



**University of South Australia**  
Information Strategy and Technology Services

## **Getting connected to the UniSA Wireless Network using 802.1x - Mac OSX 10.6.x**

Version: 1.0

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## Introduction

This guide describes how to set up Apple computers to connect the University's wireless network using 802.1x..

802.1x is an access-control method that:


1. restricts access to the network to authorised users only (staff and student);
2. provides encrypted access between the client PC and the wireless access point using WPA or WPA2 encryption.

This service provides you with access to the University's shared computing services and Internet-based facilities as if you were using a networked computer on campus.

Please note that this service is provided for authorized university-related computing only, as outlined in the Policy *Use of University Information Technology Services*, which can be found on the University's web site at:

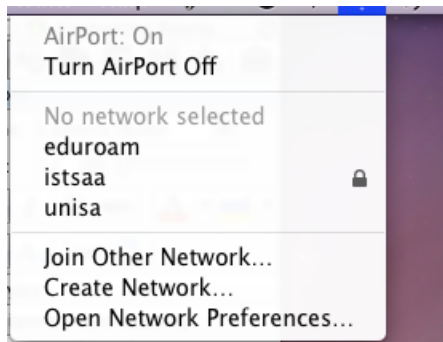
<http://www.unisa.edu.au/policies/policies/corporate/C22.asp>

IMPORTANT - READ THIS BEFORE CONTINUING!

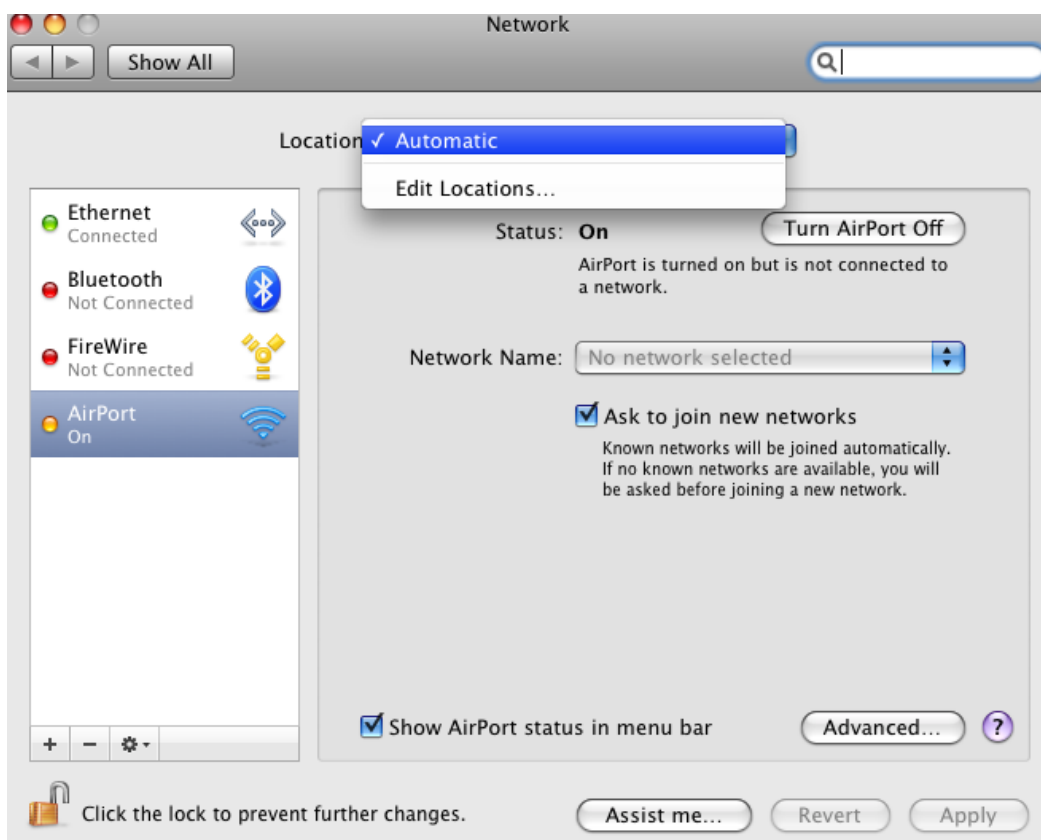
|                                   |   |
|-----------------------------------|---|
| <b>Prerequisites/ Assumptions</b> | In order to proceed with the set up detailed in this guide you will need a valid University of South Australia NT Domain username and password.   |
| <b>Hardware requirements</b>      | <p>You will need to have an Apple Macintosh computer with either in-built wireless capability or an 802.11b or 802.11g wireless card.</p> <p>This Quick Start Guide assumes that you already have AirPort wireless enabled and configured for DHCP. You should have an AirPort Status menu bar icon in the upper right corner of your screen, as pictured below.</p>  |
| <b>Software requirements</b>      | <p>802.1x uses WPA or WPA2 for security.</p> <p>WPA – Mac OS 10.6.x.</p>  |
| <b>Note</b>                       | 802.1x connectivity does not require the use of VPN client software. If you have previously connected to the wireless network using a VPN client on your notebook, this is no longer necessary if using 802.1x.   |

## Configuring your wireless connection

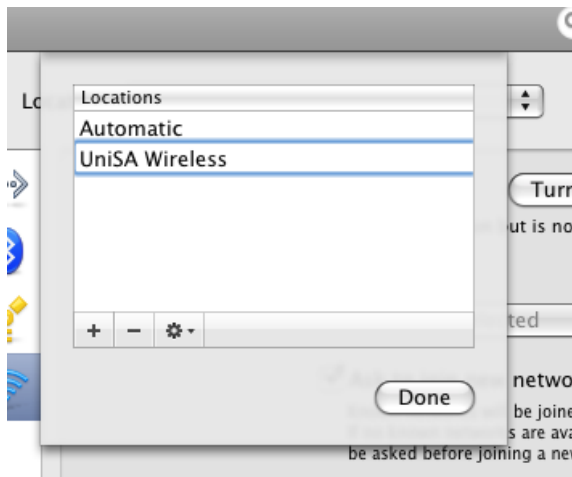
1. Turn on your Airport Wireless Network card if is not already



2. Select "Open Network Preferences..."



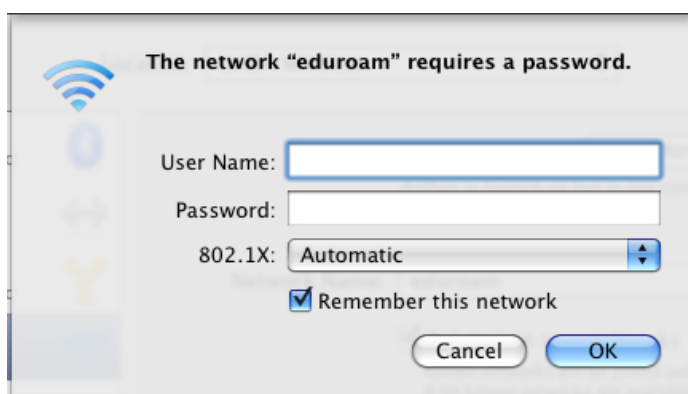
3. From the "Location" field, select to Edit Locations...



4. Click the "+" sign to add a network location.
5. Give it a name like "UniSA Wireless" and then click "Done".
6. You should see that your location is now set to the name you gave it.
7. Now, click on the "Network Name" field and select **eduroam** from the list.



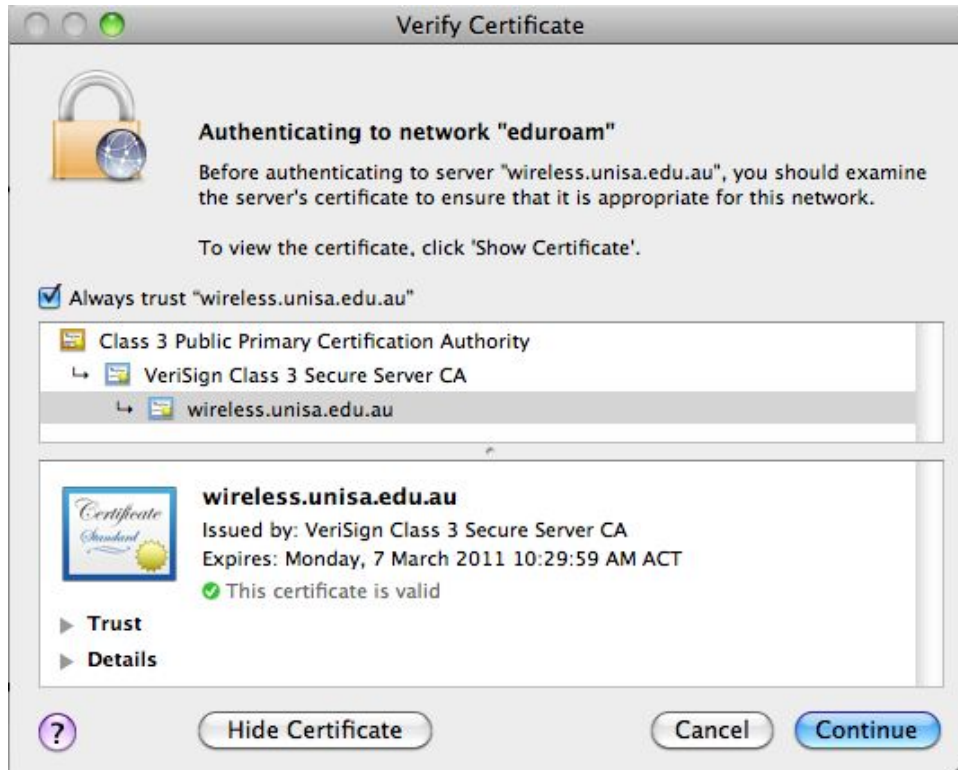
8. A window will appear asking you for credentials.



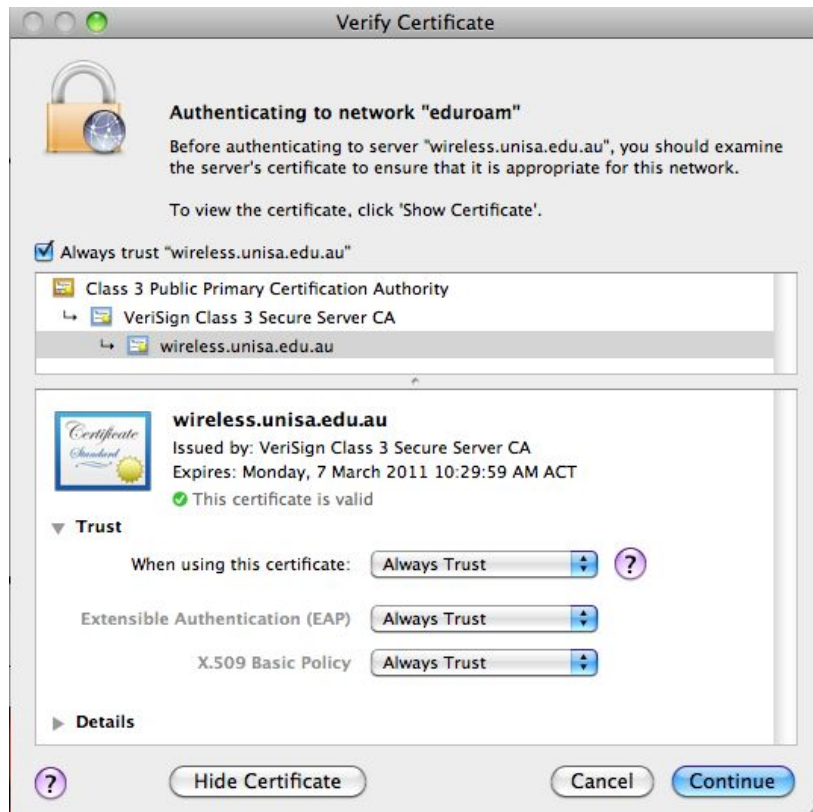
9. Enter your UniSA username as username@unisa.edu.au and password into the appropriate field and click "OK". This should not be confused with your UniSA email address.



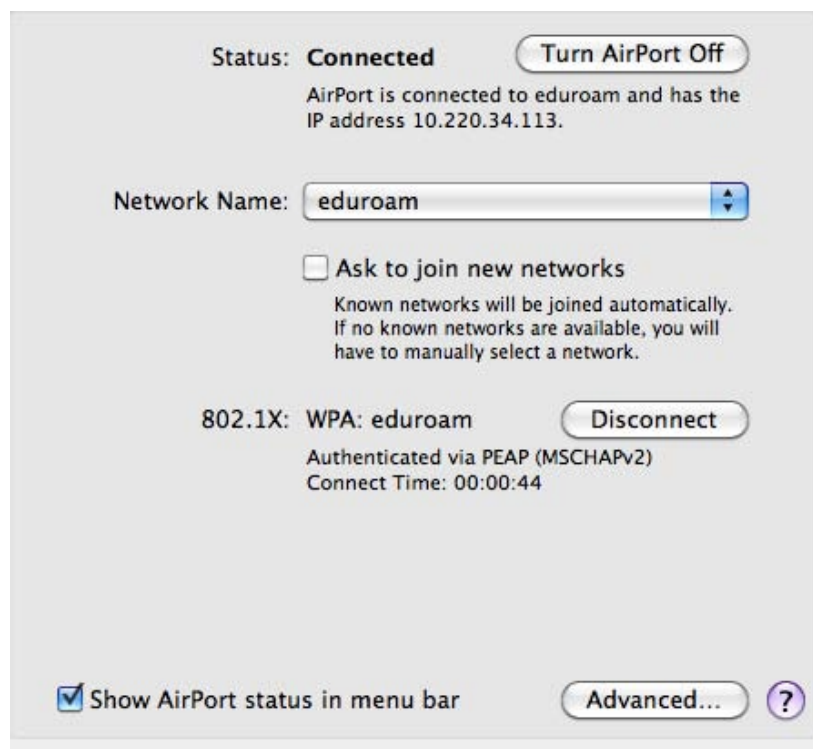
11. Click on the "Show Certificate" button.



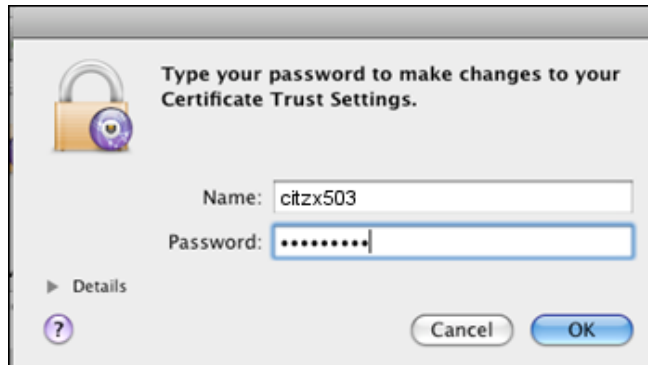
12. Expand the "Trust" tree.



13. Set the Trust type to "Always Trust" for all three fields. If you change the top field you may see it replicate that selection to the others.
14. Click "Continue".



15. You should now see that the network is available and you are now **Authenticated**. Click “Apply”.
16. Again you will be asked to verify the Certificate. Expand the “Trust” tree and select “Always Trust” for all fields.



17. You will then need to authorise the changes by supplying the local Administrator Account credentials. Fill in the fields and click “OK”.
  - Note: In most cases the account you are logged on with has the admin credentials needed and you just need to supply them again. If you do not know the Administrators Credentials then you may need to have them reset using the Mac OSX installation DVD. See your IT Support for this procedure.
18. You should now be connected to the Wireless Network.

## Configuring LAN proxy settings

At this point you have a choice on how to approach access to the Internet for your Mac. If you are likely to use Applications that are not very Proxy aware like Microsoft Live Messenger, Yahoo Messenger and Skype then you are best to use a product called Authoxy to ensure that you can connect through our Authenticating Proxy. For information on this you need to see the UniSA Web Pages for the IT Help Desk. In particular the web page found here.

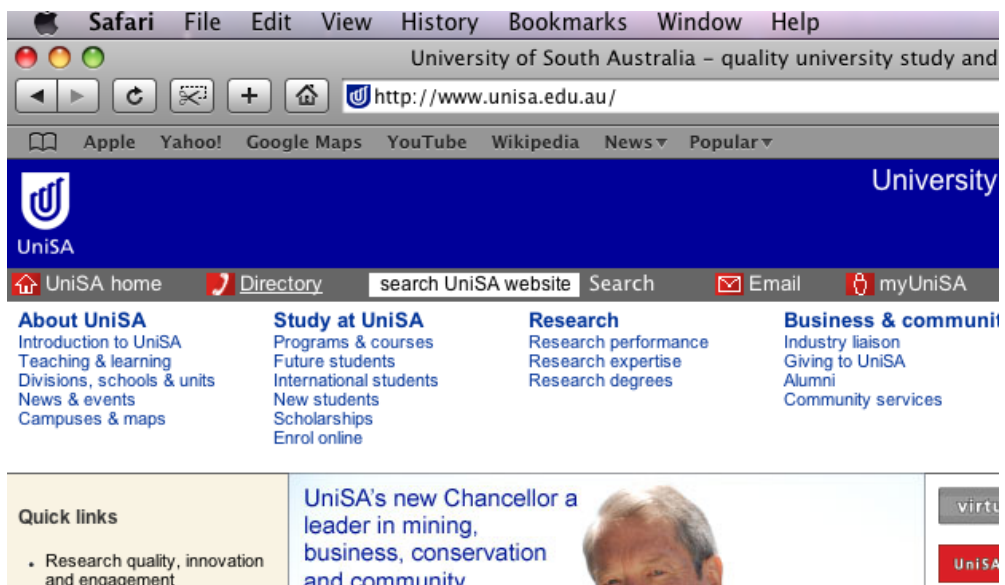
[http://www.unisa.edu.au/ists/ITHelpDesk/FAQS/Internet-Connection/FAQ/internet\\_faq11.asp](http://www.unisa.edu.au/ists/ITHelpDesk/FAQS/Internet-Connection/FAQ/internet_faq11.asp)

There is also a more detailed method at the end of this [document](#).

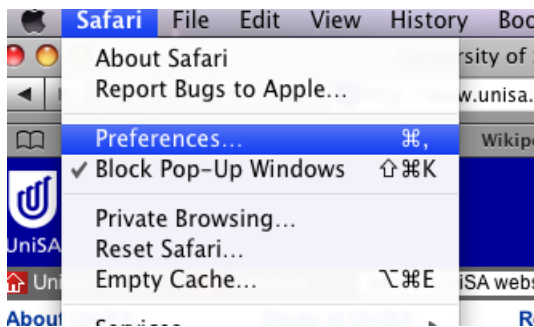
If you are simply wanting to use the Internet for Web Browsing and File download then you can simply configure your favourite Browser to use the Proxy itself.

We will start with Safari as this is the most likely choice. Firefox and Camino are similar in process, you just need to find out where they obtain their Proxy information from with in the Preferences for the individual browser.

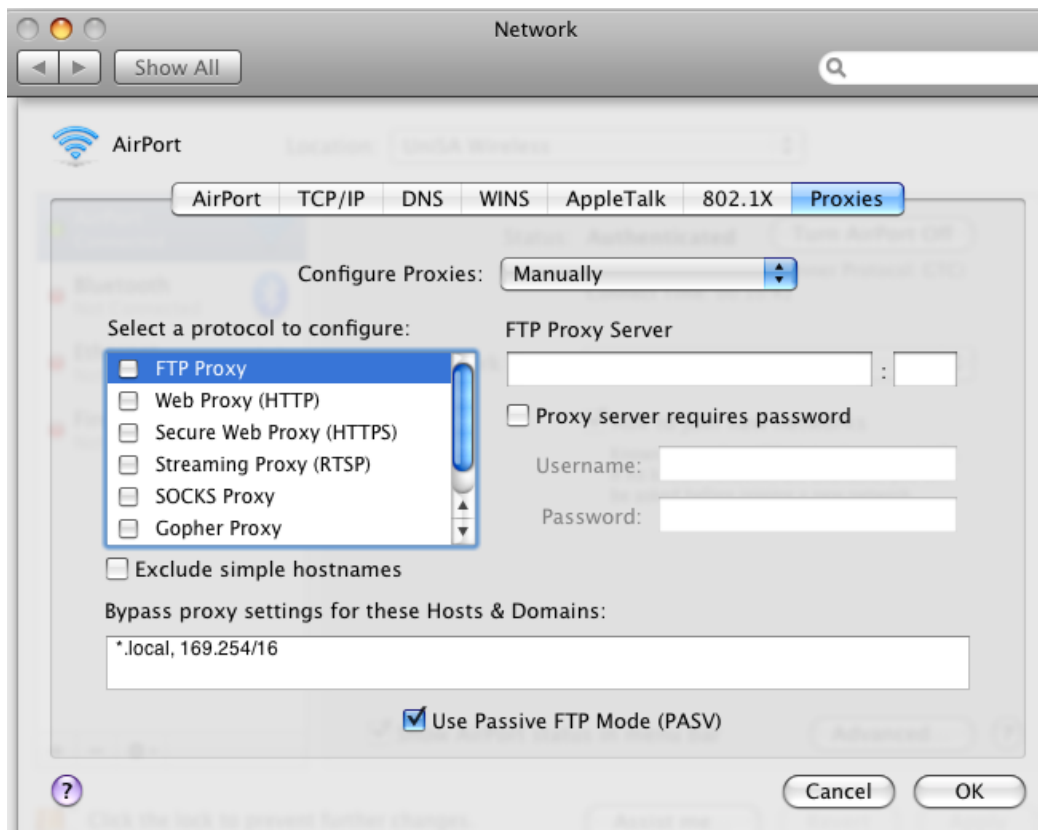
1. Open Safari after you have successfully connected to the UniSA Wireless Network.



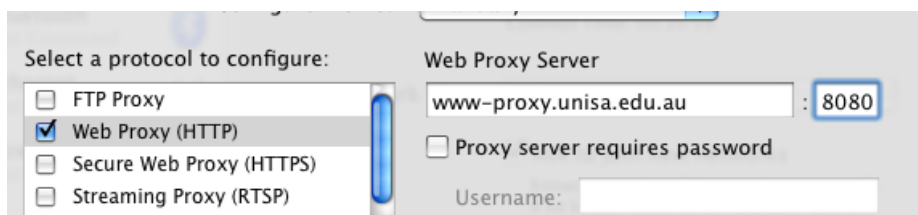
2. From the Safari menu item select "Preferences".

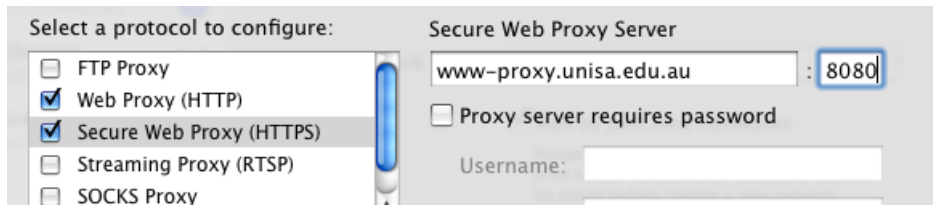


- Then click on the "Change Settings" button next to the Proxies: entry.

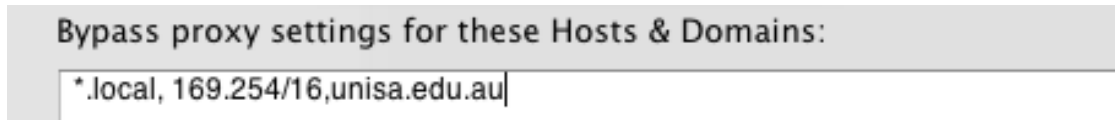


- Insert the proxy string **www-proxy.unisa.edu.au** and port **8080** into the "Web Proxy (HTTP)" and "Secure Web Proxy (HTTPS)" items.

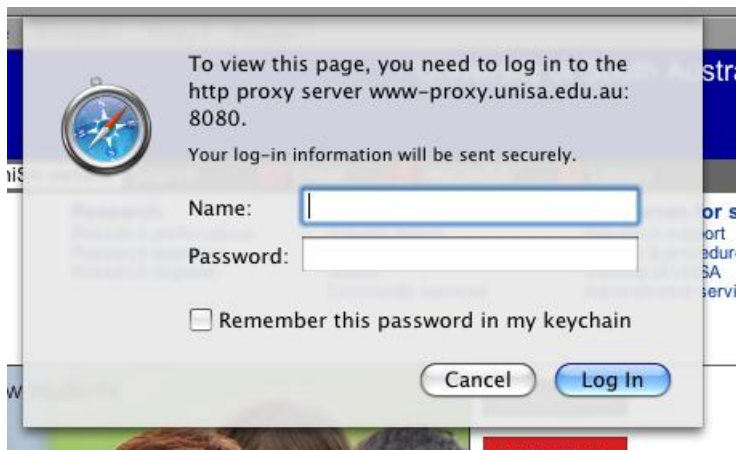




5. At the bottom under "Bypass proxy settings for these Hosts & Domains:" insert the string **unisa.edu.au**



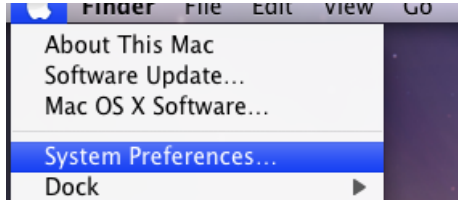
6. Close the Proxy Settings window and the System Preferences window if it appears.
7. Restart your Web Browser.
8. Once you have restarted your browser go to a web site external to the University. Something like [www.google.com.au](http://www.google.com.au) and you will be asked for your UniSA Network credentials.



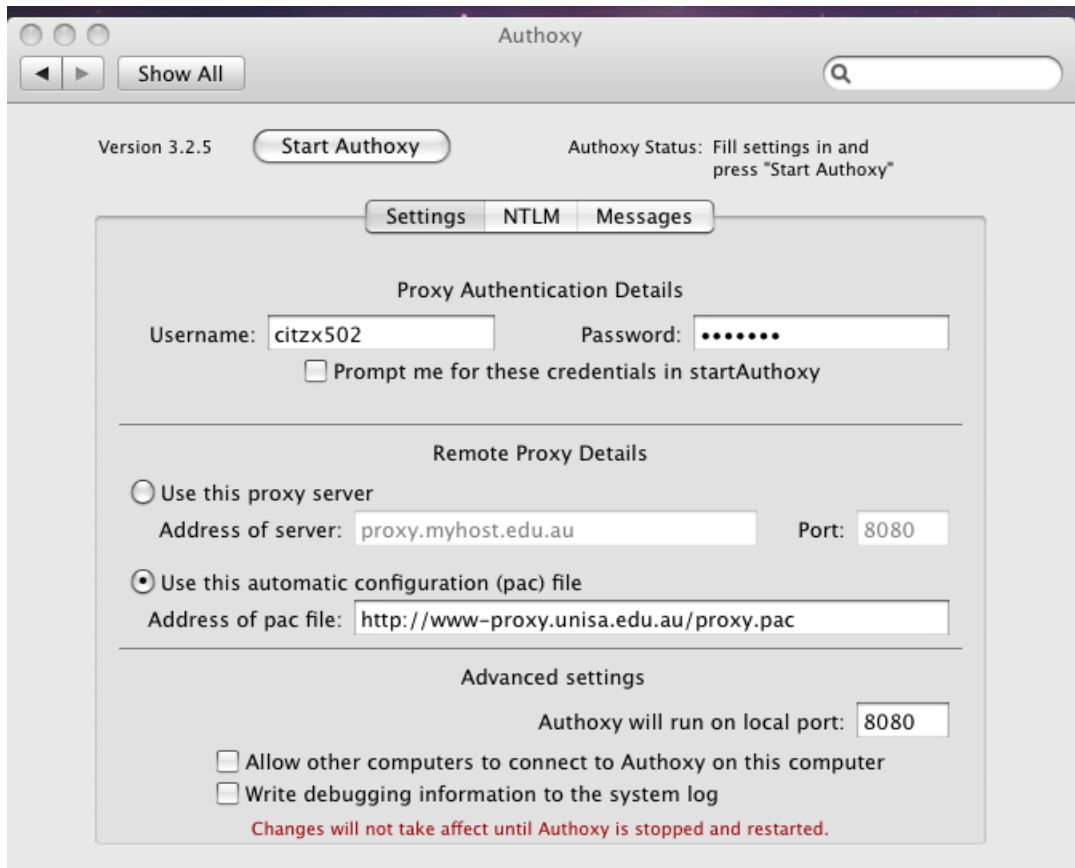
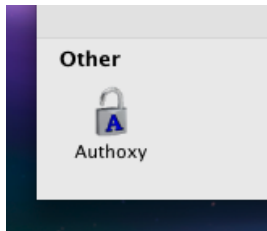
9. Enter those credentials and you will be off browsing the Internet.
10. Remember that you will be asked for these credentials every time you start your browser again and go to an external site. To stop this happening frequently, keep your browser open after you first connect to the Wireless Network. You will not get prompted for successive external connections to the External Sites.

## Configuring Authoxy for use with UniSA Authenticating Proxy

11. Install Authoxy from the image (.dmg) you downloaded from the Web Site.
12. Open your System Preferences.



13. Select the Authoxy Preferences under "Other".

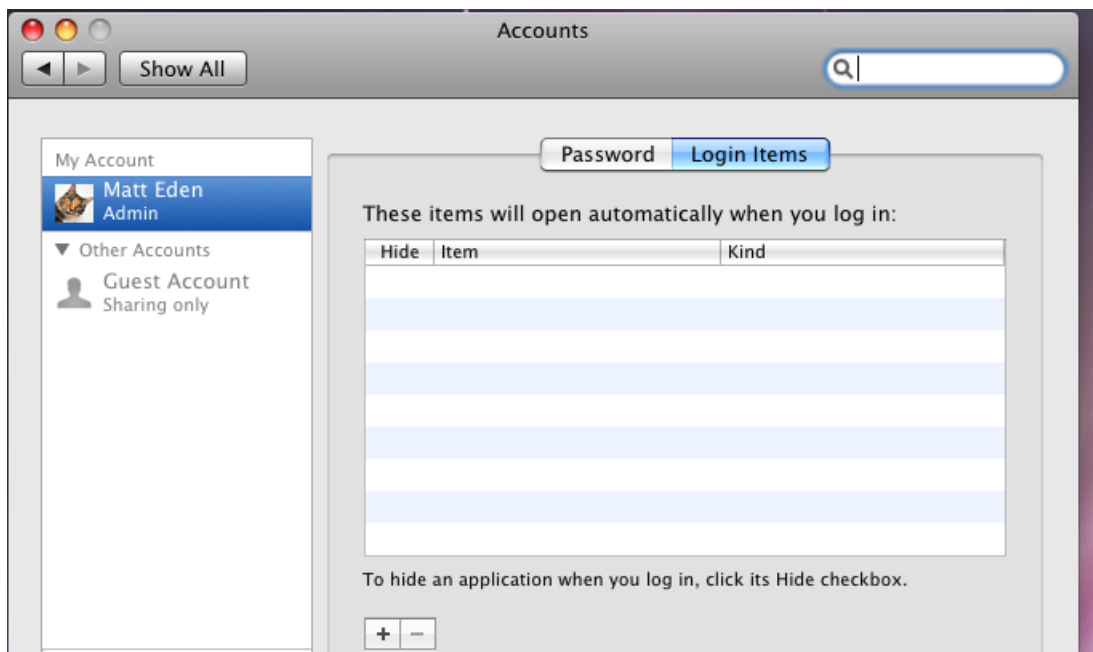


14. Enter your UniSA Username and Password into the appropriate fields and fill in the URL for the Auto Config file <http://www-proxy.unisa.edu.au/proxy.pac>
15. Set the port to be 8080 if it isn't already set to it.
16. Close your Authoxy preferences.

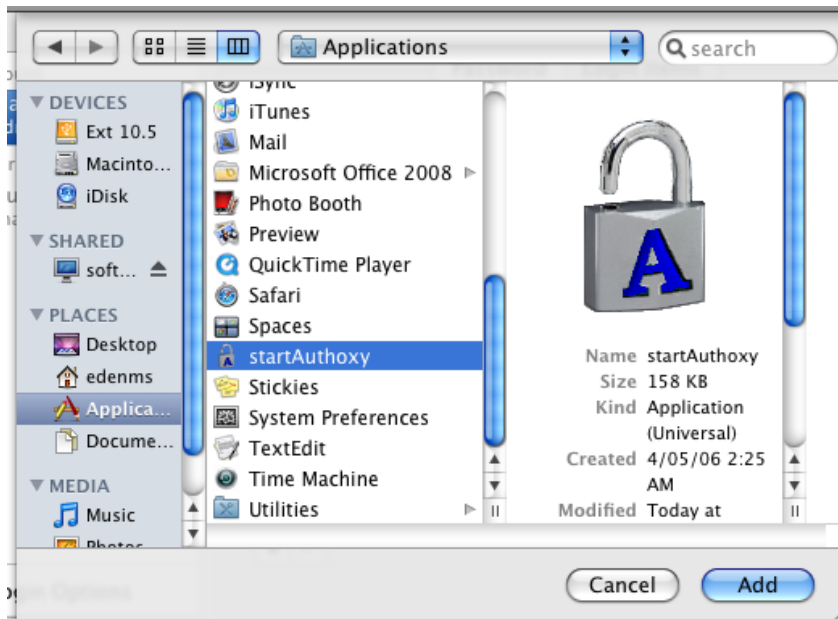
17. Open up your Accounts preferences.



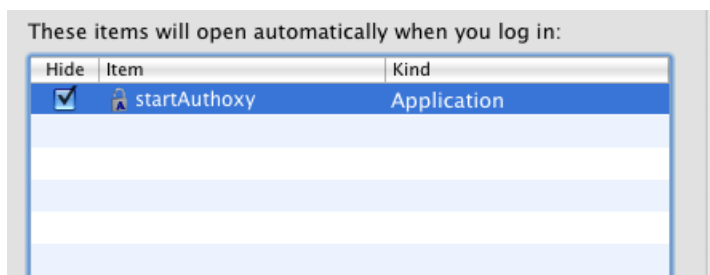
18. Select your account and click on the "Login Items" button.



19. Click the “+” to add a Start Up application.



20. Browse through your file system to find the “startAuthoxy” item.  
 21. Click “Add” to make it start when you start your machine.



22. Check the box next to the item and close the preferences.  
 23. This will mean that Authoxy starts every time you logon to your Mac.  
 24. Now, you can configure your applications to use Authoxy as the proxy server. For each application find the proxy settings and set the proxy server to be “localhost” and the port to be “8080”.  
 25. Remember, we are only setting this for the UniSA Wireless Location. If your applications do not support multiple locations then you may need to remove these settings when connecting to other Wireless Networks. This is because they are not likely to use a proxy server.  
 26. If you do not want to change all your applications everytime you move networks and they don't support multiple locations then you can reconfigure Authoxy easily to not use a proxy server and remove the username and password content.  
 27. **Note:** It may be in your best interest to do some reading up on Mac Network Locations and how they behave to get an understanding of them.