Post-Mortem Debugging Tips for GME

This is a short overview on how you can help finding bugs in GME. Some of these suggestions (see Quickstart) need very few changes to your work environment.

# Quickstart

The easiest step to understand what went wrong with GME after a crash is to make the source symbols available on your machine. If you have Visual Studio 2005 installed on your machines (preferably, with SP1 and Feature Pack installed), all you have to do is to set up the following environment variable:

**\_NT\_SYMBOL\_PATH=SRV\*C:\symcache\*\\atlantis.isis.vanderbilt.edu\Project\GME\symbols\*http://msdl.microsoft.com/download/symbols**

Note, that C:\symcache will be used to store symbol files locally. Modify this part of the environment string to match your taste.

If this environment variable is set, then selecting Visual Studio as a post-mortem debugging option after a GME crash will show you the stack trace using proper symbols (both from the Microsoft and GME binaries).

# GME source code

You can access the source code of GME at this location:

**https://svn.isis.vanderbilt.edu/GMESRC/**

After each release (external or internal) I create a snapshot of the sources in the “tags” folder. The SVN head is in the “trunk” folder. You can use your ISIS credentials to access the repo. Let me know, if it does not work.

# Tools needed to compile GME

These are the tools you need to have installed to compile GME from the sources:

* **Visual Studio 2008 Professional**: available from our MSDNAA web site
* **Visual Studio 2008 Service Pack 1**: available from <http://www.microsoft.com/downloads/details.aspx?FamilyId=FBEE1648-7106-44A7-9649-6D9F6D58056E&displaylang=en>
* **Visual Studio 2008 Feature Pack**: available from <http://www.microsoft.com/downloads/details.aspx?FamilyId=D466226B-8DAB-445F-A7B4-448B326C48E7&displaylang=en>

If you want to build the entire GME distribution (.msi installer), you need the additional tools:

* **ActivePython 2.6:** available from <http://www.activestate.com/activepython>
* **WiX 3.0.4813.0** or later: available from <http://wix.sourceforge.net/>

# GME build process

To compile the core GME application, you need to open the GMESRC/trunk/GME/GME.sln solution file and build the solution. The Gme project within this solution should be set as the “Startup Project” to run/debug GME.

To build the entire GME distribution, open a command window as Administrator and execute the build.bat batch file in GMESRC/trunk.

# Error reporting

If you find a bug or have a feature request, the preferred way is to submit a JIRA ticket. Please, use this channel if you can explain/show the issue without providing sensitive data (**our JIRA system is not ITAR restricted/compliant!**):

<http://escher.isis.vanderbilt.edu/JIRA>