



Employee Services Technical Support  
Frontline Tier 1 or Tier 2 Support for:

MAC OS X and Applications

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2<sup>nd</sup> January 2019

# Training Agenda

- Overview of Mac OS X and its Applications
- Support Overview
- Troubleshooting
- Associated Links / Sites
- Q&A



# Overview of Mac OS X and its Applications

# Overview

- General Information of Apple Hardware & Mac OS X
- Overview of MS Office 2016
- Cisco AnyConnect
- SofToken II and MobilePASS
- Cisco WebEx, Jabber and Spark
- VmWare Fusion
- McAfee & FireAmp
- Crashplan
- OnRamp

# Different Apple Computers (Desktops & Portables):



Mac Mini



Mac Pro



MacBook Pro



iMac 21.5"/27"



MacBook Air

# Generation of Mac OS X

Cheetah OS - 10.0 updated up to 10.0.4

Puma OS - 10.1 updated up to 10.1.5

Jaguar OS - 10.2 updated up to 10.2.8

Panther OS - 10.3 updated up to 10.3.9

Tiger OS - 10.4 updated up to 10.4.11

Leopard OS - 10.5 updated up to 10.5.8

Snow Leopard OS - 10.6 updated up to 10.6.8

Lion OS - 10.7 updated up to 10.7.5

Mountain Lion OS - 10.8 updated up to 10.8.5

Mavericks - 10.9 updated up to 10.9.5

Yosemite - 10.10 updated up to 10.10.5

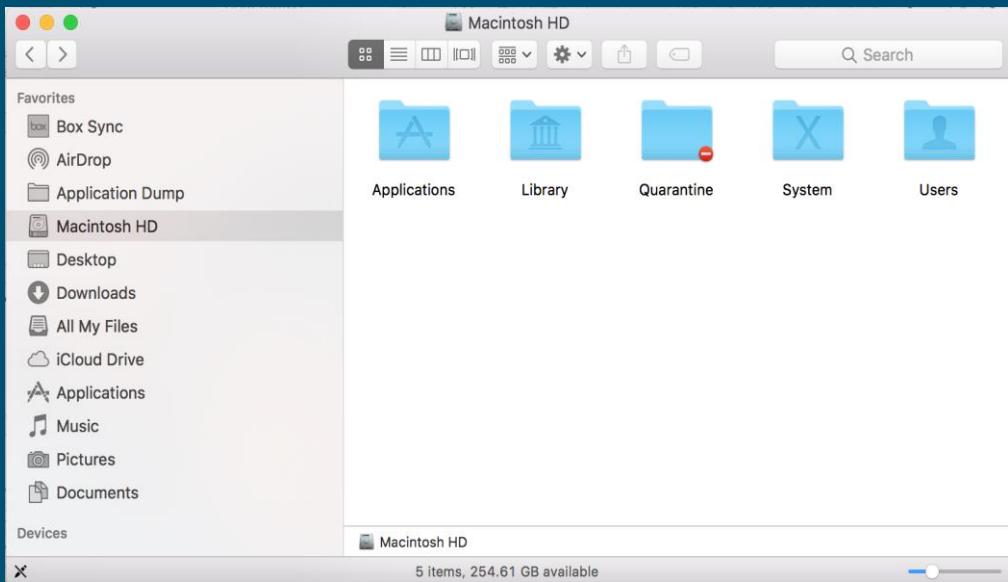
El Capitan - 10.11 updated up to 10.11.6

Sierra - 10.12 updated up to 10.12.6

High Sierra - 10.13.6 (Latest Version as of July 2018)

**NOTE:** To install Mac OS, it requires an Apple Hardware (Apple Computer). Mac OS X was available in 32 & 64 bit till Snow Leopard. From Lion OS X onwards, it's available only in 64 bit.

# Understanding File System



Mac OS X has made up four essential folders as **Applications**, **Library**, **System** and **Users**

\*\*\*\* Each and every Library folder has a Preferences folder which contains the settings of individual applications in the form of .plist.

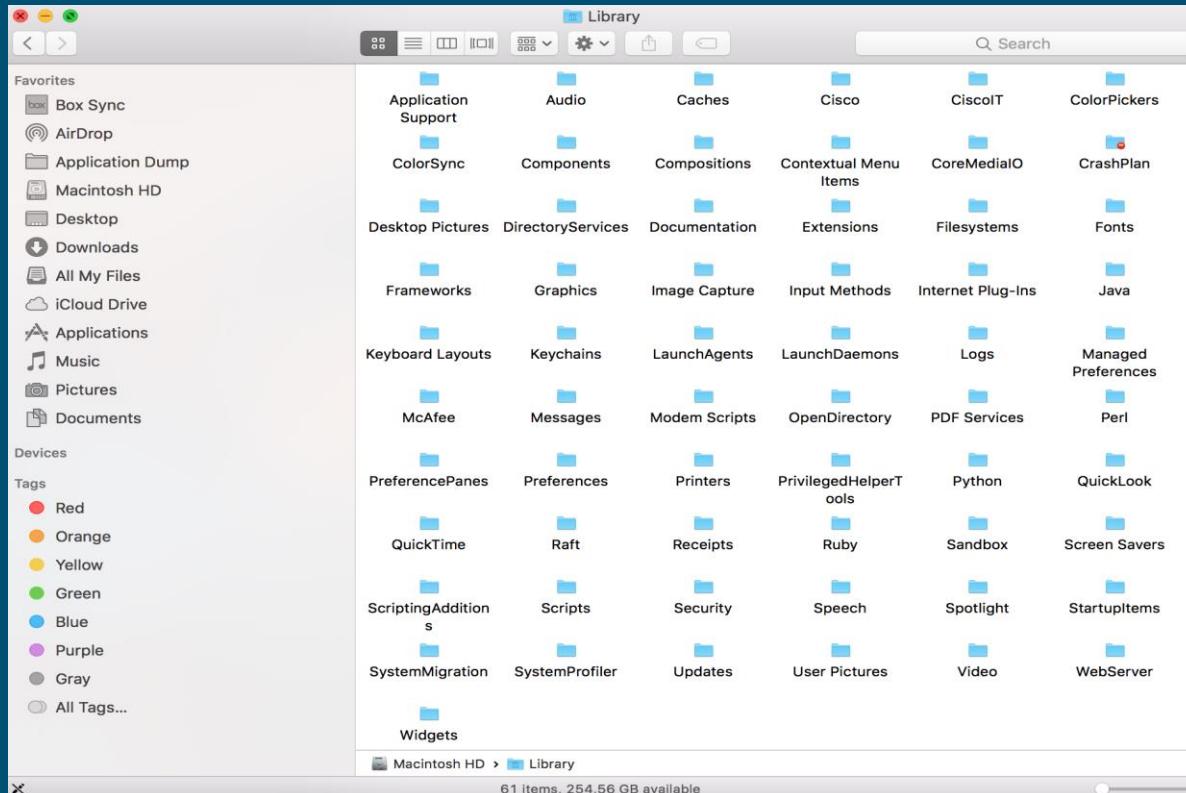
For example:

com.apple.addressbook.plist

com.microsoft.outlook.plist

or

# HDD Library



Library contains the files and folders, which are required for the Mac OS X, but it's not essential to run the basic operating System.  
For example: Internet Plugins

# Applications

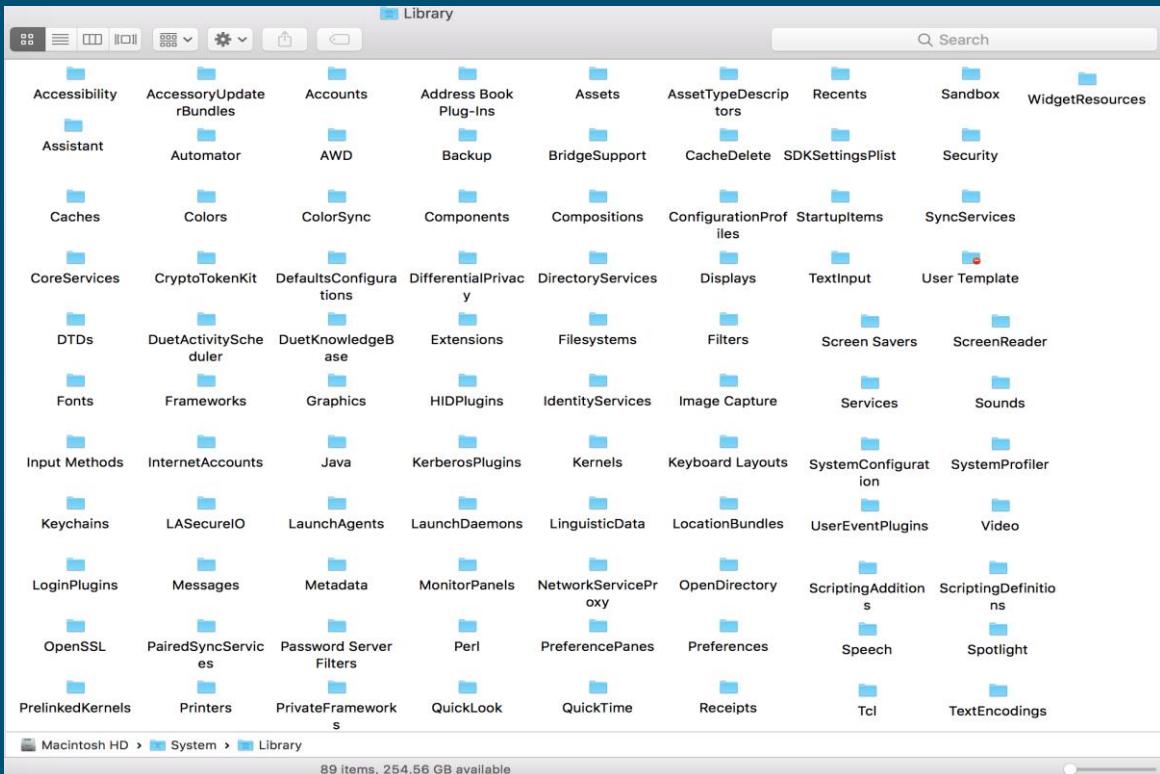
**Applications** Folder contains all the default applications and other third party applications in the format of .app. For example: Address book.app.

Installation of an application on Mac OS X is very easy. On Mac OS X, Installer helps to install any applications on the Macintosh HD in ‘Applications’ Folder. By default the entire applications install on the ‘Applications’ folder, but the applications can be installed on other locations also, if required.

On Mac OS X, all the application comes up in .pkg or .mkpg or .dmg or .app format.

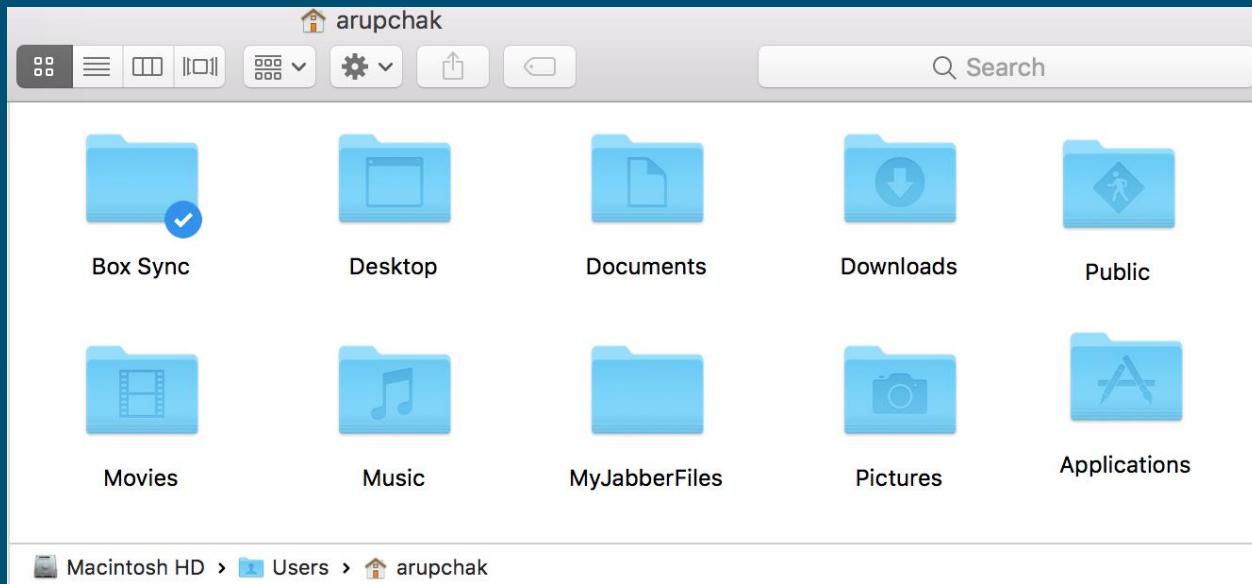
**NOTE:** Any application which comes in .app format is an executable file, which can be run directly without extracting any packages.

# System



System contains a Library Folder, which has all the essential files to run the operating System.  
For Example: Core Services

# Users



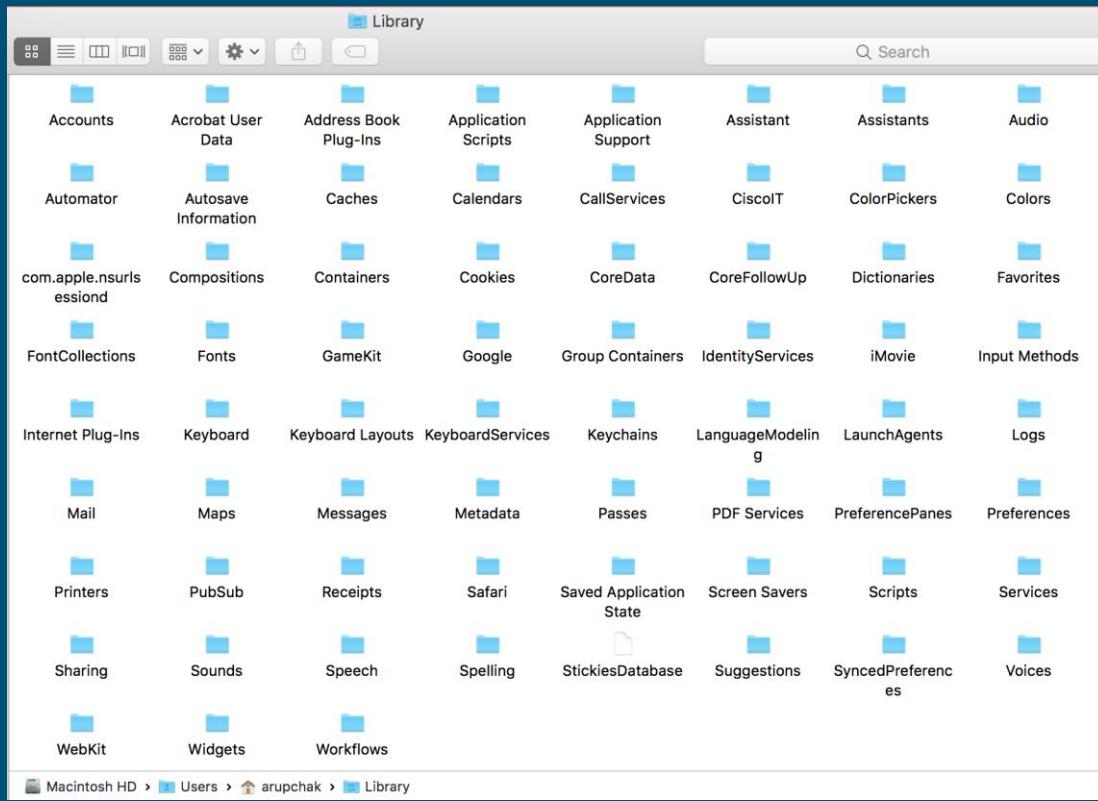
**Users** folder contains of the data of all the user accounts along with a Shared folder.

Each and every user account folder made up of mainly folders; **Desktop**,

**Documents**,  
**Library**(hidden),  
**Pictures**, **Public**

**Download**  
**Movies**, **Music**

# User Library



**Library** folder contains all the settings of the user account including the data of all user based applications.

**NOTE:** To access it, click on the **Go** option from the top menu bar after launching Finder window and then hold down the **OPTION** key on the keyboard.

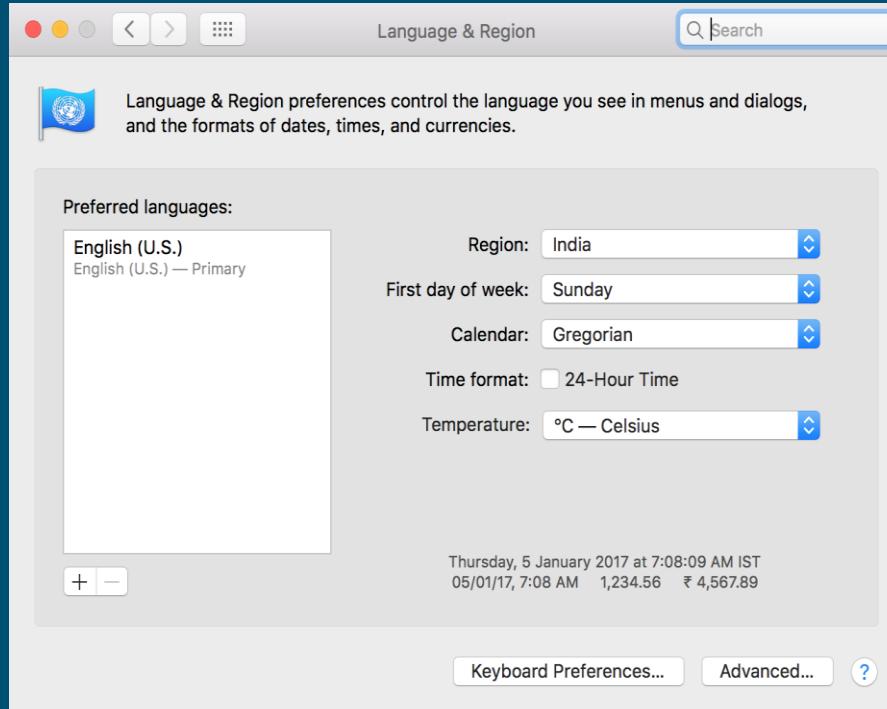
# Essential Applications and Utilities

## System Preferences

**System Preferences** controls system-wide settings ("global" settings), and is available from the Apple menu at the upper-left corner of the screen. System Preferences lets you to adjust things like your screen resolution, keyboard control, mouse control, sound, printer settings, sharing settings, accounts, and more. You can quickly locate the settings you want to change by typing the desired subject in the search field. For example, to change your login password, type "password." The preferences related to password appear below the search field, and one or more preferences are spotlighted in the System Preferences window. Click the item in the list that matches what you want to do, or click one of the spotlighted preferences. The appropriate preference pane opens.

# Essential Applications and Utilities

## Language and Region

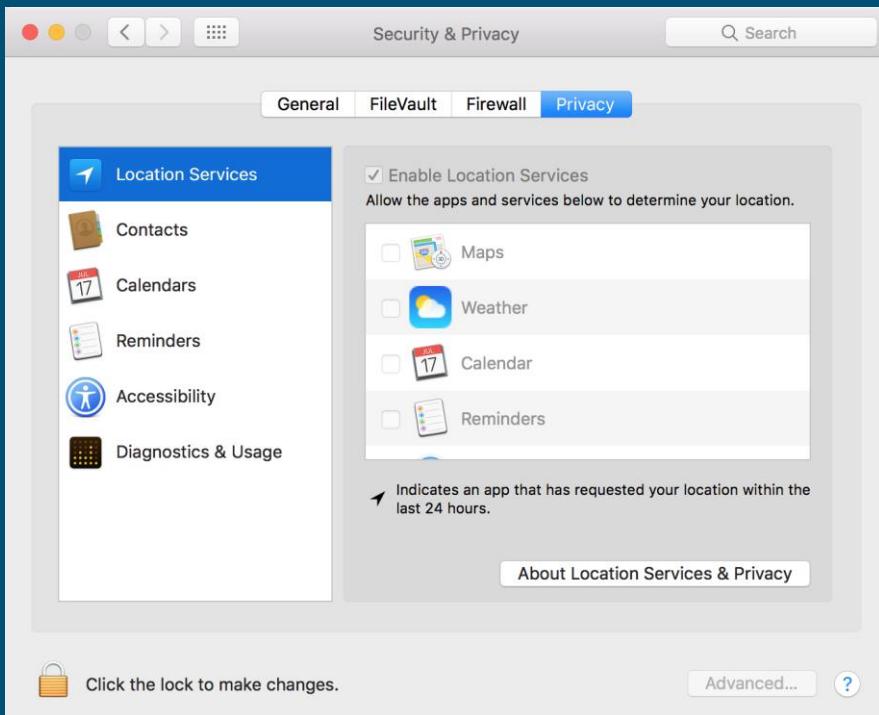


**Language & Region** option has been created to set the Preferred and second Languages, Region and Calendar style.

If any user wants more than one language on Outlook, then set the Languages here accordingly. Make sure that English (US) should be selected as it has dictionary.

# Essential Applications and Utilities

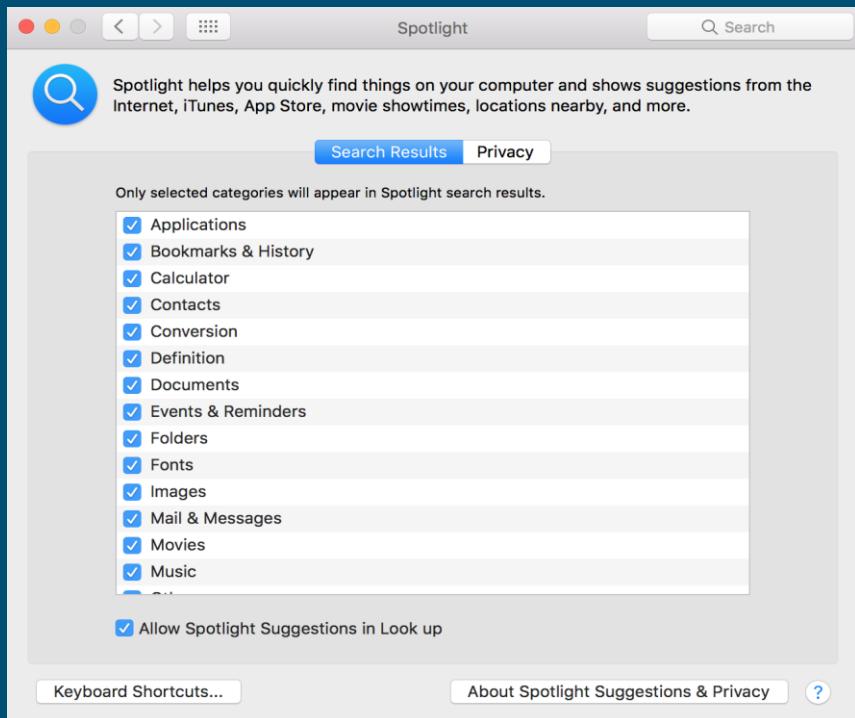
## Security and Privacy



Security & Privacy has the setting of Firewall (which allows you to accept or deny incoming connections to your Mac by application), FileVault (FileVault2 to encrypt entire Macintosh HD) and Privacy (offers a number of options that you can set to keep your information secure. In the sidebar, you'll see a list of items, many of them simple: Contacts, Calendars, Reminders all show which apps have requested to access this information. You'll see alerts when apps make such requests.)

# Essential Applications and Utilities

## Spotlight

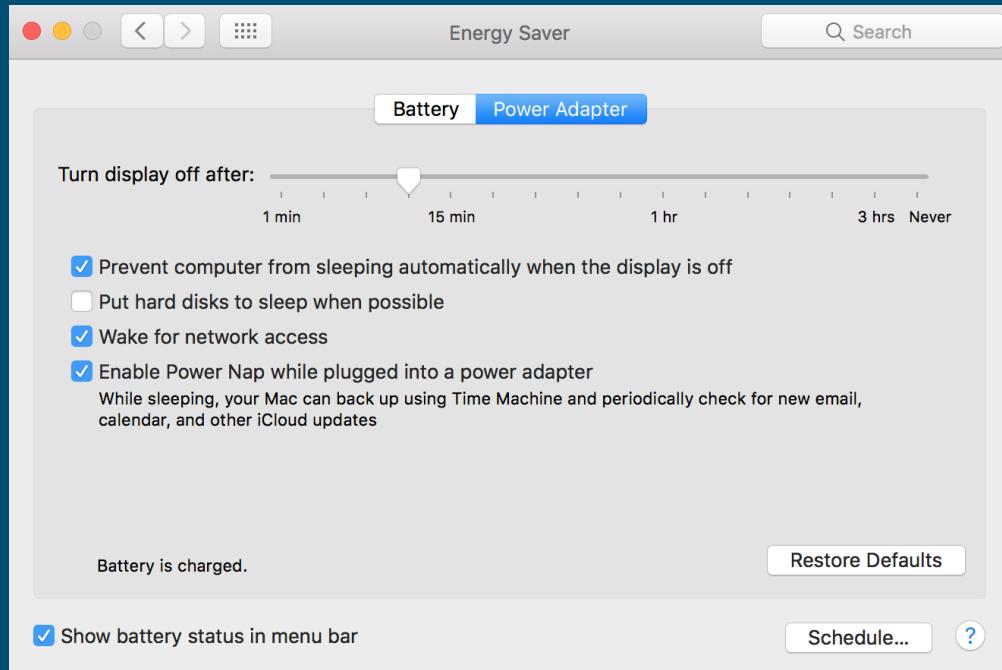


**Spotlight** manages the complete indexing service of Mac OS X and all installed applications Data. By default, under Search Results all the categories are checked to cover all kinds of data.

If any user wants to omit any particular folder or file from search results, then we need to add that folder under **Privacy** tab. If any items are not appearing in search results, then add and remove from Privacy section.

# Essential Applications and Utilities

## Energy Saver

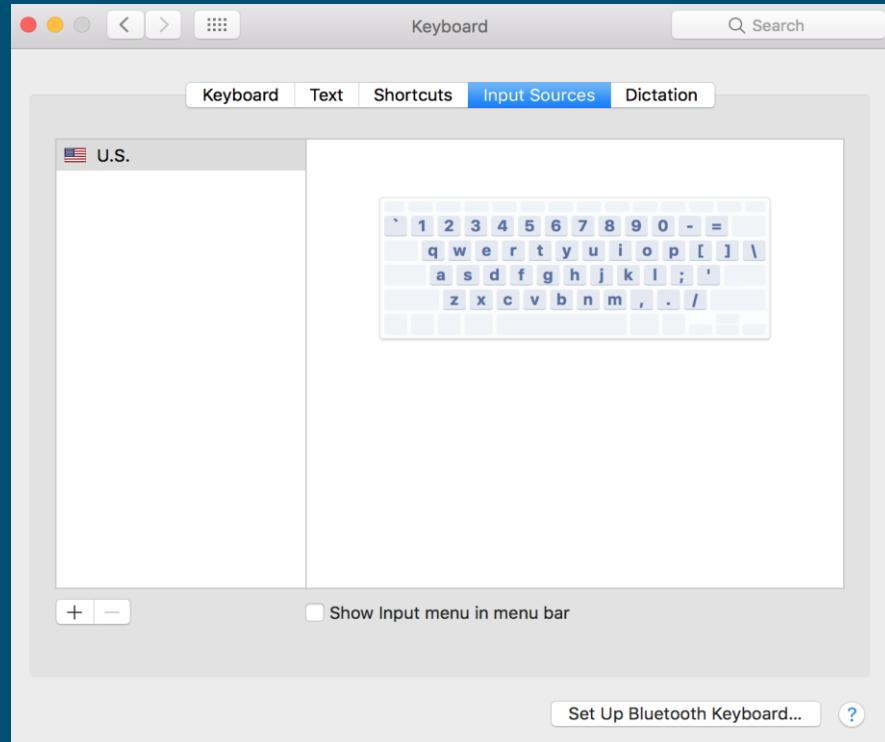


The settings in **Energy Saver** affect what happens when your Mac is left unattended for a period of time that you specify.

If the Mac is running out of Battery or doesn't go to sleep or wake up properly, then click on **Restore Defaults**.

# Essential Applications and Utilities

## Keyboard

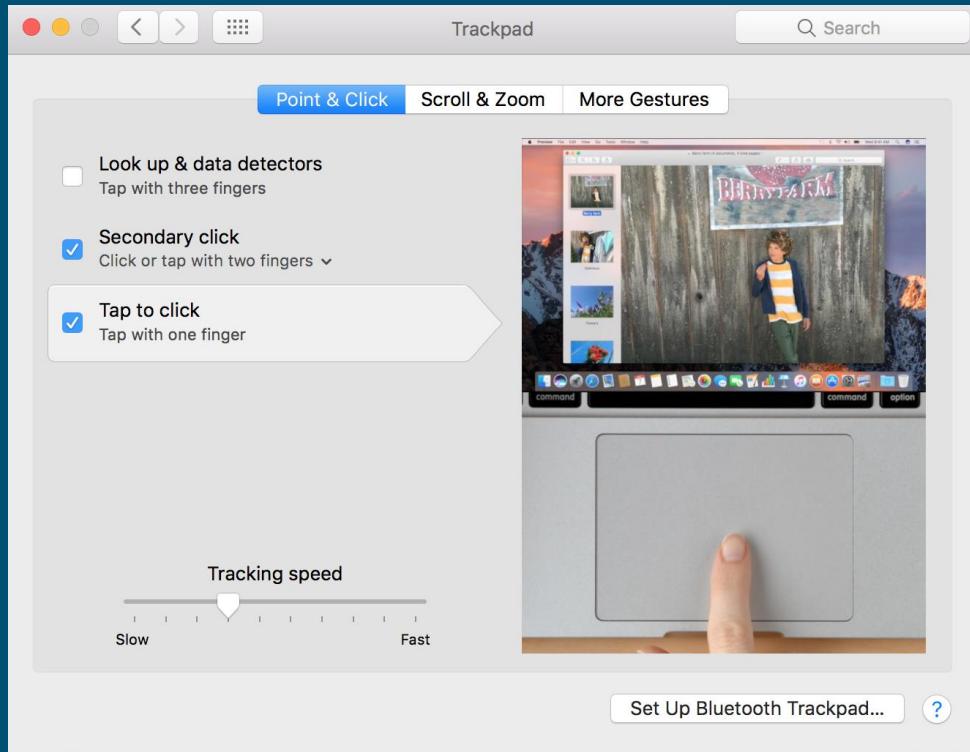


**Keyboard** option helps to change the Keyboard Preferences, setup Bluetooth Keyboard, assign keyboard shortcuts and to setup the replacement words.

Whenever any user get a login issue, where the password is correct, but still Mac OS is not accepting the password; in that case, make sure that the keyboard Layout has selected as U.S. by default after login to the Mac.

# Essential Applications and Utilities

## Trackpad

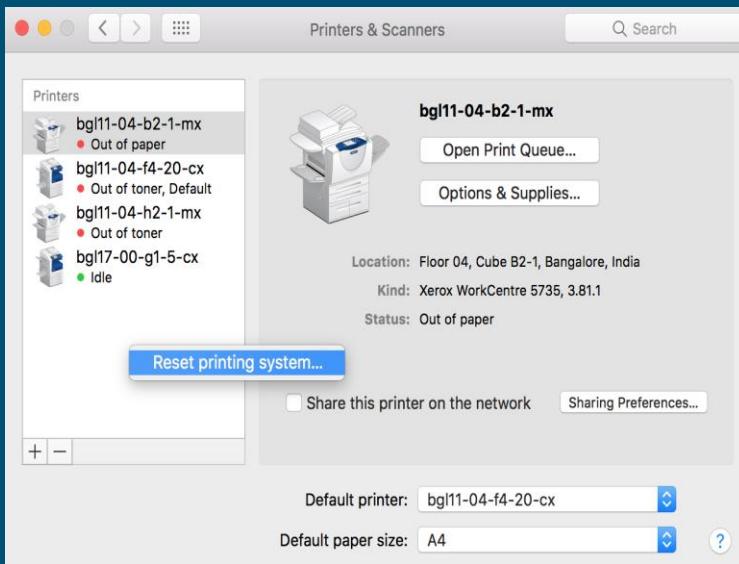


**Trackpad** option helps to change the Trackpad settings of portables and for external Trackpad. Use the appropriate tabs to change the settings of Trackpad preferences.

By default, **Tap to Click** option is disabled and user has to use hard click on the trackpad initially and then can be enabled here.

# Essential Applications and Utilities

## Printers & Scanners



**Printing and Scanning** plays a vast role on Mac OS X. There are four different kinds of printers can be added on Mac; Default (USB or Bonjour Shared Printer), Windows Shared Printer, IP Printer.

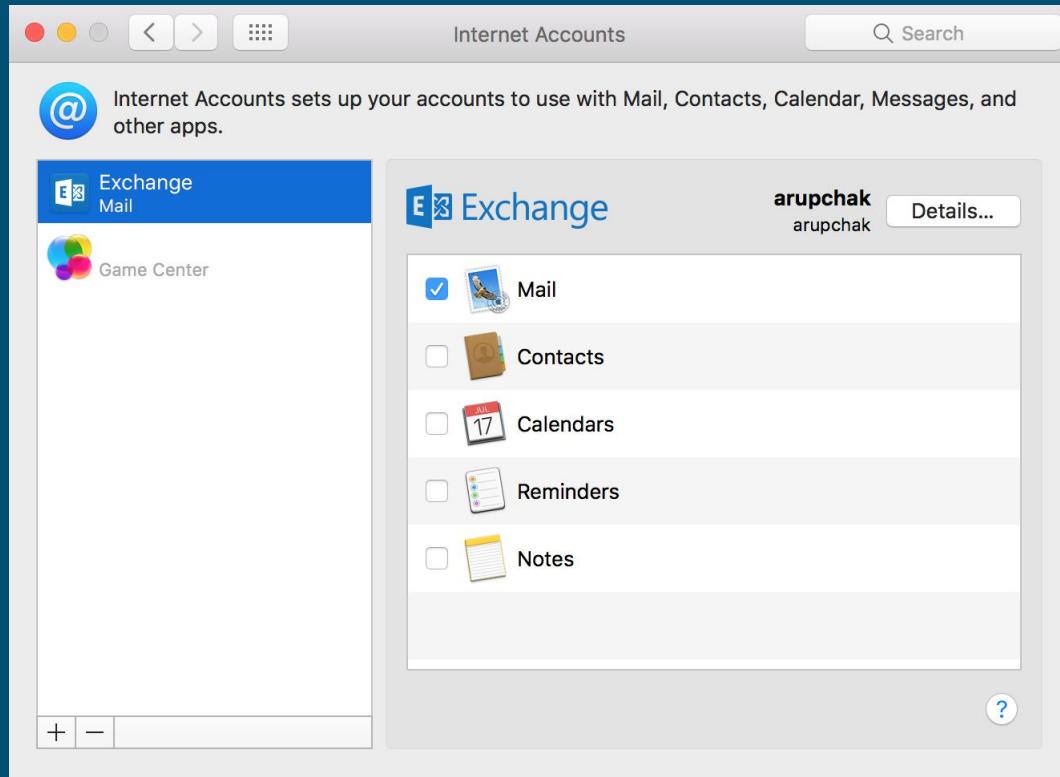
**USB Printer** is the one which connects directly to the Mac and then takes the printout.

**IP Printer** is the one which is connected to an Ethernet port or connected through Wireless and collects the printing packages through an IP address. IP Printer has to be configured as the information provided by the printer manufacturer.

**Windows Shared Printer** is the one which is connected to a windows Client or Server and both Mac & Windows computers are joined to the same Local area network.

# Essential Applications and Utilities

## Internet Accounts

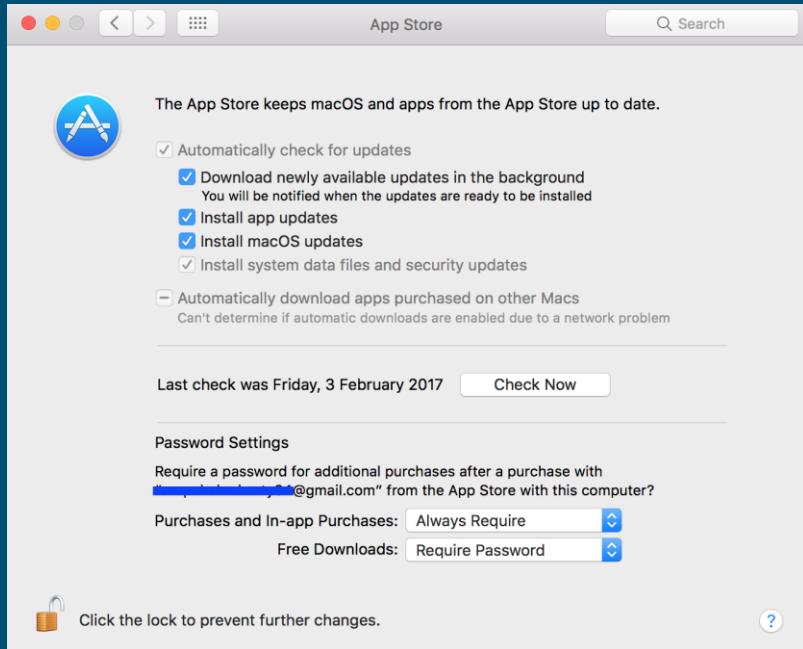


Internet Accounts tool helps to sync the Mail, contacts, Calendars with Mail, Address Book, iCal respectively all together. In this place, we can configure any exchange account including iCloud account.

If any user gets prompt to enter iCloud account password repeatedly, then remove and re-add the iCloud account here.

# Essential Applications and Utilities

## App Store

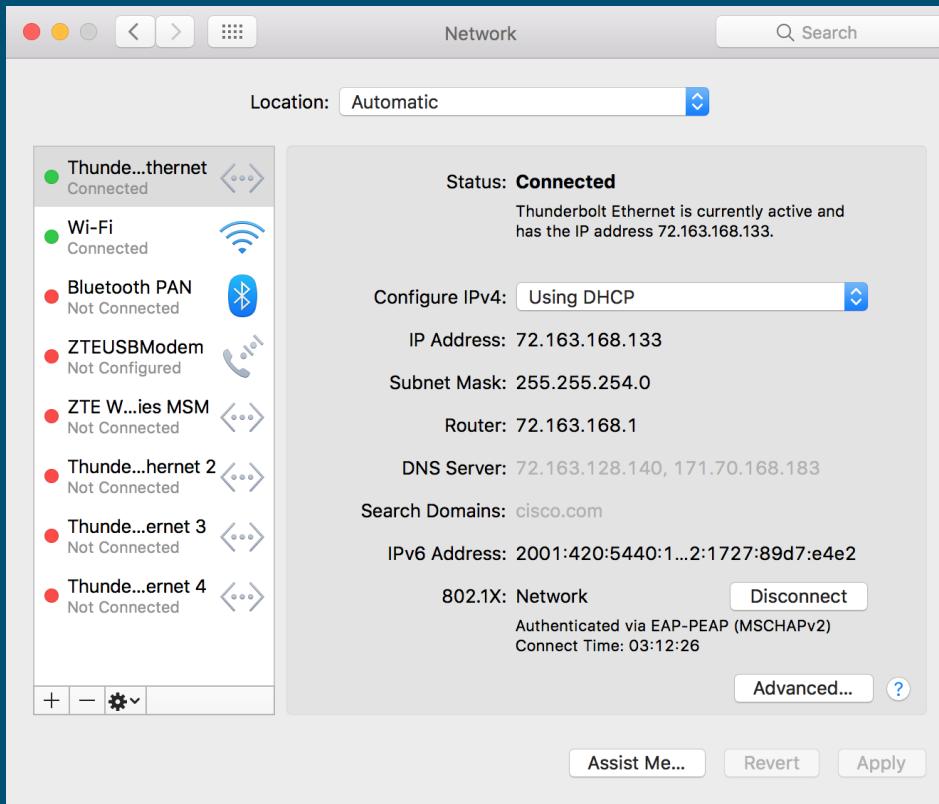


**App Store** is a default Application though which we can download millions of applications for the Mac OS. Even all the Mac OS X and applications updates are getting downloaded through App Store.

You can change the App store preferences here. But if any app gets blocked during download, then you may change the settings under **Security & Privacy** section.

# Essential Applications and Utilities

## Network



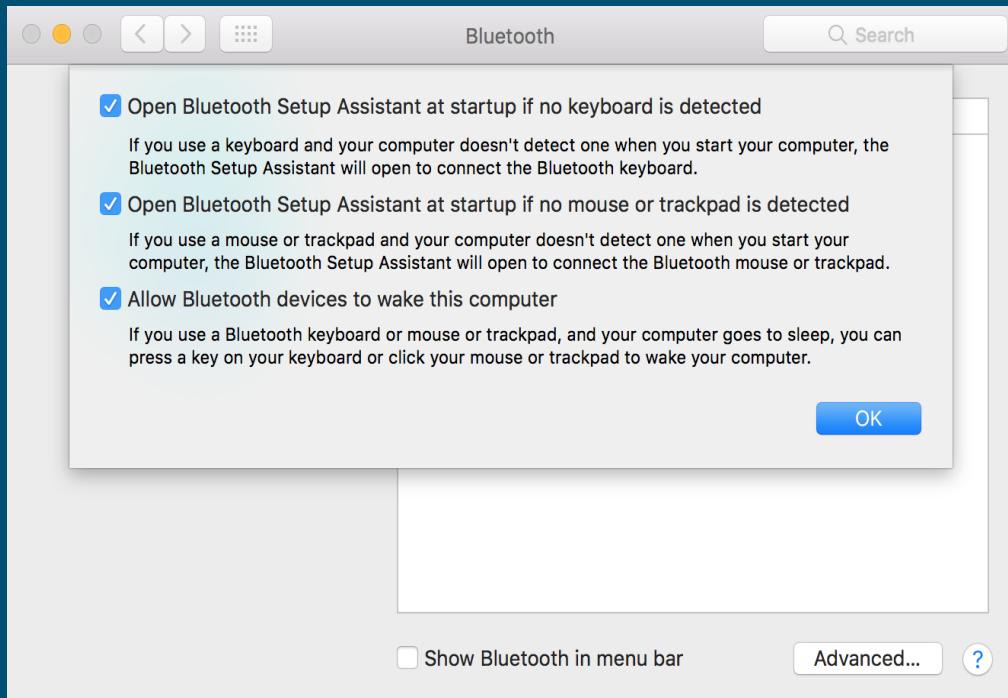
**Network** plays a vital role on Mac OS X. You can configure all kinds of Network devices from here like Wi-Fi, Bluetooth based network, USB Portable modem etc. and even the details of configured networks can be collected here like IP address, DNS, domain name, etc.

If the 802.1x authentication doesn't work for Thunderbolt Ethernet, then disconnect and reconnect here. You may set the service order for all the configured Network devices.

If there is any issue with the existing network preferences, then you may create a new location to test the network behavior.

# Essential Applications and Utilities

## Bluetooth

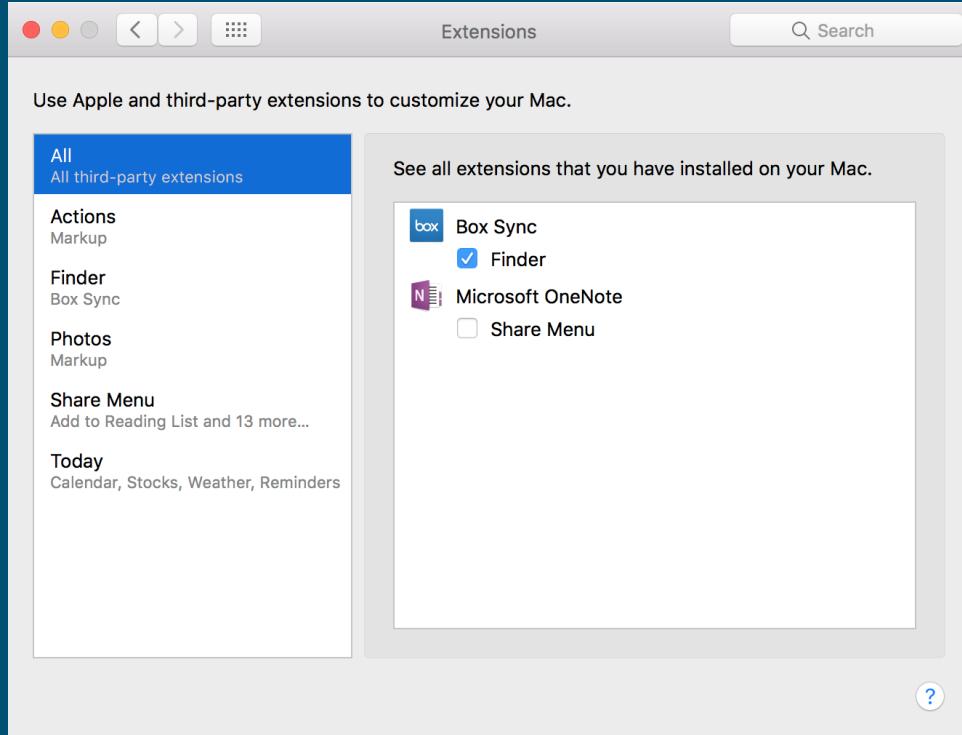


Bluetooth preferences help to pair up the Bluetooth devices like mobile phones or computer to transfer data in between the devices.

Even it helps to manage Bluetooth Keyboard, Mouse and Trackpad from the Advanced options.

# Essential Applications and Utilities

## Extensions

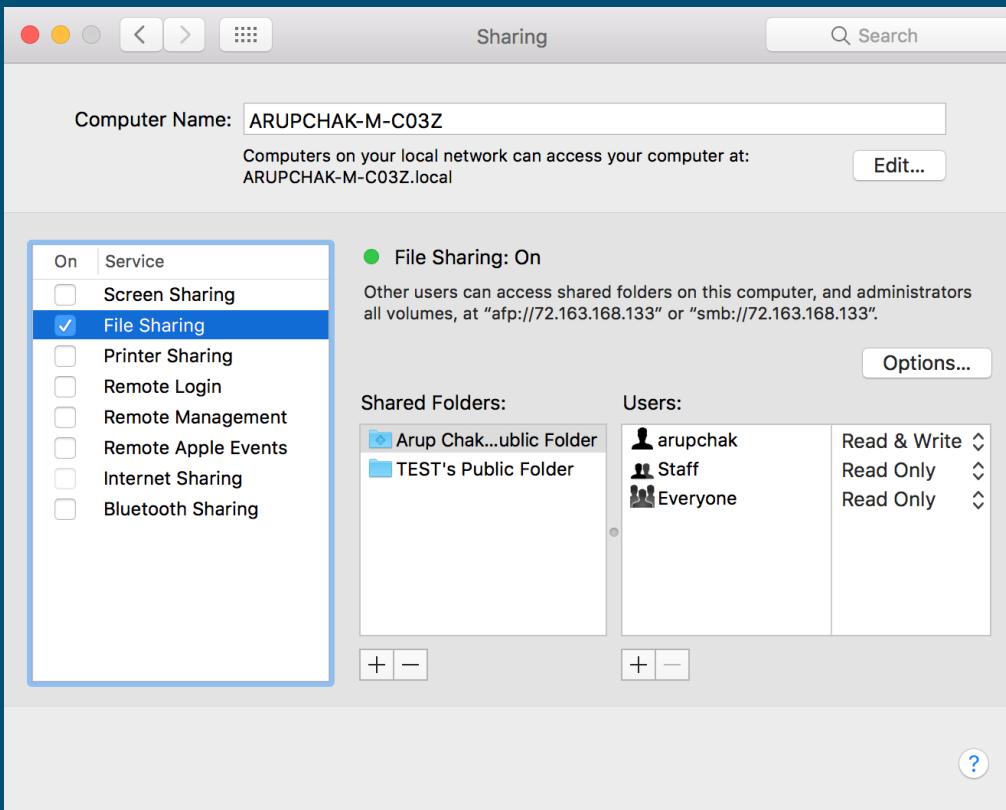


**Extensions** help you to manage the installed third-party extensions like Box Sync, OneNote etc.

If the Box Sync or Dropbox is not working on Finder, then make sure that it's enabled here.

# Essential Applications and Utilities

## Sharing



Sharing is one the important section on Mac OS X. Hostname can be updated here only.

If you are unable to access a Mac through Screen Sharing app, make sure that the Screen Sharing box is checked.

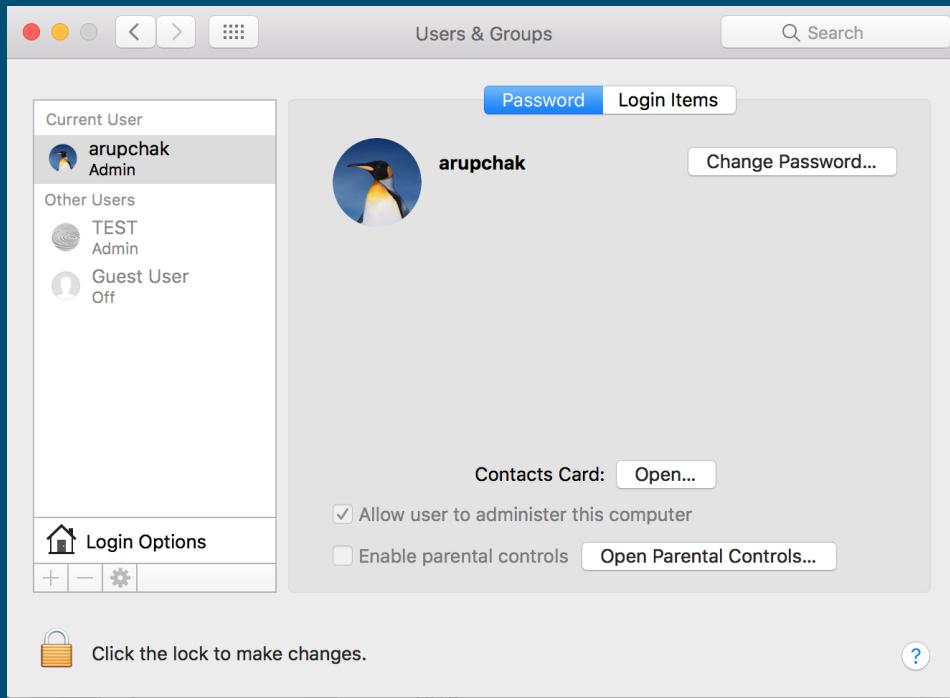
To Share any folder on Mac, you need to add the folder and provide permissions accordingly and enable the **File Sharing** option.

**NOTE:** Cisco doesn't enable this **File Sharing** options by default.

You may share Internet or Bluetooth (Tethering) from here.

# Essential Applications and Utilities

## Users & Groups



**Users & Groups** to configure or delete user accounts in Mac OS X. It helps you to change password of that particular account.

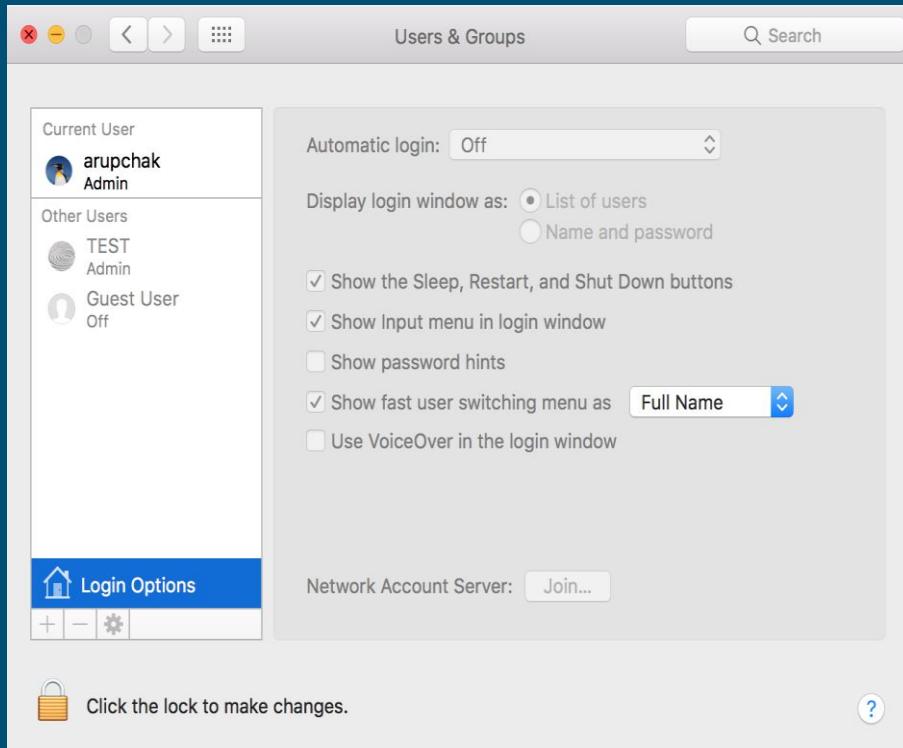
There are four different kinds of users can be created on Mac OS X; Administrator, Standard, Sharing only, Managed with Parental Controls account.

An **administrator** can create, delete, and modify accounts; install software and change system settings.

**Standard** users can install software for their own use and change settings related to their accounts, but can't administer other accounts.

# Essential Applications and Utilities

## Users & Groups



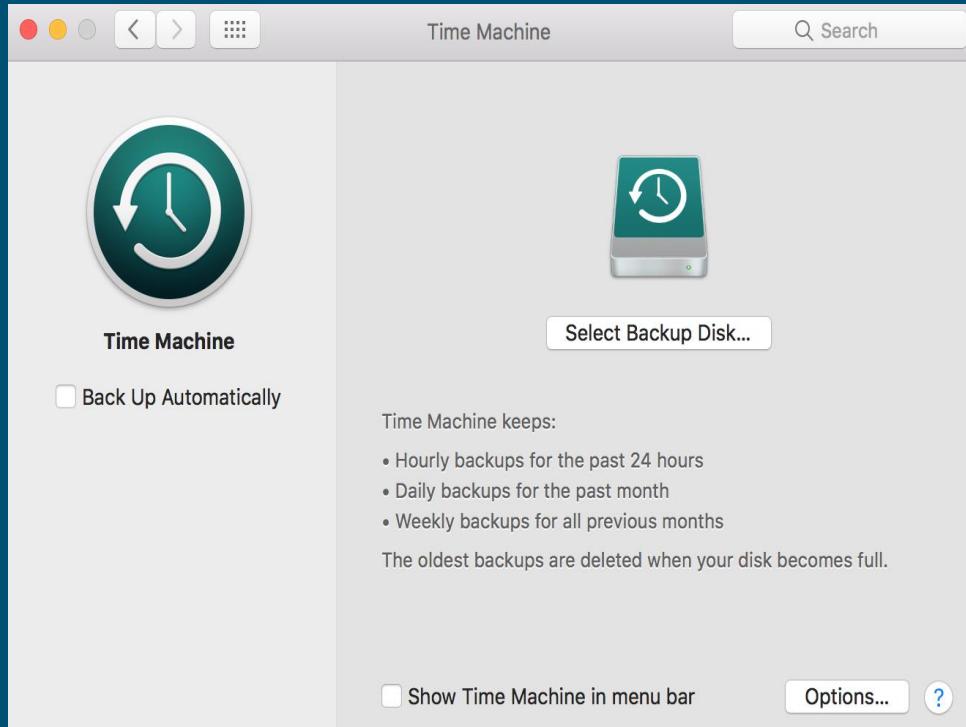
Sharing-only users on your network can access shared files remotely, but can't log in or change settings on the computer.

Managed with Parental Controls accounts, the administrator can restrict access to applications and inappropriate content, and limit the amount of time users can use the computer.

Even you can change the login preferences and keyboard Layout menus and join the Mac to domain and create Root Account from Login Options.

# Essential Applications and Utilities

## Time Machine



Time Machine option has made to setup the Time Machine application to take an automatic backup. Time Machine is an application, which takes incremental backup of the entire system including Mac OS files. It is recommended to use the Backup drive, which has double capacity of the Macintosh HD (Internal hard drive).

Also you can exclude folders or file from the Time Machine Backup through Options.

For more information about Time Machine, Refer: <http://support.apple.com/kb/HT1427>

# Essential Applications and Utilities

## Profiles

The screenshot shows the 'Profiles' section of the Jamf Pro software. On the left, there's a sidebar titled 'Device Profiles' listing several profiles with their names and settings counts:

- Block OS X Beta Rel... (1 setting)
- Cisco Sans Fonts [PR... (10 settings)
- FileVault Key Redirec... (2 settings)** (highlighted in blue)
- ISE 802.1x Wired (1 setting)
- MDM Profile (2 settings)
- Software Update Set... (1 setting)

The main pane displays the details for the selected 'FileVault Key Redirection' profile. It includes the following information:

- FileVault Key Redirection** (Cisco Systems, Inc. **Verified**)
- Description: Redirects recovery key to Casper.
- Signed: MacIT Registration Authority
- Installed: 29-Sep-2016, 6:29 PM
- Settings: FileVault Recovery Key Redirection
- Certificate: JSS Built-In Signing Certificate

Below this, under 'DETAILS', there's another section for the 'Certificate':

- Certificate**
- Description: JSS FileVault Recovery Key Redirection Certificate

Configuration **Profiles** let you standardize settings for Mac computers. For example, an administrator can set up profiles that configure Mac computers to interact network through 802.1x protocol.

If there is any issue with any of the installed profile, then we can remove it and eventually it will get pushed again by Jamf Casper.

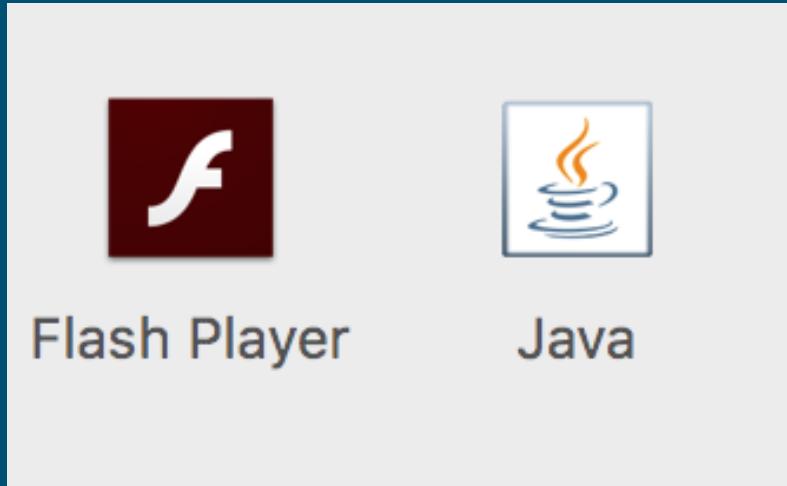
NOTE: Do not remove any profile from Cisco Machine without checking with Tier 3 Engineer.

For more information, refer this article:

<https://support.apple.com/kb/PH22006>

# Essential Applications and Utilities

## Third-Party Plug-Ins

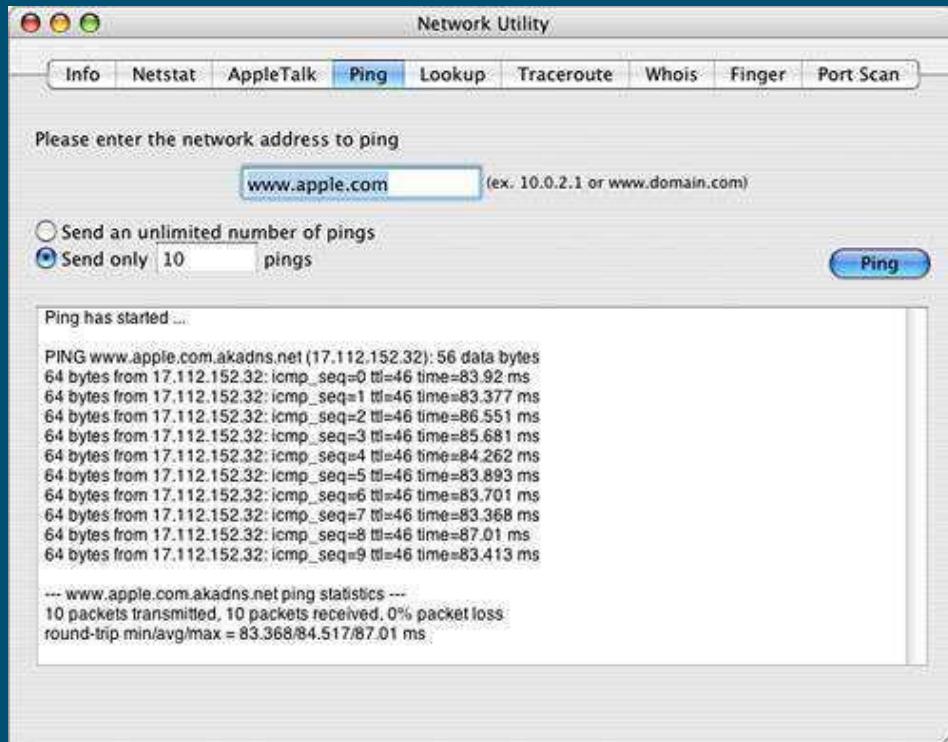


Third-Party Plug-Ins like Flash player, Java get installed under the **System Preferences**.

You can manage the preferences of these applications from here.

# Essential Applications and Utilities

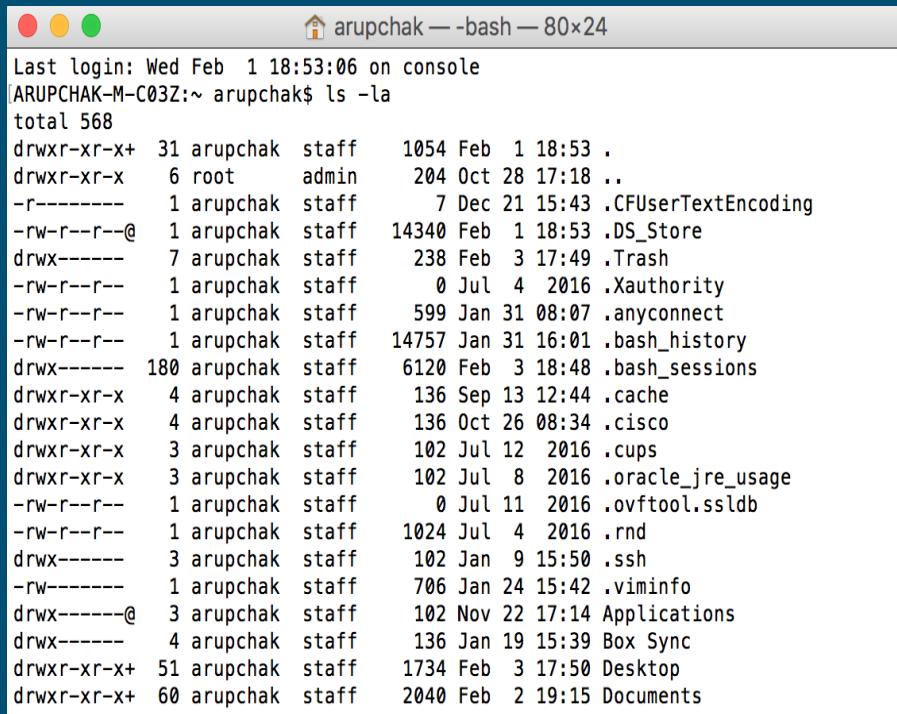
## Network Utility



**Network Utility** provides a wide range of information about your network and offers tools to help you troubleshoot it. The utility includes an interface for common functions used at the command line – such as ping, netstat, traceroute, finger, and port scan – and the information is written out to a text field, making it easy to copy into email, bug reports, or other analysis tools.

# Essential Applications and Utilities

## Terminal



The screenshot shows a terminal window titled "arupchak -- bash -- 80x24". The window contains the following text:

```
Last login: Wed Feb 1 18:53:06 on console
ARUPCHAK-M-C03Z:~ arupchak$ ls -la
total 568
drwxr-xr-x+ 31 arupchak staff 1054 Feb 1 18:53 .
drwxr-xr-x  6 root    admin 204 Oct 28 17:18 ..
-r-----  1 arupchak staff   7 Dec 21 15:43 .CFUserTextEncoding
-rw-r--r--@ 1 arupchak staff 14340 Feb 1 18:53 .DS_Store
drwx----- 7 arupchak staff 238 Feb 3 17:49 .Trash
-rw-r--r--  1 arupchak staff   0 Jul 4 2016 .Xauthority
-rw-r--r--  1 arupchak staff  599 Jan 31 08:07 .anyconnect
-rw-r--r--  1 arupchak staff 14757 Jan 31 16:01 .bash_history
drwx----- 180 arupchak staff 6120 Feb 3 18:48 .bash_sessions
drwxr-xr-x  4 arupchak staff 136 Sep 13 12:44 .cache
drwxr-xr-x  4 arupchak staff 136 Oct 26 08:34 .cisco
drwxr-xr-x  3 arupchak staff 102 Jul 12 2016 .cups
drwxr-xr-x  3 arupchak staff 102 Jul 8 2016 .oracle_jre_usage
-rw-r--r--  1 arupchak staff   0 Jul 11 2016 .ovftool.sslDb
-rw-r--r--  1 arupchak staff 1024 Jul 4 2016 .rnd
drwx----- 3 arupchak staff 102 Jan 9 15:50 .ssh
-rw-----  1 arupchak staff 706 Jan 24 15:42 .viminfo
drwx-----@ 3 arupchak staff 102 Nov 22 17:14 Applications
drwx----- 4 arupchak staff 136 Jan 19 15:39 Box Sync
drwxr-xr-x+ 51 arupchak staff 1734 Feb 3 17:50 Desktop
drwxr-xr-x+ 60 arupchak staff 2040 Feb 2 19:15 Documents
```

Mac OS X is built on an industry-standard UNIX foundation. The **Terminal** application allows you to access the complete UNIX environment using standard commands, tools, and scripting languages. But an incorrect command can corrupt the entire OS or might end up loosing data.

**NOTE:** Please take extra caution before running the Terminal commands.

Never use this command, “ **sudo rm -rf** ” if it’s not mentioned on any article (Apple or Cisco Jiveon)

# Essential Applications and Utilities

## Terminal Commands

Show Hidden Files:

```
defaults write com.apple.finder AppleShowAllFiles YES
```

Then Relaunch Finder

Reference url: <https://cisco.jiveon.com/docs/DOC-931775>

NOTE: You can type “NO“ instead of YES and then relaunch the Finder to Hide the hidden file

Reset System Core services:

```
/System/Library/Frameworks/CoreServices.framework/Versions/A/Frameworks/LaunchServices.framework/Support/lsregister -kill -r
```

Uninstallation of Casper or un-enroll a Mac from Casper: sudo jamf removeFramework

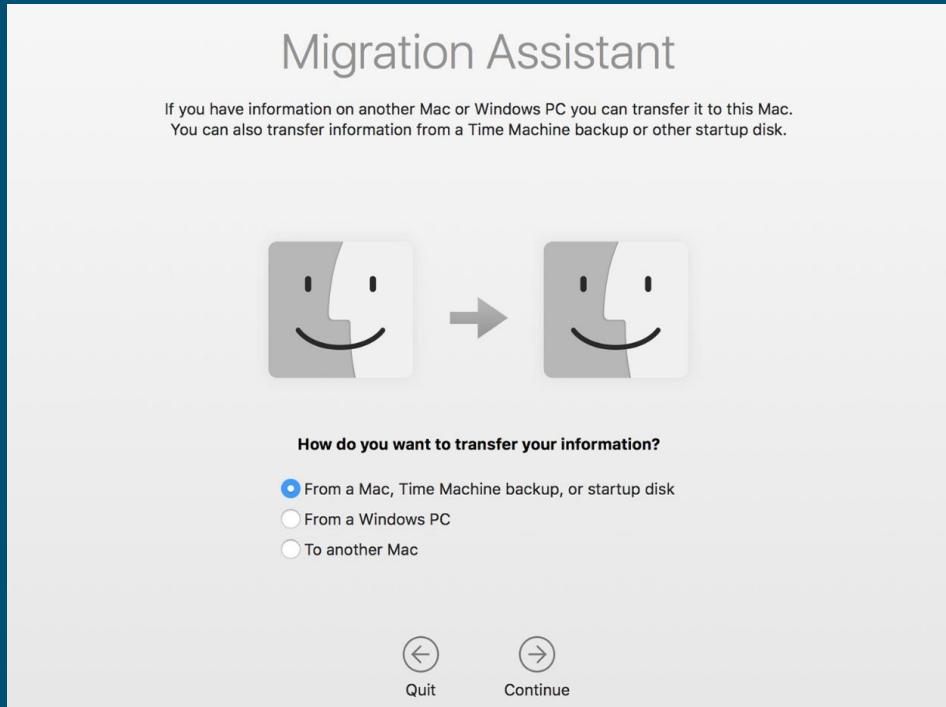
# Essential Applications and Utilities

## Terminal Commands

What is does?	Terminal Command
Clear the content on Terminal Window	clear
To navigate to a particular folder	Cd <followed by path>
List the contents of a Directory	ls
To view it in a list format	ls -l
To view all network adapter details including IP	ifconfig

# Essential Applications and Utilities

## Migration Assistant



Migration Assistant simplifies the process of moving your information from a Mac or Windows computer to another Mac by transferring User's Data including documents, music, photos, applications, network settings, and other preferences. Simply connect the two Mac computers using a FireWire or Ethernet cable. If you use Time Machine, you can transfer files from your backup copies by connecting your Time Machine backup drive via USB or wirelessly using Time Capsule. And transferring files from a Windows computer to a Mac is just as easy.

For more information, refer

<https://support.apple.com/en-in/HT204350>

# Essential Applications and Utilities

## Migration Assistant

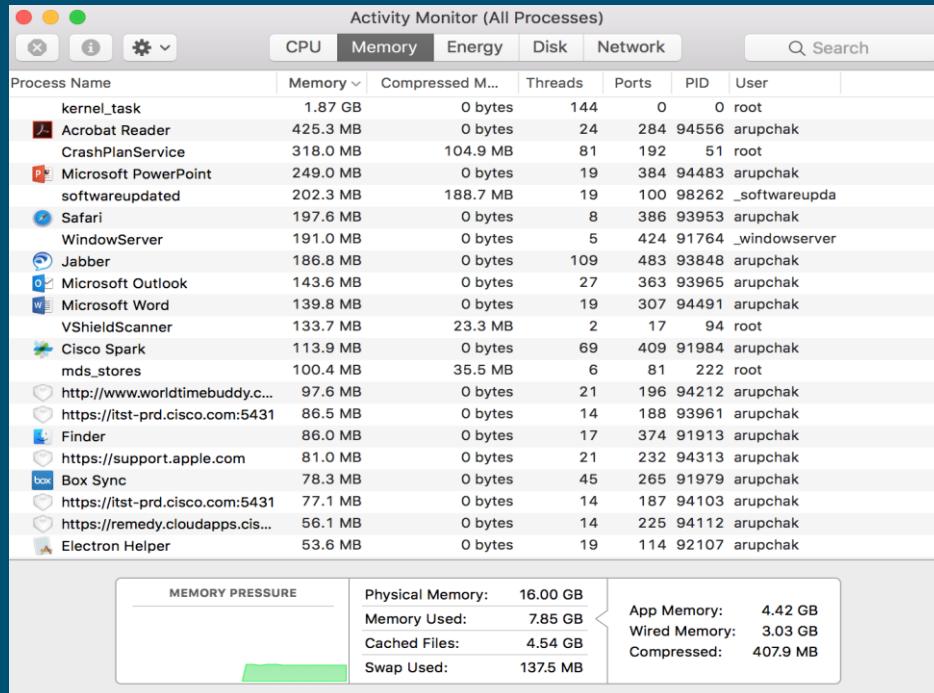
While Migrating the data from Old Mac to new Mac, I would recommend not to select **Applications** and **Computer & Network Settings** as most of times, these contents would have the corrupted data. But in this case, user have to install all Applications one by one, which is time consuming.

For some reason, if Migration Assistant doesn't work or fails during the process, then you may put the old Mac in Target Disk Mode by pressing and holding down " T " key at startup. Then connect the Hardwire or Thunderbolt cable between the Macs and the old or source Mac will appear as an external volume on the new Mac desktop. User can copy the required data from old machine to new Machine manually by entering the old Mac password to unlock it.

Reference URL: <https://cisco.jiveon.com/docs/DOC-997781>

# Essential Applications and Utilities

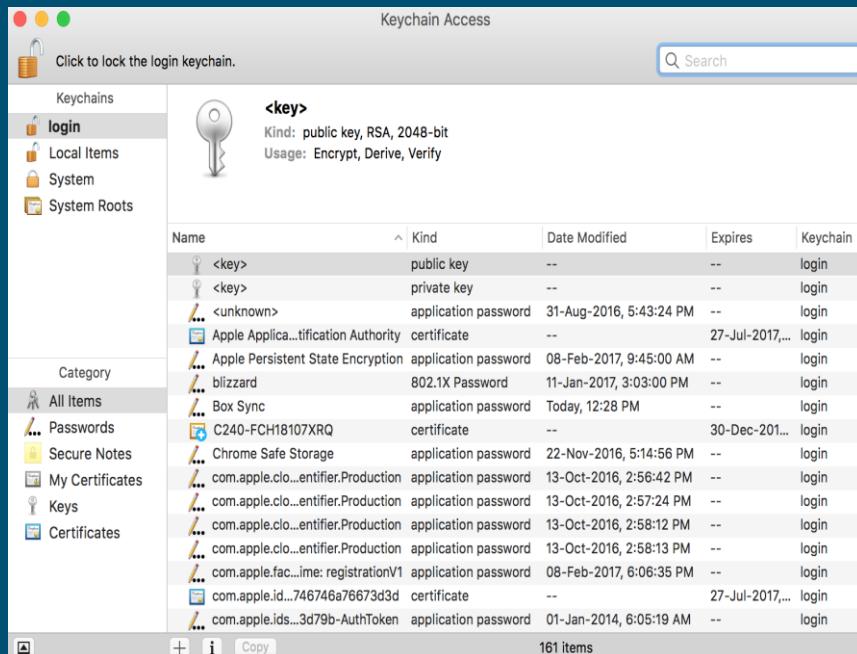
## Activity Monitor



**Activity Monitor** displays information about all the processes running on your Mac, including CPU, disk, memory, and network usage. You can see exactly how your computer's resources are being used via a searchable table, helpful graphs, or even directly in the Dock icon. You can view the processes organized in different groupings, quickly search for processes, and quit processes. Activity Monitor also makes it easy to see how your memory is being used and how much memory is available, as well as disk activity and data transferred over the network.

# Essential Applications and Utilities

## Keychain Access

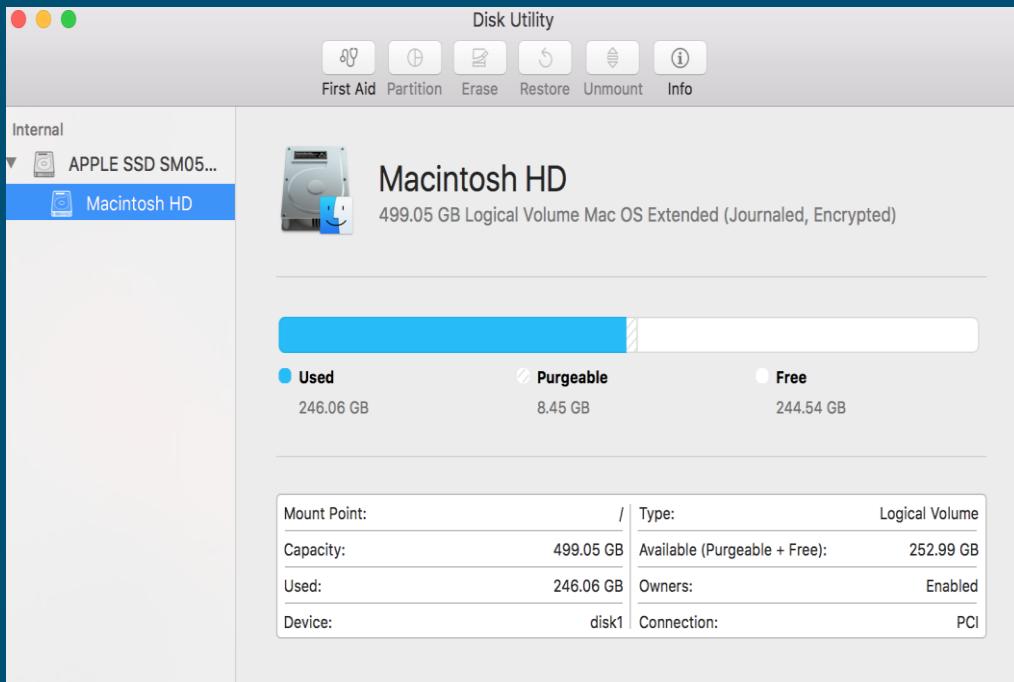


Keychain Access is password management system in Mac OS X. It allows the user to access the Keychain and configure its contents, including passwords for websites, web forms, FTP servers, SSH accounts, network shares, wireless networks, groupware applications, encrypted disk images, etc. It unlocks, locks, and displays passwords saved by the system which are dynamically linked to the user's login password, as well as managing root certificates, keys, and secure notes. Its graphical user interface displays various keychains, with there usually being at least two: the login keychain and the system keychain. The default keychain file is the login keychain, typically unlocked on login by the user's login password.

Keychain files are stored in: **~/Library/Keychains/**

# Essential Applications and Utilities

## Disk Utility

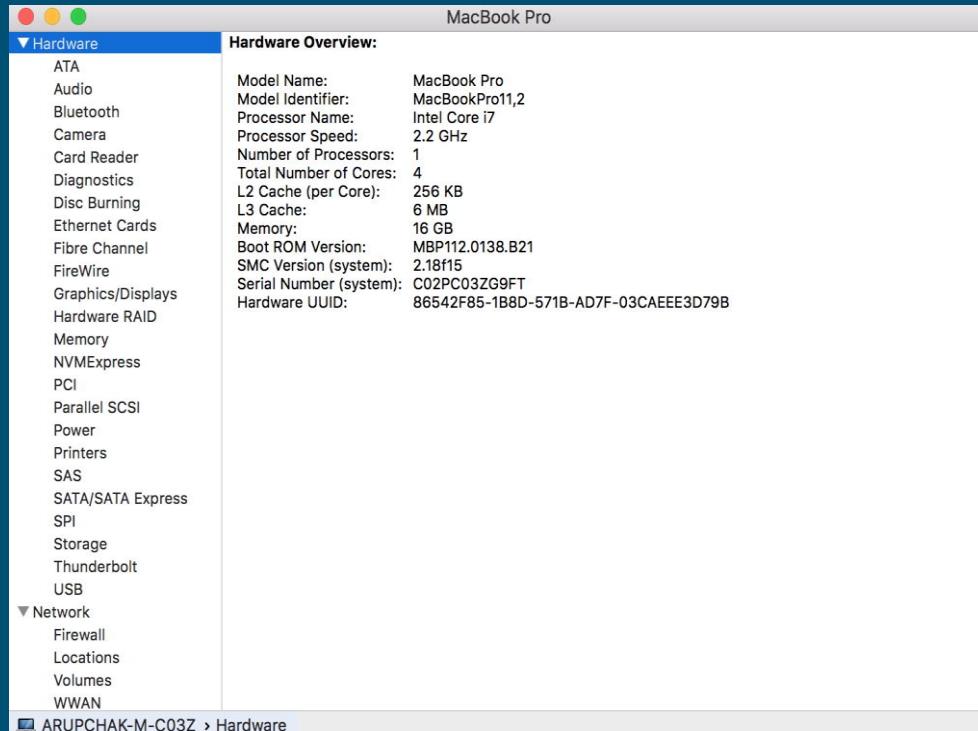


**Disk Utility** is a powerful application for viewing, managing, and troubleshooting the disks connected to your Mac, including internal and external hard drives, disk images, CDs, and DVDs. With Disk Utility, you can verify the integrity of a disk, repair it, securely erase it, and partition a hard drive. You can also create secure disk images for storing important files using AES 128- or 256-bit encryption.

For more information about verifying and repair disk, refer  
<http://support.apple.com/kb/HT1782>

# Essential Applications and Utilities

## System Information



**System Information** provides detailed information about your computer's hardware, software, and network including computer's hostname in an easy-to-read layout. It's perfect for checking to see if your Mac meets the requirements for a new hardware or software product and for confirming that the particular hardware has detected or available on your Mac. You can save your profile or have it sent directly to Apple Support.

You may also access **System Information** from **Apple Logo < About this Mac**

# Essential Applications and Utilities

## XQuartz

**XQuartz** is an open source utility which is required for Softoken II application. It can be downloaded from here: <https://www.xquartz.org>

If there is any issue with **XQuartz** utility, then you may uninstall it by running these commands on Terminal window.

```
launchctl unload /Library/LaunchAgents/org.macosforge.xquartz.startx.plist
```

```
sudo launchctl unload /Library/LaunchDaemons/org.macosforge.xquartz.privileged_startx.plist
```

```
sudo rm -rf /opt/X11* /Library/Launch*/org.macosforge.xquartz.* /Applications/Utilities/XQuartz.app  
/etc/*paths.d/*Xquartz
```

```
sudo pkgutil --forget org.macosforge.xquartz.pkg
```

You may also refer this link (Manually uninstall XQuartz X11 step by step) :  
<https://www.uninstallmacapp.com/xquartz-x11-removal.html>

# Essential Applications and Utilities

## MS Office 2016

MS Office 2016 comes up with bundled applications as Word, Excel, Power Point, OneNote and Outlook. Outlook is an application where E-mail, Calendars, Contacts, Tasks, Notes features are integrated on a single platform. Also there is a Propose New Time feature, the ability to see calendars side by side, and a weather forecast in the calendar view of Outlook.

Outlook 2016 can efficiently handle large amount of data without any issues. This is being used in Cisco as e-mail clients on both Mac and Windows platforms. For creating a Outlook 2016 Profile on Mac, refer: [Outlook 2016 MAC](#)

You may also follow this article, [Email Account](#) to remove and re-add the Cisco Exchange account on Outlook.

In Word, there is a new Design tab, an Insights feature, which is powered by Bing, and real-time co-authoring. In Excel, there is a Recommended Charts feature, and PivotTable Slicers. In PowerPoint, there are theme variants, which provide different color schemes for a theme.

For more information about Outlook, refer: [Email and Calendaring Services](#)

# Essential Applications and Utilities

## Cisco AnyConnect

Cisco AnyConnect is the application which helps to setup the VPN on external network. Now supports 2 profiles, which will use a different protocol for their connections. When opening the drop down menu to choose a connection you should see each of the 14 global sites listed twice as "Site - SSL" and "Site - IPSec". If the client only shows one type of connection you can reinstall the client from the standard setup instructions which will install both profiles along with the latest version of AnyConnect available from IT. Some users may find that one profile (CRDC, if they have configured separately) or the other works better on a particular network, and some customer sites Firewall rules may only allow one type of connection. There are no restrictions from the Cisco side on which profile the user\ select. They are free to use whichever works best for their setup.

For more information please refer:

[https://apps.na.collabserv.com/wikis/home?lang=en-us#/wiki/Wadedadedb802\\_4c25\\_b220\\_97754521da15/page/AnyConnect%20Self-Help](https://apps.na.collabserv.com/wikis/home?lang=en-us#/wiki/Wadedadedb802_4c25_b220_97754521da15/page/AnyConnect%20Self-Help)

# Essential Applications and Utilities

## Softoken II & MobilePASS

**Softoken II** and **MobilePASS** are the two different methods to generate passcode to establish VPN connection through Cisco AnyConnect application. Softoken II has a dependency on XQuartz (X11) application as it helps to initialize the Softoken II during rekey process. If XQuartz is not up to date or it has some issue; then it won't pop-up the new PIN window while reinitializing the token file on Softoken II. If Softoken II doesn't reinitialize after multiple attempts even though XQuartz, then help the user to migrate to MobilePASS. For more information, refer [Softoken Initialize](#)

**MobilePASS** applications can be downloaded from App Store on Mac or on any Android/iOS devices. Then order "Convert Token Type" from Cisco eStore and convert to MobilePASS and follow the instructions to activate it. You may even order "Reactivate MobilePASS" to recreate the token based passcode. For more information, refer [MobilePass](#)

**NOTE:** Make sure that user enters the MobilePASS pin carefully as it jumps to the next screen as soon as user's enters the 8<sup>th</sup> character and there is no option to correct it after typing the 8<sup>th</sup> character.

# Essential Applications and Utilities

## VMware Fusion

VMware Fusion helps to virtualize Windows 10 on Mac OS X to access all Windows based applications and files.

To view or access the installed virtual machines, launch VMware Fusion application and then from the menu bar, click on **Windows < Virtual Machine Library**.

You can follow this article: [VMware](#) to setup Windows 10 VM on Mac OS X.

**NOTE:** Do not use **Google Chrome** to download the Versioned.UEFI.ODS.2016-05-05.iso file or Windows 10 x64.ova template.

If there is any issue with VMware Fusion, then follow this article: [Uninstallation guide](#) to uninstall VMware Fusion completely from Mac OS X.

# Essential Applications and Utilities

## McAfee & FireAmp

**FireAmp** is another Cisco approved security application apart from McAfee. It's not recommended to install on each and every Mac. During the pilot project, Cisco has installed FireAmp for set of Mac users. If any Mac has FireAmp by default, then there is no need of McAfee on that Mac as it's approved from Cisco.

**NOTE:** If Mac has any issue related to FireAmp, like FireAmp process is utilizing the resources more than 80% or 90%, then escalate those cases to Desktop T3 Mac.

# Essential Applications and Utilities

## **McAfee & FireAmp**

McAfee is the default antivirus for all Windows and Mac computers in Cisco. The main products are VirusScan Enterprise and Endpoint Security. VirusScan and Endpoint Security both provides continual scanning and removal of malicious computer virus infections, worms and spyware to cover a broad range of threats. For more information, refer [McAfee Endpoint security](#)

If there is any issue with McAfee Endpoint Security, then you can uninstall it from Mac OS X by running the following commands on Terminal.

```
sudo /usr/local/McAfee/uninstall.sh  
sudo /usr/local/McAfee/uninstallCleanup.sh
```

Once it's uninstalled, then restart the Mac and download McAfee Endpoint Security from eStore and install it back.

**NOTE:** If the issue still persists, then escalate the case to Enduser Computing Mac

# Essential Applications and Utilities

## CrashPlan

**CrashPlan** is the new desktop backup solution for Windows and Mac at Cisco. CrashPlan runs on Cisco technology and utilizes modern scale-out architecture to allow solution growth in line with the changing size of the business. Backup data is retained for 60 days following the existing Backup Data retention policy (that can be found in IT Policy Central) and continues to enforce the file exclusion policy that HP-Connected had in place plus a few more Vendor (Code42) recommended exclusions. The exclusions are primarily system / OS related files and other files such as VMDKs.

For more information, refer [CrashPlan overview](#)

You may manage all the devices on CrashPlan Management console:

<https://crashplan.cisco.com:4285>

If there is any issue with Crashplan, then uninstall it by running Uninstall.app from /Macintosh HD/Library/Application Support/Crashplan. Once it's uninstalled, then restart the Mac and run this command on Terminal while the Mac is connected to Cisco Network.

*sudo jamf policy -event givemeproe*

**NOTE:** If the issue still persists, then escalate to Crashplan support team.

# Essential Applications and Utilities

## Mac Setup Assistant (CUSA)

Cisco Unified Setup Assistant (CUSA) for Mac aims to dramatically simplify computer setup at Cisco by consolidating and automating what was once a disjointed and prolonged manual process. The new Unified Setup Assistant installs and launches automatically once a Windows computer has been re-imaged or a Mac computer has enrolled into casper.cisco.com. This new Setup Assistant supersedes existing legacy applications with which you may be familiar, including the Legacy PC and Mac Setup Assistants and will minimize clicks involved to setup and make both setups very similar with only basic differences.

Reference Link:

<http://helpzone.cisco.com/t5/System-Setup-Protection/Cisco-Unified-Setup-Assistant-CUSA-for-Mac-Support-Information/t113333>

# Essential Applications and Utilities

## OnRamp

OnRamp provides a central access point to request accounts for and administer access to various types of user access tools. OnRamp requires your CEC authentication twice. If you use "remember password" browser feature, and you make a password mistake - OnRamp might get stuck with incorrect password. In this case, launch Keychain Access and click on Password on the left pane and search for the entries with CEC ID (for example: [abcdefg@cisco.com](mailto:abcdefg@cisco.com)) and delete all the entries and also clear all the browsers' Caches and Cookies.

**NOTE:** Do not delete any other credentials from Keychain Access as it may cause other issues while accessing the third-party webpages or applications.

\*\*\* If the issue still persist with OnRamp, then escalate the case to OnRamp Support Team.

To check your current permissions list use the following link:

<http://eman-core.cisco.com/SERVICE/OnRamp/status/> CEC Username



# Troubleshooting of Mac OS X & Applications



# Troubleshooting

- Mac OS X Startup Issues
- PRAM & SMC
- Mac OS X Troubleshooting
- Mac OS X Inbuilt Application
- Mac OS X Supported Apps

# Mac OS X Startup Issues

On a Mac, sometimes we get **Startup Issues** like:

- *Grey Screen*
- *Prohibitory Sign*
- *Flashing Question Mark*
- *Broken Folder*
- *Apple Logo with Spinning Gear*

Sometimes the Mac gets stuck at startup with any of the above symptom. To fix that issues, try the following steps:

- Perform a PRAM Reset.

**NOTE:** To perform a PRAM Reset, press and hold down, **COMMAND + OPTION + P + R keys** together and Mac. The Mac would get restarted again and again. Release those key after the third Chime. For the Dell Bluetooth Keyboard, try the same procedure immediately after turning ON the Mac.

For more information about PRAM, refer <http://support.apple.com/kb/HT1379>

# Mac OS X Startup Issues

- If the issue still persists, then hold down the ‘OPTION’ key at startup and then turn ON the Mac. Select the (Macintosh HD) and then click on the arrow mark on the bottom to boot through that partition.
- If the issue still persists, hold down the ‘SHIFT’ key and then turn ON the Mac and don’t leave the ‘SHIFT’ key login screen. It would help the Mac to boot to Safe boot, which would take approximately, 3 – 5 minutes and a progress bar on the grey screen.

**NOTE:** If the Mac fails to boot to Safe boot, then we have only option to reinstall the Mac OS X and restore the Machine backup or from CrashPlan Backup.

- If it boots to Safe boot, clear the contents from following Locations:

Macintosh HD/Library/Caches/

Macintosh HD/Library/Startupitems/

Macintosh HD/Users/<User’s Home Folder>/Library/Caches/

Macintosh HD/Users /<User’s Home Folder >/Library/Cookies/

Macintosh HD/Applications/System Preferences/Users & Groups/Login items

# Mac OS X Startup Issues

- I. To delete **Login items**, open the Lock on the bottom left corner using the Administrator Username and Password. Then highlight the user account on the left hand side and select ‘**Login Items**’ on the right side.
  - II. Delete all the items(except **CrashPlan**) listed under Login Items by highlighting one by one and clicking on **Delete**. Empty the Trash by right clicking on Trash icon on the Dock. If some of the files are not deleting, then you can delete those after rebooting the Mac by next time.
- Then Perform **First Aid** from the **Disk Utility** Window by selecting the **Macintosh HD** on the left side.
  - Now Go to **System Preferences < Startup Disk**, select **Macintosh HD** and click on **Restart**.
  - If the issue still persists, then boot to safe boot again and backup the user data.
  - Once the User data has backed up, then restart the Mac.
  - Boot through the Mac OS install Disk or the Recovery HD
  - Then Launch **Disk Utility** and perform **First Aid** by selecting the Macintosh HD.
  - If the First Aid has completed successfully, then restart the Mac and check the status.
  - If the issue still persists or if the First Aid has failed, then format the entire Macintosh HD and reinstall the operating system by following this article: [Mac OS Set up](#)

NOTE: If the Mac gets stuck at Blue screen, then follow the steps from (ii) to (x).

For more information about the Startup issues, refer <https://support.apple.com/en-us/HT204156>

# When to Perform PRAM

PRAM is "non-volatile random-access memory," a small amount of your computer's memory that stores certain settings in a location that macOS can access quickly. The settings that are stored in NVRAM depend on the type of Mac you're using and the types of devices connected to it. Information stored in NVRAM can include:

- *Speaker volume*
- *Screen resolution*
- *Startup disk selection*
- *Recent kernel panic information, if any*

# When to Perform SMC

- The computer fans run at high speed, though the computer isn't experiencing heavy usage and is properly ventilated.
- The keyboard backlight behaves incorrectly.
- The status indicator light (SIL) behaves incorrectly.
- Battery indicator lights, if present, behave incorrectly on Mac notebooks that have a non-removable battery.
- The display backlight doesn't respond correctly to ambient light changes.
- The computer doesn't respond to the power button when pressed.
- A Mac notebook computer doesn't respond properly when you close or open the lid.
- The computer sleeps or shuts down unexpectedly.
- The battery doesn't charge properly.
- The MagSafe power adapter LED doesn't indicate the correct activity.
- The computer is performing unusually slowly, though it isn't experiencing abnormally high CPU utilization.
- Application icons bounce in the Dock for an extended amount of time when opened.
- Applications don't function correctly, or they stop responding after being opened.
- A computer that supports target display mode doesn't switch into or out of target display mode as expected, or it switches into or out of target display mode at unexpected times.
- The illumination around the I/O ports on a Mac Pro (Late 2013) doesn't activate when you move the computer.

# Isolating Hardware Issues

## Audio

If there is no Audio output, then follow the below troubleshooting steps to isolate the hardware issue:

- Check the Volume and make sure that it's not in Mute position
- Check for the Startup Chime, if the Chime comes up at startup, then there is no hardware issue with the Internal Speaker.
- If the startup Chime doesn't come up, even though the volume level is in maximum position then there is a hardware issue with the Internal Speaker.
- If the Startup Chime comes up, but there is no Audio output from any application, then check the output settings in Macintosh HD\Applications\System Preferences\Sound\Output\
- If the output settings shows perfect, then try connecting any external speaker and check
- If the Audio output comes up through External Speaker, then there is a hardware issue with the Audio In/Out port.

# Isolating Hardware Issues

## Thunderbolt Ethernet

If the network is not working through the Thunderbolt Ethernet Port, then follow the below steps to isolate the hardware issue:

- Try connecting the cable to a different thunderbolt port. Also check the Ethernet Cable and thunderbolt adapter and make sure that it's working fine. Also check the connectivity of the wall port.
- Check in Macintosh HD\Applications\System Preferences\Network\Thunderbolt Ethernet and make sure that it obtains a valid IP address. If it's showing a valid IP address, then check the DNS Servers, Proxy settings, if there is anything entered manually as it comes from DHCP server by default.
- If it's not showing up any valid IP address, then restart the Mac and boot through the Recovery HD and
- launch **Network utility** from the **Utilities** Menu bar. Select the Interface as Thunderbolt Ethernet under **Info** Tab.
  - a) If the Link Status shows **Inactive**, then there is hardware issue with the Network Interface Card.
  - b)If the Link status shows **Active** with an invalid IP address, then there is an issue with the wall port or  
c)cable or adapter.
  - d)If the Link status shows **Active** with a valid IP address, then go to **Ping** tab and type [www.google.com](http://www.google.com) and try to ping to the Google server.
  - d)If the Ping has completed successfully, then there is an issue with the Mac OS
  - e)If the ping hasn't completed, then there is an issue with Switch Settings.

# Isolating Hardware Issues

## Thunderbolt Ethernet

- If the issue has been isolated as a Mac OS X related issue, then restart the Mac.
- Go to **Macintosh HD\Applications\System Preferences\Network\** and open the Lock from the bottom left corner of that page by entering the Administrator Username and Password.
- Then Select **Edit Location** from the Location Drop down Menu. Add a new Location, by clicking on the (+) button and then click on **Done**. Click on **Apply** on the bottom right corner.
- Disconnect the **Thunderbolt Network adapter** and go to **Keychain Access**
- Search for the entries with **Network** or **Default** or **802.1x** and delete all the entries
- Now connect the thunderbolt Ethernet cable and authenticate with Cisco CEC ID and password.
- If you get the IP valid address with 802.1x authentication enabled, but still unable to browse, then download and run Malwarebytes to scan for Malware or adware from this link:

<https://www.malwarebytes.com/antimalware/mac/>

NOTE: Make sure that you have uninstalled it after running the scan.

# Isolating Hardware Issues

## Wireless

If the network is not working through the Wi-Fi Port, then follow the below troubleshooting steps to isolate the hardware issue:

- Check the Airport or Wi-Fi icon and make sure that it's turned On and also check with other wireless network to confirm whether the Wi-Fi is working or not.
- Check in **Macintosh HD\Applications\System Preferences\Network\Wi-Fi\Advanced\TCP/IP\** and make sure that it obtains a valid IP address. If it's showing a valid IP address, then check the DNS Servers, Proxy settings, if there is anything entered manually as it comes from DHCP server by default.
- If it's not showing up any valid IP address, then restart the Mac and boot through the Recovery HD. Then launch **Network utility** from the **Utilities** Menu bar. Select the Interface as Wi-Fi under **Info** Tab.
  - a) If the Link Status shows **Inactive**, then there is a hardware issue with the Airport Card.
  - b) If the Link status shows **Active** with an invalid IP address, then there is an issue with the blizzard wireless.
  - c) If the Link status shows **Active** with a valid IP address, then go to **Ping** tab and type [www.google.com](http://www.google.com) and try to ping to the Google server.
  - d) If the Ping has completed successfully, then there is an issue with the Mac OS X.
  - e) If the ping hasn't completed, then there is an issue with blizzard wireless.

# Isolating Hardware Issues

## Wireless

- If the issue has been isolated as a Mac OS X related issue, then restart the Mac.
- Go to **Macintosh HD\Applications\System Preferences\Network\** and open the Lock from the bottom left corner of that page by entering the Administrator Username and Password. Then Select
  - **Edit Location** from the Location Drop down Menu and add a new Location, by clicking on the (+) button and then click on **Done**.
  - Then Click on **Apply** on the bottom right corner.
  - Turn off Wi-Fi and go to **Keychain Access**.
  - Search for the entries with **Network** or **Blizzard** or **802.1x** and delete all the entries.
  - Now connect the thunderbolt Ethernet cable and authenticate with Cisco CEC ID and password.
  - If you get the IP valid address with 802.1x authentication enabled, but still unable to browse, then download and run Malwarebytes to scan for Malware or adware from this link:
    - <https://www.malwarebytes.com/antimalware/mac/>

Reference Link: [Wi-Fi TBS MAC](#)

NOTE: Make sure that you have uninstalled it after running the scan.

# Isolating Hardware Issues

## Display

If there is an issue with the **Display** (No Display, Distorted Display, Lines on the Display), then follow the below troubleshooting steps to isolate the hardware issue:

- Make sure that the Mac is turned ON and check for the startup Chime.
- Hold down the **OPTION** key at startup and check whether it shows any bootable drive or not in Startup Manager.
- If it doesn't show anything, then there is a hardware issue with the display
- If the Display has any distortion at startup Manager, then it's an issue with the Display
- For better isolation, boot through the Recovery and then check the display. If the issue persists, then there is a display issue. If the issue doesn't get reproduced there, then it's an issue with the Mac OS X.

# Isolating Hardware Issues

## Keyboard & Mouse

If there is an issue with the **Keyboard** or **Mouse**, then follow the below troubleshooting steps to isolate the hardware issue:

- Make sure that the Keyboard/Mouse has connected Properly.
- For Bluetooth Keyboard, replace the battery and then pair up the keyboard/Mouse.
- For better isolation, boot through the Recovery HD
- Launch Network Utility and go to Ping tab and check the Keyboard/Mouse.
- If it's working fine over there, then it's an issue with the Mac OS X.
- If it's not working over there, then it's an issue with the Keyboard/Mouse.

# Isolating Hardware Issues

## Printer

If a **printer** is not working as expected, then follow the below troubleshooting steps to fix the issue:

- Make sure that the printer is connected to a power source and Turned ON (for local Printers) and check the other connections of the Printer to Mac.
- For domain printer, check the printer by going to [print.cisco.com](http://print.cisco.com) and ping to the printer by typing printer-xxxxxx
- Try with a different printing application like MS Word or Safari or Text Edit, other than the effected one.
- If the printer works fine with the other applications, then troubleshoot that particular application.
- If the printer is still not working or print goes to the printer; but doesn't print; then check if there is **Print Audit 6** application is installed on the Mac OS X.
- If **Print Audit 6** installed, then run the Print Audit uninstaller to remove it completely.
- Make sure that there is no traces of Print Audit on the following locations:
  - ~/Library/LaunchAgents/
  - /Library/LaunchAgents/
  - /Library/LaunchDaemons/

# Isolating Hardware Issues

## Printer

- **Reset the Printing System** by going to System Preferences <Printers & Scanners , then right click on the left Side bar.
- Reconfigure the Printer and check the status.
  - a) For **Local Printers**: by clicking on the ‘ + ‘ sign and through the **Default** Tab.  
Refer <https://support.apple.com/en-in/HT201961>
  - b) For the **Cisco domain Printers**: Go to [print.cisco.com](http://print.cisco.com) and install the required printer.
- If the issue still persists, then disconnect the printer from the local system (Only for Local Printer).
- Uninstall the Printer Drivers from **Macintosh HD/Library/Printers/** , then remove all the contents from Printer folder.
- Empty the Trash and Restart the Mac
- For **Local Printers**, connect the Printer to the local Mac and then click on **Apple Logo** and perform Software Update, which would download the printer driver from Apple Website, if it's listed in this link: <http://support.apple.com/kb/HT3669>. Then re-configure the Printer from **System Preferences < Printers & Scanners**
- For **Cisco Domain Printers**, go to [print.cisco.com](http://print.cisco.com) and install the required printer.
- Reference Link: <https://wiki.cisco.com/pages/viewpage.action?pageId=10526073>

# AppleCare Enterprise Support

AppleCare Enterprise Support provides Cisco employees with priority Apple OS/software and next business day onsite Mac warranty repair. Use the region selectors below to see which AppleCare options are available in your country.

## Software and Operating System Support

- AppleCare will help with any *Apple* related software issues. This includes OS performance issues, Mac to Mac refreshes, PC to Mac refreshes, OS upgrades, Apple Mail and Calendar, wireless issues, power problems, display issues, and kernel panics. AppleCare is not able to assist with 3rd party software (like Microsoft Office) or Cisco software (like Cisco's Migration Assistant, Spark, etc.).

## Hardware Support

- If you have a 2015 Mac or newer (2016 for Canada) there is a good chance you are covered by the AppleCare Enterprise hardware warranty. Look in [SmartSupport](#) to see if you are covered. To do this, expand the Computers card by clicking the arrow. Then click View More (if necessary) to see full details on your Mac. You will see your hardware coverage start and end dates listed if your hardware is covered.
- Reference: [AppleCare Enterprise](#)

# Mac Hardware Support

- **Physical Damage (Accidental):** Physical damage, accidental or otherwise, cannot be covered under warranty. Damage includes drops, dents, rust, corrosion, and liquid spills.
- Refer user for hotswap: [Global MAC Hardware Support](#)
- **Warranty Repair (Not physically damaged):** Cisco purchases a 3 year warranty on all MacBook models, which covers repairs not caused by physical damage.
- Refer user to Applecare Enterprise Support: [MAC Hardware, ACE](#)

# Mac OS X Troubleshooting

## Won't Shut Down or Restart

If any Mac that has issues while **shutting down or restarting** it, then try the following steps as it could be caused by a variety of reasons:

- Try to determine if any particular app is causing this issue. If any particular app always freezes while shutting down the Mac.
- If yes, then perform a software update for the App Store based application by Launching **App Store** and click on **Updates > Update All**.
- For other applications which was installed outside of the App Store, open the App and look for update option on the Menu Bar
- Restart the Mac and perform **SMC** reset.
- If the issue still persists, check & confirm that the **FileVault** is turned ON (System Preferences > Security & Privacy > FileVault > Turn ON FileVault).
- If the issue still persists, then open **Disk Utility** and choose the **Macintosh HD** and click on **First Aid**. If there are any issues, then it will ask to run **First Aid** from **Recovery HD**. To boot to Recovery HD, Restart the Mac by holding Down **COMMAND + R** keys and it will boot to Recovery HD and then select **Disk Utility** and click on **Continue**.

# Mac OS X Troubleshooting

## Slowness on Mac OS X

If any Mac that has slowness issue while accessing any applications, then try the following steps:

- Check and confirm that **Macintosh HD** has sufficient space. If not, suggest the user to free up space.
- Clear the contents from following Locations:

/Library/Caches/

/Library/StartupItems/<Except cma Folder>

~/Library/Caches/

~/Library/Cookies/

/Applications < System Preferences < Users & Groups < Login items (Do not remove Crashplan)

- Empty the Trash by right clicking on Trash icon on the Dock. If some of the files are not getting deleted, then those after rebooting the Mac by next time.
- Clear off cluttered **Desktop items & Dashboard widgets**.
- Launch **Disk Utility** and Select **Macintosh HD** and perform **First aid**.
- Clear all the caches and website date from all the web browsers to improve Internet surfing.
- Identify and knock out heavy apps/processes in Activity Monitor (if any) and also perform OS X update.
- Check if the **FileVault** Encryption is paused; if paused then Resume it. Also Reset **SMC** and **NVRAM** to fix errors.

# Mac OS X Troubleshooting

## FileVault Login Issue

If any Mac that has FileVault Login issues or user has forgotten the Login Password, then try the following steps:

- Enter the **Filevault Recovery Key** at the login page when asked and reset the password.
- Once logs into the account, create a new login Keychain (it would prompt at logon).
- Go to System Preferences < Keyboard < Input Sources and set the correct Keyboard (Preferable: U.S).
- Go to System Preferences < Users & Groups < Login Options, and tick the checkbox “ Show Input menu in login window.”
- Go to System Preferences < Security & Privacy < FileVault; and open the Lock with Local Admin credentials and Turn Off FileVault.
- Restart the Mac and then login to the account with new password.
- Run the following commands on Terminal:  
`sudo jamf recon`  
`sudo jamf policy`

**NOTE:** After sometime or after a reboot, user will get a prompt to enable the FileVault. Suggest the user to enable it at that time.

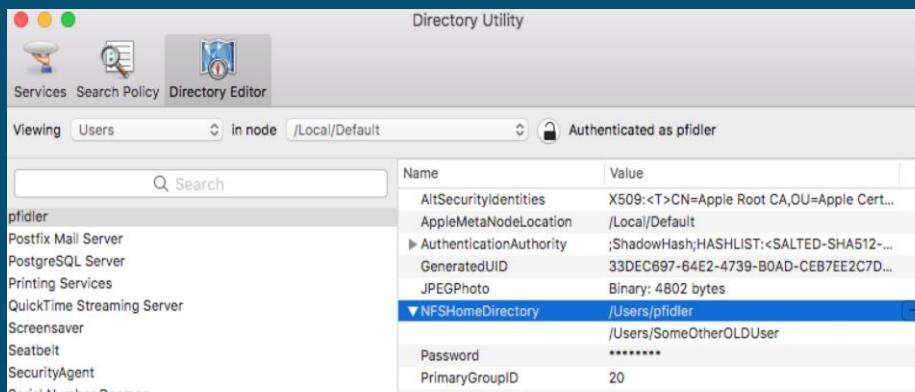
# Mac OS X Troubleshooting

## Compliance Password Prompts Repeatedly

If any Mac asks to enter the password repeatedly for Cisco compliance and even after entering the correct one, it keeps popping up, then try the following steps:

- Check and confirm that if that Mac has any other local user account (Non Cisco user's account like TEST). If yes, then ask the user to backup all data from that account and delete that account.
- If there is no other local user account, then make a note of the home folder name of the current user's account.
- Launch **Directory Utility** and unlock the lock with user's credentials and go to **Directory Editor** and search for any other old account entry under **NFSHomeDirectory** apart from the user's home folder. If there is any old user entry then delete it.

**NOTE:** Double check and make sure that you are not deleting the User's home folder.



# Mac OS X Troubleshooting

## Compliance Password Prompts Repeatedly

- If there is only one entry under **NFSHomeDirectory**, then Restart the Mac.
- Run the following commands on Terminal:

```
Launchctl unload /Library/LaunchAgents/com.cisco.??pol*
Sudo rm -rf /Library/CiscoIT/Scripts/Security/*
Sudo rm -rf ~/Library/Preferences/com.cisco.compliance.plist
Sudo rm -rf /Library/LaunchAgents/com.cisco.??pol*
```

- Restart the Mac.
- Run the following commands on Terminal:

```
sudo touch /Library/CiscoIT/Attributes/.Debug
Sudo jamf recon
Sudo jamf policy
```

NOTE: Log file location: /Users/USERNAME/Library/Logs/com.cisco.pwpolicy-DEBUG.txt

# Mac OS X Inbuilt Application Troubleshooting

## Isolating The Issue Whether System Wide or User Specific

If you get any issue related to any application, the root cause might be in either of the cases:

- Some issue may occur due to corruption in user's Library, which classified as User Specific.
- Some issue may occur due to corruption in HDD Library or System Library, which is classified as System Wide

To isolate that always create a local user account with Admin right and try to reproduce the issue on the newly created account.

- a) If it persists, then eliminate the User's account or Library and troubleshoot on HDD Library.
- b) If the issue doesn't occur on the new account, then troubleshoot on effected User's Library or Account.

# Mac OS X Inbuilt Application Troubleshooting

## Apple Mail

Refer this article: <https://support.apple.com/en-in/HT204075>, if any of the following issue occurs:

- *If you can't send or receive email on your Mac*
- *If Mail refers to a problem with the mail server or network*
- *If Mail keeps asking for your email password*
- *If Mail says that your account appears to be offline*
- *If email doesn't arrive as soon as you expect*

If the Mail app keeps **crashing**, then perform the following steps:

- Quit Mail and delete the following files
  - ~/Library/Preferences/com.apple.mailxxx.plist
  - ~/Library/Saved Application State/com.apple.Mail.SavedState
  - ~/Library/Caches
  - ~/Library/Cookies
- Logout and Login to the user's account and Launch Mail App
- If the issue still persists, then Rebuild the Mail database from Mail Menu < Mailbox < Rebuild OR Please refer user to applecare enterprise support: [AppleCare](#)

# Mac OS X Inbuilt Application Troubleshooting

## App Store

If the **Mac App Store** doesn't Launch and keeps crashing:

- Restart the Mac
- If issue still persists, then delete com.apple.AppStore.SavedState from ~/Library/Saved Application State
- If issue still persists, then delete the files from following locations:
  - ~/Library/Preferences/com.apple.appstore.plist
  - ~/Library/Caches
  - ~/Library/Cookies
- Log out and login to user's account
- If the issue still persists, then check on another account to confirm whether it's a System Wide or User's Specific issue
- If it occurs on another account as well, then we need to reinstall the Mac OS X. If it doesn't occur on another account, then we need to migrate user's data to another account.

If the **Mac App Store** doesn't connect, then refer this article: <https://support.apple.com/en-us/HT203811>

# Mac OS X Inbuilt Application Troubleshooting

## Contacts

If any user wants to clear duplicates from **Contacts**, then

- Launch **Contacts**
- From the Menu bar, click on **Card < Look for Duplicates** and clear all the duplicate contacts

If iCloud contacts doesn't Sync up with **Contacts**, then

- Go to **Contacts < Accounts** and disable all the other accounts
- Go to **System Preferences < Internet Accounts** and uncheck icloud contacts and check it back
- It would synchronize all the contacts
- Then you can enable other accounts, like google, yahoo or exchange

# Mac OS X Supported Application Troubleshooting

## MS Outlook 2016

If the e-mails, contacts, Calendars doesn't sync on **MS Outlook 2016**, then try the following:

- Go to **Keychain Access** and search for the entry with 'Exchange' and delete that.
- Quit and relaunch Outlook and enter the CEC password
- If issue persists, then Delete the Cisco Exchange Account from **Tools < Accounts** and re-configure it
- If the issue still persists, create a new Outlook Profile through **Outlook Profile Manager** from /Applications/Microsoft Outlook/Contents/SharedSupport/
  - If issue persists, then create another local admin account and configure Cisco Exchange account on Outlook on that newly created account.
  - If issue persists, on new account as well, then uninstall Entire MS Office applications using the uninstaller script and restart the Mac.

**NOTE:** Make sure that you have backed up the Outlook profile which has user's data before uninstallation. Now reinstall MS Office 2016 and update to the latest version and configure user's Cisco Account.

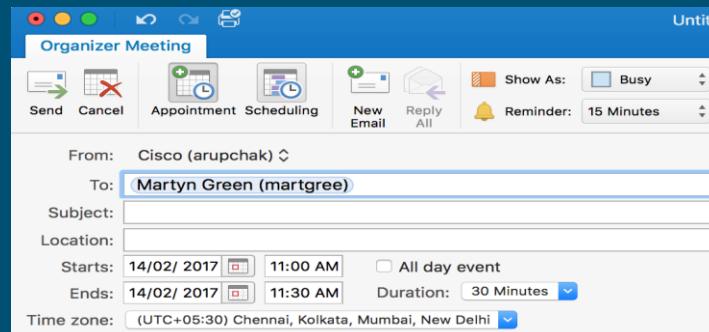
# Mac OS X Supported Application Troubleshooting

## MS Outlook 2016

If user is unable to view others calendars on **MS Outlook 2016**, then try the following:

- Check and confirm that user is accessing others calendar by going to **calendar** tab > **Meeting** > Enter the other user's e-mail address in **To** field and then click on **Scheduling**.
- If it shows the status as Tentative or busy even though in actual its free of the other user's, then check the number of calendar events on other user's Calendar. It would be more than the Outlook supported numbers and will show a caution.
- In that case, escalate the case to Exchange Team to check for duplicate events and also suggest the user to opt in opt-in to 1 or 2 years of retention policy for of Calendar events.

Reference: [Calendar management service](#)



# Mac OS X Supported Application Troubleshooting

## MS Outlook 2016

If the MS Outlook 2016 goes to **frozen state** or **crashes** frequently, then try the following:

- Check on the Calendar Tab, if there is any shared Calendars. If yes, then remove all the shared calendar as it creates a local cache on the Outlook Calendar database.
- Also check the number of calendar events on user's Calendar through Smart support. If it's showing any caution sign on Smart support, then escalate the case to Exchange Team to check for duplicate events and also suggest the user to opt in opt-in to 1 or 2 years of retention policy for of Calendar events.

Reference: [Calendar Management Service](#)

- If still the Outlook Crashes, then create a new Outlook Profile and check the status. If it works fine on new Outlook Profile, then there is a corruption with the existing profile data and you need to export those archived mails, calendars, contacts (if any) to a PST file using OLM to PST converter.

Reference: [Data recovery from Corrupted Outlook identity](#).

- If issue persists on another outlook profile as well, then create a Local user account with admin rights and try configuring Outlook over there and check.
- If issue persists, on the other Local user account as well, then uninstall MS Office 2016 using the uninstaller

**NOTE:** Make sure that you have backed up the Outlook profile which has user's data before uninstallation

# Mac OS X Supported Application Troubleshooting

## MS Outlook 2016

- Now reinstall MS Office 2016 and update to the latest version and configure user's Cisco Exchange Account.
- If the Outlook 2016 works fine on the other user account, then it's an issue with Outlook settings on the original account.
- Log out and login to the effected user account and quit all the running applications.
- Delete the following files and empty the trash.

~/Library/Caches/<all contents of Caches folder>

~/Library/Application Scripts/com.microsoft.outlook

~/Library/Application Support/Microsoft

~/Library/Containers/com.microsoft.outlook

~/Library/Cookies/<all contents of Caches folder>

~/Library/Preferences/com.microsoft.outlook.xxx.plist

~/Library/Saved Application State/com.microsoft.outlook.savedstate

~/Library/WebKit/com.microsoft.outlook

- Restart the Mac and then launch Outlook and check.
- If the issue still persists, then escalate to Desktop T3 Mac

# Mac OS X Supported Application Troubleshooting

## **MS Outlook 2016**

- If there is any data missing after importing the profile from Outlook 2011 to Outlook 2016, then scan the profile of Outlook 2011 using the OLM to PST converter.
- If the scan results shows those missing data or folders, then export those to a PST file.
- For further instructions, refer: [Data recovery from corrupted outlook identity](#)

# Mac OS X Supported Application Troubleshooting

## MS Excel & PowerPoint

If the MS Excel or PowerPoint 2016 goes to frozen state or crashes frequently, then try the following:

- Create a Local user account with admin rights and try accessing **Excel or PowerPoint** over there and check.
- If issue persists, on the other Local user account as well, then uninstall MS Office 2016 using the uninstaller.

**NOTE:** Make sure that you have backed up the Outlook profile which has user's data before uninstallation

- Now reinstall MS Office 2016 and update to the latest version and configure user's Cisco Exchange Account
- If the **Excel or PowerPoint 2016** works fine on the other user account, then it's an issue with Excel or PowerPoint on the original account.
- Log out and login to the effected user account and quit all the running applications.
- Delete the following files and empty the trash.

~/Library/Caches/<all contents of Caches folder>

~/Library/Application Scripts/com.microsoft.excel or com.microsoft.powerpoint

~/Library/Application Support/Microsoft

~/Library/Containers/com.microsoft.excel or com.microsoft.powerpoint

~/Library/Cookies/<all contents of Caches folder>

~/Library/Preferences/com.microsoft.excel.plist or com.microsoft.powerpoint.plist

~/Library/Saved Application State/com.microsoft.excel.savedstate or com.microsoft.powerpoint.savedstate

~/Library/WebKit/com.microsoft.excel or com.microsoft.powerpoint

- Restart the Mac and then launch Outlook and check.

- If the issue still persists, then escalate to Desktop T3 Mac.

# Mac OS X Supported Application Troubleshooting

## Cisco AnyConnect

If Cisco AnyConnect gives an error “ Login Failed”, then try the following steps:

- First Validate the VPN token by going to estore and order “ Validate Token ”. If it’s successful, then there is an issue with Cisco Anyconnect; else you will have to rekey the Softoken II or Reactivate MobilePASS.
- If it’s an issue with Cisco AnyConnect, then uninstall it by running the Uninstaller from /Applications/Cisco/Uninstall AnyConnect.app. Also make sure that you have run the Uninstall AnyConnect DART.app to remove the DART application.
- Restart the Mac and reinstall Cisco Anyconnect from estore.
- Try to establish VPN through Cisco AnyConnect. If it gives the same error again or another error, “anyconnect was not able to establish a connection to the specified secure gateway”, then run the following commands on Terminal App.

```
cd /Private/  
Sudo chmod 777 ./tmp/
```

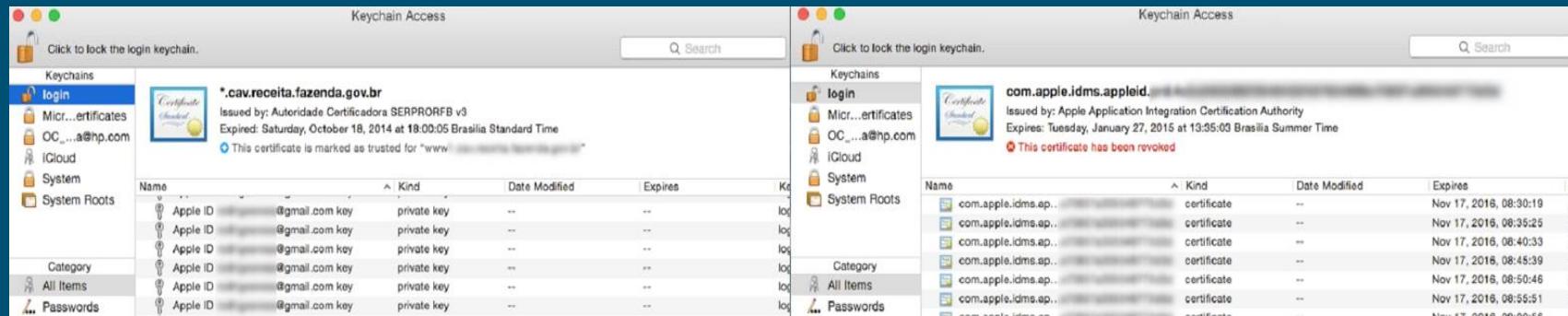
- Now try again to establish VPN. If the issue still persists, try with different Gateway like San Jos - SSL
- If the issue still persists, then escalate the case to AnyConnect Application support Team.

# Mac OS X Supported Application Troubleshooting

## Cisco AnyConnect

If Cisco AnyConnect gives an error “ Login Denied. Your environment does not meet the access criteria defined by your administrator ”, then try the following steps:

- Quit Cisco AnyConnect Application and Launch Keychain Access.
- From the left sidebar select ‘login’ under ‘Keychain’ and ‘All Items’ under ‘Category’.



- Delete all these **duplicate** certificate entries with "Apple ID [xxxx@cisco.com](mailto:xxxx@cisco.com) key" and "com.apple.idms.ap..xxxx" and be sure not to remove anything else except these duplicate entries.
- Restart the Mac and then try to connect to VPN.

# Mac OS X Supported Application Troubleshooting

## SofToken II

If **SofToken II** doesn't initialize (Error 507) or the PIN change pop-up window doesn't appear, then try the following steps:

- Launch Xquartz Application and update it to the latest version and restart the Mac
- If the issue still persists, then uninstall and reinstall Xquartz Application.
- If still the Softoken II doesn't initialize, then uninstall Softoken II by deleting it from
  - /Applications/Softoken II
  - ~/Library/Application Support/Softoken II
  - ~/Library/Preferences/com.cisco.it.softoken2.plist
- Restart the Mac and reinstall Softoken II and try to reinitialize it
- If it fails again, then it's recommended to migrate to MobilePASS by going to estore and order "Convert Token ". You can download MobilePASS from Mac App store.

# Mac OS X Supported Application Troubleshooting

## Cisco Jabber (Voice Services)

➤ If the Phone services or Voicemail doesn't work on Jabber, even though the Instant Messaging is fine, then try the following steps:

- Log Out from Cisco Jabber and Reset Jabber.
- Delete the following folders: ~/Library/Logs/Jabber and ~/Library/Application Support/Cisco
- Login to phone.cisco.com or voicemail.cisco.com using CEC ID and password. On the pop-up window, reenter the CEC credentials.

**NOTE:** Make sure that the Pop-up blocker is disabled on the browser before accessing the sites.

- Login to Cisco Jabber, then go to **Preferences < Accounts** and reenter the CEC credentials for Phone Services or Voicemail and click on **Apply**. This should bring the Phone Services or Voicemail in Active State
- If the issue still persists, then uninstall **Cisco Jabber** by deleting it from **/Applications/** and **/Library/Cisco/** and **/Library/Messages/Plugins/** and **~/Library/Address Book Plug-Ins** and **~/Library/Preferences** and **~/Library/Saved Application State** and **~/Library/WebKit**
- Restart the Mac and reinstall Cisco Jabber from eStore and update to the latest version.

**NOTE:** ESTS supports issues related to Voice services and for cisco jabber/spark application related issues, the case should be escalated to RCSS or WHO the call to RCSS queue

# Mac OS X Supported Application Troubleshooting

## VMware Fusion

If user claims that the Windows VM loses its **network** connectivity frequently or for **Audio/Graphics/Sharing** issues, then try the following steps:

- Check the Network on Mac OS X by doing a ping test from Terminal or from Network Utility. If it's fine on Mac OS X within the time reported by the user, then it's an issue with VMware Fusion or the Windows VM. (Try this step only for Network Issue.)
- Update the VMware fusion to the latest version.
- Turn On the Effected VM and then uninstall and reinstall the VMware Tools by clicking on **Virtual Machines < Install VMware Tools** from the menu bar. Then run Setupx64.exe from **Windows 10 OS < This PC < CD/DVD Drive**.
- Then select remove option from the setup wizard and then restart the Windows VM and reinstall the VMware Tools again.
- If the issue still persists, then uninstall VMware Fusion by running the uninstaller from [VM uninstallation guide](#)
- Restart the Mac and reinstall the VMware Fusion from eStore and update to the latest version.
- Launch the Windows 10 VM and reinstall the VMware Tools again
- If the issue still persists, then we need take data backup from the Windows VM and recreate another Windows 10 VM.

# Mac OS X Supported Application Troubleshooting

## VMware Fusion

If any user wants to **extend the Hard Drive Size** of Windows VM, then follow these steps:

- Shut down the Windows VM.
- Then select the particular VM and then settings > Hard Disk (SCSI) and set the required volume size.
- Turn on the Windows VM. It will not be reflected as the extended space is in raw state.
- Open Disk management > Create an extended partition with the newly added space.
- Now the additional space will show up as separate drive (not included on C Drive).

**NOTE:** If user wants the extended space to be added with C Drive, then he has to use third-party application and there might be a chance of **Data loss on C Drive**.

# MAC OS – Support Overview

Tier 1 – Level 1 or 2 Support Group(s)	Support Tasks/Responsibilities
Mac OS X Support	Desktop T1 Mac should support on Mac OS Sierra and El Capitan and recommend the El Capitan users to upgrade to Sierra OS
Mac OS X Applications	Desktop T1 Mac should support on all in-build Mac OS applications like Mail, Calendars, Contacts, Photos, etc.
Other Applications runs on Mac	Desktop T1 Mac should support most of the other applications used in Cisco like MS Office 2016, Jabber, OnRamp, McAfee, VMware Fusion, etc.
WebEx and Spark	Refer user to RCSS queue as webex and spark is no longer supported by ESTS
Printers Troubleshooting	Anything related to printers' drivers or printing System on Mac, Desktop T1 Mac should support. If it's related to printer access or MobilePrint doesn't work, then escalate to Xerox team.
OnRamp Application	If it's related to access, then pass it to OnRamp support team after checking on different machines, else Desktop T1 Mac should support.



# Top or known Issues



# Top Issues and Solutions

Issue	Description	Solution / Workaround
Search feature not working on MS Outlook 2016	Unable to search e-mails, Calendars and Contacts	Assign Outlook as Default App for *.olk15Message files and perform re-indexing
Unable to Print from Mac	Unable to print as the print Jobs are getting cancelled automatically	Uninstall Print Audit 6 Application and replace the CUPS folder and reset the printing system
Unable to join to WebEx Meeting	Unable to join to WebEx meeting as it asks to download add-on again and again	Perform a permission repair of Home and root directory and reinstall WebEx PT and Cisco Meeting Center
Outlook Freezes	Outlook goes to frozen state while switching between Mail and Calendar window	Removed all shared calendars and suggest the user to archive or delete old calendars, if it's more
Onramp Issue	Unable to login to Onramp Application	Clear all the stored password from browsers and Keychain Access and also clear browsers cache and cookies
Network Issue	Unable to connect to Blizzard	Delete entries from Keychain



## Associated Links / Sites

# Mac OS Support – Associated Links

Title	Associated Links
Mac OS X Troubleshooting Guide	<a href="#">Technical Support internal - MAC</a>
Mac New Hire OS X Setup	<a href="#">OS Set up – MAC</a>
Mac to Mac Refresh OS X Setup	<a href="#">MAC to MAC Refresh</a>
Mac Reimage OS X Sierra Setup	<a href="#">MAC reimage</a>
Mac OS X High Sierra Upgrade	<a href="#">MAC – High Sierra upgrade</a>
Windows 10 VM running on VMware Fusion	<a href="#">VMware set up</a>
Repairing a sparse virtual disk in Fusion (1023888)	<a href="https://kb.vmware.com/selfservice/microsites/search.do?language=en_US&amp;cmd=displayKC&amp;externalId=1023888">https://kb.vmware.com/selfservice/microsites/search.do?language=en_US&amp;cmd=displayKC&amp;externalId=1023888</a>
Troubleshooting guide of Outlook 2016 Mac	<a href="#">MAC – Outlook 2016</a>
How to recover data from Corrupted Outlook Identity on Mac	<a href="#">MAC&gt; Data recovery from corrupted Outlook identity</a>

# Mac OS Support – Associated Links

Title	Associated Links
Calendar Purging Management	<a href="#">Calendar Management Service</a>
Unable to Search e-mails on Outlook 2016 on Mac	<a href="#">Outlook search issue</a>
How to Uninstall Box Sync	<a href="https://community.box.com/t5/Box-Sync/How-Do-I-Install-or-Uninstall-Box-Sync-4-0/ta-p/85">https://community.box.com/t5/Box-Sync/How-Do-I-Install-or-Uninstall-Box-Sync-4-0/ta-p/85</a>
How to uninstall Java on Mac	<a href="https://www.java.com/en/download/help/mac_uninstall_java.xml">https://www.java.com/en/download/help/mac_uninstall_java.xml</a>
Re-enable Java web plug-in and Web Start features	<a href="https://support.apple.com/en-in/HT202643">https://support.apple.com/en-in/HT202643</a>
Mac OS X Startup Issues	<a href="https://support.apple.com/en-us/HT204156">https://support.apple.com/en-us/HT204156</a>
Transfer data using Migration Assistant	<a href="https://support.apple.com/en-in/HT204350">https://support.apple.com/en-in/HT204350</a>
Anyconnect Self - help	<a href="#">Anyconnect – Self help</a>

# Mac OS Support - Associated Links

Title	Associated Links
Mac OS X: Using Keychain Access to search directory services for certificates	<a href="https://support.apple.com/en-in/HT201993">https://support.apple.com/en-in/HT201993</a>
If your Mac keeps asking for the login keychain password	<a href="https://support.apple.com/en-us/HT201609">https://support.apple.com/en-us/HT201609</a>
Smart badge - Configuring Email Clients for Signing/Encrypting with S/MIME	<a href="https://cisco.jiveon.com/docs/DOC-151311#ol2013">https://cisco.jiveon.com/docs/DOC-151311#ol2013</a>
How to create a new profile on Outlook 2016	<a href="#">Outlook&gt;New profile</a>
How to remove an re-add the Exchange account on Outlook 2016	<a href="#">Outlook&gt;Remove and Re-add exchange account</a>
Mac Hardware - Global Support Options	<a href="#">MAC - HW</a>
Case Standards - Mac global support	<a href="#">Help Zone - Case Standards - Mac</a>

# Q & A



