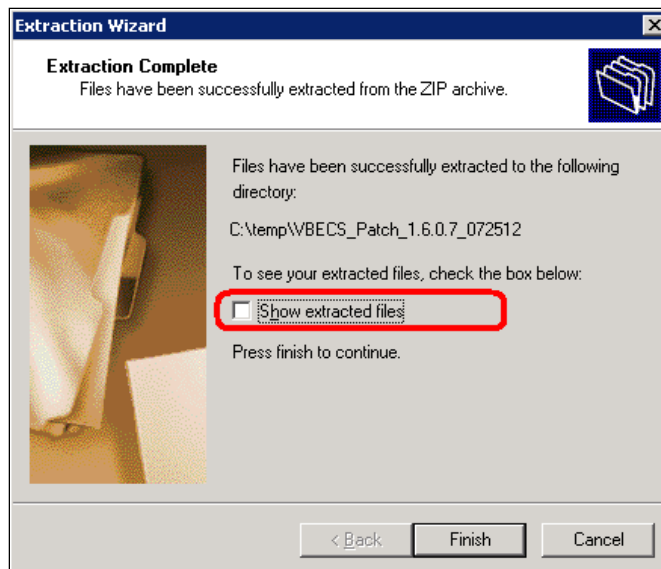
If you encounter the 'Your current settings do not allow you to download files from this location' error, see Appendix E: Adding VBECS FTP Site to the Trusted Sites in Internet Explorer for instructions on how to resolve the problem.

- 5) Using Windows Explorer, navigate to the **C:\temp** folder. Right-click and select **Paste**. The **VBECS_Patch_1.6.0.7_072512.zip** file will be copied to this location.

3 Verify the Contents of the VBECS 1.6.0.7 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_1.6.0.7_072512.zip** file and select **Extract All**.
- 3) After the Extraction Wizard opens, click **Next**.
- 4) Click **Next** to extract the contents of the patch zip file to the temp directory.
- 5) After the extraction completes, uncheck **Show extracted files** and click **Finish** (Figure 18).

Figure 18: Completing Zip File Extraction



- 6) Verify that the extraction completes and a **C:\temp\VBECS_Patch_1.6.0.7_072512** folder is created.
- 7) Using Windows Explorer, right-click on the **VBECS_Patch_1.6.0.7_072512** folder and select **Properties**.

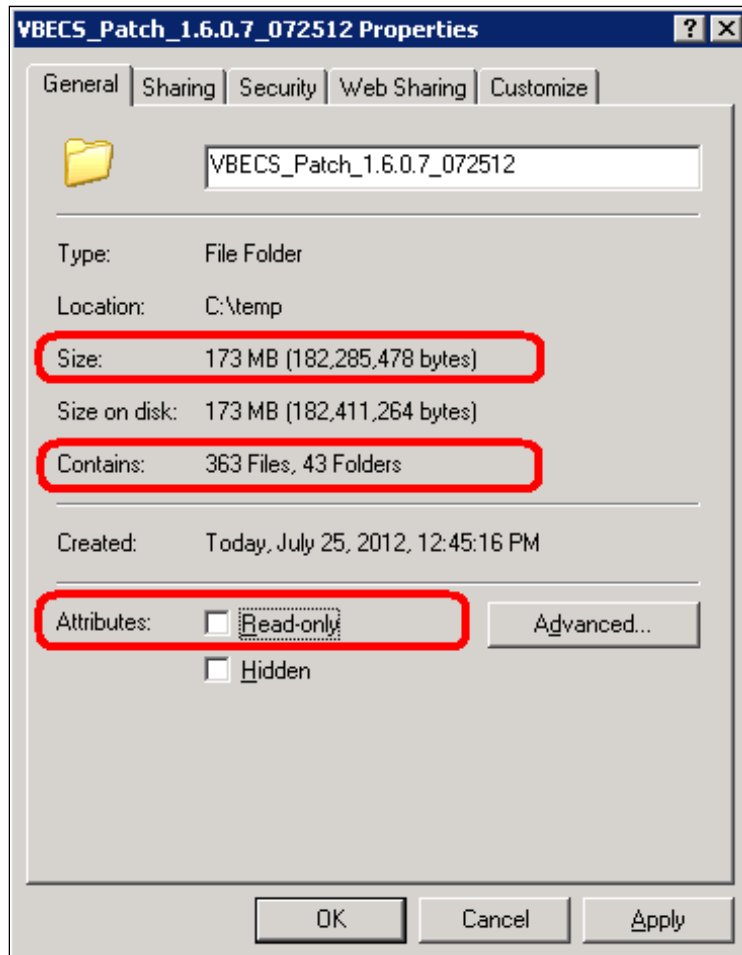
- 8) In the VBECS_Patch_1.6.0.7_072512 Properties window (Figure 19), verify:
- **Size is 173 MB (182, 285, 478 bytes)**
 - **Contains 363 Files, 43 Folders**




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_1.6.0.7_072512 file match, check the box in the *VBECS 1.6.0 Patch Installation Form for the Production Environment*.
- 10) In the Attributes section, uncheck the **Read-only** check box (Figure 19).

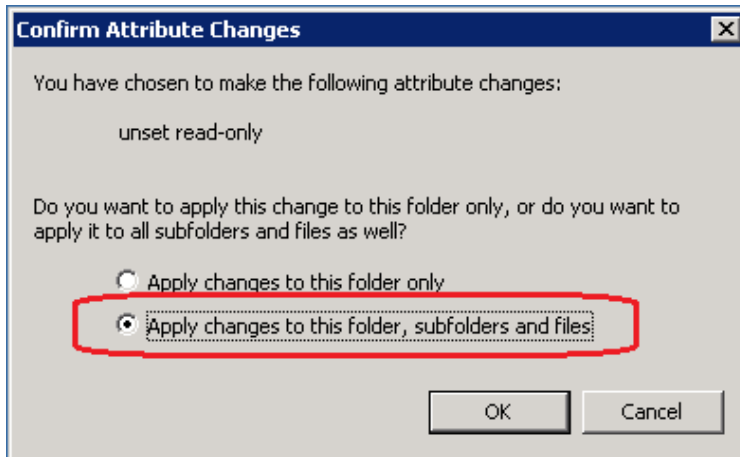
Figure 19: VBECS Patch Folder Properties



- 11)  Capture a screen shot of the VBECS_Patch_1.6.0.7_072512 Properties window.
- 12) Insert the screen shot in the *VBECS 1.6.0 Patch Installation Form for the Production Environment*.


- 13) Click **OK**. 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 20).


Figure 20: Removing Read-Only Attributes




- 14) Using Windows Explorer, navigate to the **C:\temp** folder.
- 15) Select the **VBECS_Patch_1.6.0.7_072512.zip** file.
- 16) While holding the **Shift** key, press the **Delete** key. Click **Yes** to confirm file deletion.

4 Executing the VBECS Patch: Application Updates

-  *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.*

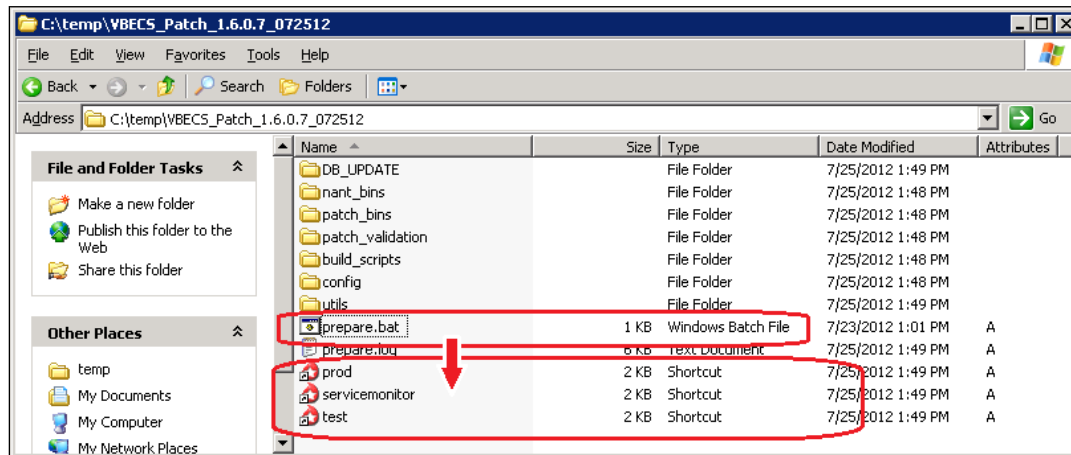
 *After the upgrade, warning emails with the subject '**Operations Manager Critical Error Alert**' are normal and should be ignored. They are merely noting that changes have been made to the various VBECS files which is expected during a software upgrade.*

 *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_1.6.0.7_072512** folder.

- 2) Double-click the **prepare.bat** file. Shortcuts for **prod**, **servicemonitor** and **test** are created (Figure 21).

Figure 21: Creating Patch Shortcuts



- 3) Double-click on the **prod** shortcut. The VBECS Patch form will open with the contact information pre-filled for the user applying the patch.
- 4) If the form opens with missing pre-filled values for the contact information, enter the following for the required fields (Figure 22).
 - **Contact Name** – [NAME]: This is your full name.
 - **Contact E-mail** – [E-MAIL]: This is your email address.
 - **Contact Phone** – [PHONE]: This is your telephone number.

Figure 22: Example of VBECS Patch Form: Production Environment

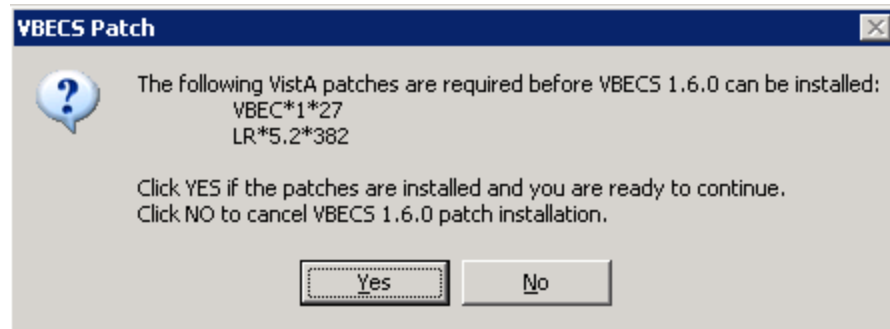
- 5) Click **Start**.



If the patch detects abnormalities with your system environment, you will be presented with additional screen prompts. Consult Appendix D: Troubleshooting Messages for further information on how to proceed if you encounter a prompt not described in this section.

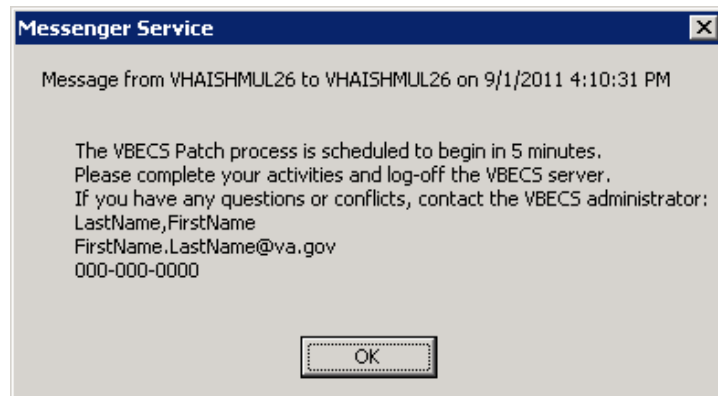
- 6) A prompt to verify that the required Vista patches are installed is displayed (Figure 23).
- Click **Yes** to begin the patch installation.
 - Click **No** to abort the current patching attempt and restart the patch process at a later time.

Figure 23: Required Vista Patches Prompt



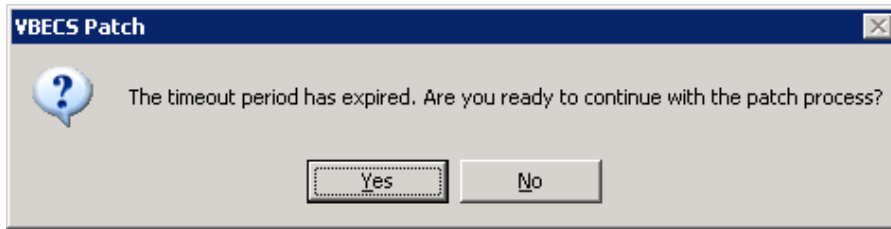
- 7) The cluster wide patch alert message is displayed. Click **OK** (Figure 24).

Figure 24: Example of Patch Alert Message








- 8) After the timeout period has expired, a message signifying the final opportunity to abort the patch installation is displayed (Figure 25).
- Click **Yes** to continue with the patch installation.
 - Click **No** to abort the current patching attempt and restart the patch process at a later time.

Figure 25: VBECS Patch: Continue Patch Message



9) Refer to Figure 26 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, otherwise a  indicates a failure.

 *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.*

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

Figure 26: Example of VBECS Patch Form: Production Environment

 The screenshot shows the "VBECS Patch" application window. It has a tabbed interface with "Info" and "VBECS Patch" tabs. The "Info" tab displays fields for VBECS Source Build (1.5.2.2), VBECS Target Build (1.6.0.7), VBECS Environment (prod), and SQL Server Name (VHAXXXSQLZ1 OR R01YYYSQLXXX01). The "VBECS Patch" tab shows contact information: Message TimeOut (5), Contact Name (LastName, FirstName), Contact E-mail (FirstName.LastName@va.gov), and Contact Phone (000-000-0000). Below this is a blue progress bar. The main area shows the "VBECS Patch Process" as a tree view with steps: Backup VBECS Environment, Verify VBECS cluster (checked), Prepare VBECS cluster for backup (checked), Archive existing VBECS database and application files (checked), Apply VBECS Patch Updates, Prepare VBECS cluster for patch, and Patch VBECS application and database. At the bottom, there is a green bar with vertical lines, a "Close" button, and a "Start" button.

- 10) When the VBECS patch finishes successfully, a “**VBECS Patch process completed successfully**” message will be received. Check the box in the *VBECS 1.6.0 Patch Installation Form for the Production Environment*.



If a Patch Failure message is displayed, go to Appendix D: Troubleshooting Messages. If no solution to the failure message is found, please file a Remedy ticket immediately. Do not proceed or release VBECS for use until the ticket is resolved.



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.

- 11) Click **Close** to close the VBECS Patch success message.
12) Click **Close** on the VBECS Patch main window to exit the patch application.

5 Completing Patch Installation

- 1) On the remote desktop connection to the cluster already open, use Windows Explorer to navigate to the **C:\temp** folder.
- 2) Select the **VBECS_Patch_1.6.0.7_072512** folder.
- 3) While holding down the Shift key press the **Delete** key. Click **Yes** to confirm file deletion.
- 4) Check the box in the *VBECS 1.6.0 Patch Installation Form for the Production Environment*.
- 5) Print the *VBECS 1.6.0 Patch Installation Form for the Production Environment* and initial and date the printed copy. Save this with your records of previous VBECS installations.
- 6) 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.



Do not configure the BCE COTS Interface until the Bar Code Expansion commercial off-the-shelf software (BCE COTS) is made available.



For BCE COTS Interface Configuration, refer the VistA Blood Establishment Computer Software (VBECS) 1.6.0 Technical Manual-Security Guide (Configure Interfaces section) for Configuration Details

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Glossary

Acronym, Term	Definition
AD	Active Directory.
ADPAC	Automated Data Processing Application Coordinator.
BCE	Bar Code Expansion.
COTS	Commercial Off-the-Shelf Software.
FDA	Food and Drug Administration.
FTP	File Transfer Protocol
IT	Information Technology.
OI	Office of Information.
PD	Product Development.
PS (formerly CPS, formerly EPS)	Product Support.
IRM	Information Resource Management.
Remote Desktop Connection (formerly Terminal Services)	The connectivity tool used to access VBECS on the server.
SCOM	Systems Center Operations Manager.
VA	Department of Veterans Affairs.
VASD	VA Service Desk.
VBECS	VistA Blood Establishment Computer Software.
VDL	VA Software Document Library.
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:

- When the patch is executed for the Service Monitor environment, a log file will be created in:
 - **C:\Program Files\Vista\Archive\logs**
 - **L:\VBECS_Archive\VBECSRecords** directories with **<ACTIVENODE>_VBECS_<mmddyy>_1.5.2.2_to_1.6.0.7_servicemonitor_<hhmm>.log** as the file name, where:
 - **<ActiveNode>** represents the active cluster node at the time of patch execution.
 - **<mmddyy>** represents the current date.
 - **<hhmm>** represents the hour and minute the patch began execution.

For example,

VHAXXXNODZ1_VBECS_090111_1.5.2.2_to_1.6.0.7_servicemonitor_1610.log or
R01YYYNODXXX01_VBECS_090111_1.5.2.2_to_1.6.0.7_servicemonitor_1610.log.

- When the patch is executed for the Test environment, a log file will be created in:
 - **C:\Program Files\Vista\Archive\logs**
 - **L:\VBECS_Archive\VBECSRecords** directories, with **<ACTIVENODE>_VBECS_<mmddyy>_1.5.2.2_to_1.6.0.7_test_<hhmm>.log** as the file name, where:
 - **<ActiveNode>** represents the active cluster node at the time of patch execution.
 - **<mmddyy>** represents the current date.
 - **<hhmm>** represents the hour and minute the patch began execution.

For example, VHAXXXNODZ1_VBECS_090111_1.5.2.2_to_1.6.0.7_test_1610.log or
R01YYYNODXXX01_VBECS_090111_1.5.2.2_to_1.6.0.7_test_1610.log.

- When the patch is executed for the Prod environment, a log file will be created in:
 - **C:\Program Files\Vista\Archive\logs**
 - **L:\VBECS_Archive\VBECSRecords** directories, with **<ACTIVENODE>_VBECS_<mmddyy>_1.5.2.2_to_1.6.0.7_prod_<hhmm>.log** as the file name, where:
 - **<ActiveNode>** represents the active cluster node at the time of patch execution.
 - **<mmddyy>** represents the current date.
 - **<hhmm>** represents the hour and minute the patch began execution.

For example, VHAXXXNODZ1_VBECS_090111_1.5.2.2_to_1.6.0.7_prod_1610.log or
R01YYYNODXXX01_VBECS_090111_1.5.2.2_to_1.6.0.7_prod_1610.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 VBECS Server Admins	vhaBHS Vbecs Administrators
	608	Manchester	vhaMANVbecsServerAdmins	vhaMANVbecsAdministrators
	631	Northampton	vhaNHMVbecsServerAdmins	vhaNHMVbecsAdministrators
	650	Providence	vhaPROVbecsServerAdmins	vhaPROVbecsAdminstrators
	402	Togus	VHATOGVBECS Administrators	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)	vhaHVVbecsServerAdmins	vhaHVVbecsAdministrators
	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	VHAALTVbecsServerAdm	vhaALTVbecsAdministrators
	540	Clarksburg	vhaCLAVbecsServerAdmins	vhaCLAVbecsAdministrators
	542	Coatesville	VHACOA VbecsAdministrators	vhaCOAVbecsAministrators
	562	Erie	vhaERIVbecsServerAdmins	vhaERIVbecsAdministrators
	595	Lebanon	VHALEBVbecsServerAdminist rators	vhaLEBVbecsAdministrators
	642	Philadelphia	vhaPHIVBECS_ADM	vhaPhiladelphiaBBAdmin
	646	Pittsburgh University Drive (Pittsburgh HCS)	vhaPTHVbecsServerAdmins	vhaPTHVbecsAdministrators
	693	Wilkes-Barre	vhaWBPVbecsServerAdmins	vhaWBPVbecsAdministrators
	460	Wilmington	VHAWIMVbecsServerAdminist rators	vhaWIMVbecsAdministrators
5	512	Baltimore (Maryland HCS)	vhaBALVbecsServerAdmin	vhaBALVbecsAdministrators
	512A5	Perry Point (Maryland HCS)		
	613	Martinsburg	vhaMWVVbecsServerAdmin	vhaMWVVbecsAdministrators


VISN	Facility #	Facility	Server Administrative Group	VBECs Admin AD Group
	688	Washington	VHAWAS VBECs Administrators	vhaWAS Vbecs Administrators
6	637	Asheville	vhaASHVbecsServerAdmins	vhaASHVbecsAdministrators
	517	Beckley	vhaBECVbecsServerAdmins	vhaBECVbecsAdministrators
	558	Durham	vhaDURAdmin	v06DURVbecsAdministrators
	565	Fayetteville NC	vhaFNCVbecsServerAdmins	vhaFNCVbecsAdministrators
	590	Hampton	vhaHAMVbecsServerAdmins	vhaHAMVbecsAdministrators
	652	Richmond	vhaRICVbecsServerAdmins	vhaRICVbecsAdministrators
	658	Salem	vhaSAMVbecsServerAdmins	vhaSAMVbecsAdmins
	659	Salisbury (Heffner)	VSBYVbecsAdministrators	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)	vhaNFL VbecsServerAdmins	VHANFL SP VbecsAdministrators
	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	vhaCINAdmin	v10CinVbecsAdministrators
	541	Cleveland Wade Park	vhaCLEVbecsServerAdmins	vHACLEVbecsAdministrators
		Columbus	v10COSVbecsServerAdmins	v10COSVbecsAdministrators
	552	Dayton	vhaDAYVbecsServerAdmins	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	vhaSAGVbecsServerAdmin	vhaSAGVbecsAdmin
12	537	Chicago Westside (Chicago HCS)	v12CHSVbecsServerAdmins	v12CHSVbecsAdministrators

VISN	Facility #	Facility	Server Administrative Group	VBECs Admin AD Group
	578	Hines VA Hospital	v12HINVbecsServerAdmins	v12HINVbecsAdministrators
	585	Iron Mountain	vhaIROVbecsServerAdmins	vhaIROVbecsAdministrators
	607	Madison	v12MADVbecsServerAdmins	v12MADVbecsAdministrators
	695	Milwaukee	v12MIWVbecsServerAdmins	v12MIWVbecsAdministrators
	556	North Chicago	v12NCHVbecsServerAdmins	v12NCHVbecsAdministrators
	676	Tomah	vhaTOMVbecsServerAdmins	vhaTOMVbecsAdministrators
15	589	Kansas City (Heartland West HCS)	v15KANVbecsAdministrators	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	V16ALXVbecsServerAdmins	vhaALXVbecsAdministrators
	520	Biloxi (VA Gulf coast HCS)	v16BILVbecsServerAdmins	v16BILVbecsAdministrators
	564	Fayetteville AR	v16FAVVbecsServerAdmins	v16FAVVbecsAdministrators
	580	Houston	vhaHOVbecsServerAdmins	vhaHOVbecsAdministrators
	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	R01BOIVbecsAdministrators
	648	Portland (/Vancouver)	R01VbecsServerAdmins	R01PORVbecsAdministrators

VISN	Facility #	Facility	Server Administrative Group	VBECs Admin AD Group
	653	Roseburg (VA Roseburg HCS)	R01VbecsServerAdmins	R01ROSVbecsAdministrators
	663	Seattle (Puget Sound HCS)	R01VbecsServerAdmins	R01PugVbecsAdministrators
	663A4	American Lake (Puget Sound HCS)		
	668	Spokane	R01VbecsServerAdmins	R01SPOVbecsAdministrators
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)	V23BHHVbecsServerAdministrators	v23BHHVbecsAdministrators
	568A4	Hot Springs (Black Hills HCS)		
	618	Minneapolis	v23MINVbecsServerAdmins	v23MINVbecsAdministrators
	438	Sioux Falls	v23SUXVbecsServerAdmins	V23SUXVbecsAdministrators
PS	NA	St. Cloud	v23STCVbecsServerAdmins	V23STCVbecsAdministrators
		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 step was performed correctly. These points are indicated by the camera

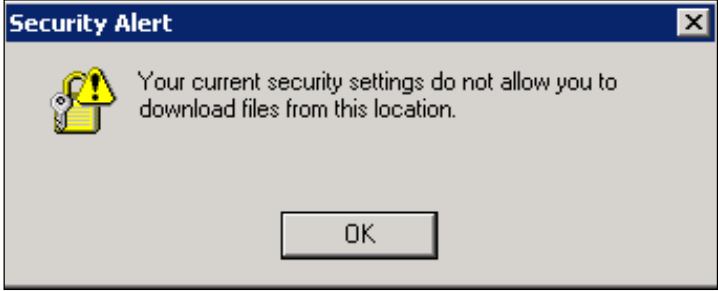
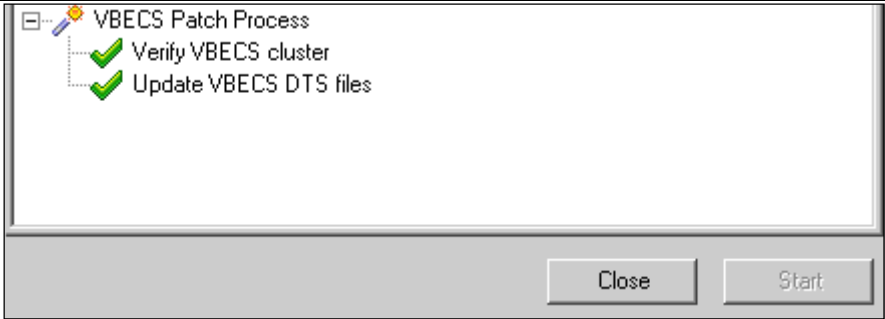
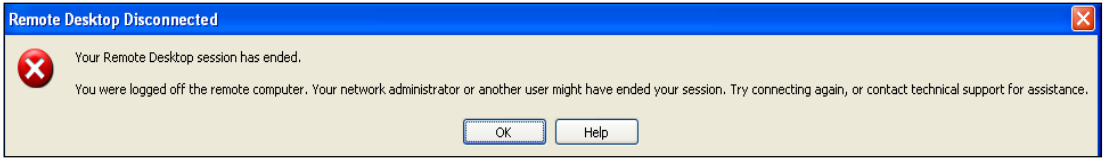
icon:  .

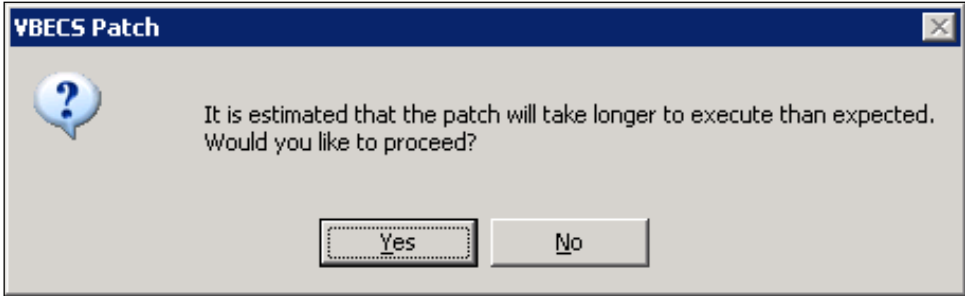
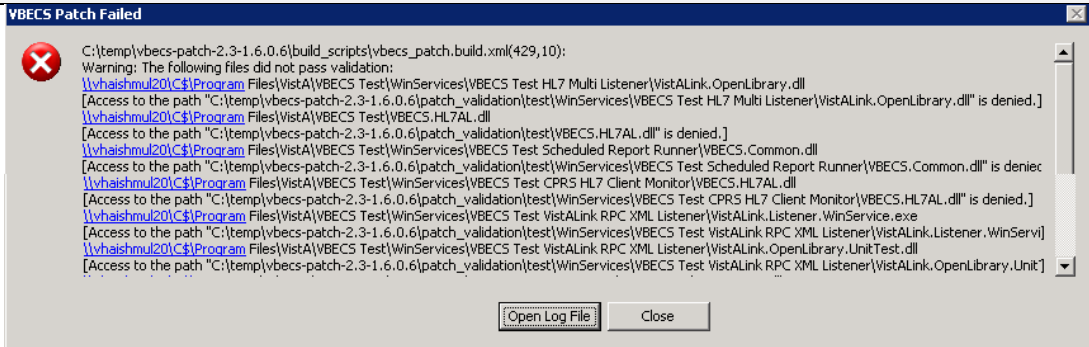
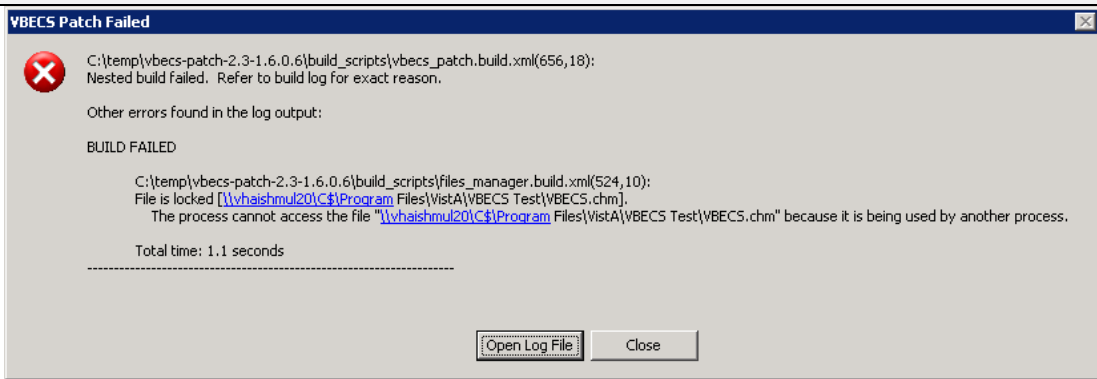
To capture a screen shot:

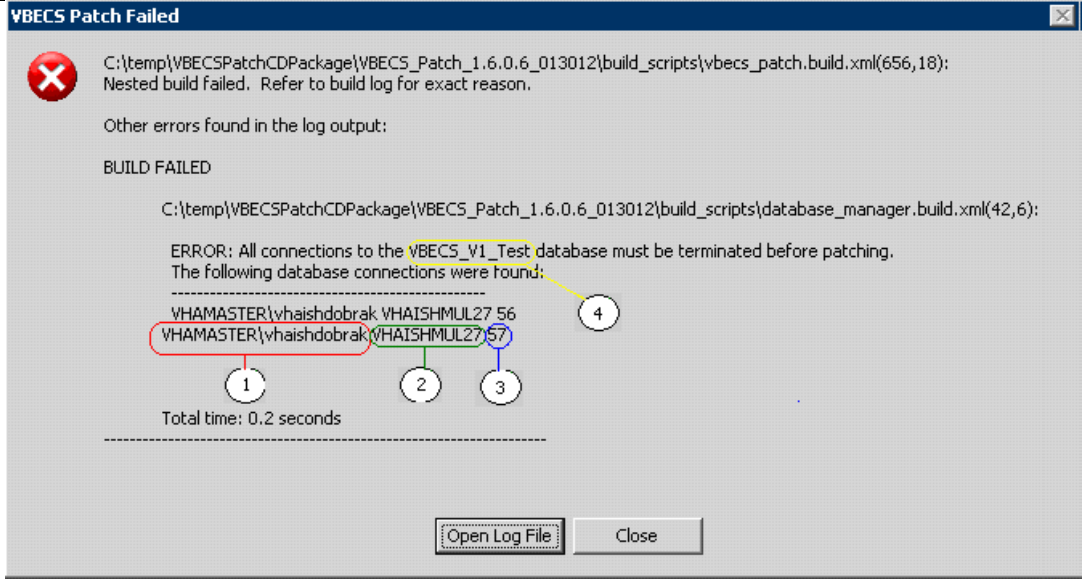
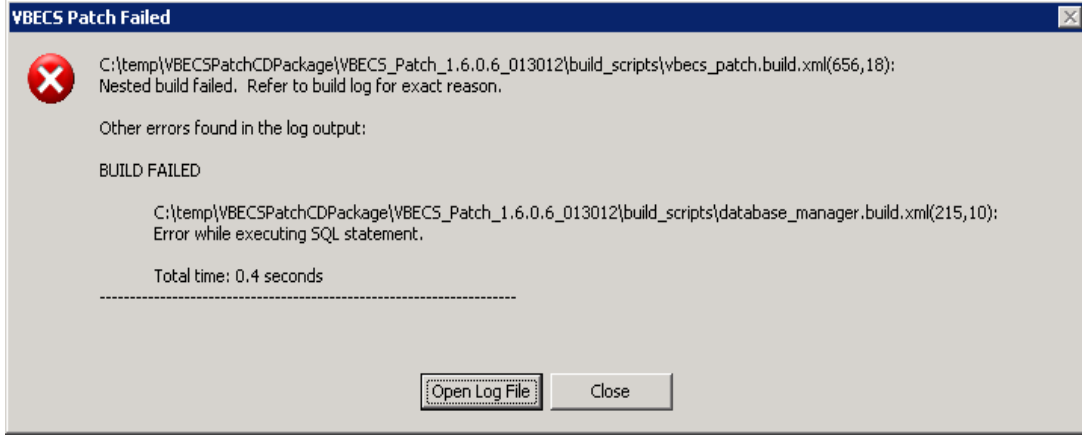
- 1) When the screen you wish to capture is displayed:
 - Press **Ctrl+Alt+Print Screen** key to capture only the screen where your pointer is located.
 - Press **Print Screen** key to capture the entire screen.
- 2) In the *VBECS 1.6.0 Patch Installation Form for the Test (or Production) Environment*, place the cursor where you want to insert the screen shot.
- 3) Press **Ctrl + V** to paste.

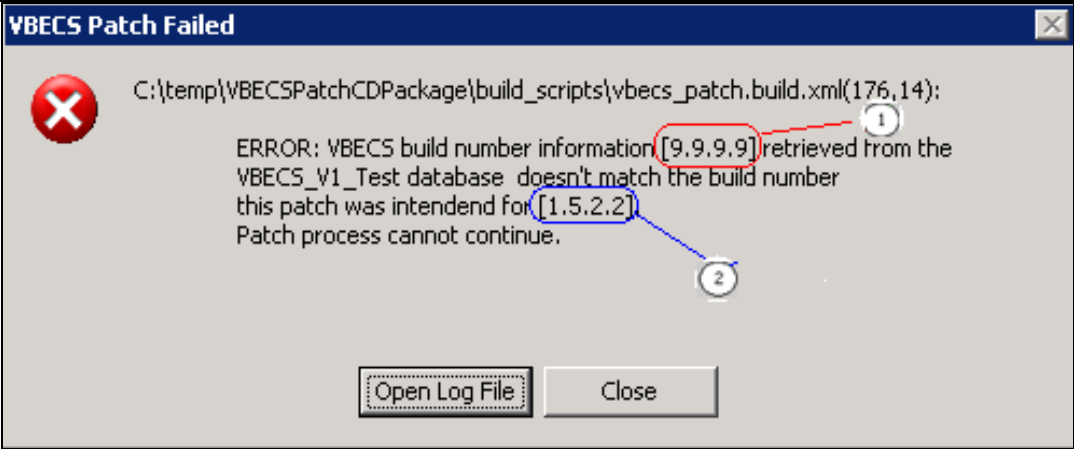
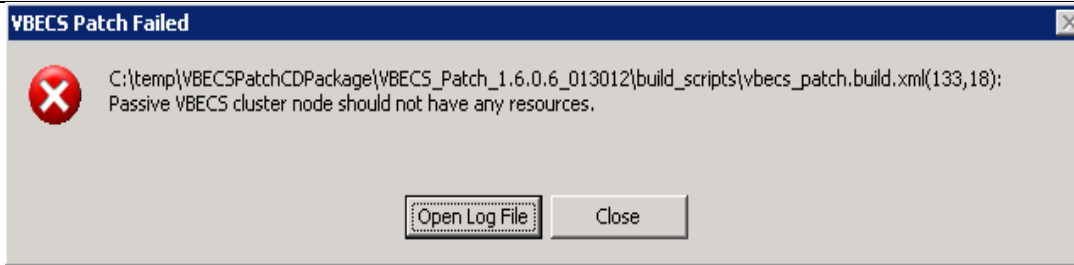
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Appendix D: Troubleshooting Messages

Error Message	Example Screen Shot and Solution
Internet Explorer alert is received when attempting to download from the FTP site.	 <p>A Windows Security Alert dialog box with a yellow padlock icon. The text reads: "Your current security settings do not allow you to download files from this location." There is an "OK" button at the bottom.</p> <p>Solution: Follow the instructions detailed in Appendix E: Adding VBECS FTP Site to the Trusted Sites in Internet Explorer.</p>
The Start button of the VBECS patch is disabled.	 <p>A dialog box titled "VBECS Patch Process" showing a progress bar. Below the progress bar, there are two green checkmarks with the text "Verify VBECS cluster" and "Update VBECS DTS files". At the bottom, there are "Close" and "Start" buttons. The "Start" button is disabled.</p> <p>Solution: The Start button is disabled while the patch is running and after the patch completes.</p>
The patcher's Remote Desktop Connection was terminated by the patch.	 <p>A "Remote Desktop Disconnected" dialog box with a red X icon. The text reads: "Your Remote Desktop session has ended. You were logged off the remote computer. Your network administrator or another user might have ended your session. Try connecting again, or contact technical support for assistance." There are "OK" and "Help" buttons at the bottom.</p> <p>Solution: You have an active session at the server console (KVM). Log off your server console session and restart the patch.</p>

Error Message	Example Screen Shot and Solution
The patch has detected a slow data transfer rate.	 <p>Solution: Verify the cluster network configurations are setup properly. Refer to the VBECs 1.6.0 Technical Manual-Security Guide. Consult with your Network Administrator for possible hardware problems. Check Task Manager to verify the Networking and CPU performance metrics.</p>
The files extracted from the zip file were left in a Read-only state.	 <p>Solution: Do not skip steps listed in this guide. Remove the read-only attribute of the extracted patch files. Refer to the Verify the Contents of the Patch Package file sections, Step 10 Test and Production Environments.</p>
The patch was denied access to an application file.	 <p>Solution: Using Task Manager, verify that all users are logged off the server identified in the message. Reboot the server if the locked file cannot be identified and released.</p>

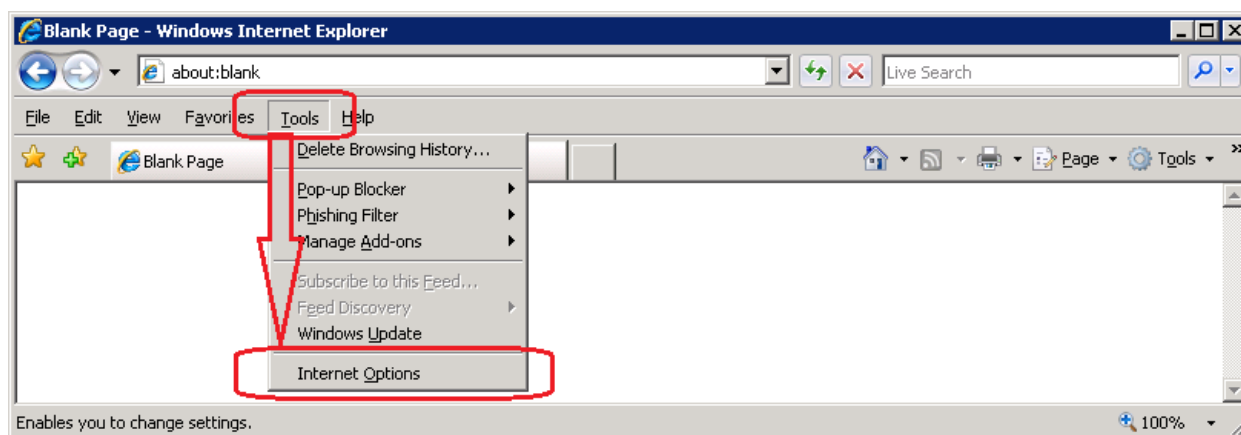
Error Message	Example Screen Shot and Solution
The patch detected an active database connection	 <p>Solution: Close the identified connection/application and restart the patch. Use the information contained in the message to identify the user/machine connected to the database:</p> <ol style="list-style-type: none"> 1. User Login ID 2. Computer Name 3. SQL Process ID 4. Database Name
The SQL Server instance detected by the patch could not be reached.	 <p>Solution: Using Cluster Administrator, make sure all of the cluster resources are Online and running on the same node. Verify you have server administrative permissions to the cluster.</p>

Error Message	Example Screen Shot and Solution
The wrong patch is being executed for the current VBECS build.	<div data-bbox="354 247 1421 693">  </div> <div data-bbox="354 714 1421 861"> <p>Solution: Verify you are using the correct patch for your build. Use the information displayed in the message to identify where the problem lies: 1. Build number found in the VBECS database. 2. VBECS Build number the patch is designed to update.</p> </div>
The patch detected active resources running on the passive node.	<div data-bbox="354 882 1421 1144">  </div> <div data-bbox="354 1165 1421 1260"> <p>Solution: Using Cluster Administrator, verify that all resources are running on the same node. Restart the patch.</p> </div>

Appendix E: Adding VBECS FTP Site to the Trusted Sites in Internet Explorer

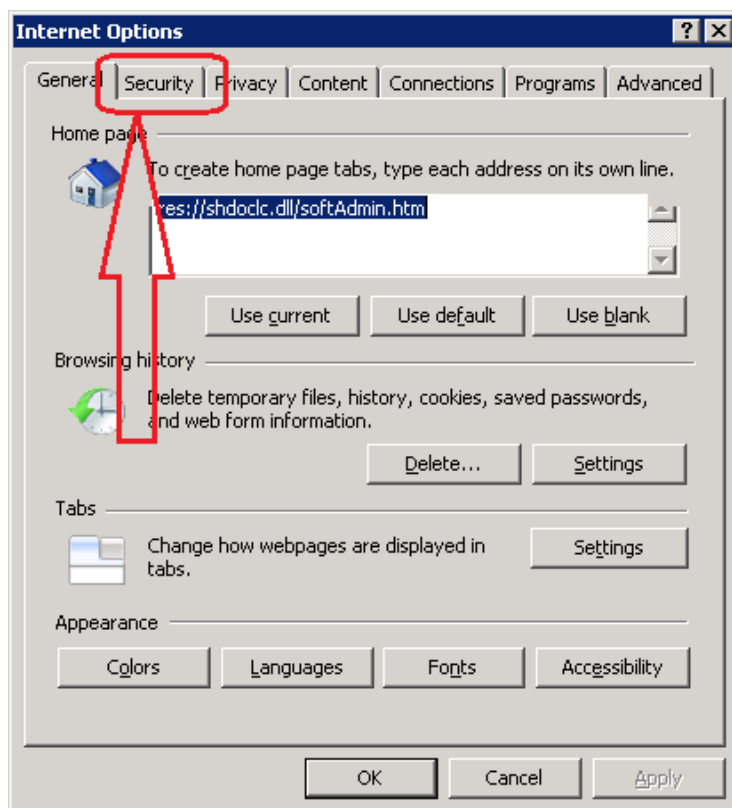
- 1) Open a remote desktop connection to the Cluster Node 1 (e.g. **VHAXXXNODZ1** or **R01YYYNODXXX01**).
- 2) Open Internet Explorer and select **Tools, Internet Options** (Figure 27).

Figure 27: Example of Internet Explorer Window



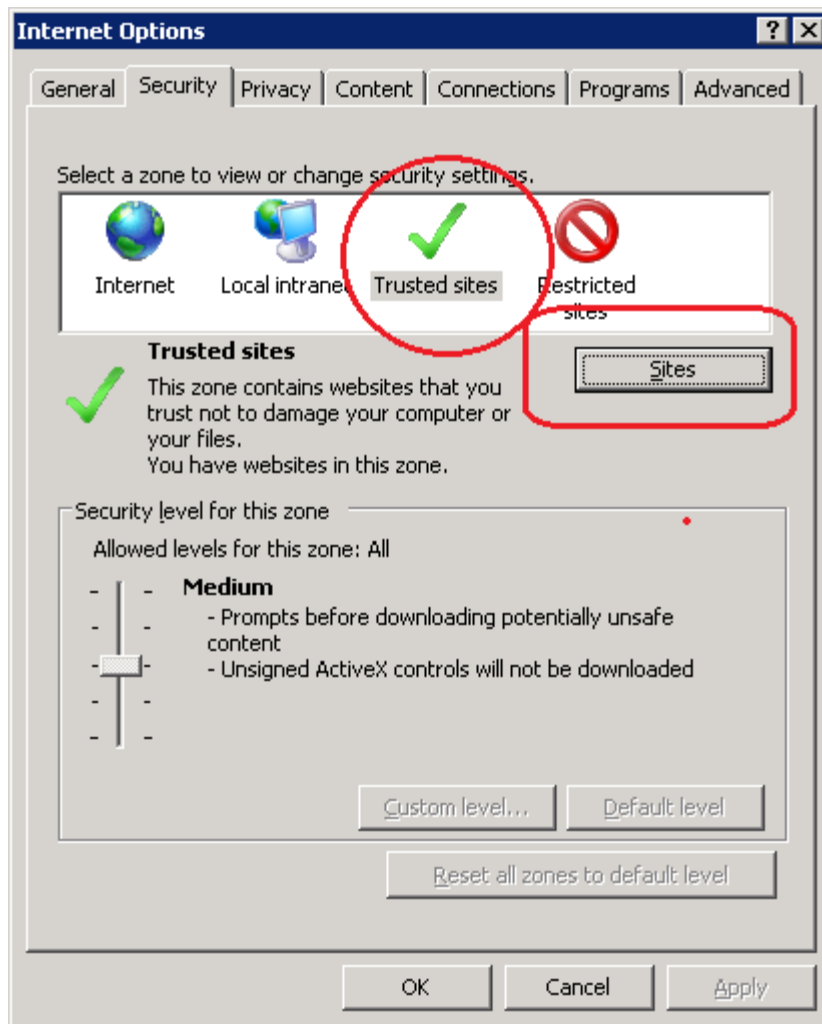
- 3) Select the **Security** tab (Figure 28).

Figure 28: Example of Internet Explorer Internet Options Security tab



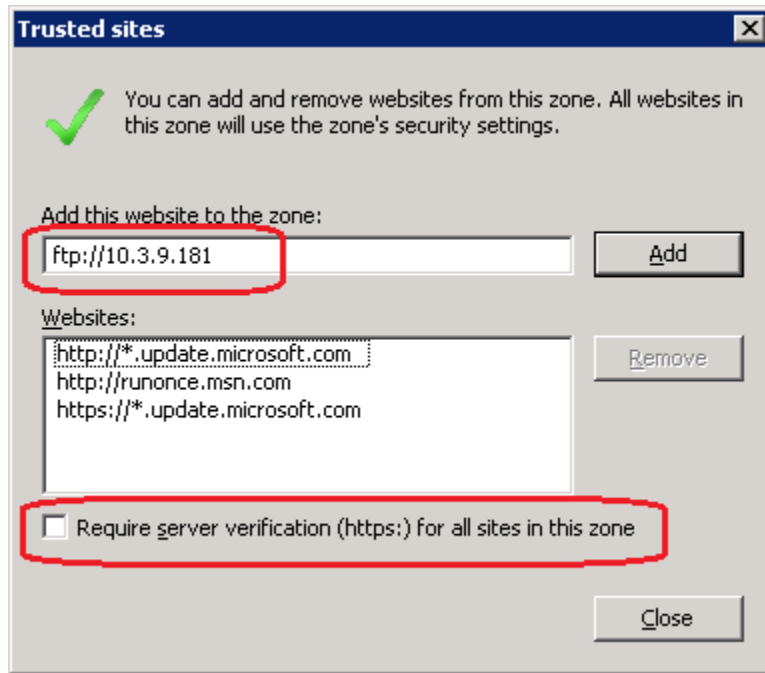
- 4) Select **Trusted sites** and click **Sites** (Figure 29).

Figure 29: Example of Internet Options Trusted Sites



- 5) Make sure **Require server verification...** is unchecked. Enter **ftp://10.3.9.181** and click the **Add** button (Figure 30).

Figure 30: Adding VBECS FTP to the Trusted Sites



- 6) Close all windows.
- 7) Log off Cluster Node 1.
- 8) Repeat Steps 1 through 8 for the Cluster Node 2 [e.g. **(VHAXXXNODZ2 or R01YYYNODXXX02)**].

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Patch Installation Guide.