



Education



# Apple Caching Server (eT4L)

## DEPLOYMENT GUIDE

# Table Of Contents

- 3. Change Control.
- 4. High Level Overview.
- 5. System Requirements - Apple Caching Server.
- 6. Network Configuration - macOS.
- 7. Network Configuration - iOS.
- 8. NetBoot Process.
- 10. Prepare Device For Deployment.
- 12. Deployment Workflow.
- 18. Deployment Complete.

# Change Control

| Date     | Person       | Version | Change Details                               |
|----------|--------------|---------|--|
| 04-07-16 | Calum Hunter | 1.0     | Initial draft                                |
| 07-07-16 | Calum Hunter | 1.1     | Revision                                     |
| 12-07-16 | Calum Hunter | 1.2     | Remove static ip configuration               |
| 15-08-16 | Calum Hunter | 1.3     | Add Macmini URL                              |
| 22-09-16 | Calum Hunter | 1.4     | Update EULA acceptance page                  |
| 26-09-16 | Calum Hunter | 1.5     | Update images to reflect Imagr               |
| 8-11-16  | Calum Hunter | 1.6     | Update to include email alerts and fix typos |
| 8-11-16  | Calum Hunter | 1.7     | Update wording                               |
| 14-11-16 | Calum Hunter | 1.8     | Update system requirements and terminology   |
|          |              |         |  |
|          |              |         |  |

# High Level Overview

The caching service speeds up the download and distribution of software and other content distributed by Apple\*

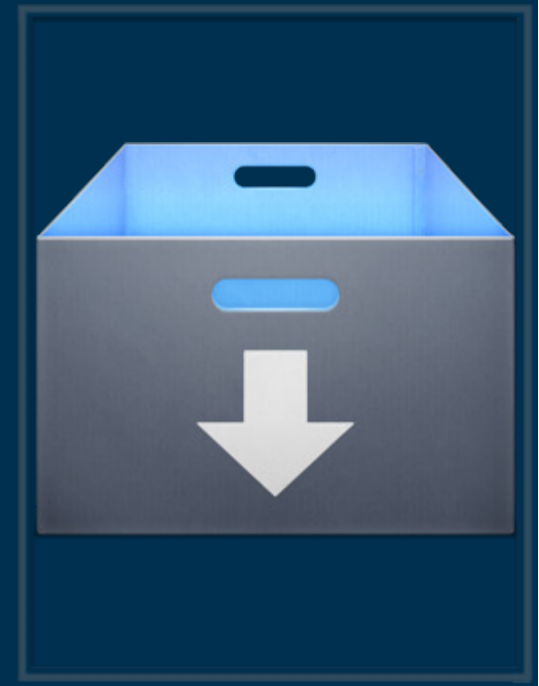
It caches the first download of various items distributed by Apple, then makes these items available to devices and computers on your local network.

This means you can offer fast downloads of items distributed by Apple to clients on your network.

This allows you to save time as well as Internet bandwidth.

<https://support.apple.com/en-au/HT204675>

\*The list of content cached is available from the link above



# System Requirements - Caching Server

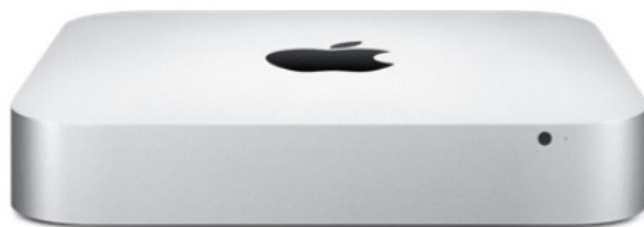
Apple Caching Server has the following requirements.

Server hardware:

- Mac mini
- 8Gb RAM
- 1TB Fusion Drive.
- Gigabit Ethernet connection - Wi-Fi is NOT supported

A correctly spec'd Mac mini is available on the DoE procurement list:

<https://education.nsw.gov.au/technology-for-schools/products-and-services/hardware/standard-devices-for-schools/standard-apple-desktops/apple-mac-mini-desktop>



[View gallery](#)

## Summary

Mac mini

2.8GHz Dual-Core Intel Core i5 (Turbo Boost up to 3.3GHz)

8GB 1600MHz LPDDR3 SDRAM

1TB Fusion Drive

Intel Iris Graphics

User's Guide (International English)

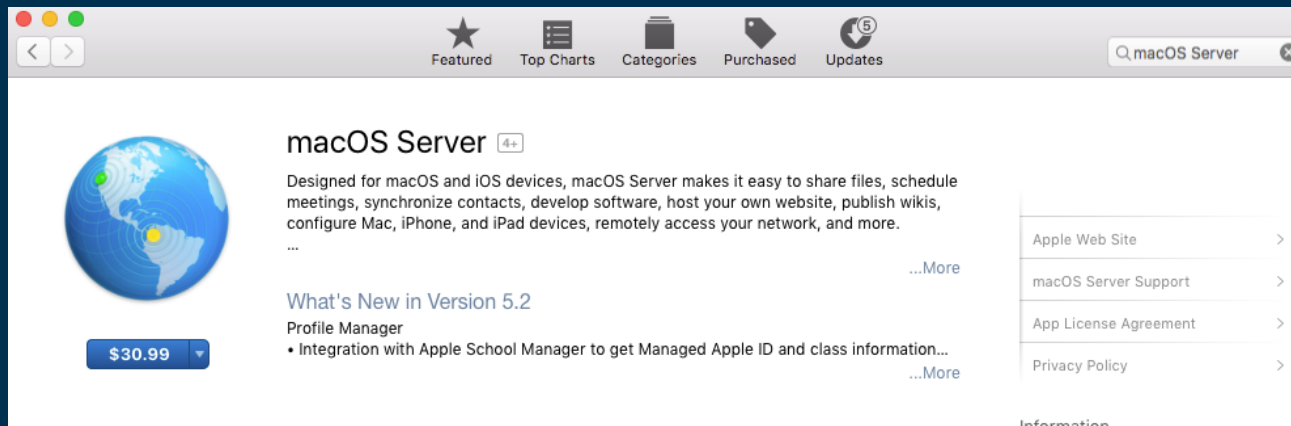
Accessory Kit

# System Requirements - Caching Server

Apple Caching Server has the following requirements.

Server software:

- A copy of mac OS server needs to be purchased from the Mac App Store



<https://itunes.apple.com/au/app/macos-server/id883878097?mt=12>

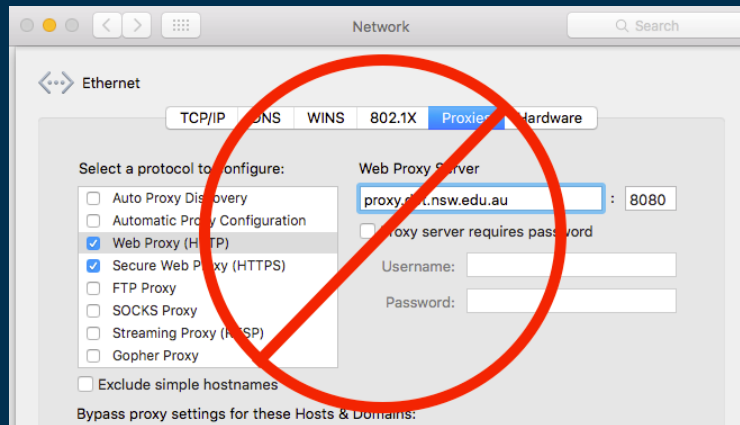
- This application can be purchased using a VPP Apple ID account or any other Apple ID account using a credit card or iTunes gift card for payment.

# Network Configuration - macOS devices

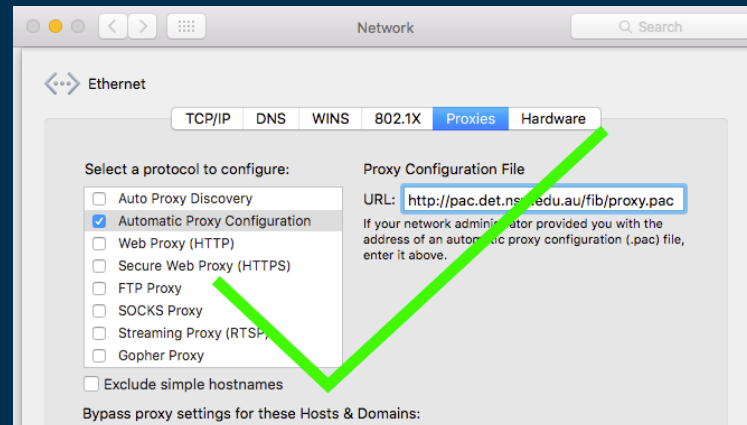
## Proxy settings:

- macOS devices (Macs) MUST use the proxy PAC file. Or be set to Auto Proxy Discovery
- macOS devices MUST NOT be set to use a manual proxy setting or they will cause a double download of every piece of content from the internet and max out the schools internet bandwidth.

## Example



Manual Proxy



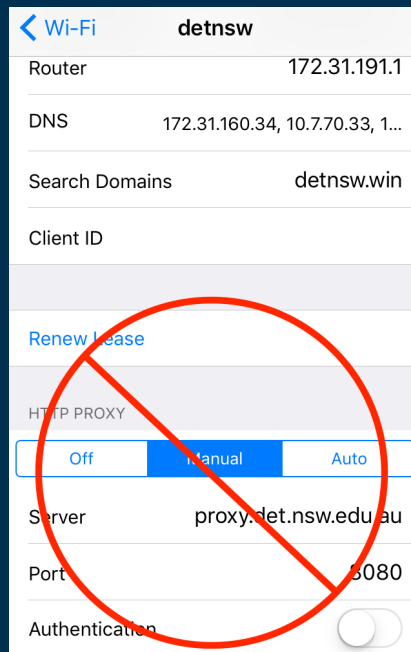
Proxy PAC

# Network Configuration - iOS devices

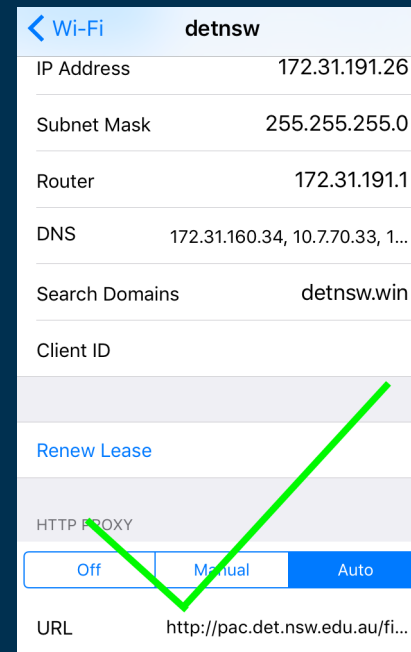
## Proxy settings:

- iOS devices (iPads) MUST use the proxy PAC file.
- Client devices MUST NOT be set to use a manual proxy setting or they will cause a double download of every piece of content from the internet and max out the schools internet bandwidth.

Example:



Manual Proxy

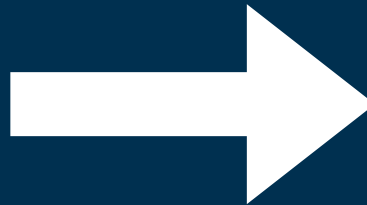


Proxy PAC

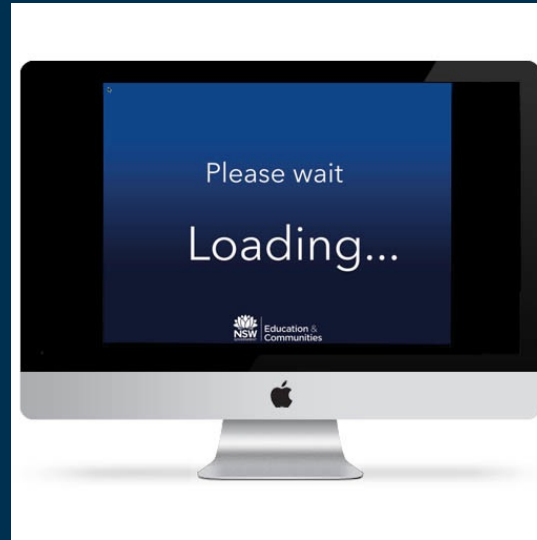


# Netboot Process

After connecting the Macmini to power and an ethernet cable to the supported eT4L subnet environment, turn on the device and hold down the N key until a flashing globe icon is displayed as shown below.



The system will load and you will be presented with a dialog box requesting authentication.

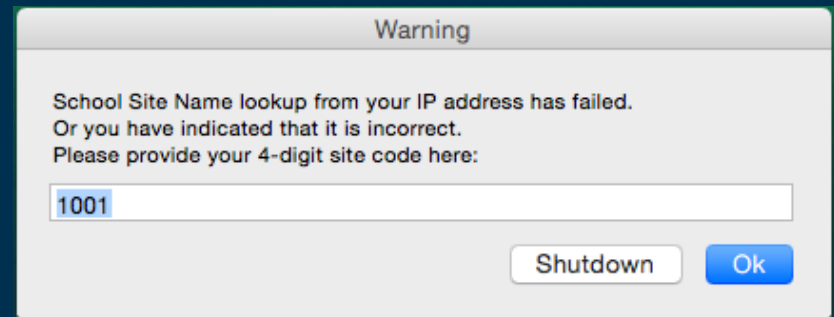
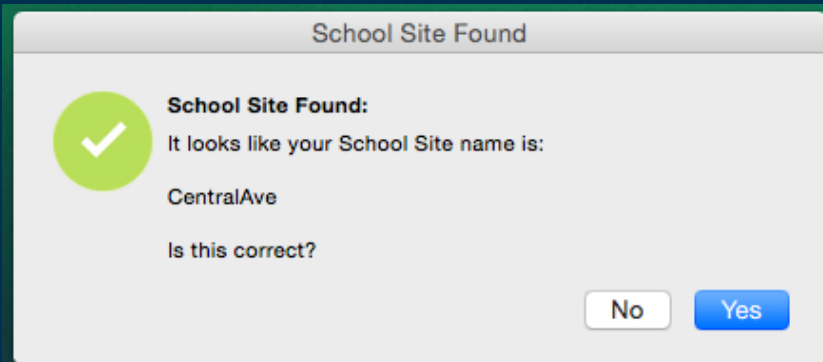


At this point you should enter your login credentials and click login. The system will check your credentials and group membership.

# Prepare Device For Deployment

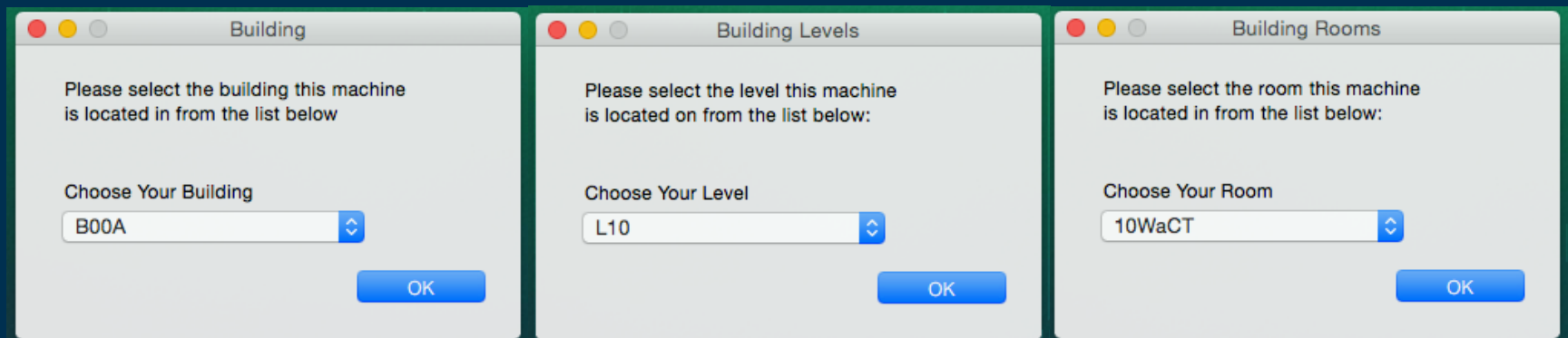
If your account checks out, the system then attempts to locate your site name.

You will be prompted to confirm the site name, or if the system was unable to locate your site automatically, you will be prompted to manually enter your site code and try again.

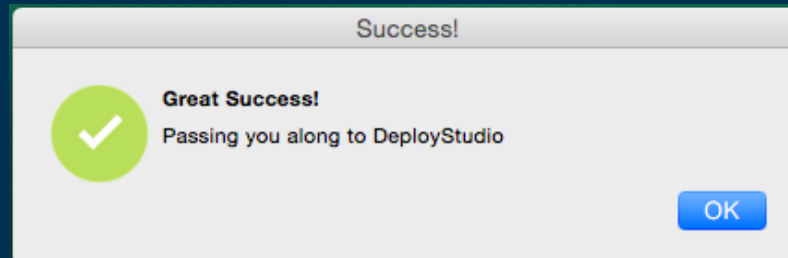


Next you are prompted for information about where the machine is physically located.

Select the correct building, level and room from the popup menus.

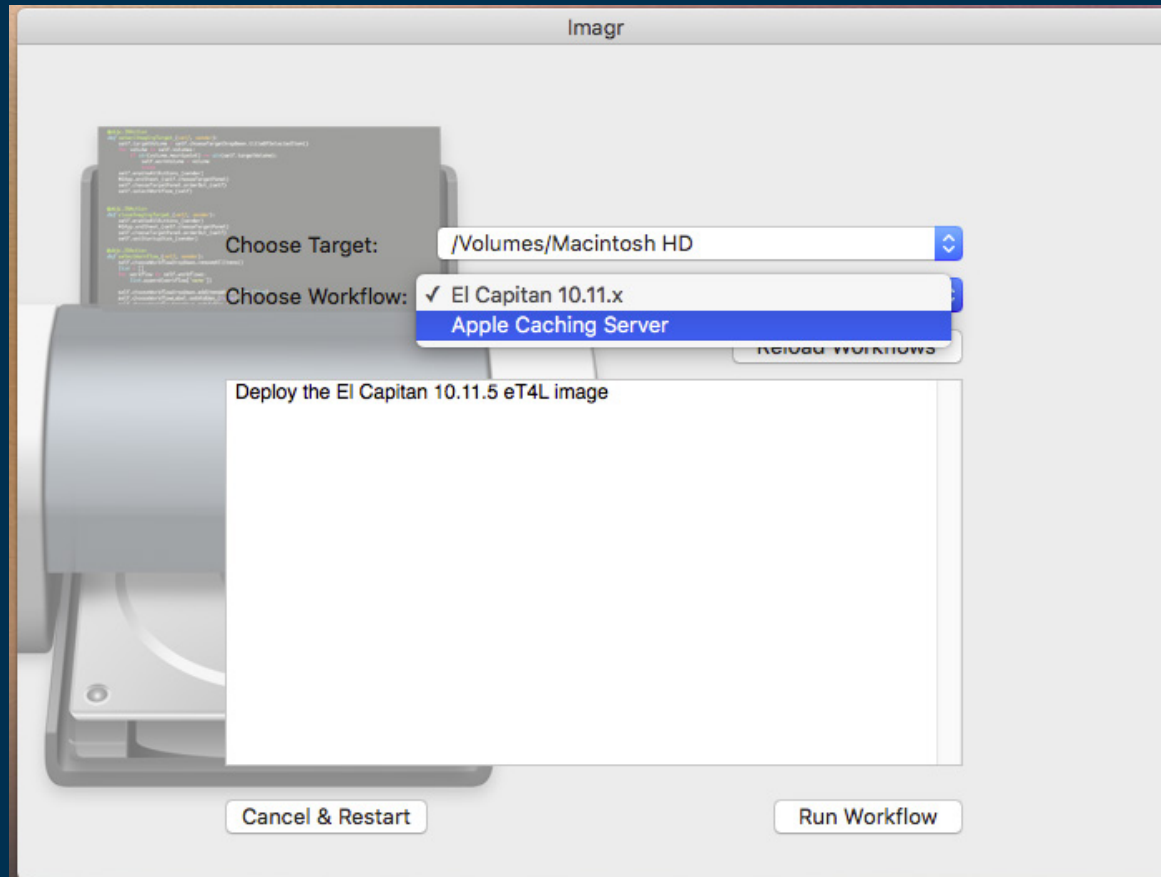


The following dialog lets you know things are proceeding along nicely.



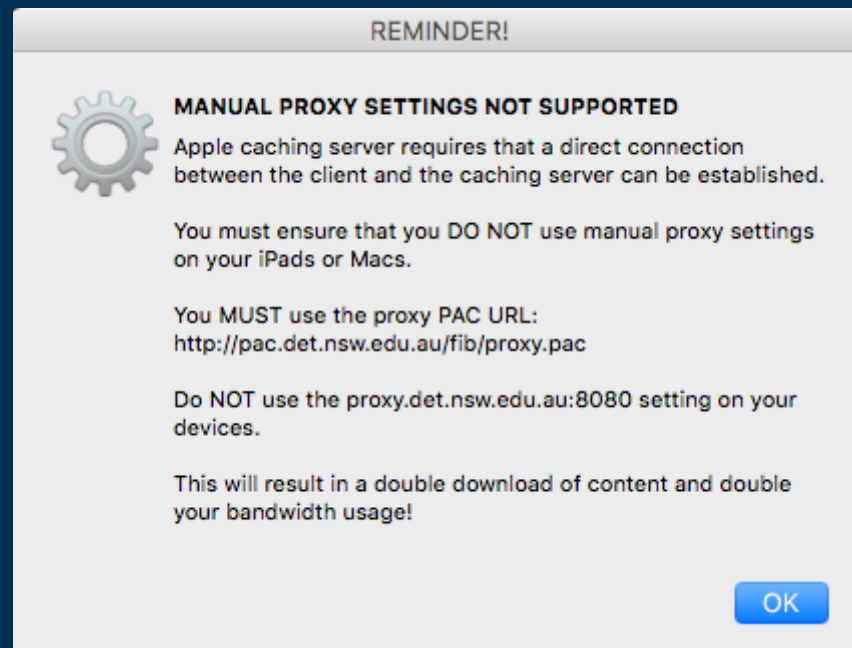
# Deployment Workflow

Choose the workflow for Apple Caching Server from the popup menu and click Run Workflow

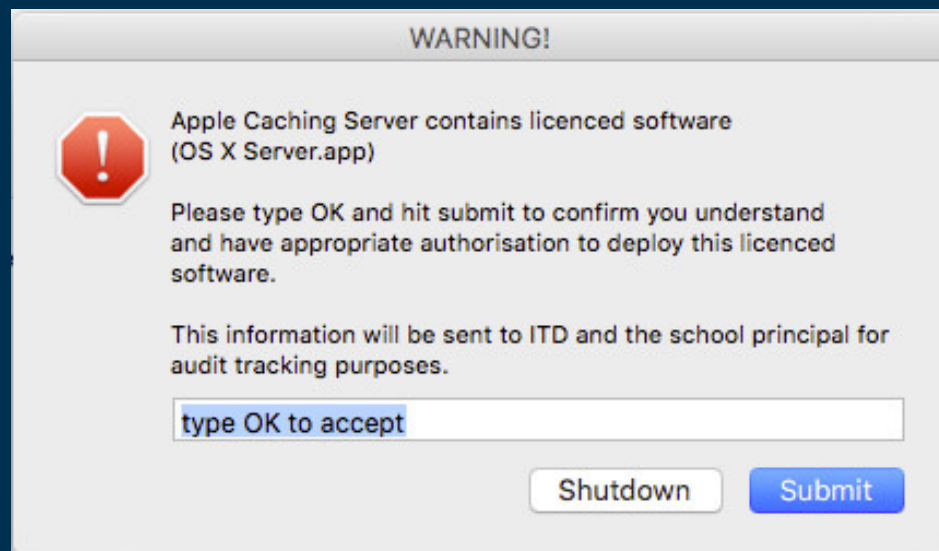


The workflow will begin by running some checks to ensure the hardware and network configuration meet the requirements. You will be alerted to any errors.

Once the checks have been completed you will be reminded that your client devices **MUST NOT** be configured to use manual proxy settings and instead must use the proxy PAC URL.



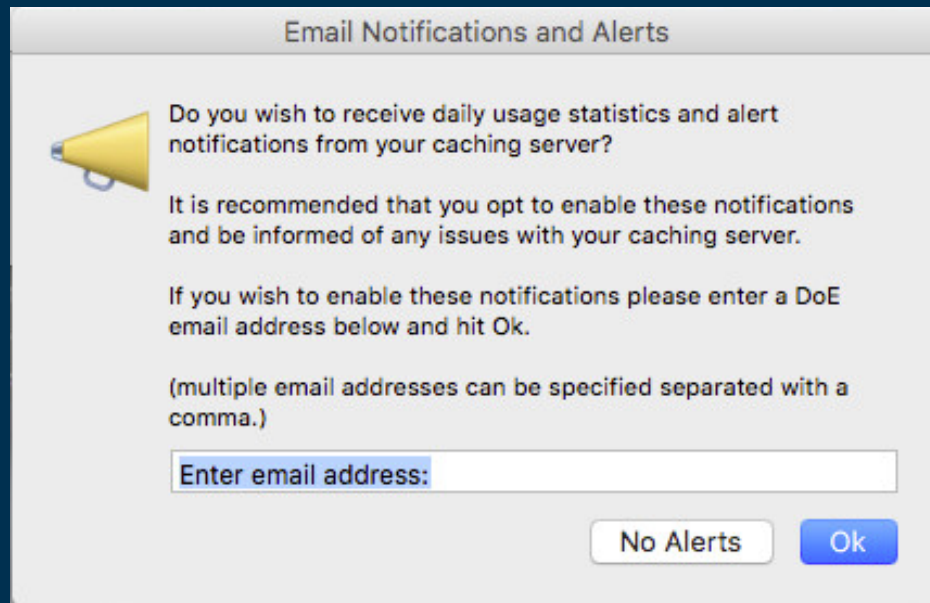
Apple Caching Server is licensed software. You need to ensure you have purchased a copy of mac OS Server from the Mac App Store or via VPP. You will be prompted to acknowledge this requirement and you must enter OK in to the prompt in order to acknowledge this and continue. This acceptance will be sent to ITD and the school principal.



# Email Notifications

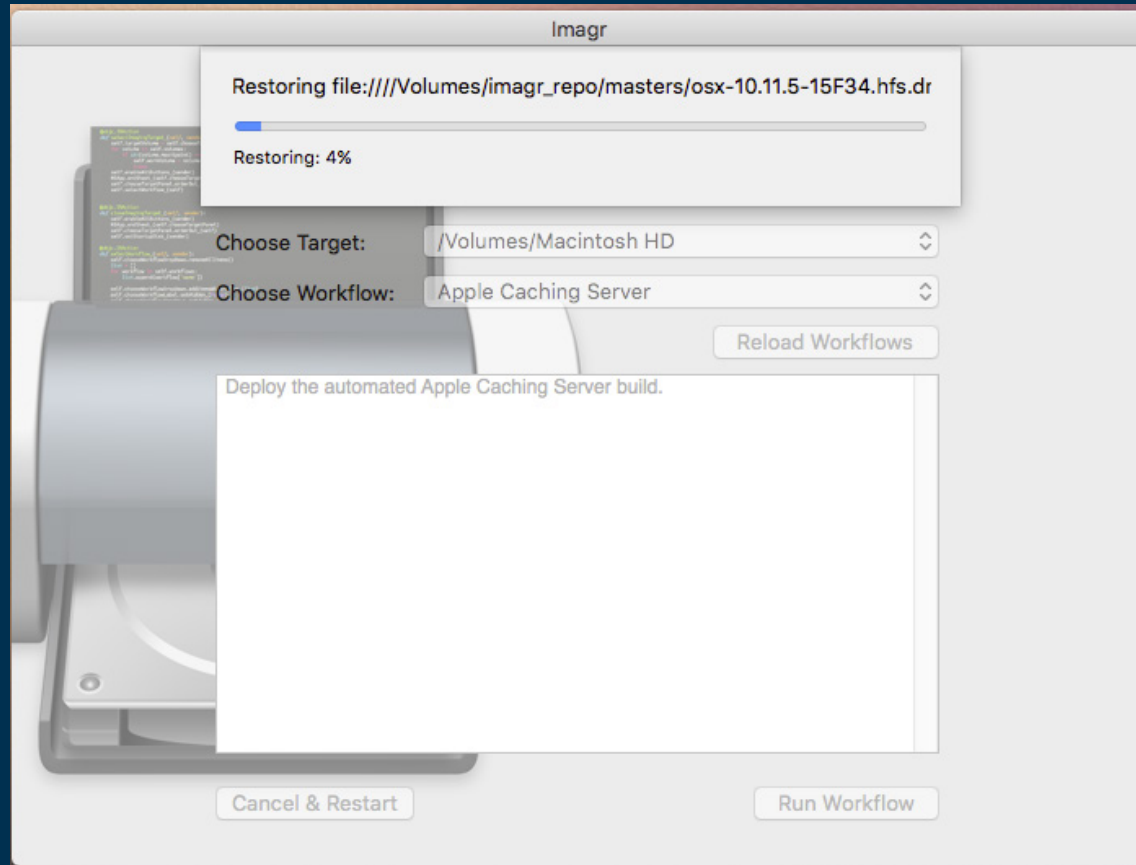
Your caching server has the ability to send email notifications, alerts and daily usage statistics. It is recommended that you provide an email address to receive these emails so that you can monitor the health and usage of your caching server.

Enter a DOE email address and hit 'OK' at the prompt.





The base OS image will start to be restored to the Macmini.



Once complete, the machine will reboot.

After the reboot, additional software will be installed and the Apple Caching Service will be configured and enabled.

```
DeployStudio Finalize script log

installer:STATUS:
installer:PHASE:Finishing the Installation...
installer:STATUS:
installer:%100.000000
installer:PHASE:The software was successfully installed.
installer: The install was successful.
Install successful, removing script and related packages...
ds_finalize.sh - running /etc/deploystudio/bin/ds_install_packages_0003.sh
ds_install_packages_0003.sh - v1.15 (Mon Jul 4 12:53:47 AEST 2016)
installer: Package name is Munki - Managed software installation for OS X
installer: Installing at base path /
installer:PHASE:Preparing for installation...
installer:PHASE:Preparing the disk...
installer:PHASE:Preparing Munki - Managed software installation for OS X...
installer:PHASE:Waiting for other installations to complete...
installer:PHASE:Configuring the installation...
installer:STATUS:
installer:%94.548960
installer:PHASE:Cleaning up...
installer:PHASE:Validating packages...
installer:%97.750000
installer:STATUS:Running installer actions...
installer:STATUS:
installer:PHASE:Finishing the Installation...
installer:STATUS:
installer:%100.000000
installer:PHASE:The software was successfully installed.
installer: The install was successful.
installer: The install requires restarting now.
Install successful, removing script and related packages...
ds_finalize.sh - running /etc/deploystudio/bin/ds_0001.sh
-----
Mon Jul 04 12:53:50 - Starting First Boot setup script...
Mon Jul 04 12:53:50
Mon Jul 04 12:53:50 - Setting Computer Name
Mon Jul 04 12:53:50 [WARN] - Machine does NOT have Wi-Fi. Using the Ethernet MAC for computer naming instead
Mon Jul 04 12:53:50 - LocalHostname set to: 000c2961cfd8AC5
Mon Jul 04 12:53:50 - HostName set to: 000c2961cfd8AC5
Mon Jul 04 12:53:50 - ComputerName set to: 000c2961cfd8AC5
Mon Jul 04 12:53:50 - Setting correct timezone
Mon Jul 04 12:53:50 - Site: 0916 is not a special case
Mon Jul 04 12:53:50 - Setting timezone to Australia/Sydney
Set TimeZone: Australia/Sydney
Network Time is already on.
setNetworkTimeServer: ntp.det.nsw.edu.au
Mon Jul 04 12:53:51 - Disabling iCloud Setup Assistant Prompts.
Mon Jul 04 12:53:54 - Disabling Automatic Apple Software Update check
Mon Jul 04 12:53:54 - Enabling ARD for: cadmin
```

Please wait  
Loading...



# Deployment Complete

Once you are presented with the login window the server is ready.

The server will start caching iOS/macOS and app updates as soon as they are requested by users. There is no need to login to the server.

