Install VisualVM with OpenJDK

- 1. Download visualvm from: https://visualvm.github.io/download.html
- 2. Download Open JDK: https://jdk.java.net/
- 3. Unzip OpenJDKinstaller and pasted it on a prefer location i.e.:

📙 C:\jdk			
nts 🖈 ^	Name	Date modified	Туре
ds 🖈	📙 bin	7/16/2019 1:01 AM	File folder
*	onf	7/16/2019 1:01 AM	File folder
	📙 include	7/16/2019 1:01 AM	File folder
(S	📙 jmods	7/16/2019 1:01 AM	File folder
	📙 legal	7/16/2019 1:01 AM	File folder
er	📙 lib	7/16/2019 1:01 AM	File folder
	release	7/16/2019 1:01 AM	File

4. Add Java variable to environment variables:

👱 System		Environment Variables X
← → · ↑ 🛃 > Control	Panel > System and Security > System	
Control Panel Home		User variables for jason.montero
control and the	System Properties	Variable Value
🎈 Device Manager	Computer Name Hardware Advanced System Protection Remote	OneDrive C:\Users\jason.montero\OneDrive
 Remote settings System protection Advanced system settings 	You must be logged on as an Administrator to make most of these changes. Performance Visual effects, processor scheduling, memory usage, and virtual memory	Path C:\Users\jason.montero\AppData\Local/Microsoft\WindowsApps; TEMP C:\Users\jason.montero\AppData\Local\Temp TMP C:\Users\jason.montero\AppData\Local\Temp
	Settings User Profiles Desktop settings related to your sign-in Settings	New Edit Delete
	Startup and Recovery System startup, system failure, and debugging information Settings	Variable name: JAVA_HOME_ Variable value: CAVIDA
	Environment Variables	Browse Directory Browse File QK Cancel
See also	OK Cancel Apply	New Edit Delete
Security and Maintenance		OK Cancel

5. Then add the OpenJDK path to Path variables on the "Environment variables", in order to make java available on the command line:

System And Security > System System And Security > System Control Panel Home System Properties Device Manager Computer Name Hardware Advanced System Protection Remote Varia Computer Name Hardware Advanced System Protection Remote System Root Ski System 32(Windows ProverShell(V1.0) Edit Varia Computer Name Hardware Advanced System Protection Browse Varia of System settings System Settings Varia of Settings Varia User Profiles Desktop settings related to your sign in Settings System System settings System failure, and debugging information Settings System System settings System failure, and debugging information Settings System Varia Deck Deck Deck Deck Doke Environment Variables System OK OK Cancel Advanced System Settings	👱 System			Edit environment variable	×	E
System startup. system failure, and debugging information Settings Environment Variables OK Cancel Apply Path C:\WINDOWS\System32:C\WINDOWS\System32:C\WINDOWS\System32:C\WINDOWS\System32:Wb	 System System Control Panel Home Device Manager Remote settings System protection Advanced system settings 	Panel > System and Security > System System Properties Computer Name Hardware Advanced System Protection Remote You must be logged on as an Administrator to make most of these changes. Performance Visual effects, processor scheduling, memory usage, and vitual memory Usaul effects, processor scheduling, memory usage, and vitual memory Settings User Profiles Desktop settings related to your sign-in Settings	Environm User va Varia One[Path TEM]	Edit environment variable %SystemRoot%\system32 %SystemRoot%\System32\Wibem %SYSTEMROOT%\System32\Wibem %SYSTEMROOT%\System32\WindowsPowerShell\v1.0\ C\Bin\PHP C\Program Files\&0\Windows Live\Shared C\Program Files\PuTT\\ C\gitkbin	X Edit Browse Delete Move Up Move Down Edit text	
See also	See also	Startup and Recovery System startup, system failure, and debugging information Settings Environment Variables OK Cancel Apply	System Varia Doka Doka JAVA NUM OS Path	Windows_N1 C:\WINDOWS\svstem32:C:\WINDOWS:C\\WINDOW	Cancel	

6. Confirm that OpenJDK was installed correctly by running the following command "Java - version":

C:\WINDOWS\system32\cmd.exe

```
Microsoft Windows [Version 10.0.15063]
(c) 2017 Microsoft Corporation. All rights reserved.
C:\Users\jason.montero>java -version
openjdk version "12.0.2" 2019-07-16
OpenJDK Runtime Environment (build 12.0.2+10)
OpenJDK 64-Bit Server VM (build 12.0.2+10, mixed mode, sharing)
C:\Users\jason.montero>
```

7. Unzip visualvm to any location you like:

This PC > Downloads > visualvm_143 > visualvm_143 Size Name Date modified Type 8/29/2019 10:13 AM File folder bin 5/30/2019 2:29 PM File folder etc platform 5/15/2019 12:53 PM File folder profiler 5/15/2019 1:44 PM File folder visualvm 5/30/2019 2:29 PM File folder LICENSE.txt 5/17/2019 12:20 PM Text Document 19 KB 8. Open visualvm location on the command prompt:

C:\WINDOWS\system32\cmd.exe

4icrosoft Windows [Version 10.0.15063]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\jason.montero>cd C:\Users\jason.montero\Downloads\visualvm_143\visualvm_143\bin

C:\Users\jason.montero\Downloads\visualvm_143\visualvm_143\bin>

- 9. Start Visualvm from command prompt visualvm.exe --jdkhome "C:\jdk" : C:\Users\jason.montero\Downloads\visualvm_143\visualvm_143\bin>visualvm.exe --jdkhome "C:\jdk"
- 10. Then Visualvm will start correctly.

Connect Visualvm to an UCMDB Probe

- 1. Go to Probe bin folder "C:\UCMDB\DataFlowProbe\bin".
- 2. Edit the file named "WrapperGateway.conf".
- 3. Add the following line:

Visualvm configuration

wrapper.java.additional.65=-Dcom.sun.management.jmxremote.port=29898

```
_ □
                       WrapperGateway.conf - Notepad
                                                                    x
File Edit Format View Help
# Monitor exceptions
# the jvm is restarted in case of 'java.lang.OutOfMemoryError: Metaspace'
exception
wrapper.filter.trigger.1=java.lang.OutOfMemoryError: Metaspace
wrapper.filter.action.1=RESTART
# Run script to automatically upgrade probe if needed:
wrapper.event.jvm prelaunch.command.argv.1="%GW UPGRADE SCRIPT%"
wrapper.event.jvm_prelaunch.command.argv.1.stripquotes=TRUE
wrapper.event.jvm_prelaunch.command.block=TRUE
wrapper.event.jvm_prelaunch.command.block.timeout=30
# JVM exit handlers
# This is either Ctrl-C or other System.exit(0)
wrapper.on_exit.0=SHUTDOWN
# Any other exit we want to restart the probe
wrapper.on_exit.default=RESTART
#include %BASE DIR%/conf/WrapperGatewayCustom.conf
                                                                     ≡
# Visualvm configuration
wrapper.java.additional.65=-Dcom.sun.management.jmxremote.port=29898
```

- 4. Then restart the UCMDB Probe service.
- 5. Next open Visualvm tool and choose file>add JMX connection.

6. On connection add the host ip of the probe server, the port that we added on the wrapperGateway.conf file and the Probe JMX user and password:

Add JMX Conr	V Add JMX Connection	
Connection	10 10 15 221:20808	
connection.	Usage: <hostname>:<port> OR service:jmx:<protocd>:<sap></sap></protocd></port></hostname>	
Display name:	sysadmin@10.10.15.221:29898	
Use security cre	edentials	
Username:	sysadmin	
Password:	••••••	
Save sec	urity credentials	
Do not require	SSL connection	
	OK Cancel	

7. Click ok and you will be able to monitor the probe:





