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AppZero

How to Create an Apache 2.2 VAA

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About This Document

AppZero is an application virtualization solution for the data center that turns Windows applications into discrete, movable objects called AppZero virtual application appliances (VAA).

This document describes the steps for creating an Apache 2.2 VAA.

Additional Information

The resources in this table can help you learn more about AppZero.

To more learn about	See
Creating and managing AppZero virtual application appliances (VAA). Among other things, this guide describes installing AppZero and using VAA Creator.	AppZero User Guide
Important and late breaking information	AppZero Release Notes
Other services and products	www.appzero.com

What's Ahead

In this document, you will use AppZero VAA Creator to create a VAA that contains Apache 2.2.

In the prerequisites section, you will learn what software needs to be installed before you begin.

Throughout the remainder of the document, you will follow these steps:

- Create the VAA
- Move the VAA
- Test the VAA

Appendix A provides the steps for installing Apache 2.2.

Software and hardware prerequisites

Before you create the VAA, you will need to install AppZero 4.1 32-bit on both the source and target host computers. The source host is the computer upon which the VAA is created; the target host is the computer upon which the VAA is deployed and used.

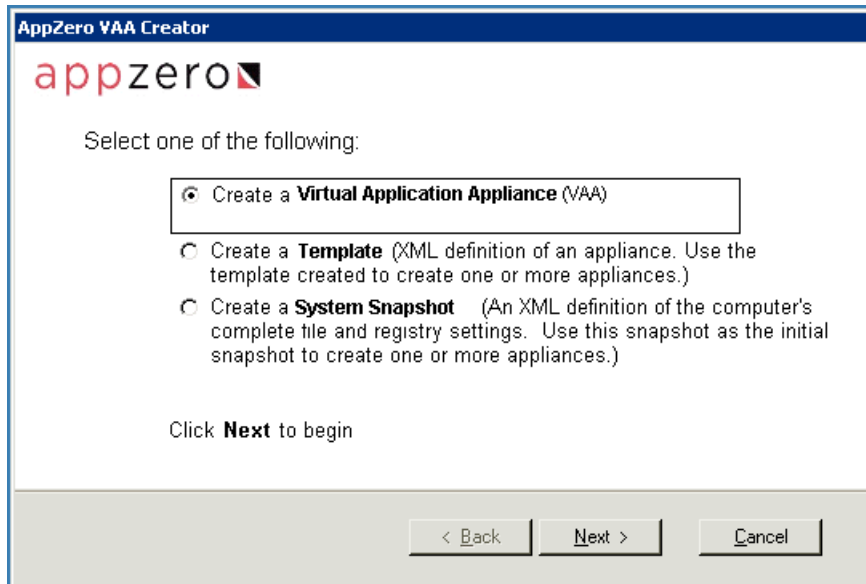
Note: *You must make sure that the version of AppZero and the platform are both 32-bit.*

Also, it is recommended that you start with a clean source computer; that is, a computer where Apache 2.2 has never been installed. In doing so, you avoid the chance of missing files and registry settings or including unnecessary files or registry settings in the VAA.

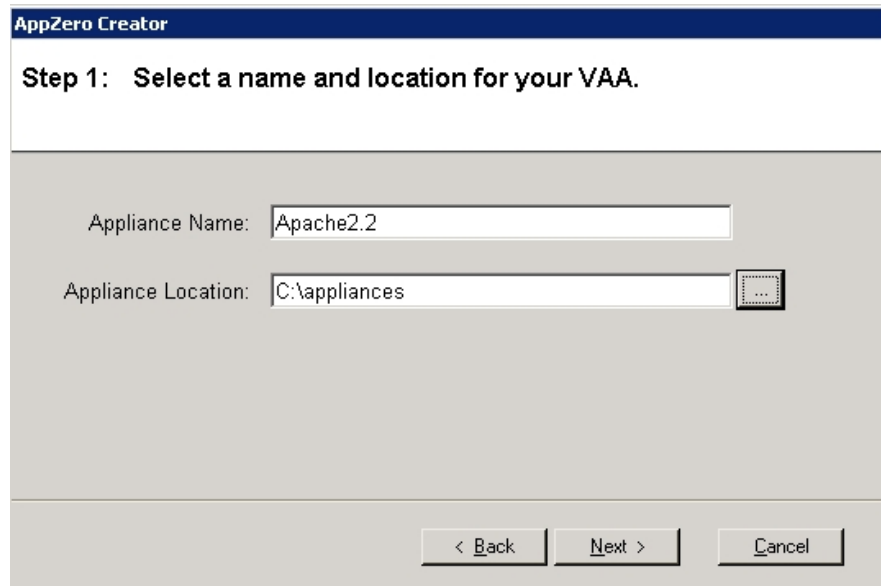
For information about supported platforms and installing AppZero 4.1, see the *AppZero User Guide*.

Creating the VAA

1. On the source host, start VAA Creator, select **Create a Virtual Application Appliance**, and then click **Next**.



2. Enter the name and location for the VAA, and then click **Next**.



3. Select **Snapshot** as the source to create the VAA, and then click **Next**.

The screenshot shows the 'AppZero Creator' window at 'Step 2: Select a source to create the appliance'. It features three radio button options: 'Snapshot' (selected), 'Appliance', and 'Template'. Each option has a descriptive text box. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

AppZero Creator

Step 2: Select a source to create the appliance

- Snapshot:** Create an appliance by comparing an initial and final snapshot of the operating system. The appliance's components (files, registry entries, and services) are defined by the differences between the two snapshots.
- Appliance:** Duplicate an appliance. The duplicate appliance is assigned a unique identifier ("CID") to distinguish it from the original appliance.
- Template:** Create an appliance from a template. The application's components must be already installed on this computer.

< Back Next > Cancel

4. Select **Create a new initial system snapshot**, and then click **Next**.

The screenshot shows the 'AppZero Creator' window at 'Step 3: Select the initial snapshot'. It includes a text box explaining that users can either create a new snapshot or use an existing one. There are two main options: 'Create a new initial system snapshot.' (selected) and 'Select a saved snapshot'. The 'Create a new...' option has a sub-section 'Save snapshot' with a checkbox and two text boxes for 'Snapshot File Name' and 'Snapshot File Location'. The 'Select a saved snapshot' option has a text box. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

AppZero Creator

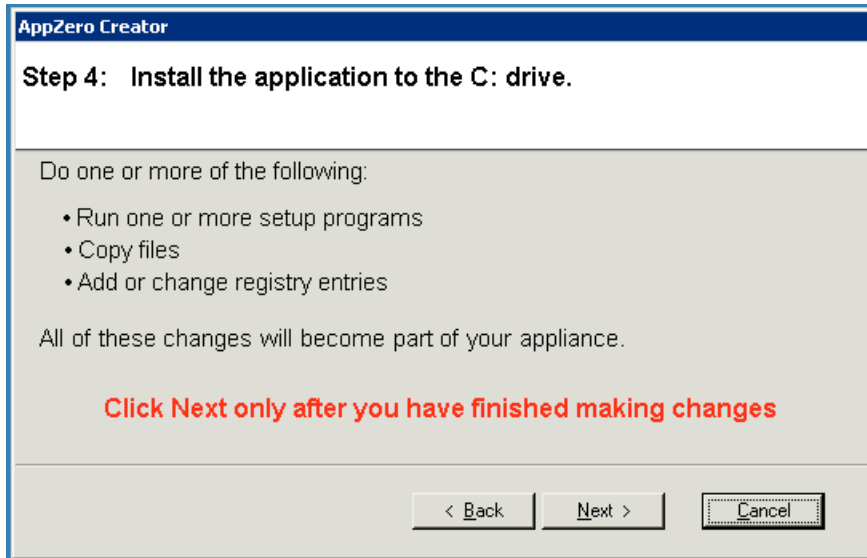
Step 3: Select the initial snapshot

You can either create a snapshot or use an existing one for the initial snapshot.

- Create a new initial system snapshot.**
 - Save snapshot
 - Snapshot File Name:
 - Snapshot File Location: ...
- Select a saved snapshot** ...

< Back Next > Cancel

The initial snapshot is created and the following window appears:



Important: Do not click Next or close this window. This window must remain open while you install Apache 2.2.

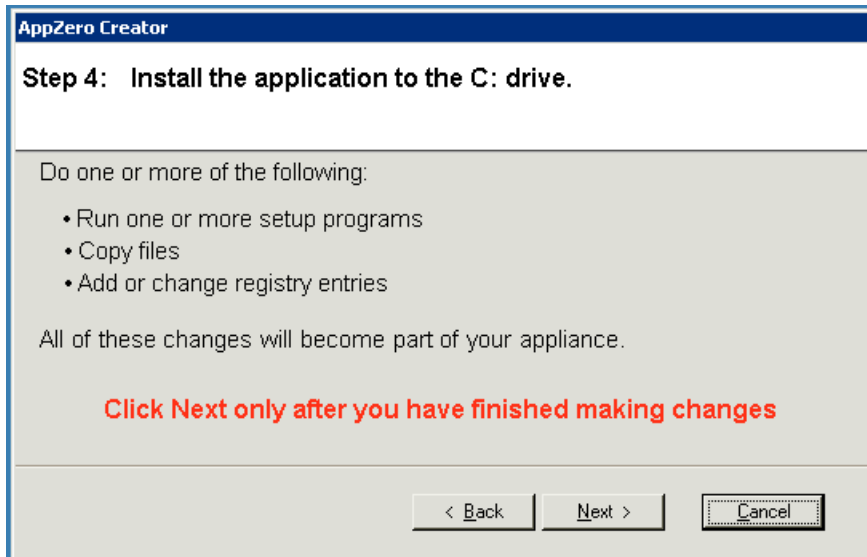
All of the changes that you make from this point will become part of the VAA.

5. Install Apache 2.2 on the source computer's C: drive.

For information about installing Apache 2.2, see Appendix A.

Once the Apache 2.2 installation is complete, you are ready to create the final snapshot.

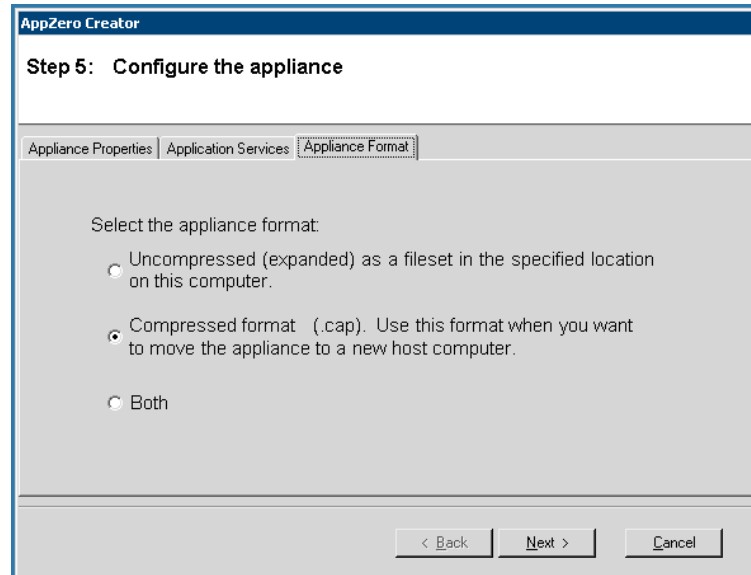
6. Locate the AppZero window, and then click **Next**.



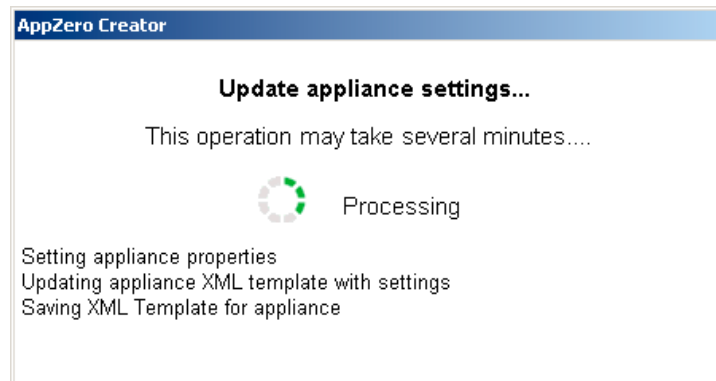
VAA Creator takes the final snapshot and compares the initial and final snapshots to create the VAA.

Important: Do not change or add files to the computer while this process is running. This includes using the web browser.

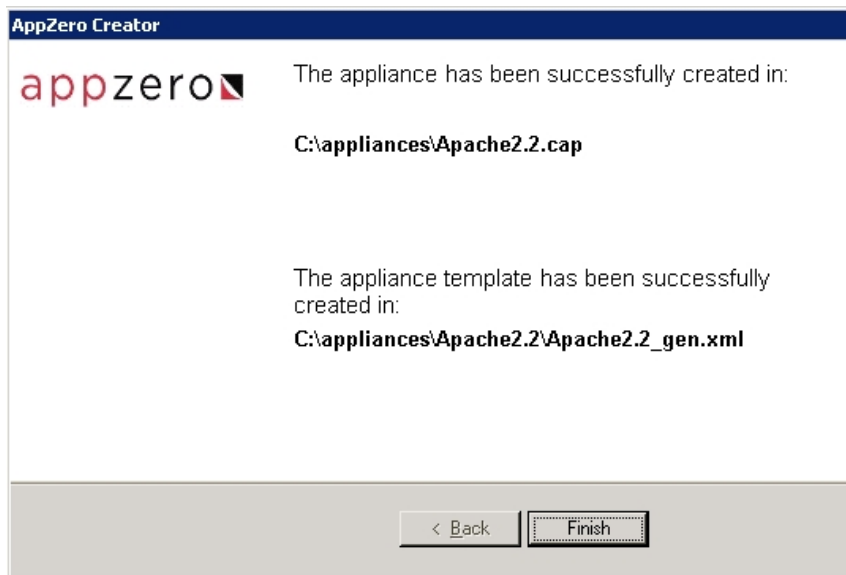
7. In the Appliance Format tab of the Configure the Appliance window, select **Compressed format** to save the VAA as a .cap file so that you can easily move the VAA to the target host.



8. Click **Next**. Wait for AppZero to finish processing the VAA.



When the processing is completed, the following window appears:



9. Click **Finish**.

Moving the VAA

To move a VAA to the target host, you must move the compressed VAA (Apache 2.2.cap). Then, you must uncompress the file to begin using the VAA. One of the reasons for compressing the VAA is to preserve the short file names of the files in the VAA as they exist on the source computer.

Note: Do not use a third party file compression application to compress the VAA.

1. Move the Apache 2.2.cap file to the C:\appliances directory on the target host.
2. In the Command Prompt window, change to the AppZero folder.

```
cd C:\Program Files\AppZero
```

3. Uncompress the .cap file.

```
uncompress C:\appliances\Apache 2.2.cap
```

Testing the VAA

Before you test the VAA, make sure that the environment on the target host where you will be running the test is configured to meet the configuration requirements of Apache 2.2 in the VAA.

To test the VAA

1. To configure Apache 2.2, use a text editor to edit the httpd.conf file in the following directory:

C:\appliances\Apache2.2\cstore\Program Files\Apache Software Foundation\Apache2.2\conf

2. Make the following changes, and then save the file.

Listen 58080

ServerAdmin admin@appzero.com

ServerName www.appzero.com:58080

3. Open a Command Prompt window, and then change to the AppZero directory (by default, C:\Program Files\AppZero).

4. At the command prompt, type the following:

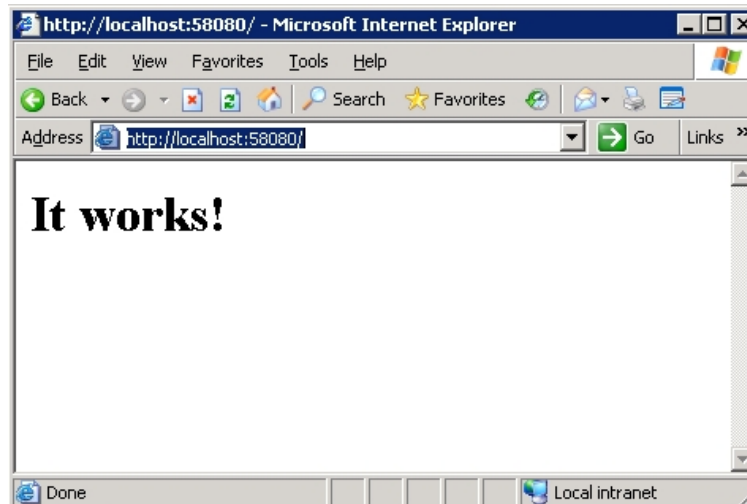
cd C:\appliances\Apache 2.2

5. At the command prompt, type the following:

appstart C:\appliances\Apache 2.2

6. Open a Microsoft Internet Explorer window at <http://localhost:58080/>. (58080 is the port number that you configured in Step 2).

The Microsoft Internet Explorer window displays.



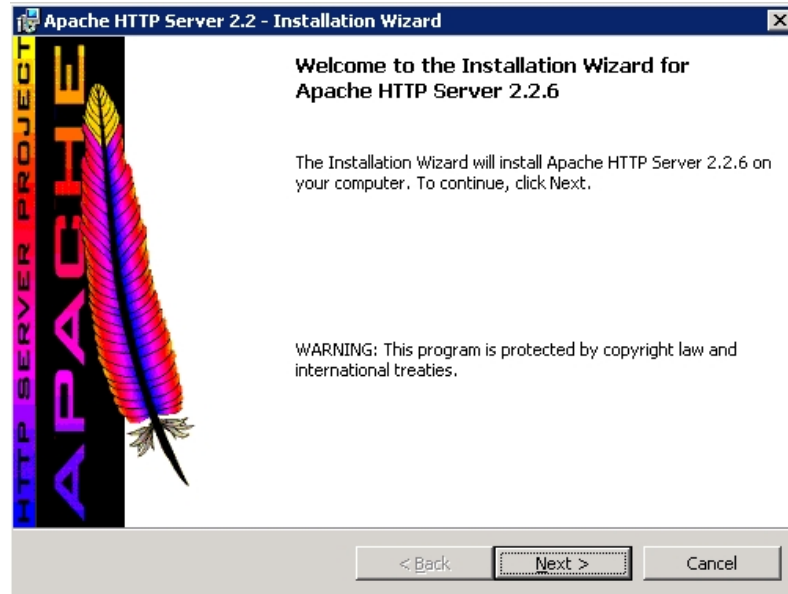
Note: You can see this page from any computer when you know the IP address of the computer where Apache 2.2 is running. For example, if your IP address is 10.1.6.98, then the page appears when you type http://10.1.6.98:58080 in an

Internet Explorer window on another computer. Activate your own web by placing your web files in the following location:

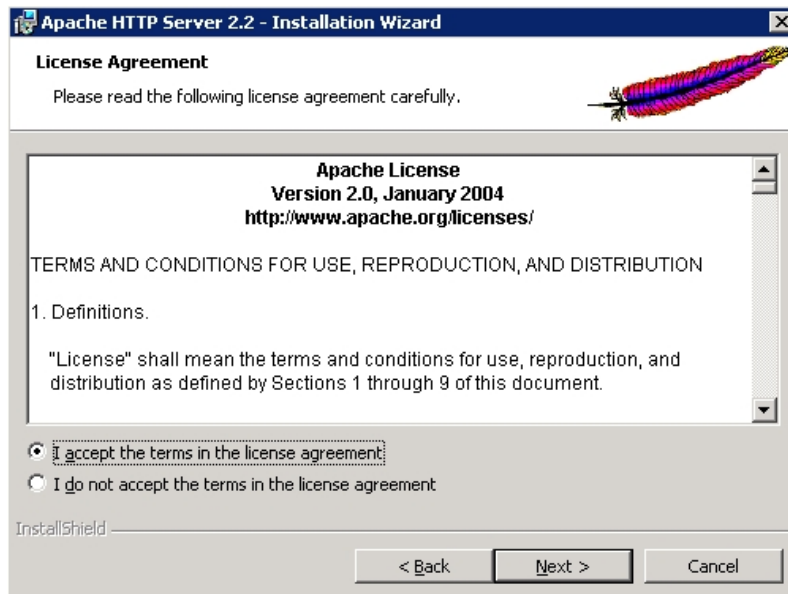
C:\appliances\Apache2.2\cstore\Program Files\Apache Software Foundation\Apache2.2\htdocs

Appendix A: Installing Apache 2.2

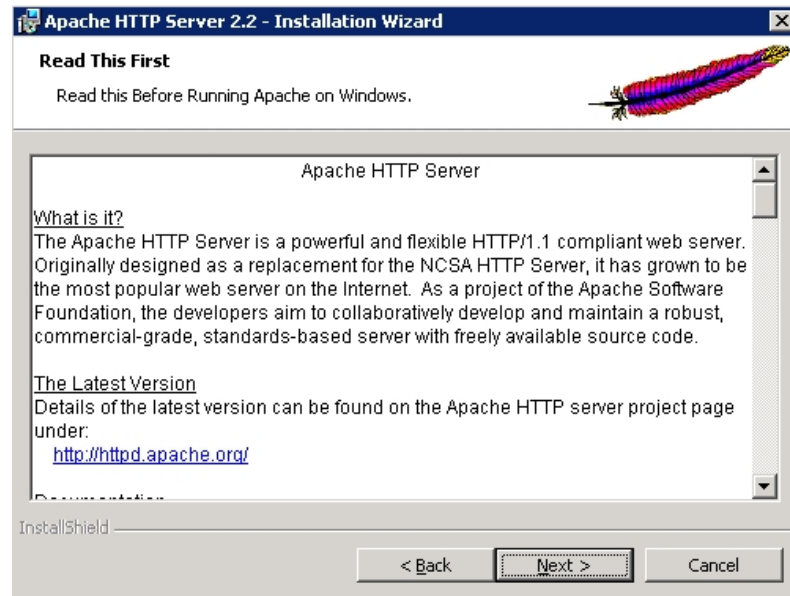
1. Start the Apache 2.2 installer, and then click **Next**.



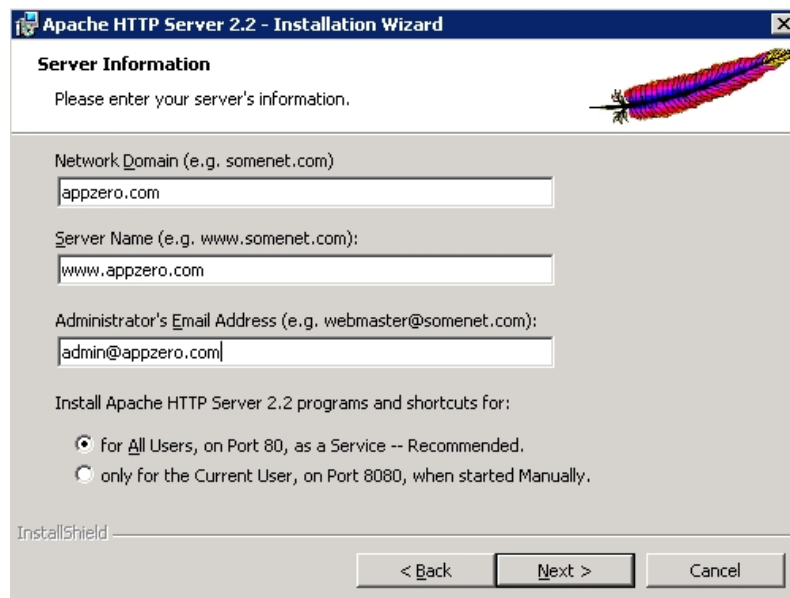
2. Accept the License Agreement, and then click **Next**.



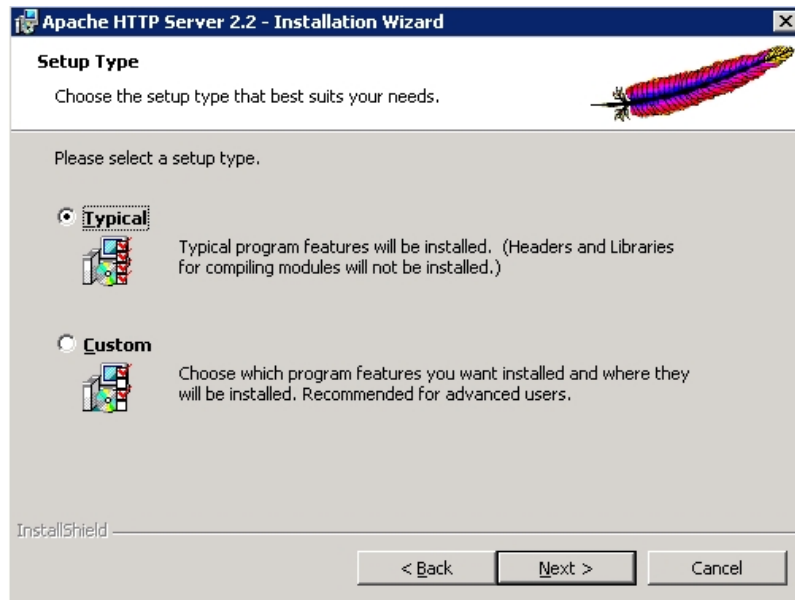
3. Read the Apache HTTP Server description, and then click **Next**.



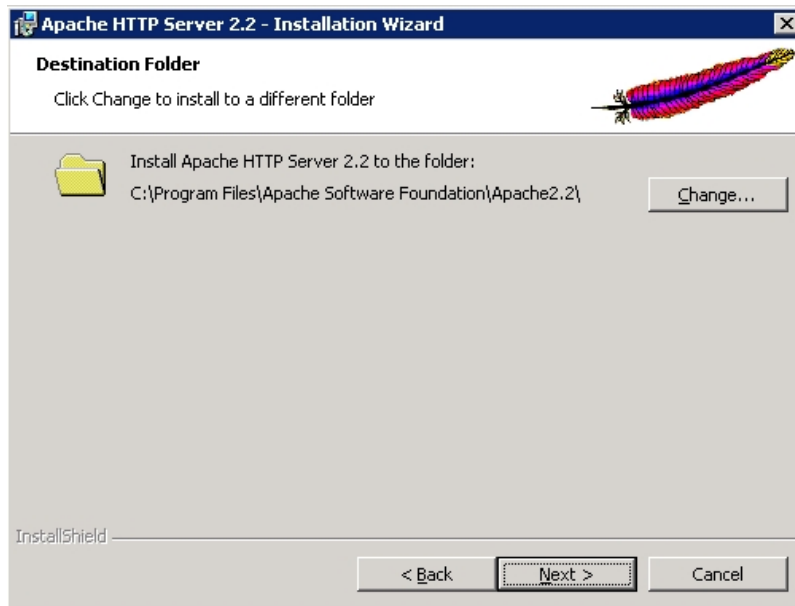
4. Enter the server information, and then click **Next**. You can also enter or change this information at a later time.



5. Click **Next**.

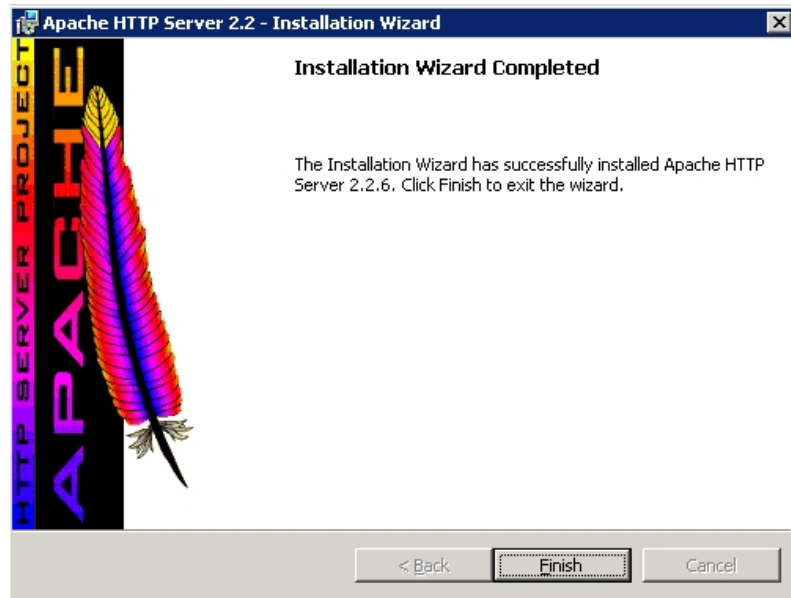


6. Click **Next**.

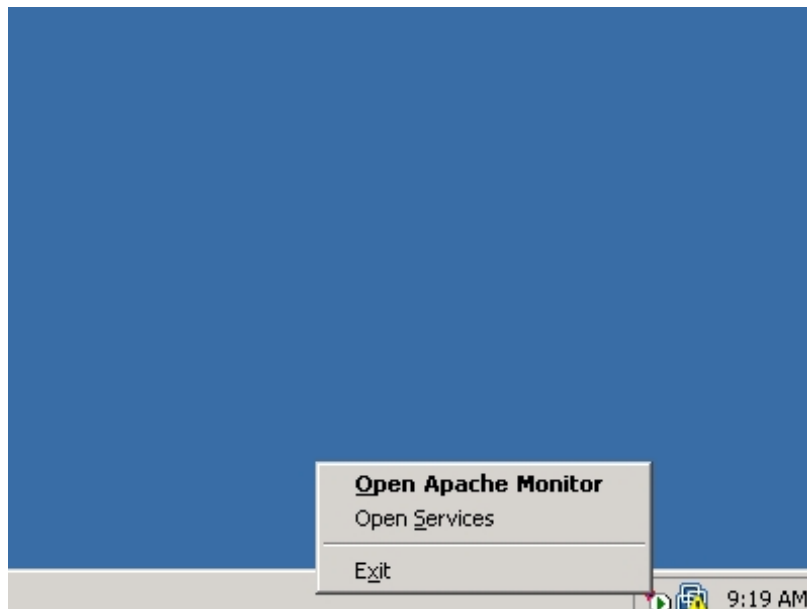


7. Click **Install**.

8. Click **Finish**.



9. Right-click the Apache icon at the lower-right side of the desktop, and then click **Open Apache Monitor**.



10. To stop the Apache service, click **Stop**. Click **Exit**.

