

INFORMATION TECHNOLOGY Services

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PacketFence – Introduction

Welcome to Albany State University! As one of the perks for your Student Experience, ASU ITS provides free access to WiFi and Wired (dorm room) access to the network on both the Radium Springs and Gillionville locations through PacketFence. PacketFence is a fully supported, trusted, Free and Open Source network access control (NAC) solution that can be used to effectively secure Wired and Wireless networks. All devices, including laptops, cell phones, gaming consoles and others can be registered on though PacketFence using your ASU provided Network Account.

Once your device is enrolled in PacketFence, you will be able to have access to WiFi throughout the campus as well as Wired access in your dorm room. PacketFence has been configured to encrypt your communications so that you can securely access your personal accounts and information without fear of being compromised. This helpful guide will instruct you on how to connect your devices to the network using PacketFence as well as provide helpful tips if there are any problems connecting.

Network Terminology

Below are some common network terminology that will be helpful to know:

Internet Protocol (IP) Address: A numerical label assigned to a device connected to a network the uses Internet Protocol for communication. It is 4 numbers ranging from 1-254 separated by periods (Ex. 192.168.1.25).

Media Access Control Address (MAC): A unique identifier assigned to a network interface that helps to distinguish between different devices on the network. It is usually in the form of 12 letters/numbers (Hexadecimal) separated by a colon or dash (Ex. 00:00:00:00:00:00).

Network Cable: Network hardware designed to connect one or more devices to a network. Usually a twisted-pair cable with a RJ45 connector on each end. Also known as an Ethernet Cable.

WiFi: The IEEE 802.11 standard for wireless local area networks. It is what your computer, phone, TV or other device connects to so that you can connect to a network or Internet within or outside of a building or home without having to use a network cable.



PacketFence – Computer/Phone/Tablet Connectivity

Instructions for Android (Phone/Tablet):

• Click on **ASURAMS-SECURE.**

- Type in/select the following for each of the fields below:
 - o CA Certificate: Choose "Don't validate"
 - o Identity: Network ID
 - **Password**: Network Password
 - Do not fill out the "Anonymous" field; leave it blank
- Once done click Connect, and you will be connected to WiFi.

Instructions for Apple iOS (iPhone/iPad/iPod):

- o Click on ASURAMS-SECURE. Type in your ASU username and password.
- A '**Certificate**' screen will come up, with '**packetfence.asurams.edu**' listed as the certificate. Click on the blue '**Trust**' link in the upper right corner.
- Once installed, you will now be connected to WiFi.

Instructions for Apple Macbook:

- Click on the WiFi icon in the upper right corner of the screen.
- Click on ASURAMS-SECURE.
- Enter in your ASU username/password.



- Once you connect to ASURAMS-SECURE/ASURAMS-OTHER, you may be asked to install the PacketFence Mobile Config Provisioner file on your Macbook. Click 'Install' to install the profile on your Mac.
- You may be asked to supply your password or other information for your Macbook Administrator Account to install.
- Once installed, you will be connected to WiFi.

Instructions for Windows:

Current versions of Windows (8, 10 and later):

- o Click on the WiFi icon in the Taskbar, then click on ASURAMS-SECURE.
- Type in your ASU username and password.
- Click the **'Connect'** button.
 - On the box that says "Do you want to allow your PC to be discoverable by other PCs and devices on this network?" box, click 'Yes".
- You should now be connected to WiFi.

Older versions of Windows (7 and Older):

- Click on the WiFi icon in the Taskbar, then click on **ASURAMS-SECURE**.
- In the **Windows Security** window under '**Network Authentication**', enter in your ASU username and password.
- In the **Windows Security Alert** window, click the **'Connect'** button.
- You should now be connected to WiFi.

Resolving Device Issues:



If you have any difficulty connecting to WiFi, please follow the steps below for your device:

Android (Phone/Tablet):

- Go to the WiFi Settings on your Android device and Forget the ASU WiFi Networks (ASURAMS-ONBOARD, ASURAMS-SECURE, ASURAMS-OTHER). For each network, press and hold finger on that network and click Forget.
- Search for the network again, then try to connect to **ASURAMS-SECURE**. If this still does not work **forget** the networks **again**, turn WiFi **OFF** and then **restart** the device.
- Once powered back on, turn on your device WiFi, and follow the <u>Instructions for Android</u> (<u>Phone/Tablet</u>) listed earlier in this document.

Apple iOS (iPad/iPhone/iPod):

- Open up **Settings**, then click on **WiFi**.
- Forget all the ASU WiFi networks (ASURAMS-ONBOARD, ASURAMS-SECURE, ASURAMS-OTHER). You can do this by clicking on the blue i next to the ASU networks then click Forget the network.
- Search for the network again, then try to connect to **ASURAMS-SECURE**. If this still does not work **forget** the networks **again**, turn WiFi **OFF** and then **restart** the device.
- Once the iPad/iPhone is powered on, turn on the WiFi, and follow the <u>Instructions for Apple iOS</u> (iPhone/iPad/iPod) listed earlier in this document.

Apple Macbook

- Choose Apple menu > System Preferences.
- Then click Profiles (*if you haven't installed any configuration profiles, Profiles preferences will not be available*).
- Select a profile in the Profiles list, then click the Remove button



- You may be asked to supply your password or other information for your Macbook Administrator Account to remove.
- Once this is done, go back to the Network settings, and remove the **ASU** WiFi networks (ASURAMS-ONBOARD, ASURAMS-SECURE, ASURAMS-OTHER).
- Turn off WiFi for 3 minutes, then turn it back on.
- Follow the steps in the **Instructions for Apple Macbook** listed earlier in this document.

Windows (8, 10 and later):

- Go to the **Network** Settings.
- Turn WiFi Sense and Paid Networks OFF.
- Go to manage networks and **forget** all of the **ASU WiFi networks** (ASURAMS-ONBOARD, ASURAMS-SECURE, ASURAMS-OTHER).
- Reboot your computer.
- Once your computer is logged back in, go to the WiFi and try to connect to **ASURAMS-SECURE**, following the **Instructions for Windows** listed earlier in this document.

Windows (7 and Older):

- o Click on the WiFi icon in the Taskbar, then click on 'Open Network and Sharing Center'.
- On the left side of the window, click on 'Manage wireless networks'.
- In the 'Manage wireless networks that use (Wireless Network Connection)' window, click on the ASU WiFi networks (ASURAMS-ONBOARD, ASURAMS-SECURE, ASURAMS-OTHER) one at a time, then click the 'Remove' button.
- Once removed, close all windows.
- Reboot your computer.



• Once your computer is logged back in, go to the WiFi and try to connect to **ASURAMS-SECURE**, following the **Instructions for Windows** listed earlier in this document.

If you still cannot connect, either your network account is locked and/or you network password needs to be changed. You can go to the <u>Password Management Portal</u> to change the password. If you are still having problems, please submit an Incident to the Help Desk by either sending an email to <u>helpdesk@asurams.edu</u> or by calling (229) 500-4357. Please provide the following information:

- o First and Last Name
- o Phone Number
- o Email Address
- o Building, Floor, and Room Number
- MAC Address of your device
- Type of device (Ex. iPhone, Samsung Galaxy, Mac/Windows Laptop, etc.)
- Any error messages that you received.

PacketFence – Gaming Console/Media Streaming Device/Smart TV Connectivity

Instructions for Fire Stick, PlayStation, Roku, Smart TVs, Xbox and other Media Steaming Devices

To register and manage your devices, you must use a desktop/laptop/tablet computer with a web browser. You cannot register from the device itself.

To register a device manually:

- Please make sure that you connect your phone/tablet/laptop to the ASURAMS-Secure network first or use an ASU Computer before trying these instructions.
- In your web browser on your laptop/computer, go to the <u>ASU PacketFence Device</u> <u>Registration</u> page
- Log in using your Network Username/Password.
- Enter the MAC Address (ex. 00:00:00:00:00) of the device.



- Click the "Register" button.
- Once complete, you will then connect your device to the "ASURAMS-OTHER" WiFi network. If you are using Ethernet, then plug in the cable to connect your device to the network.

To manage registered device(s):

- In your web browser on your laptop/computer, go to the <u>ASU PacketFence Device</u> <u>Status</u> Page
- Log in using your Network username/password.
- To unregister a device, click on "Unregister" next to the device.

If you have problems registering your device(s):

- After registering your device, you may need to power off your device for at least 30 seconds, then power it back on again.
- Please make sure that you have entered in the MAC address for your device correctly in PacketFence.
- You will only be able to connect to 'ASURAMS-OTHER' once your device is registered; you will not be able to connect to any of the other networks.

If you are still having problems, please submit an Incident to the Help Desk by either sending an email to <u>helpdesk@asurams.edu</u> or by calling (229) 500-4357. Please provide the following information:

- o First and Last Name
- o Phone Number
- o Email Address
- o Building, Floor, and Room Number
- MAC Address of your device
- Type of device (Ex. Xbox, Roku, Vizio TV, etc.)
- Any error messages that you received.

General Troubleshooting Tips



If you are still having issues connecting to PacketFence with your device, it could be that your device is having issues. The General Troubleshooting Tips below will help to clear up any issues your device may be having. Please try the following:

- a. If the device is a PC, Laptop, Smart TV, Gaming Console or other device that uses a power brick or regular power cord:
 - i. Check the cables/connections.
 - ii. Reboot the device/system.
 - iii. Perform a Static Discharge of the system (if applicable).
 - 1. Power off the device.
 - 2. Unplug the power cord from the device
 - a. If the device is a laptop, also remove the battery.
 - 3. Press the Power Button on the device 15 times; on the 15th time, hold the button down for 20 seconds.
 - 4. Plug the power cord back in.
 - a. If the device is laptop, put the battery back in and then plug in the power cord.
 - 5. Power on the device.
- b. If the device is a Smartphone or Tablet:
 - i. Power off the device. Leave it powered off for 5 minutes.
 - ii. Power the device back on.
- c. Check software settings.
 - i. Please make sure that you have the latest version of the operating system or the latest updates for your device.
- d. Verify if someone else has the problem.
 - i. Consult with one or more of your colleagues to see if there is a solution to the issue.

If you are still having problems, please submit an Incident to the Help Desk by either sending an email to <u>helpdesk@asurams.edu</u> or by calling (229) 500-4357. Please provide the following information:

- o First and Last Name
- o Phone Number
- o Email Address
- Building, Floor, and Room Number
- MAC Address of your device
- Type of device (Ex. Xbox, Roku, Vizio TV, etc.)
- Any error messages that you received.