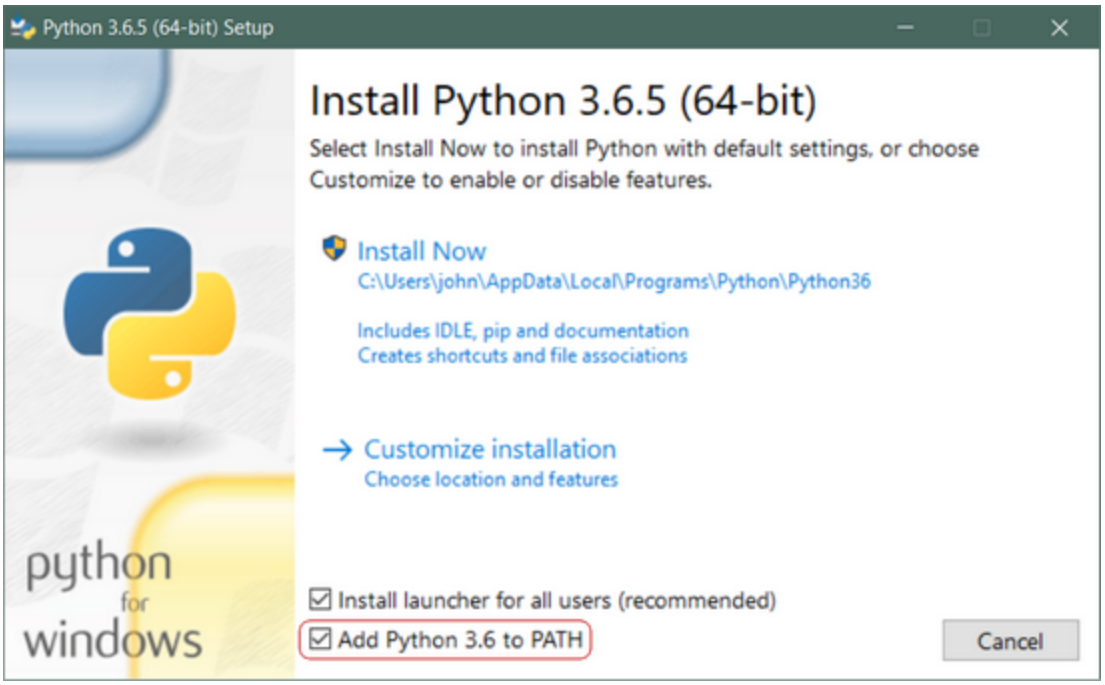
Step 1: Installing Python

No matter how you intend to utilize **Python** within **Ayehu NG** (even Custom Activities), **Python** must be installed directly on the server hosting **Ayehu NG** and/or its separate Executor components.

The latest version of **Python** for Windows can be downloaded directly from the official website (https://www.python.org/downloads/). **Python** must be installed directly on the Windows server running **Ayehu NG**.

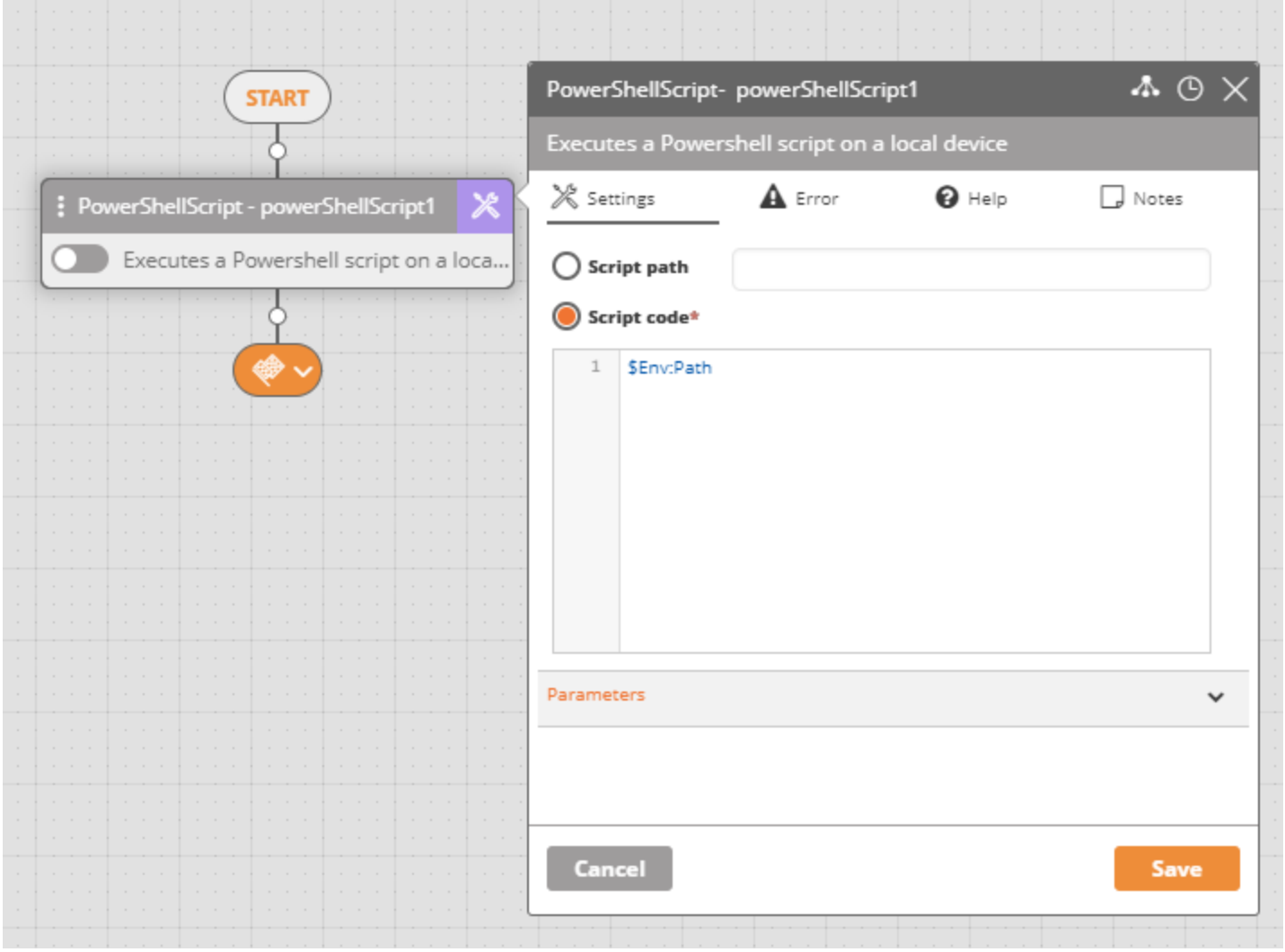
During installation, you must be sure that both of the optional checkboxes in the installation wizard as selected. They are both shown in the screenshot below ("Install launcher for all users" and "Add Python to PATH").



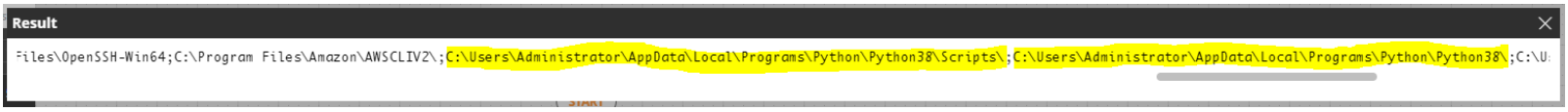
After the installation of **Python** on the server is complete, reboot it to ensure that all changes to the various users' environment variables are propagated successfully.

Step 2: Confirming Installation

Now that **Python** has been installed, it's important to test to make sure that the user account running **Ayehu NG** has the **Python** folders in its path. To test this, simply create a new, empty workflow and place in it one **PowerShellScript** activity that executes the command **$Env:Path**, which will return a list of all the folders that are part of the default path for the user under which **Ayehu NG** is running.

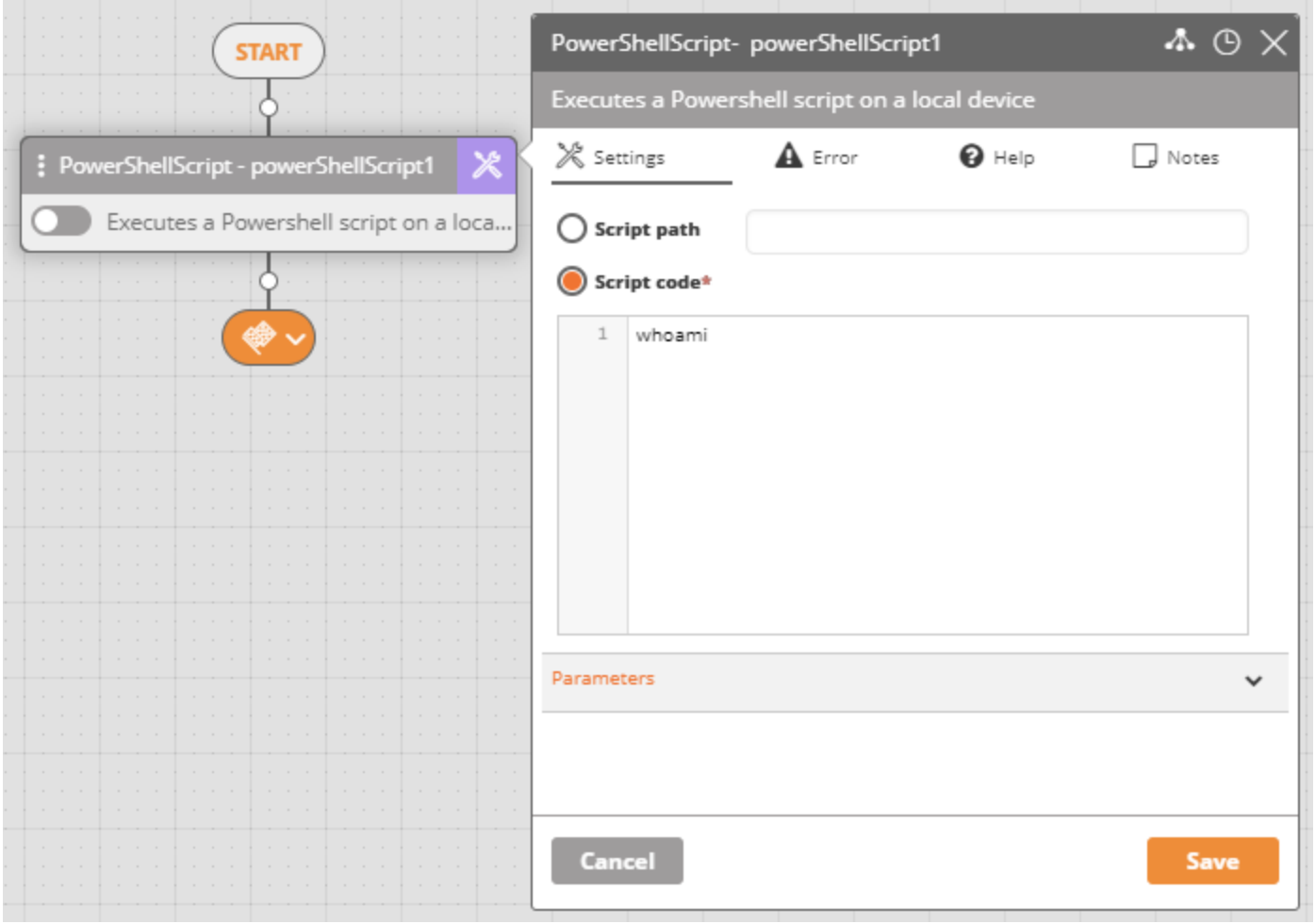


After running the workflow with this activity in it, you will have output returned to you that resembles what's seen in the screenshot below. Scroll through the output to ensure that you see the **Python** paths present.



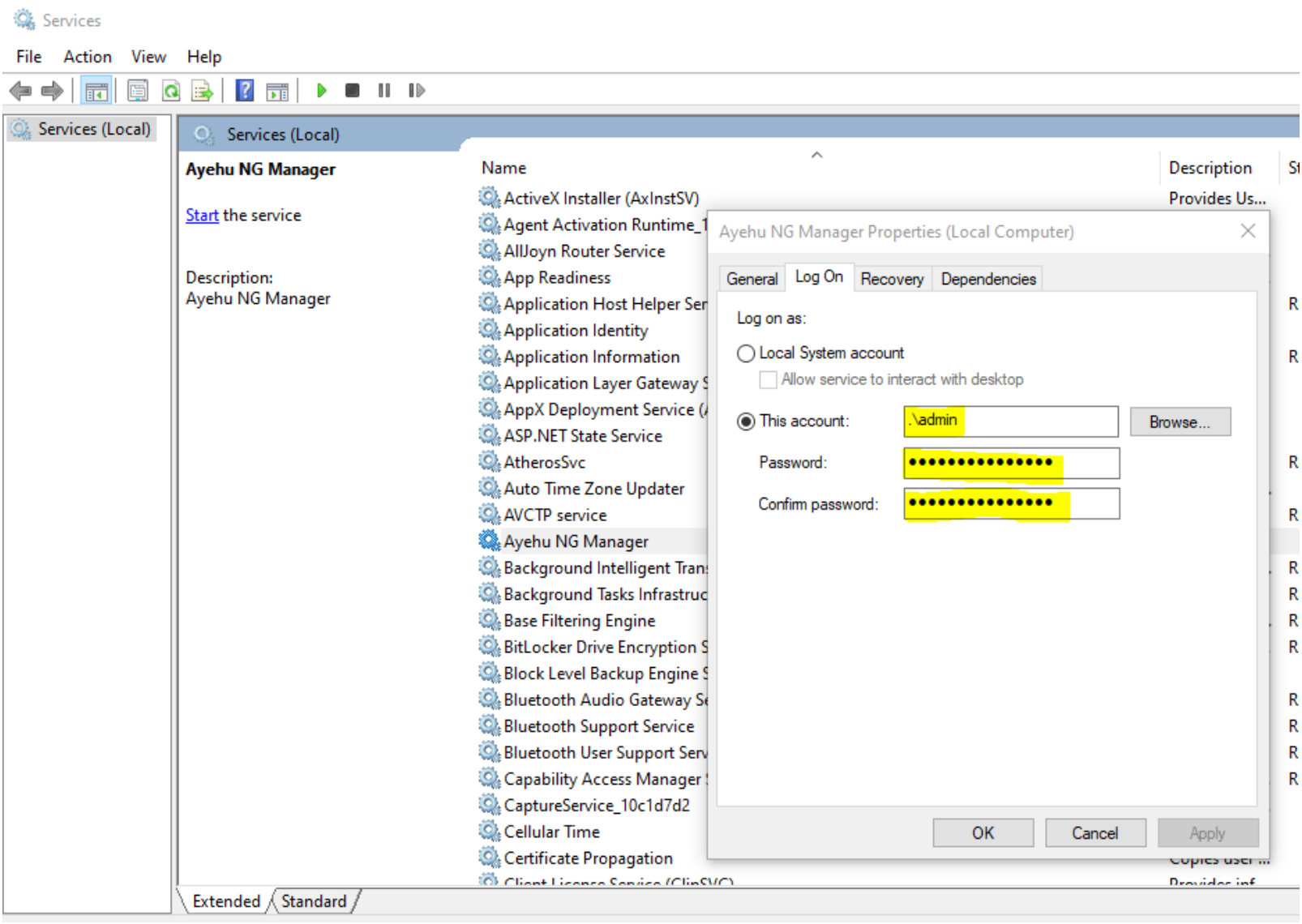
If you're unsure which folder paths to check for, you can compare what you see here with the environment variables from Windows' System Properties while logged into the **Ayehu NG** server under the account that's actually running **Ayehu NG**.

If you're unsure of which user account is running **Ayehu NG**, there are two ways to find out. The first is to again use a **PowerShellScript** activity, but this time issue the **whoami** command to return the full username of the account that is running **Ayehu NG**. The activity is simple to configure, as seen in the screenshot below.

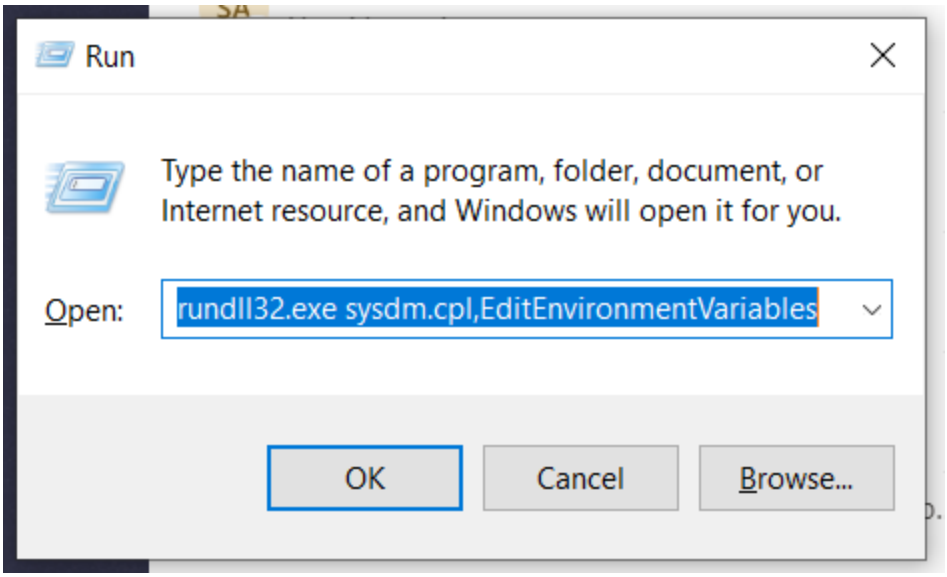


Event Type	Activity Name	Status	Result
Incoming event			
PowerShellScript	powerShellScript1	Executed	ec2amaz-epog264\administrator
Terminate		Executed	

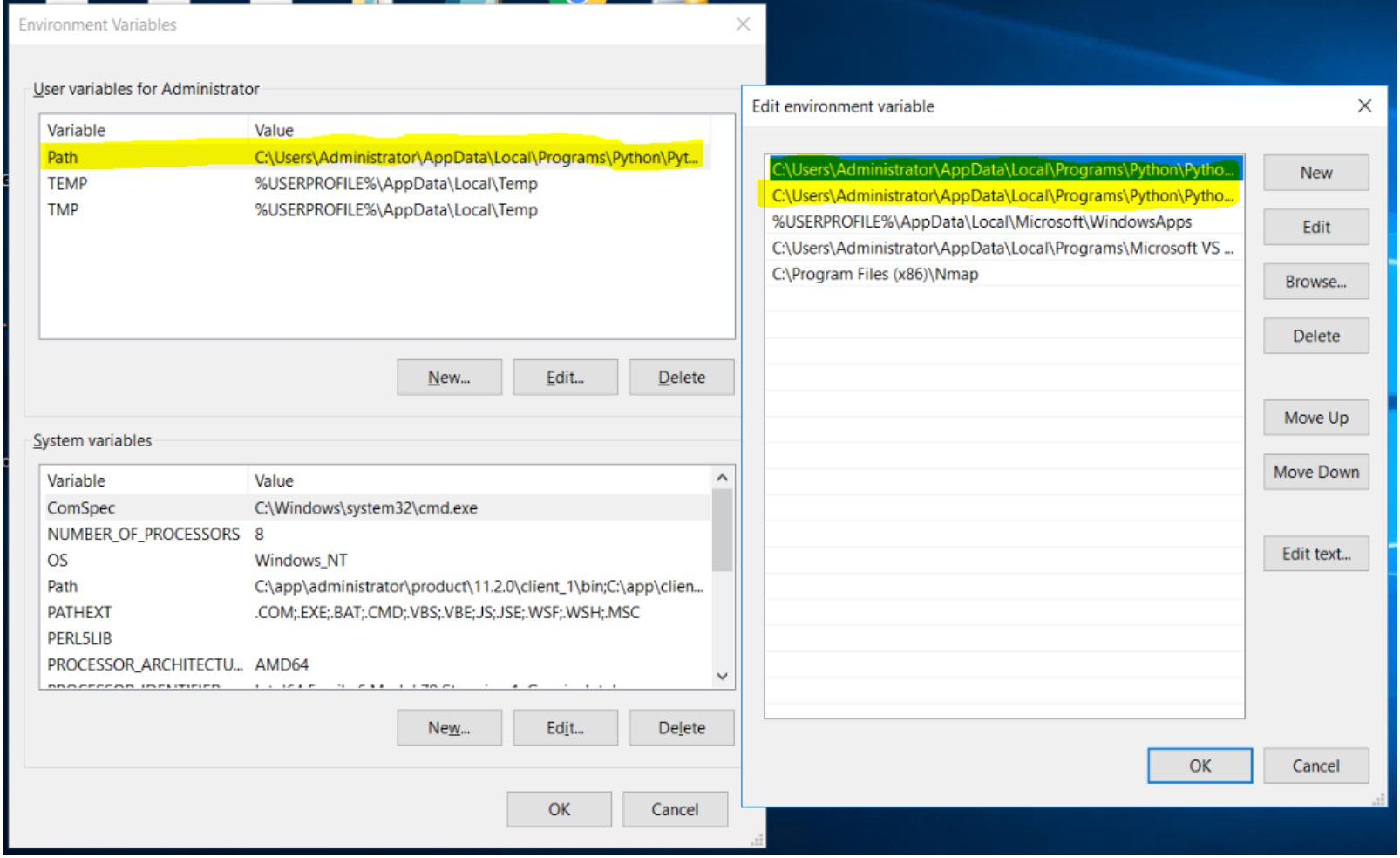
The second method to determine the user running **Ayehu NG** is to open the Windows Services tool and locate the **Ayehu NG Manager** service. Then, right-click on the service name and select "Properties" and then navigate to the "Log On" tab. Here, you will see the account being used.



Once you have this information, login to Windows using that account and then access the "Environment Variables" editor by pressing the Windows Key + R and entering **rundll32.exe sysdm.cpl,EditEnvironmentVariables** as seen in the screenshot below.



From there, locate the entries related to **Python** for comparison with the output of the **PowerShellScript**activity in your workflow.


Environment Variables
User variables for Administrator
Variable
Value
Path
C:\Users\Administrator\AppData\Local\Programs\Python\Pyt...
TEMP
%USERPROFILE%\AppData\Local\Temp
TMP
%USERPROFILE%\AppData\Local\Temp
New...
Edit...
Delete
System variables
Variable
Value
ComSpec
C:\Windows\system32\cmd.exe
NUMBER_OF_PROCESSORS
8
OS
Windows_NT
Path
C:\app\administrator\product\11.2.0\client_1\bin;C:\app\clien...
PATHEXT
.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
PERL5LIB
PROCESSOR_ARCHITECTU...
AMD64
New...
Edit...
Delete
OK
Cancel
Edit environment variable
C:\Users\Administrator\AppData\Local\Programs\Python\Pytho...
C:\Users\Administrator\AppData\Local\Programs\Python\Pytho...
%USERPROFILE%\AppData\Local\Microsoft\WindowsApps
C:\Users\Administrator\AppData\Local\Programs\Microsoft VS ...
C:\Program Files (x86)\Nmap
New
Edit
Browse...
Delete
Move Up
Move Down
Edit text...
OK
Cancel