

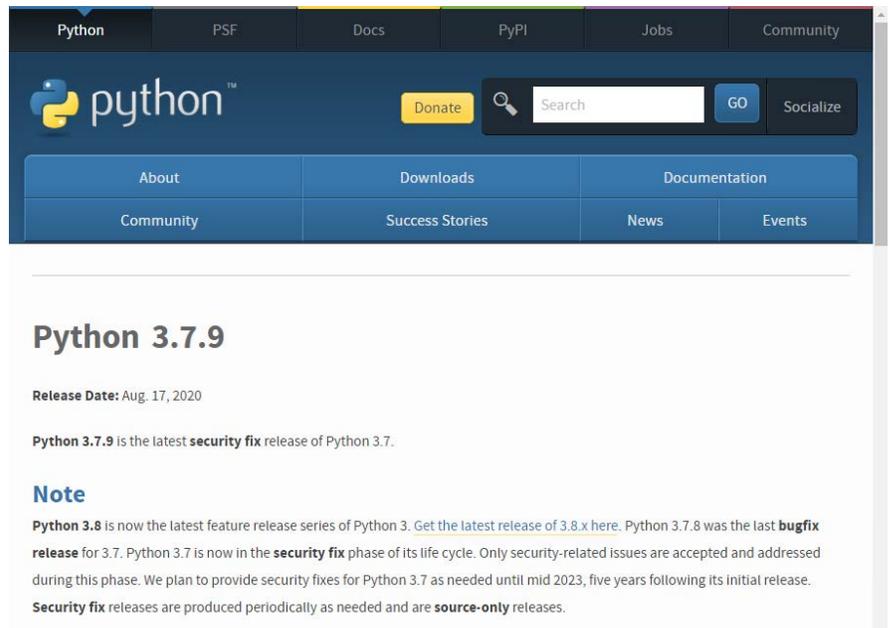
Ubiquiti WIM AP Staging Guide

REQUIRED ITEMS:

- Latest version of the autoInstallViasat.zip file
- Ubiquiti WIM AP (*note – AP must be factory reset before beginning the software installation process*)
- Laptop with internet connection and RJ45 ethernet port.
- 2 Ethernet cords
- Something thin (like a paperclip) to reset the AP
- A working outlet with steady power

Ubiquiti WIM AP – Staging Guide

1. Open a web browser and navigate to <https://www.python.org/downloads/release/python-379/>



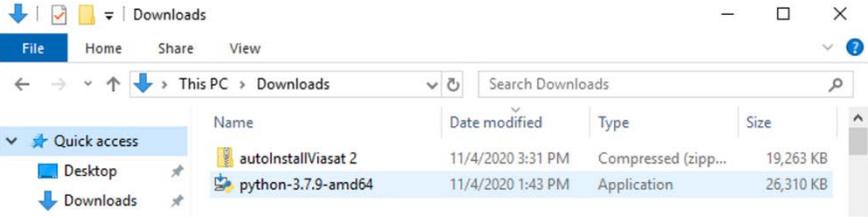
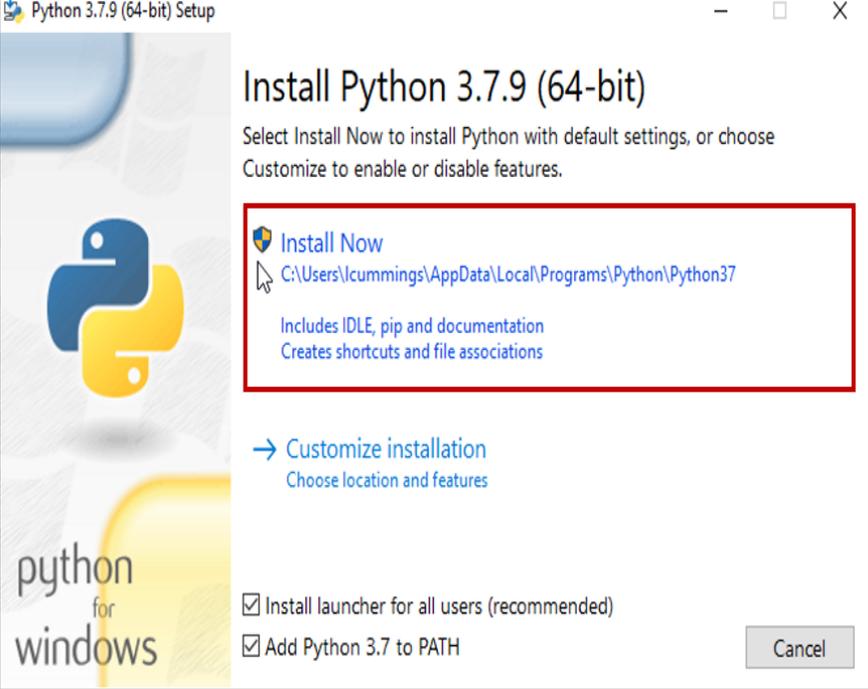
The screenshot shows the Python.org website for the Python 3.7.9 release. The navigation bar includes links for Python, PSF, Docs, PyPI, Jobs, and Community. The main content area features the Python logo, a search bar, and a 'Donate' button. Below the navigation, there are links for About, Downloads, Documentation, Community, Success Stories, News, and Events. The main heading is 'Python 3.7.9'. The release date is listed as 'Aug. 17, 2020'. A note states that Python 3.7.9 is the latest security fix release of Python 3.7. A 'Note' section explains that Python 3.8 is the latest feature release series, and Python 3.7.8 was the last bugfix release for 3.7. It also mentions that Python 3.7 is now in the security fix phase of its life cycle, and security fixes are produced periodically as needed and are source-only releases.

2. Scroll to the files section of the page and select the “executable installer” file that corresponds to your operating system.

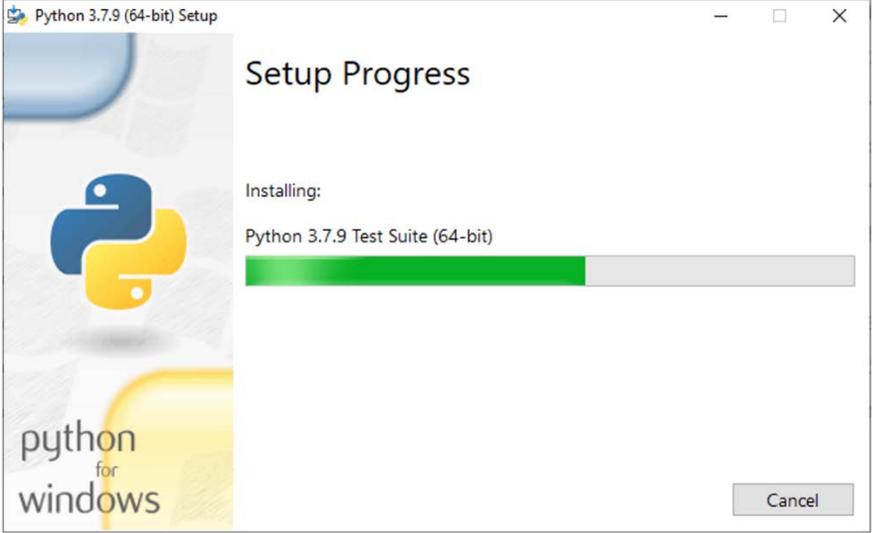
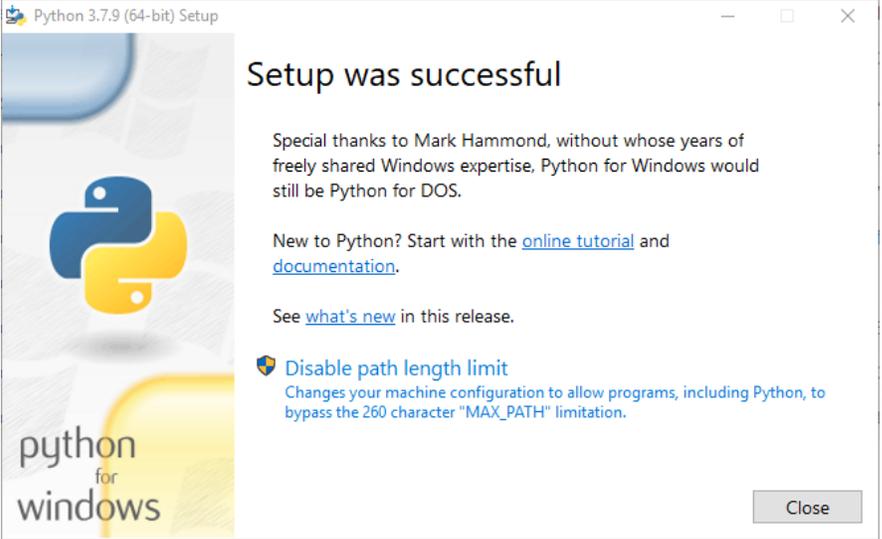
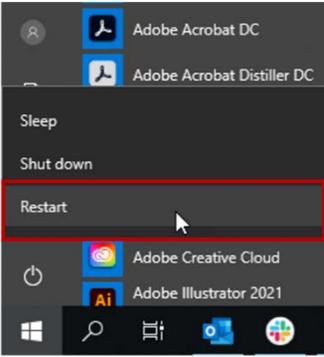
Files

Version	Operating System	Description	MD5 Sum
Gzipped source tarball	Source release		bcd9f22cf531e
XZ compressed source tarball	Source release		389d3ed26b4d
macOS 64-bit installer	Mac OS X	for OS X 10.9 and later	4b544fc0ac8c3
Windows help file	Windows		1094c8d9438a
Windows x86-64 embeddable zip file	Windows	for AMD64/EM64T/x64	60f77740b3003
Windows x86-64 executable installer	Windows	for AMD64/EM64T/x64	7083fed513c3c
Windows x86-64 web-based installer	Windows	for AMD64/EM64T/x64	da0b17ae84d6
Windows x86 embeddable zip file	Windows		97c6558d479d
Windows x86 executable installer	Windows		1e6d31c98c68c
Windows x86 web-based installer	Windows		22f68f09e533c

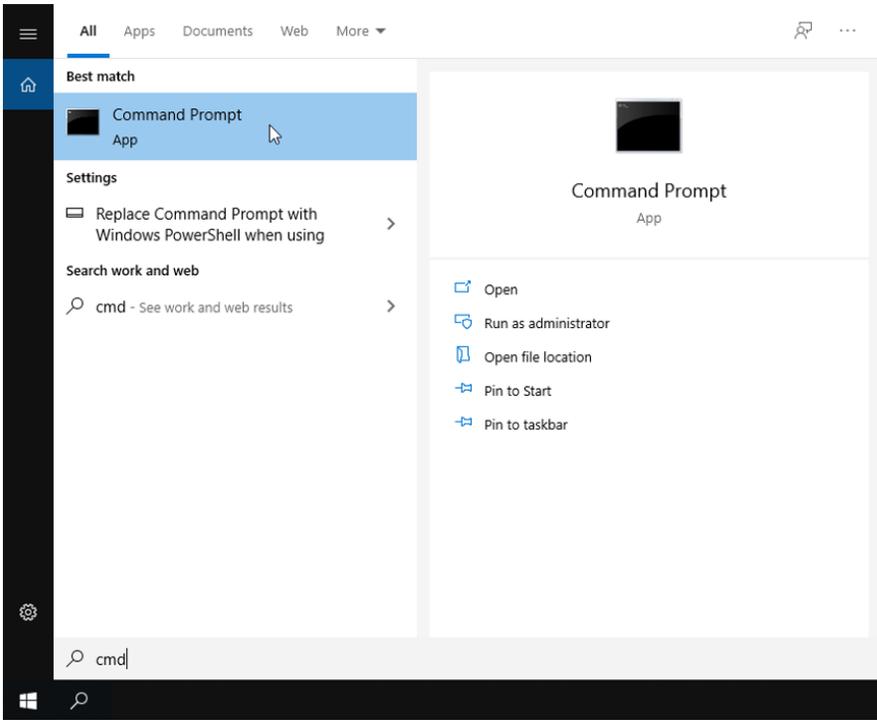
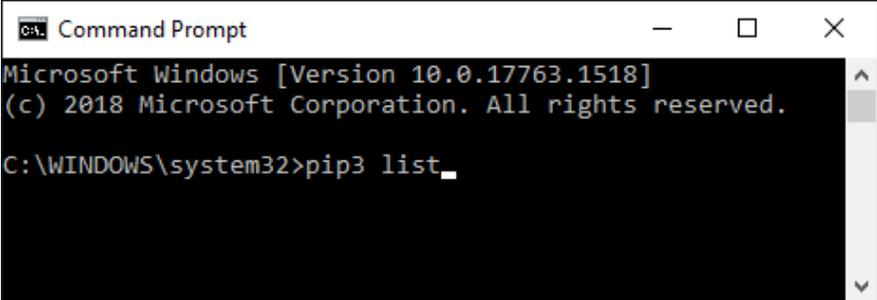
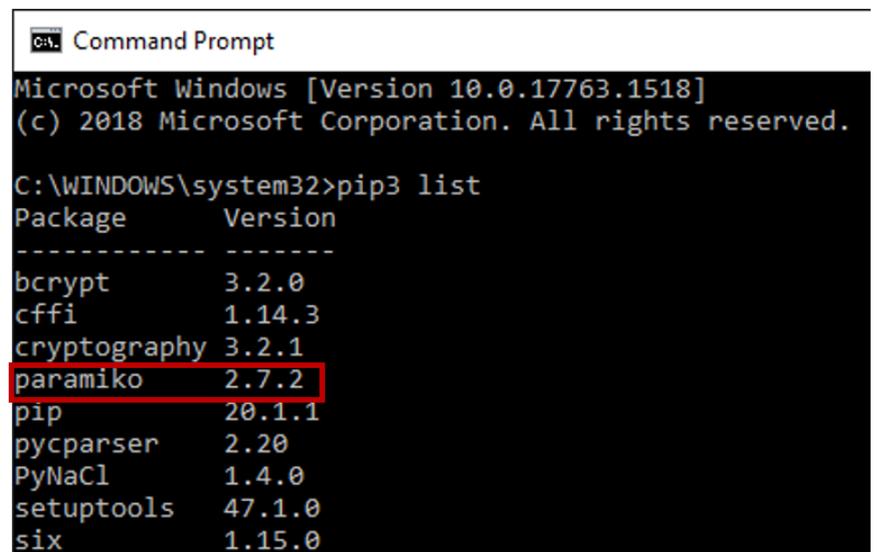
Ubiquiti WIM AP – Staging Guide

3.	Navigate to your downloads folder and double click the downloaded python file. The Python 3.7.9 installer will appear.	 <p>A screenshot of a Windows File Explorer window showing the Downloads folder. The file 'python-3.7.9-amd64' is selected. The file details are as follows:</p> <table border="1"><thead><tr><th>Name</th><th>Date modified</th><th>Type</th><th>Size</th></tr></thead><tbody><tr><td>autoInstallViasat 2</td><td>11/4/2020 3:31 PM</td><td>Compressed (zipp...</td><td>19,263 KB</td></tr><tr><td>python-3.7.9-amd64</td><td>11/4/2020 1:43 PM</td><td>Application</td><td>26,310 KB</td></tr></tbody></table>	Name	Date modified	Type	Size	autoInstallViasat 2	11/4/2020 3:31 PM	Compressed (zipp...	19,263 KB	python-3.7.9-amd64	11/4/2020 1:43 PM	Application	26,310 KB
Name	Date modified	Type	Size											
autoInstallViasat 2	11/4/2020 3:31 PM	Compressed (zipp...	19,263 KB											
python-3.7.9-amd64	11/4/2020 1:43 PM	Application	26,310 KB											
4.	Make sure both “Install launcher for all users (recommended)” and “Add Python 3.7 to PATH” are selected.	 <p>A screenshot of the 'Python 3.7.9 (64-bit) Setup' window. The 'Install Now' button is selected. Below it, the following options are checked:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Install launcher for all users (recommended)<input checked="" type="checkbox"/> Add Python 3.7 to PATH												
5.	Click Install Now .	 <p>A screenshot of the 'Python 3.7.9 (64-bit) Setup' window. The 'Install Now' button is highlighted with a red box. Below it, the following options are checked:</p> <ul style="list-style-type: none"><input checked="" type="checkbox"/> Install launcher for all users (recommended)<input checked="" type="checkbox"/> Add Python 3.7 to PATH												

Ubiquiti WIM AP – Staging Guide

5.	Installation will begin.	 A screenshot of the Python 3.7.9 (64-bit) Setup window. The title bar reads "Python 3.7.9 (64-bit) Setup". The main content area features the Python logo and the text "python for windows". Below this, it says "Installing:" followed by "Python 3.7.9 Test Suite (64-bit)". A green progress bar is shown, indicating the installation is in progress. A "Cancel" button is located in the bottom right corner.
6.	When the installation is complete, a "Setup was successful" screen will appear.	 A screenshot of the Python 3.7.9 (64-bit) Setup window after successful installation. The title bar reads "Python 3.7.9 (64-bit) Setup". The main content area features the Python logo and the text "python for windows". Below this, it says "Setup was successful". There is a message of thanks to Mark Hammond, followed by links for "New to Python? Start with the online tutorial and documentation ." and "See what's new in this release." A section titled "Disable path length limit" includes a sub-link "Changes your machine configuration to allow programs, including Python, to bypass the 260 character 'MAX_PATH' limitation." A "Close" button is located in the bottom right corner.
7.	After the installation is complete, restart your computer.	 A screenshot of the Windows Start menu. The "Restart" option is highlighted with a red rectangular box. Other visible options include "Sleep" and "Shut down". The taskbar at the bottom shows icons for Adobe Acrobat DC, Adobe Acrobat Distiller DC, Adobe Creative Cloud, and Adobe Illustrator 2021.

Ubiquiti WIM AP – Staging Guide

8.	After your computer is rebooted, open Command Prompt.	 A screenshot of the Windows search interface. The search bar at the top contains the text 'cmd'. Below the search bar, the results are categorized into 'Best match' and 'Settings'. Under 'Best match', 'Command Prompt' is listed as an 'App' and is highlighted with a blue selection bar. To the right of this result, a preview card for 'Command Prompt' is shown, featuring a small icon and the text 'Command Prompt App'. Below the preview card, there are several action buttons: 'Open', 'Run as administrator', 'Open file location', 'Pin to Start', and 'Pin to taskbar'. The 'Settings' section below shows a toggle for 'Replace Command Prompt with Windows PowerShell when using'. At the bottom of the search interface, the search bar contains 'cmd' and a magnifying glass icon.
9.	In the Command Prompt window, type <code>pip3 list</code> and press enter. This will verify whether or not the paramiko module is installed.	 A screenshot of a Windows Command Prompt window. The title bar reads 'C:\> Command Prompt'. The window content shows the following text: 'Microsoft Windows [Version 10.0.17763.1518] (c) 2018 Microsoft Corporation. All rights reserved. C:\WINDOWS\system32>pip3 list'. The cursor is positioned at the end of the command 'pip3 list'.
10.	If you see paramiko listed (as shown to the right), proceed to step 12.	 A screenshot of a Windows Command Prompt window showing the output of the 'pip3 list' command. The title bar reads 'C:\> Command Prompt'. The window content shows the following text: 'Microsoft Windows [Version 10.0.17763.1518] (c) 2018 Microsoft Corporation. All rights reserved. C:\WINDOWS\system32>pip3 list'. Below the command, the output is displayed as a table with two columns: 'Package' and 'Version'. The packages listed are: 'bcrypt 3.2.0', 'cffi 1.14.3', 'cryptography 3.2.1', 'paramiko 2.7.2', 'pip 20.1.1', 'pyparser 2.20', 'PyNaCl 1.4.0', 'setuptools 47.1.0', and 'six 1.15.0'. The 'paramiko 2.7.2' entry is highlighted with a red rectangular box.

Ubiquiti WIM AP – Staging Guide

11. If you do not see paramiko listed, type `pip install "paramiko==2.7.2"` and press Enter.

When the installation is complete, Command Prompt will display “successfully installed paramiko – 2.7.2” as shown.

```
Command Prompt
Microsoft Windows [Version 10.0.17763.1518]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>pip3 list
Package      Version
-----
pip          20.1.1
setuptools  47.1.0

WARNING: You are using pip version 20.1.1; however, version 20.2.4 is available.
You should consider upgrading via the 'c:\users\lcummings\appdata\local\programs\python\python37

C:\WINDOWS\system32>pip install "paramiko==2.7.2"
Collecting paramiko==2.7.2
  Downloading paramiko-2.7.2-py2.py3-none-any.whl (206 kB)
    | 206 kB 504 kB/s
Collecting pynacl>=1.0.1
  Downloading PyNaCl-1.4.0-cp37-cp37m-win_amd64.whl (206 kB)
    | 206 kB 1.1 MB/s
Collecting cryptography>=2.5
  Downloading cryptography-3.2.1-cp37-cp37m-win_amd64.whl (1.5 MB)
    | 1.5 MB 939 kB/s
Collecting bcrypt>=3.1.3
  Downloading bcrypt-3.2.0-cp36-abi3-win_amd64.whl (28 kB)
Collecting cffi>=1.4.1
  Downloading cffi-1.14.3-cp37-cp37m-win_amd64.whl (178 kB)
    | 178 kB 1.6 MB/s
Collecting six
  Downloading six-1.15.0-py2.py3-none-any.whl (10 kB)
Collecting pycparser
  Downloading pycparser-2.20-py2.py3-none-any.whl (112 kB)
    | 112 kB 819 kB/s
Installing collected packages: pycparser, cffi, six, pynacl, cryptography, bcrypt, paramiko
Successfully installed bcrypt-3.2.0 cffi-1.14.3 cryptography-3.2.1 paramiko-2.7.2 pycparser-2.20
WARNING: You are using pip version 20.1.1; however, version 20.2.4 is available.
You should consider upgrading via the 'c:\users\lcummings\appdata\local\programs\python\python37
```

12. Plug one end of an ethernet cord into the AP ethernet port.



Ubiquiti WIM AP – Staging Guide

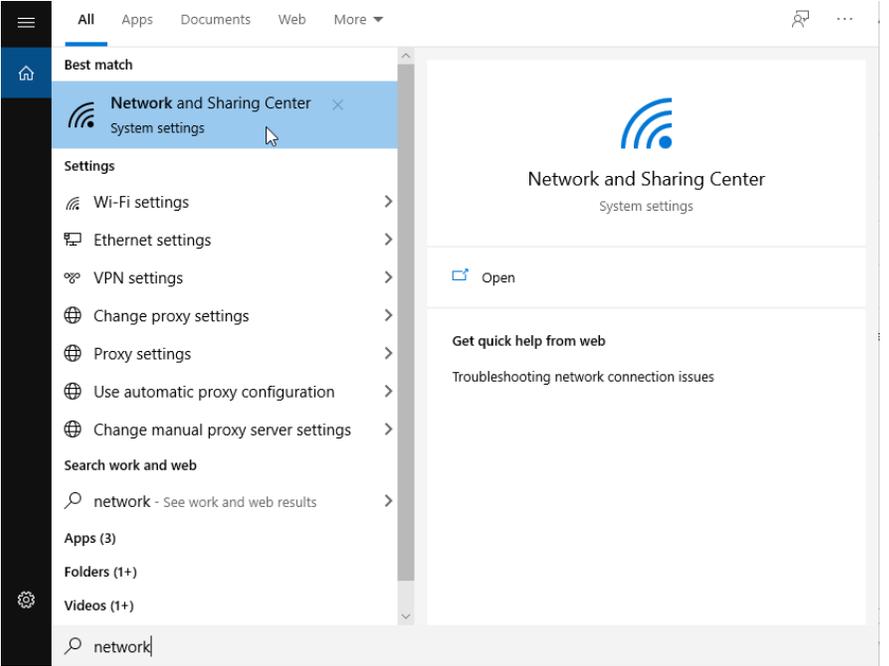
13. Plug the other end of the ethernet cord into the POE port of the AP power brick and connect to a working power outlet.



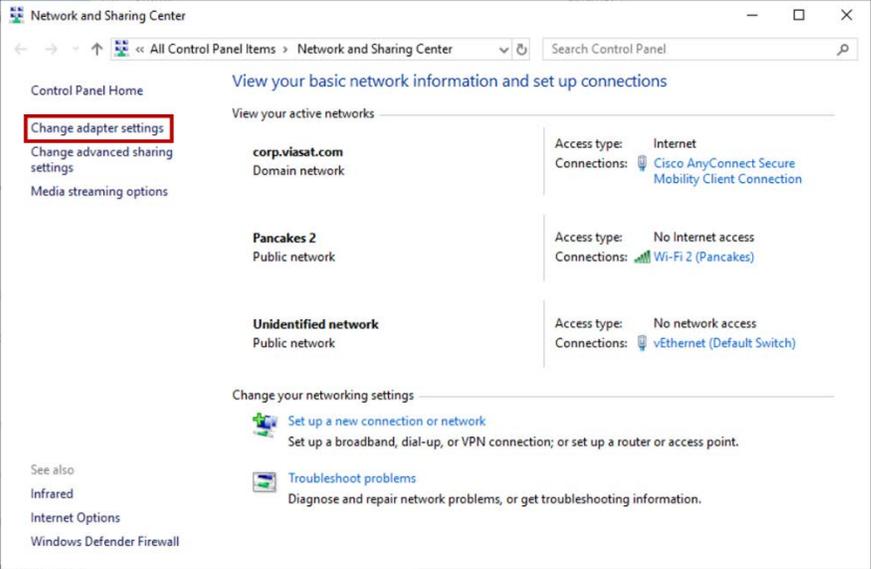
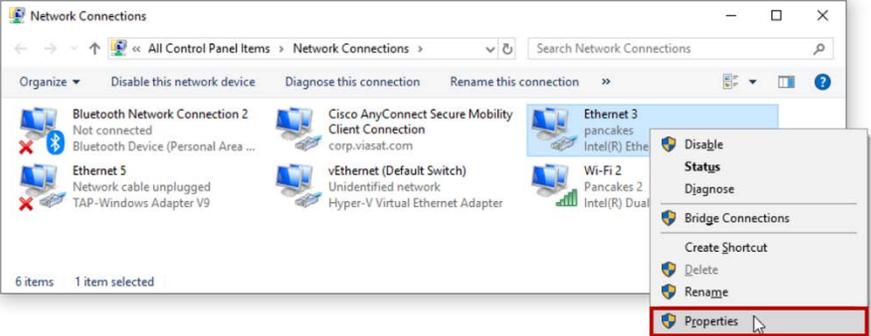
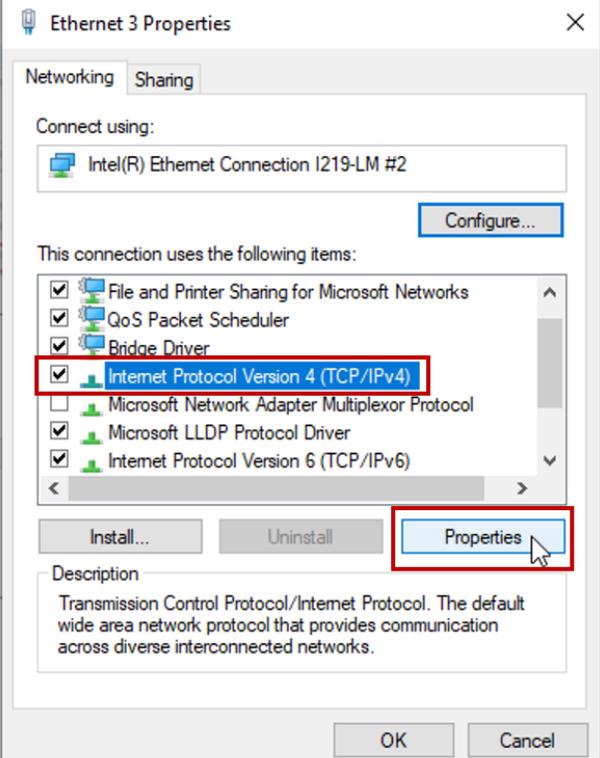
14. Factory reset the AP by using a narrow object to press and hold the reset button until the status light turns off. This will take around 5 seconds.
- Let go of the Reset button once the status light turns off.



Ubiquiti WIM AP – Staging Guide

<p>15. Connect a second ethernet cord to the “LAN” port of the AP power brick.</p>		
<p>16. Connect the other end of this ethernet cord to the laptop or computer with Python downloaded.</p>		
<p>17. Manually configure the laptop IP address and Subnet mask. Please note that this process may vary by operating system. Steps 12-17 are an example of this process on a Windows computer.</p> <p>Open the laptop’s Network and Sharing Center or Network Connections.</p>		

Ubiquiti WIM AP – Staging Guide

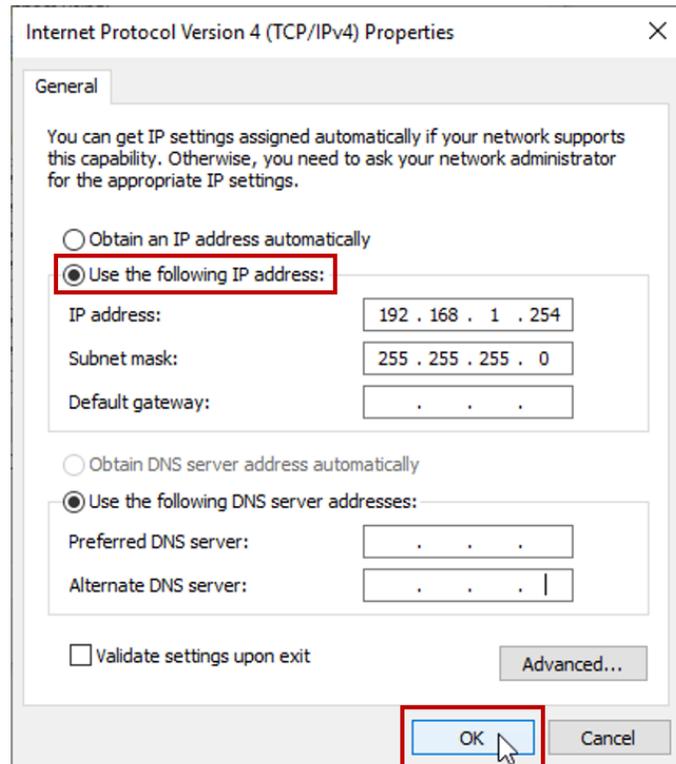
<p>18. Click Change adapter settings/options.</p>	 <p>The screenshot shows the Windows Network and Sharing Center. On the left sidebar, the link 'Change adapter settings' is highlighted with a red rectangular box. The main area displays 'View your active networks' with three network profiles: 'corp.viasat.com' (Domain network), 'Pancakes 2' (Public network), and 'Unidentified network' (Public network). Each profile shows its access type and active connections.</p>
<p>19. Right click the Ethernet connection that is plugged into the AP. Select "Properties."</p>	 <p>The screenshot shows the Windows Network Connections window. A right-click context menu is open over the 'Ethernet 3' connection. The 'Properties' option at the bottom of the menu is highlighted with a red rectangular box. Other options in the menu include Disable, Status, Diagnose, Bridge Connections, Create Shortcut, Delete, and Rename.</p>
<p>20. From the list of connection items, select Internet Protocol Version 4 (TCP/IPv4) and click Properties.</p>	 <p>The screenshot shows the 'Ethernet 3 Properties' dialog box. The 'Networking' tab is selected. Under 'This connection uses the following items:', the 'Internet Protocol Version 4 (TCP/IPv4)' checkbox is checked and highlighted with a red rectangular box. At the bottom right of the dialog, the 'Properties' button is also highlighted with a red rectangular box. The description at the bottom reads: 'Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.'</p>

Ubiquiti WIM AP – Staging Guide

21. Select Use the following IP address and type the following:

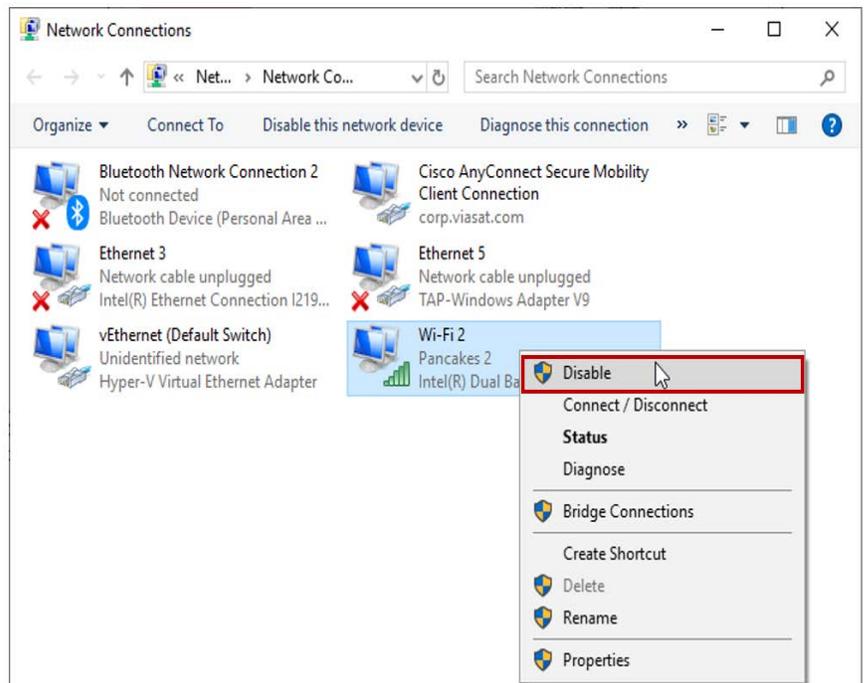
IP address: 192.168.1.254
Subnet mask: 255.255.255.0
Default Gateway: Leave blank

Click OK.

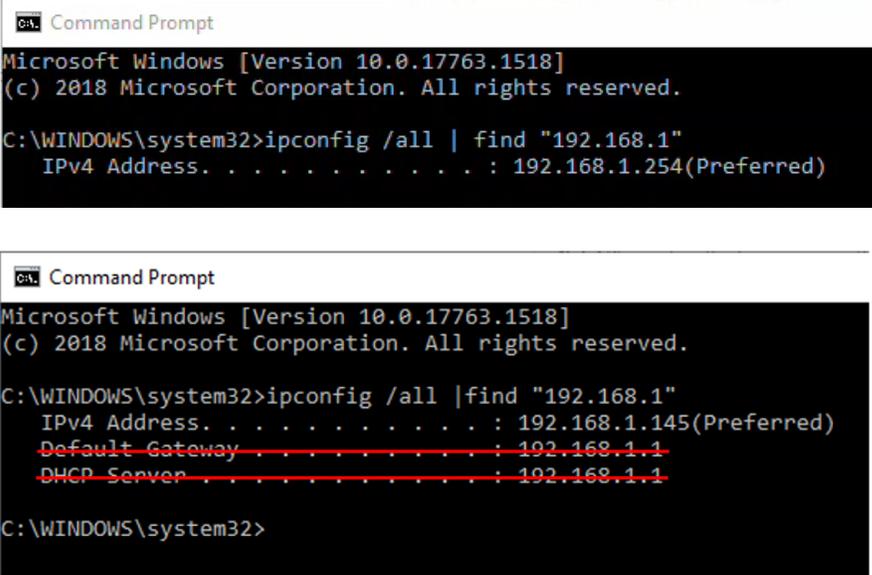
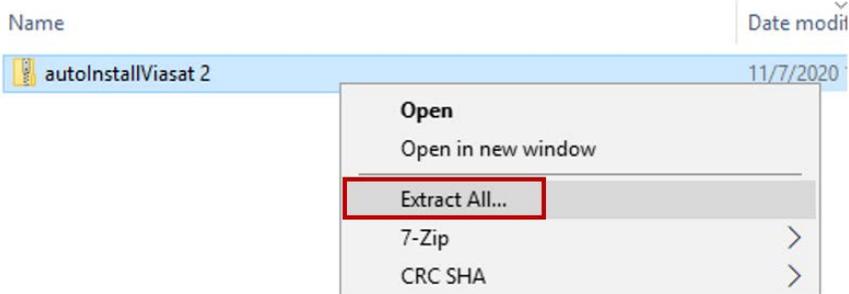
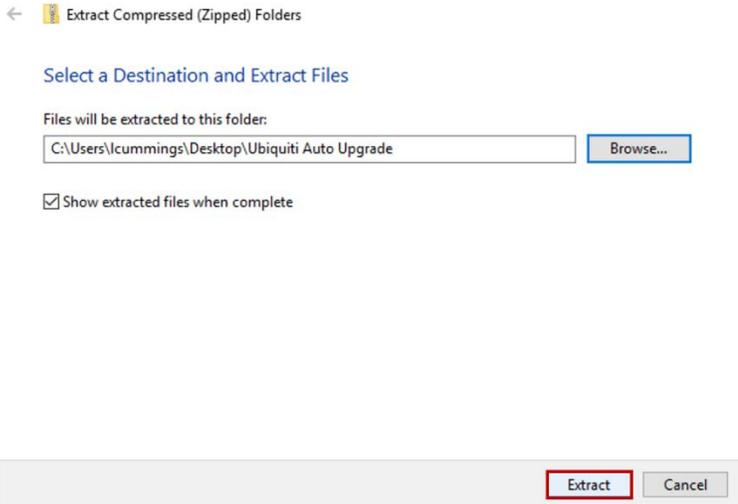


22. From the network and sharing center, disable all network adapters (including Wi-Fi) other than the Ethernet connection to the AP.

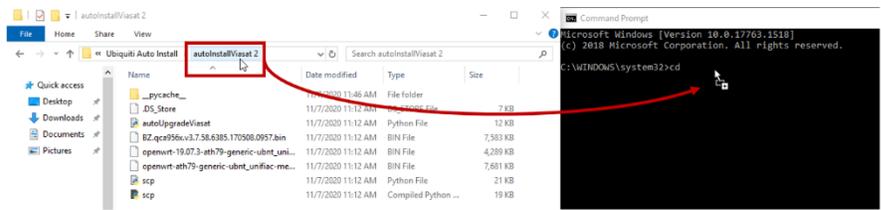
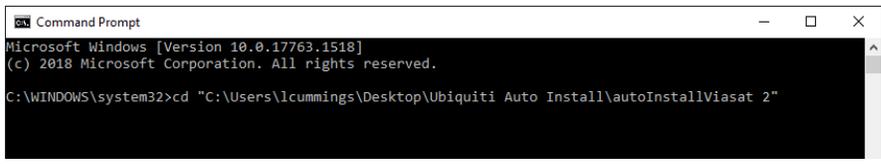
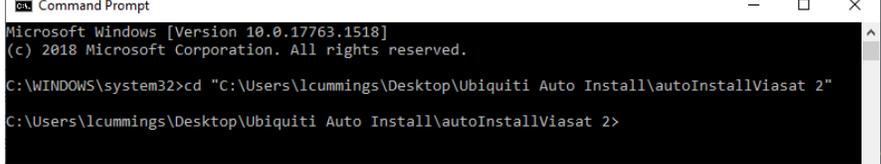
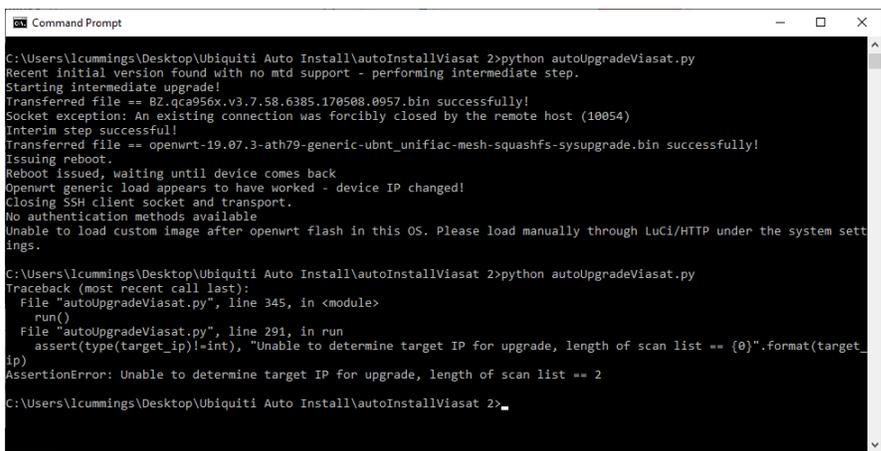
To turn off Wi-Fi, right click, then select Disable.



Ubiquiti WIM AP – Staging Guide

<p>23.</p>	<p>To ensure that only the AP is connected, type the following in command line, then press enter. <i>ipconfig /all find "192.168.1"</i></p> <p>You should only see one connection (IPv4), as displayed here.</p> <p>If you see more than one connection (such as Default Gateway, DHCP Server), return to the previous step.</p>	 <pre>Command Prompt Microsoft Windows [Version 10.0.17763.1518] (c) 2018 Microsoft Corporation. All rights reserved. C:\WINDOWS\system32>ipconfig /all find "192.168.1" IPv4 Address. : 192.168.1.254(Preferred) Command Prompt Microsoft Windows [Version 10.0.17763.1518] (c) 2018 Microsoft Corporation. All rights reserved. C:\WINDOWS\system32>ipconfig /all find "192.168.1" IPv4 Address. : 192.168.1.145(Preferred) Default Gateway : 192.168.1.1 DHCP Server : 192.168.1.1 C:\WINDOWS\system32></pre>				
<p>24.</p>	<p>Locate the autoInstallViasat.zip file on your computer. Right click the file and select Extract All.</p>	 <table border="1"><thead><tr><th>Name</th><th>Date modified</th></tr></thead><tbody><tr><td>autoInstallViasat 2</td><td>11/7/2020</td></tr></tbody></table> <ul style="list-style-type: none">OpenOpen in new windowExtract All...7-Zip >CRC SHA >	Name	Date modified	autoInstallViasat 2	11/7/2020
Name	Date modified					
autoInstallViasat 2	11/7/2020					
<p>25.</p>	<p>Select a location for the extracted files and click Extract.</p>	 <p>← Extract Compressed (Zipped) Folders</p> <p>Select a Destination and Extract Files</p> <p>Files will be extracted to this folder:</p> <p>C:\Users\lcummings\Desktop\Ubiquiti Auto Upgrade Browse...</p> <p><input checked="" type="checkbox"/> Show extracted files when complete</p> <p>Extract Cancel</p>				

Ubiquiti WIM AP – Staging Guide

26.	In command prompt, type <code>cd</code> and press the space bar (there must be a space after “ <code>cd</code> ”), then drag and drop the folder containing the extracted files into command prompt, then press enter.	
27.	Command prompt should now display the location of the extracted files. (Verify that command prompt looks like the example photo)	
28.	Press Enter.	
29.	Type <code>python autoUpgradeViasat.py</code> then press enter. <i>Note – if you have more than one version of Python installed, you will need to type <code>python3 autoUpgradeViasat.py</code></i>	
30.	The install will begin. This will take 5-10 minutes to complete.	

Ubiquiti WIM AP – Staging Guide

<p>31.</p>	<p>When the program displays “KeyboardInterrupt” (CTRL/C) to exit! the status light on the AP will begin flashing.</p> <p>If an error occurs and “KeyboardInterrupt” (CTRL/C) to exit! never appears, repeat step 29 and contact support if it continues to not work.</p>	<pre>C:\Users\linux\Desktop\Ubiq_Coverage_Update\final_package\test\autoUpgradeViaSat>python3 autoUpgradeViaSat.py Recent initial version found with no mtd support - performing intermediate step. Starting intermediate upgrade! Transferred file == BL.qca950x.v3.7.58.6385.170508.0957.bin successfully! Socket exception: An existing connection was forcibly closed by the remote host (10054) Interim step successful! Transferred file == openwrt-19.07.3-ath79-generic-ubnt_unifiac-mesh-squashfs-sysupgrade.bin successfully! Issuing reboot. Reboot issued, waiting until device comes back Openwrt generic load appears to have worked - device IP changed! Closing SSH client socket and transport. Starting custom image upgrade! Transferred file == openwrt-ath79-generic-ubnt_unifiac-mesh-squashfs-sysupgrade.bin successfully! Sysupgrade executed successfully. If the controller is up and in range/LOS, it should be operation within minutes. DO NOT POWER OFF. KeyboardInterrupt (CTRL/C) to exit!</pre>
<p>32.</p>	<p>Wait until the status light stops flashing and turns solid blue. After this, the install is complete and the AP can be disconnected.</p>	