

# Moving to Mac OS X

## Guide for K12 Transition

### Introduction

Many schools are facing the transition from Mac OS 9 to Mac OS X. This move requires more planning than previous upgrades to the Mac OS, so this guide is intended to provide advice and direction to schools as they plan.

### Developing a Plan

Each school is different, and so will your plan for moving to Mac OS X. One common ingredient to all schools is planning since the move to Mac OS X is more involved than say the simple upgrade from Mac OS 8.6 to 9.0, which involved little more than running a simple updater. It cannot be stressed how important developing a plan, a strategy, for moving your organization to Mac OS X.

A plan should include three steps: *Decide* to move to Mac OS X, *Prepare* your organization, and *Implement* the move. The following section outlines the steps you might take.

### Step 1: Decide

#### *Strategy*

If you are considering Mac OS X, it is good to understand the benefits, and be convinced why you wish to move to Mac OS X, especially if you need to gain support from others in your organization. A part of your planning will be deciding when to move the servers to Mac OS X Server, and when to migrate the teacher and student/lab machines. The integration of Mac OS X, Client and Server with auto-mounting of home directories, management of preferences, desktop control and quotas is very attractive to education.

For other great features of Mac OS X, look at:

<http://www.apple.com.au/macosx/>

<http://www.apple.com.au/server/>

#### *Support*

A move to Mac OS X will affect more than you, it has the potential to touch all parts of your organization. Therefore, gaining support from the teaching and executive staff, along with your IT team, and external providers such as your Apple Education Reseller is important.

### Step 2: Prepare

#### *Audit*

The following items need to be audited for suitability in a Mac OS X environment:

- Hardware: do you have G3 or G4 processors, at least 128Mb RAM and enough hard disk?
- Operating System: do you have enough licenses of Mac OS X?
- Software: what software do you use, on how many machines, are they Mac OS X native?
- Peripherals: are drivers available, built into Mac OS X, on the vendors website?
- Network: is your network reliable, do you have 10/100 to each computer, 100/1000 to server?

This information can be gathered using tools like 'Apple Remote Desktop' over the network, or 'Apple System Profiler' locally on each machine. It is best to collect this information into a spreadsheet or database to make manipulation, searching and evaluation easier. A sample spreadsheet titled 'Audit Example' gives you a place to start.

### *Analysis & Recommendations*

Once you have gathered all of the information, you need to analyze the information. Check:

- how many computers do not have a G3 or G4 processor?
- how many computers have less than 128Mb of RAM?
- of the applications you run, do you own Mac OS X native versions, or are they available?
- etc. . .

Once you have interpreted the information you gathered, it is time to write a report, with your recommendations. A sample report titled 'Migrating Plan Example' gives you a place to start. This will be your working document, it tells you what needs to be upgraded, the associated costs if any, and should give a recommended timeline. If you need to get approval for the move to Mac OS X, this document will be invaluable.

### *Upgrade*

Based on the recommendation above, you may need to upgrade RAM, software or hardware. The upgrade phase is acting on the recommendations, ensuring everything is ready BEFORE you begin the move to Mac OS X

### *Technical Training*

Mac OS X is a very different operating system to Mac OS 9, and Mac OS X Server is even more different than AppleShare IP. You, or your IT staff need to be trained on Mac OS X and Mac OS X Server before you move your organization.

Apple offers training and certification. Further information can be found at:

<http://www.apple.com.au/training/>

## **Step 3: Implement**

### *Proof of Concept & Testing*

While the integration of Mac OS X, Client and Server with auto-mounting of home directories, management of preferences, desktop control and quotas is attractive to schools, it is not as simple as iMovie. It is recommended that before you 'go live' on teacher and student machines, a small test environment is setup so a proof of concept can be done. This gives staff a change to test their design, practice what was learnt in training, and be sure it will work on the 'live' system.

### *Migrating Servers*

Since much of the Mac OS X Client functionality relies on a Mac OS X Server, it is best to move servers from AppleShare IP or Windows NT to Mac OS X Server before moving the client machines. A test server should also be established, say on an iMac, before moving the 'live' servers. This step might benefit from input from your Apple Reseller, or Apple Professional Services. The document 'Installing Mac OS X Server' might be a good reference here also.

### *Build a Standard Operating Environment (SOE)*

It makes no sense to hand-install each software package, on each Mac in the place. Therefore, most organizations build a 'standard operating environment', and 'image'. This is simply one computer with the correct software installed, preferences set, all neat and tidy. Remember, testing is your best friend. This can then be 'imaged', or 'cloned' to the rest of the machines in the organization. Tools such as 'Carbon Copy Cloner' and 'NetRestore' can enable rapid deployment of Mac OS X 'images'. These are similar to 'Ghost' in the Windows environment. See:

<http://www.bombich.com/>

### *Rollout of SOE to Client machines*

This step has the potential to create disruption to classes, teachers and students, and timing and efficiency is important. Develop a plan of attack, pick the least disruptive time, and even think of things like how will you handle the period when some are on Mac OS 9 and some are on Mac OS X?

### *User Training*

Most students will 'cope' with arriving one day and finding Mac OS X rather than Mac OS 9, but staff might be a different story. Training staff in using Mac OS X, access documents on the server, printing, how things are different to Mac OS 9, are all essential. Apple has a new course, either hard-copy or electronic, titled 'Getting Started with Mac OS X' and another 'Introduction to Microsoft Office vX for Mac'. Further information:  
<http://www.apple.com.au/training/>

Preparing them for changes in process, eg. Students might not have used username & password before and need to be informed in an orderly fashion of what their username & password is and how to login. Planning, planning, planning.

### *Support*

Finally, you may find you run out of answers and need some help. It is wise to know your support options before you need them. Check out the following options.

## **Future Version of this Document**

Check here for a newer version:

<http://www.barnham.com.au/macosex/>

## **Getting Help**

You might decide your organization is too small; you don't have the skill or time to do the migration yourself. Maybe outsourcing the migration is the most timely or cost effective solution.

There are people who can help you move to Mac OS X. Call them to come and discuss your needs and the services they offer. They include:

Apple Education Reseller  
Apple Professional Services  
<http://www.apple.com.au/services/>

## **Resources**

A variety of websites, white papers and tools that will help:

Mac OS X Admin Guide – version 10.2.3 can be downloaded at:  
[http://www.apple.com/server/pdfs/MacOSXServer\\_AdminGuide\\_121902.pdf](http://www.apple.com/server/pdfs/MacOSXServer_AdminGuide_121902.pdf)  
Mac OS X Server Support Webpage  
<http://www.info.apple.com/usen/macosexserver/>  
Mac OS X Server List  
<http://lists.apple.com/mailman/listinfo/macos-x-server>