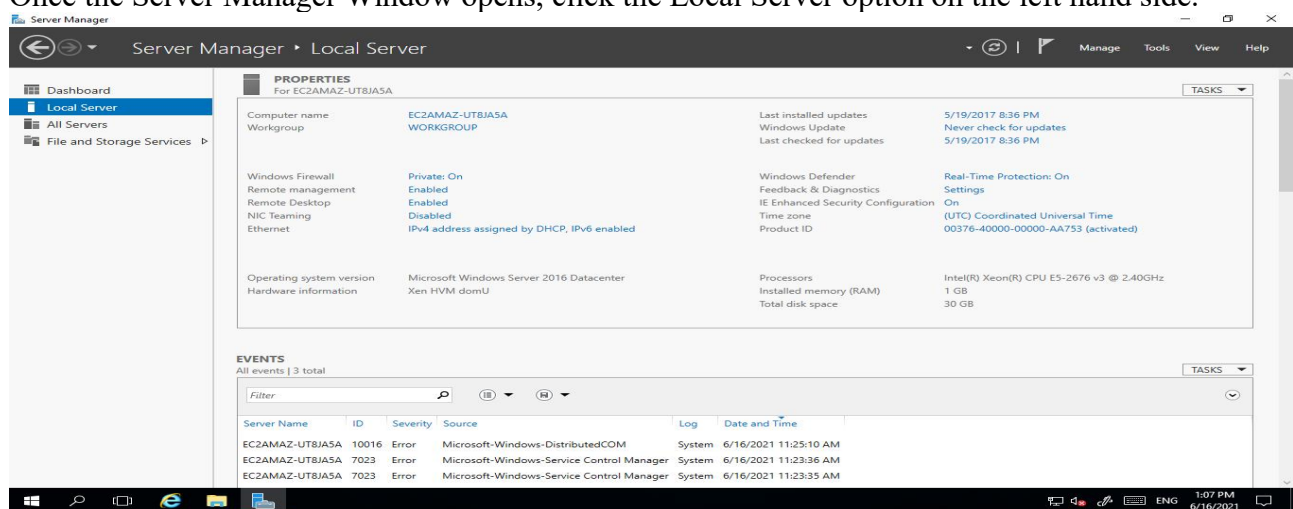


# Creating a Web site in Windows EC2 Instance

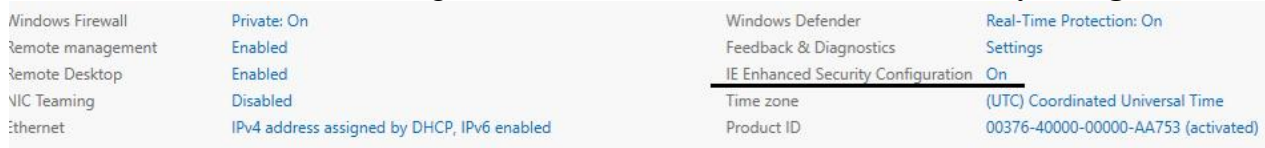
The steps below install open-jdk and tomcat server on the Windows EC2 instance. If you have not created a Windows EC2 instance, please follow the steps provided into the separate guide provided.

Perform all the below steps in the remote desktop screen of the EC2 instance.

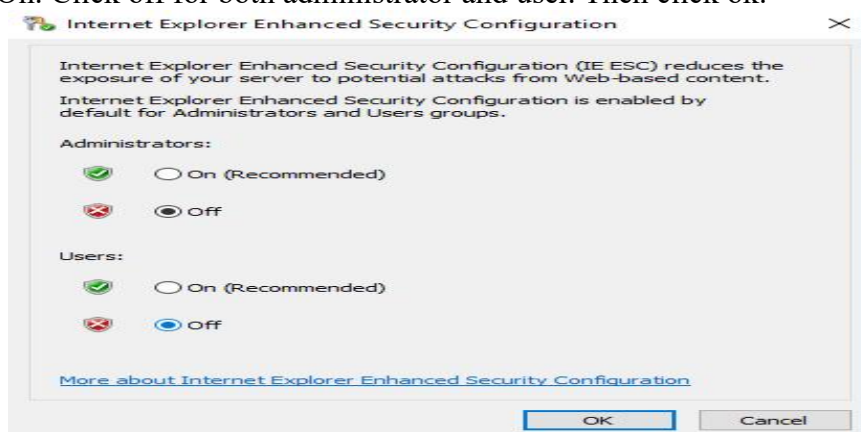
1. first we need to reduce the Internet Explorer security. On Server the IE security is enhanced, which creates a problem while downloading packages. For this click the search button of the screen on the left side. Then in the search box type Server Manager. Click on the Server Manager above. Once the Server Manager Window opens, click the Local Server option on the left hand side.



2. In the above window, on the right hand side check for **IE Enhanced security configuration**.



3. Click on the On. Click off for both administrator and user. Then click ok.

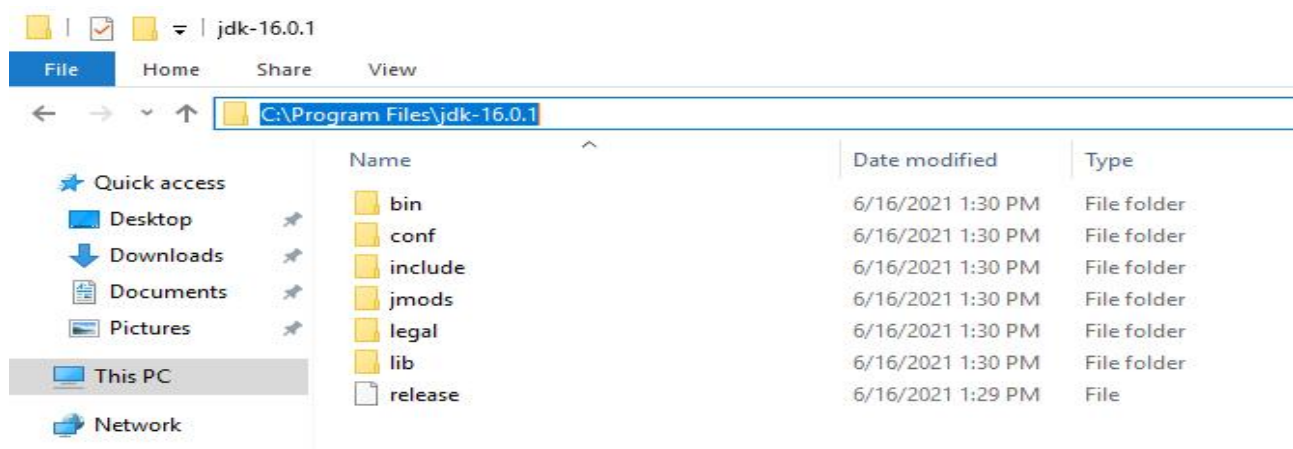


4. Now open Internet Explorer. Go to the website <https://jdk.java.net/>. Click on JDK16 to download. On the page that opens, click zip in front of Windows/x64.

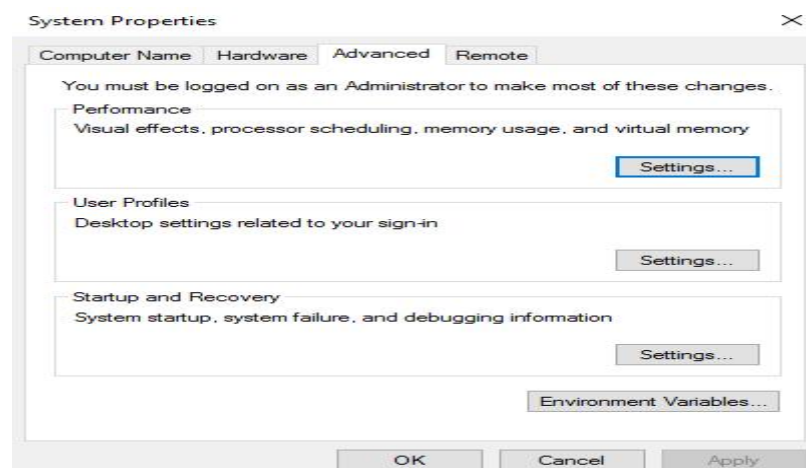
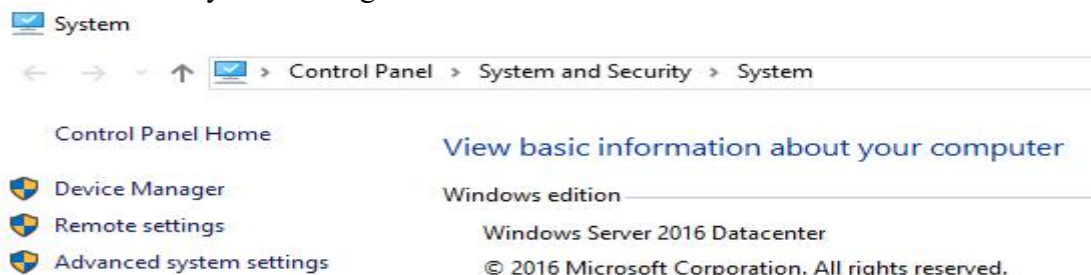
#### Builds

<b>Linux/AArch64</b>	<a href="#">tar.gz (sha256)</a>	174498972 bytes
<b>Linux/x64</b>	<a href="#">tar.gz (sha256)</a>	184332972
<b>macOS/x64</b>	<a href="#">tar.gz (sha256)</a>	181628041
<b>Windows/x64</b>	<a href="#">zip (sha256)</a>	183657432

5. Click Save. Then click open folder option in the internet explorer option or open windows explorer and go to Downloads folder. Double click on the zip file downloaded and copy the **jdk-16.0.1** folder to the c:\program files directory. Double click on the folder and click on the path tab to display the path as shown below. Copy the path.

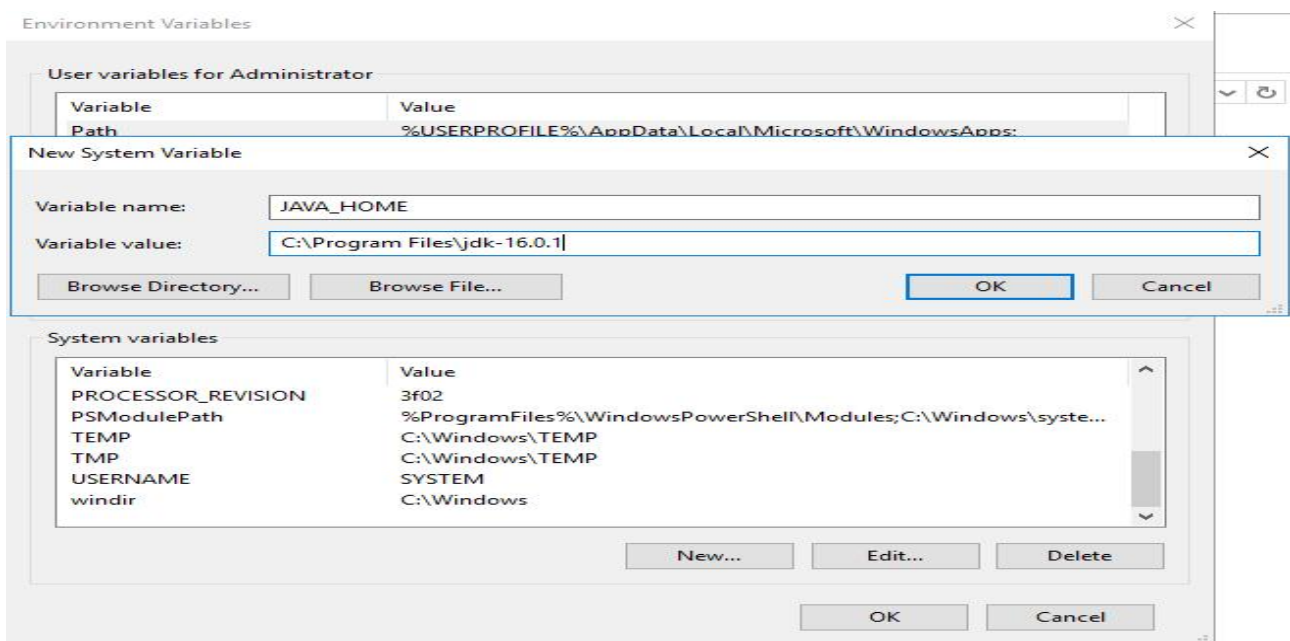


6. In the above window, right click **This PC** option and click properties. In the new window that opens click Advanced system settings on the left side.

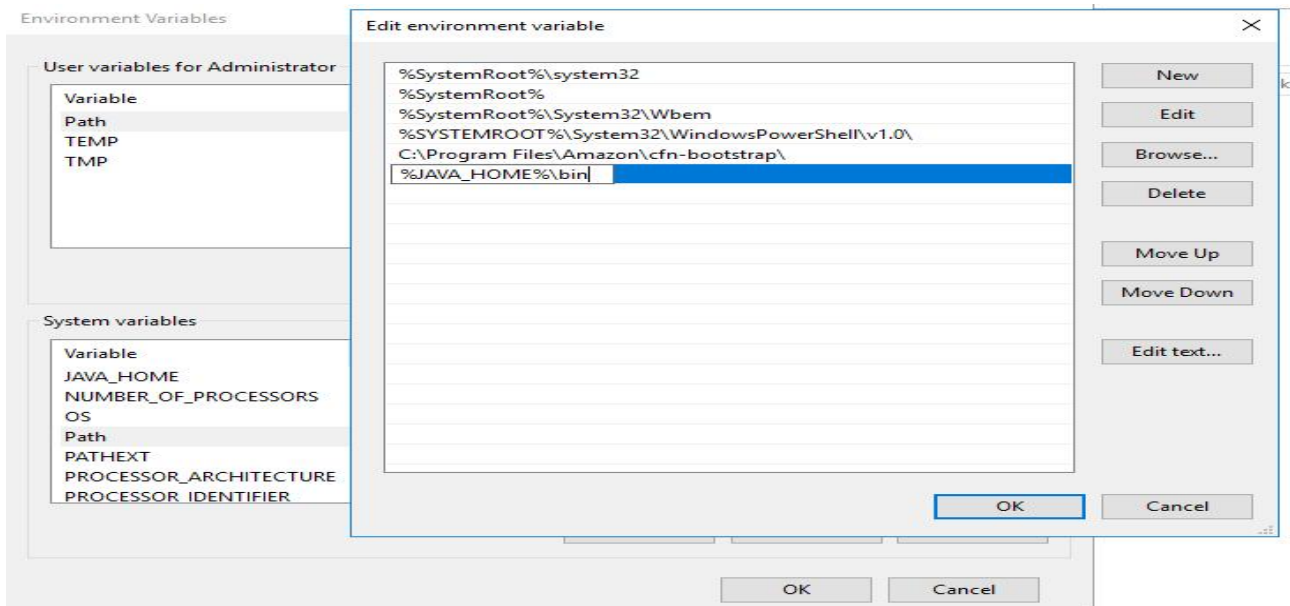


7. In the system properties window click Environment Variables button below.

8. In the window that opens, in the system variable section click New and add JAVA\_HOME as the variable name and in the variable value paste the path of the jdk directory. Click OK.

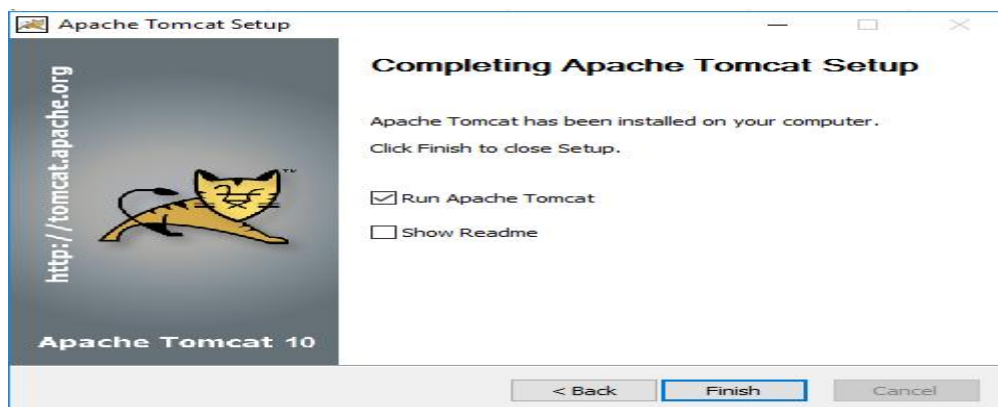


9. Now in the system variable select PATH variable and click Edit. Then click Edit. In the new window that opens, click New and add %JAVA\_HOME%\bin. Then Click OK on all windows to close.

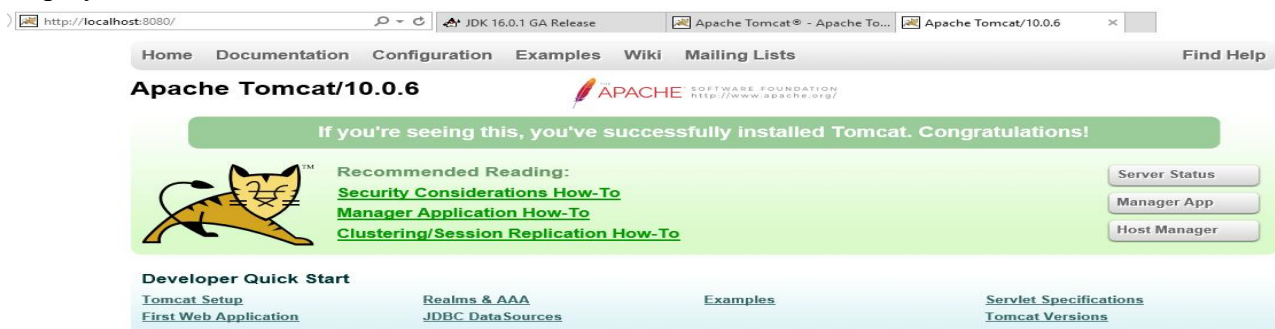


10. Now go to Internet explorer and go to <https://tomcat.apache.org/download-10.cgi> . Then scroll down and download **32 bit/64 bit Windows Service Installer**. Save the file.

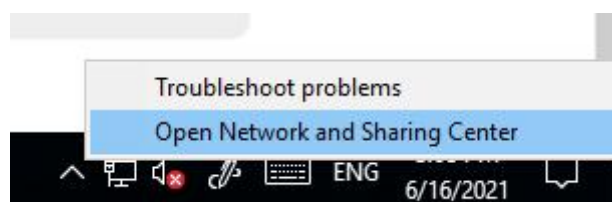
11. Once the download is complete, go the Downloads folder and double click on the installer. Click the default option or next to install the tomcat server. On the last screen uncheck show readme and click finish.



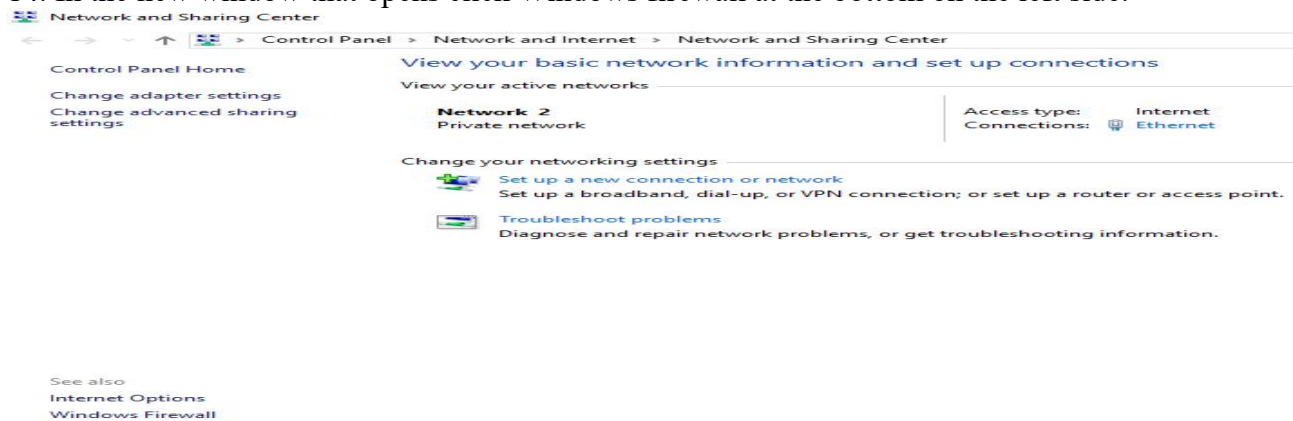
12. Now in the Internet Explorer type **http://localhost:8080/**. The following tomcat page should be displayed.



13. Now to open port in Windows firewall right click on the network icon. Click Open Network and Sharing Center.



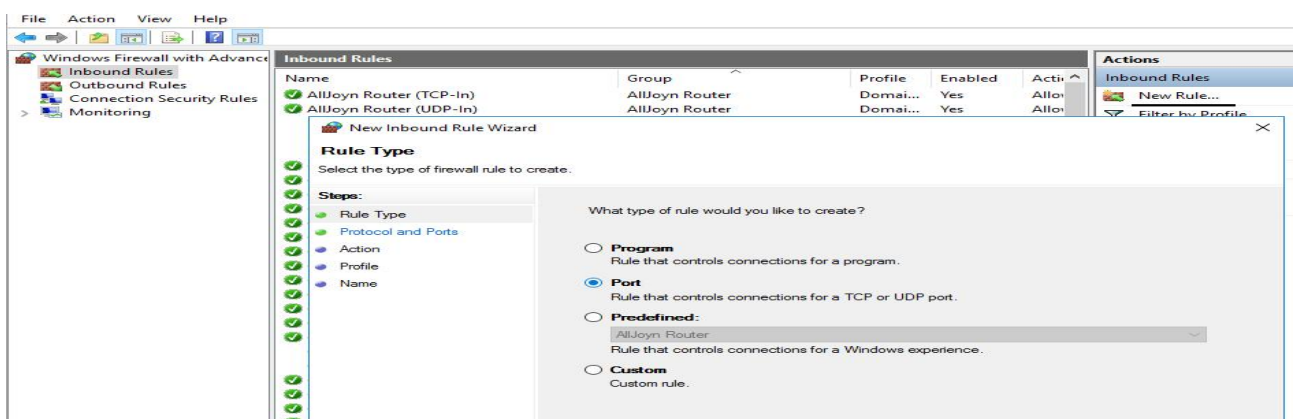
14. In the new window that opens click Windows firewall at the bottom on the left side.



15. In the new Window that opens click Advanced setting on the left side.



16. In the new window that opens click Inbound rules. Then click New rule option on the right hand side. In the new window that opens, click port option and click next.



17. On the next screen just type 8080 in the Specific local ports field. Click Next.



New Inbound Rule Wizard

**Protocol and Ports**

Specify the protocols and ports to which this rule applies.

**Steps:**

- Rule Type
- Protocol and Ports
- Action
- Profile
- Name

Does this rule apply to TCP or UDP?

☒ TCP

☐ UDP

Does this rule apply to all local ports or specific local ports?

☐ All local ports

☒ Specific local ports:

Example: 80, 443, 5000-5010

< Back   Next >   Cancel

18. On the next screen just click Next.

19. On the next screen also click Next.

20. On the last screen in the name field type tomcat and click Finish. Then close all windows.

21. Now open this tomcat web server to internet by opening TCP port 8080 in the security group configuration settings associated with this Windows EC2 instance.

22. Minimize the remote desktop screen. Go to the AWS console window. Select the check box in front of the Windows EC2 instance. Below in the security tab click on the security group name.

Details   **Security**   Networking   Storage   Status checks   Monitoring   Tags

▼ Security details

IAM Role	Owner ID
	712185432598
Security groups	
<u>sg-0e44b8e7daca9fc5 (launch-wizard-29)</u>	

23. In the new page that opens click the **Edit inbound rules**. Click Add rule. Keep Custom TCP option as it is. In the port range type 8080. In the source keep custom and select 0.0.0.0/0. Then click Save rules button below.

## Edit inbound rules Info

Inbound rules control the incoming traffic that's allowed to reach the instance.

**Inbound rules** Info

Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Source <small>Info</small>	Description - optional <small>Info</small>	
RDP ▼	TCP	3389	Custom ▼ <input type="text" value="0.0.0.0/0"/>	<input type="text"/>	<div>Delete</div>
Custom TCP ▼	TCP	8080	Custom ▼ <input type="text" value="0.0.0.0/0"/>	<input type="text"/>	<div>Delete</div>

Add rule

24. Now in the laptop browser type <http://public-ip-windows-instance:8080>. You should be able to see the earlier tomcat page now.

You can close the remote desktop screen anytime. This will just close the connection with the Windows EC2 instance. Anytime you want to connect to this instance again just double click the rdp file downloaded and type the saved password.

**After the completion of this practical make sure you terminate the instance.**