

# Crash! PRO

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Software is never as stable as you wish it to be. So even on small computers like your PalmOS-based PDA, you may encounter crashes. These are not in blue, but equally annoying message boxes with information like “Fatal Exception”, “MemoryMgr.c, Line: 4365, NULL handle” and so on.

Depending on how much 3<sup>rd</sup> party software you install or how many beta versions and experimental software you are using, you may see crashes quite a lot.

Not only does a crash interrupt your work and potentially erases your last input, you are also facing additional problems, where *Crash Pro* is going to help you.

1. Often the reset button in the crash dialog does not work. This means that you need to unscrew your stylus for a reset pin or, with some devices, that you need to find a paper clip. Additionally, you will have to access the back of your device, which requires that you remove the Palm from its case.

⇒ Using *Crash Pro*, you will not have to reset your device manually in these situations. Rather, *Crash Pro* will automatically initiate a reset after a customizable timeout. No more frantic searches for a reset pin. No more the need to remove your Palm from its case.

2. A crash can happen while you are away from your Palm. At night, some software products are doing housekeeping tasks (re-ordering alarms, making backups, etc) and a crash at 3am will mean that your Palm is on until you find it the next morning – hopefully before the battery has drained completely.

⇒ Using *Crash Pro*, the device will reset automatically and afterwards the usual auto-off timeout applies. This means that your Palm won't be on much longer but a few minutes even if there is a crash during the night. No more battery draining if a crash happens while you are away.

3. Stress. A crash can be really frustrating.

⇒ Using *Crash Pro* will make the experience a bit less annoying. While it cannot prevent the crash itself, an image will be displayed before the automatic reset is taking place. Hopefully this will make it a little bit more interesting.

## **Legal / Registration**

*Crash Pro* is © 2000-2002 Daniel Seifert, © 2003-2006 79bmedia GmbH.

We put every effort into making sure that *Crash Pro* works reliably, and we are not aware of any bugs or problems in *Crash Pro* that are not listed in this manual. Nonetheless, due to the application's nature, we need to point out that you use *Crash Pro* on your own risk.

*Crash Pro* is shareware. If you want to continue using it after the two-week trial period, you can obtain a registration code for a small fee. Please refer to register.html for details

## **System requirement**

This version of *Crash Pro* supports all PalmOS 3 and PalmOS 4 devices. Additionally, the following PalmOS 5 devices are supported:

- Palm Tungsten T, T2, T3, T5, C and E2 (but not E) and Zire 21, 31, 71 and 72 as well as the palmOne LifeDrive and the TX<sup>1</sup>
- Sony Clié NX60, NX70, NX73, NX80, NZ90, TG50, UX40, UX50, TJ25, TJ27, TJ35, TJ37, TH55
- Garmin iQue 3600, 3200, 3600a
- Tapwave's Zodiac and the GSPDA m28, m68
- Treo 600, Treo 650

If your PalmOS 5 device is not supported, please check our website for a new version or contact us at [crash@79bmedia.com](mailto:crash@79bmedia.com). The Tungsten E is not officially supported: on some devices it works, but on other Tungsten E devices it may not do the automatic reset. This is a Tungsten E specific issue, please do not contact support regarding this issue.

## **Installation**

*Crash Pro* is available in different languages. Install the language version of your choice (i.e. crash-pro-english.prc) by double-clicking it and it will be installed with your next HotSync.

If you are updating *Crash Pro* to a newer version, please make sure to disable the previously installed version of *Crash* on your handheld before installing the new version; otherwise the installation will fail.

If you are updating from *Crash* 1.3, please make sure you remove CrashLog from your handheld. CrashLog is now a part of *Crash Pro* and using the *Crash* 1.3 version of CrashLog will damage the preferences of *Crash* 2.x, as the internal data format has changed. To prevent this, *Crash Pro* 2.x will refuse to be enabled until CrashLog has been de-installed.

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<sup>1</sup> Some devices, most notably the Palm TX, do not always crash with an error message but simply do a soft reset. For these cases, it is neither possible to intercept the crash (there is nothing to intercept) nor to log the crash (there is nothing to log). Crashes that are display the "old-fashioned" way will of course be intercepted and logged as usual.

## Usage



After installing *Crash Pro*, a new icon will be added to your launcher. Launching *Crash Pro* will open the main screen, where you can enable/disable *Crash Pro*, access the settings or the menus. You may change the settings while *Crash Pro* is enabled, too. *Crash Pro* will stay enabled after a crash or a soft reset.

At the time of a crash, an image will be displayed and after the customizable timeout, a reset will take place.

## Settings

In the settings screen, you can define how many seconds after a crash the automatic reset should take place. The default value is 10 seconds. During this time, *Crash Pro* will display an image that you can select and which will be displayed in the settings screen. Additional images can be downloaded from <http://www.79bmedia.com> or you may use *Crash Imager* to create your own images. Please refer to *Crash Imager*'s manual for more details.

If you want to delete an image, you can do this by selecting "Delete current image". This does only work, though, if the currently displayed image is not used by *Crash Pro*. In this case, you should disable *Crash Pro* before deleting the image. Furthermore, you cannot delete the default image.

## Debug Menu

In the Debug menu, you can go to the Logging screen (see below). Additionally, two test crashes can be activated from within the menu. These were added so you can see *Crash Pro* in action any time you like and to see the differences between a crash with *Crash Pro* disabled and enabled.

## Logging

*Crash Pro* 2.x can keep a log of all crashes (including time, error message and application name) and soft resets.

Logging has to be explicitly enabled in *Crash Pro*. If you want to use this feature, please make sure to read this section of the manual completely.

To enable logging or to view the log, launch *Crash Pro* and select "Logging". A new window will open. Here you can enable the logging feature when tapping the "Prefs" button and define how many crashes/resets you want to remember. You can also set that soft resets should not be logged and whether the last crash should be displayed after the automatic reset.

In the center of log screen, *Crash Pro* will display the crashes and resets (if logged) in reverse order, i.e. the last one will be at the top. You can see the date, time and the name of the application. When tapping on a log entry, you will see the error message of the crash. All entries can have a note attached and via the menu you can also add a single note to the log.

It should be noted that the application that is named in a log entry is not necessarily the cause of the crash. It might just happen to be the application that was running during the crash. If the crash was caused by hacks or the operating system itself, this cannot be determined. Additionally, logging the name usually only works correctly if the application is located in the internal memory of the device.

**WARNING:** *Crash Pro* runs at a time when the system already determined that something went wrong. Therefore, one should try to do as few things as possible afterwards. Displaying an image and making a reset is no problem. There usually shouldn't be a problem either in storing the error message to survive the reset. It is recommend nonetheless to not use the logging feature on a permanent basis, e.g. just out of curiosity. This feature is meant to be a tool to support error tracking in an instable environment.

## **Supported crashes**

A 'crash' by definition is *a sudden, usually drastic failure* of hardware or software. A crash can have several symptoms/results:

1. An error message is displayed (like the bluescreen on your Windows-PC) and a soft-reset is initiated after the error is acknowledged by the user. This means that the PalmOS has discovered that the application or the system is not working correctly. *Crash Pro* acts upon this kind of crash.
2. The system freezes or soft-resets. This kind of crash cannot be handled by *Crash Pro*. In case of a soft-reset, it is already too late for *Crash Pro* to display anything. In case of a frozen system, the problem is either the processor being halted (in which case *Crash Pro* cannot be executed either and a manual soft reset is required) or an endless loop. Technically speaking, an endless loop should not be considered as a crash as it might be by purpose (lengthy calculation, etc).

Please keep in mind that *Crash Pro* will only act upon crashes that produce an error dialog (a.k.a. fatal exception). It is technically impossible to intercept crashes causing a soft reset, crashes causing the system to freeze or to intercept endless loops.

## **Known bugs / problems**

On PalmOS 3.x and PalmOS 4.x, no problems are known. The core function of *Crash Pro* used on PalmOS 3 and 4 is identical to *Crash 1.x* which has been in heavy use for almost three years without any bugs.

On PalmOS 5, *Crash Pro* has been tested extensively. The beta test has shown that there may be very rare occasions where empty fatal exception dialogs are displayed which are not intercepted by *Crash Pro*, requiring a manual soft reset. This behavior is harmless and almost never happens.

## **Contact**

In case of questions regarding *Crash Pro*, please contact [crash@79bmedia.com](mailto:crash@79bmedia.com) in either English or German language. We will try to reply to your mail within two business days.



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