
Subject: Re: Question about using pointers to fill TClonesArray
Posted by [Tobias Stockmanns](#) on Thu, 18 Dec 2014 20:46:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dear Klaus,

the TClonesArray operates as you said. They allocate a block of memory which is dynamically extended if more storage is needed but never freed. If the TClonesArray is cleared the memory is internally marked as free. New data is then written into the same position as the previous data without the need to allocate new memory.

This only works if all objects in the TClonesArray have the same size which does not work for objects with container classes inside. For this purpose the TClonesArray uses a trick. It stores a pointer to the container classes while the data of the container classes are stored outside the memory block of the TClonesArray.

If you call a clear() for a TClonesArray with containers inside you get a memory leak only delete() calls the destructor of the container class which frees the memory of the container.

As I said, it is a bit tricky and it took me a while to figure it out.

Cheers,

Tobias
