## TinkerTool: Frequently Asked Questions

#### What is TinkerTool?

TinkerTool is a control panel for the System Preferences application. It lets you access additional settings in Mac OS X 10.1 and later versions.

### TinkerTool is so small. How can it have all these features?

TinkerTool does nothing more than to unlock hidden features that Apple has built into Mac OS X and its applications. TinkerTool itself has no features at all.

I installed a previous version of TinkerTool, then added some other third-party preference panes. However, the Installer is unable to install the latest version of TinkerTool and I also cannot remove the tool or any of the other panes manually. What should I do?

It appears to have become the latest fashion to publish system utilities in form of a Mac OS X preference pane. Unfortunately, many panes come with defective installers that corrupt the permission settings of the System Preferences environment. In this case, you can no longer update or remove third-party preference panes, including TinkerTool. Do the following to solve the problem:

1) Try to remember which preference panes you installed after you had installed your first version of TinkerTool. The installer(s) of this/those pane(s) are likely to have destroyed the permission setup

in your system. Complain to the authors of these tools.

- 2) Open the Terminal application.
- 3) Enter the following commands exactly as shown:

sudo chmod g+w /Library sudo chgrp admin /Library sudo chmod g+w /Library/PreferencePanes sudo chgrp admin /Library/PreferencePanes

Note that the system will ask for your password after you entered the first line.

### Can you change the font in the menu bar?

No, the menu bar is controlled by the Dock and the loginwindow applications. There is no official or undocumented way known yet to change the font of the menu bar without directly reprogramming the Dock / loginwindow applications or its resources.

### How can I control smoothing of fonts?

In Mac OS X, font smoothing (anti-aliasing of fonts) is enabled in most cases so that text is displayed in very high quality. However, many users with analog low-resolution monitors report a poor, unsatisfactory rendering of text. For that reason, fine-tuning of font rendering was one of the most often requested features that users wanted to see integrated in TinkerTool. Beginning with version 1.3, TinkerTool allows to control font-smoothing with Mac OS X. You can set individual limits (in points) where font-smoothing should start. Fonts with a size equal or greater than the specified size will be smoothed, smaller fonts will not be smoothed. Using TinkerTool, you can set individual thresholds for the following groups of fonts or applications:

- \* Fonts displayed by Cocoa applications
- \* Fixed-width fonts displayed by Cocoa applications (partially overrides the first setting)
- \* Fonts displayed by applications using QuickDraw

The first "general" Cocoa setting applies both to variable and fixed-width fonts. The second value overrides the first one for fonts of fixed width (e.g. Courier), if you specify a threshold that is *greater* than the first value. For example, if you specify 0 points for both values, all fonts in Cocoa applications will be smoothed. If you specify 4 pt as the first and 16 pt as the second value, all variable-width fonts with a size greater or equal than 4 points will be smoothed, but for fixed-width fonts, smoothing will begin at a size of 16 points.

By default, Mac OS X Cocoa uses the values 0 and 11, respectively. So the fixed-width font "Monaco 10" that is typically used in Terminal, Console, ProjectBuilder or Mail's plain text mode is already displayed without smoothing. If you want to enable anti-aliasing for those applications, use a smaller value than 11. The default threshold for QuickDraw applications is 12.

Some high-end applications (like OmniWeb) are able to control fontsmoothing themselves. TinkerTool will not override any settings of those applications, so you can still define individual smoothing parameters in such programs. See the respective manuals for more information.

Beginning with version 1.4, TinkerTool can additionally disable font smoothing at the CoreGraphics level. If you set the respective checkmark, font-smoothing in almost every Aqua user interface element and in all Cocoa applications will be switched off.

## Are there unwanted side effects when changing the font smoothing settings?

This depends. Some versions of Mac OS X show kerning problems (the spacing between adjacent glyphs is incorrect) when you use particular fonts in certain applications and anti-aliasing is disabled. This is true both for Apple's global font-smoothing setting and TinkerTool's additional settings. Also, the fixed spacing in the Terminal application might fail if unusual font-smoothing limits are set for Cocoa. Apple is aware of those problems and will correct them in future versions of Mac OS X.

### Isn't there a difference between anti-aliasing and smoothing?

No, font smoothing and anti-aliasing of fonts are the same, antialiasing is just a more technical term. In signal theory, aliasing means that high frequencies of a given signal become distorted when being sampled with low frequencies. In the case of computer graphics, or font rendering in particular, the limited resolution (low frequency) of the screen causes "jaggies" to appear along not exactly vertical or not exactly horizontal parts of the characters' contours. Every technique that tries to counteract this problem is called anti-aliasing. By adding levels of gray along oblique or round edges, your eyes get tricked into perceiving smoother countours. Font-smoothing is part of Mac OS since version 8.5. In Classic Mac OS, font-smoothing is controlled by settings in the Appearance control panel:

#### pastedGraphic.tiff "

However, font smoothing of Cocoa and font smoothing of QuickDraw (used by Carbon applications) behave very differently. QuickDraw uses simple 4-times oversampling (in each dimension) to compute the gray-level pixmaps for anti-aliased text. The fonts are virtually rendered with a resolution of 288 dpi. This is four times the resolution that is needed to display the fonts on a 72 dpi screen. Conceptually, each screen pixel is replaced by a square of 4x4 sub pixels. By counting the number of black sub pixels (a number between 0 and 16) of each "real" pixel, a gray level is computed that is used for display on screen. Cocoa directly uses Quartz to render fonts. Here, the much more sophisticated anti-aliasing technologies of PDF / PostScript are used for screen display as well as for printing. As you can see in these samples, the results are much better than those of QuickDraw:

1\_\_#\$!@%!#\_\_pastedGraphic.tiff "

Verdana, 16 pt, rendered with the mentioned technologies, shown in original size

2\_#\$!@%!#\_\_pastedGraphic.tiff "

Three-times enlarged detail of the word "Font" in the left example

# I'm using an inofficial future version of Mac OS X. Is it safe to use TinkerTool or will it destroy Mac OS X components?

The special architecture of TinkerTool guarantees that you can safely use the application with future versions of Mac OS X. TinkerTool only changes preferences values of the current user, it avoids changing parts of the operating system. The way TinkerTool works makes sure that

- \* future system updates will work fine on your system,
- \* the tool can be used in a network environment without any problems (e.g. in schools and universities),
- \* no security holes are opened.

# I am a software developer entitled to use the preview versions of Mac OS X "Jaguar". Is TinkerTool compatible with Jaguar?

No, this is not possible due to technical reasons. However, by request of many developers, we have made a restricted version of TinkerTool available that runs on Jaguar. Download **TinkerTool Release 2.2J** from <a href="http://www.bresink.com/osx/TinkerTool2J.html">http://www.bresink.com/osx/TinkerTool2J.html</a>.

# Yikes! I updated TinkerTool from an earlier version, now I have two TinkerTool icons in System Preferences

This can happen if you didn't install the new version to the same location as the old one. In this case, the installer is cautious and

intentionally does not remove the old version. If you no longer need the old version, just remove it manually as described in the next paragraph.

**NOTE:** As of TinkerTool 2.2, the installer will now automatically find an old version of TinkerTool and automatically select its location as destination for the new release, hereby replacing the previous one. This will avoid the problem.

#### How can I remove TinkerTool?

Use the Finder to select the icon "TinkerTool.prefPane" in the folder "PreferencesPanes" in the "Library" folder. Move this icon to the Trash. That's all! Depending on the type of installation, you have to look either into the Library folder in your private folder, or the one on your startup disk, or the one on your network file server.

You might consider resetting TinkerTool's preferences to the preinstallation state before removing the tool. (See also the next item.)

## I used TinkerTool for a while, then I deleted it. But all of its settings are still effective, what should I do?

As mentioned above, TinkerTool unlocks settings in other applications. The applications will respect their settings no matter if TinkerTool is installed or not. If you want to reset your configuration, select the TinkerTool pane in System Preferences, select the item "Reset" and press the button "Defaults" below the message "Reset all TinkerTool settings to...". All settings accessible via TinkerTool will be reset to Apple's defaults. The only exception is the startup language which has to be reset manually using an administrator's password. Note that a full reset of TinkerTool's settings might also affect preference values that are partially shared between TinkerTool and the standard preferences panes, e.g. the style of the scrollbar arrows.

As of version 2.1, TinkerTool additionally allows you to reset it's preferences to the state they were before using TinkerTool 2.1. Note that this does not include settings changed before using the 2.1 release.

## Why do you differentiate between TinkerTool for Mac OS X 10.0 and a different version for Mac OS X 10.1?

There is no technical reason to do so. However, in Mac OS X 10.1 it is possible to integrate TinkerTool as a third-party pane into the System Preferences program, a feature which is not available in Mac OS X 10.0. It was decided to publish TinkerTool as a preference pane beginning with 10.1, because this is more user-friendly and "Maclike". It also better represents what TinkerTool is actually doing: The program changes user preference values that Apple has built into the OS.

## I don't like the striped Aqua backgrounds or the arrows in the Dock. Why can't I change those resources with TinkerTool?

TinkerTool has never supported and will never support the manipulation of system resources. This is a design decision that is based on many reasons:

- \* Mac OS X is a multi-user system. Replacing system resources would be a system-wide change affecting all users, not an option a single user could control.
- \* the majority of our users has integrated Mac OS X in a professional environment, in most cases a computer network where you typically don't have the administror's or Unix-administrator's passwords. Changing the resources is not possible without the correct password, so this feature would be of no use in such an environment.
- \* replacing system resources can create serious security problems. We won't go into details here, but the uncontrolled manipulation of resource files could put your computer and your data at great risk.

### The pop-up button "Startup and login language" is always disabled for me. How come?

Could it be that you are logged in as the "root" user? There are three bugs in the preferences subsystem of Mac OS X 10.1 which in combination limit the way the root account can change the language settings while it is logged in. TinkerTool (as of version 2.2) protects "root" from creating unwanted side effects caused by those bugs. Login as administrator instead to change startup and login language. Note that is always a bad idea to login as root. Unless you need write access to a NetInfo server, the root account should remain disabled in Mac OS X.

#### Is TinkerTool compatible with Mac OS X Server?

Yes, because there is no difference between Mac OS X 10.1.x and the corresponding version of Mac OS X Server 10.1.x. The Server version only comes with additional administration and service software. So TinkerTool works the same on both system versions.

### Why don't the Desktop background settings stick when I select a new background image?

The Finder intentionally deletes all background scaling settings when a new image is selected. This does not appear to be user-friendly from TinkerTool's point of view but it is user-friendly from the Finder's point of view. Apple has designed the Finder to automatically select an appropriate background setting for each new image you select. If you want to fine-tune the image scaling manually, you'll have to repeat it each time the background is changed. (First select an image in the Desktop preference pane, then select the preferred scaling in TinkerTool and relaunch the Finder.) With the current version of the Finder, no other solution is practicable.

#### After using TinkerTool I can no longer select

### between all disk partitions as startup volume for Classic. How can I recover from this?

This is an "optical" problem of the scroll bar in the Classic preference pane. If you have selected the option "Place scroll arrows: Together at both ends" in TinkerTool, the startup volume scroll view does not have enough space to display all four arrow buttons. As a result, the scroll bar will partially fail, and you can only click on the first four partitions of your disk.

To solve the problem, just select one of the other scroll arrow settings in TinkerTool and restart System Preferences. Now the Classic preference pane will be displayed correctly and you can select between all volumes.

A similar effect might arise in other applications as well, if they use an unusually short scroll bar in a non-resizable window. If you use such an application, you should not enable the arrow option "together at both ends".

# When I enable transparent terminal windows, the title bar of the active window in Terminal is not transparent. Is this a problem of TinkerTool?

No. All newer versions of the Terminal application use different transparency factors for the window's contents and the window's title bar. This is a feature of Terminal to better differentiate between active and non-active windows. TinkerTool does not change the transparency of the title bars and also does not respect this in its Terminal preview window.

## Version 1.5 suggested that there would be a feature to select the default paper size in Mac OS X 10.1. Where is this feature?

We had planned to introduce this feature with the release of Mac OS X 10.1. TinkerTool 1.5 supported this feature successfully with unpublished preview releases of 10.1. Unfortunately, Apple changed the mechanism to select the default paper size in later releases of 10.1. They replaced it by a technique that automatically selects the default paper size based on the primary language preference of the current user. Apple considers this a "feature", but for users outside

the US, this is one of the most annoying bugs in Mac OS X.

For these reasons, default paper size selection did not become an integrated part of later TinkerTool versions. We have informed Apple about this problem and hope they correct it in future updates of Mac OS X.

We know that there are "hacks" to solve this kind of problem. Those hacks basically destroy or alter language resources to change the default paper size. While this might be an alternative for some users to make printing in Mac OS X usable, we will not support these "hacks" in TinkerTool because they only cure the symptom but don't solve the problem.

### I downloaded the latest release of TinkerTool, but I'm missing some of the features that were built into earlier versions.

Some features of TinkerTool had to be taken out during certain updates. The features have been removed because either Apple disabled the required functionality when updating Mac OS X, or they introduced an official interface to control the preference values affected. TinkerTool should not reimplement features that are already built into the base system to guarantee a consistent user experience.

- \* [TinkerTool 2.0] Desktop Option: Show trash on the desktop: Apple no longer supports this feature in Mac OS X 10.1. It would be necessary to implement a new Finder to bring it back. Note that there are shareware applications available now which successfully simulate Apple's trashcan by using completely transparent windows and communicating closely with the Finder. This might be an alternative if you don't want to use the "real" trashcan in the Dock.
- \* [TinkerTool 2.0] Dock Option: Mark foreground application with blue arrow: Apple no longer supports this feature in Mac OS X 10.1. It would be necessary to implement a new Dock to bring it back.

- \* [TinkerTool 2.0] Dock Option: Unlock Dock extensions: In Mac OS X 10.1, Dock extensions are always enabled. It makes no sense to disable them, so this checkmark could be removed.
- \* [TinkerTool 1.1] Finder Option: Show hard disks and network mounts on the desktop: This feature is now controlled directly by the Finder. Select the menu item "Finder Preferences" and look for the checkmarks "Show these items on the Desktop".
- \* [TinkerTool 1.1] Finder Option: Open new window when double-clicking folder: This option has been removed because the Finder now controls this feature depending on the toolbar status: If the Finder toolbar is hidden, the Finder will always open a new window when double-clicking a folder. If the Finder toolbar is visible, no new window will be opened. You can control the toolbar by clicking the oval button in the top right corner of a Finder window. It is also possible to select the respective option in the main menu or to press Command-B (Apple-B). In Mac OS X 10.1 there is also the new option "Always open folders in a new window". You can enable it after selecting the menu item "Finder Preferences" in the Finder.
- \* [TinkerTool 1.1] Appearance: User Interface Style: Apple has removed the functionality to display the user interface in NEXTSTEP or Microsoft-Windows style. So the option has been removed as well.
- \* [TinkerTool 1.1] Appearance: Double-click in title-bar minimizes windows: This feature is always switched on in Mac OS X 10.0 or higher and cannot be disabled. The option checkmark has been removed.
- \* [TinkerTool 1.1] Display Settings and Gamma Calibration: There is now an official interface to change these settings. Open "System Preferences" and select the "Displays" control. Select the "Color" pane, choose a display profile to begin with and press the "Calibrate" button.

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