Crash Reporting System Downloader Reference

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1 Introduction

The Crash Reporting System Downloader (CRS Downloader) is an application that allows users to automatically download a core file and all associated symbol files from the Crash Reporting System (CRS), decompress these files and begin symbol level debugging with the SN Systems ProDG debugger with one click.

Supported Platforms

The CRS Downloader supports the following platforms:

- 32-bit and 64-bit Windows XP
- 32-bit and 64-bit Windows 7

Both operating systems require the latest service packs and updates.

The CRS Downloader integrates with the following debuggers:

- ProDG for PlayStation®3 430 or later
- Debugger for PlayStation®Vita 1.80 or later

2 Installation and Environment Set Up

Use the SDK Manager to install the CRS Downloader to your system.

The default installation path is:

```
C:\Program Files\SCE\Common\CRS Downloader\bin
```

The installer associates the `.crsdim` file extension with the CRS Downloader program.

Ensure your browser is set-up to open `.crsdim` files whenever you download them to your system.

Configure CRS Downloader

The first time you run the CRS Downloader, it creates an XML configuration file with the default configuration settings in the `%USERPROFILE%\SCE\CRS Downloader` directory, such as:

```
C:\Users\<user>\Documents\SCE\CRS Downloader\CRS Downloader.config
```

You can change the configuration parameters by editing the generated CRS `Downloader.config` file. To restore the default configuration, delete the CRS `Downloader.config` file. A default CRS `Downloader.config` file is recreated in `%LOCALAPPDATA%\SCE\CRS Downloader` the next time you launch the CRS Downloader.

The following CRS Downloader.config parameters are configurable (attributes are identified using XPath):

- `//LocalCache/@RootDir`. The local cache root directory.

  Default: `%LOCALAPPDATA%\SCE\crsd\Cache`

  Such as: `C:\Users\<user>\AppData\Local\SCE\crsd\Cache`
- `//LocalCache/@MaxSizeMB`. The maximum local cache size in megabytes.

  Default: 16384 (16 GB)
- `//Log/@Path`. The path to the log file.

  Default: `%LOCALAPPDATA%\SCE\crsd\CRS Downloader.log.txt`

  Such as: `C:\Users\<user>\AppData\Local\SCE\crsd\CRS Downloader.log.txt`
- `//Log/@Severity`. Level of messages to place in the log file. CSRM filters all messages with a severity equal to or lower than the configured value. For example, if `Severity=20`, only critical and error messages are stored in the log.

Table 1

Value	Severity
0	None
10	Critical
20	Error
30	Warning
40	Information
50	Debug
60	CacheDump
70	All

  Default: 40
- `//@OpenCommand`. The command to use when initially launching the debugger.
- `//@NewInstanceCommand`. The command to use when launching a new instance of the debugger.

- `//Downloader/@MaxCount`. The maximum number of concurrent connections.

  Default: 10

Configure the Internet Settings

You may need to configure Internet options, such as connection and proxy settings.

To Configure Internet Options

- In Control Panel, click **Network and Internet**, and then click **Internet Options**.

OR

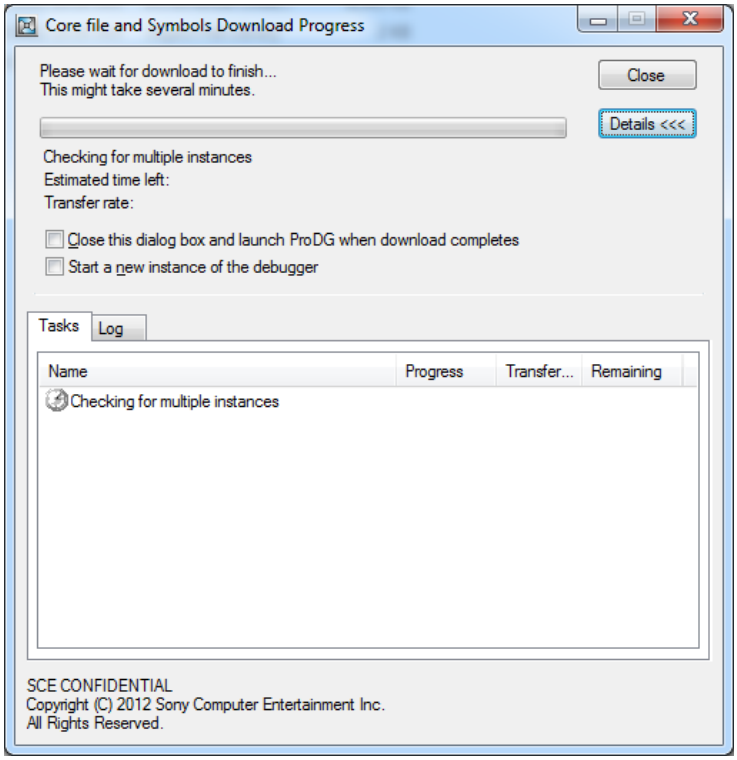
- In Internet Explorer, on the **Tools** menu, click **Internet Options**.

3 Operating the CRS Downloader

This section describes how to use the CRS Downloader to download crash data from the Crash Reporting System and analyze it using the ProDG debugger.

Note: You can only have a single instance of the CRS Downloader running at a time. If you are currently running an instance and then launch a second instance, you will see a window similar to Figure 1 on the second instance and it will not continue to run until you close all other instances.

Figure 1

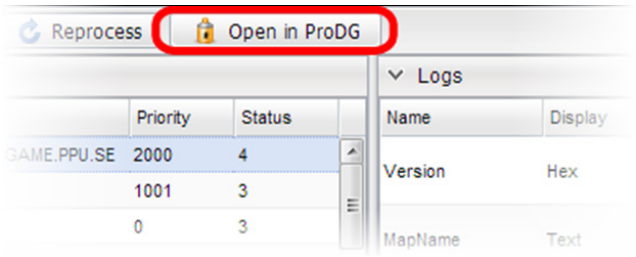


To Analyze Crash Reporting System Data in the ProDG Debugger

(1) From the Crash Reporting System UI, navigate to the crash view page for the crash whose information you want to analyze in the ProDG debugger.

(2) From the top-right corner, click **Open in ProDG**.

Figure 2



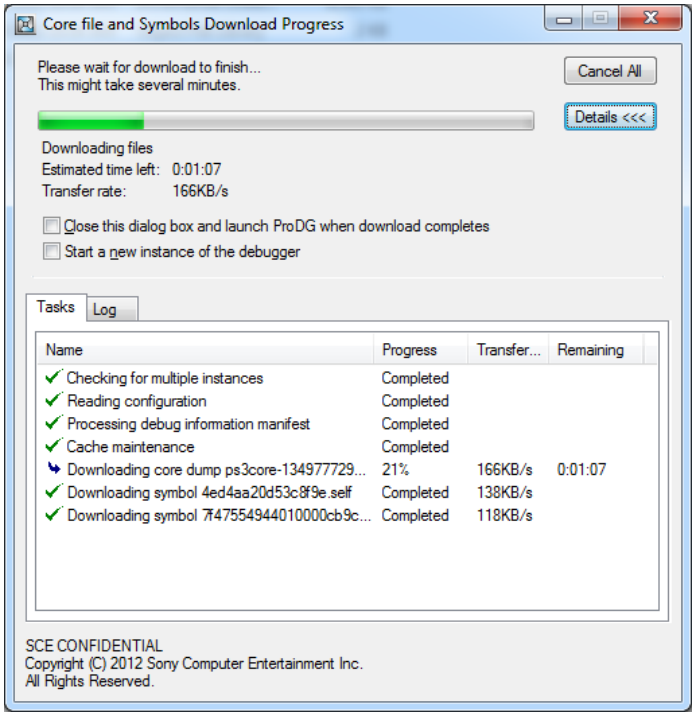
A manifest file for the current crash is downloaded to your local machine.

Note: Within your browser, ensure you enable files with the extension `.crsdim` to open automatically.

(3) The CRS Downloader launches and starts processing the file manifest.

A window similar to Figure 3 appears:

Figure 3



(4) To launch the ProDG debugger once the CRS Downloader processes all of the required files, select **Close this dialog box and launch ProDG when the download completes**.

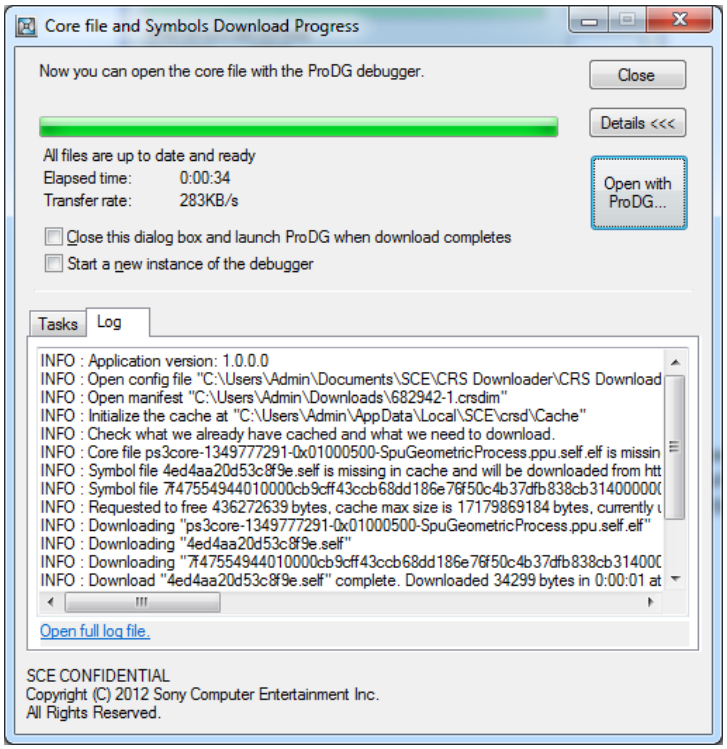
If you do not choose to automatically launch the ProDG debugger upon completion, you can manually launch it by clicking the **Open with ProDG** button.

(5) If you want to open a new instance of the ProDG debugger for this set of crash data, select **Start a new instance of the debugger**.

(6) If you want to view the CRS Downloader log information, click the **Log** tab.

A tab similar to Figure 4 appears:

Figure 4



This tab contains only the INFO level log entries. If you want to see the entire log file, click **Open full log file**. This is the same information that is stored in the log file stored at the location configured in the `<Log_Path>` attribute of the CRS `Downloader.config` file.

Appendix A: Operation Details

The CRS Downloader runs on the same computer as the ProDG debugger and manages a local cache of symbol and core files. All of the information needed to request core and symbol files from the Crash Reporting System server is within a Crash Reporting System debug information manifest file (`.crsdim`). These manifest files are downloaded from the Crash Reporting System when you select a crash from the Crash Reporting System UI and then click the Open in ProDG button. The manifest file associated with the crash is downloaded to your computer.

The CRS Downloader ensures that the core file and all associated symbol files specified in the `.crsdim` file exist locally, and automatically downloads missing referenced core and symbol files from the Crash Reporting System. Older files are automatically deleted when the local symbol and core file cache reaches the configured maximum size.

Files are downloaded in parallel; using up to the configured maximum number of connections to simultaneously download the files. If a download is interrupted, if possible, the CRS Downloader prompts you to resume the download to retrieve the remaining files.

When the download is complete, the CRS Downloader decompresses the files and creates a ProDG core description file that specifies the paths to the locally cached symbol files. If you choose, the ProDG debugger can then be launched automatically using the generated core description file and the corresponding core file.

Also, the CRS Downloader creates a log file every time it runs. This log file can be helpful if you need to troubleshoot issues.

Appendix B: Tips and Tricks

- The CRS Downloader caches the downloaded files; if the same file is used in multiple core dumps, it is only downloaded once. If you want all core and symbol files to always be downloaded from the Crash Reporting System, set the maximum local cache size (`<LocalCache MaxSizeMB>`) to `0`.
- If you need direct access to files in the local cache, you can obtain the cache path from the log file.
- The CRS Downloader dumps the local cache content to the log file for informational purposes. This process can potentially take some time if your cache is configured to keep a large number of files. If this becomes an issue, you can disable the logging of the cache content by setting the log severity (`<Severity>`) to `50`.