Subject: Stack tracing
Posted by Zbych on Thu, 24 Jan 2013 12:49:00 GMT
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Hi,

Since assertion messages aren't very helpful in hunting for bugs, I decided to add some extra help to them (at least for gcc users). Modified Core/Utils.ccp/AssertFailed displays call stack similar to this one:

Stack trace:
Upp::AddStackTrace(char*, int)
Upp::AssertFailed(char const*, int, char const*)
Upp::AString<Upp::String0>::operator[](int) const
Upp::CCTalk::GetAsciiData(int, int, Upp::String&)
Upp::CCTalk::EquipmentID(int, Upp::String&)
Upp::CCTalk::FindDevs()
Upp::CCTalk::WorkingThread()
Upp::CallbackMethodAction<Upp::CCTalk, void (Upp::CCTalk::*)()>::Execute()
Upp::Callback::Execute() const
Upp::Callback::operator()() const

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All you need (beside modified version of Core/Utils.cpp) is '-rdynamic' added to linker options in your application.
Disadvantages? Bigger executable, much longer linking time and of course visible function names.
Debug symbols are not necessary, all function names are kept in .dynsym section.

Without -rdynamic, call stack looks like this one:

Stack trace:
() [0x82bf968]
() [0x82bfc18]
() [0x8053fbe]
() [0x8052948]
() [0x8053c51]
() [0x80522b0]
() [0x8053009]
() [0x8054d26]
() [0x825cb0a]
() [0x8050fd3]
() [0x8241889]
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Edit:
New version of Util.cpp is uploaded.

File Attachments

1) Util.cpp, downloaded 491 times