ChangeShortName v1.3
(Distributed with changeshortname.command v1.3)
© James Bucanek & Dan Frakes

IMPORTANT! ChangeShortName does *serious* things. You *must* read this documentation before using ChangeShortName.

SUMMARY

One of the most common questions users of Mac OS X ask is "How do I change my short username?" Although OS X provides a simple interface—the Accounts pane of System Preferences—for changing a user's *long* name, there is no easy way to change the *short* name of an account once the account is created. Apple provides a set of instructions (<`http://docs.info.apple.com/article.html?artnum=106824`>) in the Apple Knowledge Base—actually, a process for creating a new user account and then transferring all your data to it—but that process isn't as complete as actually changing your short username. A more comprehensive tutorial was provided in Dan's book, *Mac OS X Power Tools* (<`http://www.macosxpowertools.com/`>). However, one look at either of these methods may persuade you to just live with your current short username. Unless you have ChangeShortName, that is.

ChangeShortName is a utility that does the dirty work involved in changing the short name of a user's account in Mac OS X (versions 10.4.*x* and 10.3.*x*; see below for information about 10.2.*x*; ChangeShortName has *not* been tested with Mac OS X Server). ChangeShortName offers an easy-to-use graphical interface that runs, under the hood, a well-tested Unix shell script that fully—and safely—changes the short username of a healthy OS X account. (The script itself is also provided separately for those who prefer, or need to use, the command line; instructions for using both versions of ChangeShortName are provided below.)

NOTE: This ReadMe provides important information about the ChangeShortName utility and script. Because changing a short username is a serious process, you **MUST** at least read the *USING ChangeShortName* section. However, we recommend that you read the entire document, as it contains important details about what ChangeShortName does, minor issues you may encounter, and what to do if you have a problem.

In addition, we'll say right up front that because changing the short username is such a serious procedure, we recommend using ChangeShortName as a last resort. The best option is to simply learn to live with your present short username. Or, if the account in question was just created, create a *new* account with the desired short username and then delete the "unwanted" account. That said, if you're determined to actually change the short username of an existing account, read on—ChangeShortName is the safest and easiest way to do so.

THE DETAILS

What is a Short User Name?
Each account in Mac OS X has two names: A "long" name, which is the name the user normally sees (the *Name* field in Accounts preferences), and a "short" name, which is the user's actual Unix account name (the *Short Name* field in Accounts preferences, the account's entry in Mac OS X's NetInfo database, and the name of the user's home directory in `/Users`). The long username can be easily

changed via the Accounts pane of System Preferences, but there's no easy way to change the short username.

Why has Apple made it so difficult to change the short name?
To be fair to Apple, changing the short username is not a trivial task. Mac OS X uses the short name for a number of purposes, and to change that name, it must be changed in *every* location:

- The account name itself, as stored in the NetInfo database
- The name of the user's home directory, in /Users
- Any groups to which the account belongs, also stored in the NetInfo database
- Other account information in the NetInfo database linked to the short name
- The user's keychain file
- The user's Samba (Windows File Sharing) password
- The user's Personal Web Sharing configuration files

The *long* username, on the other hand, is purely cosmetic and is a single property in the NetInfo database, linked to the short username, so changing the long username is simple.

Where did ChangeShortName come from?
The ChangeShortName utility and script were written by James Bucanek, with input from Dan Frakes. The actual procedure for changing an account's short username was developed by Dan Frakes, with input from James Bucanek ;-)

The procedure was first published in Dan's book, *Mac OS X Power Tools* (<http://macosxpowertools.com/>). However, there was a clear desire in the Mac community for an easy way to perform this procedure. ChangeShortName, for the most part, simply performs these steps for you. (We say "for the most part" because ChangeShortName has a few additional features, explained below in "What does ChangeShortName do?")

How do I install (and uninstall) ChangeShortName?
ChangeShortName works great when run directly from the disk image you've downloaded and mounted; you don't have to "install" it anywhere. In fact, due to Unix permissions issues—the script must have executable permissions to run properly—we strongly recommend that you simply run it from the disk image. (If you decide to copy the accompanying shell script, *changeshortname.command*, to your hard drive, and run it from there, you may need to change the script's permissions so that it is executable. Note that the separate script does not affect the operation of the main ChangeShortName utility, which includes its own copy of the script.)

In terms of "uninstalling," ChangeShortName does not install any additional files; it is completely self-contained. If you've copied it to your hard drive, you can simply drag it to the trash to "uninstall" it.

What does ChangeShortName do?
In short, ChangeShortName performs the following steps:
1. Backs up all local NetInfo databases.
2. Replaces all instances of the user's short name in the /users/<user> NetInfo record.
3. Changes the long name (if a new long username is supplied).
4. Finds all groups to which the user belongs and updates the short name in each group to the new short username.
5. In Mac OS X 10.3 and 10.4, renames the user's "personal" group, if present.

6. Renames the user's home directory.
7. Renames the user's keychain file.
8. Renames and reconfigures the user's httpd (Personal Web Sharing)
    config file.
9. Renames any Samba access files.
10. Renames the user's crontab file (if it exists).
11. In Mac OS X 10.4, deletes the Spotlight index for the boot volume (see
    "Tiger [Mac OS X 10.4]-specific issues," below).

If you're the curious type, you can open the *changeshortname.command* file in a text editor to view the script itself. It's a basic shell script.

With which versions of Mac OS X is ChangeShortName compatible?

The current version of ChangeShortName is compatible with Mac OS X 10.3 and later. The *changeshortname.command* script (see below) should work with Mac OS X 10.2 (Jaguar), but the graphical application will not. ChangeShortName has *not* been tested with Mac OS X Server, but may work fine—use ChangeShortName with Mac OS X Server at your own risk.
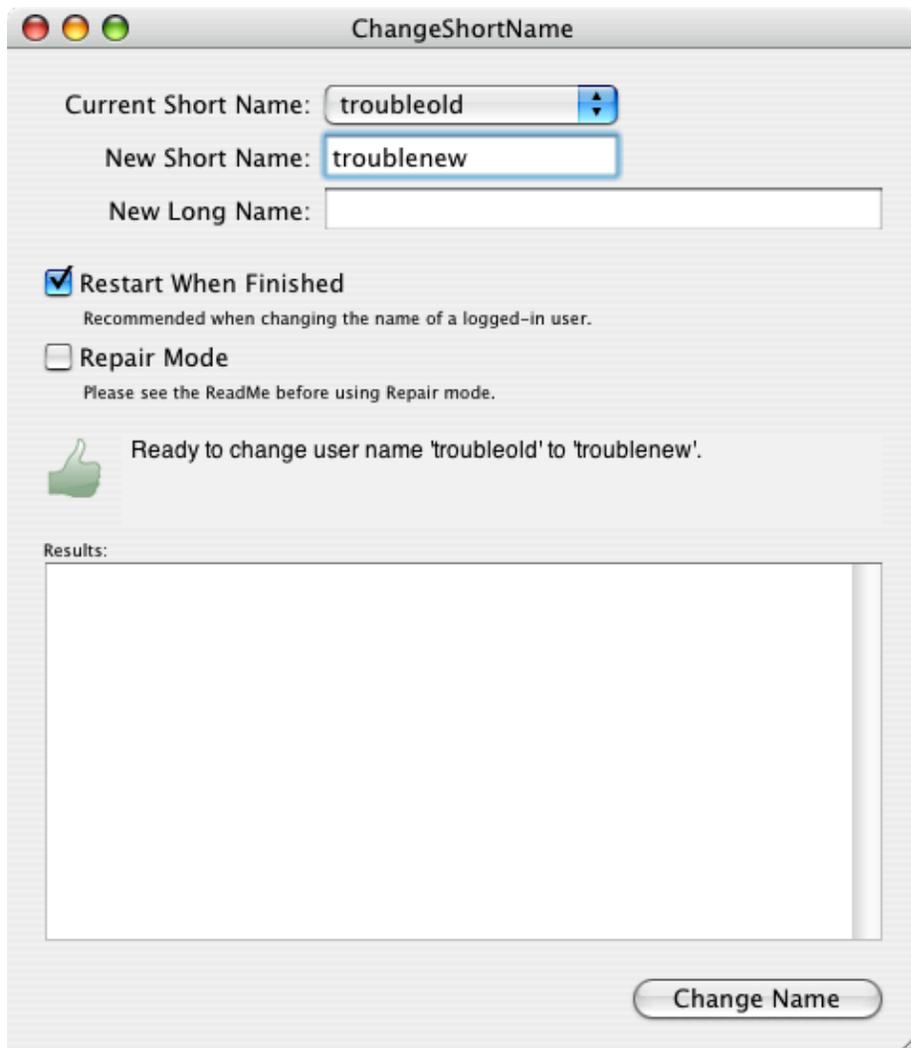

USING ChangeShortName:

There are three ways to use ChangeShortName: by using the actual ChangeShortName application, by launching the *changeshortname.command* script from the Finder, or by running the script from within Terminal.

Whichever method you use, neither System Preferences nor NetInfo Manager should be running. In addition, if you change the name of the account that's currently logged in, we strongly recommend logging out and then back in, immediately after the change has been made. (The ChangeShortName application will note this recommendation before you make any changes. In fact, it will recommend a restart, which is optimal, but simply logging out and back in will suffice.)

1) Use the ChangeShortName utility (easy method): The easiest way to change a short username is to use the ChangeShortName utility, which provides a graphical user interface into which you can enter the necessary information. Simply double-click the application, and in the window that appears, choose the account you want to change from the Current Short Name pop-up menu, and then type your new short username in the New Short Name field. (If desired, you can also provide a new full username in the New Long Name field.) The red "warning" sign in the middle of the window will change to a green "thumbs up" icon to indicate that ChangeShortName has enough information to proceed; the text next to this icon tells you what is about to happen.

If you're changing the name of the current user, or another user that's logged in, you should use the Restart When Finished option. Alternatively, you can log out and then back in immediately after the process is finished. To simply change your short username, ignore the *Repair Mode* checkbox; see "WARNINGS/TROUBLESHOOTING/REPAIR MODE," below.

ChangeShortName

Current Short Name: troubleold

New Short Name: troublenew

New Long Name:

☑ Restart When Finished
Recommended when changing the name of a logged-in user.

☐ Repair Mode
Please see the ReadMe before using Repair mode.

👍 Ready to change user name 'troubleold' to 'troublenew'.

Results:

[Change Name]

Click the Change Name button to proceed. ChangeShortName will prompt you for an administrative name and password. (If you're actually changing the name of that administrative account, you should type the *current*—pre-change—username.)

As ChangeShortName is doing its thing, the Results field displays the shell output of the changeshortname.command script:

Results:

```
NetInfo database 'local.nidb' backed up to 'local-
ChangeShortNameBackup-2007May22-174624.nidump'
Values in NetInfo record '/users/troublenew' updated.
Group 'admin' member list updated.
Home directory renamed from /Users/troubleold to /Users/troublenew
User keychain renamed from /Users/troublenew/Library/Keychains/
troubleold to /Users/troublenew/Library/Keychains/troublenew
/:
    Volume index removed.
Spotlight database on / reset.
ChangeShortName is now finished.
```

Once you see the text "ChangeShortName is now finished," the process is complete.

2) Launch the script in the Finder ("medium" method): Double-click the *changeshortname.command* script file in the Finder. The script is a standard .command file, so unless you've changed the default application for .command files, double-clicking the script file should launch the Terminal application and run the script. Answer the questions as the script prompts you. When the script is finished—when you see the text [Process completed]—you can close the Terminal window.

3) Run the script from within Terminal (expert method): If you're familiar with Unix, you can run the *changeshortname.command* script from any shell, such as a shell in Mac OS X's Terminal application. The command's syntax is:

    changeshortname.command [-efrvy] [old_name [new_name [fullname]]]

-e	Expert mode. Suppresses some warnings.
-f	Fix mode. Makes the assumption that a previous attempt to rename an account was only partially completed. Ignores most errors and disables a number of sanity checks. Implies -v. (See "Warnings/Troubleshooting/Repair Mode," below.)
-r	Restart mode. Restarts the computer after the script finishes.
-v	Verbose mode. Outputs additional progess messages.
-y	Answers "yes" to all confirmation questions.
old_name	Existing short name for the account being modified.
new_name	The new short name for this account.
fullname	A new "full" ("long") user name ("realname" in the NetInfo database) for the renamed account.

If old_name or new_name/fullname are absent, the script will prompt for them interactively. If new_name is supplied on the command line, but not fullname, then fullname is not prompted for, on the assumption that the realname property (the actual property in the NetInfo database that stores your full username) is not to be changed—in other words, the script assumes you don't want to change the existing long username.

Minor issues you may encounter

After changing your short username, here are a few issues you may encounter. Note that these are not the fault of ChangeShortName; rather, they are consequences of changing your short username in general.

• To avoid various cosmetic issues, if you changed the name of an account currently logged in, we strongly recommend logging out and then back in, immediately after the change has been made.

• If you had previously added your home directory to Finder window sidebars, after changing your short username your Finder window sidebars may still show your "old" username. The solution is to either drag your home folder out of the sidebar and then re-add it, or to open the Sidebar panel of

Finder preferences and disable and then re-enable the Home item.

• If you have Fast User Switching enabled, the Fast User Switching menu will not immediately reflect changes to usernames. The solution is to either log out and then back in—which you should have done anyway, as noted above—or to go to the Login Options screen of Accounts preferences and disable and then re-enable Fast User Switching.

• Apple tracks some user files—such your iPhoto Library—using an absolute pathname (e.g., /Users/*username*/Pictures/iPhoto Library) instead of a relative pathname (e.g., ~/Pictures/iPhoto Library). This means that after changing your short username (which also changes the name of your home folder), you may need to change some application preferences to reflect the "new" location of your files. (In the iPhoto example, this is a simple task: you'll be asked to locate your iPhoto Library folder the first time you launch iPhoto after changing your short username.) This may be true for some third-party applications, as well. To help you with this, ChangeShortName scans all *.plist* and *.xml* files in your ~/Library/Preferences folder for instances of your previous home directory path (/Users/*oldshortname*); if any such references are found, they will be listed in ChangeShortName's Results field after the name-change process finishes. (Not all such occurrences will cause problems; however, if you have trouble with a particular application after using ChangeShortName *and* that application's preferences file is listed by ChangeShortName as including an absolute pathname to your previous home folder, the pathname in the preferences file may be the culprit. If the application provides a way to designate where your data resides, change the location to your new home directory; if not, try deleting the application's preferences file and then relaunching the application.)

• Some applications create folders or files in your home directory when they quit. If you're changing the short username of an account that's currently logged in, these applications may cause a new folder in /Users, with the name of your old account, to be created in order to save these files/folders where the application thinks they should go. (For example, preference files may get saved in a "new" folder at /Users/*oldname*/Library/Preferences.) If you're changing the short username of the account that's currently logged in, after logging out and then back in, check for the presence of a nearly-empty home folder in /Users that's named after your *old* short username; if you find it—*and you verify that it's almost empty*—you can safely delete it. (This is yet another good reason not to log in as the user whose short username you're attempting to change; it's better to log in to a different admin-level account to make such a change.)

• After changing an account's short username, ChangeShortName's Current Short Name pop-up menu may not reflect the new short username until after re-launching ChangeShortName (and sometimes not even then). Mac OS X apparently caches the list of short usernames and doesn't immediately update that cache when you change a username. This shouldn't normally be an issue, because it would affect you only if you immediately tried to rename an account that you had just renamed. If you find yourself in this situation, try re-launching ChangeShortName. If that doesn't work, simply restart your Mac.

Tiger (Mac OS X 10.4)-specific issues
• If you've installed third-party Dashboard widgets in your personal Widgets folder (~/Library/Widgets), after changing your short username these widgets will no longer be running in Dashboard and will, in fact, no longer appear in Dashboard's widget "dock." This is a result of security measures implemented in recent Apple Security Updates. You will need to open ~/Library/Widgets and manually double-click each third-party widget to get Dashboard to recognize it.

• ChangeShortName 1.2 and later deletes the Spotlight index, if present, for your boot volume, forcing Mac OS X to re-index that drive. This is necessary because Spotlight's index uses absolute pathnames (/Users/*username*/) rather than relative pathnames (~/) for files in home directories; when you change your short username, the absolute path to your home directory changes, which

means Spotlight's index is no longer accurate.

• In Tiger (Mac OS X 10.4), if you use ChangeShortName via the command line with the "verbose" option, the script may complain that it was unable to rename the keychain. This is because the name of the keychain in Tiger no longer includes the user's short name (as it did in Panther); rather, it is now a standard name (*login.keychain*) that does not need to be changed. You can ignore this error.

WARNINGS/TROUBLESHOOTING/REPAIR MODE:

Should I be scared of ChangeShortName?
Yes. Although every attempt has been made to make this script safe and robust, renaming a Unix account is not a trivial process. If something goes wrong, or if you rename an account that shouldn't be renamed, you could seriously foul up that account or even cripple the operating system. In addition, changing your short name involves editing the NetInfo database. If your NetInfo database was *already* corrupt/damaged *before* using ChangeShortName, using this utility could reveal existing corruption or, in the worst-case scenario, add to that corruption. (This only makes sense: editing a directory of information that is out of order means that you might edit the wrong thing unintentionally.)

To protect against potential problems, the script makes a backup of the NetInfo database before it makes any changes. After the script runs, you will find this backup file in `/var/db/netinfo`, named *local-ChangeShortNameBackup-<date>.nidump*, where *<date>* is the date the change was made.

How can I recover from my backup NetInfo database?
If something goes horribly wrong and you need to recover from the backup created by ChangeShortName, follow these steps:

1. Reboot the computer, holding down command-S until you enter single-user mode. (If you've never used single-user mode before, it looks a lot like Terminal: white text on a black screen.)

2. Mount the system volume in read/write mode:

   `/sbin/mount -uw / <RETURN>`

3. Change directories to the local NetInfo database:

   `cd /var/db/netinfo <RETURN>`

4. Rename the corrupted database to "bad":

   `mv local.nidb local.nidb.bad <RETURN>`

5. Create a new NetInfo database:

   `/usr/libexec/create_nidb <RETURN>`

6. Enable the root account with an empty password. (This is only temporary; you'll delete this account in a subsequent step.)

   `nicl -raw local.nidb -create /users/root passwd "" <RETURN>`

7. Reboot your (now lobotomized) system by typing the following command

```
reboot <RETURN>
```

8. Immediately hold down Command+V to boot into *verbose* mode. You'll see what looks like Terminal code on the screen; this is normal.

9. Your computer will continue booting, but since we've wiped the NetInto database, there are no user accounts to log in to. Eventually, the login screen should appear, displaying a prompt for an account name and password.

10. At the login screen, type >*console* for the account name (including the ">" character, no spaces, all lowercase); leave the password field empty. Then click the Login button.

11. At the next login prompt that appears, type *root* for the username (all lowercase), and then press <RETURN> when prompted for a password.

12. Use the niload command to restore the database from your backup:

```
cd /var/db/netinfo <RETURN>
niload -d -r / -t localhost/local < local-ChangeShortNameBackup-<date>.nidump <RETURN>
```

(Note that <date> is the date of the backup you wish to recover from; ChangeUserName automatically added the date when it was run. If you're not sure of the name of the backup database, type `ls /var/db/netinfo <RETURN>` to see a list of files; the backup database will be one of them.)

13. Restart your computer:

```
reboot <RETURN>
```


"Repair" mode

ChangeShortName can also be run in *Repair mode*, via the application (using the "Repair" checkbox) and the shell script in Terminal (using the `-f` option); Repair mode is not available when double-clicking the script in the Finder. Repair mode is intended as a "last ditch" effort to repair a partially failed or botched attempt at changing a short username. It was primarily designed for the situation where a user has attempted to rename an account manually, not realizing the complexity of the operation, and encountered problems. It is also included on the (slim) chance that ChangeShortName miscalculates or fails to consider some odd combination of conditions that causes the underlying script to terminate prematurely.

Repair mode considers the possibility that only some of the steps of a previous rename attempt have been successful. Normally, ChangeShortName's script stops if it encounters an error or an unexpected condition. In Repair mode, the script instead ignores—or tolerates the errors that arise from—steps that appear to have been previously completed. It continues on, attempting to complete any unfinished steps.

For example, when run normally, the ChangeShortName script stops immediately if the account name you want to rename does not exist in the NetInfo database, or if the "new" account name already exists. Repair mode assumes that the account name has already been changed in the NetInfo database, but other changes required to successfully rename an account (such as changes to group ownership and the home directory name) have not yet been made—so it allows the script to run despite such discrepancies. It also ignores any errors encountered during these later steps, again assuming that some of these steps might have already been done.

ETC.:

How much does ChangeShortName cost?
ChangeShortName is donationware—if you find it useful, we really appreciate contributions! To donate whatever ChangeShortName is worth to you, you can use PayPal or Amazon Honor System:

PayPal:
`<http://tinyurl.com/36nm5h>`

Amazon:
`<http://s1.amazon.com/paypage/P3UQQEWHYLQXIT/103-3168966-2943032>`

Distribution
ChangeShortName is freely distributable, but not open-source. You may redistribute ChangeShortName as long as you provide it—intact and unaltered—via its original disk image (.dmg) file. (Please check the Web site to make sure you're distributing the latest version.) You may not sell this software, nor charge any kind of fee for its distribution. You may not use ChangeShortName or its code in other software without the express, written consent of Major League Baseball... er, I mean, without the consent of Dan Frakes and James Bucanek, who retain all rights to and ownership of this material.

What if I have questions?
If you have questions about or problems with ChangeShortName or the underlying script, feel free to contact the authors. However, please read this entire ReadMe ***before*** contacting us :-)

James Bucanek `<changeusername@twilightandbarking.com>`
Dan Frakes `<changeusername@frakes.org>`

VERSION HISTORY:

Version 1.3 (May 25, 2007)
• Complete rewrite of the ChangeShortName Helper application, which has been renamed ChangeShortName (i.e., without the "Helper"). The new version is a Cocoa application with a new interface that's easier to use and provides more—and more useful—information and feedback. The downside of this rewrite is that the ChangeShortName application is no longer compatible with Mac OS X 10.2.*x*; users of Jaguar will need to use the standalone *changeshortname.command* script.

• ChangeShortName's underlying shell script—which does all the dirty work—has been renamed *changeshortname.command* to differentiate it from the main ChangeShortName application and is now embedded within the application package. (The raw script is still provided separately, but you no longer need to keep it with the application for the application to work properly.)

• The application no longer launches Terminal to run the underlying script, which should make ChangeShortName less intimidating for non-Terminal-savvy users; shell output is now displayed directly in the application window.

• Added a Restart option to both the ChangeShortName script (-r) and the graphical interface (via a checkbox); this option is recommended if you're changing the short username of a user that's currently logged in.

• Changed the underlying script to work with an existing short username that contains a hyphen (-). Because Apple warns against including a hyphen in a short username, previous versions of ChangeShortName would not attempt to change such a name, but we had enough requests for this capability that we added it.

• Edited the NetInfo-recovery process in this ReadMe to work around a >*console* bug in Mac OS X.

Version 1.2 (June 25, 2006)
• ChangeShortName now deletes the Spotlight index, if present, for your boot volume, forcing Mac OS X to re-index that drive. This is necessary because Spotlight's index uses absolute pathnames (/Users/*username*/) rather than relative pathnames (~/) for files in home directories; when you change your short username, the absolute path to your home directory changes, which means Spotlight's index is no longer accurate.

• Added word boundary checks to avoid erroneous replacements (e.g., changing *rs* to *randysmith* won't accidentally change /Users to /Userandysmith in pathnames).

• Scans preferences files for references to old home directory.

Version 1.1.3 (January 19, 2005)
• In Version 1.1, the ChangeShortName script assumed that the directory ~/Library/Logs exists; if it doesn't, the script would stall. (The absence of this folder would also cause the script to erroneously report that the user's name was not found in the NetInfo database.) In Version 1.1.3 and later, the script automatically creates the directory if necessary.

Version 1.1.2
• [Development version]

Version 1.1 (November 30, 2004)
• The entire script is now recursively executed as root using a single sudo command. This avoids repeated prompts for authorization on systems that have the *sudoers timestamp_timeout* value set to *0*.

• Progress details and additional info are now appended to a log file. When ChangeShortName is run normally, the log file is located at `~/Library/Logs/ChangeShortName.log`. If the script is run directly as root, the log file is located at `/Library/Logs/ChangeShortName.log`.

Note to system admins: If you would like to redirect the log output to a different location, first set the *CHNGSHRTNMLOG* environment variable then execute the script as root, using the following commands:

```
export CHNGSHRTNMLOG="/Volumes/SomePlaceElse/ChangeShortName.log" <RETURN>
sudo ChangeShortName.command ... <RETURN>
```

• In most cases, the script now explicitly checks to see if any file or directory already exists before renaming anything. This applies to home directories, keychain files, and so on. If a file/folder with the new name already exists, an error message is output to the log and the original file/folder is left untouched. It is then up to the user to rename or remove the conflicting file/folder and to run the script again (in repair mode).

• The script has been reorganized internally to make error checking, reporting, and logging more consistent.

Version 1.0   (May 24, 2004)
Initial release.