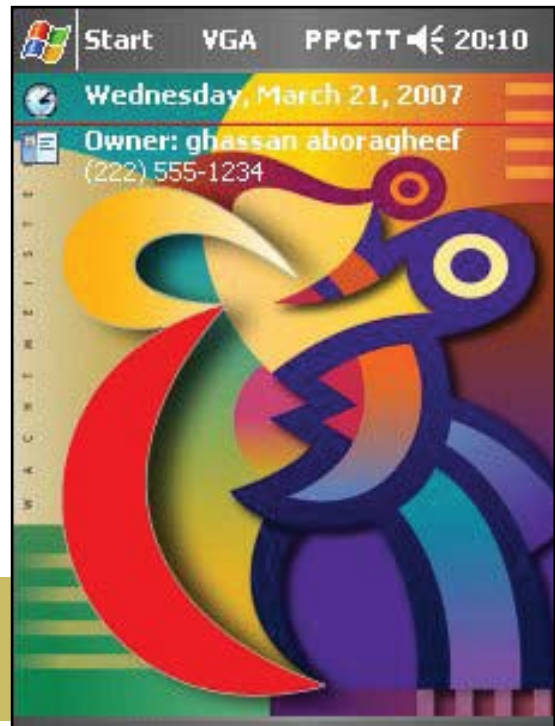




SPECIAL REPORT

Creating and Using Themes





Creating & Using Themes

by Nate Adcock and Tari Akpodiete

SPECIAL REPORT... Creating & Using Themes



Change the look and feel of your WM device with themes and Today/Home screen add-ons

A Windows Mobile “theme” is a file containing graphical information, icons, and other elements used to customize the look and feel of the Today or Home screens. Thousands of themes are available online, most of them for free. In addition, you can create your own themes using any of a number of excellent programs. Themes are more than clever coordinations of contrast and color. They not only catch the eye and make the drab into something more appealing, they also enhance the user experience, adding a spark of newness to your device.

A theme is a single archive file that contains at least one background image for the Today/Home screen and a settings file that customizes the user interface. Pocket PC (touch screen) theme files have a .tsk file extension. Smartphone (non-touch screen) theme files have a .hme extension. (In addition, smartphone theme files use an XML file to store color settings.) It’s nice to know these details, but it’s really not necessary to be able to create or modify a theme. There are plenty of theme creation programs available that make it easy to select graphics, color schemes, and other options, and generate a theme file for your device.

Know thy device and theme type!

Theme capability has been integrated into Windows Mobile devices since the release Pocket PC 2002 and remained essentially unchanged until the release of Windows Mobile 5. The Today screen on WM 5 Pocket PCs was streamlined over previous versions and is somewhat less tweakable. However, themes designed for previous versions of the OS still function on WM 5/6 devices with a few limits for older themes.

Less than two years after WM 5 was released, Microsoft announced Windows Mobile 6. As it turns out, the differences between the WM 5 and WM 6 interfaces are noticeable. This worried me a little until I asked Bob Katayama (one of our mobile experts) to test one of the themes I created for WM 5 with a pre-release WM 6 device he had. He reported that it worked just fine, and I have since tested some of my themes in the newly released MS Device Emulator.

Before you attempt to create a theme or download one, you need to know the resolution of the screen on your device. Themes designed for one screen resolution may not display well on another. Most Pocket PCs and Phone Edition (or Professional) devices have QVGA (320 x 240 pixel) screens, but a few have VGA (640 x 480) or square (240 x 240) screens.

Many of the more recent non-touch screen smartphones have horizontally oriented QVGA screens (240 x 320). The other common smartphone screen resolution is 176 x 200 pixels. You should also note that themes designed for older versions of the OS may not work as well on newer versions (especially if the theme was not designed to support Landscape mode). The following chart will help you select compatible themes from download sites and properly format the themes you create on your own.

OS / screen size	Today / Start menu sizes*	Supports Landscape?	Tweak gradients & Taskbar color
PPC 2002 / QVGA	242x287/154x289	No	Yes
PPC 2003 / QVGA	242x287/154x289	Yes**	Yes
PPC 2003SE / QVGA	320x294/240x320	Yes**	Yes
PPC 2003SE / VGA	640x588/480x640	Yes**	Yes
Pre-WM 5 Square Screen	240x214/239x213	Yes	Yes
Smartphone (176X200)	176x200	N/A	Yes (pre-WM 5)
Smartphone QVGA	240x293	N/A	Yes (pre-WM 5)
PPC WM 5 QVGA & VGA	Same as SE	Yes	No

*Recommended Sizes are for cropping images for themes you are creating; actual sizes displayed vary.

**Using Extended Theme (pre-SE versions can use a tool such as Nyditot Virtual Display to rotate the screen)

Free theme creation tools

For the sake of brevity, and to provide as many resources to check out as possible, I tried to focus more on the products and important features of each. Many products mentioned here have excellent tutorials and help

Nate Adcock is a systems test and integration engineer with experience managing and administering a wide variety of platforms and network environments. Nate is a former military weather forecaster and has worked extensively with the Pocket PC OS and handhelds for several years. In addition to working on his own hobbyist blog (natescrap.blogspot.com), he is also a regular contributor to *Smartphone & Pocket PC* magazine’s Blogs and was an expert judge in our recent Best of Software Awards 2007. His e-mail is natester@gmail.com



Tari Akpodiete has been actively involved in the mobile community since 2000. Nicknamed the “Pocket PC Princess,” her sites include PocketRocketFX.com and HandheldUnderground.com, where one can download movie trailers, eBooks, themes, and wallpapers for their device. As a journalist who specializes in technology and entertainment issues, she has spoken at numerous conferences, and her articles have appeared both in print, and online. You can reach her at TariAkpodiete@gmail.com.

SPECIAL REPORT... Creating & Using Themes



Themes created using Microsoft's free Theme Generators: Pre-WM 5 Pocket PC (left), WM 5 Pocket PC (middle), WM 5 and WM 6 smartphone (right).

Theme Generator adds these capabilities to the free MS Theme Generator for Pocket PC (see below left). Spb also provides several theme and icon sets with this tool, and joining the free Spb club gives you access to several very attractive, integrated themes for WM 5 (including skins for applications as well). A link to an excellent online user manual/tutorial is found in the lower left corner of the Web page.

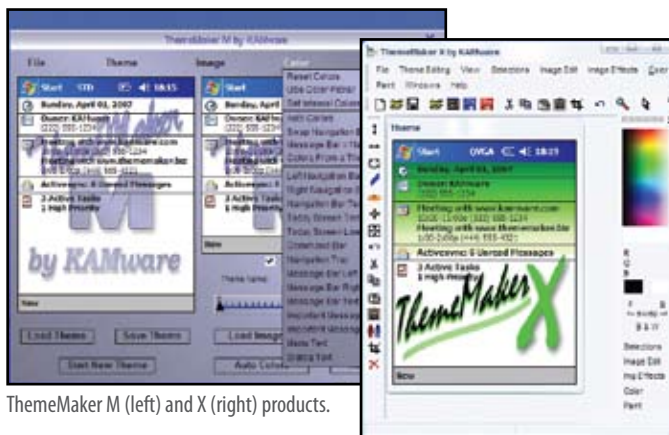
for doing all of the above and more, and links will be provided at the end to help get you started.

MS Theme Generator for Smartphone

microsoft.com/downloads (search on "Theme Generator")

If you have used older Pocket PCs or smartphones, you may know about these free theme-generator programs from Microsoft. These programs install on your desktop PC and walk you, step-by-step, through the process of creating and transferring themes to your device. The Pocket PC version will also install a handy Today screen plug-in on your device that allows you to switch your theme. I have used both of these tools quite a bit over the years, and especially appreciate the ability to create themes with color gradients in the title bar and a custom color in the command bar. They natively support QVGA-capable devices only; however, the next product reviewed will allow you to create VGA themes.

Commercial theme creation tools

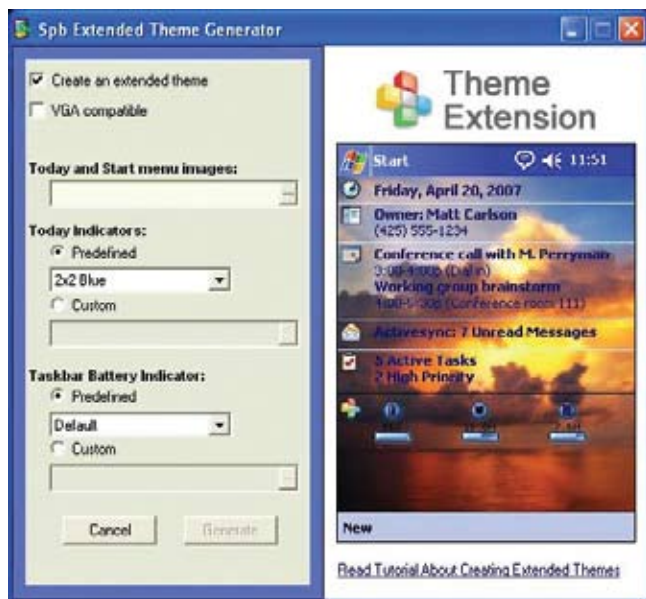


ThemeMaker M (left) and X (right) products.

ThemeMaker (X, M, SE, and SP)

thememaker.biz

KAMware's ThemeMaker is the application of choice for the serious theme author. Different versions of this desktop PC program are offered, supporting the creation of themes for Pocket PCs and smartphones



Extended Theme Generator enhances Microsoft's Theme Generator for the Pocket PC.

Extended Theme Generator

spbsoftware.com/products/extthemegen

An extended theme includes the standard WM theme elements, plus additional features such as Today screen plug-ins, battery indicators, landscape view generation, and VGA themes. Spb Software's Extended

TIP *Change Today/Home screen background without creating a theme*

You can use the Pictures & Video application built into all Windows Mobile 5 devices to select any JPG on your device as the background image of your Today/Home screen. (On pre-WM 5 Pocket PCs, this app is called "Pictures.") After opening the program follow these steps:

- 1) Find the image you want in the thumbnail view and select it to display it in full-screen view.
- 2) Tap Menu >Set as Today Background. (On pre-WM 5 Pocket PCs, tap on Tools >Set as Today Wallpaper. On smartphones, select Menu >Use as Home Screen. This displays a setup screen that displays the image and allows you to crop it and adjust the transparency of the image—the lower you set this percentage, the more solid the image.
- 3) When you like what you see, select OK (smartphones: Finish) and the image will be set as the background to your Today or Home screen.

Today/Home Screen Add-ons

You can use these “add-ons” to enhance the functionality to the Today/Home screen without creating or modifying themes. The downside is that they are installed on top of the Windows Mobile interface and can eat up system resources. But they do look cool and enhance the usability of your device. Here are four add-ons that I like:

Facade for Smartphone

sbsh.net

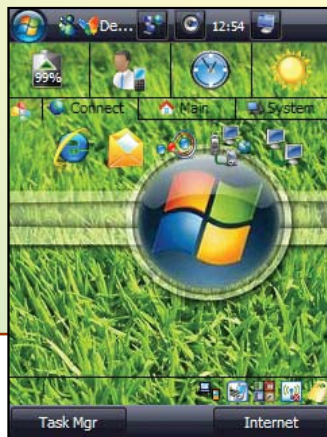
Facade is a highly customizable tab-based Home screen plug-in for non-touch screen smartphone devices. Facade puts an application launcher on the Home screen, allowing you to start your apps quickly and easily. It can also add battery and memory meters, Calendar and Tasks tabs, and much more!



Wisbar Advance

lakeridgesoftware.com

Wisbar is the Cadillac of task management/UI enhancers, adding sound effects, skins, customizations, menu animations, and more to your touch screen device's Today screen. It's fairly easy to mix and match skins, and the



with varying screen resolutions and orientations. I use both the ThemeMaker M (supports Pocket PCs 2002 and up and any screen resolution or orientation) and ThemeMaker X (any theme-capable Windows Mobile device). These applications make theme creation a breeze, allowing you to create a color scheme for your title/command bars, as well as menus and text. The Auto-Color feature, which picks menu/text colors based on the colors in your background image, selects theme colors pretty well for my taste, but the program provides superior editing capabilities if you want to further tweak the colors, images, menus, etc.



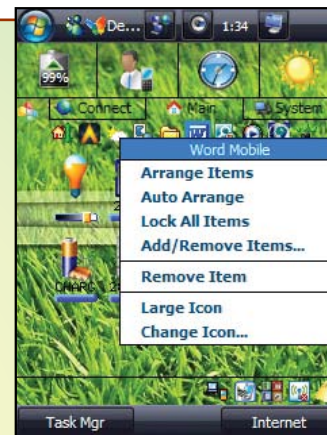
ThemeMachine sports a streamlined user interface that makes theme creation easy.

more initiated Wisbar user can create his or her own from scratch. (The site has a link to a “Skinning Guide” that helps you create Wisbar skins.)

Spb Pocket Plus

spbsoftwarehouse.com

Pocket Plus is an excellent plug-in, adding a tabbed interface to the Today screen, which lets you launch applications, check battery and memory stats, quickly access system and connection utilities, and more. It also adds a feature-rich task manager and enhancements to File Explorer and Internet Explorer.



SPB Mobile Shell

spbsoftwarehouse.com

This new and very useful product from Spb Software House enhances the look, functionality, and ease-of-use of your Pocket PC. It has its own version of the Today screen (called the Now screen), an integrated launcher, and will conform to the look of your theme. Highly recommended!



These tools also make the process of moving, listing, and previewing themes in landscape and portrait mode a cinch. ThemeMaker X is my favorite version because it does it all!

ThemeMachine

mobilemediaint.com

ThemeMachine's streamlined user interface makes it a real stand-out in this category, and it supports all theme-enabled versions of the OS, including Windows Mobile 6. It also does a good job of supporting the creation of themes for both portrait and landscape viewing modes. The overall layout is efficient, and new themes can be designed rapidly using the tabbed editor menus and the quick pick icons. ThemeMachine also supports the capturing of image frames from a video file (Apple Quicktime, MPG1, AVI, or WMV) or directly from a camera connected to your PC—a nice addition to this genre. Finally, the program also offers great theme transfer and browsing features.

MMI plans on releasing this application in conjunction with their new Web site, which will also offer theme images formatted for the various screen resolutions.

FlashThemes Generator

netwasp.com/flashthemesgen.asp

Flash Theme Generator is a great desktop PC tool for creating static themes and flash themes for the Pocket PC. A flash theme displays an animated image on the Pocket PC's Today screen (e.g., fish swimming in an aquarium). To use the animated themes created by this program, you will also need to install Adobe's Macromedia Flash Player (adobe.com/products/flashplayer_pocketpc/) and Netwasp's FlashThemes

SPECIAL REPORT... Creating & Using Themes



Netwasp's Flash Theme Generator lets you create animated themes for your Pocket PC.

Player (netwasp.com/flashthemes.asp) on your Pocket PC.

To create a theme, the simple theme control panel provides you with various selectors to set the desired Today background images and color options, along with your selected animation. You simply download the flash file you wish to add to your theme (.swf format) or create your own. (See also "Playing Flash Content on the Pocket PC: pocketpcmag.com/blogs/menneisyys/052006FlashPlayers.asp for more on getting flash files.) Then tweak your Today screen options, give the theme file a name, and voila! You just created a new animated theme. The program includes an

emulator that will display the flash theme. When you're finished, use the program's transfer tool to send the new theme to your Pocket PC via an ActiveSync connection. All the major theme download sites mentioned in the sidebar at the end of this article offer animated themes—there are a ton of cool ones available online.

VITO Theme Editor

vitotechnology.com/en/products/themeeditor.html

Like any of the third-party programs mentioned above, VITO Theme Editor goes beyond the MS Theme Generator in both form and function. The program provides a handy split interface that shows the tweakable theme elements on the left and the resulting Today screen on the right.

VITO Theme Editor: the object-oriented approach.



The program currently supports WM 2003 through WM 5/6, and includes 4 prepackaged themes.

The biggest drawback with the program is that it saves the themes you are working on in its own proprietary format, in files with a ".theme" extension. When you are finished creating or modifying the theme, you can then export it into a standard .tsk theme file and transfer it to your Pocket PC. However, you cannot open an existing .tsk file and modify it using the program. (In fact, they don't even show up in the VITO Theme Editor file listing.) This means that if you want to modify existing (.tsk) theme files—either your own or ones you've downloaded from other sources—you have to re-create them from scratch.

The program doesn't give you the advanced cropping features or the landscape support found on other theme creation programs. However, it is very easy to use and gives you some extra customization options (like the ability to tweak the color of your tap-n-hold dots). It also incorporates a transfer function that copies completed themes to your Pocket PC via an ActiveSync connection.

1-HomeEdit

omegaone.com/homeedit/default.htm

1-Home Edit is one of the few products that lets you edit (not create)

Theme-Related Resources

Free theme sites

You don't need to spend any time creating your own themes—there are plenty of them available online for free. All you have to do is download the ones you like, copy them to the My Documents folder on your device, and select them using the Today setup utility located in the Start > Settings screen (smartphones: Start > Settings > Home Screen). On the smartphone, you can also use the File Manager to browse to a theme file and select it to install it on your device. Here are some free theme-related sites:

- DeviantArt.com: This is probably my favorite site to get images for my themes, as well as themes, skins, and almost any computer graphic art file type I could ever want.
- PocketThemes.com: This top Pocket PC theme site is easy to navigate and has an extensive, well-categorized library of themes, plus user forums and a nice theme tutorial.
- PocketPCThemes.com: This is another large, categorized online theme library, which includes a large section of animated themes.
- WmThemes.com: The makers of ThemeMaker host this site, which has plenty of free themes.
- McDeb.com: This site offers some really unique Pocket PC themes as well as skins for Dashboard and Wisbar. It also offers the "McDeb" version of Thememaker, which is streamlined to make theme-making easier.
- SmartphoneThemes.com: Great site for grabbing good-looking Smartphone themes.
- MobileMedialnt.com (soon to be in production): The new home of PocketRocketFX.com. Run by Windows Mobile expert Tari Akpodiete (co-author of this article), it will include themes and much more.
- Online Screen Creator (pocketpc-live.com/shopping-cart/index.php): This is the home page of a unique online theme generator. The site offers attractive today images that

can be themed/customized and downloaded right from the Web site, without needing a generator application.

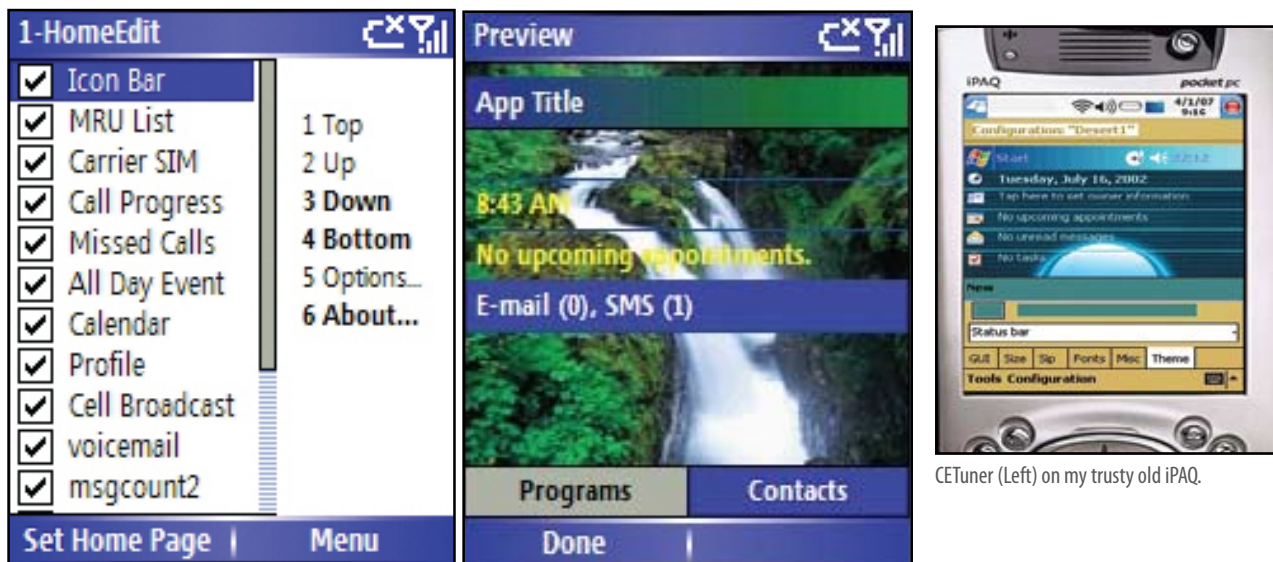
Additional Links/Resources

- ThemeChanger (homepages.inspire.net.nz/~gambit): Free Smartphone Home screen utility.
- Theme Developer's Guide (pocketthemes.com): Link on the left side of the page.
- All About Themes (wmthemes.com/aboutthemes.aspx): More info and tutorials on theme topics.
- Extended Themes (spbsoftwarehouse.com/products/pocketplus/themetutorial.html): Tutorial on creating themes using MS Theme Generator and Spb Pocket Plus.
- Everything You Wanted to Know about Themes (pocketpcthoughts.com/forums/viewtopic.php?p=361263).
- My home page (home.comcast.net/~natester/themes.html): Includes some of the themes and skins shown in this article.
- PPCSG Themes/Plug-in FAQ (ppcsg.com/mobile/index.php/t47257.html): The ultimate WM theme-related FAQ with links to tips, how-tos, guides, hacks, and much more.
- ThemesTool.dll: This free DLL file is available from PocketPcFreewares.com and other online sources (do a Google search to find it). When installed on your desktop PC, it displays WM theme files as thumbnails when viewed in the PC's File Explorer. Follow the installation instructions that come with the DLL carefully.

Comprehensive list of theme-related sites

On the PPCSG FAQ page (ppcsg.com/mobile/index.php/t47257.html) click on the second link, titled "Recommended Theme Sites," for a comprehensive list of links to theme generators, theme sites, and much more.

SPECIAL REPORT... Creating & Using Themes



CETuner (Left) on my trusty old iPAQ.

1-Home Edit lets you edit Home screen themes right on the smartphone.

themes for your device itself. You can change the background image, choose one of 20 different color schemes, or define your own, and add to or remove elements from the smartphone's Home screen. You can tweak just about any aspect of your smartphone's look and feel from within this handy tool. One of the coolest features is the preview mode, which allows you to check your changes before you apply them. Unfortunately, it is not available for the Pocket PC.

CETuner

pocket-pc-software.penreader.com/CETuner_2002.html

CETuner lets you change theme elements directly on your Pocket PC. It has a ton of great features, including pre-configured styles similar to desktop PC versions of Windows. It also includes some very useful registry tweaks that change the appearance of your device (you can make your scroll bars thinner, for example, or re-size your device fonts). Although I did not test this, the vendor claims that some of the tweaks will save bat-

tery life by giving you the option to run lower-contrast themes. The vendor is planning on a version of the program that supports WM 6 themes.

Putting it all together!

You can use downloaded images to create the Today/Home screen backgrounds in your themes, but a graphics tool will let you edit the image and create a more interesting background. I use the more advanced Adobe Photoshop to blend images, but something as simple as Microsoft Paint will do. (I've created very attractive themes using only Paint and the free MS Theme Generator tools mentioned above.) Another recommended program, which started showing up in Office 2003 under the tools menu, is the Office Picture Manager. This tool makes image resizing/cropping a breeze, and is a must for reducing pictures for your small device display.

I'm fairly confident that with the tools mentioned in this article and a little artistic sense, you can create some great-looking themes that will add functionality and visual appeal to your Today or Home screen. ■