
Subject: Problems with GO4 installation

Posted by [Shitov Yuri](#) on Wed, 15 Sep 2004 10:51:12 GMT

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Hi to GO4-World.

I compiled GO-4 v2.7 with the following stuff:

qt-3.3.3

ROOT-4-00/03

gcc (GCC) 3.2.2 20030222 (Red Hat Linux 3.2.2-5)

System: RH-9.0:

\$ uname -a

Linux 2.4.20-28.9smp #1 SMP Thu Dec 18 13:37:36 EST 2003 i686 i686 i386 GNU/Linux

I configured enviroment following instructions in README.txt

Up to this everthing was OK, the only problem - the crash of Go4 GUI on the start (GUI windows don't appears) with the following error message:

\$ go4

G-OOOO-> Started go4gui.

Go4 v2.7-0

*** Break *** segmentation violation

Generating stack trace...

0x424f79a1 in <unknown> from /usr/X11R6/lib/libX11.so.6

0x424e3210 in XrmQGetResource + 0x130 from /usr/X11R6/lib/libX11.so.6

0x424c3625 in XGetDefault + 0xd5 from /usr/X11R6/lib/libX11.so.6

0x42a820f8 in _XcursorGetDisplayInfo + 0x4b8 from /usr/X11R6/lib/libXcursor.so.1

0x42a8236f in XcursorGetDefaultSize + 0x1f from /usr/X11R6/lib/libXcursor.so.1

0x42a84655 in XcursorLibraryLoadCursor + 0x25 from /usr/X11R6/lib/libXcursor.so.1

0x41e69dee in QCursor::update() const + 0x66 from

/data/nemo2a/shitov/qt/v3.3.3/lib/libqt-mt.so.3

0x41e69a7d in QCursor::handle() const + 0x39 from

/data/nemo2a/shitov/qt/v3.3.3/lib/libqt-mt.so.3

0x41e89f45 in qt_x11_enforce_cursor(QWidget*) + 0x8d from

/data/nemo2a/shitov/qt/v3.3.3/lib/libqt-mt.so.3

0x41e8ab70 in QWidget::create(unsigned long, bool, bool) + 0x7a8 from

/data/nemo2a/shitov/qt/v3.3.3/lib/libqt-mt.so.3

0x41f4fd7b in QWidget::QWidget[not-in-charge](QWidget*, char const*, unsigned) + 0x10f from /data/nemo2a/shitov/qt/v3.3.3/lib/libqt-mt.so.3

0x4200ed8a in QMainWindow::QMainWindow[not-in-charge](QWidget*, char const*, unsigned) + 0x26 from /data/nemo2a/shitov/qt/v3.3.3/lib/libqt-mt.so.3

0x08065c85 in TGo4FitPanel::TGo4FitPanel[in-charge](QWidget*, char const*, unsigned) + 0x5915 from /data/nemo2a/shitov/go4/v2.7/Go4GUI/MainGo4GUI

0x080647d9 in QWidget::windowActivationChange(bool) + 0x469 from

/data/nemo2a/shitov/go4/v2.7/Go4GUI/MainGo4GUI

0x42687704 in __libc_start_main + 0xe4 from /lib/tls/libc.so.6

0x08064461 in TGo4EditDynEntryStatus::SetHisEvZ(char const*) + 0x31 from

/data/nemo2a/shitov/go4/v2.7/Go4GUI/MainGo4GUI

Abort (core dumped)

It's seems like some problems between GO4 and qt-3.3.3. Also it can be problems qt-X11lib communication, but qt binaries like designer and qtconfig lunch without problems.
Any ideas?

Best,
Yuri

Subject: Re: Problems with GO4 installation
Posted by [Jörn Adamczewski-Musch](#) on Wed, 15 Sep 2004 11:56:47 GMT
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Hello Yuri, hello world!

The problem you described stems from
the combination of X system and Qt on your machine.
This has also been reported e.g. for fedora2 and SuSe9.1
systems.

Unfortunately, the Qtroot interface of Go4 <=v2.7 has
problems with Qt versions >3.1 in connection with newer
X11 libraries. This was caused by a wrong order of
X-initialization calls that did not matter before, but
shows up now(Qt-init before ROOT-init).

This is already fixed in the next Go4 v.2.8
which is going to be released within the next 2 weeks.

If you don't want to wait for the next release,
we recommend to install and use Qt 3.1.1 to work with Go4 versions <=v2.7.
(old Qt tarball is available on gsi linux after
". go4login pro" at \$QTDIR)

Best regards,

Joern

Subject: Re: Problems with GO4 installation
Posted by [Shitov Yuriy](#) on Wed, 15 Sep 2004 15:52:39 GMT
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Hi, Joern,

Thank you for quick answer, you proved my assumptions about the origin of this error.
Yes, I prefer to wait 2 weeks as I'm only going to use GO4.

Once you are here I have another more general question, maybe not for this forum, but anyway...

I'm working on ROOT-based data analysis program (porting it from old CERNLIB/GEANT3/PAW analysis software), which will do:

1. Simulations (ROOT+VMC(G4+G3)) batch/interactive
2. Data analysis with raw/preanalyzed/simulated data in batch and interactive mode.

I see two possibilities:

1. usage of GO4
2. usage of QtROOT only (and personal coding of data analysis).

I'll be happy to read any advices of experts shared with their experience. BTW, does QtROOT father Valeri Fine reads this forums?

Best,
Yuri

Subject: Re: Problems with GO4 installation
Posted by [Jörn Adamczewski-Musch](#) on Thu, 16 Sep 2004 08:08:23 GMT
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Hallo Yuri,

at first some comments for clarification:

The Go4 Qtroot interface is not the same package as originated by Valeri Fine.

We use a different implementation which was developed independently by Denis Bertini and Mohammad Al-Turany in the scope of the Go4 project in 2001.

The main difference to Valeri's approach is that in Go4 both application frameworks (QApplication and TApplication) operate fully in parallel, i.e. the root system loop is invoked frequently from a Qt timer. Additionally, the Go4 qtroot provides a root TCanvas embedded into a QWidget, interfacing the mouse signals. By this, you are able to build more complex GUIs containing root canvases with the Qt designer.

Valeri's interface, however, was intended to replace the original moderate ROOT graphics on MS Windows by a Qt implementation of TVirtualX.

This means the Qt widgets would run inside the root application loop.

Of course Valeri Fine is aware of our Qtroot implementation that is somehow complementary to his interface...

Concerning your data analysis job, the Go4 is surely suited for that. Besides the Go4 Qtroot interface, you get multithreaded inter-task communication (i.e. non-blocking GUI controls analysis task); object management for histograms, conditions, pictures, parameters; an analysis framework with base classes for eventstructures, algorithms, and i/o (root i/o and gsi-mbs daq already implemented). Even if you would not like to adjust your analysis to these classes, Go4 can run any existing C++ code in the UserEventFunction, both in batch mode, and with GUI online monitoring of ROOT histograms and TTrees. In addition to the standard Go4 GUI, one can plug in any user defined GUI (developed with Qt designer) to display application specific things. There is a lot of flexibility here...

So I would recommend to start rather with Go4 than to develop from plain Qtroot interface (Valeri's or Go4's). For the interactive analysis, you would have to develop and test a lot of things anew that you get in Go4 for free. Additionally, in case of problems with the framework, you would get support and bugfixes from us...

Best regards,

Joern

Subject: Re: Problems with GO4 installation
Posted by [Shitov Yuriy](#) on Thu, 16 Sep 2004 15:56:19 GMT
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Thank you, Joern, for so detail explanations. I choose Go4!
Please, let me know about v.2.8 release.
Good luck,
Yuriy
