

TealDesktop User's Manual



Program Version 1.24
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Introduction

Thank you for trying TealDesktop, the powerful and customizable application launcher for PalmOS handhelds.

Contents

This archive contains the following files:

Handheld Program files:

TEALDESK.PRC	The TealDesktop program file (for direct install)
FONTBUCKET.PRC	FontBucket add-on font manager

Desktop Program files:

IMAGEMGR.EXE	Image Database import utility (Windows, optional)
TPSETUP.EXE	Easy-installer program (Windows, optional)

Content files:

FBFONTS.PDB	Optional set of add-on fonts
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Document files:

DESKDOC.PDF	This document in Adobe Acrobat (PDF) format
DESKDOC.HTM	This document in HTML format (sans images)
DESKDOC.PRC	This document in TealDoc format
REGISTER.HTM	TealPoint Registration form in HTML format
REGISTER.TXT	TealPoint Registration form in text format

Terms used in this document

Hardware Buttons:

The four physical buttons (e.g. date, address, todo, and memo) typically located in a row at the bottom of your handheld

Scroll Up/Down Buttons:

The physical rocker switch at the bottom center of the handheld

Five-way control:

On newer handhelds, a 5-way control replaces the scroll up/down buttons, adding left and right movement and a center select button.

Graffiti:

The special letter-like symbols you write to enter text with your stylus.

Graffiti Entry Area:

The rectangular area at the bottom of the display screen where you can write letters in graffiti.

Silkscreen Buttons:

The four printed circular tap areas (Home, Menu, Calculator, and Find) to the left and right of the graffiti drawing area.

Menus:

The drop-down menus you get when tapping on the silkscreen menu button, or tap on the title bar (if present) on a device running PalmOS 3.5 or higher.

Chapter 1 – Getting Started

What makes TealDesktop different?

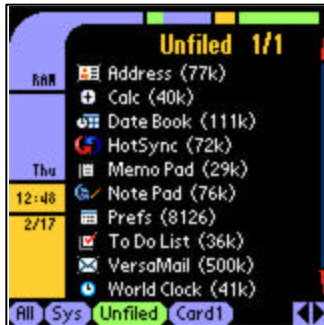
TealDesktop replaces the standard system launcher, offering unmatched new features and expanded versatility:

Power



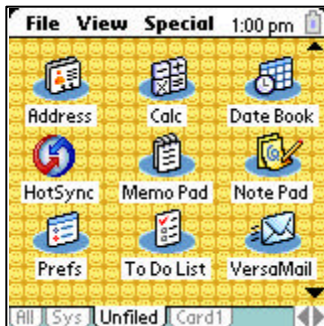
TealDesktop supports tabbed categories, multiple card folders, launching documents, drag and drop, context-sensitive menus, background images, fill patterns, and much more.

Themes



Unlike the simple “skins” provided by some launchers, TealDesktop **Themes** allow a whole new level of customization. Themes not only change the look and layout of the screen, but can completely rewrite its functionality as well, determining what elements are on screen, where they are located, and what they do. You can even assign a completely different theme to each category if you wish.

Customization



TealDesktop allows you to easily customize the fonts, colors, and backgrounds of each theme on a category-by-category basis. For low-level customization, a full **Theme Editor** is even included so you can make or modify your own creations.

Installing

On a Windows PC, you can use the quick setup installer by double clicking on the **TPSETUP.EXE** installer program, and following the on screen prompts.

For other systems, (Macintosh, Linux, etc), manually install the necessary files:

1) Install Program

Use the Palm Install Tool that comes with your organizer to install the program file **TEALDESK.PRC** into *Handheld Main Memory*. The Palm Install Tool can be found as an icon along the left hand side inside the Palm Desktop program on your desktop computer. Instructions on how to use the Palm install tool are in the Palm Handbook or electronic manual that came with your Pilot, PalmPilot, Visor, CLIE, or WorkPad.



2) Install Fonts

Install **FONTBUCKET.PRC** if you wish to support add-on fonts, and **FBFONTS.PDB** for our own selection of fonts we've hand-optimized for use with TealDoc. Visit Hands High Software for additional fonts or tools to convert your own fonts from your Mac or PC desktop.

3) Install Documents

You can optionally also install **DESKDOC.PRC**, a copy of this document in Palm "Doc" format suitable for reading with a Doc reader like *TealDoc*.

The TealPoint Desktop Image Manager (IMAGEMGR.EXE) does not require any installation. Just copy the EXE file to a location on your hard drive and double-click on it to run.

Launching



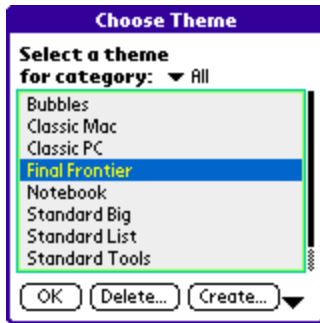
To run TealDesktop, tap on its icon in the standard device launcher screen.



After you get used to TealDesktop, you'll probably want it come up instead of the standard launcher.

You can set this by turning on the **Use TealDesktop as Default Launcher** option in the TealDesktop *Preferences* screen.

Chapter 2 – Choosing Themes



To change the current theme, select the **Choose Theme** selection from the **Themes** drop down menu. A list of available themes will appear.

Selecting Themes

In TealDesktop, every category tab can have its own theme. This is useful, but it can be a little disconcerting to have the screen jump around when changing categories if the themes are too dissimilar.

A pick list at the top of the theme selection screen chooses which tab receives the theme you choose. Choose “All Tabs” (distinct from the “All” tab) to load a single theme into all tabs in one step.

Where to get Themes

When you first install TealDesktop, some themes will automatically be available. Four **Standard Themes** are built into the program and can always be recovered even if you delete them.

A number of additional **Bundled Themes** will also appear. These install with the main application, but if you delete them you’ll have to reinstall TealDesktop or individually install each theme to recover them.

Add-On Themes are the last category. As we and other customers come up with new theme ideas, we hope to share them with you and make them available for download off the TealPoint Software site. Look for additional add-on themes and background images on the TealDesktop software page at www.tealpoint.com.

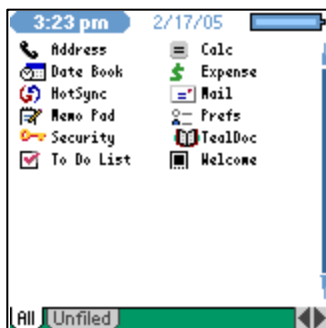
Standard Themes

TealDesktop supports four standard themes. It knows how to make these internally, so even if you delete one of them, you can recreate it by choosing the **Create** option (described later in this chapter) in the **Theme Select Screen**:



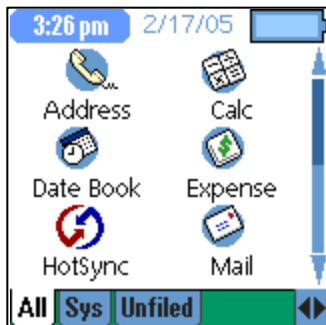
Standard View

The View theme is designed to closely resemble the default layout of the Standard launcher. Instead of a category pick list, however, a category tab bar is present at the bottom of the screen.



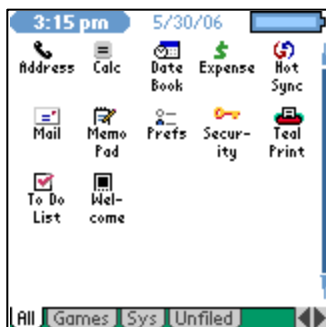
Standard List

The List theme (and its “tools” variant) is designed to closely resemble the “list” style view of the Standard launcher, showing the alternate “list” icon for each program (if defined), allowing for a compact, concise view.



Standard Big

The Big theme is a new special theme designed with big buttons and text for easily mobile access or the visually impaired.



Standard Tiny

The Tiny theme (and its “tools” variant) uses small icons to fit more items in the display screen. **New in 1.20**

Note: If upgrading to 1.20 from an earlier version, use the “Create” button in the “Choose Theme” screen to create the tiny theme.



Standard Tools

The Tools theme is an expanded option with a row of toolbar icons for common system functions. These icons can have different purposes in different themes, but here they perform the following functions (from left to right):



File Beam

Drag a file here to beam it or tap on this button to bring up the **File Beaming** screen.



File Delete

Drag a file here to delete it or tap on this button to bring up the **File Delete** screen.



File Information

Drag a file here to show information for it or tap on this button to bring up the **File Information** screen.



File Copy/Move

Drag a file here to copy it, or tap on this button to bring up the **File Copy/Move** screen.



System Lock

Tap on this button to lock the device using the Standard Security application or **TealLock** (if present).



Alarm Volume

Tap on this button to adjust the PalmOS alarm volume.



System Volume

Tap on this button to adjust the PalmOS system volume.



Favorites 1

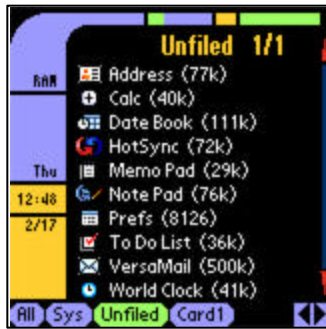
Tap this button to launch a pre-programmed application, or hold it down to change which app to launch.



Favorites 2

Tap this button to launch a pre-programmed application, or hold it down to change which app to launch.

Bundled Themes



Final Frontier

The Final Frontier theme showcases the visually entertaining power of TealDesktop. When operating in “wide” landscape mode on devices that support this display format, the extra screen space is used for extra bonus system adjustment tools. The bar graphs at the top of the screen are functional memory and battery indicators.



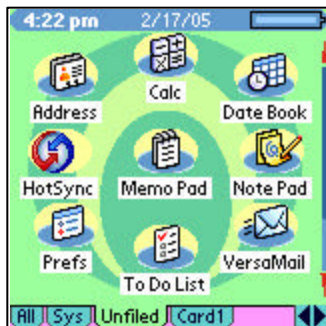
Classic Mac

The Classic Mac theme nostalgically brings back the look of everyone’s favorite “toaster” of the mid-late 1980’s.



Classic PC

Want a “familiar” interface on your handheld? The Classic PC theme brings you this while keeping the ease of use of PalmOS. Complete with a functional start menu, the title bar icons are functioning beam, info, copy, and delete buttons.



Bubbles

The Bubbles themes is a colorful layout that showcases TealDesktop’s ability to create graphic backgrounds from simple primitives and use non-linear icon layouts.



Notebook

The Notebook theme demonstrates use of a sideways rotated category tab bar combined with icon pages that scroll horizontally instead of vertically. Five-way controllers work differently while in this theme (up and down change categories while left and right scroll icons), so this theme is usually best used when all categories are set to a “sideways” theme as well.

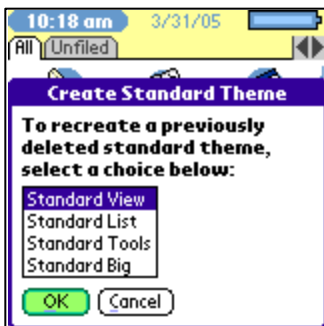
Add-On Themes



The availability of Add-On themes and background images continues to change. The experimental “Classic Amiga” theme is shown. Check the TealDesktop page on the TealPoint Software web site to see the latest themes and background images we or customers have posted for download.

Recreating Standard Themes

If you delete a standard theme to make space and later want to restore it, or want to undo changes made to a standard theme, select the **Create** button in the **Theme Selection** screen. You'll be presented with a list of standard themes to create.



Chapter 3 – Using Categories

Like the standard system Launcher, TealDesktop allows you to place applications in named organizational categories to make them easier to find. TealDesktop goes further, however, in allowing categorization of card-based files and giving many convenient ways to arrange icons and place them into categories.

Three ways to set file categories



Method 1: Use File Category Screen (RAM)

The most familiar way to move applications into categories is using the File Category Screen reachable from the Category drop down menu. This screen lets you set categories for files in Main Memory using drop down pick lists and mirrors the way the standard launcher works.



Method 2: Choose from Popup Menu (RAM)

An easier way to set an app's category is to hold the pen down on the app's icons until the **Popup File Menu** appears. Just select a new category for the app from the list. You can also choose to delete, beam, or carry out a number of other common actions on the file.



Method 3: Drag to Tab (Both RAM and Cards)

The easiest way to move a file into a non-empty category is to simply drag it to the category's tab. **This works even if you're dragging a file from memory to a card or the other way around;** you'll simply be asked to whether you want the file to be "Moved" to the new location or just "Copied" there.

Editing Ram Categories



To edit the list of categories, choose **Edit Ram Categories** from the main drop down menu.

Tap on a category name to modify it.

TealDesktop uses the PalmOS standard category mechanism, which supports up to 15 named categories and one “unfiled” category. Categories are automatically hidden if they do not contain any files

Hidden Categories



You can also optionally hide any single category by tapping on the name and selecting the **Hide this category** option. The category then will not appear as a tab or selection from on-screen category selectors. It will still be available for placing files into and from the main menu.

Category Order



Unlike PalmOS, you are not restricted to keeping your tabs in alphabetical order. To change the order that categories appear in the list of tabs, tap on the **Order** button to bring up the Category Order screen.

On this screen you can also choose to move the “All” category to the end of the list of RAM categories.
(New in 1.10)

Editing Card Categories



Select **Edit Card Categories** to define categories to use for external storage cards such as SD, MS, and Compact Flash.

Card Folders

Card categories work a little bit differently than ones in RAM because they can take advantage of the subfolders that external storage cards support.



Tap on a category to set its properties.

In TealDesktop, you name a number of card categories and set a subfolder path that each category corresponds to. Whenever a card is inserted that contains a listed subfolder, the corresponding card category tab will appear. Use the **Choose Path** button to select an existing folder path, or the **Folders** button on the **Edit Card Categories** screen to view and create new subfolders.

Swapping Cards

Card categories work a little bit differently than ones in RAM because they can take advantage of the subfolders that external storage cards support. Using this mechanism, you can set things up so that different categories appear depending on what physical card you insert.

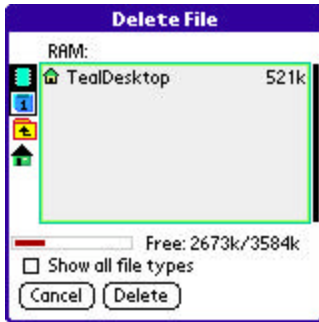
For instance, you can set up both “Games” and “Maps” categories, but have different physical cards; one with a games subfolder, and another with a folder containing maps. If you switch cards, the tabs will change automatically, and any folders will be scanned for new content if the **Rescan card contents** option is selected for that category.

NOTE: Unlike RAM categories, card categories appear whenever a corresponding folder path exists on a card, even if no files are present in that folder path.

HINT: By default, the standard system launcher and Palm Desktop only recognize the /Palm/Launcher subfolder. You probably want to keep one card category mapped here so you can find files installed to the card by the Palm Desktop.

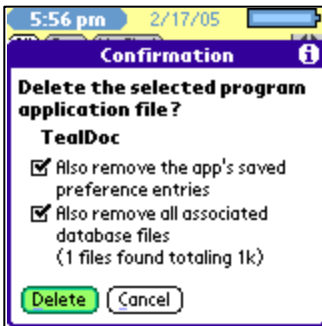
Chapter 4 – Managing Files

Deleting



Choose the **Delete** drop down menu to delete files from your handheld. You can also delete an individual file by holding down the pen to bring up the Popup File Menu, or dragging the file to a Trashcan toolbar icon (if supported by the current theme).

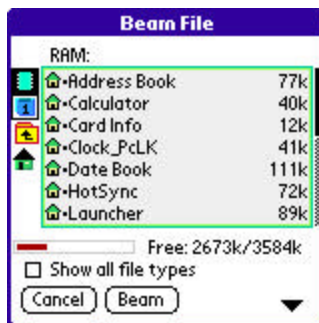
You can delete any writable file off your handheld; not just applications. Check the **Show all file types** to access other files.



When deleting applications, you can optionally choose to delete the program's related data files and settings saved in the system preferences database. A program's data files and settings are identified as any files having the same Creator ID value as the application.

Normally, you want to leave these options checked. If so, the delete operation will act like the standard system Launcher.

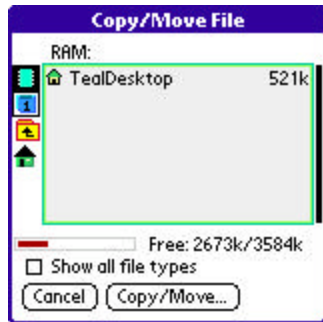
Beaming/Sending



Choose the **Beam** or **Send** drop down menus to transfer files from your handheld. You can also move an individual file by holding down the pen to bring up the Popup File Menu, or dragging the file to a Beaming icon (if available).

You can transmit any file from your handheld or an external card. Check the **Show all file types** to access other files.

Copying/Moving



Choose the **Copy** drop down menu to move or copy files to or from external cards from between different folders on the card. You can also move an individual file by dragging its icon between category tabs, even card-based tabs.

Information



Choose the **Info** drop down menu to get the size, record-count, or version of files on your handheld or external cards.



You can also get information about an individual file by holding down the pen to bring up the Popup File Menu, or dragging the file to an Information icon (if available).

Renaming Icons

When you show information on an individual file, you have two additional options; the ability to rename the icon as it appears in TealDesktop, and to mark the icon as "Private". Renaming the icon only changes how it's icon is labeled; it does not change the program itself or affect any functionality.

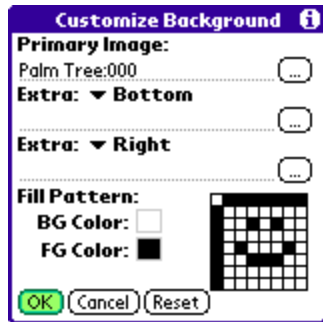
Private Icons

A private application's icon will not appear if PalmOS private records are hidden or masked. This is a simple way to hide some applications from easy view.

NOTE: Only TealDesktop supports the "Private" property. If used, you probably want to make the standard launcher (called "applications") private as well so someone cannot easily run it to see the hidden applications.

Chapter 5 – Customizing Views

Backgrounds



Use the **Customize Backgrounds** screen to customize the background image, colors, or fill pattern for the current category view.

Images should be in **TealPaint** format, and can be created using TealPaint or the include **TealPoint Image Manager** (see Appendix).

Image Sizes



The primary image should be either 160x160 (lo-res) or 320x320 (hi-res).

If your handheld is capable of a portrait or landscape full screen mode, you may also wish to respectively add 160x80 (320x160 hi-res) or 80x160 (160x320 hi-res) images to fill in the extra space when in those modes.

Image Placement

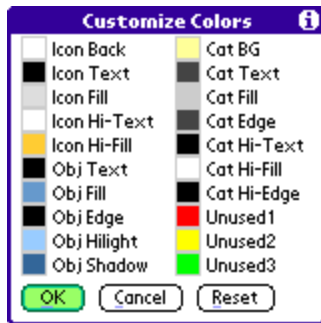
The extra images can be designed to fill in the left, right, top, or bottom sides of the display when the screen is expanded. This flexibility allows you to draw interface elements into the background image and keep them aligned with controls as they move. For instance, if you draw buttons into the bottom of the primary image that should move down with an expanded display, you should set an extra portrait image to fill the “top” of

the display area so that the normal display bitmap is forced downwards when in full screen mode.

For best results and drawing speed, be sure to match the depth of the images to TealDesktop. By default, most devices run in 8-bit mode. You can override this to 16-bits using the TealDesktop **Preferences Screen**.

If images are not selected, you can create a custom fill pattern of two colors by tapping on the grid at the bottom of the screen, or select 'Reset' to clear all image fields and patterns back to their default values defined in the original theme file.

Colors

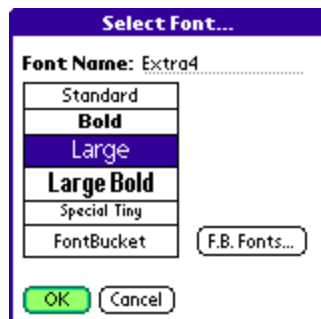


Open the **Customize Colors Screen** to customize colors for the current theme and category. Tap on a color to customize it for the current category, or select 'Reset' to restore colors to their theme defaults.

Fonts



Open the **Customize Fonts Screen** to customize fonts for the current theme and category. Tap on a font to customize it for the current category, or select 'Reset' to restore fonts to their theme defaults.



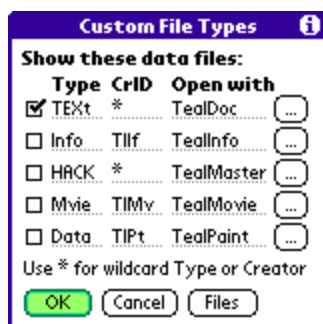
TealDesktop supports the basic set of standard system fonts and a new "Special Tiny" custom font. It also supports user-added FontBucket fonts if you have FontBucket (freeware at www.handshigh.com) installed.

Chapter 6 – Custom File Types



One of TealDesktop's more powerful features is the ability to select and launch documents and data files as well as applications. This is done using the **Custom File Types Screen**.

Specifying Custom File Types



Use the Custom File Types Screen to specify and enable support of data files.

File types are specified type **Type** and **CreatorID**, two four-letter properties associated with every PalmOS-format file.

Files of a certain type usually have a common Type and the same CreatorID as the program meant to open them. There are some exceptions, however, especially for files meant to be shared between programs. There is no central database of what files correspond to what Type and CreatorID values, and we have no information on files from other companies. However, can usually deduce codes using the Files button to view the Type and CreatorID of files on your handheld.

Opening Custom File Types

Once you've specified a custom file type, you must also associate an application with that file type. The application will provide not only the icon image for that type of file (since data files do not contain icon information), but will be called to open the data file should the file's icon be selected.

The file you specify can be in memory or on an external storage card. When the data file or document is "run", TealDesktop will look both in memory and on all card folders for the named application. If found, it will make a temporary copy of the data file in memory (if it's on a card) and launch the application to open the data file.

NOTE: The name of the data file will be passed to the application using the Palm **OpenDB** launch code. Most document readers, but not all, will recognize this code and automatically load up the specified document or data file. If not, the application should still launch but will not automatically open the selected file. You may wish to contact the developer of the application to add support for the needed launch code.

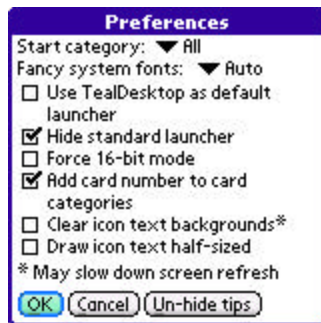
Chapter 7 – Advanced Tools and Options

Scanning Files

When TealDesktop scans files, it looks on the current device (card or memory) for any changes in applications and selected file types, and updates the icon list to reflect them. Normally, this process is automatic, occurring after a HotSync, device reset, or card insertion, but you can turn it off for individual card categories with the **Rescan card contents** option if the contents of the corresponding card folder are not likely to change.

You can also force rescanning manually to reflect programs deleted using other applications or beamed onto the handheld. Choose the **Scan for changes** to automatically look for new files or remove any old icons, or **Force full scan** to not only look for changes, but to refresh the icon images and names of all existing programs just in case some of them may have changed.

Preferences



Select Preferences to bring up the preferences dialog for options to fine tune how TealDesktop works.

The following choices are available:

Start category

Selects which category to use whenever TealDesktop is launched. A specific category can be selected, or choose “Last Category” to tells TealDesktop to restore the last-accessed category each time you return. **(New for 1.18)**

Fancy fonts

Selects new “thin” system fonts on high-resolution devices for a clean modern look. Choose “All” to enable thin fonts universally, or “Auto” to leave buttons with standard heavy fonts. Turn off fancy fonts if using a third-party font-remapping program, however, as font remappers only support standard system fonts. **(New for 1.24)**

Use TealDesktop as default launcher

Tells PalmOS to call TealDesktop instead of the standard launcher when the launcher buttons are activated in writing areas, keyboards, or the status bar, if present.

Hide standard launcher

Hides the icon for the standard launcher (Applications) in TealDesktop.

Force 16-bit mode

PalmOS default to 8-bit mode on most color devices. Use this option to force TealDesktop to use a 16-bit display mode (if supported) to better reproduce images and smooth colors in background images.

Add card number to card categories

If set, a card number is added to the end of card-based folders to distinguish them from each other on devices with an internal card or more than one card slot. Card numbers refer only to mounted cards, not physical card slots.

Clear icon text backgrounds



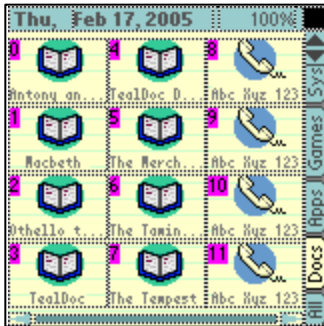
Normally, the text for icons is drawn with both a foreground color and a background color. The latter is used to draw a solid box around the text for better readability.

If this option is set, the box is removed, leaving only the raw text. This option can nicely clean up the background behind icons, especially when using a background image, but can hinder screen redraws on slower devices due to additional graphic processing involved.

Draw icon text half-sized

On high-resolution devices, this option tells TealDesktop to draw the text for icons half of its normal size. On low-resolution devices, this option has no effect. **(New for 1.18)**

Chapter 8 – Theme Editor: Introduction



The TealDesktop **Theme Editor** gives you the lowest level control over the look and functionality of the program. Using it, you can modify existing themes or create your own for personal use, for free distribution, or even for sale to others.

NOTE: Use of the theme editor is a powerful but moderately technical. This section of the manual assumes a minimal degree of technical sophistication, as does the editor itself. We do not recommend use of the editor for novice users and cannot provide tutoring for topics already covered in this manual.

Overview

The theme editor allows you to create or edit theme files. Theme files are templates that consist of two parts: **Screen Elements**, and **Customization Values**. Screen Element define where various items go on the screen and how they function, while Customization Values set global parameters like colors, fonts, and control mappings.

Screen Elements



Screen Elements are all the little widgets you interact with on the display. This includes program icons, category selectors, scroll bars, and buttons. It also includes non-interactive elements, such as title bars, battery level indicators, and even purely decorative graphic shapes that are drawn with basic graphics primitives. In the *Theme Editor*, you have complete control over all of these, individually placing and sizing them and determining how they move if the display is resized.

Customization Values



Customization Values include general properties for how TealDesktop should function when a theme is active. Many of these, including color, font, and background settings, can be overridden by the end-user on a category-by-category basis. Others, such as control mappings, or icon effects, however, are stored in the theme and cannot be changed outside the *Theme Editor*.

Creating a New Theme



To create a new theme, select **Create New** from the editor main menu. You'll be asked to pick a unique new name for the theme. You can create a theme as a copy of an existing theme, as a copy of one of the standard themes, or as a blank theme that has no *Screen Elements*.

Saving Changes

When you're done editing a theme, just select **Close Theme Editor** to return back to the main screen. There's no need to explicitly save changes as they've been saved all along.

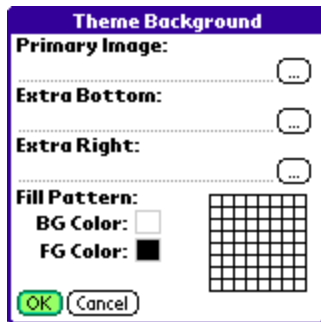


NOTE: if you made changes to *Customization Values* in the *Theme Editor*, those changes may not be immediately reflected in categories already using the theme you've just edited. To get these categories to adopt the new "default" values that you've set, select **Reset** in the *main Customization* screen for that category, or reload the theme into that category after temporarily changing the theme to something else.

Chapter 9 – Theme Editor: Customization Values

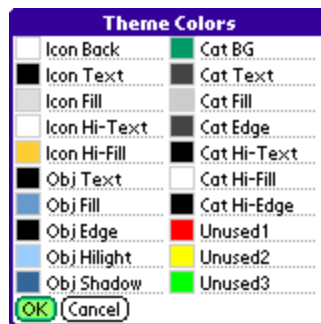
When creating a new theme, avoid the tendency to jump into creating screen objects without first thinking about *Customization Values*. While some settings, such as background and icon effects, can be set at any time, others, such as fonts and colors, determine the choices available to *Screen Elements*. Plan ahead to make sure the colors and fonts you need will both be available for use and easily editable by the end user if your theme is for wide distribution.

Theme Background



The *Theme Background* screen is essentially identical to the *Customize Background* screen used outside by the end user. Settings you select here determine the default settings used when a theme is first loaded or when the *Reset* button is used on the *Customize Background* screen.

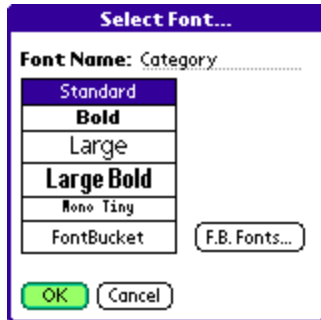
Theme Colors



The *Theme Colors* screen is similar to the *Customize Colors* screen used outside the editor by the end user. In it, you get to not only define which color fill each of 20 color slots, but you can name each slot, hinting to the end user how the color is to be used in the theme.

HINT: Avoid the tendency to just simply assign one slot for every color you plan to use. Instead, think of color usage “groups” that the user might want to change independently. For instance, your default color scheme might, say, use the same blue for both icon labels and the title bar. If you want to give the user flexibility to change these independently, however, you should assign two color slots (naming one “title bar” and the other “icon text”) and assigning them both to the same blue color.

Theme Fonts



The *Theme Fonts* screen is similar to the *Customize Fonts* screen used outside the editor. In it, you select a font in each of 10 font slots. When you get to the actual font selection screen, however, you can also change the name of each font slot.

As with the *Theme Colors* screen, try splitting font usage into functional named groups to improve user customization, even if you assign them to the same default font initially.

Theme Icons



The *Theme Icons* screen has not counterpart outside the editor. In it, you can set general properties for how icons are drawn or used in the theme.

Icons:

PalmOS applications normally contain two groups of icon images. The first is a 32x20 main icon to be used in the standard launcher's "Standard" view. The second is an optional 15x9 icon to be used in the "List" view. Each group contains multiple images to be used at different resolutions.

In TealDesktop, you can select whether to use the "Standard" icon or the "List" icon (if present) for applications in a theme. On high-resolution devices, you can also alternatively show the standard icon half-sized (16x10). When this option is selected on a low-resolution device, the list icon is used instead.

HIGHLIGHT: In other launchers, icons are occasionally drawn with a solid white rectangular background. This sometimes occurs because the application developer did not set the icon's transparency bit. Other times, this is done on purpose for compatibility sakes because PalmOS' older 16-bit icon format didn't support a transparency option, and files using the new format can crash older devices. TealDesktop automatically fixes both problems by filling in an icon's corners with transparency if it detects the icon being completely surrounded by a white border.

Effect:

While rarely used, TealDesktop has the ability to perform color effects on icon images. Icons can be made grayscale, tinted sepia toned, converted to black and white (sketch or dither) or rendered as a film negative.

Scrolling:

Icons can be freely laid out in horizontal rows, vertical columns, or free form layouts that don't have a regular column or row count. This selection lets you specify the minimum increment used to scroll through icons so you don't find them jumping inappropriately from column-to-column or row-to-row. Set *By Row* if icons are in a regular grid that scrolls vertically, *By Column* if it is in a regular grid that scrolls horizontally, or *By Page* if icons are in a freeform shape that should scroll only by an entire page at a time.

Safe-area border:

Some devices support a "full screen" mode that lets you expand the display area vertically or horizontally by removing the Graffiti writing area. For these devices, TealDesktop lets you place extra controls and icons to the right or below the normal "safe" display area, where they are automatically hidden in "non-full" display modes.

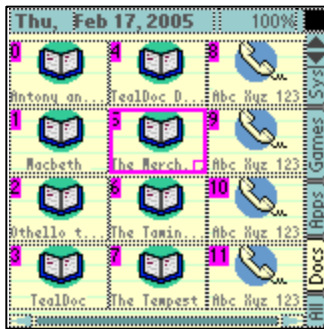
The *save area border* lets you contract the "safe" display area, hiding icons on the bottom or right borders of the screen if the display is not in an expanded mode. This is typically useful only when dealing with small "list" icons.

HINT: Don't worry about this feature for now. When you need it, you'll know it.

Chapter 10 – Theme Editor: Screen Element Overview

Screen Elements are individual “widgets” that you place onto the display area. Each element has a rectangular “bounding” box that defines both where the object draws and where it responds to clicks (if it is interactive). Elements also have a *depth* that is linked to its relative order in the big list of elements for the theme. This *depth* determines which object draws on top of another, and which receives a click when they overlap.

Selecting Elements



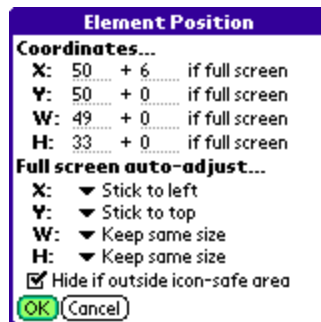
When inside the *Theme Editor*, TealDesktop operates in one of two modes: **Test Mode** and **Select Mode**. In test mode, elements operate normally, except that all categories are mapped to the current theme, unused icons are filled with a default icon, and some operations are disabled.

In *Select Mode*, by contrast, bounding boxes are shown and a single “selected” element is highlighted. Icon objects show an additional **Icon Number** indicating the order programs will be filled into the icons. Tapping on an element changes

the current selection.

To toggle between Test and Select modes, just tap on an unused area or choose the **Toggle Select/Test** menu.

Positioning Elements



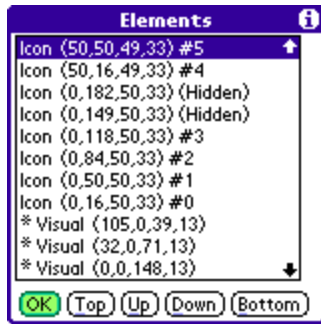
To position an element, simply highlight it in *Select Mode* and drag it to the new location. To resize it, drag the *resize box* in the lower right corner of the selected object.

For finer control, highlight an element or its *resize box* and use a 5-way control or keyboard arrow keys to make changes one coordinate at a time.

For exact control, use the **Element Position** screen to enter numerical values. This screen also contains many options to optimize for full screen mode described in a following chapter: *Full Screen Modes*.

HINT: *Screen Elements* are placed using **PalmOS Standard Coordinates**, which matches the coordinate system used if the device were low resolution. Thus, the normal square display area always ranges from 0-159 pixels by 0-159 pixels, even if the display is high resolution.

Ordering Elements



The relative order of screen elements in the *Global Element List* determines how they draw and respond to taps.

Elements near the top of the list are drawn in front of other overlapping elements, and receive precedence in receiving pen taps.

For icon elements, the order also determines how individual programs are placed alphabetically, and should read from bottom to top as the reading order a customer is likely to expect.

To manually order elements, use the **Select/Order** menu to bring up the element list, which shows elements by type and screen coordinates (x,y,w,h).

HINT: TealDesktop caches the images of static background objects for faster redrawing. Try to group non-interactive visual elements at the bottom of the list to help this. Visual elements that will be cached are shown with an asterisk before their name.

Copying/Pasting Elements

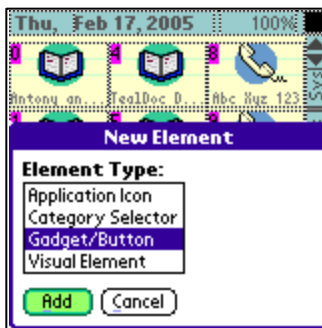


To copy or paste one or more objects within, or between, themes, tap and hold on a selected object. The **Popup Element Menu** will appear, giving common actions to perform.

Three additional menus exist only here. Select **Clipboard Copy** to copy the current element, or **Clipboard Append** to add the current element to a list of previously-copied elements. Select **Clipboard Paste** to insert all copied elements into the current theme.

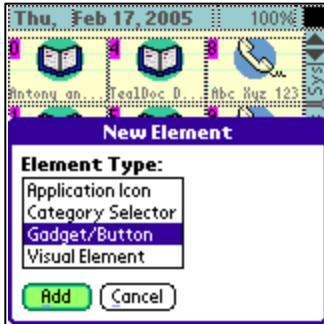
NOTE: If copying between themes, some adjustment will be necessary if font and color lists are not identical between the themes.

Creating New Elements



Select **Add New** to create a new element in the current theme. Select an element type and select **Add** to bring up the element **Properties Screen** for that element type. Details on adjusting each element type appear in the next Chapter.

Chapter 11 – Theme Editor: Screen Element Properties



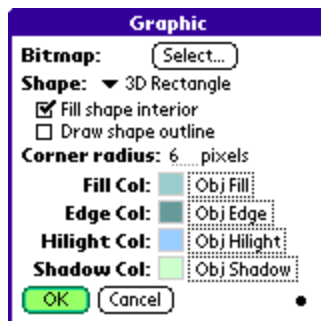
TealDesktop supports four basic element types:

- **Application Icons**
- **Category Selectors**
- **Gadgets**
- **Visual Elements.**

All four have special properties you can adjust specific to their element type.

However, many share one or more instances of two common sub-properties which we'll cover first: **Graphic Properties** and **Text Properties**.

Graphic Properties



An element's *Graphic Property* controls underlying graphics drawn on the screen based on an element's bounding box. Graphics are normal used to define button boundaries, highlighted areas, or non-interactive visuals.

Filled/Outline Rendering

Graphic Properties can support the following drawing shapes, and most can draw either filled, with an outline, or both.

Check **Fill shape interior** to fill the inside of the shape (typically with the selected *Fill Color*), and **Draw shape outline** to draw the exterior of the shape (typically in the *Edge Color*). If neither is selected, no shape will be drawn.

Supported Graphic Shapes



Rectangle

A square plain rectangle.



Rounded Rectangle

A rectangle with corners rounded at the specified corner radius.



3D Rectangle

A rectangle with beveled edges in the highlight and shadow colors.



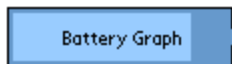
Oval

A circle or oval filling the element's bounding box.



Tab (up, down, left, or right)

Half of a rounded rectangle; a tab shape pointing up, down, left, or right.



Battery Graph (horizontal or vertical)

A filled or hollow image shaped like a battery with a bar graph inside set to the current battery level. Does not include text.



Memory Graph (horizontal or vertical)

A filled or hollow rectangle filled inside with a memory bar graph showing total used memory. Does not include any text.



Polygon

An arbitrary-shaped closed polygon of up to 8 vertices.



Scroll Bar (horizontal or vertical)

A scroll bar image showing the current icon scroll position.

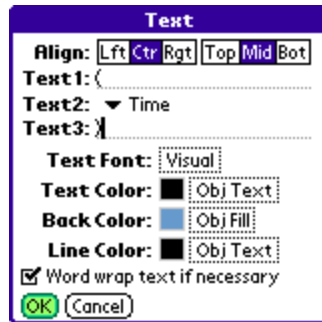
Typically used only on a gadget control set to have a scroll bar action, but may also be used as a purely visual indicator.

Bitmaps



An optional bitmap may also be drawn on top of the graphic shape (if any) from a selection of handy internal bitmap icons.

Text Properties



An element's *Text Property* controls how, and which, text is drawn in an element's bounding box. Text can be a combination of user-defined characters and system-dependent text such as date, time, HotSync User Name, and battery voltage.

Text Options

Text to be drawn can be vertically or horizontally aligned, and contain two user-defined strings surrounding system-generated text. The text can be word-wrapped, if necessary, or alternatively truncated with an ellipsis if it does not fit within the width of the given bounding rectangle.

Supported text sources:

Time (long or short)

Category Name

Date (long, medium, or short format)

Day of week (long or short)

Icon page number (e.g 1 or 1/2)

Battery level (percentage)

Battery voltage (current, warning, or critical)

Memory (percent)

Memory (free, used, or total bytes)

HotSync User Name

Device Serial Number

Volume level (system, game, or alarm)

Beam enabled (on/off)

Secret record state (show, hide, mask)

Application Icon Elements



An *Icon Element* defines the style and location where a program icon can be placed. Note that it does not specify a specific file, only the location on screen where a file icon should be drawn and how to display it graphically.

A and B Rendering Styles

Icons support two alternate rendering styles. The *A* rendering style defines how the icon will look under normal use, while the *B* style defines how the icon will look when highlighted by a pen press. You can tap the *A* and *B* preview buttons at the top of the screen to show how each version will look.

HINT: When an icon is selected, the *B* style is drawn on top of the existing display; any remnants of the *A* style are not automatically erased. Thus, the selected state really draws as *A+B*, so if you don't want the *A* style to show through the *B* style, you must set up the *B* graphic property to blank over any parts of the *A* style already drawn.

Icon and Text Choices

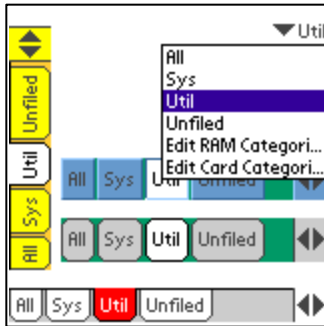
The program icon defined in global *Theme Icon* settings is normally drawn along with the name of the program. The placement of the icon relative to the name can be set (top, bottom, left, or right), as well as whether the name is also accompanied by the program size.

Graphic and Text Properties

Separate text and graphic properties are associated with each of the *A* and *B* styles. The graphic property behaves as previously described and defines an arbitrary shape to be drawn behind the program icon. The text property, on the other hand, is slightly modified, in that it controls how the program name is drawn rather than a selectable text source.

Normally, the graphic property is drawn to fith the entire *Icon Element* bounding box. Choose ***Fit graphic to icon only*** to shrink the graphics to fit only the program icon itself. Text outside the icon is then automatically kept out of the icon area.

Category Elements



Category Elements can appear as a traditional pick list or any number of tab-based variations. *Categories* can appear in four styles:

Pick Lists

A standard control resembling the category selector of the default system launcher.

Tabs

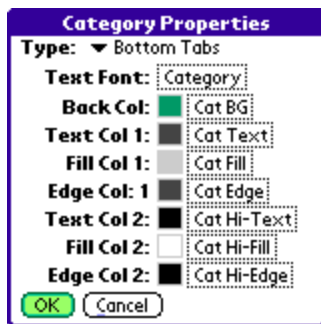
The shape of the tabs and text can face up, down, left, or right. The tab direction does not dictate where you put the element; you can still size and place it wherever you wish.

Buttons

Like tabs, except each tab is drawn as a completely rounded rectangle. There is currently no difference between up and down facing buttons.

Rectangles

Each tab is drawn as a 3D rectangle using the *Edge1* and *Edge2* colors respectively as highlight and shadow colors.



Gadget Elements



Gadget Elements define on-screen objects that respond to a pen tap or 5-way selection. They can be used to create interactive buttons that navigate, launch applications, or perform system functions, or to create purely visual display elements that change information when tapped.

A and B Rendering Styles

Like *Icon Elements*, *Gadgets* support two alternate rendering styles. The *A* rendering style defines how the gadget will look under normal use, while the *B* style defines how the gadget will look when highlighted by a pen press. Selecting ***Toggle Display State*** makes the gadget switch between *A* and *B* each time it is selected.

HINT: When a gadget is selected, the *B* style is drawn on top of the existing display; any remnants of the *A* style are not automatically erased. Thus, the selected state really draws as *A+B*, so if you don't want the *A* style to show through the *B* style, you must set up the *B* graphic property to blank over any parts of the *A* style already drawn.

Graphic and Text Properties

Separate text and graphic properties are associated with each of the *A* and *B* styles. The graphic property behaves as previously described and defines an arbitrary shape to be drawn, while the text property controls any text that is drawn. Typically, the text describes the gadget's function or shows a system parameter (like beam enable state, for instance) that is modified by the gadget.

Gadget Actions

Gadgets can perform one of the following functions when activated:

Popup apps list / apps in category

Pops up a list of applications. Selecting an entry launches it immediately.

Popup prefs panel

Pops up a list of system preferences panels. Selecting an entry launches the panel immediately.

Popup DA lists

Pops up a list of PalmOS desk accessories (DA's) like TealTools. Selecting an entry opens the selected accessory.

Popup system clock

Pops up the system clock, if supported by the handheld model.

Popup TealGlance

Pops up the TealGlance reminder window, if installed.

Toggle backlight

Toggles the system display backlight, if supported.

Toggle beam enable

Toggles on and off the state of the system beam-receive.

Adjust brightness

Pops up the system display brightness control, if present.

Adjust contrast

Pops up the system display contrast control, if present.

Adjust system/game/alarm volume

Pops up a pick list to adjust the device system, game, or alarm volume.

Page previous/next

Scrolls application icons to the last or next page.

Page horizontal/vertical scroll

Act as an icon scroll bar. Typically used only with *scroll bar* graphic shape.

Category previous/next

Advances or retreats the current category.

Category goto

Goes to a specific category. The user can hold down the gadget to change the target category, allowing them to use this function as a “favorite category” button. If the target category is empty, tapping a gadget mapped to this action will change the current category to “all”. **(New in 1.18)**

Category list

Pops up a list of all active categories. This action lets any gadget function like a “pick list” category selector. **(New in 1.18)**

Show menu

Pops up the TealDesktop’s menus. Tapping unused space at the top of the screen already activates menus by default, so this is useful only lower on screen.

Show/hide private records

Calls the system security popup to set the current private record state.

Lock handheld

Locks the handheld using the system security app or TealLock, if present.

Turn off handheld

Turns off the handheld.

File beam

Beams any single file dragged to it, or opens the *File Beam Screen* if tapped.

File send

Sends any single file dragged to it, or opens the *File Send Screen* if tapped.

File info

Shows Info on any file dragged to it, or opens the *File Info Screen* if tapped.

File delete

Deletes any single file dragged to it, or opens the *File Delete Screen* if tapped.

File copy/move

Copies any single file dragged to it, or opens the *File Copy Screen* if tapped.

Launch named application

Launches a single specified application. User can also tap and hold the gadget to change apps.

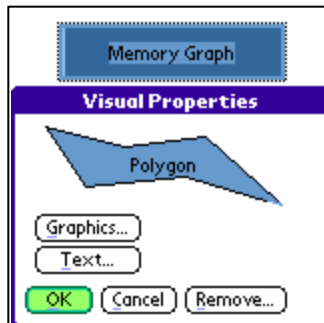
Launch named prefs panel

Launches a single specified prefs panel. User can also tap and hold the gadget to change the selected panel.

Launch named DA panel

Launches a single specified desk accessory. User can also tap and hold the gadget to change the selected panel.

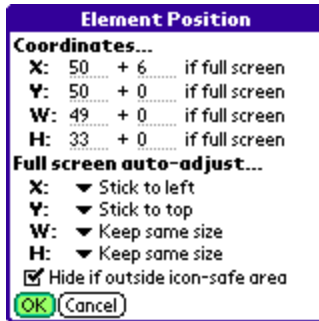
Visual Elements



The simplest of display components, **Visual Elements** are not interactive. Instead, they just contain a **Graphic** and **Text Property**, and are used to add visual display elements to the screen, such as dividing lines, clocks, and graphic flourishes.

Visual elements do not respond to taps.

Chapter 12 – Theme Editor: Full Screen Modes



All PalmOS devices support a normal square display mode of 160x160 or 320x320 pixels (160x160 in standard coordinates). Many new devices also support special *full screen* modes with standard coordinate measurements of either 160x240 (portrait) or 240x160 (landscape).

TealDesktop has the advanced ability to intelligently reorganize the display to use extra space from these device-specific *full screen* modes.

NOTE: If you are making a theme for general distribution, it must be full screen friendly.

Automatic size/position adjustment

Under the *Element Position* screen, an element can be set to automatically adjust itself from its base coordinates (at the top of the screen) when it detects the device is in a full screen mode.

Horizontal Auto-Adjust

When the display is wider than normal, the element's X and W coordinates can be set to automatically adjust themselves. The element can stay in the current position (stick left), move with the right edge of the display (stick right), or keep the center of the element in the same position relative to both sides of the display (move proportionally).

Vertical Auto-Adjust

When the display is taller than normal, the element's Y and H coordinates can be set to automatically adjust themselves. The element can stay in the current position (stick top), move with the bottom edge of the display (stick bottom), or keep the center of the element in the same position relative to the top and bottom of the display (move proportionally).

HINT: Create most objects in standard (not full) display mode first, and then set auto-adjustment options to set where the full screen position will be. If you place objects outside the normal display area while in full screen mode, the expanded coordinates will be incorrectly saved as the element "base" position. If you later try to set auto-adjustment settings for these objects, you may see them zoom off screen as the already-enlarged coordinates are adjust up to off-screen values. If this occurs, you can still select the object using the *Element Order* screen and manually adjust coordinates using the *Element Position* screen.

Hidden objects

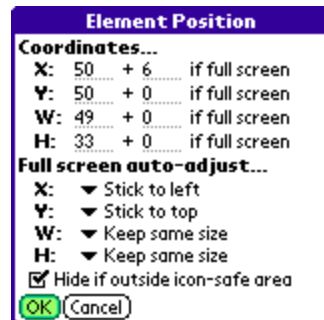
Sometimes, you'll want to create objects that only appear when the device is in a full screen mode. Typically this is used to place extra *Icon Elements* to take advantage of the enlarged display. To do this, simply expand the display and place these objects in the expanded area. Turn off all auto-adjustment options, sticking the object to the left and top sides of the display.



If the new elements are completely off screen, they will automatically be hidden when the device is in standard display mode.

If part of the element's bounding box can still be seen, however, part of the object will appear in the normal display. To prevent this from happening, you can check the option: **Hide if outside icon-safe area** in the *Element Position* screen. The *icon safe area* defaults to 160x160 standard coordinates, but can be made smaller in the *Theme Icon* screen.

Coordinate tweaking



One final set of adjustments can help fine-tune the placement of objects in full screen modes.

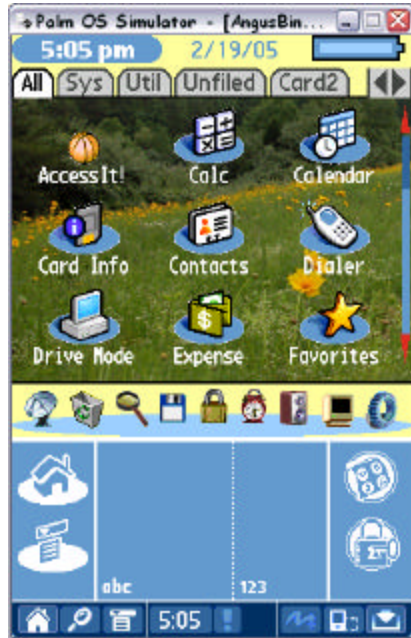
In the element position screen, you can a positive or negative adjustment to every element's position or size coordinate that will be applied in case the display is in a full screen mode. These *tweaking* values appear to the right of each coordinate.

These tweaking values are commonly used to adjust positions of base icons (icons that also appear in non-full display modes) to get nicely centered columns when in full screen modes.

NOTE: The X and W tweaking values are only added when the device is in a wider (landscape) display mode. Correspondingly, the Y and H tweaking values are only applied in vertically expanded display modes.

Chapter 13 – Theme Editor: Advanced Hints

PalmOS Simulator



It's possible to create great themes on an actual handheld device. Sometimes, however, it's more convenient to do so on a desktop PC using the **PalmOS Simulator**, available from individual licensee web sites (www.palmone.com) or from PalmSource directly (www.palmsource.com).

The simulator has a number of distinct advantages for theme development, including input and navigation via keyboard and quick access to image databases created by the *TealPoint Image Manager*.

Key Shortcuts

The *Theme Editor* supports the following shortcuts:

- | | |
|-------------|--|
| Space | - selects the next object in the object list if in select mode |
| Backspace | - selects the previous object in the object list |
| Tab | - toggles select/test mode |
| Home button | - toggles select/test mode |

Simulator Version

The simulator comes in many customized versions tailored to emulate specific devices. Most of the time, we use the Tungsten T5 simulator from PalmOne. Despite some annoyances, it has a number of advantages, including support for both landscape and portrait full screen modes, which makes it very easy to test these on every theme.

More importantly, however, it supports the new PalmOS Non-volatile File System (NVFS), which means that it saves your data between sessions or crashes, so you won't automatically lose your theme if the simulator crashes or your computer unexpectedly restarts.

Extracting Data

While it's easy to load programs and data into the Simulator using the **Install Database** popup menu (right click to get it), getting your theme back off again is not so obvious. To do so, just use TealDesktop's **Copy** menu to copy the theme file (choose *Show all files*) to the external expansion card. A Tungsten T5 has an internal expansion card, so the external slot appears as the second card. The Simulator emulates the external card slot using a folder named **Card1** on your hard drive. Just find this folder inside the simulator install folder, and you'll find your copied theme inside.

"Lost" Elements

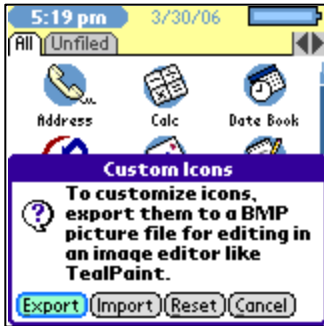
If you accidentally scroll an element completely off screen, otherwise set it to inaccessible coordinates, remember that you can always select the element using the *Element Order Screen*. All the other element menus will then work on the selected element, even if it is not visibly selected on screen, so you can bring up the *Element Position Screen* to fix the incorrect coordinates.

Optimizing for speed

When creating a theme with many background visuals, especially with those using rounded shapes, try to group virtual objects near the bottom of the object list so they can be cached during screen drawing. This will greatly speed up screen drawing during scrolling and other operations.

When using background images, also be sure to match the image format with the current screen format. By default, most color devices run in an 8-bit display mode unless you choose the *Force 16-bit mode* in TealDesktop preferences. If you try to display a 16-bit image in 8-bit mode, TealDesktop will do the conversion for you, but there will likely be noticeable pauses when redrawing the screen. If creating a background image for distribution, consider releasing different versions of the image for different display modes.

Chapter 14 – Custom Icon Bitmaps



For a truly custom look, it's possible to replace the bitmap images built into TealDesktop that are used for on screen gadgets and controls. To do this, use the **Custom Icon Bitmaps** menu to import or export the image bitmaps that are being used for the current display resolution and color mode. **(New in 1.18)**

Exporting

Choose the **Export** option to save the current icon bitmaps into a BMP file. You can choose a destination to save the image, either to memory or an external storage card. When saved you an external card, you can insert the card into a PC-based card reader for editing on your PC.

Editing



The exported image file can also be edited directly on your handheld with TealPaint. Each icon will appear in a 6 x 4 grid of squares. Simply load the BMP file into an TealPaint image database, edit the images (without disturbing the grid lines) and then save it back out again into BMP format.

Importing Icon Bitmaps

Once you have modified the images in the database, choose the **Import** button in the *Custom Icon Bitmaps* screen to load the modified icons.

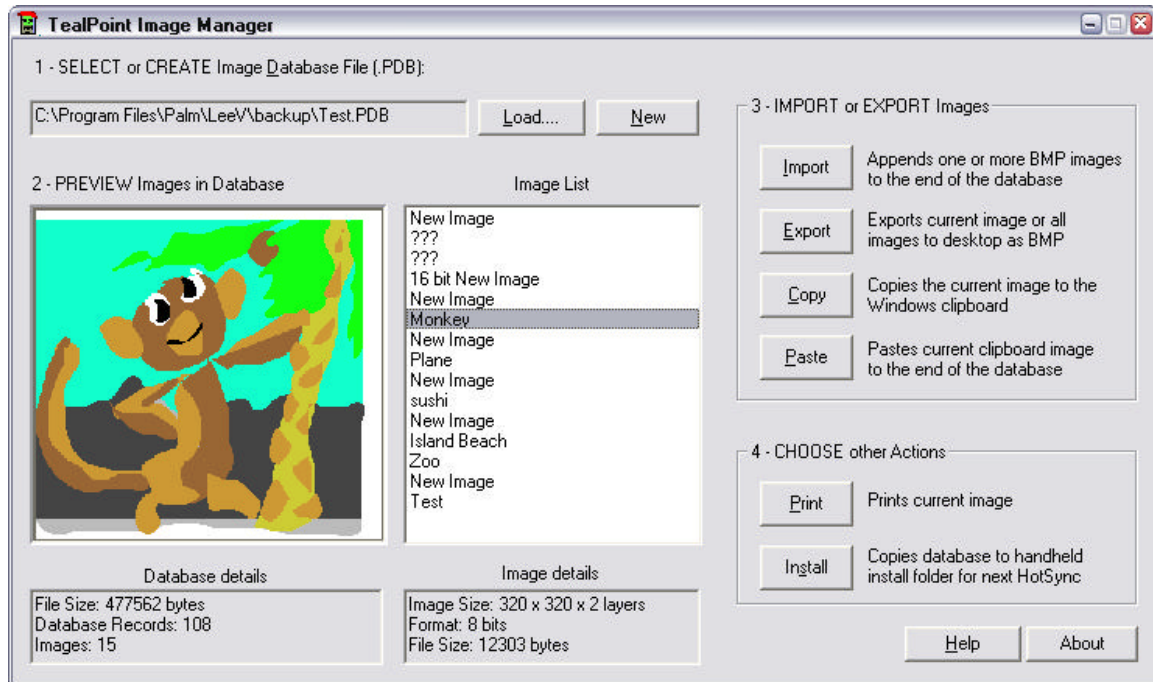
Icon Sets

Custom icons are stored in a file in RAM called "TealDesktop Icons", where they will override the icons built into the program. This file can be traded or copied to other handhelds as an "icon set" for TealDesktop. The icons are resolution (high versus low) and color-depth (color versus monochrome) specific, so if you beam it to another handheld, the icons will only look correct if that handheld is running in the same color depth and resolution.

Appendix A – TealPoint Image Manager

The **TealPoint Image Manager** (IMAGEMGR.EXE) is a Windows utility that converts images to and from TealPaint image format.

Use the *TealPoint Image Manager* to import or export images to or from TealPaint-format databases, view them on the desktop, or print them to a Windows printer.



Step 1 – Select a Database File

You can create a new TealPaint-format database, or find the backup of an existing one created on your handheld. Click on "Load" or load an existing database or "New" to create a new one.

When you HotSync your handheld, *TealPaint* image databases are automatically backed up to a folder called "BACKUP" which in turn resides in a folder named after your handheld's **HotSync User Name** in the Palm install folder.

For instance, if your user name is "John Smith", the backup folder would be in another folder named "SmithJ". The backed-up files are named the same as the databases on the PalmPilot, but have a '.PDB' extension, like "PICTURES.PDB."

NOTE: All PalmOS database files have a ".PDB" file extension. If you find an image database on, say, a website that also has a .PDB extension, it may not be (and probably is not) in TealPaint format, so don't be surprised if the image manager cannot load it.

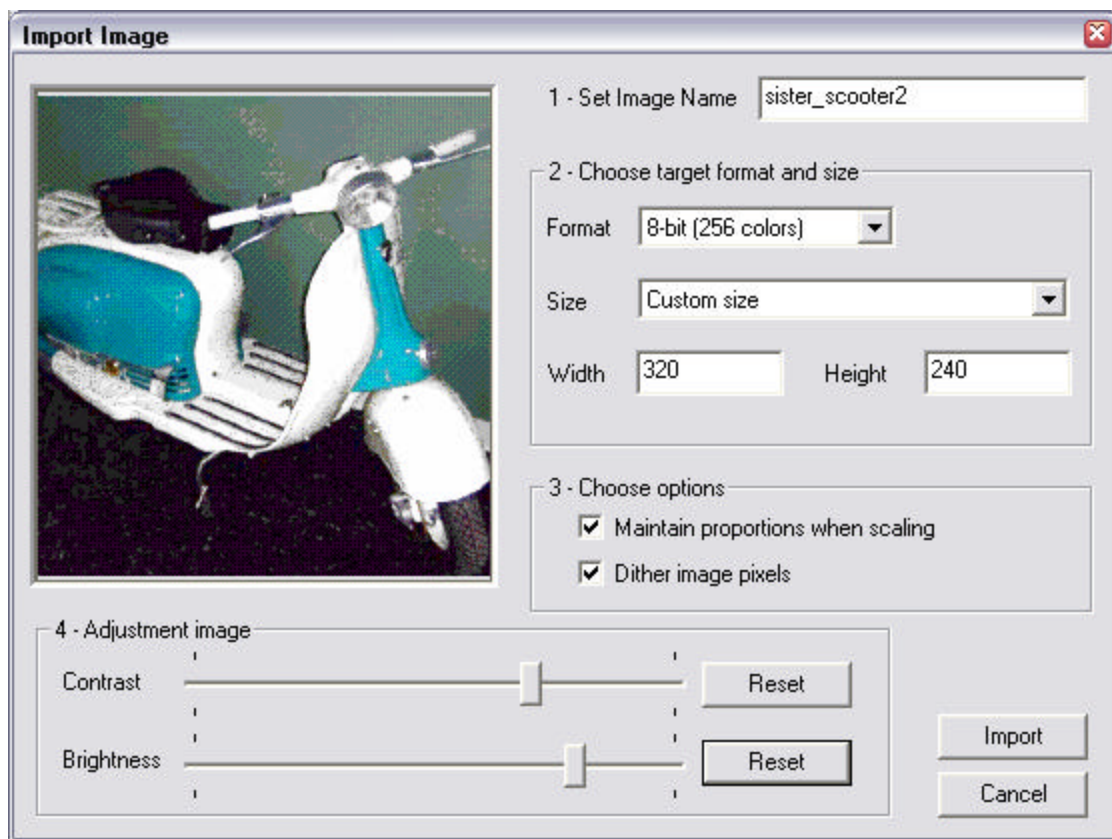
Step 2 – Preview images

Once a database is loaded, you can view any of the images in the database. Scroll the Image List to see the list of images by selection. Tap on a name to see that image to the left.

Step 3 – Import or Export Images

Importing an Image

Click on “Import” to import images from .BMP format. You can also click “Paste” to import an image copied to the Windows clipboard from another program or captured using the PrintScreen button. The Image Import window will appear, with a preview of how the image will appear.



On this screen you can set the target bit depth and image size of the final imported image, and also adjust the brightness and contrast of the converted image. Two options are also present:

Maintain proportions when scaling

When setting image sizes or fitting the image to a screen size, this option makes sure the image's aspect ratio remains intact. When this option is not set, you'll be free to stretch the image vertically or horizontally out of shape.

Dither image pixels

Allows the program to use patterns of similar colors to simulate the presence of intermediate colors. This option can greatly enhance the appearance of photographic images in grayscale or 8-bit modes.

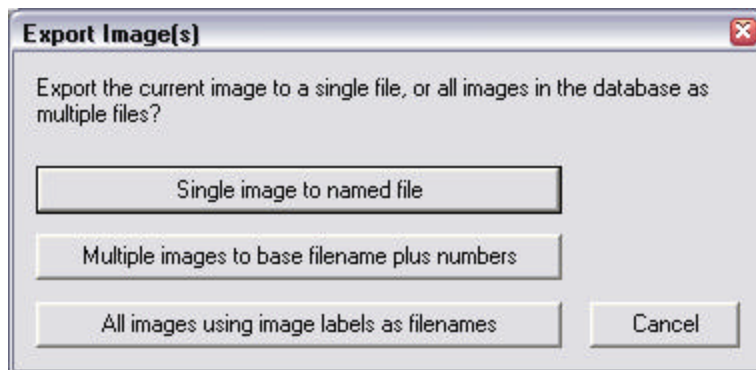
Importing Multiple Images

When selecting a .BMP image to import, you can actually use the SHIFT button to choose more than one image at a time if they reside in the same folder, and import them in one step into the TealPaint image database.

When you do so, the first image selected will appear as normal, but a new "Import All" button will appear in the lower right. Click on it to import all the images together using the same settings, or "Import" to import only the first image and reopen the Import window with the next image selected.

Exporting Images

Click on the "Export" button to export one or more images to .BMP format, or "Copy" to export the currently selected image to the Windows clipboard so that it can be pasted into a PC-based paint or other program.



You have three export choices:

Single image to named file

The current image shown in the main window will be exported to a .BMP file you specify.

Multiple images to base filename plus numbers

All the images in the database will be exported in order as numbered files. You specify the base filename, after which three numbers will be added. For instance, if you specify "Fred.bmp", the actual files will be named "Fred000.bmp", "Fred001.bmp", "Fred002.bmp", and so on.

All images using image labels as filenames

All images in the database will be exported using each image's name as its filename. The Image Manager will add the .BMP extension as necessary, and will add "[2]", "[3]", etc to images whose names conflict with existing files or previous images. You specify a default filename to be used for files with no description or whose name consists of invalid Windows filename characters.

Step 4 – Other Actions

Printing an Image

Click on "Print" to print the current image to your Windows printer.

Install Database

Once changes have been made to a database, you need to "install" the changes to copy them back to the handheld. This is true even if the file exists in the user backup folder, as the Palm Desktop will not automatically mirror the changes back. In fact, it is even more important to install a database here, as the backup file will get overwritten if the database is modified on the handheld.

You can use the Palm Install Tool in the Palm Desktop program to install the databases, or tap on the "Install" button in the Image Manager to automatically install the current database for you.

NOTE: Never make changes to the same database (or databases of the same name) on both the desktop and handheld at the same time. The entire database is backed up when changes are made on the handheld, and entire databases (not just individual images) completely overwrite the same file on the handheld when you install them.

Appendix B – TealPoint File Manager



When a “Move” action is available in a TealPoint applications, the TealPoint standard File Manager provides a consistent interface for copying or moving files.

Moving/Copying Files

The TealPoint Standard File Manager allows you to copy or move the pre-selected file from one folder or device to another. The contents of a target location to receive the file appear in the lower half of the screen. Simply select the destination device and folder using the file list and device/navigation icons, and tap on the **Copy** or **Move** buttons to start. Files may be copied between RAM and external storage cards, or between folders on the same storage card. The target location must differ from where the source file already exists. Note that items in the list are not selectable, but are present to indicate contents that may already be present in the target location for the pre-selected file.

Note that operations are limited to what is supported by the installed hardware and system software.

Palm Memory

PalmOS memory does not support folders, and can normally only hold PalmOS-specific resource (.PRC) and database (.PDB) files. Desktop-specific files (such as .WAV, .TXT, etc.) can normally only be stored on external expansion cards, or if copied to RAM, are typically not recognized by applications.

MemPlug

The system software MemPlug expansion Springboard modules does not support the VFS-standard interface for moving of files between Cards and RAM, but third-party add-ons such as the Kopsis Engineering VFS library can add this capability.

Sony CLIE

Sony CLIE handhelds running older versions of the PalmOS system software (prior to PalmOS 4.0) do not support copying files to any folders outside the root standard “MSSONY” folder. Subfolders can be freely made and used within the MSSONY folder however.

An additional **Folder** button is present for creating and deleting folders. If the current target is on a device that supports folders, tap on it to either delete the current folder location (if it is empty) or create a new subfolder in the current target location.

Appendix C – TealPoint Pen-Free Navigation

TealPoint Pen-Free Navigation provides access to almost all programs screens and functions via keyboard or device 5-way rocker pad. Similar to the 5-way interface on the Treo 600, TICL pen-free navigation also adds similar functionality to older PalmOS handhelds with directional pads or devices with add-on keyboard peripherals.

Pad Navigation



With 5-way controls, a current button, checkbox, or text field control is highlighted in blue-green or drawn bolded in monochrome handhelds. The current control is changed by presses of the directional pad, which moves the selection to a control in the general direction of the button press. The center “select” button will activate the highlighted control, pressing buttons, toggling checkboxes, or turn on or off the cursor in a text entry field.

On some devices, like the Treo600, the direction pad is mapped in the operating system to move the cursor in an active text field. When this is the case, the direction pad will move the cursor by default, but will change the active control selection once the cursor has reached the end of the text field and can move no further in that direction.

Keyboard Navigation

With an add-on keyboard, arrow keys replace the directional pad of a 5-way control. To select a control, the Enter key may be used, except when the text cursor is active in a multi-line text field. When this is true, the Enter key will enter a line break into the text field instead.

Accelerator Keys

On screens without text entry fields or other elements that accept keystroke input, buttons may also support an accelerator key which may be pressed to simulate a press of the key. When this is the case, the letter is shown underlined in the button.

Appendix D – Products

Products Visit us online for our complete product line, including:

SHORTCIRCUIT (<http://www.tealpoint.com/softshrt.htm>)

A new twist on gameplay fused from your all time action puzzle favorite games, connect falling conduit pieces into explosive loops in this frantic race against the clock.

SUDOKUADDICT (<http://www.tealpoint.com/softsudo.htm>)

Sudoku Addict brings to your handheld the addictive worldwide puzzle craze that has displaced crossword puzzles in many newspapers in Great Britain and Japan.

TEALAGENT (<http://www.tealpoint.com/softagnt.htm>)

Get news, movie times, stock quotes, driving directions, web pages and more without need for a wireless connection. TealAgent fetches and formats web-based content for offline viewing.

TEALALIAS (<http://www.tealpoint.com/softalia.htm>)

Free up memory and make the most of external expansion cards. Placeholder 'Alias' shortcut files automatically find, load, and launch apps and data from external SD cards, increasing free main memory.

TEALAUTO (<http://www.tealpoint.com/softauto.htm>)

Track and graph automobile mileage, service, and expenses with TealAuto, the complete log book for your car or any vehicle. Extensive customization options and unmatched in features and functionality.

TEALBACKUP (<http://www.tealpoint.com/softback.htm>)

Backup your valuable data with TealBackup, supporting manual and automatic backups to SD/MMC/CF cards and Memory Stick, backups through HotSync, and optional compression and encryption.

TEALDESKTOP (<http://www.tealpoint.com/softdesk.htm>)

Launch applications with TealDesktop, the themed replacement for the standard system launcher screen with tabs, multiple card folders, drag and drop, and more

TEALDIET (<http://www.tealpoint.com/softdiet.htm>)

Shape up your life with TealDiet, the diet, exercise, and personal tracking application for mobile devices. Lose weight, build more muscle, and live healthier with TealDiet.

TEALDOC (<http://www.tealpoint.com/softdoc.htm>)

Read, edit, and browse documents, Doc files, eBooks and text files with TealDoc, the enhanced doc reader. Extensive display and customization options; TealDoc is unmatched in features and usability.

TEALECHO (<http://www.tealpoint.com/softecho.htm>)

Improve your Graffiti text input speed and accuracy, seeing what you write with TealEcho digital "ink". No more writing blind!

TEALGLANCE (<http://www.tealpoint.com/softglnc.htm>)

See the time, date, upcoming appointments and todo items at power-up with TealGlance. The TealGlance pop-up utility and key guard comes up when you power up, letting you see your day "at a glance."

TEALINFO (<http://www.tealpoint.com/softinfo.htm>)

Lookup postal rates, area codes, tip tables, schedules, airports, and info from hundreds of free TealInfo databases. Create you own mini-apps; a handheld reference library.

TEALLAUNCH (<http://www.tealpoint.com/softlnch.htm>)

Launch applications instantly with the TealLaunch pop-up launcher and button/stroke-mapping utility. Map applications to button presses and pen swipes so you can get to your apps quickly.

TEALLOCK (<http://www.tealpoint.com/softlock.htm>)

Secure and protect your handheld with TealLock, the automatic locking program with encryption and card support. TealLock has unmatched features and customization options for personal or corporate use.

TEALMAGNIFY (<http://www.tealpoint.com/softlens.htm>)

Save your eyesight with TealMagnify, an ever-ready magnifying glass that works with most any program. TealMagnify lets you enlarge the screen for those times the text is too small to read.

TEALMASTER (<http://www.tealpoint.com/softmstr.htm>)

Replace Hackmaster with TealMaster, the supercharged 100%-compatible system extensions manager. TealMaster adds enhanced stability, configuration and diagnostic features and PalmOS 5.0 hack emulation.

TEALMEAL (<http://www.tealpoint.com/softmeal.htm>)

Save and recall your favorite restaurants with TealMeal, the personal restaurant database. With TealMeal's handy sorting and selection options, never ask "where to eat" again.

TEALMEMBRAN (<http://www.tealpoint.com/softmemb.htm>)

Stop crashes and monitor your memory use with TealMemBrain, the application stack stabilizer. TealMemBrain boosts your stack space on OS3 and OS4 handhelds, eliminating causes of system instability.

TEALMOVER (<http://www.tealpoint.com/softmovr.htm>)

Beam, delete, rename, and copy files with TealMover, the file management utility for SD/CF/MS cards. TealMover lets you see, move, modify, hex edit, and delete individual files.

TEALMOVIE (<http://www.tealpoint.com/softmovi.htm>)

Play and convert high-quality video and synchronized sound with the TealMovie multimedia system. TealMovie includes a handheld audio/movie player and a Windows AVI/MPEG/Quicktime converter program.

TEALNOTES (<http://www.tealpoint.com/softnote.htm>)

Insert freehand graphics anywhere with TealNotes "sticky notes" for Palm OS. TealNotes can be inserted into memos, to-do lists, address book entries--almost anywhere you currently have editable text.

TEALPAINT (<http://www.tealpoint.com/softpnt.htm>)

Paint, sketch, or draw with TealPaint, the all-in-one mobile graphics paint program and photo editor. Highlights include 25 tools, 32 patterns, 49 brushes, zoom, layers, undo, & JPEG/GIF/BMP support.

TEALPHONE (<http://www.tealpoint.com/softphon.htm>)

Supercharge the address book with TealPhone, the contacts replacement with superior interface and options. Highlights include enhanced display, search, phone-dialing, groups, and linking.

TEALPRINT (<http://www.tealpoint.com/softprnt.htm>)

Print text and graphics to IR, serial, and Windows printers with TealPrint. With numerous connection options, TealPrint, is the all-in-one text and graphic printing solution.

TEALSAFE (<http://www.tealpoint.com/softsafe.htm>)

Store your passwords, credit cards, PIN numbers, and bank accounts in the TealSafe data wallet. With maximum security and encryption, TealSafe is a must for features and security.

TEALSCAN (<http://www.tealpoint.com/softscan.htm>)

Keep your PDA or Smartphone healthy, clean, and fast with TealScan, the system maintenance utility. Use TealScan to fix crashes, find updates, and keep your device running smoothly and efficiently.

TEALSCRIPT (<http://www.tealpoint.com/softscrp.htm>)

TealScript adds Graffiti text input to Treo and Centro smart phones. For devices that already support Graffiti, TealScript adds a trainable system that supports both multi-stroke and Graffiti-1.

TEALTRACKER (<http://www.tealpoint.com/softtrac.htm>)

Track time and expenses with a fast, easy to use interface that requires minimal effort. Generate reports and export data to a spreadsheet. TealTracker is your personal time clock.

TEALTOOLS (<http://www.tealpoint.com/softtool.htm>)

Improve productivity with TealTools pop-up Palm Desk Accessories. TealTools includes a popup calculator, clock/stopwatch, preferences panel, editing panel, memopad, and a file/backup manager.

Appendix E – Revision History

Version 1.24 - April 7, 2008

- Added new improved UI with shaded buttons and optional thin fonts
- Added 'System fancy fonts' option in preferences to turn on/off thin fonts
- Added workaround for bug in TX to re-enable full screen mode icon in landscape mode after system mistakenly disables it

Version 1.23 – August 7, 2006

- Added support for mapping application button on Palm Treo 700p to TealDesktop as default launcher

Version 1.21 – June 22, 2006

- Fixed icon placement in hires devices or display modes (landscape) that do not support direct screen writes

Version 1.20 - May 30, 2006

- Added new "Standard Tiny" and "Standard Tools Tiny" themes (Use "Choose Theme->Create" to create them if TealDesktop is already installed)
- Fixed crash launching on Palm Z22 handheld
- Fixed initial drawing of screen when entering Theme editor on Palm Z22

Version 1.19 – April 3, 2006

- Fixed graffiti-seek in "all" category when hidden categories are present
- Fixed theme customizations to apply to categories that have not been visited since the last global category change

Version 1.18 – March 30, 2006

- Added preference option to specify a startup category other than 'all'
- Added preference option to use half-sized fonts for icons on high-res devices
- Added menus to import and export customize icon gadget bitmaps
- Added auto-positioning of popup category/app lists to match trigger gadget
- Added support for category-favorite gadgets (go to a specific category when tapped)
- Added support for category-list gadgets (similar to category pick list)
- Added support for mapping the hardware launcher button (really application button #1) on lifedrive/TX to TealDesktop when 'Use as default launcher' option is on
- Fixed beam enable/disable controls to work on newer devices
- Fixed crashes switching to/from landscape mode on some devices
- Fixed display from blanking background in lower third of the screen when minimizing the graffiti area on LifeDrive and possibly other devices
- Fixed display of high-resolution images in landscape mode on devices that do not support direct screen access
- Fixed dragging and resizing of objects in theme editor
- Fixed gadget action selection from popping up wrong selection list for named app/panel actions
- Fixed pen selection of categories when using 'All at end' mode
- Fixed scrambled icons on LifeDrive when accessing card-based folders (Palm's SD driver trashes files if code tries to do a 0-byte write)
- Fixed to rescan icons after copying/moving apps with copy/move menu

Version 1.10 – November 11, 2005

- Added option to move 'All' category to end of RAM categories (in RAM Categories -> Order)
- Fixed selection of date indicator in default 'standard' and 'standard list' themes (delete theme to recreate)
- Fixed compatibility with Palm Z22

Version 1.05 – August 22, 2005

- Added backup of icon categories in case system is reset immediately after a full scan on an NVFS device
- Added support for auto-launching SD cards (with startup.prc file)
- Updated so pressing Treo menu button will dismiss open men
- Fixed graffiti-seek when in a sub-category

Version 1.00 – March 1, 2005

- Initial Release

Appendix F – Contact Info

TealDesktop by TealPoint Software
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TealPoint Software
TealDesktop for PalmOS
454 Las Gallinas Ave #318
San Rafael, CA 94903-3618
We look forward to hearing from you.

Please visit us at www.tealpoint.com, or email us at contact@tealpoint.com.

Appendix G – Registering

Registering allows you to use the program past the 30 day expiration period and turns off registration reminders.

Currently, you may register by snail mail or online with a credit card and a secured server from the store where you downloaded the software. For the first option, send the following information on a sheet of paper separate from your payment.

- Product Name
- E-Mail Address
- HotSync User ID (Pilot Name Required for Passkey generation. It can be found on the main screen of the HotSync application on the Pilot as "Welcome _____" or in the corner on a PalmIII or higher)
- Check (drawn off a US Bank) or Money Order for (\$19.95 US). No international checks or money orders please.

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6. Applicable Law. This Agreement is governed by the laws of the State of California.