

Technical Training for Mac OS X Administrators

4 to 6 July 2012 University of Technology, Sydney

## Contents

Welcome	2
Agenda	3
Sessions	4
Feature Presentations	5
Session Presentations	б - 8
Workshops	9 - 11
Meals & Social Activities	11
General Information	12
UTS Campus Guide	13
Peter Johnson Building	14
UTS Transport Map	15
Darling Harbour Map	16

# Welcome to X World 2012

Colleagues,

I'm delighted to be able to extend to you all a warm welcome to the tenth X World. We're very proud that it has remained such a successful event on the AUC calendar - thanks in part to many of you, who have shown your support by coming each year to learn, to share, and to give back to the AUC community.

The first X World was held in 2003. Some of the talks offered in that first year were "Migrating from OS 9 to OS X","Building an SOE,""Directory Integration" and "Understanding Samba". It's been an amazing journey since then, and it's interesting to reflect that while the underlying tools and techniques may have changed, some of those talk topics are as relevant today as they were back then.

X World was always intended as an event to support staff of AUC member institutions working with Apple technology in the systems and technical areas, and proved so successful that we used the same model for CreateWorld (serving those working in the creative spaces), and for /dev/world (for MacOS and iOS software developers).

Holding an event of the scale of XWorld is a major undertaking, and many people have contributed to make it a success. Firstly, thanks to our international guests - Micah Baker from Apple, and Arek Dreyer from Dreyer Network Consultants - we appreciate them both making themselves available for X World. Thanks too to Thomas Esamie from UTS for providing us with labs for the workshop sessions, AUC Programs Manager Andrew Jeffrey for co-ordinating the event, and Sharon Bain from The Events Authority for her invaluable assistance on site. And thanks to all of the session and workshop presenters - mostly people like you, giving back to our community. We're greatly appreciative of the time and effort all of the presenters have put into the event.

It is my sincere hope that during the next 3 days your time at X World will provide you with new and renewed friendships, new perspectives, solutions to problems, and most of all an enjoyable and rewarding time. I urge you to get to know people from across our membership so that you can share your experiences, knowledge, successes and failures.

I wish you a warm welcome and a great conference.

Tony Gray AUC Chair

# Agenda

#### Wednesday 6 July

09:30	11:00	Registration
11:00	11:15	Welcome
11:15	12:30	Feature Presentation
12:30	13:30	Lunch
13:30	15:00	Presentations
15:00	15:30	Afternoon Tea
15:30	17:30	Presentations
19:00		Conference Dinner

### **Thursday 7 July**

09:00	10:30	Session 1
10:30	11:00	Morning Tea
11:00	12:30	Session 1 cont
12:30	13:30	Lunch
13:30	15:00	Session 2
15:00	15:30	Afternoon Tea
15:30	17:00	Session 2 cont
		Free Night

### Friday 8 July

09:00	10:30	Presentations	Gu
10:30	11:00	Morning Tea	Gu
11:00	12:30	Presentations	Gu
12:30	13:30	Lunch	Gu
13:30	14:45	Presentations	Gu
14:45	15:00	Close	Gu
15:15		Bus Departs to Airport from Harris St	

#### Location

Guthrie Foyer Guthrie Theatre Guthrie Theatre Guthrie Foyer Guthrie Theatre Guthrie Theatre Star Room @ IMAX

#### Location

See page 4 Guthrie Foyer See page 4 Guthrie Foyer See page 4 Guthrie Foyer See page 4

#### Location

Guthrie Theatre
Guthrie Foyer
Guthrie Theatre
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Guthrie Theatre
Guthrie Theatre

# Sessions 1 & 2

Workshops are 180 minute hands-on labs with a 30 minute break. The presentation is a quick overview of the OS X certification exam and what topics will be covered and what you need to know if you want to compelte the optional certification exam on Thursday evening.

Thursday 5 July	Session 1
Presentation	09:00 to 12:30
Mac OS X Support Essentials - Lion 101- Revision Session	Guthrie Theatre
Workshops	09:00 to 12:30
Building an SOE on Linux	Lab 1
Building an SOE/MOE	Lab 2
Rapdi Prototyping using FileMaker Pro	Lab 3
Understanding Profile Manager	Lab 4

Thursday 5 July	Session 2
Presentation	13:30 to 17:00
Mac OS X Server Essentials - Lion 201 - Revision Session	Guthrie Theatre
Workshops	13:30 to 17:00
Puppet for Developers	Lab 1
Building an SOE/MOE (Repeat)	Lab 2
SNMP Monitoring of Devices using Lithium	Lab 3
Understanding Profile Manager	Lab 4

## **Feature Presentations**

#### Wed 11.15am - 12.30pm

#### Micah Baker, Apple Inc

#### iOS Devices: Configuring, Deploying and Managing

iOS devices are a new class of computing device, and bring with them new opportunities for learning IT best practices. This session will provide an overview of tools, techniques, and workflows for iPad, iPhone, and iPod touch configuration, deployment, and management. Uses of new tools from Apple, such as Apple Configurator and Profile Manager will be reviewed.

#### Fri 2.15pm - 3.00pm

#### 10 Years of Sys Admin in the Apple World Arek Dreyer, Dreyer Network Consultants

Arek Dreyer is a Chicago, USA based author, courseware developer and computer consultant, expert in Mac OS X and directory services in Mac OS X Server. He is an Apple Certified Trainer and Apple Certified System Administrator and has been delivering system administration training for Apple Worldwide Training and Certification since 2002. He maintains expertise in Microsoft Windows and UNIX based environments, particularly Sun Solaris, Mac OS X has become his preferred platform, and he enjoys the challenge of heterogeneous networks like integration with Active Directory.

He has been a presenter at the Macworld Expo conference on many occasions and presented at X World in the past.

He is is the author of many books including; Apple Pro Training Series: OS X Lion Support Essentials; Apple Pro Training Series: OS X Lion Server Essentials and his new book on Managing iOS Devices with OS X Lion Server.

# **Session Presentations**

#### Wed 1.30pm to 2.30pm

#### The Goodthink Project Dale Hills, Waikato University

Development of the goodthink project was driven by the evolving necessity to provide appropriate teaching and learning technology to staff and students in an increasingly BYOD environment. Most tertiary institutions have been very good at providing formal, face-to-face teaching technology in lecture theaters and classrooms. However, less attention and consideration has been given to the need for technology in the informal spaces where students congregate and can work collaboratively with each other outside the traditional classroom. This area of research is known as 'informal learning space design' and it is possible to provide the infrastructure and technology in any hallway, foyer, cafe or library where there is space, furniture and access to power & wireless Internet access. [Full description on web]

#### Wed 2.30pm to 3.00pm

### Munki Magic

#### Sam Dunster, University of Wollongong

Munki is a set of tools that, used together with a webserver-based repository of packages and package metadata, can be used by OS X administrators to manage software installs (and in many cases removals) on OS X client machines. Munki can install software packaged in the Apple package format, and also supports Adobe CS3/CS4/CS5/CS6 Enterprise Deployment "packages", and drag-and-drop disk images as installer sources. Additionally, Munki can be configured to install Apple Software Updates, either from Apple's server, or yours. Munki is currently in use at organizations all over the world, managing software for thousands of Macs.

#### Wed 3.30pm to 4:15pm

#### iCouncil

#### Jenny Rhodes, University of Newcastle

A case study of the setup and support of the University of Newcastle's council meetings into the paperless meeting space. Basic MDM for security and looking at what would be done differently if the project had access to the Apple Configurator tool. From concept to implementation and the ongoing support. This presentation will appeal to other universities that are concerned with mass managed deployment of iOS devices.

#### Wed 4.15pm to 4:55pm

#### To the iCloud!

#### Jon Rhoades & Peter Tonoli, University of Melbourne

Documents on IOS devices, the legalities, practicalities & pitfalls.

iOS devices are now ubiquitous in our organisations, and there is a clear business need for our users to access their documents on theses devices. We will be exploring how users can access their documents using popular syncing services and directly accessing your existing storage infrastructure. We also look at the risks and implications of storing data on external company servers. This presentation is suitable for all attendees who deal with iOS devices.

# Session Presentations (cont)

Wed 4:55pm to 5:30pm

#### Effective Data Management

#### Aaron Tan, University of Melbourne

Managing your data effectively enhances your project. Inadequate data management can also lead to catastrophes like the loss of data or the violation of people's privacy. This talk will focus on digital asset management systems that are currently used by educational and research institutions, libraries and museums. I will also cover software resources available to create good general models of data management planning for any project.

This will cover backup strategies, content management, cloud computing and collaboration tools. This is likely to be of particular interest to system administrators, developers, researchers/research administrators who are charged with data management for a research project or an institution.

#### Fri 9:00am to 9:30am

#### Extending Lecture Recording Systems Adam Reed, Australian National University

I've recently done a proof of concept with our lecture recording system to automatically add chapter markers within the video. Once I determined where the chapters were I've extracted still frames and run them through OCR. Finally I created a HTML 5 player that would sync the text with the slides. It's been done using free or open source software. This starts to make video "searchable", instead of being a large binary blob. This presentation will outline what I've done, the tools I used and how I have put them together. I would then like to open the session up to learn from other attendees what they are doing to add value to video assets, particularly any work around making video accessible, and / or people looking at automatic transcription of audio.

#### Fri 9:30am to 10:00am

#### Web Based iOS Configuration

#### Tim Bell, Trinity College, University of Melbourne

As Trinity College's use of iPads has grown from a small pilot study, to a medium sized cohort of students, and now a forecast 600 students and 100 staff this year, we have steadily improved how we manage the configuration of those iPads. The presentation will briefly recap the evolution of iPad configuration management at Trinity, and look at existing solutions that are available. However, the majority of the presentation will cover our Django-based web application. It allows IT staff to prepare a configuration profile using iPhone Configuration Utility and upload it to the web app; students then authenticate to the web app with their LDAP credentials, and download a profile directly on their iPad over wireless, customised with their own account settings for email, wireless authentication, etc.

# Session Presentations (cont)

#### Fri 10:00am to 10:30am

#### Designing Up To Date Operating Environments Andrew Galka, University of Wollongong

This session will discuss strategies that the University of Wollongong employed to design an operating environment that immediately responds to new OS releases whether they be major updates or hardware specific builds.

#### Fri 11:00am to 11:45am

#### Integration of iOS/OSX Devices into an Enterprise Environment Adam Ware, Queensland University of Technology

This presentation is on Integration of IOS/OSX Devices into an enterprise environment using Profile Manager found in OSX Lion Server and Casper Management Suite.

Intended Audience is anyone support or deployment staff interested in managing larger number of iOS devices across a network.

#### Fri 11:45am to 12:30pm

#### Best Practices for Apple Clients William McGrath, University of Auckland

This presentation is on best practice techniques that the Faculty of Education at the University of Auckland is delivering to users this year to ensure quality of service and to improve security of our fleet. The presentation aims to inform those who are in the business of informing key decision makers of their options when deploying Apple technology in their departments, and making their Apple devices EQUAL citizens to their Microsoft counterparts. The presentation will allude to the changes that have come to us thanks to centralization of IT, for example, our Exchange mail services moved centrally this year, and we used Profile Manager to make the changes to user's profiles so that they would use the correct server after the migration. This may include a demonstration of how simple the changes were to implement.

#### Fri 1:30pm to 2:15pm Rsync & Carbon Copy Cloner Ashley Aitken, Curtin University

Rysnc is a very powerful and very flexible tool (and associated Rsnapshot) for backup and sync-ing on Macs (and other operating systems). Integrated with the fantastic Carbon Copy Cloner tool (CCC) (free for use in education institutions) it makes a powerful combination. This technology and tools are not a replacement for Time Machine but fills a complementary need. Setting up these technologies can also be sometimes confusing and complicated (e.g. setting up the keys to allow no-password ssh). This presentation is relevant to beginner and intermediate level administrators who haven't really explored the potential of the rsync technology.

# Workshops

#### Building an SOE/MOE Adam Reed, Australian National University

This hands on session will cover numerous aspect of building and maintaining a SOE/MOE including understanding OS X, software packaging, basic scripting and the command line. In addition you will see and use various tools that make managing a SOE easier. Finally you will gain some practical ideas that you can utilise in your environment. This session is a repeat from 2011.

## **Building a Standard Operating Environment on Linux**

#### Christian Unger, University of Queensland

This workshop is intended to introduce an audience of technical staff to the concepts associated with building a standardised operating environment for the server environment. It covers with full worked examples how to build:

- a repository server using;
- a kickstart environment; and
- a Puppetmaster to manage the fleet of servers.

The biggest single focus of the workshop is introducing the audience to Puppet which occupies approximately two thirds of the workshop and is platform agnostic. The course features Puppet examples for both Linux/Unix and OS X.

## Puppet for Developers – "Intermediate" SOE

#### Christian Unger, University of Queensland

This workshop is intended to bridge the gap between developers & system administrators and deals with intermediated SOE focused topic, with the goal of supporting the full development framework used by developers through the use of Puppet.

This workshop expands on my other workshop "Building a Standard Operating Environment on Linux," however it stands largely alone. Never the less the two workshops should ideally be attended in sequence, with much of the example code being extended from the first workshop. The concepts apply to Linux/Unix or OS X, however the primary technical focus remains on Puppet. [Full description on web]

#### **Understanding Profile Manager**

#### Arek Dreyer, Dreye Network Consulting

Profile Manager makes it easy to configure your user's Mac OS X Lion computers and iOS devices so they're set up to use your company or school resources and so they have the settings your organization requires. This workshops will cover what you need to know about Profile Manager including:

Components of Profile Manager Understanding configuration profiles

Managing a Mac lab

Understanding user and device groups Distributing configuration profiles Remotely locking or wiping a lost device

plus how to integrate Profile Manager with Active Diretcory and other third-party LDAP services.

# Workshops (cont)

## Rapid prototype development of useful apps using Filemaker + Filemaker GO 12 for deployment on iPhones, iPods, iPads and Macs.

### Alistair Campbell, Edith Cowan University

Attendees will leave with a number of personalised apps for their desired device(s). The audience would be any one interested in rapid development and/or prototype development of useful apps with no coding for deployment on iPhones, iPods, iPads and Macs. The same app can easily recognise the device and display appropriate windows.

Short introduction to the new features in Filemaker GO and Filemaker.

The conversion of existing spreadsheets, a number of samples will be given.

The development of a number of windows to display this information and how different types of data can be entered using standard database features.

Issues that need to be considered when developing app, fonts, layout, navigation etc Explore the new ability to capture signatures, audio and video along with pictures within the app with no coding required.

Deployment issues e.g. local and server based.

You are encouraged to bring your own iPad or iPhone with FileMaker GO 12 installed (a free download from the App Store).

#### SNMP Monitoring of Devices using Lithium Matthew Tilney, Australian National University

Audience: System administrators responsible for monitoring a number of networked servers or clients. Beginner to moderate knowledge of system administration.

Lithium is a product recently setup at ANU to provide remote monitoring and reporting information from our Print services. Currently monitored devices include Windows Servers, Windows XP 'kiosk' machines, Konica; HP and Lexmark printers, Custom network-serial port devices and Lion servers associated with out student printing system. However you could use it to monitor any SNMP (and to lesser extent IP) capable devices on your network where up-time or responsiveness impacts the running of the service.

This workshop provides a hands-on opportunity to setup and configure Lithium. It has been designed as a beginners introduction to the software and how to configure SNMP reporting for network devices like printers, desktop machines or services on servers. The software provides Email and iPhone Push Notifications for alerts, visual graphical representation of past trends and an internal website for clients with non-apple devices for monitoring. Through the workshop you will be have access to a small variety of devices to test your skills at finding information to monitor and then implementing monitoring on the devices.

# **Meals & Social Activities**

#### Meals

Morning and afternoon teas and lunch will be served in the Guthrie Foyer.

Please note that the DAB Café and courtyard on level 4 is privately owned and operated and not part of the catering for X World 2012. You are welcome to purchase food and beverages from the Café at your own cost.

Vegetarian options will be available during lunches and the dinner on Wednesday night. If you have any special meal requirements please let us know well in advance.

Breakfast on Thursday & Friday is at your own arrangements.

One of the important goals of X World 2012 is to foster collaboration amongst Universities and to help you build a network of colleagues from whom you can seek advice and guidance in relation to common issues with Mac OS X administration. Whilst each University is unique there are a number of common issues that we all face while administering Mac OS X and many people have found that having a good support network is a vital part of implementing solutions.

We have created a number of social breaks during X World during which we encourage you to meet staff from other Universities and exchange ideas and solutions. A full list of X World attendees will be available on the AUC web site after the conference.

#### X World 2012 Conference Dinner

On Wednesday night make the short walk to Darling Harbour and the Star Room at the IMAX Theatre. The Star Room offers sweeping views of the city of Sydney and Darling Harbour. Please arrive at the Star Room by 7.00pm.

Star Room, IMAX Theatre, Darling Harbour (see map on page 15)

To celebrate our 10 years we have invited some guest speakers at the dinner.

#### **Free Night**

Thursday night is a free night for you and your new colleagues to explore Sydney. Why not visit the newly opened Apple Retail Store at Broadway, it's a short walk from UTS. There are also hundreds of restaurants and places to go within a few minutes walk of UTS including Darling Harbour, China Town, George & Pitt Streets and more....

<www.apple.com/au/retail/broadway/>

# **General Information**

### **UTS Security**

UTS Security Services operates a concierge desk on level 4 of Building 1, near the main entrance. The contact number is 02 9514 1192 or Free Call 1800 249 559. For emergency situations please call 000.

### **Transport Contacts**

CityRail	13 15 00
Metro LightRail	02 8584 5288
Sydney Buses	13 15 00
Taxis Combined	02 8332 8888
Legion Cabs	13 14 51
RSL Taxis	02 9581 1111

#### **Internet Access**

Internet access will be via WiFi in the Guthrie Foyer and lunch areas. We will advise the Network ID and logon/ password during the conference. A number of free access computers are located in the Faculty Computing Unit on Level 3.

#### **Banking Services**

A number of ATM's are located within UTS, mostly in the Union area of Building 1. Local bank branches are located nearby along George Street.

ATM's are also located in the Darling Harbour shopping areas.

#### **Airline Contacts**

Qantas	13 13 13
VirginBlue	13 67 89
Regional Express	13 17 13
JetStar	13 15 38

#### **Accommodation Contacts**

Citigate Central	02 9281 6888
Mercure Broadway	02 9217 6666
Marque Hotel	02 9212 2544
Hotel UniLodge	02 9338 5000

# **UTS Campus Guide**

Accommodation

UTS

City Ra

A

B Bus Stop - Main

Parking Station Child Care Cer

> Mary A House

> > ULTIMO

UTS 🔰

CHIPPENDALE

Clevelo

SQUARE

Central

Station

125 250m



X World 2012 will be held in the Peter Johnson Building (Building 6).

Entry is via Harris Street or the walkway over Harris Street from the main UTS campus.

Public transport is available via Sydney Buses and CityRail. Parking is available in nearby parking stations for a fee.



**BROADWAY SITE** 

## **Peter Johnson Building 6**

Guthrie Theatre & Foyer	Level 3
Labs	Level 3





X World 2012

Page 15



Apple University Consortium www.auc.edu.au