

ISI Group

Raptor VIX

Installation Guide



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1 Introduction

The Raptor Vista Imaging Exchange (VIX) service is a service that provides access to images stored in Vista Imaging for the Raptor system.

2 Prerequisites

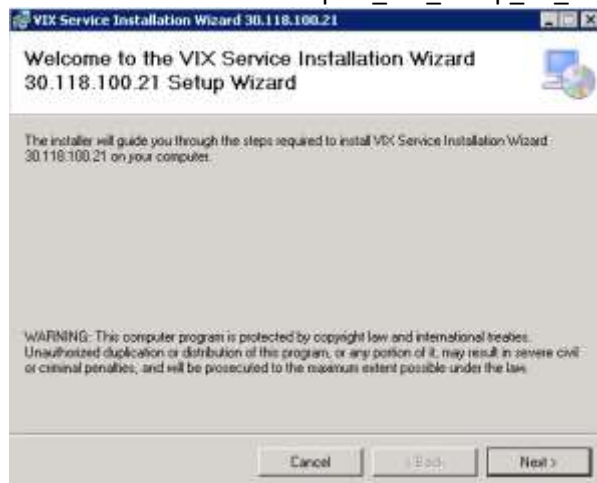
The Raptor VIX requires the following for installation:

1. A Laurel Bridge DCF license key.
2. A VIX certificate.
3. The Raptor VIX installation package.
4. A x64 Windows Server 2008 R2 machine
5. The installation must be run as a user with administrator rights on the server.

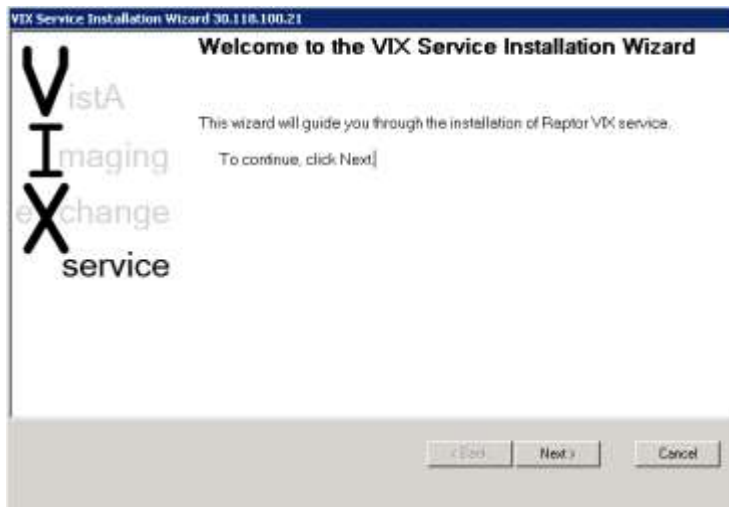
3 Installation

3.1 Raptor VIX Installation

1. Double click on the Raptor_VIX_Setup_30_118_100_XX.msi to launch the MSI installer



2. Press the **Next** button twice to accept the defaults and install the **VIX Service Installation Wizard**
3. Press the **Close** button when the installation is complete.
4. From the **Start** menu select **Programs → Vista Imaging Programs → VIX Service Installation Wizard**.



5. Press the **Next** button.
6. Enter site **9999** and press **Lookup Server Addresses**

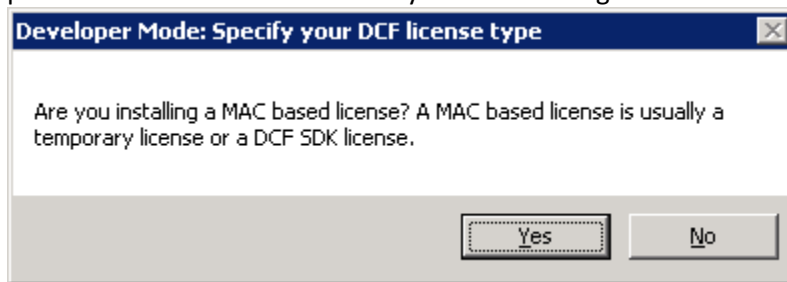
 This is the second screen of the wizard. The title bar is the same. The heading is 'Specify the VA site the VIX will service.' Below this, it says 'Specify the VA site number for this VIX then click the Lookup Server Addresses button.' The form contains several input fields: 'Site Number' with the value '9999' entered, 'Vista Server Name', 'Vista Server Port' (with '0' entered), 'VIX Server Name', and 'VIX Server Port' (with '0' entered). To the right of the 'Site Number' field is a button labeled 'Lookup Server Addresses'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Note: the site number **9999** must be registered in the VA Site Service as the Raptor VIX. If another site number is designated for the Raptor VIX in the site service then that number should be used here.

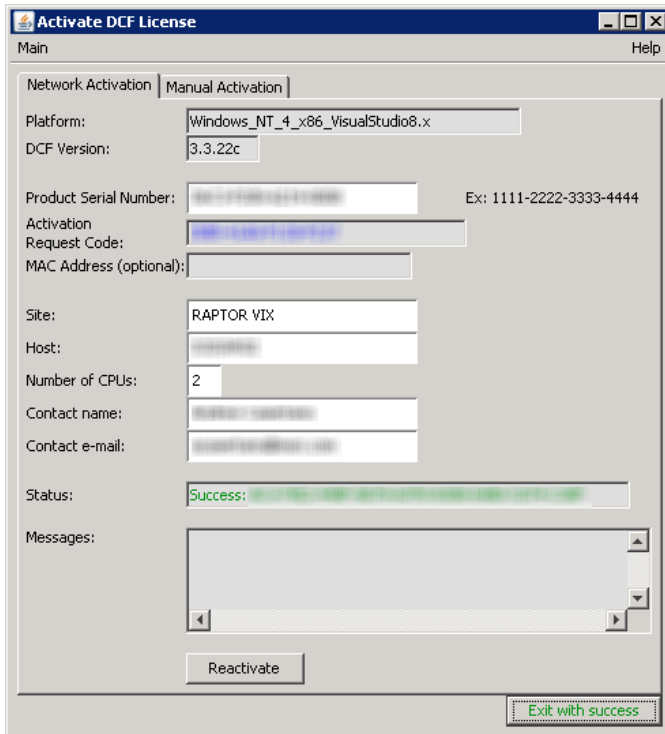
7. Press the **Next** button.
8. Click the button next to each VIX prerequisite



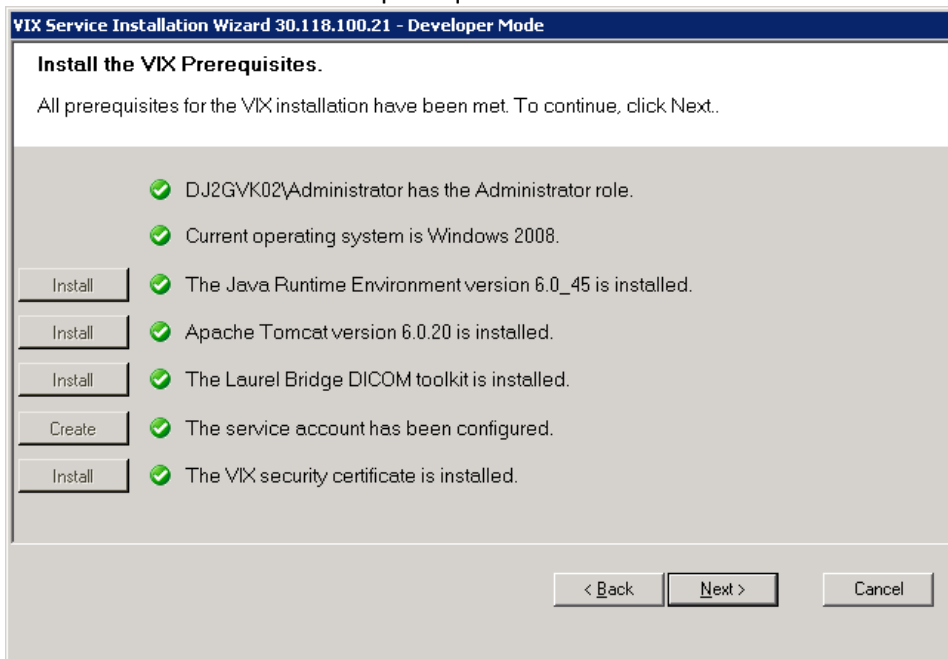
9. When installing Apache Tomcat it will ask you for a password for example: **Raptor123**. This password is used by Tomcat and will not be needed later.
10. When installing the Laurel Bridge DICOM toolkit you will need the Product Serial Number provided from the VA. If asked if you are installing a MAC based license, answer **No**.



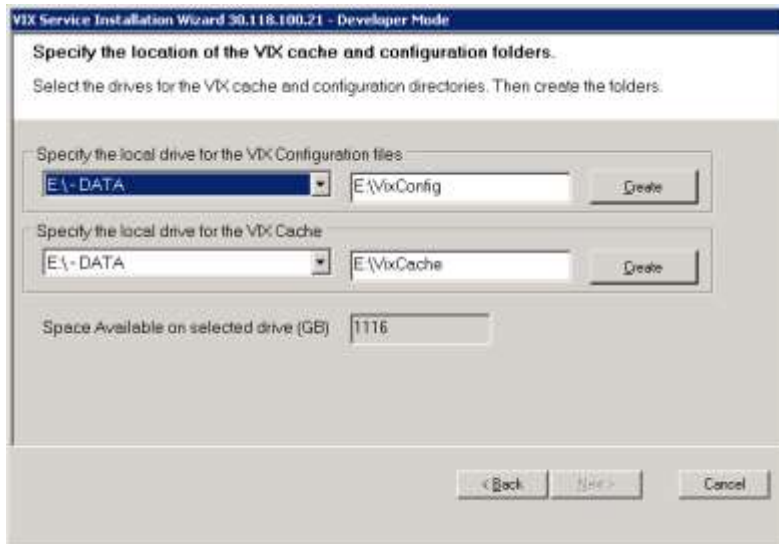
11. Enter the information required to activate the DCF license, then press the **Activate** button.



12. Click **Exit with Success** when the Laurel Bridge License has been installed
13. When creating the service account you will need to enter a password. Use the same password you used for Apache Tomcat.
14. When installing the VIX security certificate you will need to provide the ZIP file from the VA.
15. Press the **Next** button when all prerequisites have been met.



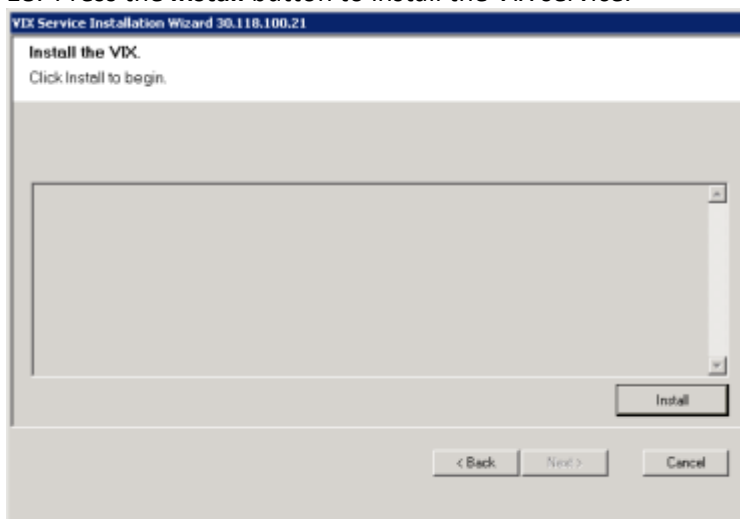
16. Press the **Create** button next to the VIX Configuration and VIX cache directories. Change the drive if the default selected is not where you want the configuration and cache files to exist. Then press the **Next** button



Note: On the production Raptor VIX the **VixConfig** and **VixCache** directories are on the **E:** drive.

17. Press **Next** to skip configuring local DoD connections for images.

18. Press the **Install** button to install the VIX service.



19. When complete, press the **Finish** button to close the VIX Service Installation Wizard.

3.2 Hydra Installation

Hydra does not need to be installed on the same server as the Raptor VIX however it does need to be able to access the Raptor VIX. Users need to be able to access the Hydra service on port 9000.

1. Copy the **Hydra** directory to the **e:\program files\ISI Imaging** directory (create it if needed)
2. Open a command prompt with administrator privileges and from the **e:\program files\ISI Imaging\Hydra** directory run the following command:
`"C:\Windows\Microsoft.NET\Framework64\v4.0.30319\installutil.exe" Hydra.Host.Service.exe`
3. Open the **Hydra.Host.Service.exe.config** file in a text editor
4. Modify **Hydra.PublicUrl** value to **http://<hostname of server Hydra is running on>:9000/**
5. Modify **ISIXServer.HostName** to the hostname of the Raptor VIX server.
6. Modify **ISIXServer.Port** to **8090**.

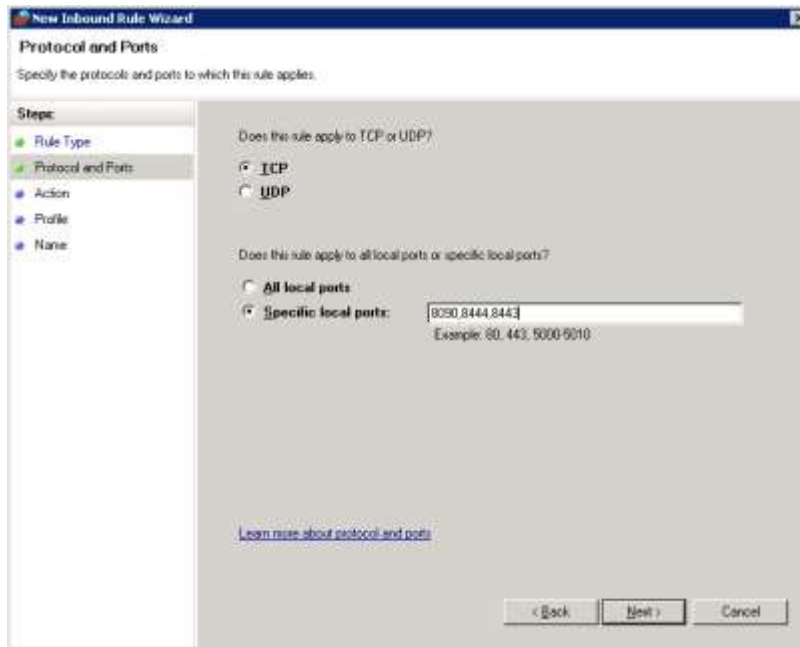
7. Save the **Hydra.Host.Service.exe.config** file and close the editor.
8. Right click on **Computer** (on the desktop) and select **Manage**.
9. Select **Server Manager** → **Configuration** → **Services**.
10. Right click on **Hydra Service** and select **Properties**.
11. Change the **Startup type** to **Automatic**.
12. Click the **Start** button and then click **OK**.

3.3 Firewall Configuration

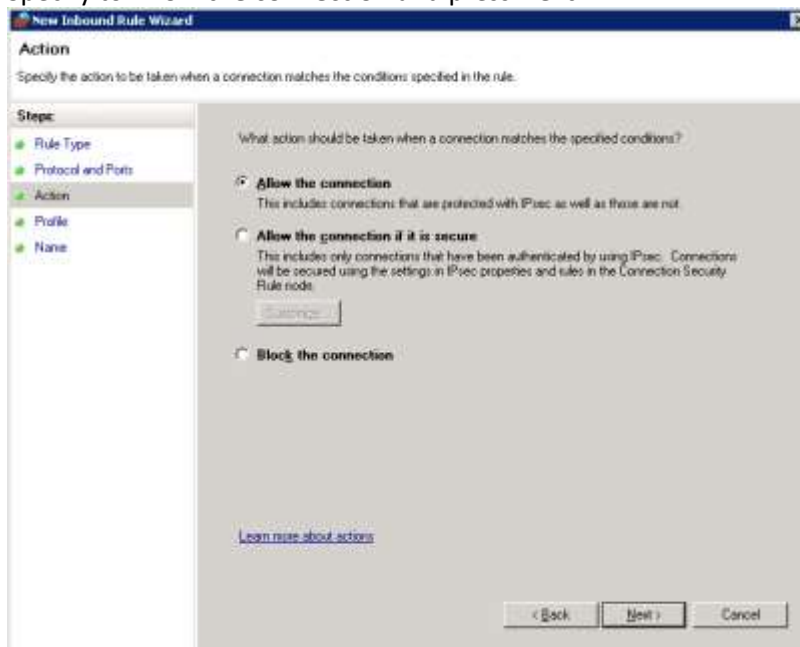
1. Right click on **Computer** and select **Manage**.
2. Expand **Server Manager** → **Configuration** → **Windows Firewall with Advanced Security** → **Inbound Rules**
3. Create a new rule
4. Specify it is a port rule and press **Next**.



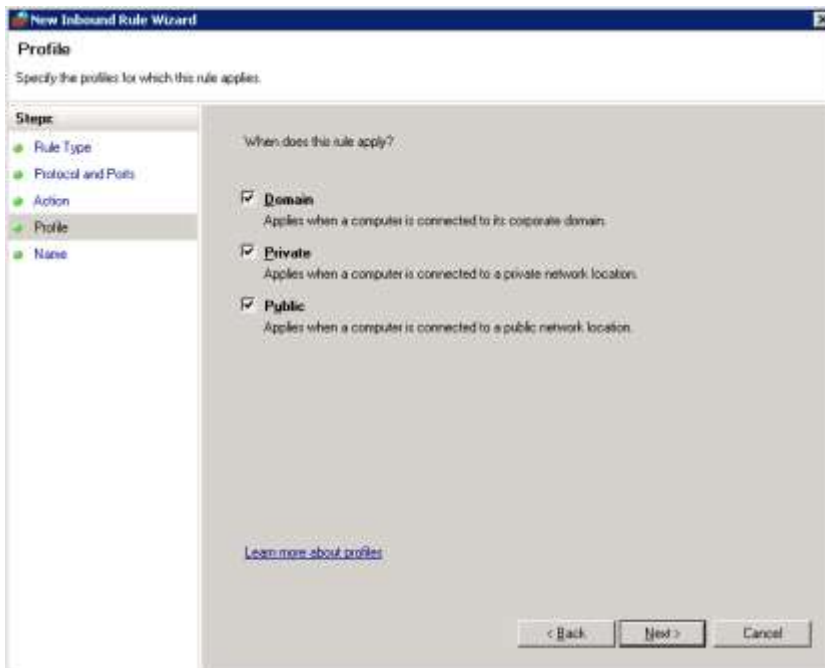
5. Specify the specific ports **8090**, **8443** and **8444** for the rule when configuring the Raptor VIX. When configuring the server with Hydra specify port **9000**. Press **Next**.



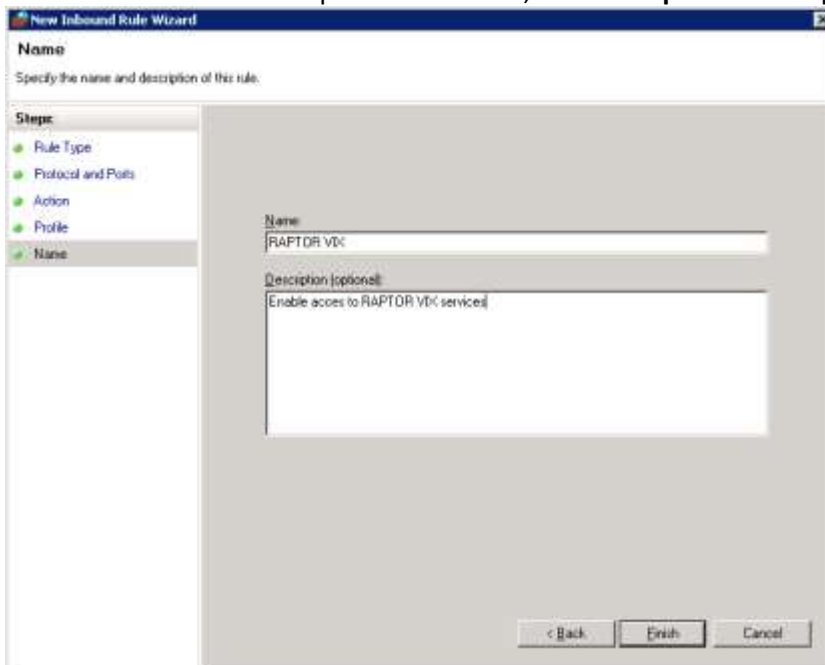
6. Specify to **Allow the connection** and press **Next**.



7. Specify the rule applies to **Domain**, **Private**, and **Public** and press **Next**.



8. Provide a name and description for the rule, such as **Raptor VIX** and press **Finish**.



4 Production Configuration

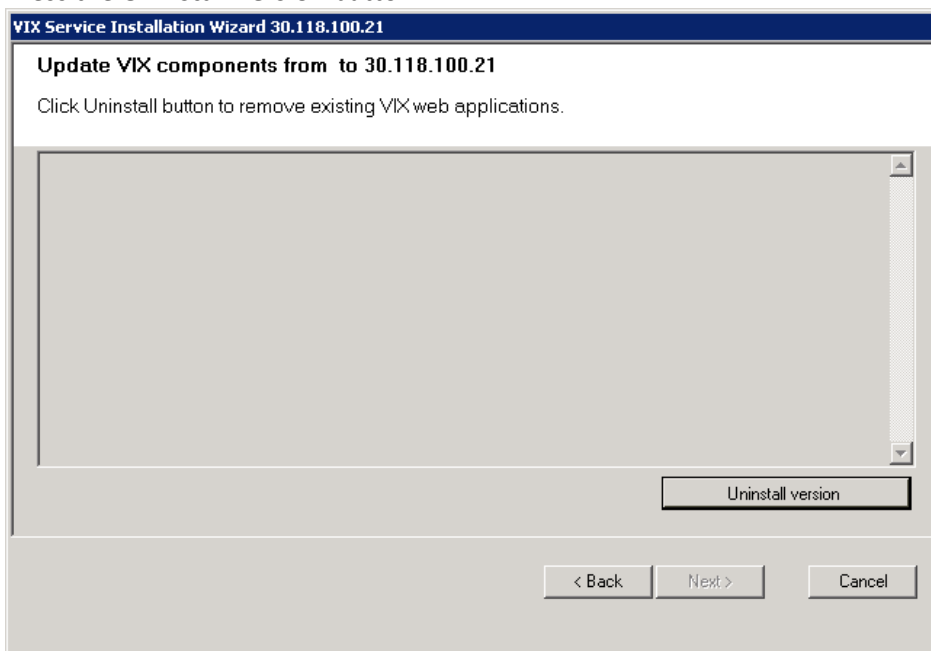
The configuration of the systems **will** need to be modified when they are deployed into production. The following steps should be performed after the servers have been fully configured with their proper hostnames and put into the correct domain:

4.1 Raptor VIX

1. Send an email to the VHAVIVIXSETUP@VA.GOV email group requesting a VIX certificate for the Raptor VIX. Include the fully qualified domain name of the Raptor VIX server in the message.
2. Delete the **e:\VixConfig\vhassites.xml** file if it exists.
3. Delete the **e:\VixConfig\VixInstallerConfig.xml** file
4. Delete the **e:\VixCertStore** directory
5. From the **Start** menu select **Programs → Vista Imaging Programs → VIX Service Installation Wizard**.



6. Press the **Next** button.
7. Press the **Uninstall version** button.



8. Press the **Next** button.
9. Enter site **9999** and press **Lookup Server Addresses**

Note: the site number **9999** must be registered in the VA Site Service as the Raptor VIX. If another site number is designated for the Raptor VIX in the site service then that number should be used here.

10. Press the **Next** button.

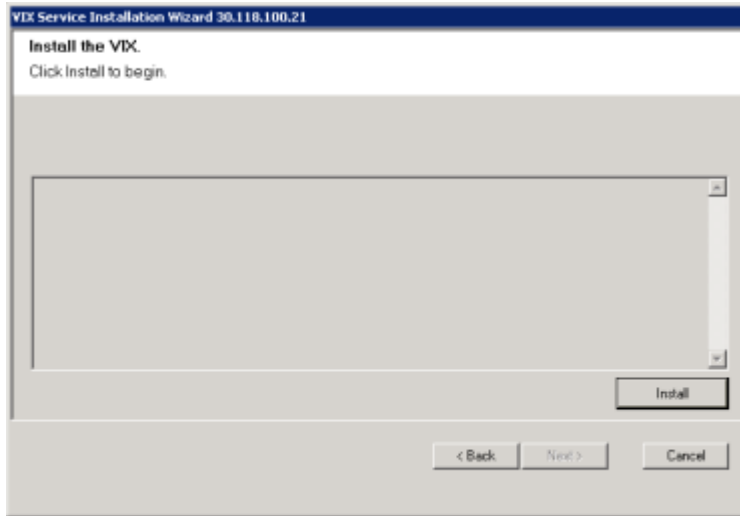
11. In step 8, select the new certificate zip file issued by Vista Imaging for the Raptor VIX.

12. Press the **Next** button when all prerequisites have been met.

13. Press the **Next** button because the directories have already been created.

14. Press **Next** to skip configuring local DoD connections for images.

15. Press the **Install** button to install the VIX service.



16. When complete, press the **Finish** button to close the VIX Service Installation Wizard.

4.2 Hydra

On each system Hydra is installed, the following configuration changes need to be made after the servers have been configured:

1. Modify the **e:\program files\ISI Imaging\Hydra.Host.Service.exe.config** file and change the **Hydra.PublicUrl** to the hostname needed to access Hydra (this is the fully qualified domain name of the web server Hydra is running on).
2. Modify the **ISIXServer.HostName** to the hostname of the Raptor VIX server.
3. Save the **Hydra.Host.Service.exe.config** file and restart the **Hydra Service**.

Glossary

DCF – DICOM Connectivity Framework, a Laurel Bridge product.

DICOM – Digital Imaging and Communications in Medicine

URI – Uniform Resource Identifier. Describes a name of a resource.

URL – Uniform Resource Locator. Defines a reference to a resource.

VA – Department of Veterans Affairs

VistA – A hospital information/electronic health record system developed by the Department of Veterans Affairs for use in VA hospitals. VistA stands for *Veterans Health Information Systems and Technology Architecture*.

VIX – VistA Imaging exchange service.

VistA Imaging –A VistA package used to manage images associated with a patient record in VistA.