Illinois Mathematics and Science Academy

INFORMATION TECHNOLOGY SERVICES
630.907.5000 . 1500 SULLIVAN ROAD, AURORA, IL 60506-1000 . IMSA.EDU

Prepare Your Computer for Life at IMSA

For Apple Macintosh OS

Table of Contents

Prepare Your Computer for Life at IMSA 1
Table of Contents 1
Reminder: Supported Laptop Operating Systems 3
Supported Laptop Operating Environments 3
Unsupported Laptop Operating Environments 3
Local User (login) on the computer must be an administrator 3
Make Sure Your Computer's Applications, Drivers and Operating System is Up to Date 3
Apple Application(s) and Macintosh OS Updates 3
Software Update 3
Apple Store 4
Web Browsers 5
Web Browser Settings 5
Registering Your Computer with IMSA 5
Accessing the Internet While on Campus 5
IMSAPublic Wireless (WiFi) Network 6
airIMSA Wireless (WiFi) Network 6
Pre- and Post-Registration Tasks 7
1 - Download and Extract IMSA's Computer Setup Package 7
2 - Setting your computer's host name – REQUIRED 7
2-1 – Enable Macintosh OS "Root User" 8
2-2 – Open the Terminal Application 9
2-3 – Setting computer's host name 10
3 – Install Antivirus Solution (CrowdStrike Falcon) – REQUIRED 11
3-1 - Uninstall Existing Antivirus Solutions 11

3-2 - Uninstall any previous installation of Symantec Endpoint Protection as required by IMSA 11
3-3 - Installing IMSA's Antivirus, Data and System Security Solution 12
3-4 – License/Link CrowdStrike Falcon Sensor 13
3-5 – Set Macintosh OS security preferences for CrowdStrike 14
Troubleshooting Installation Issues 15
4 – Register computer for access to airIMSA wireless network – REQUIRED 16
4-1 - Getting the MAC Addresses 17
4-2 - Proof, you have Installed IMSA's Antivirus, Data and System Security Solution 18
4-3 - Send Email with Information Gathered 18
5 – Connecting to IMSA's wireless (WiFi) network called airIMSA – REQUIRED 19
5-1 - Connecting to airIMSA Wireless (WiFi) Network 19
5-2 - Remove IMSApublic Wireless Network 20
6 – Setting up access to IMSA printers – **RECOMMENDED** 21
6-1 - Download Installation Application 22
6-2 - Install the PaperCut Mobility Print Client 23
6-3 - Checking the Printer Installation 24
6-4 - Perform a Test Print 26
7 - Accessing IMSA Student Server while on campus – OPTIONAL, Required for some classes 27
Uninstall IMSA's Antivirus, Data and Security Software 29

Reminder: Supported Laptop Operating Systems

IMSA Information Technology Services (ITS) team is not staffed enough to support every possible computing device operating environment. There are limits to what can be used and supported. Below is a list of the supported and unsupported laptop operating systems. This is not an exhausted list, it lists only general laptop operating environments.

Supported Laptop Operating Environments

- Microsoft Windows OS (10 or 11), all editions except as noted below. **Windows OS is the recommended OS for use by students**
- Apple/Macintosh OS
- Linux OS Distributions – **LIMITED** Support, not all functions can be fully supported. Students are on their own when running a Linux OS distribution. Recommend running Linux as a virtual machine under Apple/Macintosh OS or Windows OS.

Unsupported Laptop Operating Environments

- Chromebooks (Android OS) – **NOT SUPPORTED**
- Microsoft Windows OS (10 or 11) running on laptops with an “ARM” or “RISK” processor – **NOT SUPPORTED**

Local User (login) on the computer must be an administrator

During the student’s IMSA career they will be asked to install software on to their computer to participate in educational or research activities. To do this they must have full administrative rights on their computer.

Make Sure Your Computer’s Applications, Drivers and Operating System is Up to Date

It is important to keep your computer’s operating system and other installed applications up to date with the latest device driver, security and performance updates. Apple releases application, firmware, security and performance updates every month. Failure keeping your computer updated can result in the computer being compromised (hacked), or an inability to complete important tasks, thus affecting your educational experience.

Apple Application(s) and Macintosh OS Updates

Apple has a two utilities or features in its operating systems that automatically checks for updates. You can also run these utilities manually to check and install updates at any time.

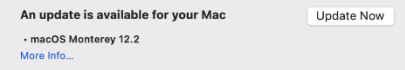
Software Update

This is Apple’s primary update utility for the computer’s firmware, and operating system.

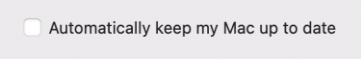
- Click on System Preferences

- Find and Click on Software Update

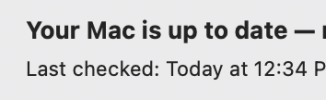
- If an update is available, click the Update now button, some updates may take a few hours to complete



- Recommended: ITS recommends you enable “Automatically keep my Mac up to date” feature by placing a check mark in the box



- Repeat steps until there are no more updates to install



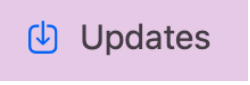
- Task Completed

Apple Store

This is Apple’s application installation and update utility. You will need a working Apple ID to install and update applications.

- Find and click on the Apple Store icon

- Before proceeding, make sure you are logged into the Apple Store with a working Apple ID that has access rights to install applications onto your computer.
- Click on Updates in the left hand menu



- Install any updates that Apple Store reports your computer needs

- Repeat steps until Apple Store reports No Updates

- Task Completed

Web Browsers

IMSA Information Technology Services (ITS) team recommends the use of the following web browsers. Other browsers may be used, we have found the following browsers to work the best when accessing the multitude of web sites an IMSA student will access during their educational career. ITS recommends having at least two web browsers installed on your computer.

- Recommended:
  - Google Chrome – latest version (Top choice)
  - Safari (Macintosh OS default)
  - Mozilla Firefox – latest version
- Not Recommended:
  - Microsoft Internet Explorer
  - Microsoft Edge
- Alternates:
  - Brave
  - DuckDuckGo (Add-on extension)
  - Opera
  - There may be others

Web Browser Settings

ITS recommends turning off the password save feature of the web browser. We know that it is easier to use saved passwords, but in the event your laptop is stolen all of your saved passwords would be compromised.

Registering Your Computer with IMSA

Registering your computer with IMSA Information Technology Services is recommended, failure to do so will prevent you from accessing certain computing resources that will be vital to your educational and research career at IMSA.

Accessing the Internet While on Campus

All students are able to connect their laptops, phones, tablets, etc… to one of two wireless networks. The capabilities of these networks are described below.

IMSAPublic Wireless (WiFi) Network

As the name describes this is a public wireless network available to anyone residing, working or visiting the IMSA campus. This is an unsecured, unencrypted wireless network, similar to what you may find at a restaurant or hotel. To access this wireless network you just need a simple password which is provided freely. It grants you full access to the Internet and limited or no access to specific IMSA managed resources.

- Purpose: For use on phones, tablets, and other computing devices
- Access: No access to specific on-site resources such as printers and specific educational web sites
- Security: NONE, not encrypted

airIMSA Wireless (WiFi) Network

This is the IMSA “production” wireless network. All IMSA owned laptops are connected to this wireless network. This network has the same Internet connectivity as “IMSApublic” with a few exceptions. This wireless network is encrypted and enables the student access to printers and some specific educational web sites. This is the recommended wireless network for a student’s primary computing device, a laptop.

- Purpose: For use on student’s primary computing device, laptop
- Access: Requires pre-registration, see instructions below
- Security: Encrypted

Pre- and Post-Registration Tasks

To take full advantage of IMSA's technology resources the following steps need to be completed. Some of the steps can be completed off site, whiles other must wait until you are on campus. Some steps are required and some steps are optional but recommended.

NOTE: If you have been issued or expect to be issued an IMSA loaner computer as a part of the Scholarship Loaner Program you can skip these steps. The IMSA owned computer you have been or will be provided is already authorized and setup for full functionality within the IMSA environment.

1 - Download and Extract IMSA's Computer Setup Package

IMSA's Computer Setup Package includes all of the files and application necessary to prepare your computer for accessing IMSA's computing and network resources.

- Open a web browser and go to: https://sites.imsa.edu/scs/
- Find the link for IMSA's Computer Setup Package for Macintosh OS

Apple/Macintosh OS Computers – Downloads.

- *IMSA's Computer Setup Package for for Apple/Macintosh OS* (Download)
  - Using Google Chrome –
    - Right-click on the link and select Save link as…
    - Download the file
    - Look at the bottom of the Chrome window for a security alert box. It will state that Symantec cannot be downloaded securely
    - Click on the up carrot next to the Discard button and select Keep
  - Using Mozilla Firefox – Click on the link and follow the screens to download the ZIP file

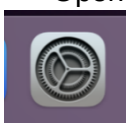
2 - Setting your computer's host name – REQUIRED

In order for IMSA Information Technology Services (ITS) to contact you concerning security issues with your computer, we need to have a way to link your computer with your email address and your name. To that end we are requesting you set a name for your computer that will be recorded with in IMSA's Antivirus, Data and System Security Portal. Please follow the instructions below to set your computers "host" name.

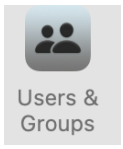
2-1 – Enable Macintosh OS "Root User"

To set the host name you will first need to enable the Macintosh OS "Root User", follow the instructions below to "Enable the Root User".

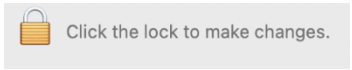
- Open System Preferences



- Open Users & Groups

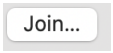


- Click the lock to make changes



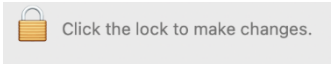
- Enter your computer's user name and password as prompted
- Click Login Options

- Click Network Account Server: Join… button



- Click the Open Directory Utility… button

- Click the lock to make changes



- Enter your computer's user name and password as prompted
- Click Edit in the Menu Bar

- Click Enable Root User in the Edit menu

- Type your computer's account login password and press Enter or click OK

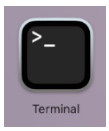
2-2 – Open the Terminal Application

Next, you will open the Terminal application and enter some commands to check and set your computer's host name.

- Navigate/Open Applications folder

- Navigate/Open Utilities Folder

- Open/Double-Click the Terminal application



2-3 – Setting computer's host name

- Enter the following command to check the current setting of your computer's hostname. NOTE: This command is case sensitive
  - **sudo scutil --get HostName**
  - Enter the same password you entered when enabling the "Root User" in the previous steps
  - Expected response from the computer: **HostName: not set**
- Enter the following command with the correct host name information to set your computer's host name
  - Recommendation/Requested format: Class Year – IMSA Username
    - Example(s): c25-rflickinger, c23-jsmith7, c24-jdoe8
  - Command: **sudo scutil --set HostName *newHostName***
  - Example: **sudo scutil --set HostName c25-rflickinger**
  - Enter the same password you entered when enabling the "Root User" in the previous steps, if prompted
- Enter the following command to check the current setting of your computer's hostname. NOTE: This command is case sensitive
  - **sudo scutil --get HostName**
  - Enter the same password you entered when enabling the "Root User" in the previous steps, if prompted

```
imsacio@IMSAs-MBP ~ % sudo scutil --set HostName c25-rflickinger
imsacio@IMSAs-MBP ~ % sudo scutil --get HostName
c25-rflickinger
imsacio@IMSAs-MBP ~ %
```

- Record the host name you have set, you will need it in the future
- You can close the Terminal application
- You do not want to disable the root user at this time, you will need it to complete future tasks

3 – Install Antivirus Solution (CrowdStrike Falcon) – REQUIRED

This step can be completed at home, as long as you have an Internet connection. Before installing IMSA's Antivirus Solution you will need to uninstall any antivirus solution that is already installed on your computer. The names of the antivirus solutions that we have seen problems with are listed below, this is not an exhausted list, but the most common. **Macintosh users, Apple has convinced most people that Apple Macintosh computers are invincible to computer viruses and malware. Since most computer viruses are written to attach Windows OS computers, this is partly true. However, Macintosh computers can be virus carriers, not directly affected, but have the ability to effect other computers. This is why IMSA requires ALL computers connected to IMSA's network to have Antivirus software installed.**

3-1 - Uninstall Existing Antivirus Solutions

Look through your Applications folder and remove or uninstall any existing antivirus application.

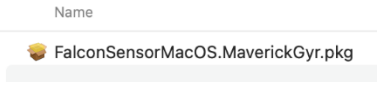
- Avast
- AVG
- Any previous installation of Symantec Endpoint Protection
- Any Norton brand product
- Any McAfee brand product

3-2 - Uninstall any previous installation of Symantec Endpoint Protection as required by IMSA

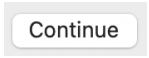
- Open Symantec Endpoint Protection
- Click on File
- Select Uninstall Symantec Endpoint Protection
- Follow the prompts
- Reboot your computer when completed, if instructed

3-3 - Installing IMSA's Antivirus, Data and System Security Solution

- Navigate to the location on your hard drive where the IMSA's Computer Setup Package for Macintosh OS file was downloaded. In most cases this will be your Downloads folder.
- Locate the file "imsaComputerSetup-MacOS.zip".
- Double-click to extract the package file, a new windows will open when complete
- Double-click on the PKG file to launch the Installer

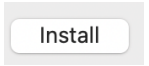


  - Click Continue for Introduction



  - Click Continue for Read Me

  - Click Install for Installation Type

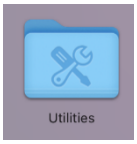


  - Enter your computer's account password, if prompted
  - Click Close when the installation finishes
  - Click Move to Trash to delete the PKG, installer file

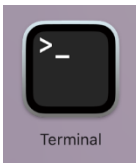
3-4 – License/Link CrowdStrike Falcon Sensor

- Navigate/Open Applications folder

- Navigate/Open Utilities Folder

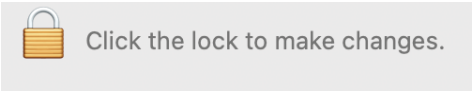


- Open/Double-Click the Terminal application

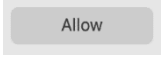


- Enter the following command to link the Falcon Sensor with IMSA's security portal
  - **sudo /Applications/Falcon.app/Contents/Resources/falconctl license A4965D76604C47B88477B53323304FDE-E5**
  - It is easiest to copy/paste the above command into the Terminal application
- Enter your computer account password, if prompted
- Click Allow to allow the Network Content changes

- Click Open Security Preferences to allow the System Extension
- Click the lock to make changes



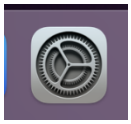
- Enter your computer account password, if prompted
- Click Allow to allow the Falcon application



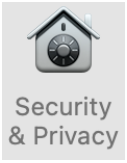
- Enter the following command to load the Falcon Sensor
  - **sudo /Applications/Falcon.app/Contents/Resources/falconctl load**
  - It is easiest to copy/paste the above command into the Terminal application
- Enter your computer account password, if prompted

3-5 – Set Macintosh OS security preferences for CrowdStrike

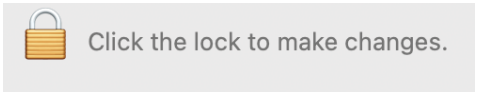
- Open System Preferences



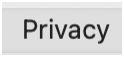
- Open Security & Privacy



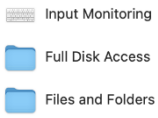
- Click the lock to make changes



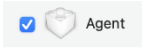
- Enter your computer account password, if prompted
- Click on the Privacy Tab



- In the left side pane scroll down until you find “Full Disk Access” and click on it



- In the right pane, make sure a check mark is next to Agent

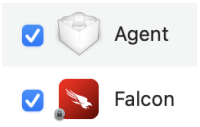


- Click the “+” (plus) button

- Click on Applications

- Find and click on the Falcon application. Click on Open

- Make sure the Falcon application is added to the right pane and has a check mark



- You can close all of the System Preferences windows
- You can disable the “Root User”, repeat the steps above for enabling the user and select “Disable Root User” as the final step.

Troubleshooting Installation Issues

To obtain help with any issues you encounter during the installation of this application, please email your issue to helpdesk@imsa.edu. Please use your, the student's, IMSA email account.

4 – Register computer for access to airIMSA wireless network – REQUIRED

NOTE(s):

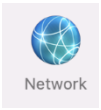
- **If you have been issued or expect to be issued an IMSA computer as a part of the Scholarship Loaner Program you can skip this procedure and send us the IMSA Inventory (Bar Code) Number of the computer. We will pull this information from our databases.**
- **Completion of task 1 thru 3 is required**

To register your computer for access to the airIMSA wireless network IMSA Information Technology Services (ITS) needs a couple pieces of information to complete the process. This will consist of taking screen shots and emailing them to the ITS team. ITS will need three or four pieces of information from you to register your computer. The first is your computers "Host Name" which you set in the "Setting your computer's host name" section above. The second is the MAC (hardware) address of your Ethernet/wired network card, the MAC (hardware) address of your wireless network card, and proof of installation of IMSA's Antivirus, data and System Security Solution. Please note that some laptops do not have, by default, an Ethernet/wired network card anymore. If this is the case and you want to make use of the wired connection in your room you will need to purchase a USB or USB-C to Ethernet "Dongle" for your laptop. We recommend you reach out to your laptop's manufacturer for recommendations on the proper dongle to purchase for your computer.

4-1 - Getting the MAC Addresses

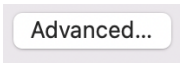
- Login to your computer
- Open System Preferences

- Open the Network Control Panel

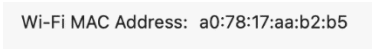


- Click on Wi-Fi to get your wireless card's hardware/MAC address

- Click the Advanced button in the lower right corner of the window



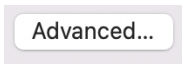
- Look for Wi-Fi MAC Address and take a snap shot using the Shift-Command-4 keyboard



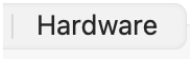
shortcut

  - An image will appear in the lower right corner of your screen, click on this image and click Done to save it as an image/picture file to your desktop
- Click OK to close the Wi-Fi window
- If you have an Ethernet dongle attached, repeat the steps above to obtain its hardware/MAC address
  - Example: Belkin USB-C Lan…

  - Click the advanced button



  - Click the Hardware tab



- Take and snapshot of the MAC Address as described above for taking a snapshot of the Mi-Fi MAC Address

MAC Address: 30:23:03:05:4b:41

4-2 - Proof, you have Installed IMSA's Antivirus, Data and System Security Solution

You must have completed steps 1 thru 3 before continuing. If you have only downloaded the installation files, you need to complete the remainder of the steps.

- Login to your computer
- Open Finder
- Open Applications folder
- Find Falcon Sensor icon

- Take a snap shot using Shift-Command-4, as described in a previous step, example of what to capture is below

4-3 - Send Email with Information Gathered

NOTE: If you have been issued or expect to be issued an IMSA computer as a part of the Scholarship Loaner Program you can skip this procedure and send us the IMSA Inventory (Bar Code) Number of the computer. We will pull this information from our databases.

Send an email using your IMSA email account to **helpdesk@imsa.edu**. Remember you must use your IMSA account and include your computer's host name, the MAC Address and proof of CrowdStrike – Falcon Sensor installation screen shots or your registration request will be rejected.

- You will receive a confirmation email that your registration email has been received.
- Within 24 hours, unless submitted on a weekend or holiday you will receive another email. Make sure you read this email completely, not just the subject.
  - Indicating Completion: All of the information has been verified and your registration is complete
  - Indicating missing information: Your registration is incomplete because information is incorrect or incomplete.

5 – Connecting to IMSA's wireless (WiFi) network called airIMSA – REQUIRED

NOTE(s):

- **Completion of task(s) 1 thru 4 are required**
- **This task has to be completed while you are at the IMSA campus in Aurora, IL. It cannot be completed remotely**

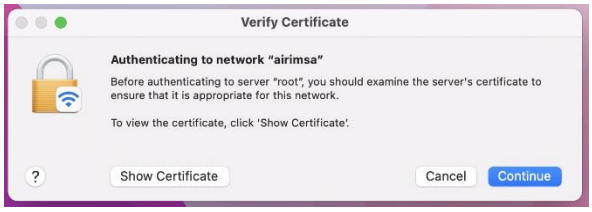
5-1 - Connecting to airIMSA Wireless (WiFi) Network

- Click on the wireless icon in the menu bar

- If your wireless card is enabled you should see a list of available wireless networks. Find and click on airimsa

- You will be prompted for your IMSA username and password

- Click OK once you have entered your IMSA username and password
- Click Continue to verify the certificate



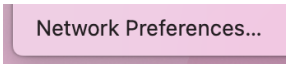
- You will be prompted to enter your local account password, click Update Settings
- You may need to repeat the steps above a 2nd time, before the connection is confirmed
- Within a few seconds you should see a confirmation that you are connected to airIMSA
- Task Completed

5-2 - Remove IMSApublic Wireless Network

If you previously connected to the IMSApublic wireless network we recommend you remove this network from your remembered network lists, or at list change its configuration so it will not attempt to auto-reconnect. If you reconnect to IMSApublic after following the procedure below to "Forget" the network, make sure you un-check the Remember this network check box before clicking Connecting.

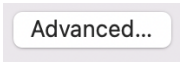
- Click on the wireless icon in the menu bar

- Click on Network Preferences



- Click on WiFi

- Click on the Advanced button in the lower right corner of the window



- Find IMSApublic in the list and click on it

- You have two choices:
  - Remove the check mark under Auto-Join next to the IMSApublic entry

  - or Click the "-" (minus) button to remove IMSApublic from your preferred wireless networks list

- Click OK when finished
- Click Apply to close control panel
- Task completed

6 – Setting up access to IMSA printers – RECOMMENDED

NOTE(s):

- **Completion of task(s) 1 thru 5 are required**
- **This task has to be completed while you are at the IMSA campus in Aurora, IL. It cannot be completed remotely**
- **You must be connected to a wired Ethernet connection in your Residential Hall room or connected to the wireless network airIMSA.**

IMSA students have access to multiple Multi-Function Devices (MFDs) on campus. A list of their locations is below. The Canon MFDs utilize your IMSA Student ID to access the devices capabilities and retrieve printed documents. Students have access to Copy, Print and Scan to Email capabilities on the Canon MFDs.

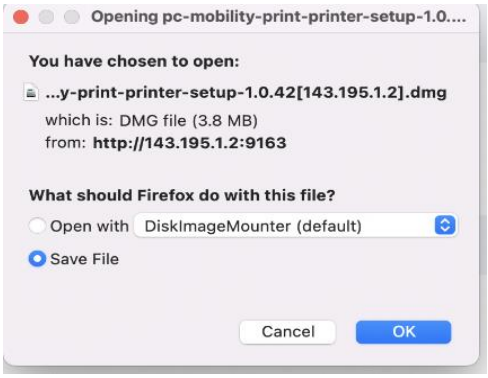
Device Locations

- One Canon Black/White device in each Residential Hall located in the RC Office
- One Canon Color device in the Information Resource Center (IRC)
- One Canon Black/White device in IN2
- One Canon Black/White device in A-109, The Writing Center

6-1 - Download Installation Application

- Open a web browser and go to http://143.195.1.2:9163/setup
- Click on the download link for Macintosh OS

- Click Save File and then Ok



- Download the file, taking note as to the download location.

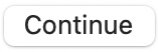
6-2 - Install the PaperCut Mobility Print Client

- Go to the location where you downloaded the installation application
- Double-click on the file called pc-mobility-print-printer-setup-1.0.42[143.195.1.2].dmg

- A new window will open, double-click on the PaperCut Mobility Print Client.pkg

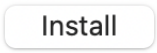
- Click Continue on the Welcome to Installer page

- Scroll to the bottom of the License Agreement page and click Continue

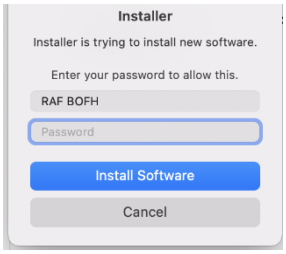


- Click Agree to agree to the license agreement

- Click Install to perform a standard installation

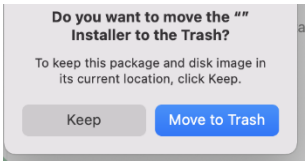


- Enter your local account password and click Install Software



- Close when the installer reports the installation was successful

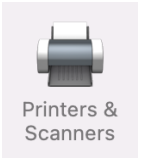
- Click Move to Trash to discard the installation program



6-3 - Checking the Printer Installation

1. Open System Preferences

2. Open Printers & Scanners Control Panel



3. You should see two IMSA printers installed
   - imsastudentbw – for black/white printers
   - imsastudentcolor – for color printers

4. If you don't see the printers, something went wrong with the installation. See a member of the IT HelpDesk staff to troubleshoot the issue.

- **REMINDER: You must be connected to a wired Ethernet connection in your Residential Hall room or connected to the wireless network airIMSA.**

6-4 - Perform a Test Print

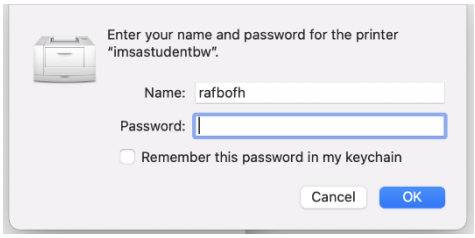
You can use any kind of document to perform a test print to one of the IMSA Student Printers. This documentation will use the basic word process included with the Macintosh OS called TextEdit.

- Open Finder
- Open Applications folder
- Find and double-click on TextEdit

- Type in a few lines
- Click on File, in the menu bar, and then click on Print. Or press Command-P

- Make sure one of the IMSA printers is selected and click Print

- The first time you print to one of the IMSA printers, you will be prompted for your IMSA username and password. We recommend you also check the box for “Remember this password in my keychain”



- Go to one of the available IMSA student printers and retrieve your test print out.

7 - Accessing IMSA Student Server while on campus – OPTIONAL, Required for some classes

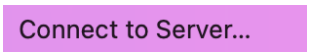
NOTE(s):

- **Completion of task(s) 1 thru 5 are required**
- **This task has to be completed while you are at the IMSA campus in Aurora, IL. It cannot be completed remotely**
- **You must be connected to a wired Ethernet connection in your Residential Hall room or connected to the wireless network airIMSA.**

As a requirement to complete some class or research assignment it may be necessary for a student to access a local file server called students.imsa.edu. Below are instructions for access this server.

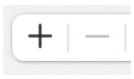
- Open Finder
- Click on Go in the menu bar

- Click on Connect to Server… or press Command-K

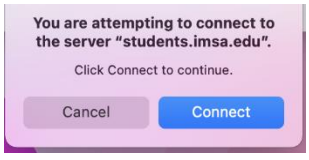


- In the server address field type:
  - **smb://students.imsa.edu**

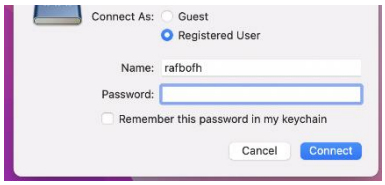
- Press <enter> or click Connect
  - NOTE: If you will be access a server a lot, we recommend adding it to your Favorite Service list by clicking the “+” plus button



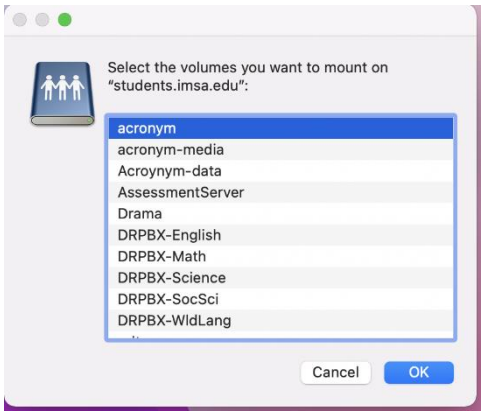
- Click Connect to confirm you wish to connect to the server



- Make sure Registered Users is select and enter your IMSA account username and password
  - OPTIONAL: Click the check box next to Remember this password in my keychain



- Click Connect
- A new window will open showing all of the possible shared area available via the student file server, find the one you need, click on it and click OK.



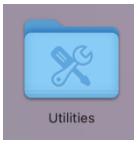
- A new window will open, showing you the contents of the shared area you selected.

Uninstall IMSA's Antivirus, Data and Security Software

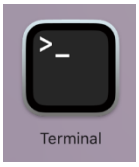
At the end of each school year you will be able to uninstall IMSA's antivirus, security software from your personal computer. This will be required of seniors, soon to be alumnus and optional for rising juniors and seniors. The grace period for this optional uninstall of the software will be from May 1st until August 10th.

- Navigate/Open Applications folder

- Navigate/Open Utilities Folder



- Open/Double-Click the Terminal application



- Enter the following command to uninstall the Falson Sensor
  - **sudo /Applications/Falcon.app/Contents/Resources/falconctl uninstall**
  - It is easiest to copy/paste the above command into the Terminal application
- Enter your computer account password, if prompted