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Subject: Re: crush of the program  
Posted by [Novo](#) on Thu, 29 Mar 2007 18:24:54 GMT  
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luzr wrote on Thu, 29 March 2007 11:49Novo wrote on Thu, 29 March 2007 10:51  
By default valgrind runs memcheck (valgrind --tool=memcheck).  
cachegrind is a part of valgrind starting from version 3.2 I believe.

Not sure what "memcheck" does, just wanted to say U++ has quite strong heap checking in debug mode

All blocks have safety sentinels (overwrite is reported), free blocks memory is filled with specific pattern and tested for writes when allocating again and leaks are not tolerated (error at the program exit).

Mirek

Quote:

Memcheck can detect if your program:

- \* Accesses memory it shouldn't (areas not yet allocated, areas that have been freed, areas past the end of heap blocks, inaccessible areas of the stack).
- \* Uses uninitialised values in dangerous ways.
- \* Leaks memory.
- \* Does bad frees of heap blocks (double frees, mismatched frees).
- \* Passes overlapping source and destination memory blocks to memcopy() and related functions.

That can be done in Debug and Release mode.

I recall somebody's messages about spending dozen of hours looking for a bug.  
With valgrind that can be done in few minutes.