Subject: Re: Heap-leaks and polymorphic containers
Posted by mirek on Mon, 12 May 2008 17:05:28 GMT

mrjt wrote on Mon, 12 May 2008 11:41It is my understanding that the following code should execute without any memory leaks:

```
struct Item {
 String name;
};

struct Collection : public Item
{
 Array<Item> items;
};

GUI_APP_MAIN
{
      // Example 1
 Array<Item> array;
 array.Create<Collection>().items.Add();

      // Example 2
 Collection *col = new Collection();
 col->items.Add();
 Item *item = (Item *)col;
 delete item;
}
```

But for some reason the destructor for 'items' isn't getting called. Adding a virtual destructor to force clearance just causes a crash in MemoryFreeDebug.

Is something broken or am I just missing something obvious?

Well, virtual destructor is absolutely required here.

The crash in MemoryFreeDebug... well, who knows, I would say it has another reason.

Mirek