



SMART CRASH REPORTS

a free tool by unsanity

What is Smart Crash Reports?

Smart Crash Reports is an enhancement for the Apple's CrashReporter application introduced in Mac OS X 10.4. It allows 3rd party developers to register their products in manner so if the eligible application crashes, the crash log is being sent to the developer as well as Apple. This greatly enhances the user experience of the OS, and allows developers to receive crashes and improve their software in a timely manner.

Smart Crash Reports requires no Application Enhancer or similar "patching" frameworks users have to install; they operate on the InputManager mechanism that is built-in Mac OS X.

Smart Crash Reports is completely free to use for both users and developers; Unsanity is providing it as a service to the community being certain it will benefit all the users on the platform.

Using Smart Crash Reports As A Developer

We strongly encourage you to use Smart Crash Reports functionality in your products. You assume no obligations by adopting Smart Crash Reports keys in your application Info.plist file, yet if the user has Smart Crash Reports installed, and your application crashes, you will receive a crash report from the user when they decide to Report it to Apple.

You can also **install Smart Crash Reports** from within your product through the use of the provided Smart Crash Reports Install API, but this is completely up to you.

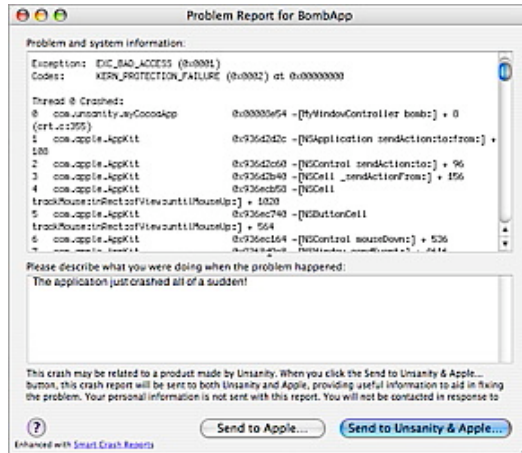
Overall, there are **two ways of receiving crash reports for your product**:

- **By E-Mail** (you have to register the email on the Unsanity server - we will keep it secure and will never disclose to anyone).
- **Through a CGI script on your web server** (this requires more effort but will eliminate Unsanity server processing the crash logs).

No matter which way you choose to receive crash reports through, you **have to let Smart Crash Reports know about your product**. This can be done in one of two ways.

Registering Your Application With Smart Crash Reports

First way is the easiest if you're developing a stand-alone application. **You simply have to add two new keys to your applications's Info.plist file:** E-mail ticket ID to send the crash reports to (or the URL to the CGI script on your site), and the colloquial name of your company that is used by users (for example, if the company is "Adobe Systems Incorporated", then "Adobe" is sufficient). The name of the company will be used in the Submit button and the static text explaining the problem, so keep it short:



List of available keys for Info.plist:

SmartCrashReports_CompanyName: (string, required) The colloquial name of your company used by users ("Apple", "Adobe", "Unsanity", instead of "Apple Computer Inc", "Adobe Systems Incorporated", "Unsanity, LLC", etc).

SmartCrashReports_EmailTicket: (string, required if no CGI URL is set) The unique E-mail ticket ID to send crash reports to. It is obtained at <http://www.unsanity.com/goto/email-ticket/>

SmartCrashReports_URL: (string, required if no email ticket is set) URL to the CGI script that will be accepting crash reports from the CrashReporter.app (if you choose to process them on your own).

SmartCrashReports_CommentsTemplate: (string, optional) This string will be inserted in the optional comments field ("Please describe what you were doing when the problem happened" one). You can use this to insert messages to user, such as "Please leave your E-mail here if you wish to be contacted in regard to this crash", etc.

Example of your Info.plist file addition for the Smart Crash Reports-enabled application (this will let Smart Crash Reports know your company name is "ABCSoft" and instruct it to send crash reports to an E-mail previously registered with Unsanity that has the E-mail Ticket ID SCR-12345ABCD:

```
<key>SmartCrashReports_CompanyName</key>
<string>ABCSoft</string>
<key>SmartCrashReports_EmailTicket</key>
<string>SCR-12345ABCD</string>
```

Advanced example that will submit the crash report to a CGI script on your web server and fill in the comments field for the user:

```
<key>SmartCrashReports_CompanyName</key>
<string>ABCSoft</string>
<key>SmartCrashReports_URL</key>
<string>http://www.abcsoft/cgi-bin/smartcrashreport.cgi</string>
<key>SmartCrashReports_CommentsTemplate</key>
<string>Please include your e-mail address if you wish to be contacted in regard to this crash.</string>
```

As you can see, adding Smart Crash Reports support to your application is pretty trivial.

Registering Your Plugin With Smart Crash Reports

If you are developing a Contextual Menu Plugin, SIMBL module, QuickTime component or any other plugin that may be operating under some other application, there still is a way to receive all related crash reports. You can register so-called "match specifier" (which is usually a Bundle ID of your plugin) with the Smart Crash Reports, and it will look for the match specifier in the crashed thread of the crash log.

To register a match specifier, you have to download (if you haven't already) the Smart Crash Reports SDK from its homepage:

<http://www.unsanity.com/smartcrashreports/>

Once it is downloaded, you need to link the SmartCrashReportsAPI.o and SmartCrashReportsAPI.h with your project and call a single function at the initialization (or where appropriate) of your plugin:

```
UnsanitySCR_RegisterMatchSpecifier(CFSTR("com.yourcompany."), CFSTR("Your Company Name"), NULL, CFSTR("SCR-XXXXXXX"), NULL);
```

Replace "com.yourcompany." with the partial (or full) bundle identifier of your plugin (Smart Crash Reports will look for that string in the crashed thread), "Your Company Name" with a readable (short) company name, and "SCR-

XXXXXXXX" with the Email Ticket ID you will receive in the E-mail after registering it at <http://www.unsanity.com/goto/email-ticket/>. Once this is done, Smart Crash Reports will know about your product.

Please refer to the "SmartCrashReportsAPI" folder in the Documentation folder for more detailed information on the available API calls.

Installing Smart Crash Reports On User's Computer

It is possible to install the "client" part of Smart Crash Reports on the user's computer from within your application (if you don't want to tell users to download Smart Crash Reports installer from its home page). The Install API provides a streamlined, one-shot install interface so you can quickly deploy Smart Crash Reports from within your product with one function call.

To implement the Smart Crash Reports install, download (if you haven't already) the Smart Crash Reports SDK from its homepage:

<http://www.unsanity.com/smartcrashreports/>

Once it is downloaded, you need to link the SmartCrashReportsInstall.o and SmartCrashReportsInstall.h with your project and call a single function when you want to install Smart Crash Reports:

```
Boolean authenticationWillBeRequired = FALSE;
if (UnsanitySCR_CanInstall(&authenticationWillBeRequired))
    UnsanitySCR_Install(authenticationWillBeRequired);
```

This will silently attempt to install Smart Crash Reports, if it was not installed on user's computer or if an older version was installed.

Please refer to the "SmartCrashReportsInstall" folder in the Documentation folder for more detailed information on the available API calls.

Implementing Your Own CGI Script To Receive Crash Reports

If you wish to receive crash reports on your Web site, you can implement the custom Submit URL script that user's CrashReporter.app will contact directly. However, keep in mind that the following criteria should be met:

- Your web server script has to be in the same place over next several years, at the very least, to allow delivery of crash reports to you.
- You are responsible for adjusting the web script if the format CrashReporter.app sends crash reports in changes.
- Your web server should be accessible 24/7 and be on a reasonably fast connection to not delay user's submission process.

For the above reasons, it is recommended to obtain the email ticket from Unsanity and use the E-mail feature of Smart Crash Reports. Unsanity will make sure the server is accessible, knows how to parse all formats of submissions, and will safely redirect the crash reports to the email you provide.

If your own Web script is still the way you want to go, here is the list of keys currently known to be passed to the script by the CrashReporter.app in a POST form data:

url_from: contains the subject of the crash report, usually "<Some Application> crash"
feedback_comments: user comments they entered in the additional info fields
bug_type: unknown constant, probably determines which POST elements are available; presently 9.
app_name: full crashed application name
app_version: version of the crashed application
os_version: Mac OS X version, in form 10.X.X:BUILD (for example, "10.4.2:8C46")
machine_config: Computer configuration string, for example, "PowerMac7,2 (2048 MB)"
page_source: Contains BASE64-encoded crash report
system_profile: Contains BASE64-encoded property list with a brief system profile of the user's system.

Please note that these form keys are subject to change by Apple, so it is your responsibility to adjust the scripts on your Web servers if such thing happens.

Distribution And License Agreement

Smart Crash Reports is completely free. It is provided as a courtesy to the user and developer community of Mac OS X. We will appreciate if you drop us a quick email at unsanity@unsanity.com and tell that your product is Smart Crash Reports ready, or link to us from within your Web site.

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Contacting Unsanity

You can always get the latest versions of our products, news, FAQ, and updates at Unsanity's Web Site:

<http://www.unsanity.com/>

To jump directly to the Smart Crash Reports page, you can use this simple address:

<http://www.unsanity.com/smartcrashreports/>

To get support on Smart Crash Reports, either visit the online support database at:

<http://www.unsanity.com/support/>

or email us at:

support@unsanity.com

To submit an idea or suggestion for this or future haxie, use this address:

feedback@unsanity.com



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