

# Panther Cache Cleaner

## Mac OS X Maintenance Software

© 2002, 2003 by Northern Softworks. All rights reserved.

### **Introduction**

Panther Cache Cleaner (PCC) is a utility designed to provide easy access to numerous OS X maintenance and utility options. When used in combination with OS X's disk repair tools, it can be very effective in curing many system problems. Panther Cache Cleaner helps simplify system maintenance chores with an easy point and click interface to many OS X functions. PCC Documents and the PCC Engine can help maintain system health by providing set and forget automation of common maintenance chores. Used as directed, Panther Cache Cleaner can be a powerful tool to keep OS X running smoothly.

### **System Requirements**

Panther Cache Cleaner requires Mac OS X 10.1.x through 10.3.

### **Installation**

Panther Cache Cleaner has no extensions or control panels, so it is very system friendly. Installation is simple. The application is distributed on a self-mounting Disk Copy disk image which can

be opened with Disk Copy or Stuffit Expander. Just drag the Panther Cache Cleaner folder from the Panther Cache Cleaner disk to your hard drive. You may place the Panther Cache Cleaner folder anywhere on your hard drive(s) that you like.

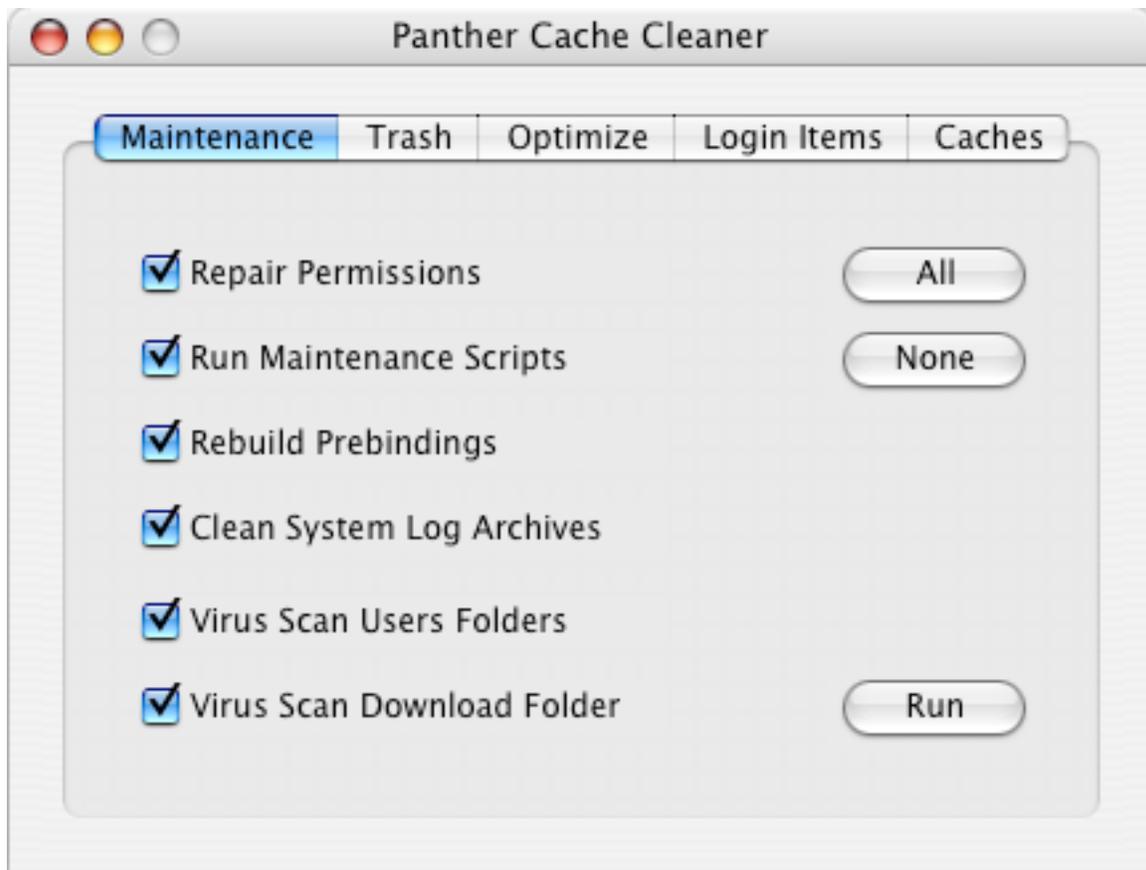
## **Removing Panther Cache Cleaner**

Since Panther Cache Cleaner is an application, removal is simple. However, you must disable “Automatic Operation.” If the application demo has expired, “Automatic Operation” will be disabled for you. Once “Automatic Operation” has been disabled, simply drag PCC to the Trash. If you wish to be thorough, you may also delete the PCC Preference files.

## **Limitations**

Not all functions and features will be available on all versions of the operating system. Panther Cache Cleaner (PCC) may issue a BSD "reboot" command that will unceremoniously restart your machine. **ANY UNSAVED CHANGES TO OPEN DOCUMENTS WILL BE LOST.** Be sure to quit open applications and save open documents before using this application. Once you clean the caches or the Finder, you cannot go back. Be sure this is what you wish to do.

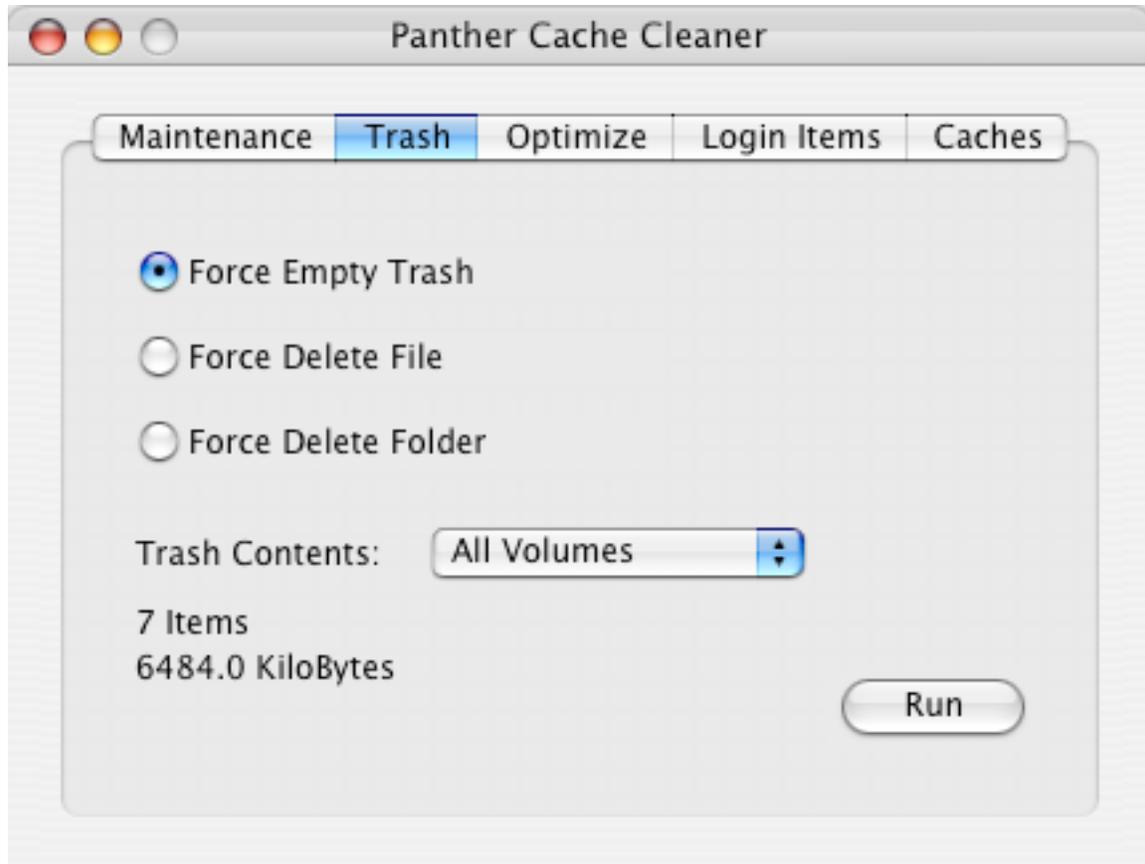
## **Operation - Maintenance**



Panther Cache Cleaner offers some powerful system maintenance features to help keep OS X running smoothly. They are readily available by clicking the Maintenance tab on the PCC window. You may select as many options as you need. Repair Permissions is by far the most important thing you can do - feel free to do it often. Run Maintenance Scripts will run the housekeeping cron scripts that are supposed to run at night (but usually don't). Rebuild Prebindings will relink all of your application libraries which after a restart, may improve your system performance. Clean System Log Archives is a housekeeping task that will reduce the build up of system logs. If you have Virex installed, PCC can also perform some virus scanning. After you have selected your desired tasks, click the Run button to perform the tasks. Remember that all of the

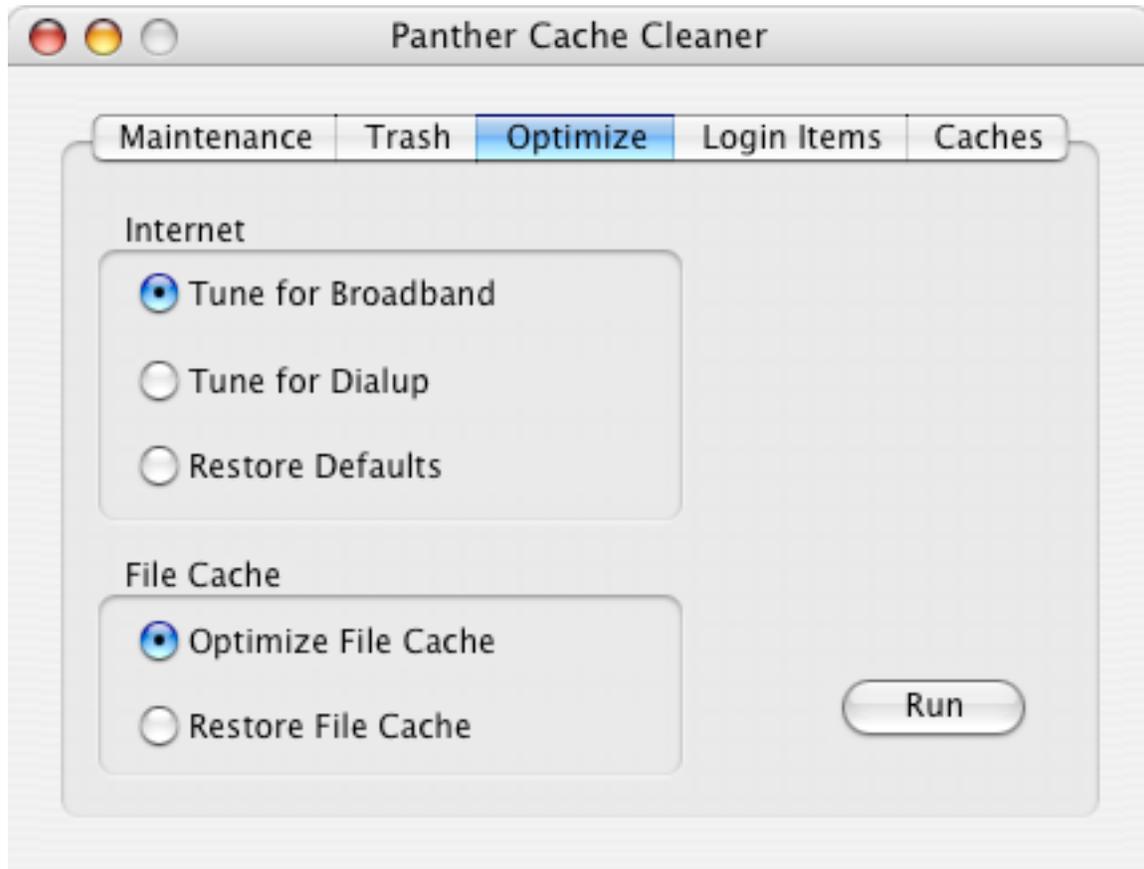
above maintenance tasks can be automated and performed at regular intervals. See the Automated Maintenance and PCC documents sections for details.

## Operation - Trash



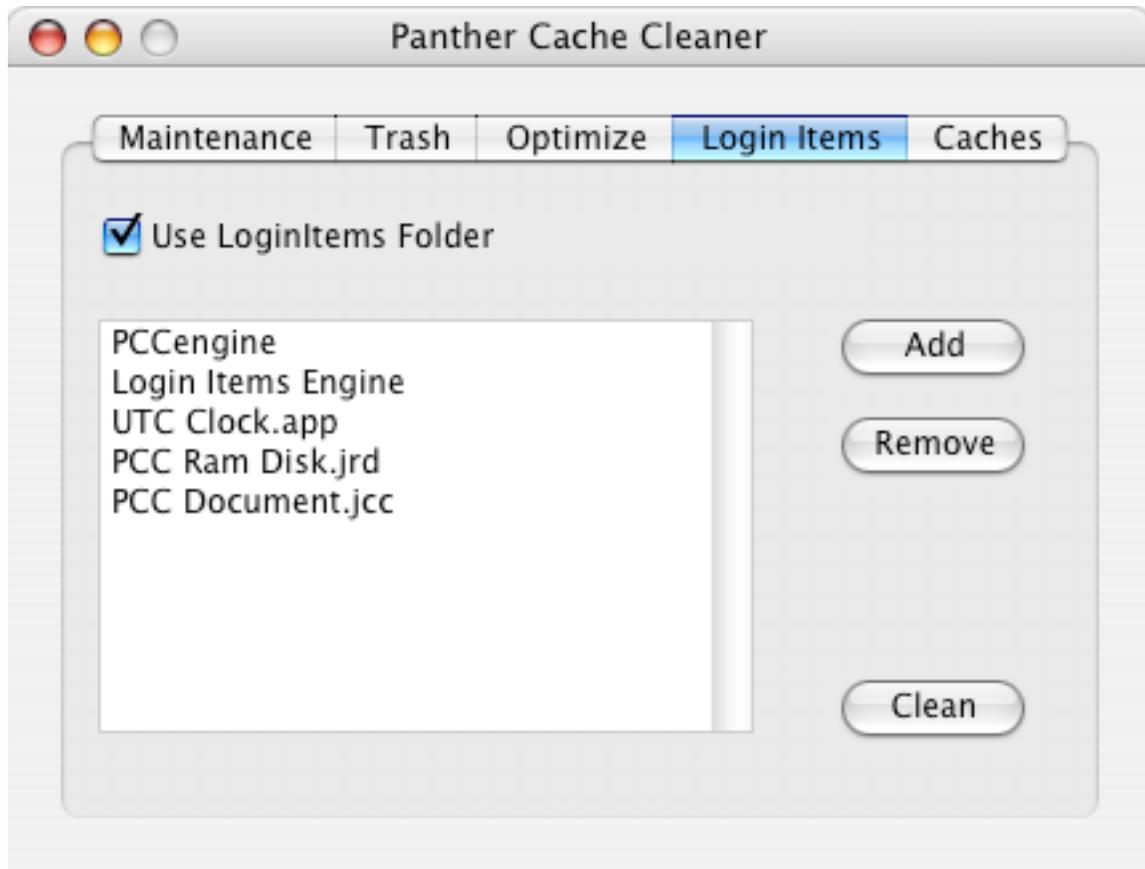
Panther Cache Cleaner offers some handy trash related functions which can be accessed by clicking on the Trash tab. In this window, you can see how much disk space is used by the trash on each mounted volume. You may force empty the trash, force delete a file, or force delete a folder by selecting the appropriate option. Click the Run button to perform your desired task.

## Operation - Optimize



Panther Cache Cleaner offers some optimization features which may help improve the speed of your system and internet connection. They are accessed by clicking the Optimize tab on the PCC window. You may optimize your internet settings for best performance on the type of connection you have. PCC can optimize the “maxvnodes” setting, effectively enlarging the file cache and possibly improving performance. To do so, select Optimize File Cache. Click the Run button to perform your desired tasks. You may undo the changes you have made by selecting the appropriate Restore option and clicking the Run button.

## Operation - Login Items

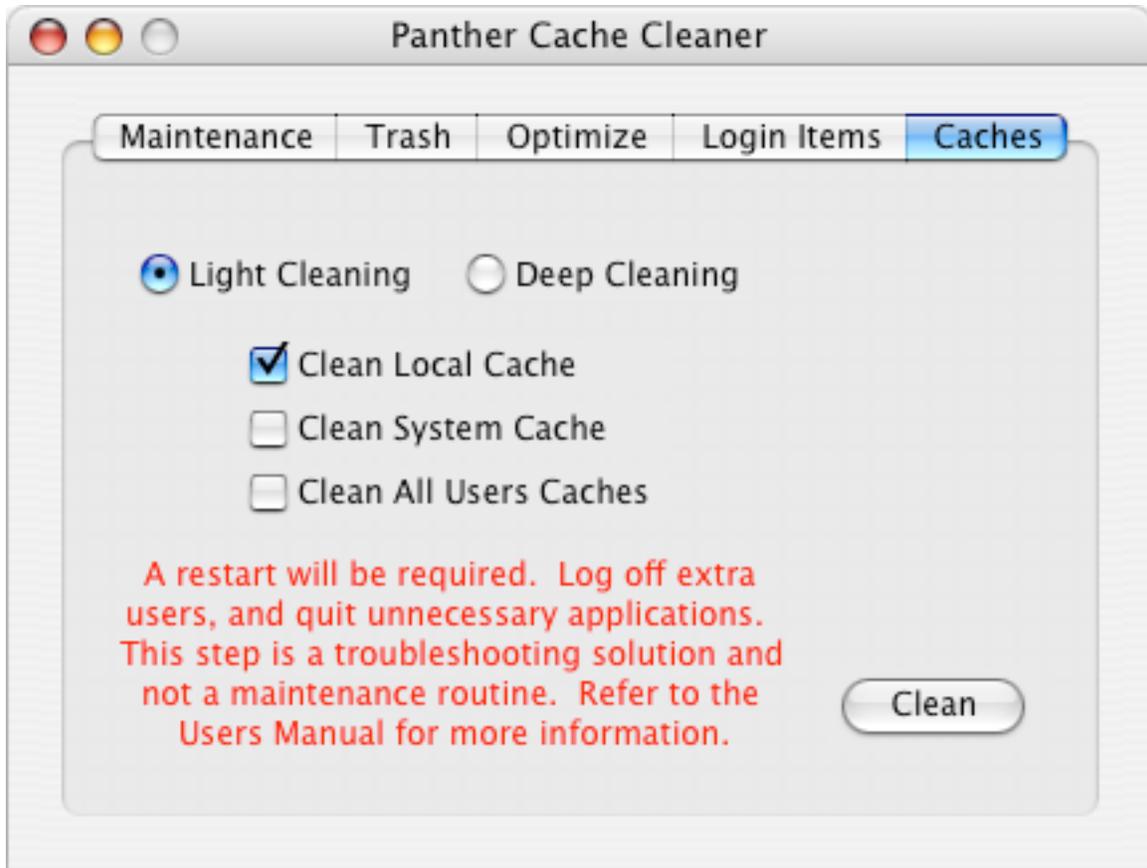


Panther Cache Cleaner offers some handy Login Items management tools. To help ensure the fastest possible startup time, PCC can scan your login items and clean out duplicate and orphaned entries. Click the Clean button to do this, and follow the prompts as the cleaning proceeds. If you remember the Startup Items folder of the classic Mac OS, you can enable this behavior under OS X by checking the “Enable Login Items Folder”. Doing so will create a Login Items folder in your home directory. Any documents, folders, apps, aliases, etc. in this folder will automatically be launched at login time. You

can remove Login Items by selecting it in the list and clicking the remove button. Conversely, you can add items by clicking the Add button. If you have enabled the Login Items folder, items will be added to this folder. If not, they will be added to your System Preferences Login Items.

### **Operation - Cache Cleaning**

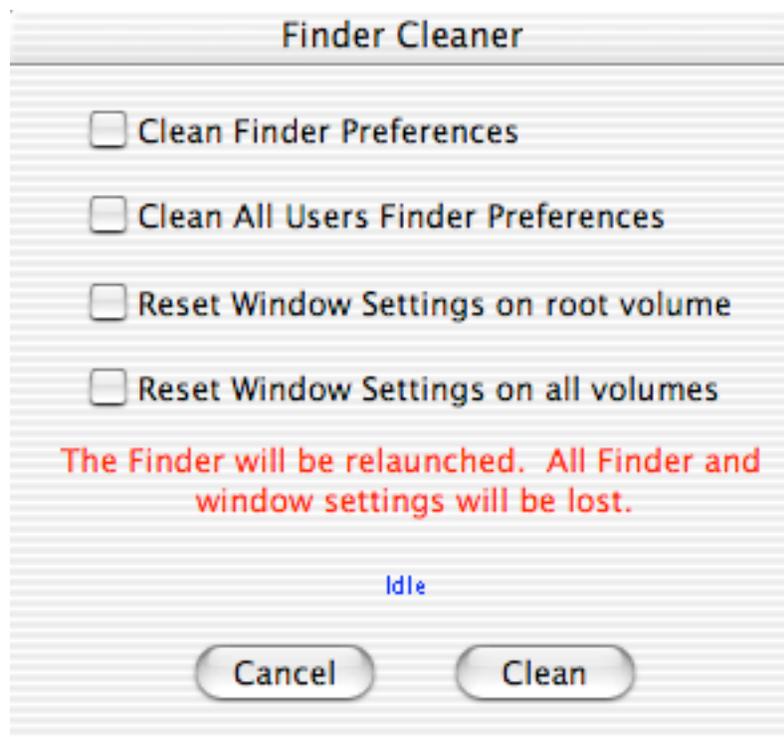
Cache cleaning can cure many types of strange system behavior. However, it should only be done to address specific problems. There is absolutely no need or benefit to regularly deleting the system caches. If you are experiencing random application crashes, difficulty with System Preference settings, or internet settings, cache cleaning may help you. Before using PCC, exhaust all of the obvious system repair options. You should boot from your Jaguar install disk and run Disk First Aid. You may also need to run the repair permissions. If, after these steps, you decide you need to clean your caches, then close out all unnecessary applications, shutdown classic, and log off any extra users. PCC may issue a BSD "reboot" command that will unceremoniously restart your machine. **ANY UNSAVED CHANGES TO OPEN DOCUMENTS WILL BE LOST.**



You have a selection of 2 options. You should try the Light Cleaning option first. If you continue to have odd system behavior, then try the Deep Cleaning option. PCC will clear the caches located in your home directory, the caches located in the system directories, or the caches in all of your users home directories. You may select any or all of them as you see fit. Any selections except "Clean Local Cache" will require an administrator password. Click the Clean button, and the caches will be deleted, and the system will then reboot. This may be a BSD "reboot" command so **ANY UNSAVED CHANGES WILL BE LOST**. Be sure to close all applications before doing your cleaning.

### **Operation - Finder Cleaning**

The Finder Cleaner window can cure many types of strange Finder behavior. If you are experiencing difficulty with Finder Preference settings, or strange Finder window behavior, Finder cleaning may help you. Before using PCC, exhaust all of the obvious system repair options. You should boot from your Panther install disk and run Disk First Aid. You may also need to run the repair permissions. If, after these steps, you decide you need to clean your Finder, then close out all unnecessary applications, shutdown classic, and log off any extra users. PCC will delete many Finder preferences files. **All of your Finder preferences and Window settings will be purged.**

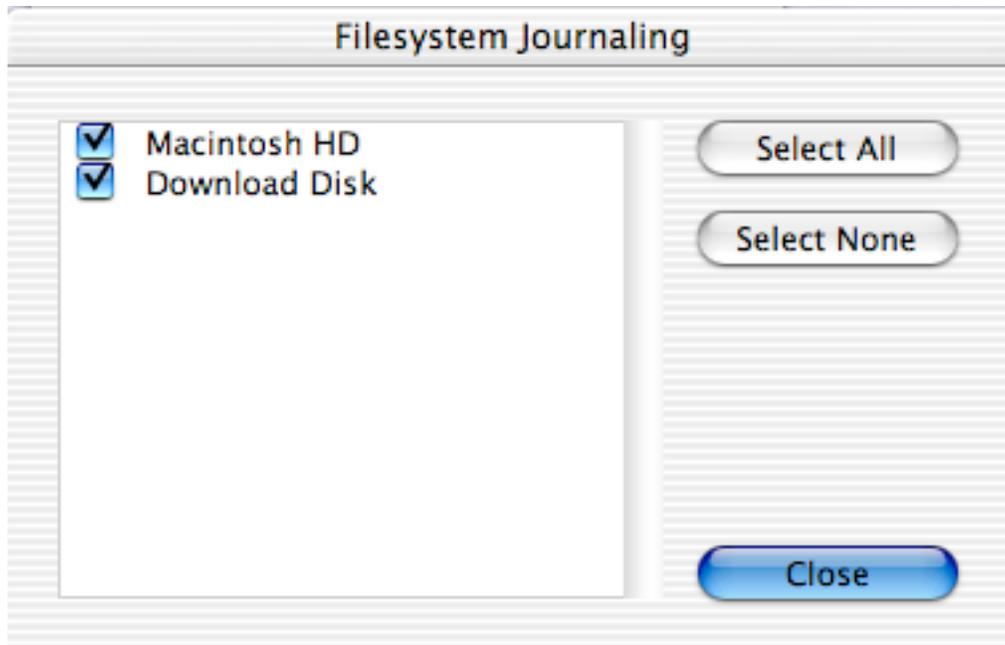


The Finder Cleaner window is opened by selecting “Clean Finder” from the Maintenance menu. It offers two categories of cleaning. You may delete the Finder preferences in your home

directory by selecting the “Clean Finder Preferences” box. You may also delete the Finder preferences in all users home directories. You may also reset Window settings. Each folder’s window and icon settings are stored in an invisible file named “.DS\_Store”. Deleting this file will reset a window to its default position and icon arrangement. The two “Reset Window Settings” boxes will delete ALL occurrences of the “.DS\_Store” files on the desired disks. You may also choose to delete single “.DS\_Store” files by selecting “Delete .DS\_Store File” from the Maintenance menu. In the resulting dialog, select a folder. You may also accomplish this by dragging and dropping a folder on to the Panther Cache Cleaner application icon. After performing the desired cleaning options, the Finder will be quit and relaunched. **All of your Finder preferences and Window settings will be purged.**

### **Operation - File System Journaling**

Panther Cache Cleaner allows convenient activation of Panther’s File System Journaling feature. Select “FileSystem Journaling...” from Special menu. You will be prompted for your password and then be shown the following window:



This window will display all HFS+ volumes that are capable of supporting file system journaling. Check any volumes in the list to enable journaling for that volume. Close the window to save your changes.

### **Operation - Single User Mode**

Panther Cache Cleaner provides an easy menu option to drop your machine in to the single user mode command prompt. You should rarely need to do this. About all you will want to do in Single User Mode is issue a "fsck -y" command to check and repair the file system. Issue the "fsck -y" command until it reports all is well. To leave Single User Mode, type "reboot". Remember in Single User Mode, you have root access to the file system. **If you do not know what you are doing, do not use this feature. Do not issue any other commands except "fsck -y" or "reboot". YOU CAN DO MAJOR DAMAGE TO YOUR SYSTEM.** To enter Single User Mode, select "Single User

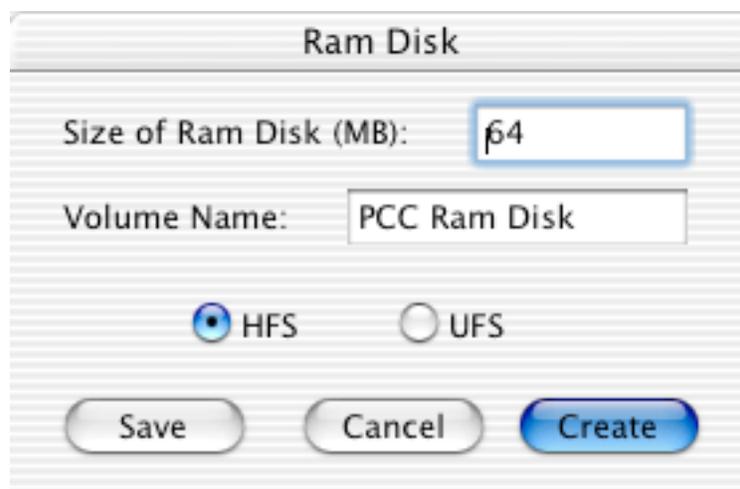
Mode...” from the Special menu. This will issue a BSD “shutdown now” command so **ANY UNSAVED CHANGES OR WORK WILL BE LOST**. Be sure to close all applications before doing using this feature.

### **Operation - Internet Settings**

Panther Cache Cleaner can adjust your internet settings to optimize online performance. To do this, just select your desired option from the Internet menu. Select “Restore Defaults...” to undo these changes. You may also renew your DHCP lease by selecting the appropriate option.

### **Operation - Ram Disk**

Panther Cache Cleaner allows you to create one or more Ram Disks. These function just like high speed regular disk drives. To access the Ram Disk features, select “Create Ram Disk...” from the Special menu.



You may enter the name and size of your Ram Disk in the appropriate fields. Select the file system you desire by clicking the appropriate radio button. You may save your Ram Disk to a file by selecting “Save” from the File menu. Otherwise click the “Create” button to mount your new Ram Disk. If you saved this disk to a file, you may remount it at any time by using “Open” from PCC’s File menu, or double clicking the file in the Finder. Remember that Ram Disks offer only temporary storage. **Do not use a Ram Disk to permanently store important files or data.**

### **Operation - Miscellaneous**

Panther Cache Cleaner offers a few other useful features. PCC offers the ability to rebuild system prebindings. This will be more useful to 10.1 users as Panther does this automatically. However, doing it manually in Panther causes no harm, and may do some good. It will certainly have a placebo effect. PCC also offers the ability to manually run the maintenance scripts. OS X has a set of maintenance scripts that clear logs and temp files. They are supposed to run in the middle of the night. If you are in the habit of turning your machine off or letting it sleep while not in use, these scripts do not get run. With PCC, you may run them manually whenever you wish. PCC also allows you to delete Virtual Memory swap files to free up disk space. And under Panther (not available in 10.1.x), PCC can repair disk permissions on the root volume. Just select the appropriate option from the Maintenance menu. PCC can kill and restart the Finder and the Dock. Just select the

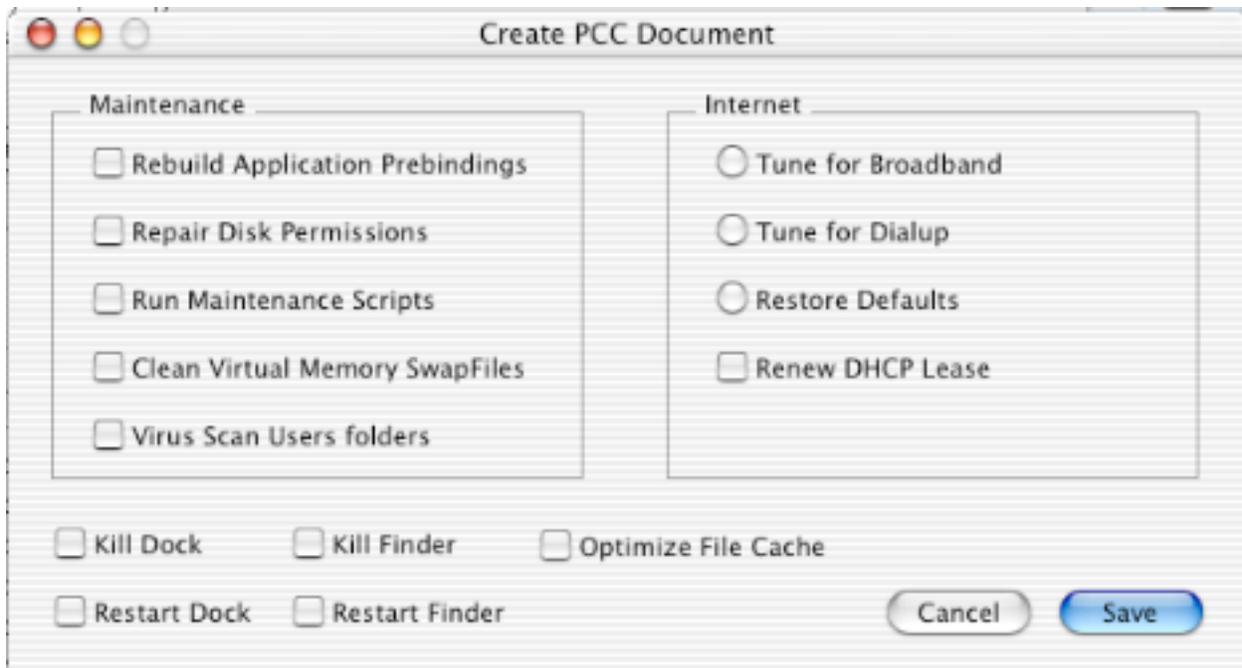
appropriate option from the Special menu. PCC can kill and restart OS X system daemons. Just select the appropriate option from the Special menu. PCC can rebuild the Services menu. Just select the appropriate option from the Maintenance menu. PCC can rebuild the locate database. Just select the appropriate option from the Maintenance menu. PCC can clean out the archived system logs to free up disk space. Just select the appropriate option from the Maintenance menu. PCC can optimize the “maxvnodes” setting, effectively enlarging the file cache and possibly improving performance. To do so, select “Optimize File Cache” from the Special menu.

### **Operation - Virus Scanning with .Mac Virex**

PCC can help protect from viruses by running the Virex command line virus scanner. Choosing “Virus Scan Users Folder” from the maintenance menu will launch the virus scanner and scan and clean all the Users folders. Choosing “Virus Scan Download Folder” from the maintenance menu will launch the virus scanner and scan and clean the Desktop and download folders as specified in the Internet Preferences. This can be particularly handy when used with PCC’s documents or Automatic maintenance. The PCC Engine can be configured to automatically scan downloaded files via the “Safe Folder” feature. Remember you must have the .mac version of Virex in order to use this feature. Also note that Virex and not PCC will handle the actual virus scanning and cleaning.

### **Operation - PCC Documents**

Panther Cache Cleaner allows you to create one or more PCC Documents. These documents can be launched from the Finder and allow for automation of a number of PCC's features. They are well suited for use in your Login Items. To create a PCC Document, select "New PCC Document..." from the File menu.

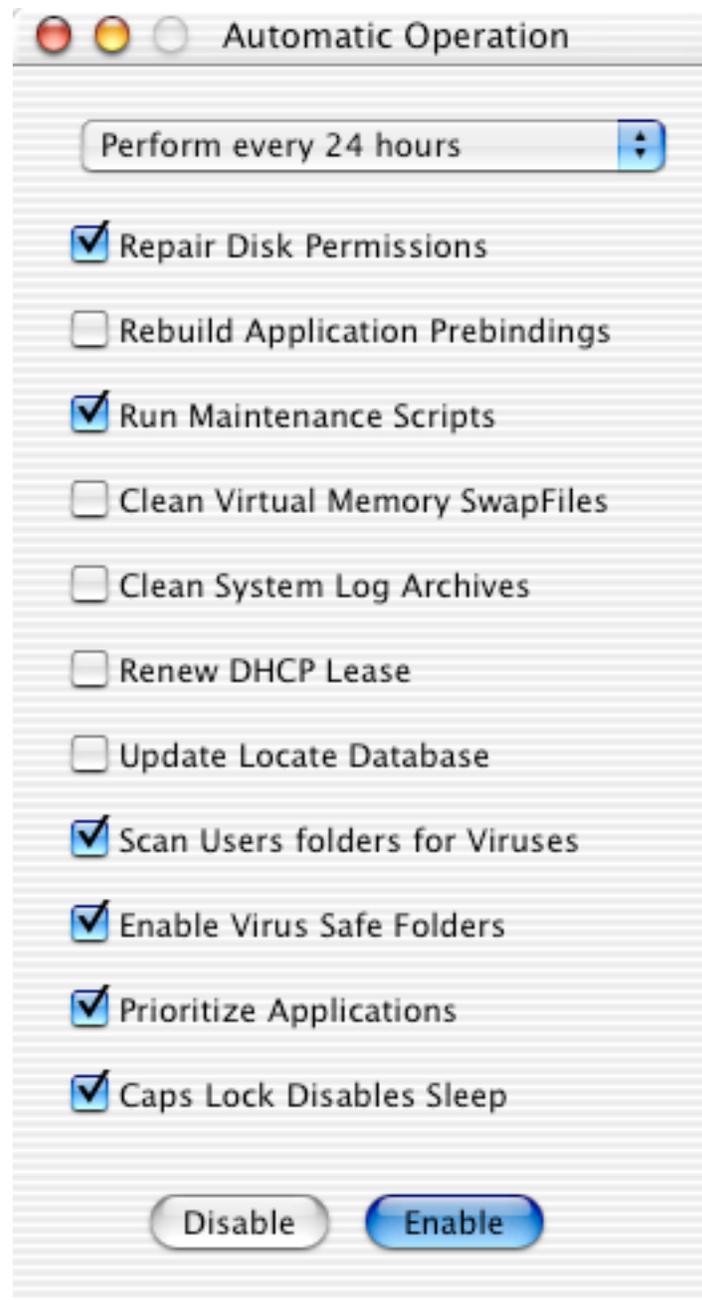


You may select as many options as you wish. These will automatically be performed each time this PCC Document is launched. To save your document, click the Save button. Enter a password, and give your file a name. You may place this file anywhere you wish. You may have as many commands run by your document as you wish, and you may create as many documents as you like.

### **Operation - Automatic Operation**

Panther Cache Cleaner allows you to automatically run

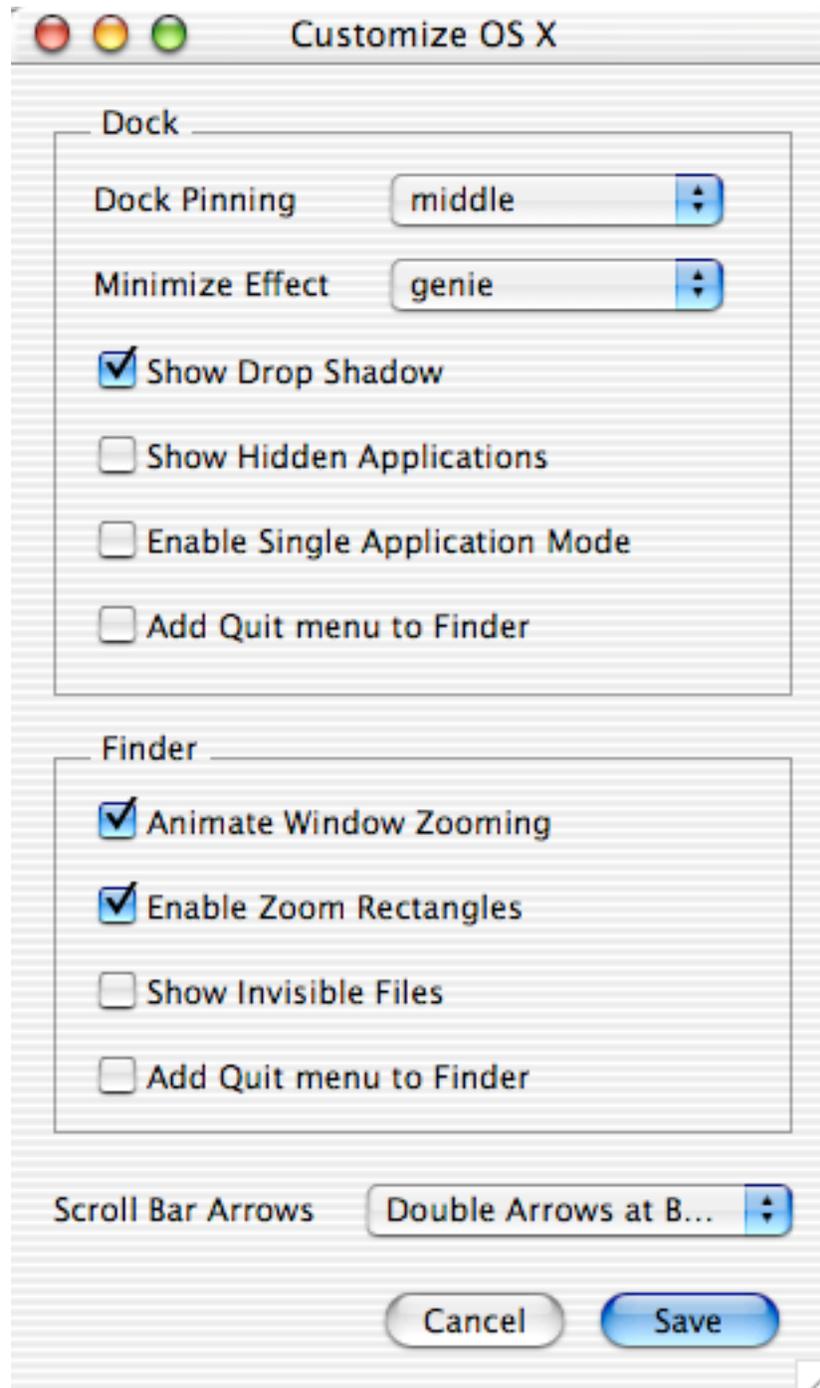
maintenance chores at defined intervals. This ensures that your system is kept healthy without any effort on your part. The PCC Engine also offers the ability to boost the priority of the frontmost application. This is done on the fly for you as you switch between applications. You may also choose to disable system sleep with the Caps Lock key. To activate the PCC Engine, select “Automatic Operation” from the Special menu.



Select as many options as you wish and set your maintenance interval. Click the Enable button and enter a password. Click the Disable button to turn this feature off.

## **Operation - Customizing OS X**

Panther Cache Cleaner can activate some hidden options of the Dock, Finder, and the OS. To activate this feature, select “Customize” from the Special menu.



Select the options you are interested in and hit the save button. When changing the scroll bar arrows, open applications will have to be restarted to see the changes. The Customize window always opens with the default options selected. This means you may restore your system to normal by clicking save without changing the selected options.

### **What Does PCC do?**

The program will delete certain cache information. Specifically:

OS X 10.2.x

Light Cleaning Option

/Library/Caches/com.apple.LaunchServices.LocalCache.csstore

~/Library/Caches/com.apple.LaunchServices.UserCache.csstore

Deep Cleaning Option

~/Library/Caches

/Library/Caches

/System/Library/Caches

/System/Library/Extensions.kextcache

OS X 10.1.x

Light Cleaning Option

~/Library/Preferences/.LSApplications\_Backup

~/Library/Preferences/.LSClaimedTypes\_Backup

~/Library/Preferences/.LSSchemes\_Backup

~/Library/Preferences/LSApplications  
~/Library/Preferences/LSClaimedTypes  
~/Library/Preferences/LSSchemes

### Deep Cleaning Option

~/Library/Caches/com.apple.FCACHEClassicDomain  
~/Library/Caches/com.apple.FCACHEUserDomain  
/Library/Caches/com.apple.FCACHELocalDomain  
/System/Library/Caches/com.apple.FCACHESystemDomain

### Finder Cleaning Option

~/Library/Preferences/com.apple.finder.plist  
.DS\_Store files

### Virus Cleaning Option

/usr/local/vscanx/vscanx -rc --secure /Users

### Optimize File Cache

sysctl kern.maxvnodes is adjusted based on physical RAM

### Internet Optimizing

#### Tune for Broadband

```
sysctl -w net.inet.tcp.sendspace=65536"  
sysctl -w net.inet.tcp.recvspace=65536"  
sysctl -w kern.ipc.maxsockbuf=262144"  
sysctl -w net.inet.tcp.delayed_ack=0"  
sysctl -w net.inet.udp.recvspace=41600"  
sysctl -w net.inet.tcp.v6mssdflt=1020"
```

### Tune for Dialup

```
sysctl -w net.inet.tcp.sendspace=4096"  
sysctl -w net.inet.tcp.recvspace=4096"  
sysctl -w kern.ipc.maxsockbuf=262144"  
sysctl -w net.inet.tcp.delayed_ack=1"  
sysctl -w net.inet.udp.recvspace=41600"  
sysctl -w net.inet.tcp.v6mssdflt=1020"
```

### Restore Defaults

```
sysctl -w net.inet.tcp.sendspace=32768"  
sysctl -w net.inet.tcp.recvspace=32768"  
sysctl -w kern.ipc.maxsockbuf=262144"  
sysctl -w net.inet.tcp.delayed_ack=1"  
sysctl -w net.inet.udp.recvspace=42080"  
sysctl -w net.inet.tcp.v6mssdflt=1024"
```

### Prioritize Applications

frontmost application is reniced to -15.

### **Uninstalling PCC.**

Since Panther Cache Cleaner is an application, uninstallation is simple. However, you must disable "Automatic Operation." If the application demo has expired, "Automatic Operation" will be disabled for you. Once "Automatic Operation" has been disabled, simply drag PCC to the Trash. If you wish to be thorough, you may also delete the PCC Preference files.

### **Caveats.**

A restart may occur without warning. Applications do not

receive a quit event. They are not offered the chance to save open documents. They are simply terminated. Before using PCC, make sure any unsaved work is saved and closed out. After using, certain preference settings may be lost. After using PCC, there may be some momentary sluggishness until caches are rebuilt. Do not use PCC without restarting. PCC has been tested without any harmful side effects and successfully cured numerous ills. Your mileage may vary. As with any software that deletes things, a current backup is prudent.

## **Registration**

Panther Cache Cleaner is distributed as shareware. You may use it for up to 30 days after which you are expected to register the software. You may register online at our web site: <<http://www.northernSW.com>>. After registering, you will receive a serial number. Select “Register” from the Apple Menu. You may enter your name and serial number. Be sure to enter it exactly as instructed in your registration receipt. Please save your receipt in case you need it in the future.

## **Technical Support**

If you have any problems or questions about Panther Cache Cleaner or any other Northern Softworks products, we want to hear from you. You may visit our website at <<http://www.northernSW.com>> or you may email us at <<mailto:info@northernSW.com>>.

## **Legal Stuff.**

Panther Cache Cleaner is licensed to you as shareware. It is not public domain, and it is not freeware. Upon registration, you may use the software for noncommercial, personal use in your home. PCC is distributed only from the Northern Softworks website. It may not be distributed in any form without prior permission of Northern Softworks. PCC comes with NO WARRANTIES either expressed or implied. PCC comes AS-IS with no warranty of merchantability or suitability for any particular purpose. PCC should not be used in mission critical installations such as nuclear power plants, navigational systems, aviation systems, etc. As with any software that deletes things, a current backup is prudent.



Made in Alaska