

ChangeDesktop  
User Guide  
Revision 1a

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ChangeDesktop

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## Document Information

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# Introduction

The premise of this User Guide is help you, the user, make use of all of the features offered by *ChangeDesktop* and to answer any questions that may occur during the normal use of *ChangeDesktop*.

In the simplest terms, *ChangeDesktop* is a Desktop picture randomizer for Mac OS X. In addition to this core functionality, *ChangeDesktop* adds many useful features not found in other applications of the same nature; including picture sharing using the Internet. In fact, *ChangeDesktop* is very Internet “aware” as you will see later in this book.

If you have a question that is not answered by this guide or you would just like to provide feedback, then use your Web browser to head to [ChangeDesktop's support forum](#).<sup>1</sup> Here you can enter discussions with other users, access the source code to *ChangeDesktop*, or enter a feature/bug report.

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<sup>1</sup><http://sourceforge.net/projects/changedesktop>



**Part I**

**Using ChangeDesktop**



# Chapter 1

## Installation

Installation of *ChangeDesktop* is very easy. Once you have downloaded the latest version, double click on the archive file and a disk image should mount on your Desktop. To install *ChangeDesktop* simply drag the *ChangeDesktop* application to your Applications folder (Figure 1.1). You may also drag install *ChangeDesktop* to any folder you wish if you don't want it in your Applications folder.

### 1.1 Upgrading

If you are upgrading from an older version of *ChangeDesktop*, the installation process is slightly more involved. Before installing the new version, you must make sure that *ChangeDesktop* is not running. See Section 4.3 for how to properly quit *ChangeDesktop*. Once the old version is no longer running, you can install *ChangeDesktop* using the same procedure as above to overwrite the old version.<sup>1</sup>

### 1.2 Requirements

*ChangeDesktop* requires Mac OS X 10.1 or higher. Certain features may also require Mac OS X 10.2 or the BSD subsystem to be installed. These extra requirements will be noted throughout the book when necessary.

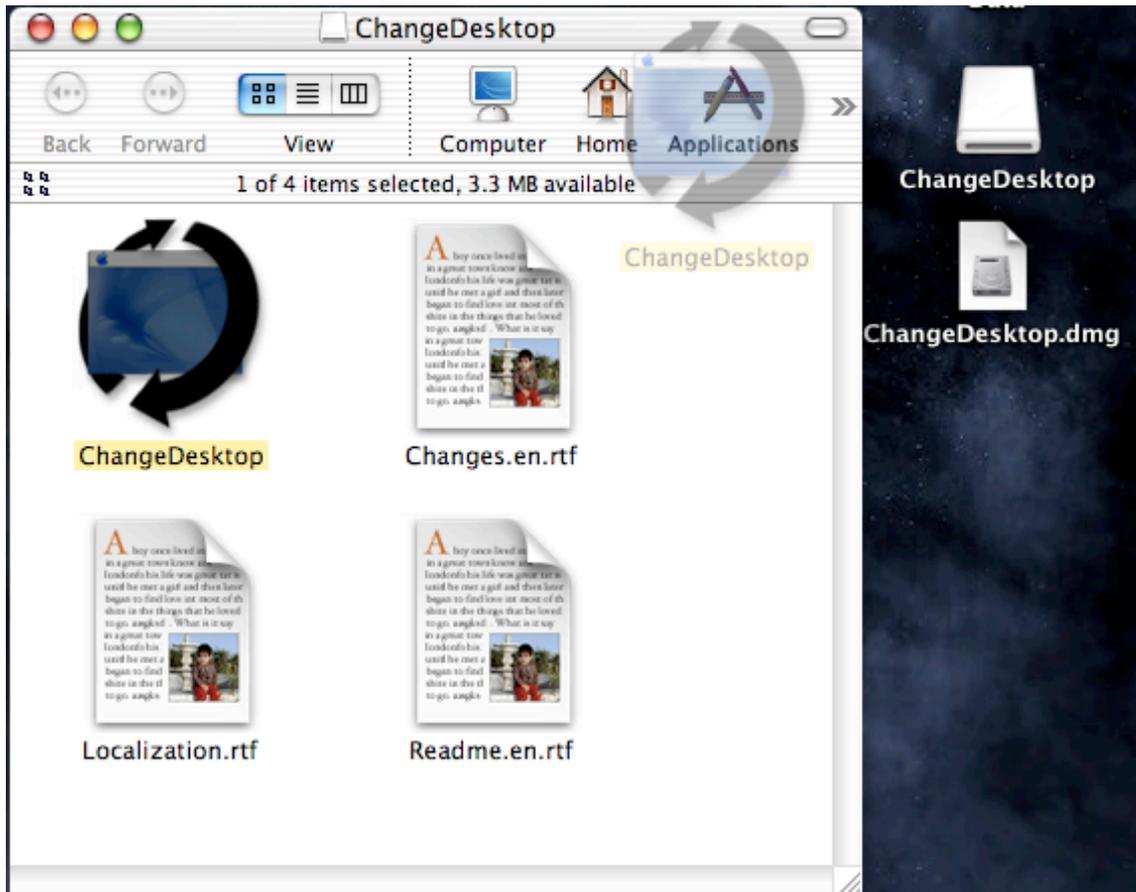
### 1.3 How to Uninstall

Removing *ChangeDesktop* is as easy as installing it. First quit *ChangeDesktop* properly (Section 4.3), and then simply drag the *ChangeDesktop* application to the trash.

---

<sup>1</sup>If you are using the Menu Extra (Chapter 6), you must log out of Mac OS X and then log back in for the new Menu Extra to be made available. This annoyance is due to the way Apple currently implements Menu Extras.

Figure 1.1: Installation of ChangeDesktop



# Chapter 2

## Getting Started

*ChangeDesktop* has many features, but you can get a basic setup running in a couple of minutes. To get started, double click on the *ChangeDesktop* icon in the Finder. This will launch the *ChangeDesktop* application.

When *ChangeDesktop* starts running, you will see the window shown in Figure 2.1.<sup>1</sup> From this window (and its various tabs) you can change all of *ChangeDesktop*'s options, see runtime statistics, start and stop Desktop picture changing (Chapter 4), and immediately change the current Desktop picture (Section 4.4).

### 2.1 Managing Pictures

The main job of *ChangeDesktop* is to manage the display of your Desktop pictures on all monitors (displays) attached to your computer.<sup>2</sup> *ChangeDesktop* does this by managing a collection of folders that you specify. Managing folders and not the pictures themselves allows *ChangeDesktop* to be very dynamic. You can add, remove, or rename pictures in any managed folder without having to tell *ChangeDesktop* that you have made any changes. *ChangeDesktop* will automatically know when you have made modifications to your picture collection and adjust itself accordingly.

#### 2.1.1 Adding Folders

The very first thing you will want to do is add some folders (that hopefully contain pictures) to *ChangeDesktop*. To add a folder click on the Pictures tab (Figure 2.1) in the main window and then click on the Add Folder... button. This will open a standard Open File window from which you can select any folder you wish (Figure 2.2). You can even select multiple folders and add them all at once. When you have chosen the folder(s) you want to add, click on the Open button and the folders will be added to the Picture Folders list. You may also Drag and Drop folders from the Finder into the Picture Folders list.

---

<sup>1</sup>You may also see the Update Check window. See Section ?? for more information.

<sup>2</sup>The current maximum is eight (8) monitors.

Figure 2.1: Main window with the Pictures tab selected.

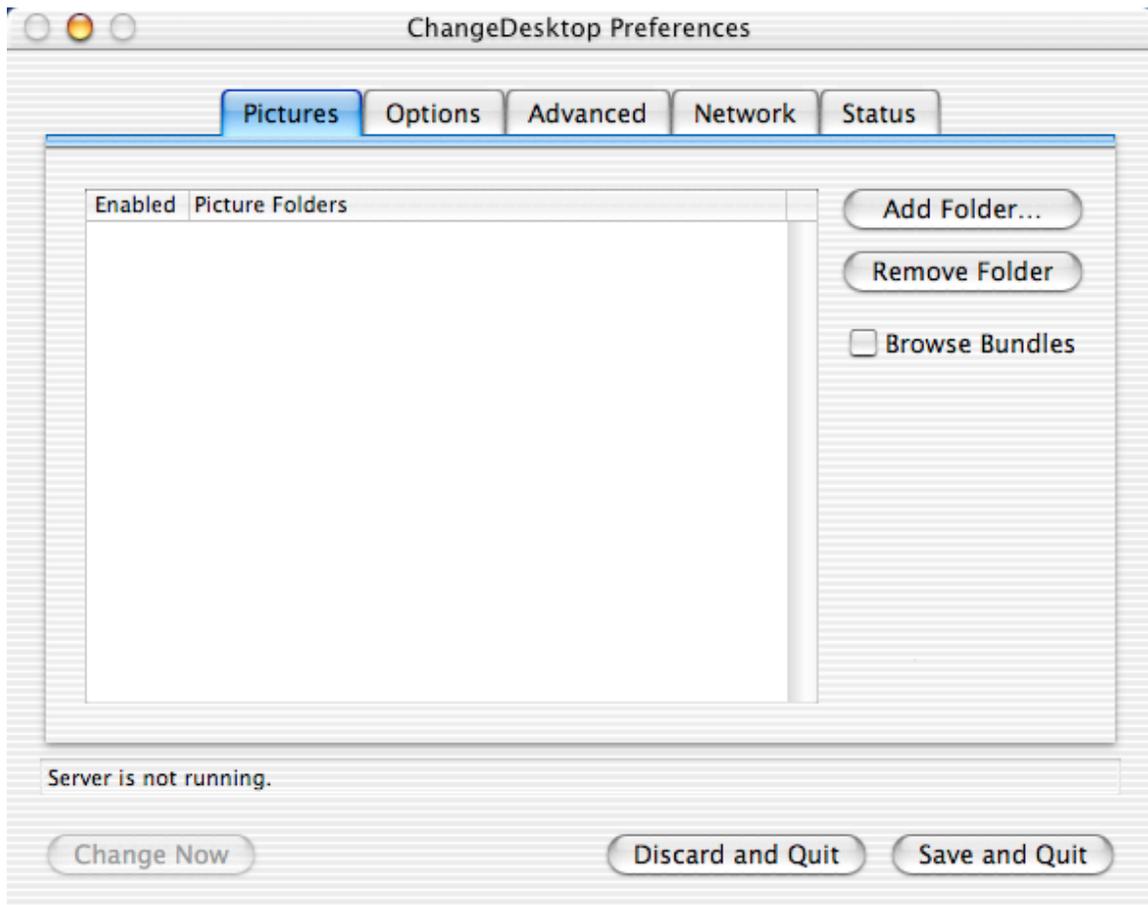
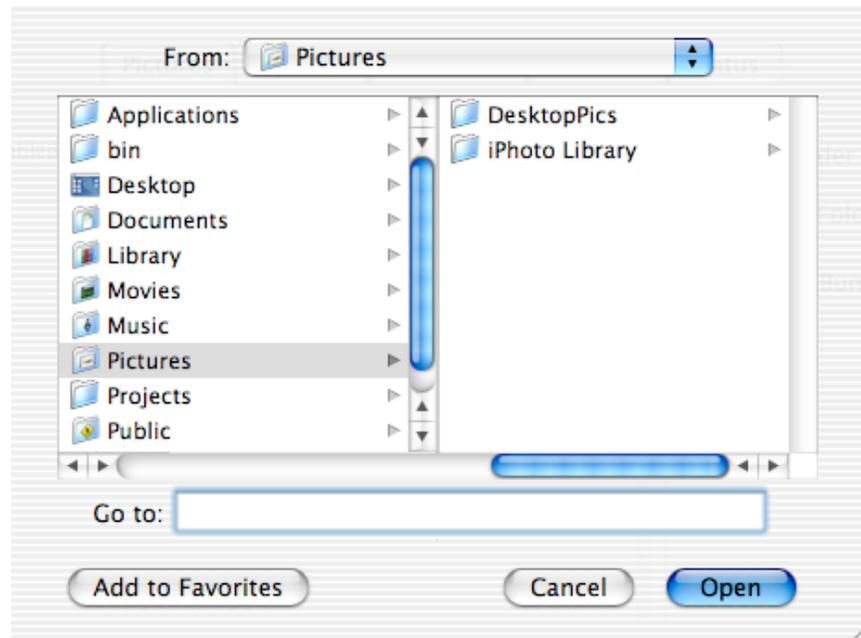


Figure 2.2: Open File window



Once a folder is added, it is considered a *Managed Folder*.<sup>3</sup> In addition, sub-folders of *Managed Folders* are automatically managed so there is no need to manually add them to the list.

### Adding Folders Contained In A Bundle

If you want to add a folder that is contained inside of a Mac OS X Bundle, check the **Browse Bundles** checkbox before clicking the **Add Folder...** button. If this is done, you can then browse the contents of Bundles in the Open File window.

### 2.1.2 Removing Folders

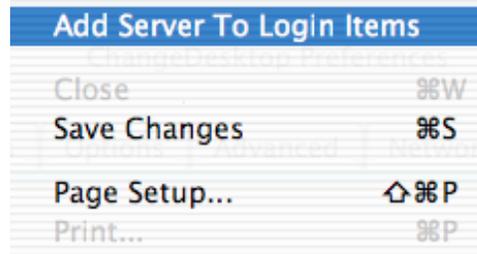
To remove a *Managed Folder*, select its name in the **Picture Folders** list and click on the **Remove Folder** button. You may remove multiple folders at once by holding down the **Command** (or **Apple**) key while you click on other folder names to add them to the selection.

### Temporarily Disabling a Folder

If you don't want to permanently remove a folder, but just want *ChangeDesktop* to ignore the folder temporarily, click on the corresponding **Enabled** checkbox next to the folder's name. When this checkbox is unchecked, the folder will be ignored when looking for pictures.

<sup>3</sup>See Chapter 7 for instructions on how to use the World Wide Web as a *Managed Folder*.

Figure 2.3: The Preferences menu.



## 2.2 Saving Your Changes

When you are done adding folders, make sure to save your changes before continuing. Open the Preferences menu and select **Save Changes**. The Preferences menu is shown in Figure 2.3.

### What's Next

At this point, you are ready to start using *ChangeDesktop's* Desktop management features (see Chapter 4). Before moving on though, you may want to visit Chapter 3 for details on some of the options available for controlling how your Desktop will be managed.

# Chapter 3

## Desktop Picture Options

There are many options (preferences) available that will affect the way your Desktop picture is changed. This Chapter concentrates on the Options tab in the *ChangeDesktop* main window. Figure 3.1 shows the Options tab in its default configuration.<sup>1</sup>

Please note that this Chapter makes reference to *ChangeDesktop Server* which is explained in Section 4.1.

### 3.1 Picture Options

#### Change At Startup

When checked, the Server (Chapter 4) will change the Desktop picture when it starts up.

#### Change On Wake

When checked, the Desktop picture will be changed when the computer wakes up from a sleep state.<sup>2</sup>

#### Same Picture For Each Monitor

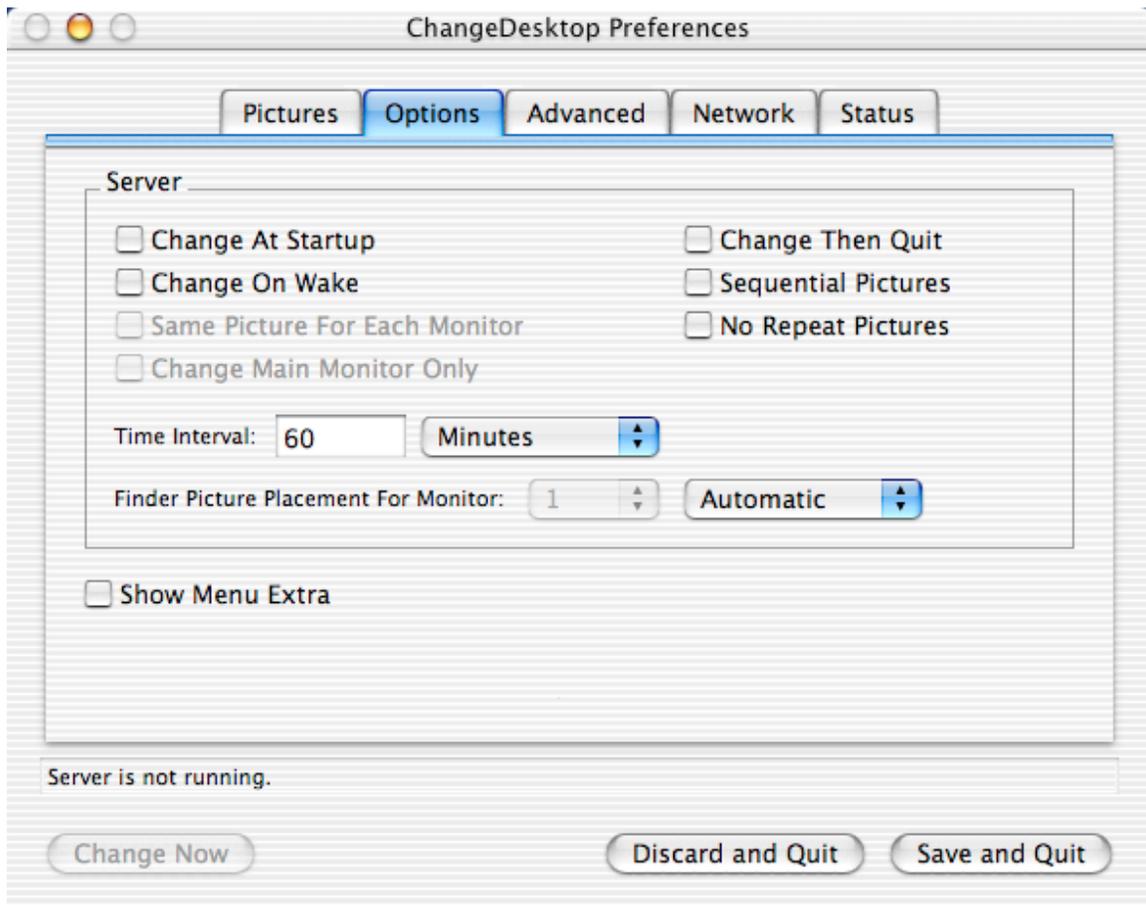
This option is only active for computers with multiple monitors attached. When checked, the same Desktop picture will be shown on every monitor. When unchecked, each monitor will have a different picture chosen for it.

---

<sup>1</sup>This is the default for a single monitor system.

<sup>2</sup>It may take several seconds for *ChangeDesktop* to be notified of a wake event. Do not expect the picture to change immediately when the system wakes.

Figure 3.1: The Options tab with factory defaults.



### Change Main Monitor Only

This option is only active for computers with multiple monitors attached. When checked, only the main monitor will have its Desktop picture changed. Other attached monitors will be left alone.

### Change Then Quit

When checked, the Server (Chapter 4) will immediately change the Desktop picture at startup and then quit. When unchecked (the default), the server will continuously run in the background.

### Sequential Pictures

When checked, pictures will be chosen in a sequential order.<sup>3</sup> When unchecked (the default), pictures will be chosen at random.

### No Repeat Pictures

This option is only active when random pictures are active (**Sequential Pictures** is unchecked). True randomness means that some pictures could be repeated. In fact it would be entirely possible for the same picture to be chosen in sequence. When checked, this option modifies the random algorithm to discard pictures once they have been displayed (thereby preventing them from being chosen again). When all pictures have been displayed, they are all reloaded and given another chance for display.<sup>4</sup>

### Time Interval

This option sets the time interval that Desktop picture changes will occur at. The default is 60 minutes. This is a relative interval, and will be affected by a system sleep or a system restart/shutdown. System sleep will extend the interval by the amount of time the computer is asleep, and system restart will reset the interval entirely.

To disable timed changes, select **Days** from the interval menu and then set the interval itself to a large number. This will (in effect) disable timed changes thereby allowing manual only changes (Section 4.4) or no changes at all.

---

<sup>3</sup>There is no way to determine this order; it can (and probably) will change between every run of *ChangeDesktop*.

<sup>4</sup>If you add or remove pictures to any *Managed Folder* or sub-folder, all pictures will have a chance of being displayed again. The same will be true if you change any preferences.

### Finder Picture Placement For Monitor

This option controls how the Finder will draw the picture on your Desktop. The default is Automatic. This is the best general choice.<sup>5</sup> If you have multiple monitors, each monitor can have a different setting.

## 3.2 Other Options

### Show Menu Extra

This check box enables *ChangeDesktop's* Menu Extra. See Chapter 6 for more information on this option.

---

<sup>5</sup>Except for Cinema or Cinema HD Displays. The best choice for these monitors is Crop.

# Chapter 4

## Desktop Picture Changes

Now that you have setup (Chapter 2) and configured (Chapter 3) *ChangeDesktop* you can start using it to manage your Desktop(s).

### 4.1 ChangeDesktop Server

*ChangeDesktop* is actually split into several different applications. The GUI application you interact with controls *ChangeDesktop*'s preferences, and provides status information (such as the currently displayed Desktop picture). In addition to this application, *ChangeDesktop* includes another background only application referred to as *ChangeDesktop Server*.<sup>1</sup> *ChangeDesktop Server* has no GUI and you cannot interact with it directly; nevertheless, it is an integral part of *ChangeDesktop*.

*ChangeDesktop Server* can be considered the “engine” that runs *ChangeDesktop*. It changes your Desktop picture, and implements all of *ChangeDesktop*'s various other features.<sup>2</sup>

This multiple application design allows you to setup *ChangeDesktop*, start *ChangeDesktop Server* and then quit the *ChangeDesktop* GUI application. *ChangeDesktop Server* will still be running in the background and doing its job, but you will never know it is there if you don't want to. Since *ChangeDesktop Server* is a background application it doesn't show up in the Mac OS X Dock or impose itself on your work environment in any other way.

### 4.2 Starting The Server

Starting *ChangeDesktop Server* is done from the **Status** tab in *ChangeDesktop*'s main window (Figure 4.1). Just click on the **Start Server** button and wait a few seconds.<sup>3</sup>

Once the Server is started, your Desktop picture will be changed automatically based on your

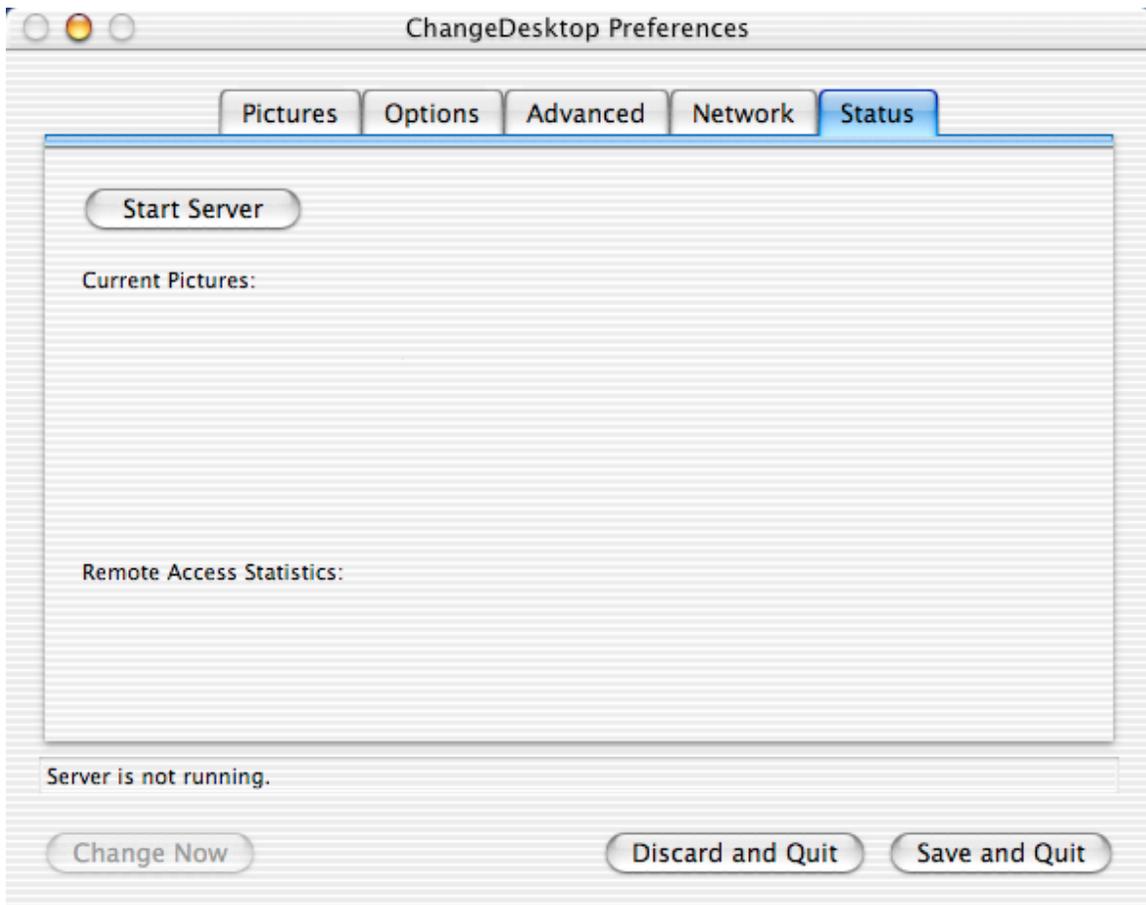
---

<sup>1</sup>This document may also refer to *ChangeDesktop Server* simply as “Server” or “the Server”.

<sup>2</sup>Including the Remote Access and Publish Desktop features.

<sup>3</sup>The Server startup time is dependent on the number of pictures that are in your *Managed Folders*.

Figure 4.1: The Status tab.



preferences. See Chapter 3 for more information on these preferences.

When the Server has finished starting, the *ChangeDesktop* main window will look similar to Figure 4.2. Notice the Start Server button is now titled Stop Server, the Change Now button has been enabled, and the Status bar contains “Server is running.” instead of “Server is not running.”.

### 4.2.1 Auto-Starting The Server During Login

You can have the Server auto-start during Mac OS X Login thereby obviating the need to start the *ChangeDesktop* application just to start the Server. To enable Auto-Start, open the Preferences menu and select the Add Server To Login Items item (Figure 2.3).<sup>45</sup>

<sup>4</sup>If Server Auto-Start is already enabled, this menu item will be disabled.

<sup>5</sup>*ChangeDesktop* is smart about the Login Items entry. If you upgrade *ChangeDesktop* and the new version is installed in a different place than the old version, *ChangeDesktop* will automatically change the entry for the Server in the Login Items list.

Figure 4.2: The main window when the Server is running.

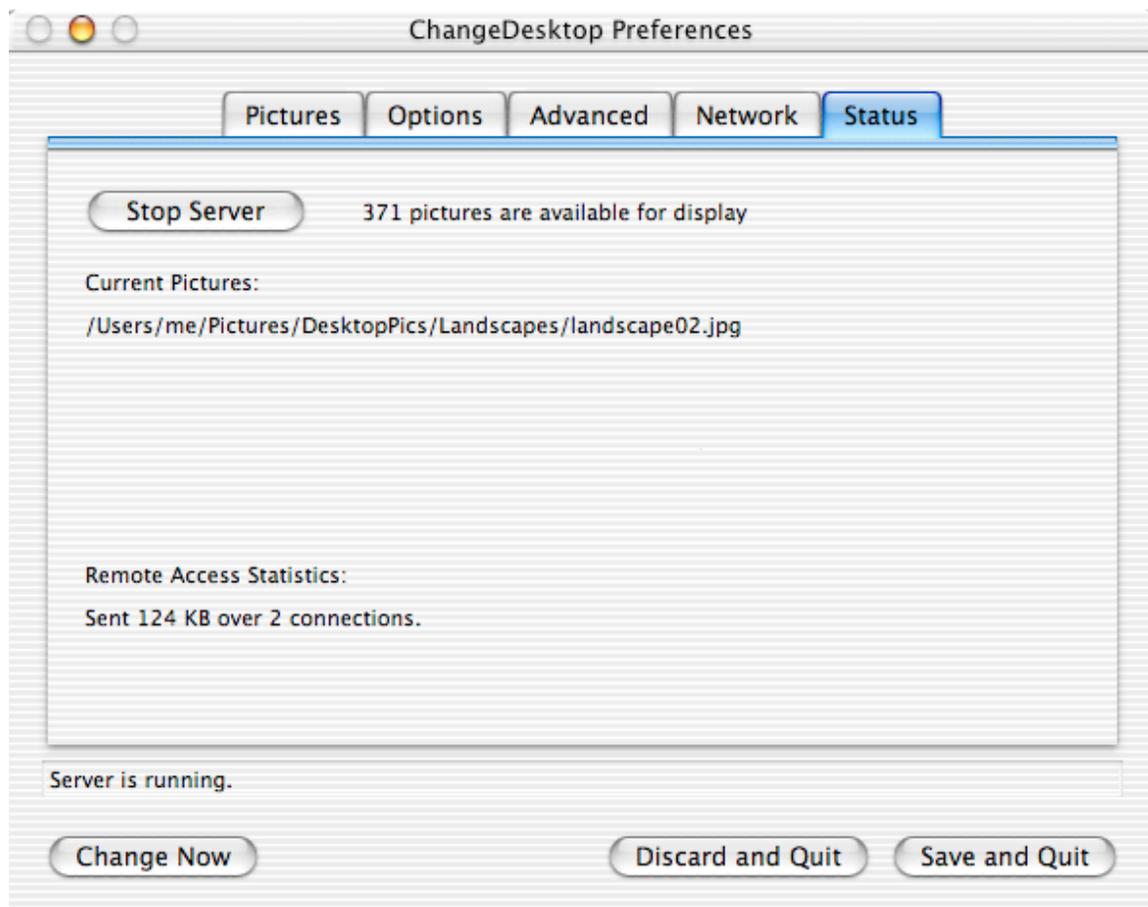


Figure 4.3: The Dock icon when the Server is running.



### 4.3 Stopping the Server

To stop the Server, click on the Stop Server button (Figure 4.2). The Server may take a few seconds to shut down, depending on what features you have activated.

### 4.4 Manually Changing The Desktop Picture

Normally, *ChangeDesktop* will automatically change the Desktop picture on a timed basis. But, you may force a change any time you wish by clicking on the Change Now button in *ChangeDesktop*'s main window (Figure 4.2).<sup>6</sup>

*ChangeDesktop* also installs a system wide hot key to manually change the Desktop picture. When you type Command-Shift-1 at anytime in any application, the Desktop picture will be changed.<sup>7</sup>

### 4.5 Desktop Picture Statistics

Once the Server has started, the Status tab (Figure 4.2) becomes an information center for Server statistics. You can see how many pictures are available for display, and the currently displayed picture(s).

The Status tab will also display *Remote Access* statistics if that service has been enabled. See Chapter 8 for more information on *Remote Access*.

#### 4.5.1 Desktop Picture Statistics In The Dock Icon

*ChangeDesktop*'s Dock icon has a special ability. When the Server is running, the Dock icon will display the number of pictures available for display (Figure 4.3). This number will automatically change as pictures are added or removed.

<sup>6</sup>Manually changing the Desktop picture will also reset the Server's internal timer, so that the next timed change is not made too soon.

<sup>7</sup>Currently, this key combo cannot be changed.

## **Part II**

# **Advanced Features**



# Chapter 5

## Advanced ChangeDesktop Features

### 5.1 Advanced Options

The Advanced Options tab is shown in Figure 5.1. From here you can enable some of *ChangeDesktop*'s more esoteric features.

#### Log Events

When checked, *ChangeDesktop Server* (Section 4.1) will log internal events to the Mac OS X *Console* application. These log entries are not errors (which are always logged), but simply more information about what the Server is doing. There is no need to enable this feature for the normal operation of *ChangeDesktop*.

#### Notify Applications

When checked, *ChangeDesktop* will broadcast a system wide event that other applications (such as *Path Finder*) can use to determine the Desktop picture has changed. If you are using the Finder, this is not necessary.

#### Disable Thumbnail Filter

By default, *ChangeDesktop* will ignore pictures that seem to be Thumbnails. This filtering is done based on the size of the picture. When this option is checked, the Thumbnail filter is disabled and all valid pictures will be used regardless of their size.

#### Ignore iPhoto Originals

When you edit a picture in *iPhoto*, a copy of the original photo is kept in your *iPhoto* Library.

Figure 5.1: Advanced Options tab.

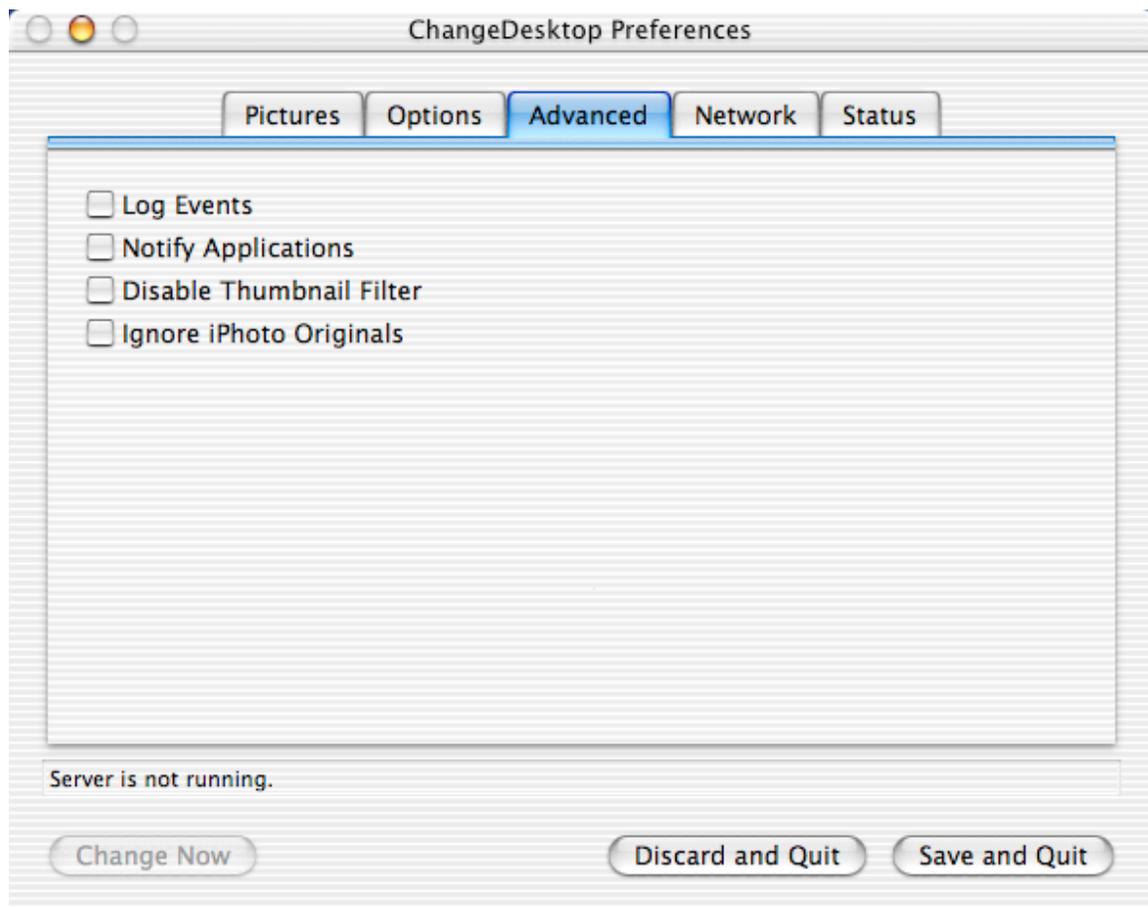
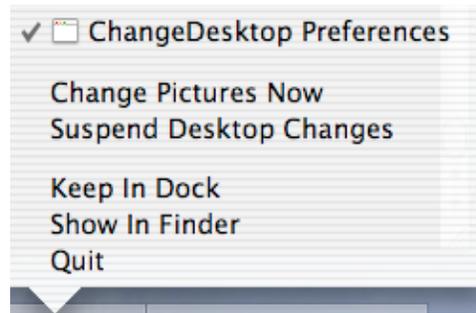


Figure 5.2: The Dock menu.



If *ChangeDesktop* detects that one of your *Managed Folders* is (or contains) an *iPhoto* Library folder it enables certain filters to exclude unwanted *iPhoto* data. If this option is checked, not only will unwanted *iPhoto* data be filtered out, but *iPhoto* original photos will also be filtered.

## 5.2 The Dock Menu

*ChangeDesktop* includes a Dock Menu (Figure 5.2) that contains some special features.

### 5.2.1 Manually Changing The Desktop Picture

The Change Pictures Now menu item can force a Desktop picture change. See Section 4.4 for more information.

### 5.2.2 Suspending Desktop Picture Changes

You can temporarily suspend Desktop picture changes by selecting the Suspend Desktop Changes menu item. To resume changes, simply select the same menu item (which will be titled Resume Desktop Changes).

## 5.3 Adding Pictures to Managed Folders

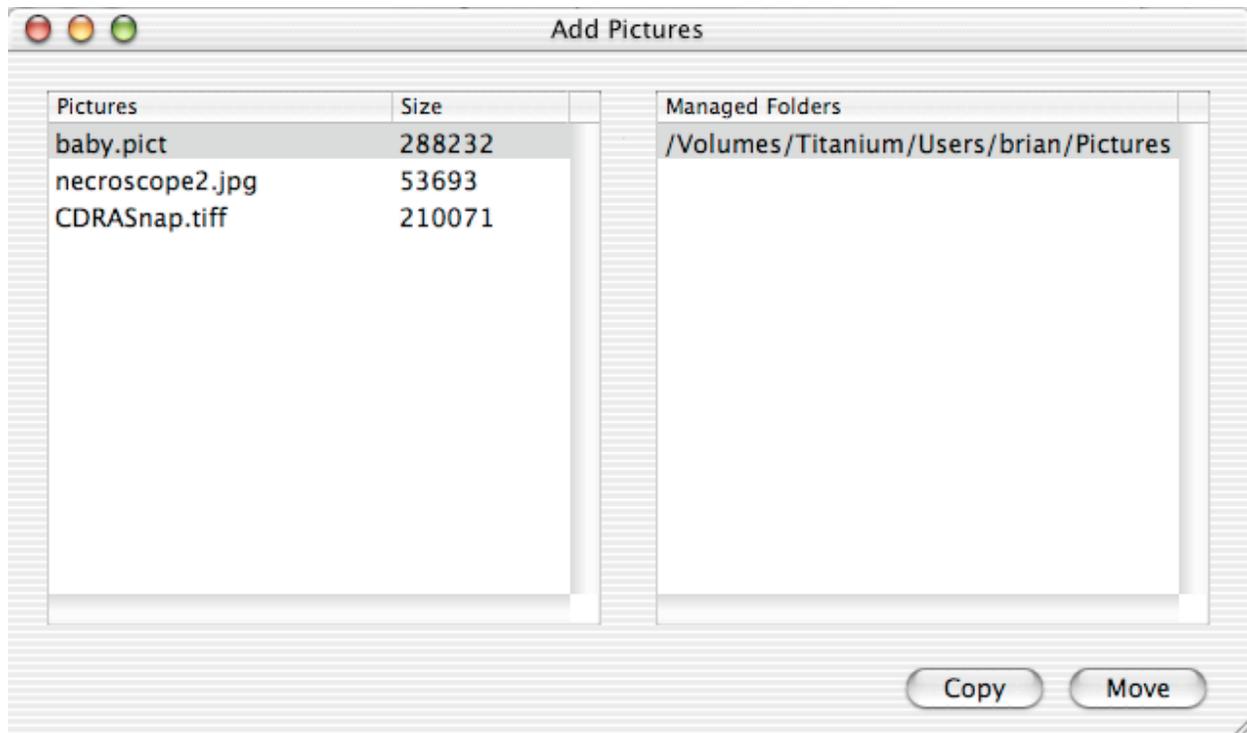
When *ChangeDesktop Server* (Section 4.1) is running, you can add pictures to any *Managed Folder* (or sub-folder) directly from *ChangeDesktop*. To do this, drag any number of pictures from the Finder onto *ChangeDesktop*'s Dock icon (Figure 5.3). This will open the window shown in Figure 5.4 from which you can move or copy the dropped pictures.<sup>1</sup>

<sup>1</sup>Any dropped files that are not valid picture formats will be ignored.

Figure 5.3: Dragging pictures to the Dock icon.



Figure 5.4: Add Pictures window.



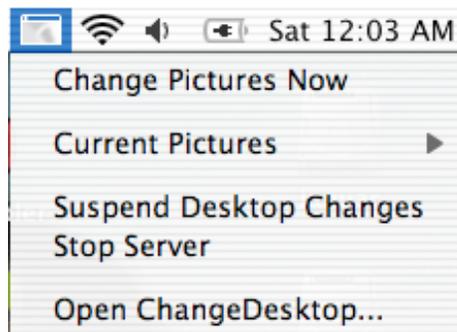
# Chapter 6

## The ChangeDesktop Menu Extra

*ChangeDesktop* includes a system wide menu that duplicates some of the functionality found in the *ChangeDesktop* application. The menu is shown in Figure 6.1. See Chapter 4, and Section 5.2.2 for more information on the features available from this menu.

One extra feature to note, is that the file names listed in the Current Pictures menu will reveal the file in the Finder if they are clicked.

Figure 6.1: The Menu Extra.





# Chapter 7

## Using The Web As A Managed Folder

In Chapter 2 you learned how *Managed Folders* worked. *ChangeDesktop* also allows you to use the Web as a *Managed Folder*. This feature is known as *Web Pics* and you access it by clicking on the *Network* tab in the main window and then on the *Web Pics* tab. The *Web Pics* tab is shown in Figure 7.1.

*Web Pics* allows you to enter a URL that *ChangeDesktop Server* will use to periodically query for an image. URL's must point to an image and not a Web page. *Web Pics* only downloads images; it does not know how to handle Web pages that reference images. You can use a URL that points to any image, but the best URL's to use are those that point to WebCams or some other image that is periodically updated.

Any image downloaded by *Web Pics* is automatically available for selection has a Desktop picture.

### 7.1 Adding a URL

Before adding a URL, you must enable *Web Pics* by checking *Enable Web Pics*. Once you have enabled *Web Pics*, you can add a URL by clicking on the *Add Host* button. This will create a new entry in the *Hosts* table where you can enter a name (this is simply a label to make differentiation of URL's easy for you) and a URL to an image on the Web. The *Hosts* table is shown in Figure 7.2 with several URL entries.

#### 7.1.1 Automatic URL Updates

*ChangeDesktop* will automatically check all enabled URL's for new images using the time interval specified by the *Check For Updates Every XX minutes* value.<sup>1</sup> The default update interval is thirty (30) minutes.

---

<sup>1</sup>Separate values for each URL are not supported

Figure 7.1: The Web Pics tab.

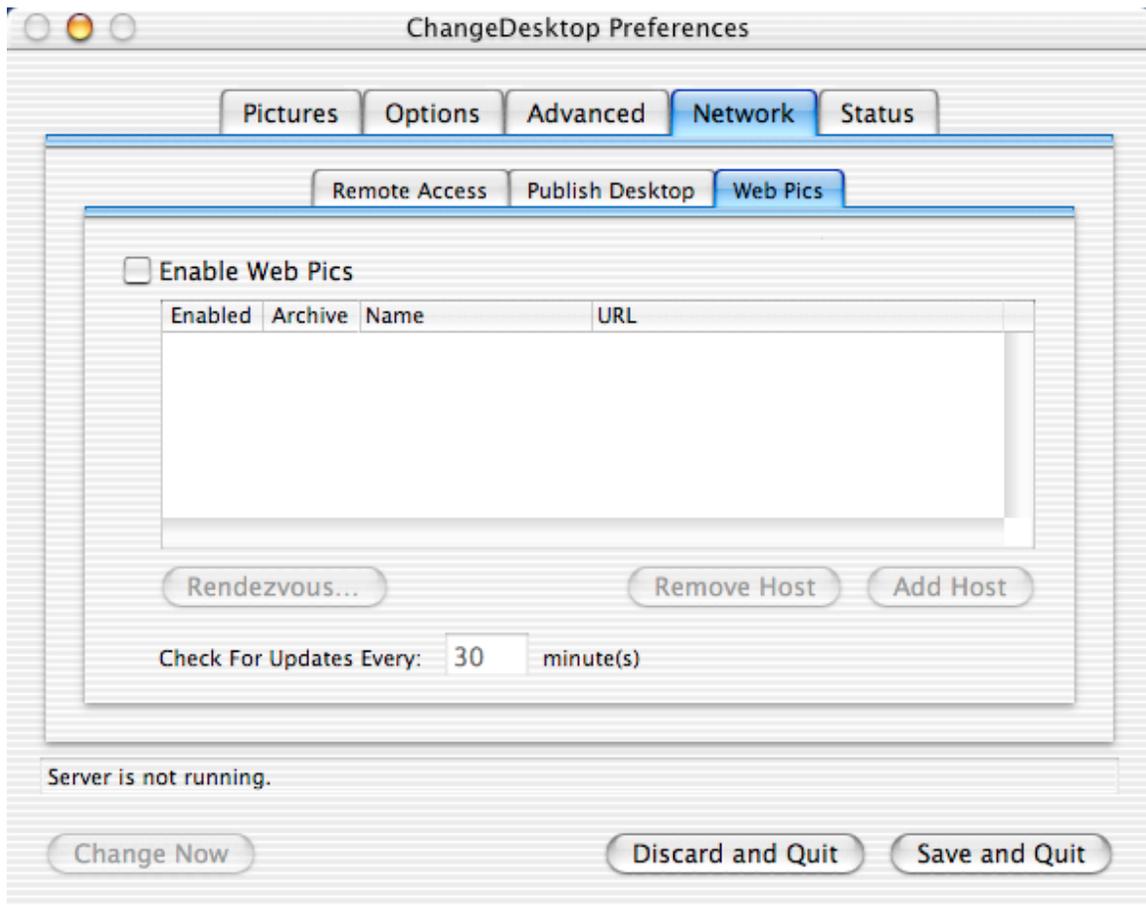


Figure 7.2: The Web Pics tab with URL entries..

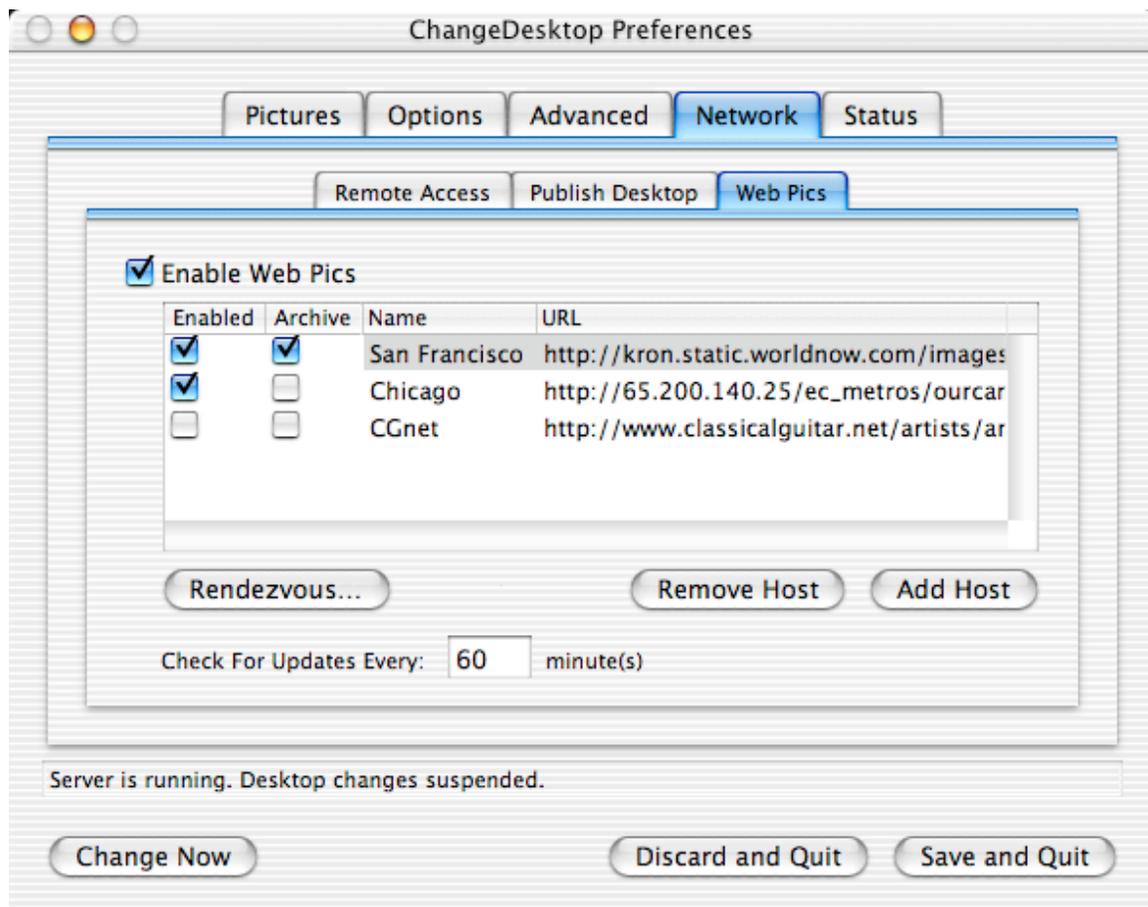
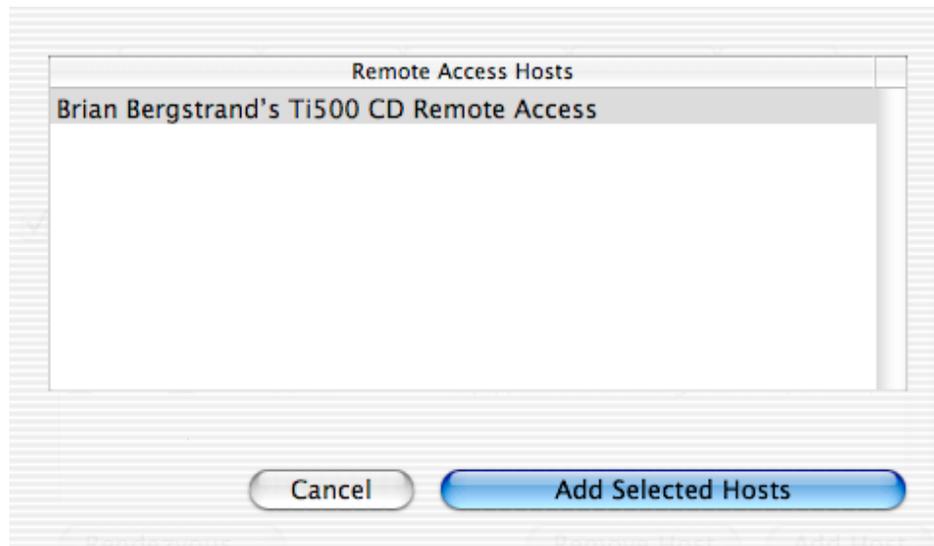


Figure 7.3: The Web Pics Rendezvous window.



## 7.2 Archiving Images

By default, *Web Pics* will simply erase previous images that have been downloaded and replace them with newer versions. However, by checking the Archive box for a URL, you can permanently save images downloaded from that URL.

## 7.3 Removing a URL

You can permanently remove a URL by selecting it (or Command clicking to select multiple entries) and then clicking the Remove Host button. To temporarily disable a URL, un-check the Enabled button next to that URL.

## 7.4 Rendezvous Support

If you are running Mac OS X 10.2, you can use Rendezvous to find *ChangeDesktop Remote Access* servers (Chapter 8) on your local network. This will allow you to use images that other *ChangeDesktop* users are sharing. When you click the Rendezvous button in the Web Pics tab the window in Figure 7.3 will be shown. *ChangeDesktop Remote Access* servers will automatically be found and shown in this window. You can select any host listed in the window and then click the Add Selected Hosts button to add them to the *Web Pics* Hosts table.

# Chapter 8

## Sharing Your Pictures With Others

*ChangeDesktop* allows you to share your Desktop pictures with others using the Internet. *ChangeDesktop* includes a built-in mini HTTP server known as *Remote Access*. When this server is active, Internet users can connect to your machine using any Web browser to view your current Desktop picture.

### 8.1 Configuring Remote Access

The *Remote Access* configuration window is shown in Figure 8.1. Before using *Remote Access*, you must enable it. Check the **Enable Remote Access** box.

#### 8.1.1 The Connection Port

*Remote Access* can use any TCP port higher than 1024, but lower than 65535 to listen for connections. The default port is 5000. Since Web browsers expect a default port of 80 for web servers, when giving out your Internet address so others can access your *Remote Access* server you must make sure to append the port number to the address. An example IP address using the default port would be:

```
http://192.168.1.100:5000/
```

And an example DNS address would be:

```
http://mymachine.corp.com:5000/
```

#### 8.1.2 Restricting The Number of Connected Users

You can restrict the maximum number of **active** connections to your machine thereby limiting the resources (and bandwidth) used by *Remote Access*. Every active connection consumes one Mac OS X thread and some amount of memory. The default number of ten (10) connections should be enough for all but the most heavily accessed machines.

Figure 8.1: The Remote Access configuration window.

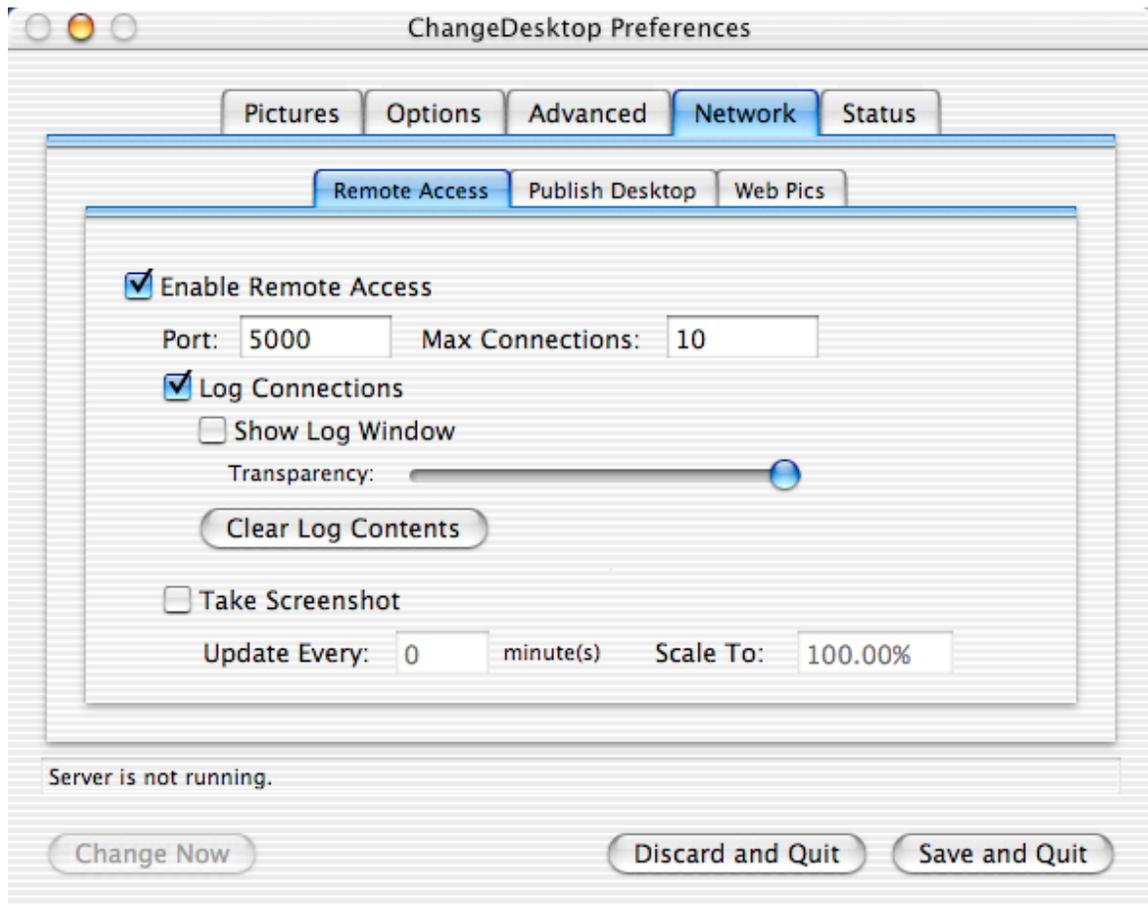


Figure 8.2: The Remote Access Log window.



## 8.2 Connection Logging

When you check the Log Connections box, the *Remote Access* server will log all resource requests from clients to a file in your Library/Logs folder. The log entries are in the Extended Apache format which makes it easy to analyze the file using any number of third party log analyzers.<sup>1</sup>

### 8.2.1 Clearing the Log File

You can clear the log file of all current entries by click on the Clear Log Contents button.<sup>2</sup> When the Server is running, you must use this button instead of deleting the log file in the Finder, otherwise you risk corruption of the log file.

### 8.2.2 The Remote Access Log Window

When Connection Logging is active, you have the choice of monitoring the log file in real time. As the Server makes an entry in the log it will automatically be entered in the Remote Access Log window.

Using the Transparency slider, you can control the degree of transparency in the log window. From completely opaque, to virtually transparent. A partially transparent Remote Access Log window is shown in Figure 8.2.

<sup>1</sup>Such as Analog. <http://www.summary.net/soft/analog.html>

<sup>2</sup>This button will also clear the contents of the Remote Access Log window when it is active.

## 8.3 Using Screenshots

By default, *Remote Access* will show the currently active Desktop picture when a client connects to your machine. By checking the **Take Screenshot** box you are telling the *Remote Access* server to take a screenshot of your desktop and use that in place of the actual Desktop picture. A Desktop screenshot will show all active windows (from all programs) on your Desktop, including the Mac OS X Dock and Menu bar. The original Desktop picture will be offered for download via a clickable URL link.

When a screenshot is taken, the Server will play a camera shutter sound so you know that a screenshot was made. If you prefer to not have the sound played, type the following into a *Terminal* window:

```
defaults write net.classicalguitar.brian.ChangeDesktop \  
RemoteAccessSnapShotNoSound -bool true
```

### 8.3.1 Screenshot Updates

When active, the Screenshot mode of *Remote Access* will update the Desktop screenshot every time the Desktop picture changes. If you have automatic Desktop picture changes disabled (Chapter 3) then you will have to enter an update interval in order for Screenshots to be available. Please note, that if automatic Desktop picture changes are active, setting this interval to a higher number than the change interval will not have the desired effect. The Screenshot will always be updated when the Desktop picture is changed by *ChangeDesktop*.

### 8.3.2 Screenshot Scaling

You can have *Remote Access* scale the resolution of the screenshots it takes by entering a number less than 100 but greater than 10 into the **Scale To** field. Scaling is done proportionately. For instance, if your monitor has a resolution of 1024x768 and you had entered a scaling factor of 50%, then the resulting screenshot resolution would be 512x384.

## 8.4 Other Information Available Via Remote Access

The *Remote Access* server also makes information other than your current Desktop picture available to client connections. The additional information consists of Mac OS X kernel information: including process stats., virtual memory stats., and version numbers. Hardware information: including CPU type and speed, bus speed, and the amount of physical memory. Finally, *Remote Access* will display the currently playing iTunes song providing your system meets these requirements: Mac OS X 10.2 or higher with the Finder and iTunes running.

# Chapter 9

## Publishing Your Pictures

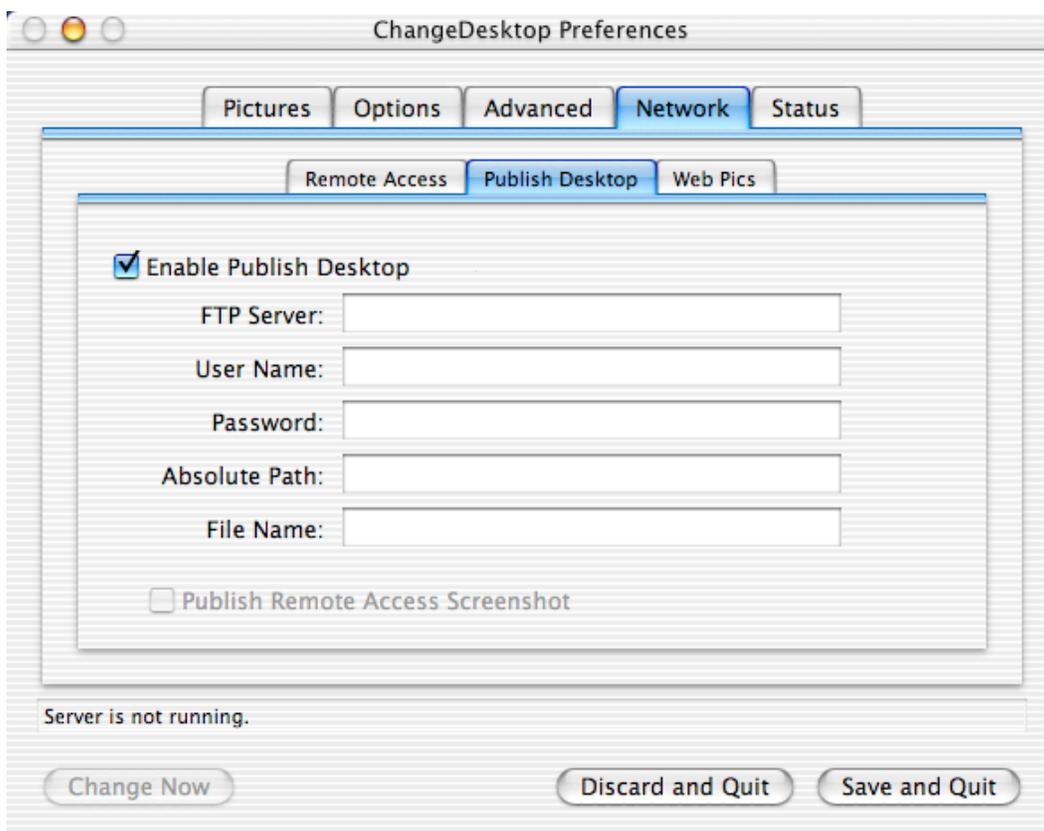
In addition to sharing your Desktop picture (and other information) in real time via *Remote Access* (Chapter 8), *ChangeDesktop* offers a more passive approach to sharing your Desktop pictures.

By enabling the *Publish Desktop* feature (Figure 9.1) you can have your current Desktop picture uploaded to an FTP server every time the Desktop picture is changed by *ChangeDesktop*.

The configuration of *Publish Desktop* is fairly self-explanatory, but two features bear mentioning.

1. If you leave the **File Name** field empty, the file name of the current Desktop picture will be used when uploading the file.
2. By checking the **Publish Remote Access Screenshot** box, you are telling *ChangeDesktop* to upload the current *Remote Access* screenshot instead of the current Desktop picture. As you may have suspected, this option requires that the *Remote Access* server is enabled.

Figure 9.1: The Publish Desktop configuration window.



**Part III**

**Appendices**



# Appendix A

## Other Resources

### A.1 Donations

Some people have expressed an interest in making a donation to further *ChangeDesktop's* development. If you are interested in making a donation, please visit [my Kagi Payment page](http://order.kagi.com/?VN&S) (<http://order.kagi.com/?VN&S>). A minimum of US \$10 is requested because of the fees Kagi charges. Please don't take this as a request for donations. Make a donation only if you want to, not because you feel you have to.

### A.2 Desktop Pictures On The Web

[My own desktop pictures.](http://www.classicalguitar.net/brian/software/changedesktop/desktops/)

(<http://www.classicalguitar.net/brian/software/changedesktop/desktops/>)

[The Art of Greg Martin](http://www.artofgregmartin.com/) has some of the best space fantasy artwork I have ever seen. Highly recommended.

(<http://www.artofgregmartin.com/>)

[Digital Blasphemy](http://www.artofgregmartin.com/) has some good 2D and 3D fantasy work, as well as user submissions.

(<http://www.artofgregmartin.com/>)

[Mandolux.com](http://mandolux.mine.nu/desktops/index.html) has a huge collection of desktop pictures of varying styles.

(<http://mandolux.mine.nu/desktops/index.html>)

[Deviant Art](http://www.deviantart.com/). Lots of good (and some not so good) desktop pictures.

(<http://www.deviantart.com/>)

[MacDesktops](http://www.macdesktops.com/) is a great place to look for additions to add to your collection of desktop pictures.

(<http://www.macdesktops.com/>)

[Space.com](http://www.space.com/) has a nice collection of space related images (once you get past their crappy homepage).

(<http://www.space.com/>)

[Tiger's pics](http://www.edu.lahti.fi/tiger/pics/supermodels/) contains a nice selection of supermodel images.  
(<http://www.edu.lahti.fi/tiger/pics/supermodels/>)

# Appendix B

## Known Limitations

The Remote Access and Publish Desktop features only work with the picture on the main monitor. Pictures on any other monitor will be ignored.

The Remote Access service will serve any file that is in a managed folder (or any sub-folder of a managed folder).<sup>1</sup> No validation is done to make sure the file is actually a valid picture. This could be a security hole if you mix your picture files with other documents. Remote Access will not give out folder listings, so an attacker would need to know the full path to a document, but it would still be prudent to keep your pictures separate from all other documents.

*ChangeDesktop* can not control the background color of the Finder's Desktop (this will show when certain Finder placement options are chosen, in particular **Center**). This color seems to be fixed to blue and there is no setting, hidden or otherwise, to change this color.

If you have multiple monitors, you may run into a problem with the Finder where it becomes "stuck" and won't allow you to update the desktop. This is a problem with the Finder and not *ChangeDesktop*. This problem can also occur with the Desktop panel in System Preferences. *ChangeDesktop* may be more likely to stimulate the problem though because it will generally update the desktop more frequently. The consensus is that a corrupt image or an image type that the Finder does not know how to handle will cause this problem. If you run into this problem, delete the `com.apple.desktop.plist` and `com.apple.finder.plist` files located in your home folder in the Library/Preferences folder. Then log out (or force quit the Finder) and the problem should go away. This problem can also show up if you only have one monitor, but it is much less likely to happen.<sup>2</sup>

Xounds 1.1.2 and earlier conflict with *ChangeDesktop*. Please upgrade to version 1.2 or later.

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<sup>1</sup>Except hidden files or folders. Hidden files begin with a period (i.e. ".DS\_Store").

<sup>2</sup>It seems Mac OS X 10.2 "Jaguar" has fixed the majority of these problems.



# Appendix C

## Trouble Shooting

If you are having a problem with ChangeDesktop, go to <http://sourceforge.net/changedesktop/> and open a bug report. Include all of the following if you can.

A detailed description of the problem and how to reproduce it.

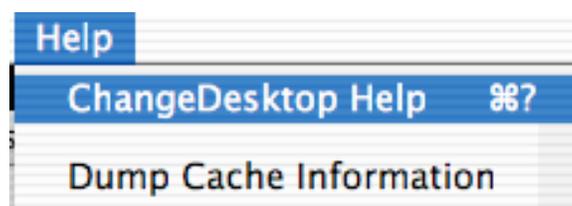
A copy of the *ChangeDesktop* preference file. This is located in your home folder at `Library/Preferences/net.classicalguitar.brian.ChangeDesktop`.

A dump of the Server's (Section 4.1) internal cache. To get this, choose **Dump Cache Information** from *ChangeDesktop's* **Help** menu (Figure C.1). This will create a file in your home folder in the form of `cd_cachedump_*.*.txt` where `***` is a number (i.e. `cd_cachedump_1.10804.txt`). You may delete this file after you send the e-mail.

Your system version as reported in the About This Mac window.

Any crash cogs related to *ChangeDesktop*. These logs are located in the `Library/Logs` folder in your Home folder.

Figure C.1: The Help menu.





# Appendix D

## Frequently Asked Questions

### Can Remote Access use PNG images instead of JPEG images for its screenshots?

Yes. This feature cannot be enabled via the *ChangeDesktop* GUI, but can be enabled via the *Terminal* application.

From a *Terminal* window, type the following (the back slash indicates this multiple line command is to be interpreted as one line):

```
defaults write net.classicalguitar.brian.ChangeDesktop \  
RemoteAccessSnapShotUsePNG -bool true
```

### What is the Publish Desktop error '60'?

Error '60' means a timeout occurred. If this was a connection timeout, then the server may be down or the address could not be resolved. On the other hand, a connection may have been made but the server may be responding to requests too slowly. In this case, you can raise the *Publish Desktop* internal request timeout.

The default timeout is 10 seconds. This is also the minimum. To raise the timeout enter the following command in a *Terminal* window:

```
defaults write net.classicalguitar.brian.ChangeDesktop PublishTimeout 30
```

This example sets the internal timeout to thirty (30) seconds, but you can raise this as high as three hundred (300) seconds or five (5) minutes.



# Glossary

**BSD** Berkley Software Distribution – The Unix core of Mac OS X.

**Disk Image** A virtual hard disk that is the most popular form of distribution of Mac OS X applications.

**GUI** Graphical User Interface

**HTTP** Hyper Text Transfer Protocol – This network protocol is the *lingua franca* of the World Wide Web. It allows Web Browsers and Web Servers to communicate with each other.

**Internet** The network that connects computers all over the world.

**Mac OS X** Apple’s next generation operating system.

**Mac OS X Bundle** A special folder that the Mac OS X Finder treats as a file. You cannot normally see the contents of a Bundle from the Finder (or any other GUI application). Bundles are also referred to as Packages.

**Rendezvous** Apple’s technology for automatic host discovery on a network. It obviates the need for the user to know the address of a host before using its services.

**TCP** Transmission Control Protocol – The network protocol that ensures reliably delivery of Internet packets.

**URL** Universal Resource Locator – A string that forms the address of an internet resource (HTML page, FTP file, etc).