

## Leopard Server: Activities

### Activity 1: Power on Client/Server

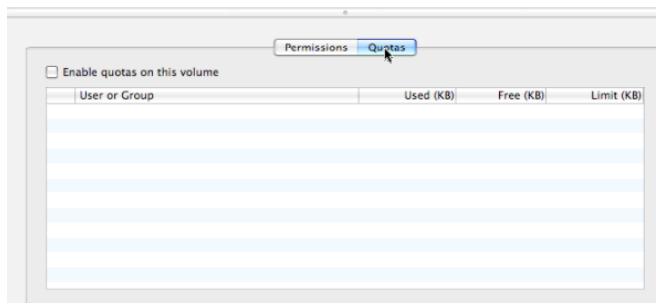
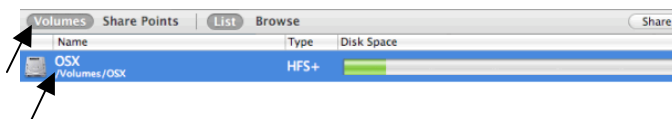
- 1) Make sure the cross over Ethernet cable is plugged into the client and the server.
- 2) Power on and log into both the client and the server.
  - Server:
    - i. Username: **admin**
    - ii. Password: **apple**
  - Client:
    - i. Username: **admin**
    - ii. Password: \_\_\_\_\_

### Activity 2: Server Admin

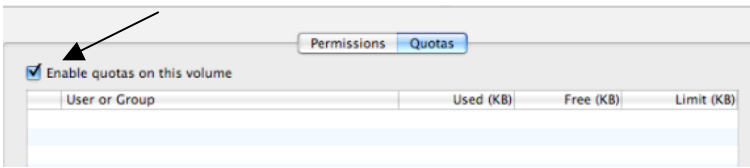
- 1) Launch **Server Admin** on the server.
- 2) Click on the down arrow beside **pie-osx.rps.loc** on the left side of **Server Admin**.
- 3) Notice the services that show up in the menu; AFP, DHCP, DNS, and Open Directory.
- 4) Click on **pie-osx.rps.loc** on the left side of **Server Admin**.
- 5) Select the **Settings** button at the top of the **Server Admin** window.
- 6) Select the **Services** tab.
- 7) Notice AFP, DHCP, DNS, and Open Directory are already selected as services.

### Activity 3: File Sharing Settings

- 1) In **Server Admin**, select **pie-osx.rps.loc**, select the **File Sharing** button.
- 2) Click on the button named **Volumes** and make sure **OSX** is highlighted.



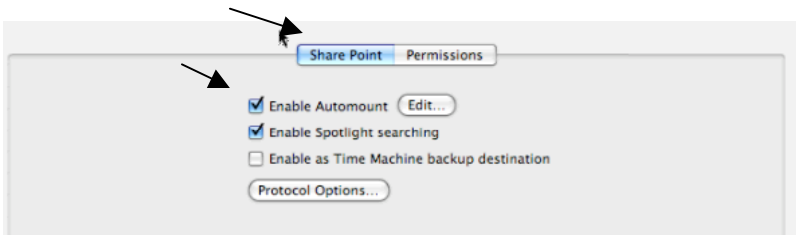
- 3) Click on the **Quotas** button in the middle of the window, select **Enable quotas on this volume**, click **Save**.



- 4) With the OSX volume still selected, click on the **Browse** button at the top of the window.



- 5) Click on the **Users** folder point.
- 6) Select the **Share Point** tab, check the box to **Enable Automount**.



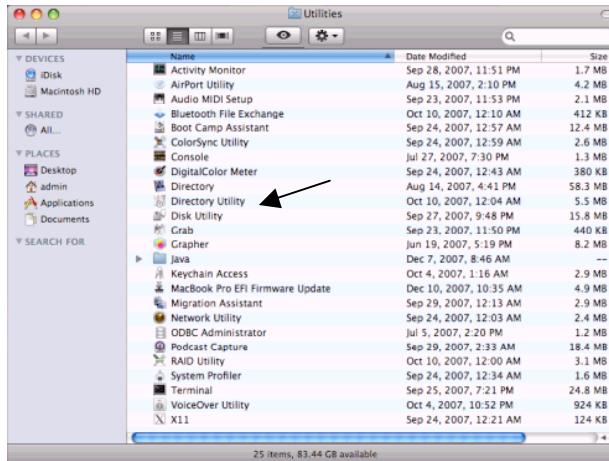
- 7) The "**Configure the automount to the selected share point**" window will open. Select **User home folders** and click **Ok**.
- 8) You will be asked to authenticate as the Directory Administrator. Enter the following:
  - a. Username: **diradmin**
  - b. Password: **apple1**



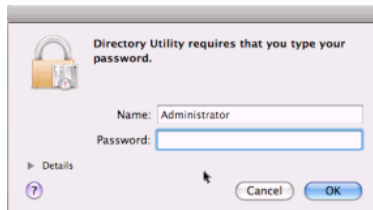
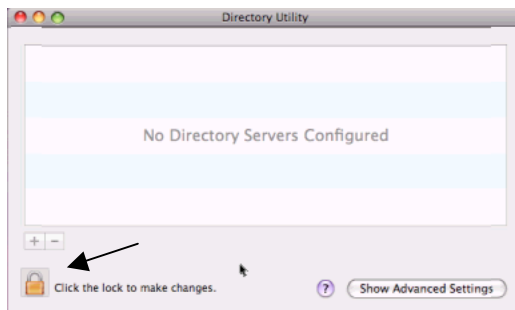
- 9) Uncheck **Enable Spotlight Searching**.
- 10) Click **Save** in the File Sharing window.

#### Activity 4: Bind Client to Server

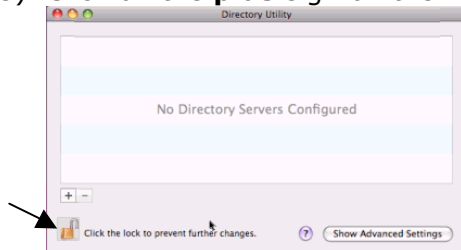
- 1) Launch **Directory Utility** on the Client computer. The application is located within **Macintosh HD/Applications/Utilities**.



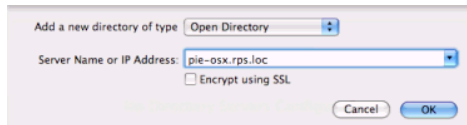
- 2) If necessary, click the **lock** to enter an admin username and password to make changes to the Directory Utility program, otherwise skip to step four.
  - a. Username: **admin**
  - b. Password: \_\_\_\_\_



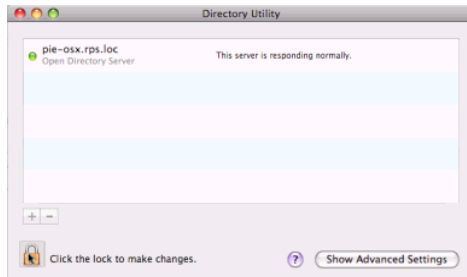
- 3) Click on the **plus** sign on the window.



- 4) Enter the server name the computer will be bound to, then click **Ok**.
  - a. Server Name: **pie-osx.rps.loc**

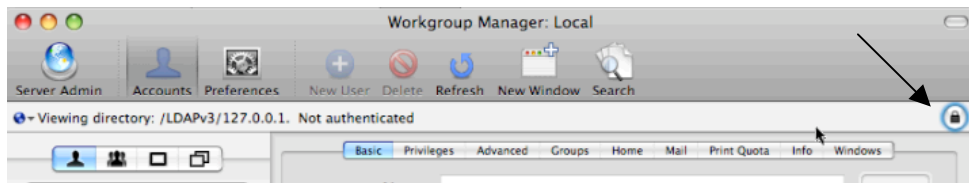


- 5) **Re-lock** the lock and **quit** out of Directory Utility.

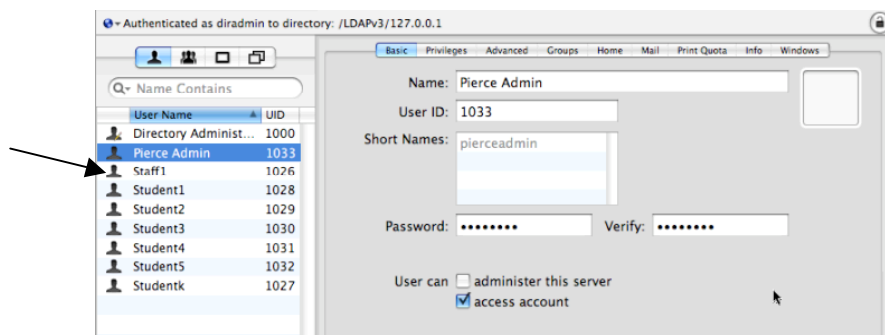


### Activity 5: Workgroup Manager User/Group Administration

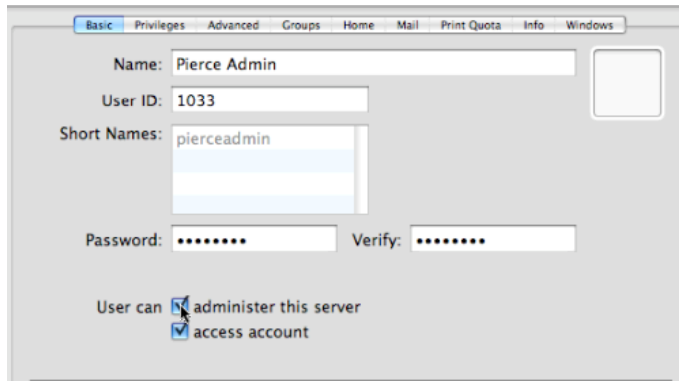
- 1) Launch **Workgroup Manager** from the dock on the server. When asked to login type in the following:
  - a. Address: **pie-osx.rps.loc**
  - b. User Name: **admin**
  - c. Password: **apple**
- 2) Once you are logged in, click on the **lock** in the upper right hand corner of the window. This will authenticate you to the directory administrator account.



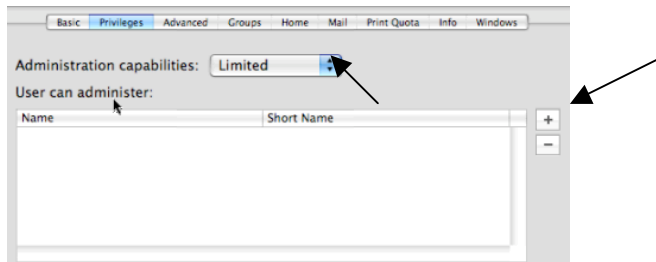
- 3) When asked to **Authenticate to directory /LDAPv3/127.0.0.1** type in the following and click **Authenticate**.
  - a. Username: **diradmin**
  - b. Password: **apple1**
- 4) Highlight the user named **Pierce Admin** on the left side of the window.



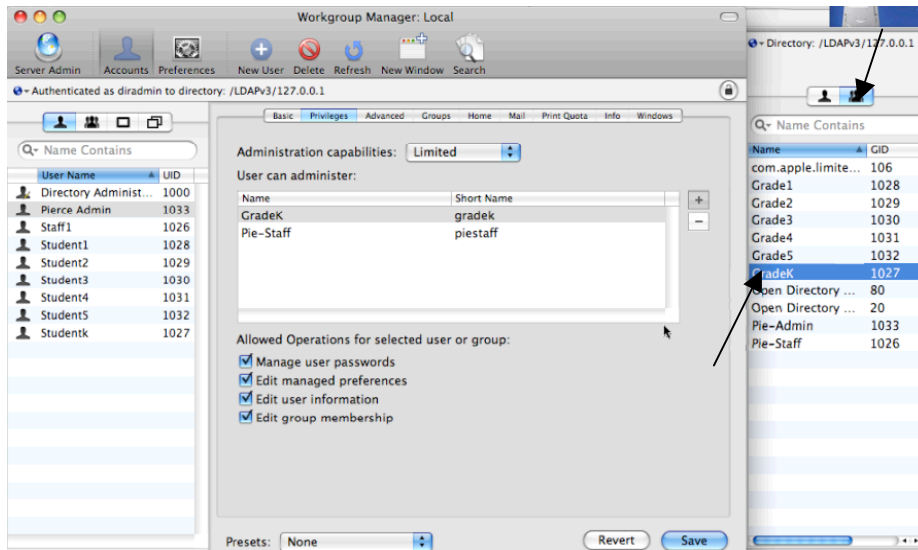
- 5) On the tab labeled **Basic**, check the box to **Administer this Server**.



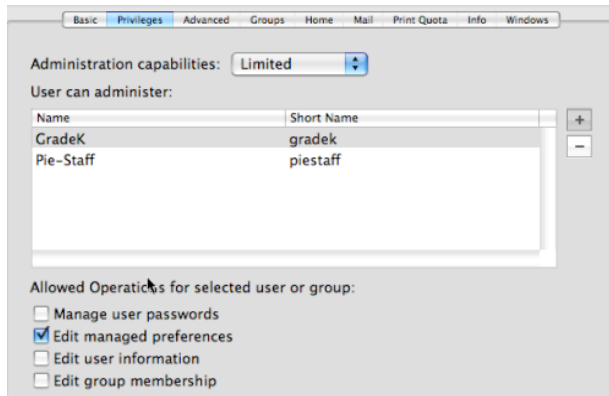
- 6) Click on the **Privileges** tab.
- 7) At the top of the window, change the pull down menu for **Administration Capabilities** to **Limited**. Then click on the **Plus** sign off to the right.



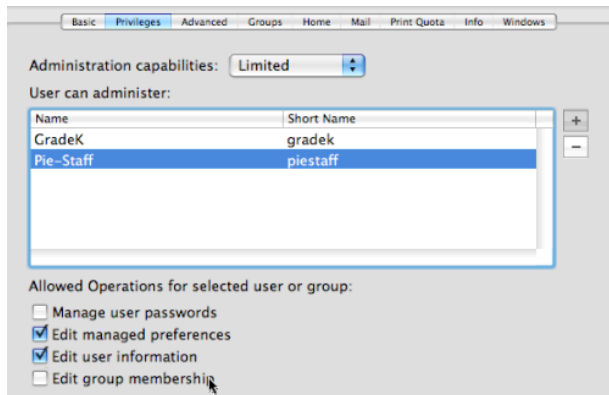
- 8) This will bring up a Users and Groups window. Click on the **Groups** button, then drag over the **GradeK** and **Pie-Staff** group into the **User can Administer** window.



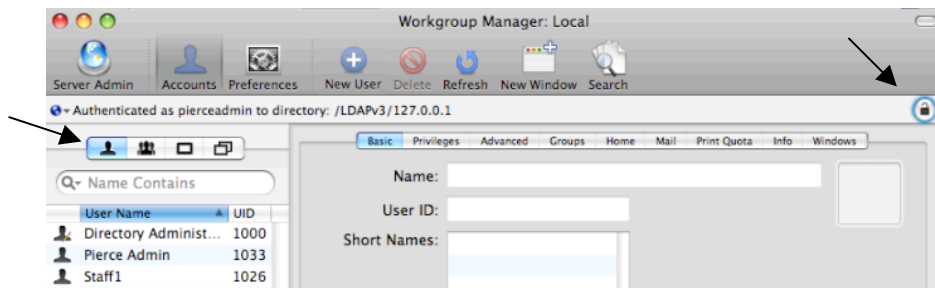
- 9) Under the **User can Administer** section highlight the **GradeK** group. Change the **Allowed Operations for the selected user or group** to only allow them to **edit managed preferences**.



- 10) Under the **User can Administer** section highlight the **Pie-Staff** group. Change the **Allowed Operations for the selected user or group** to only allow them to **Edit managed preferences** and **Edit user information**.

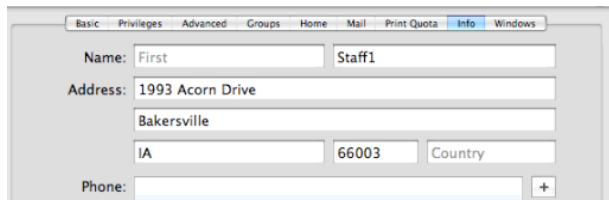


- 11) Click the **Save** button and **quit** out of Workgroup Manager.  
 12) Launch **Workgroup Manager** again from the dock.  
 13) When asked to login, type in the following information and click Connect.  
 Address: **pie-osx.rps.loc**  
 Username: **pierceadmin**  
 Password: **pierceadmin**  
 14) Notice that we don't have to authenticate as the directory administrator.



- 15) Select the user named **Staff1**. Go to the **Info** tab for that user.  
 16) Type in the following information:  
 a. Address: **1993 Acorn Drive**  
 b. City: **Bakersville**  
 c. State: **IA**

d. Zip: **66003**

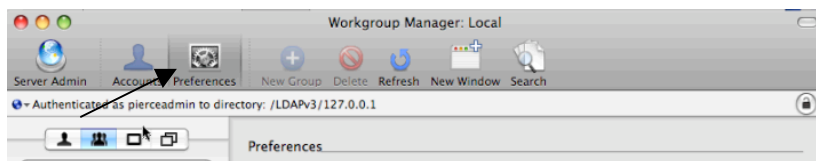


The screenshot shows the 'Info' tab in Workgroup Manager. The 'Name' field is split into 'First' (Staff1) and 'Last' (Staff1). The 'Address' field is split into three lines: '1993 Acorn Drive', 'Bakersville', and 'IA 66003'. The 'Country' field is empty. The 'Phone' field is empty with a '+' button to its right.

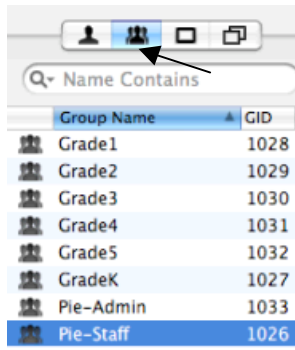
- 17) Click **Save**.
- 18) Select the user named **StudentK**. Stay on the **Info** tab.
- 19) Try adding an address in for this user and click **Save**. Notice that WGM does not save the information that you typed in.
- 20) Quit Workgroup Manager.
- 21) Launch **Workgroup Manager**.
- 22) Login as the following:
  - a. Address: **pie-osx.rps.loc**
  - b. Username: **admin**
  - c. Password: **apple**
- 23) Click on the **lock** in the upper right hand corner to authenticate as the directory administrator.
  - a. Username: **diradmin**
  - b. Password: **apple1**
- 24) Under **Accounts** and **Users**, select **Pierce Admin, Staff1, Student1, Student2, Student3, Student4, Student5, and StudentK**.
- 25) Click on the **Home** tab.
- 26) Select **afp://pie-osx.rps.loc/Users** and under **Disk Quota** type in **350MB**.
- 27) Click **Save**.
- 28) Quit out of Workgroup Manager.

### Activity 6: Syncing Mobile Accounts

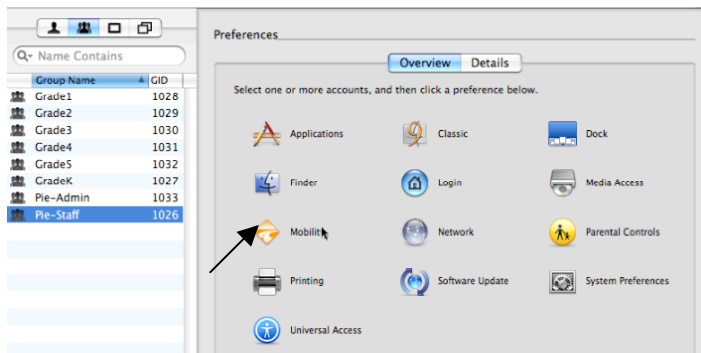
- 1) Launch **Workgroup Manager**.
- 2) Login as the following:
  - a. Address: **pie-osx.rps.loc**
  - b. Username: **admin**
  - c. Password: **apple**
- 3) Click on the **lock** in the upper right hand corner to authenticate as the directory administrator.
  - a. Username: **diradmin**
  - b. Password: **apple1**
- 4) Make sure you are in the **Preferences** section of the program.



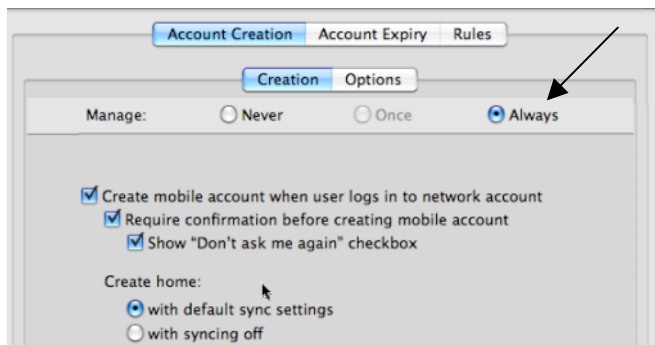
- 5) Click on the **Groups** button, then select the **Pie-Staff** group.



6) On the right select the Preference named **Mobility**.

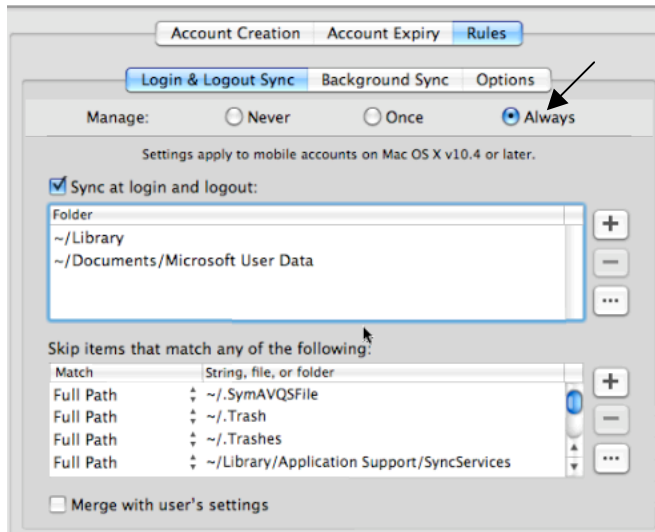


7) Under the **Account Creation/Creation** tabs, select **Always**, check **Create mobile account when user logs in to network account**, and leave the other default settings.

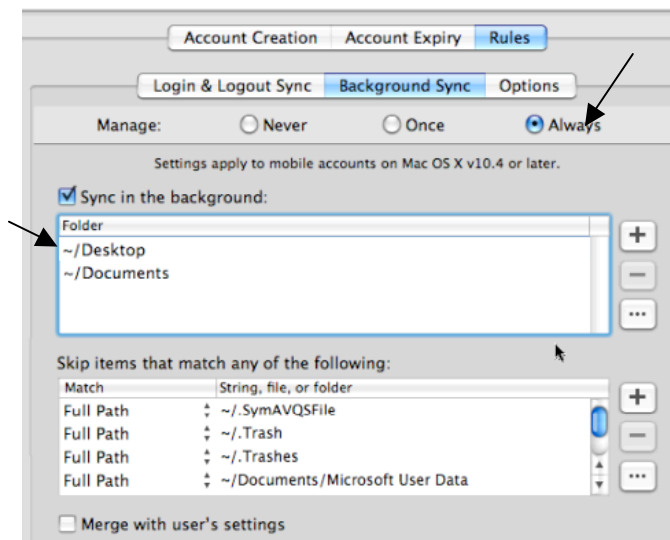


8) Under the **Rules/Login & Logout Sync** tabs, select **Always** and leave the default settings.

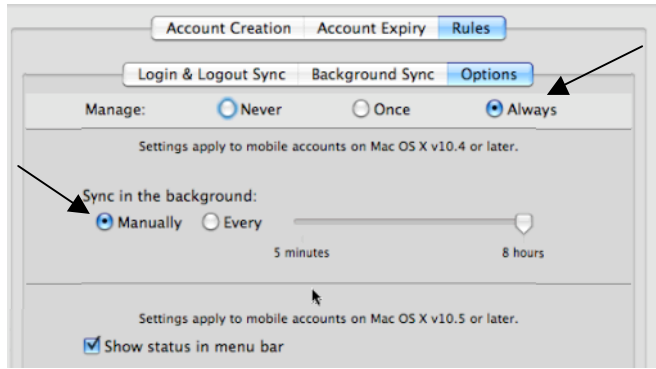




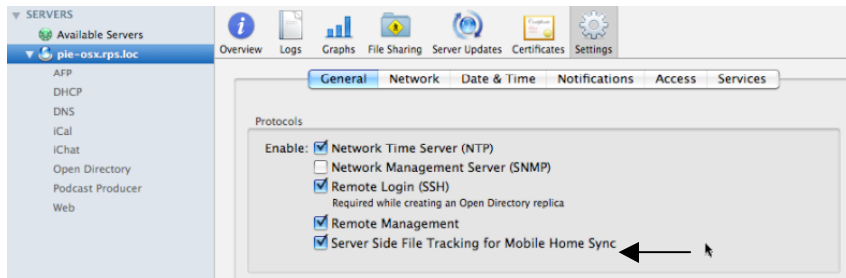
- 9) Under the **Rules/Background Sync** tabs, select **Always**. Remove the **~** from the top window and replace it with **Desktop** and **Documents**. This way only the user's desktop and documents folders will sync to the server. Typically a user's Pictures, Movies, and Music folder are too large for the server.



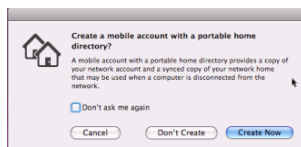
- 10) Under the **Rules/Options** tabs, select **Always**. Slide the bar to **8 hours** and set the **Sync in the Background** to **Manually**. Make **sure Show status in menu bar** is selected.



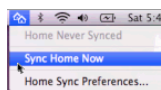
- 11) Click the **Apply Now** button at the bottom of the WGM window.
- 12) Launch **Server Admin** on the server.
- 13) Select **pie-osx.rps.loc** on the left.
- 14) Select the **Settings** button at the top of the window.
- 15) Under the **General** tab, make sure you select **Server Side File Tracking for Mobile Home Sync** and click **Save**.



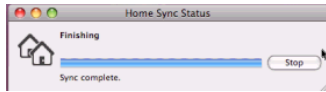
- 16) On the client machine, log out of the Administrator account.
- 17) At the login window select **Other**, then login as the staff member.
  - a. Username: **staff1**
  - b. Password: **staff1**
- 18) When asked to **Create a mobile account with a portable home directory**, select **Create Now**.



- 19) The files will start syncing down to the computer. Depending on the file sizes on the server and network speeds, this can go fast or slow.
- 20) Once you are logged in, create a few folders on the desktop.
- 21) From the **Sync** menu select **Sync Home Now**.



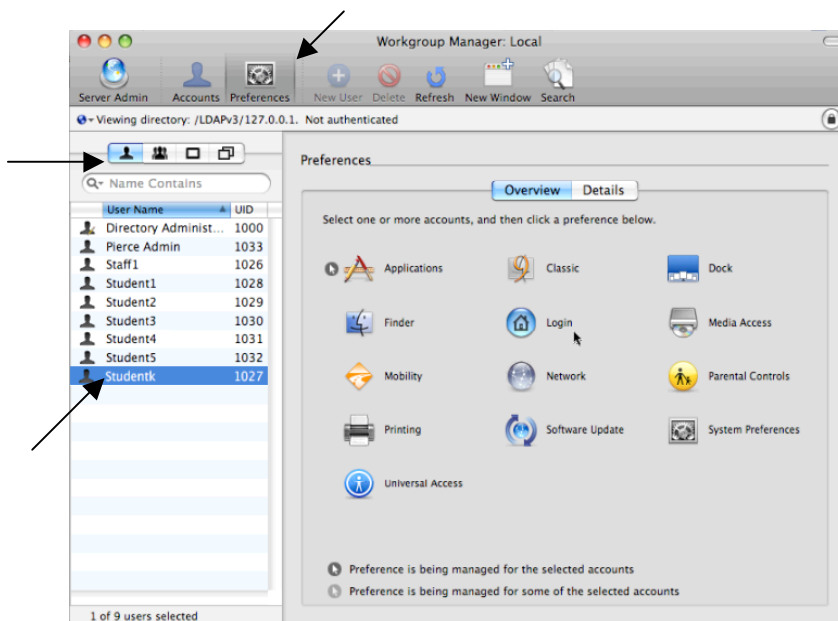
- 22) The files will start syncing to the server. If there is a conflict the user would be prompted to choose the files to keep.



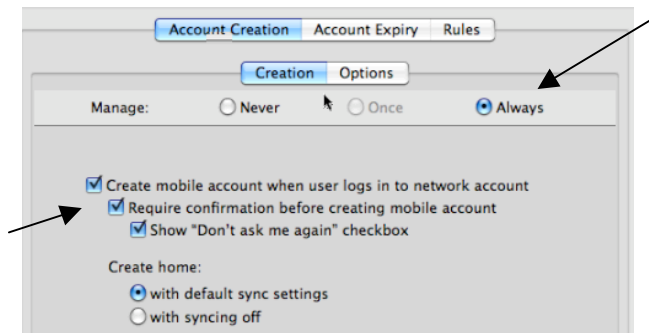
\*Note about Syncing Mobile Homes with Disk Quotas: Only those files that are synced with the server count against the user's Disk Quota. Also, if the user saves to another share point on the server, that will also count against the user's total Disk Quota. User's Home + User's Shared = Disk Quota on Server

### Activity 7: Non-Syncing Mobile Accounts

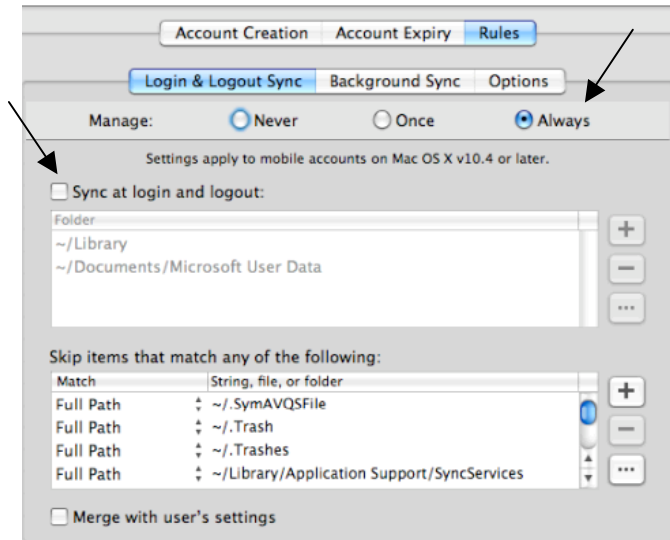
- 1) In **Workgroup Manager**, select the **Preferences** section and select the user named **StudentK** from the **Users** list.



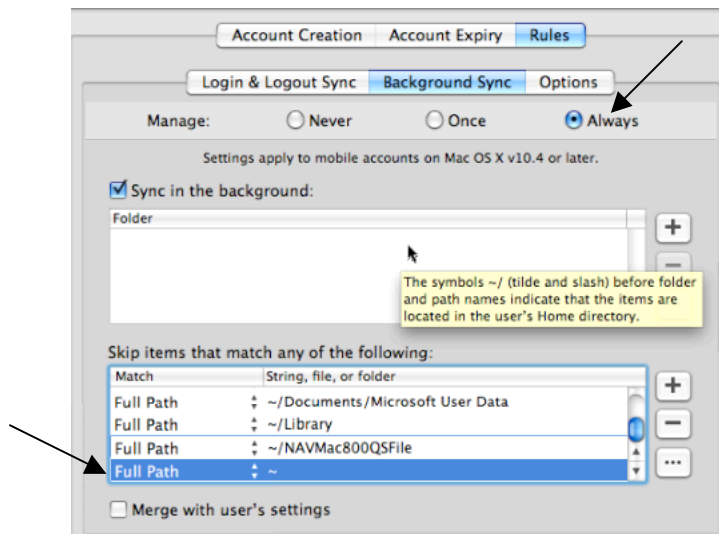
- 2) Select the **Mobility** Preference.
- 3) Under the **Account Creation/Creation** tabs select **Always** and check the **Create mobile account when user logs in to network account**.



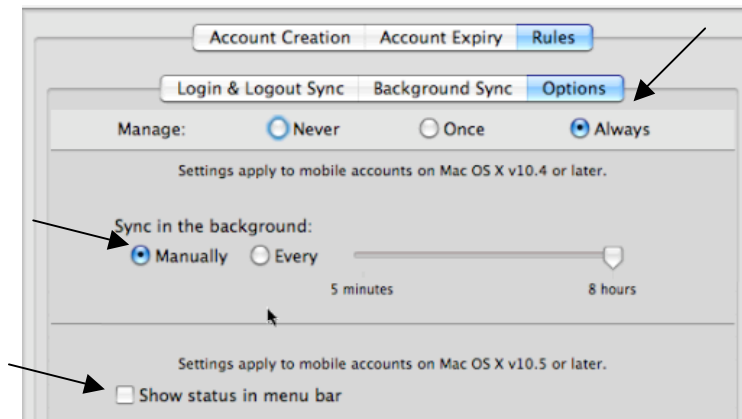
- 4) Under the **Rules/Login & Logout Sync** tab select **Always**. Remove the option to **Sync at login and logout**.



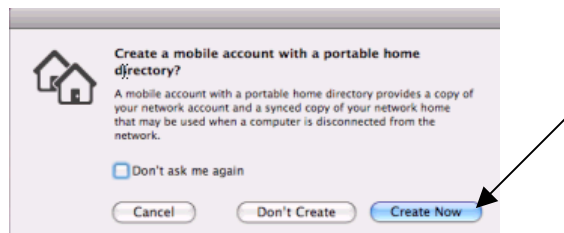
- 5) Under the **Rules/Background Sync** tabs select **Always**. Remove the **~** from the **Sync in the background** section. Under **Skip items that match any of the following** and add the **Full Path = ~**.



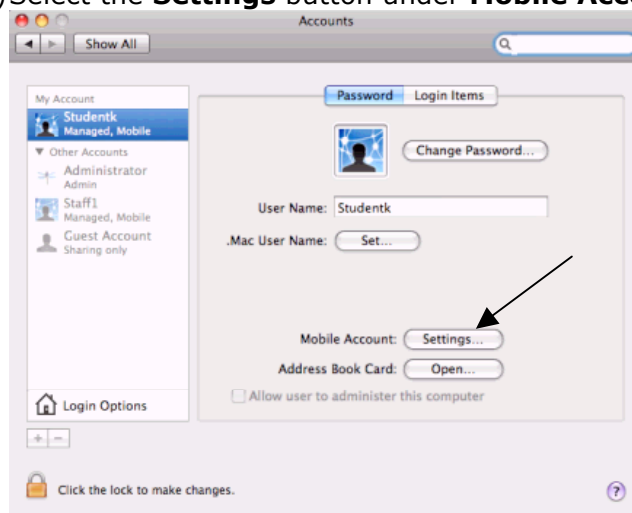
- 6) Click on the **Rules/Options** tabs select **Always**. Change the **Sync in the background** time to **8 hours** and set to sync **Manually**. Uncheck the box to **Show status in menu bar**. Click **Apply Now**.



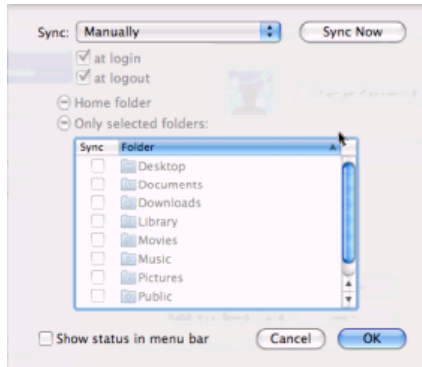
- 7) On the client machine, go back to the login window.
- 8) Select **Other**.
- 9) Login as the following account.
  - a. Username: **studentk**
  - b. Password: **studentk**
- 10) When asked to **Create a mobile account with a portable home directory**, select **Create Now**.



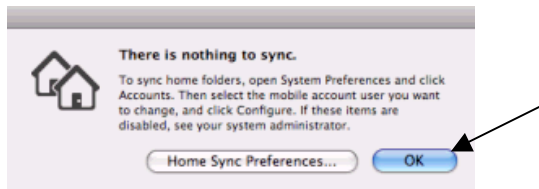
- 11) The mobile account will now be added to the computer. Notice the sync menu isn't on the menu bar.
- 12) Launch **System Preferences**. Go to the **Accounts** panel.
- 13) Select the **Settings** button under **Mobile Account**.



- 14) From the Mobile Account window, select **Sync Now**.



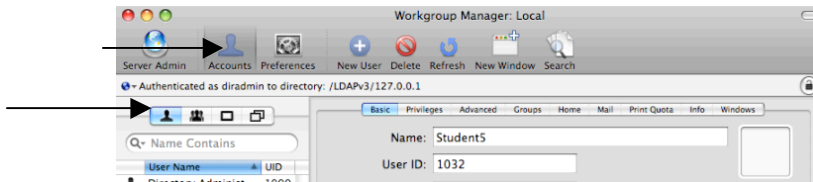
15) You will be notified that there is nothing to sync. Click **Ok**.



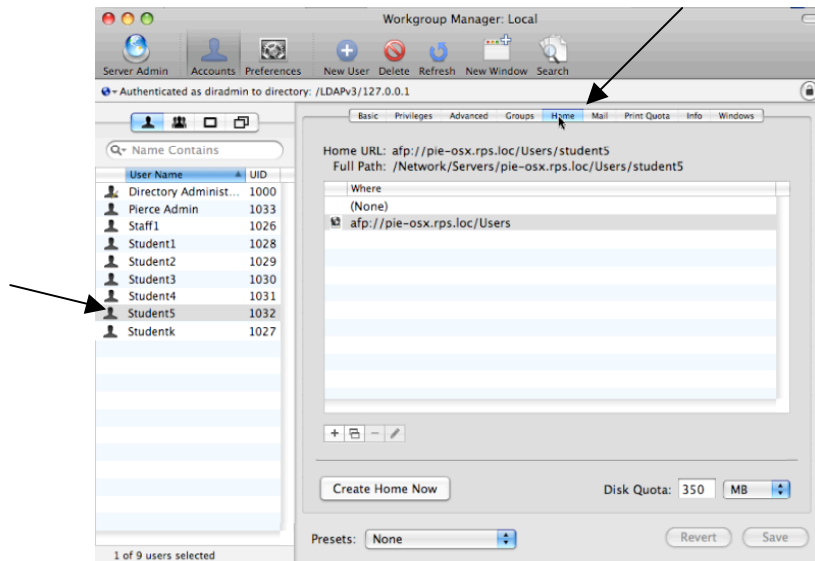
16) Log out of the **Studentk** account.

### Activity 8: Network Homes

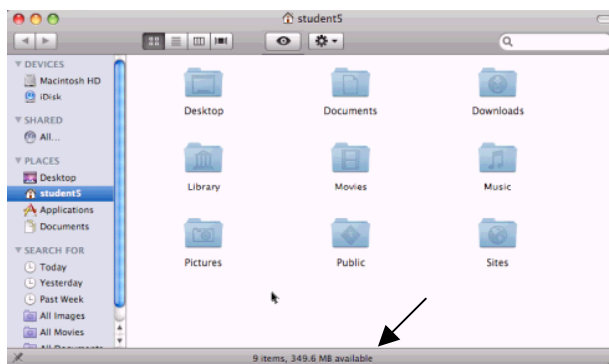
1) Launch **Workgroup Manager**, notice it defaults to **Accounts** and select **Users**.



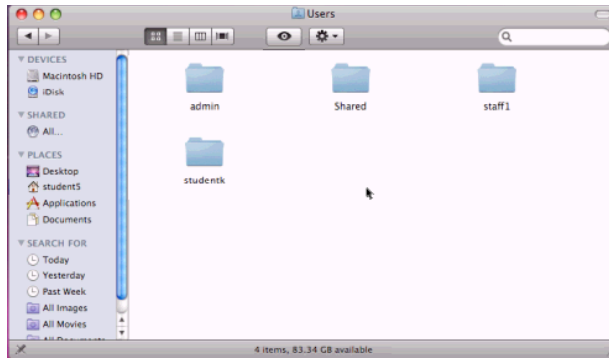
2) Select **Student5** and click on the **Home** tab.



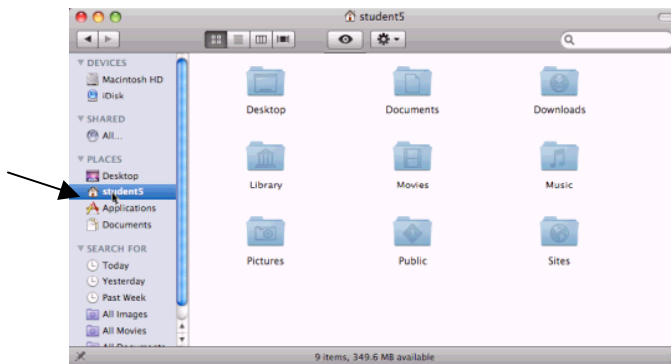
- 3) Notice that the user's home directory is set for `afp://pie-osx.rps.loc/Users`. This share point shows up in the window because it was setup as an automount in Server Admin's File Sharing window. Also, notice that the user's home directory as a Disk Quota of 350MB.
- 4) On the client login, select **Other** as the following user.
  - a. Username: **student5**
  - b. Password: **student5**
- 5) When you get to the desktop notice the finder window that opens. This will tell the user of a Network Home account, how much space they have left on the server.



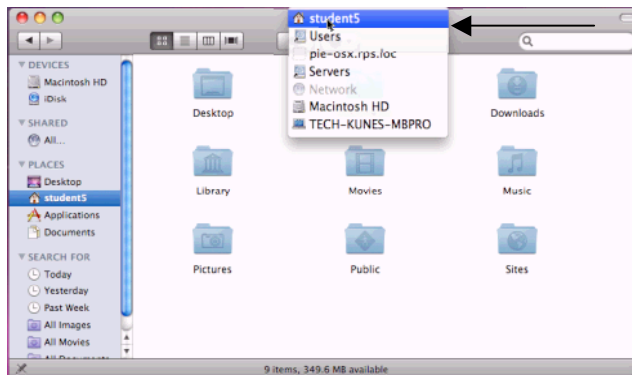
- 6) Open the **Macintosh HD/Users** folder.
- 7) Notice you have user accounts for the staff1 and studentk account (because they were mobile accounts) but not student5.



8) Click on the **student5** account from the sidebar.



9) At the top of the finder window **control click** on **student5**.



10) Notice the home directory for this user is actually in the folder location pie-osx.rps.loc/Users rather than being on the hard drive.

11) Log out of the server account on the client computer.

Note: If the server goes down, slows down, runs out of disk space, etc, these network homes will be affected. The user account does not stay on the computer when the user logs out.

### Activity 9: Preference Management via Preference Overview

1) In **Workgroup Manager**, select the group **Grade5** and click on the **Preferences** button.



### **Managing Applications:**

- 2) Select the **Applications** Preference.
- 3) Select **Always**.
- 4) Select the **Applications/Folders**.
- 5) Under **Disallow applications within these folders**, select **/Applications/Utilities**.
- 6) Under **Allow applications within these folders**, select **Dashboard, iTunes** and **Safari**.
- 7) Click **Apply Now**.
- 8) Click on the **Widgets** tab.
- 9) Remove all **Dashboard Widgets** except for **Weather** and **Unit Converter**.
- 10) Click **Apply Now** then **Done**.

### **Managing Dock Preferences:**

- 11) Click on **Dock Preferences**.
- 12) Select **Always**.
- 13) Remove **Mail, iChat** and **Address Book** from the dock. Remove the **Merge with User's Dock** option, and add the **Documents** folder.
- 14) Click **Apply Now**.
- 15) Click the **Dock Display** tab.
- 16) Select **Always**.
- 17) Set the **Position on Screen** to the **Left**.
- 18) Click **Apply Now** then **Done**.

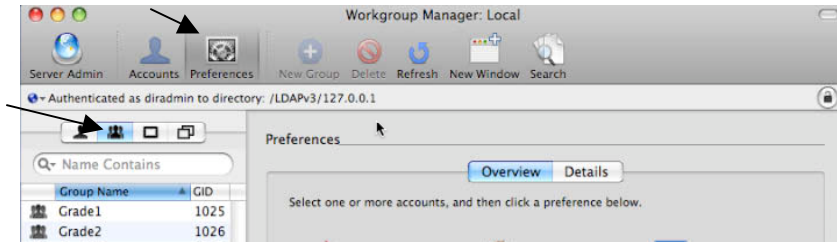
### **Managing System Preferences:**

- 19) Click on **System Preferences**.
- 20) Select **Always**.
- 21) Select **Show None**.
- 22) Then check **Displays** and **Sound**.
- 23) Click **Apply Now** then **Done**.
- 24) On the client login as student5.
  - a. Username: student5
  - b. Password: student5
- 25) Notice the settings you applied above now apply to this client computer.

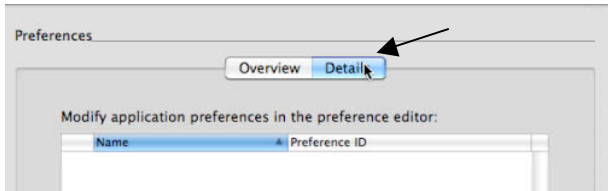
## **Activity 10: Preference Management via Importing Individual Preferences**

### **Widget Management:**

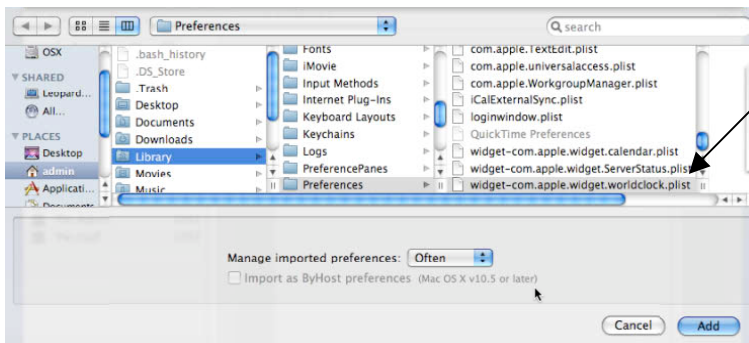
- 1) On the server, launch **Dashboard**.
- 2) Configure the **Clock** widget to point to **Dallas** instead of Cupertino.
- 3) Click **Done** and out of **Dashboard**.
- 4) On the server go to **Workgroup Manager**:
  - a. Address: **pie-osx.rps.loc**
  - b. Username: **admin**
  - c. Password: **apple**
- 5) Make sure you are authenticated to the directory.
  - a. Username: **diradmin**
  - b. Password: **apple1**
- 6) Select the **Groups**, then click on the **Preferences** button.



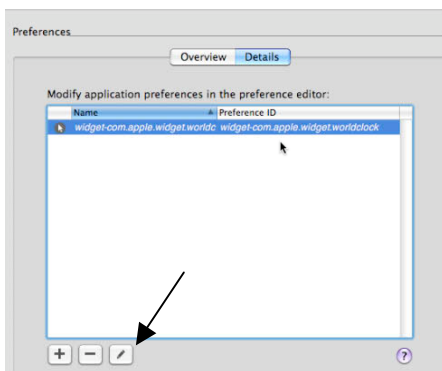
- 7) Highlight the **Grade4** group on the left.
- 8) Select the **Details** tab.



- 9) At the bottom of the Details window, click on the **Plus** sign.
- 10) Browse out to the admin's **Library/Preferences** folder and highlight the preference named **widget-com.apple.widget.worldclock.plist**.



- 11) Under **Manage imported preferences**, change this to **Always**, click **Add**.
- 12) It has now been added to the **Details** panel in **Workgroup Manager**. Click on the picture of the **Pencil**, this will allow you to edit the plist file.



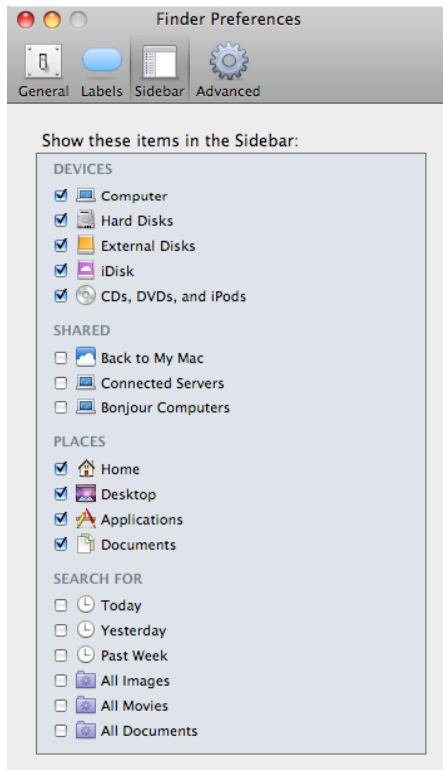
- 13) At this point you can edit the preference if you want. Click on all the down arrows by **Always**. Click **Done** to exit.



- 14) In Workgroup Manager, click on the **Accounts** button. (We are only doing this to get off of the Details window.)
- 15) On the client computer log into the account:
  - a. Username: **student4**
  - b. Password: **student4**
- 16) Bring up **Dashboard** and notice how the clock is configured to use Dallas time.
- 17) Log out of the client computer.

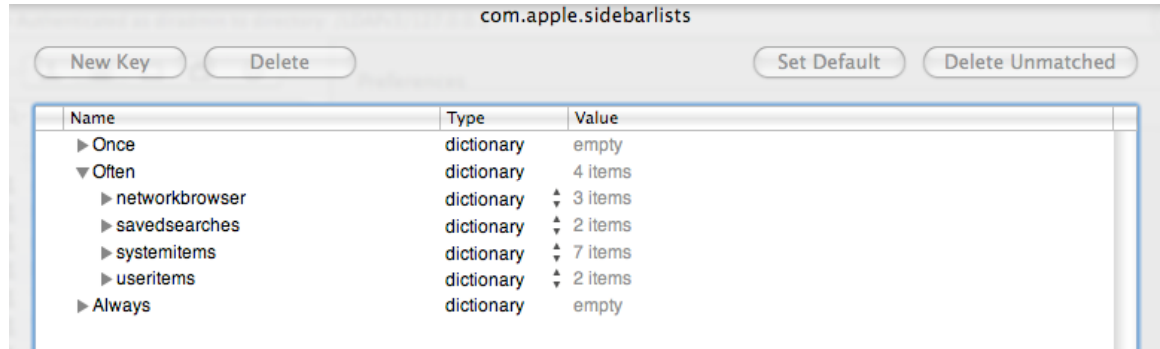
#### **Finder Sidebar Management:**

- 18) In the Finder on the server, select Preferences from the Finder menu.
- 19) Click Sidebar.
- 20) Deselect the following:
  - a. Back to My Mac
  - b. Connected Servers
  - c. Bonjour Computers



- 21) Go back to Workgroup Manager and select the group **Grade4** again.
- 22) Click on **Preferences** and the click on **Details**.

- 23) Browse out to the admin's **Library/Preferences** folder and highlight the preference named **.apple.sidebarlists.plist**.
- 24) Click on the **Often** from the pull-down menu, then click **Add**.
- 25) Double click on the **com.apple.sidebarlists** in the Details window.
- 26) Click on the expand **Often**.



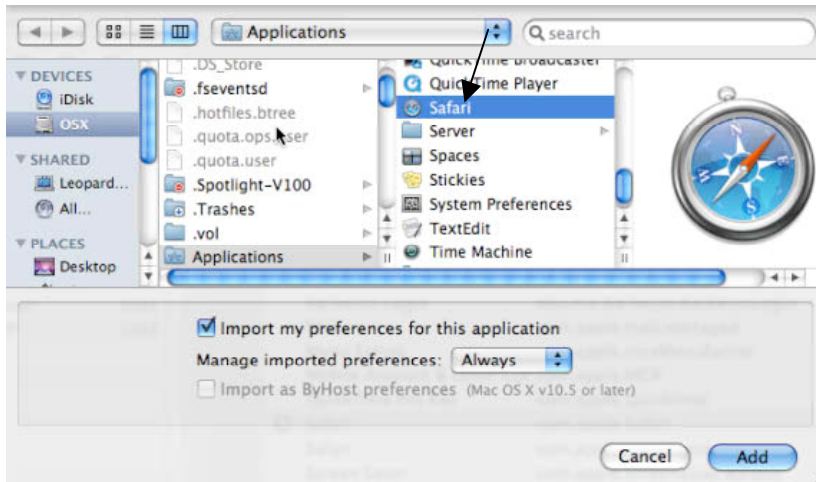
- 27) Highlight **savedsearches**, **systemitems**, and **useritems** and click **Delete**.
- 28) Expand **networkbrowser**.
- 29) Highlight **Controller** and **CustomListItems**, then click **Delete**.
- 30) Expand CustomListProperties, notice these three remain:
  - a. com.apple.NetworkBrowser.backToMyMacEnabled = false
  - b. com.appleNewtorkBrowser.bonjourEnabled = false
  - c. com.apple.NetworkBrowser.connectedEnabled = false
- 31) Click **Apply Now**.
- 32) Login as the Staff user on the client and verify that these settings are now active for their account.

*Note: The Sidebar can not be managed as Always, it must be Once or Often in order to work properly.*

### **Activity 11: Preference Management via Importing an Application's Preference Manifest**

#### **Safari's Preference Management:**

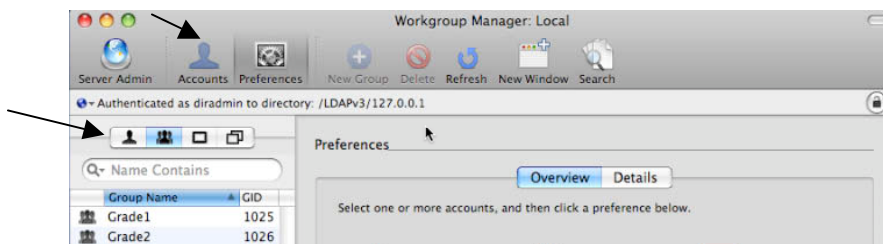
- 1) On the server launch **Safari**, set the homepage to <http://www.apple.com> and close it.
- 2) In **Workgroup Manager**, go back to the **Preferences** button, select the group **Grade4**, and select the **Details** tab again.
- 3) Click on the **Plus** sign at the bottom of the window.
- 4) Browse out to the **OSX/Applications/Safari**, check the box to **Import my preferences for this application**, set **Manage imported preferences** to **Always**, then click **Add**.



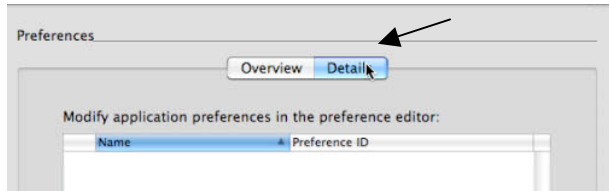
- 5) From the Details panel double click on **com.apple.Safari**.
- 6) Click on the down arrow beside **Always**.
- 7) Notice the **HomePage** is set to **http://www.apple.com**.
- 8) Click **Done** to get out of the editor.
- 9) On the client computer, log into:
  - a. Username: **student4**
  - b. Password: **student4**
- 10) Launch **Safari**, notice how <http://www.apple.com> tries to come up as the home page.

### Activity 12: Preference Management via Apple's Managed Client Application

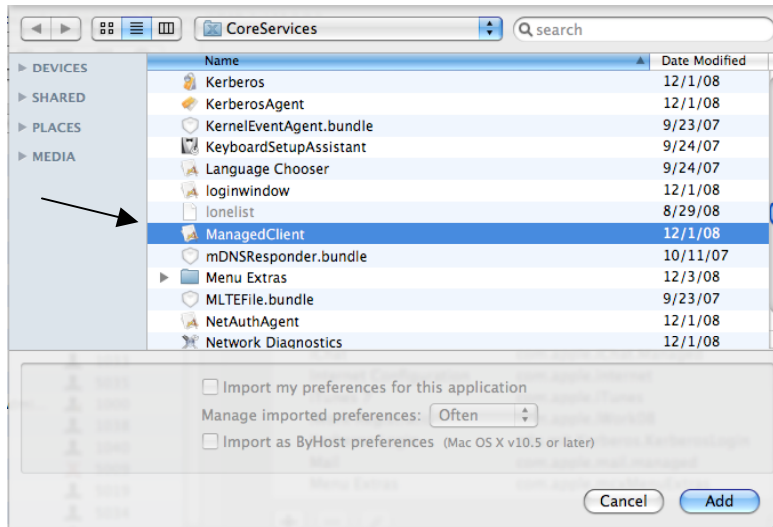
- 1) On the server go to **Workgroup Manager**:
  - a. Address: **pie-osx.rps.loc**
  - b. Username: **admin**
  - c. Password: **apple**
- 2) Make sure you are authenticated to the directory.
  - a. Username: **diradmin**
  - b. Password: **apple1**
- 3) Select the **Groups**, then click on the **Preferences** button.



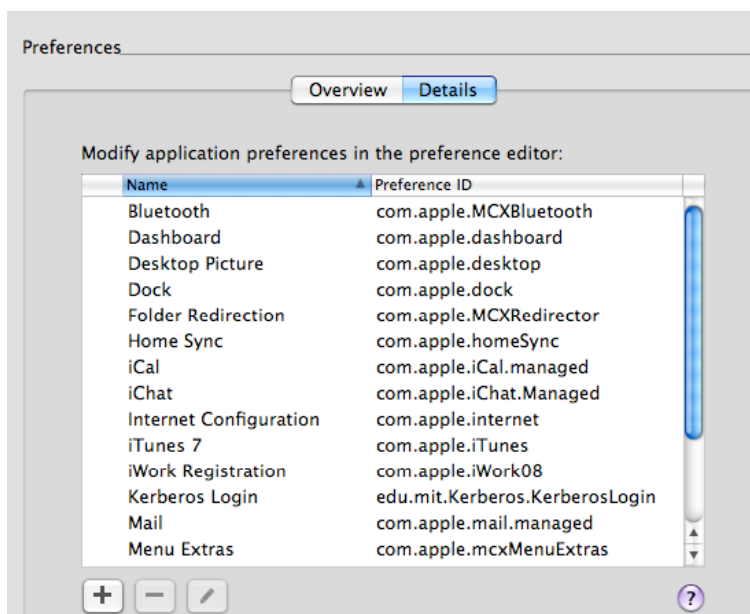
- 4) Highlight the **Grade4** group on the left.
- 5) Select the **Details** tab.



- 6) Click on the plus sign at the bottom of the WGM window.
- 7) Navigate out to the server's /System/Library/CoreServices/ folder, highlight ManagedClient and click Add.



- 8) Notice that the Preferences/Details panel is now listing various preferences. At this point those preferences are not managed until you go into them and make setting changes.



### iTunes Manifest Configuration:

- 9) Double click on the **iTunes 7** manifest.
- 10) Click the **Always** disclosure triangle and then click the **New Key** button.
- 11) Click and hold on the **New Item** name.
- 12) Select "**Disable Music Sharing.**"
- 13) Select "**true**" in the Value column for Disable Music Sharing.
- 14) Repeat steps 11 through 13 to add the following:
  - a. **Lock iTunes Parental Control = true**
  - b. **Restrict Explicit Content = true**
- 15) Click **Done**.

#### **iWork Manifest Configuration:**

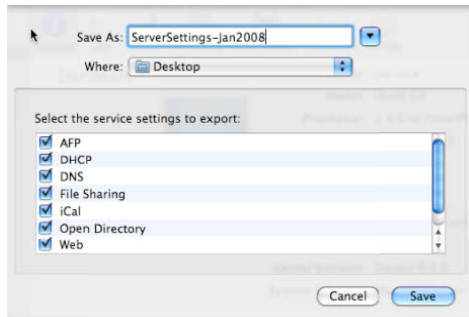
- 16) Double click on the **iWork Registration** manifest.
- 17) Expand **Always** and click on the **New Key** button.
- 18) Click and hold on the **New Item** name.
- 19) Select "**License Number.**"
- 20) Enter the **iWork 08 registration** (pretend for class) number in the Value column for License Number.
- 21) Repeat steps 17 through 20 to add the following:
  - a. **Disable Registration Window = true**
  - b. **Registration State = 1**
  - c. **User Name = Your School District's Name or User's Name**
- 22) Select all the keys under **Often**
- 23) Press **Command x** to cut the keys
- 24) Click the **Always** disclosure triangle
- 25) Press **Command v** to paste the keys.
- 26) Click **Done**.

#### **Menu Extras Configuration:**

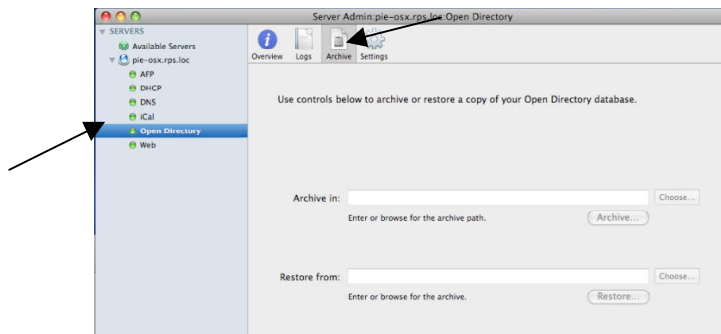
- 27) Double click on the **Menu Extras** manifest.
- 28) Expand **Always** and click on the **New Key** button.
- 29) Click and hold on the **New Item** name.
- 30) Select "**AirPort Menu Extra**" and leave the value set at **true**.
- 31) Repeat steps 28 through 30 to add the following:
  - a. **Battery Menu Extra = true**
  - b. **Displays Menu Extra = true**
  - c. **iSync Menu Extra = true**
  - d. **Sound Menu Extra = true**
- 32) Click Done.
- 33) Login to the client as:
  - a. Username: student4
  - b. Password: student4
- 34) Verify the changes you made in this section show up.

### **Activity 13: Directory Backup**

- 1) Launch **Server Admin** highlight **pie-osx.rps.loc**.
- 2) From the **Server** menu select **Server Settings**.
- 3) Under **Save As**, name the file, under **Where**, select the **Desktop**. Leave all the boxes checked. Click **Save**.



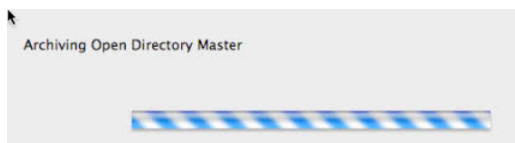
- 4) This will export all of the configuration files for Server Admin. These will include all configured services for the server.
- 5) If the server had to be rebuilt, one to all of these settings can be imported back into Server Admin to reconfigure the server.
- 6) Under the **Open Directory** service, click on the **Archive** button.



- 7) Click on **Choose** by **Archive in**, select the admin's **Desktop** folder, then click on the **Archive** button.



- 8) You'll be asked to enter a name and password for the archive. Enter the following and click **Ok**.
  - a. Archive Name: **Jan2009**
  - b. Password; **apple**
- 9) Notice there isn't a chance to verify the password. Be careful what you type.
- 10) The Open Directory database will be archived at this point.



- 11) Archiving the Open Directory database basically means all of the information in Workgroup Manager is backed up; users, groups, computer list, preferences for users, passwords. If you go into Workgroup Manager and just export users, the passwords are not exported with their other information.



- Archiving the Open Directory database is the only way to backup the passwords.
- 12) Go to the desktop of the server.
  - 13) Notice the two new files. One is the .plist file of the Service configurations from Server Admin, the other is the .sparseimage that contains the backup of the Open Directory database.
  - 14) Using the Import feature in Server Admin and the Restore feature in the Open Directory service, most all of the servers settings can be recreated if something were to happen to the server.