Hi,

I've seen similar threads posted on these forums but perhaps none that address my situation. During 2D classification (with my dataset) and/or ab-initio 3D reconstruction (with the tutorial dataset), the cisTEM GUI randomly crashes and terminal states that the GUI socket disconnected. Here are a few lines leading up to the crash during my last 2D classification:

"Dumping intermediate files...
Total logP = -789.116
Refine2D: Normal termination
Total logP = -1326.15
Refine2D: Normal termination
JOB CONTROL: Master Socket Disconnected!!
Running...
JOB CONTROL: Trying to connect to 10.0.2.15:3000 (Timeout = 4 sec)...
JOB CONTROL: Succeeded-Connection established!!
JOB CONTROL: GUI Socket Disconnected!!"

I don't have access to a dedicated linux box or cluster yet, so I am running cisTEM on a personal workstation:

- Intel Core i5-7600K Processor 3.80GHz
- NVIDIA GeForce GTX1070 8GB GDDR5 VR Ready
- 16GB DDR4-3000 RAM

I have Windows 10 with VirtualBox running Ubuntu, and cisTEM installed as recommended in the tutorial (cistem-1.0.0-beta-intel-linux.tar.gz)

Any ideas how to prevent this?

Thanks!

Erik
erikklontz
I'm not sure if this is

I'm not sure if this is related, but the "canberra-gtk-module" fails to load when launching cisTEM.

Erik
Hi Erik,

I don't have any experience running in VirtualBox, how much memory/disk space are you giving the virtual machine?

Cheers,

Tim
Hi Tim,

Hi Tim,

I'm giving it 14GB of memory, and I've allocated 25GB of dedicated disk space. However, I'm running cisTEM out of a folder that is shared with the entire hard drive, so it shouldn't be able to run out of storage.

Thanks,

Erik
Hi Erik,

Hi Erik,

Sorry you're having trouble. One way to get to the bottom of this, is if you could run a debug version and give us the backtrace output. Can you download a debug version of the cisTEM gui from here:-

http://grigoriefflab.janelia.org/sites/default/files/timgrant_18-07-12_5...

unzip it with :-

gzip -d cisTEM_debug.gz

then run it in GDB :-

gdb ./cisTEM_debug

At this point you need to type "run". The gui should then run, and you should be able to open your project. When it crashes, please type "bt" in the window and post the output.

Thanks!

Tim
Fri, 01/03/2020 - 01:48 (Reply to #5)
where can find cisTEM debug gui ??

where can find cisTEM debug GUI ???
Hi Tim,

Hi Tim,

Thanks for this advice! For whatever reason, the debug version never crashes. Problem solved I guess?

Erik
Hmm.. it is a little worrying

Hmm.. it is a little worrying - but i'm glad it is working for you.
Yue Liu
Hi Tim,

Hi Tim,

I have had a very similar issue when using Virtual box. Essentially, GUI socket is disconnected. Just wonder if you could share the debugged version again or if there might be alternative workarounds. Thanks in advance for any help.

Best,

Yue
Hi Yue,

Hi Yue,

You can download it from here for the next month :-

http://grigoriefflab.janelia.org/sites/default/files/timgrant_19-05-02_6...

Cheers,

Tim
Yue Liu
Thanks, Tim!

Thanks, Tim. I have given it a go. However, a different type of error message popped up. I was wondering if you have any idea of what might have gone wrong. Thanks for any advice.

Merge3D: Normal termination

Socket didn't read all bytes! (0 / 4) with 10 retries From gui/../core/../core/functions.h:126

void ReadFromSocket(wxSocketBase *, void *, unsigned int, bool)

Socket has an error (Input/Output error) From gui/../core/../core/functions.h:127

void ReadFromSocket(wxSocketBase *, void *, unsigned int, bool)

Failed socket is connected to : (Server Name hidden here)

gui/../core/../core/functions.h(137): assert "Assert failure" failed in ReadFromSocket().

Running...

JOB CONTROL: Trying to connect to 10.1.0.29:3000 (timeout = 4 sec) ...

JOB CONTROL: Succeeded - Connection established!

Package is 37270 bytes long

We read 37270 bytes

Job Decoded

JOB CONTROL : GUI Socket Disconnected!!

JOB : Failed ! Unable to connect

JOB : Failed ! Unable to connect
Hi,

Hi,

This just sort of says the GUI is dieing, can you run it in a debugger and let me know the backtrace :-

gdb ./cisTEM_debug

At this point you need to type "run". The gui should then run, and you should be able to open your project. When it crashes, please type "bt" in the window and post the output.

Thanks!

Tim
Hi Tim,

The debug version works very well on a single workstation. However, when accessing multiple computers using ssh (ssh hostname directory/$command. Unlike the GUI, the command does not run in a debugger), it crashed. Here is the backtrace. Thanks for any suggestions. Yue

ASSERT INFO:
gui/../core/../core/functions.h(137): assert "Assert failure" failed in ReadFromSocket().

BACKTRACE:
[1] ReadFromSocket(wxSocketBase*, void*, unsigned int, bool) /tmp/cistem-1.0.0-beta/src/core/functions.h:137
[2] Receive<wxStringFromSocket(wxSocketBase*) /tmp/cistem-1.0.0-beta/src/core/functions.cpp:184
[3] AbInitio3DPanel::OnJobSocketEvent(wxSocketEvent&):184
[6] wxEvtHandler::ProcessEventIfMatchesId(wxEventTableEntryBase const&, wxEvtHandler*, wxEvent&):184
[7] wxEvtHandler::SearchDynamicEventTable(wxEvent&):184
[8] wxEvtHandler::TryHereOnly(wxEvent&):184
[9] wxEvtHandler::TryBeforeAndHere(wxEvent&):184
[10] wxEvtHandler::ProcessEventLocally(wxEvent&):184
[12] wxEvtHandler::ProcessPendingEvents():184
[14] wxApp::DoIdle():184
[16] g_main_context dispatch
[17] g_main_loop_run
[18] gtk_main
[19] wxGUIEventLoop::DoRun()
[20] wxEventLoopBase::Run() /home/grigoriefflab/tmp/wxWidgets-3.0.2./src/common/evtloopcmn.cpp:78
[21] wxAppConsoleBase::MainLoop():78
[22] wxAppConsoleBase::OnRun():78
[23] wxAppBase::OnRun():78
[24] wxEntry(int&, wchar_t**):78
[25] wxEntry(int&, char**):78
After typing bt, here is the output.

#0 0x00007fff4629207 in raise () at /usr/lib64/libc.so.6
#1 0x00007fff462a8f8 in abort () at /usr/lib64/libc.so.6
#2 0x0000000000542cd3 in ReadFromSocket(wxSocketBase*, void*,
    unsigned int, bool) (socket=0x6714, buffer=0x6714, nbytes=6,
    die_on_error=255)
    at core/functions.h:138
#3 0x000000000006ed707 in
ReceivewxStringFromSocket(wxSocketBase*) (socket=0x6714) at
core/functions.cpp:180
#4 0x00000000000690dc3 in
AbInitio3DPanel::OnJobSocketEvent(wxSocketEvent&) ()
#5 0x0000000000e6126a in
wxAppConsoleBase::HandleEvent(wxEvtHandler*, void
    (wxEvtHandler::*)(wxEvent&), wxEvent&) const ()
#6 0x0000000000e611c2 in
wxAppConsoleBase::CallEventHandler(wxEvtHandler*,
    wxEventFunctor&, wxEvent&) const ()
#7 0x0000000000f76cc5 in
wxEvtHandler::ProcessEventIfMatchesId(wxEventTableEntryBase
    const&, wxEvtHandler*, wxEvent&) ()
#8 0x0000000000f76fb6 in
wxEvtHandler::SearchDynamicEventTable(wxEvent&) ()
#9 0x0000000000f7784d in wxEvtHandler::TryHereOnly(wxEvent&) ()
#10 0x0000000000f78f87 in
wxEvtHandler::TryBeforeAndHere(wxEvent&) ()
#11 0x0000000000f75f7f in
wxEvtHandler::ProcessEventLocally(wxEvent&) ()
#12 0x0000000000f75d48 in wxEvtHandler::ProcessEvent(wxEvent&) ()
#13 0x0000000000f76a75 in wxEvtHandler::ProcessPendingEvents() ()
#14 0x0000000000e6151d in
wxAppConsoleBase::ProcessPendingEvents() ()
Hi,

Hi,

This is hard to diagnose - do you have problems with jobs other than the ab-inito?

Cheers,

Tim
Hi Tim,

Yes, I also tested 2D classification and ran into a similar situation. Please find the backtrace below.

```c
#0  0x00007fff4629207 in raise () at /usr/lib64/libc.so.6
#1  0x00007fff462a8f8 in abort () at /usr/lib64/libc.so.6
#2  0x0000000000542cd3 in ReadFromSocket(wxSocketBase*, void*,
unsigned int, bool) (socket=0x8dc9, buffer=0x8dc9, nbytes=6,
die_on_error=255)
    at core/functions.h:138
#3  0x00000000006ed707 in
    ReceivewxStringFromSocket(wxSocketBase*) (socket=0x8dc9) at
core/functions.cpp:180
#4  0x000000000063d93c in
    MyRefine2DPanel::OnJobSocketEvent(wxSocketEvent&) (this=0x8dc9,
event=...) at gui/MyRefine2DPanel.cpp:1512
#5  0x0000000000e6126a in
    wxAppConsoleBase::HandleEvent(wxEvtHandler*, void
    (wxEvtHandler::*)(wxEvent&), wxEvent&) const ()
#6  0x0000000000f76cc5 in
    wxEvtHandler::ProcessEventIfMatchesId(wxEventTableEntryBase
const&, wxEvtHandler*, wxEvent&) (entry=..., handler=0x3d88ff0,
event=...) at ./src/common/event.cpp:1392
#7  0x0000000000f76f6b in
    wxEvtHandler::SearchDynamicEventTable(wxEvent&) (this=0x3d88ff0,
event=...) at ./src/common/event.cpp:1751
#8  0x0000000000f7784d in
    wxEvtHandler::TryHereOnly(wxEvent&) (this=0x3d88ff0, event=...) at ./src/common/event.cpp:1585
#9  0x0000000000f78f87 in
    wxEvtHandler::TryBeforeAndHere(wxEvent&) ()
#10 0x0000000000f75f7f in
    wxEvtHandler::ProcessEventLocally(wxEvent&) (this=0x3d88ff0,
event=...) at ./src/common/event.cpp:1522
#11 0x0000000000f75d48 in
    wxEvtHandler::ProcessEvent(wxEvent&) (this=0x3d88ff0, event=...) at ./src/common/event.cpp:1495
#12 0x0000000000f76a75 in
    wxEvtHandler::ProcessPendingEvents()
    (this=0x3d88ff0) at ./src/common/event.cpp:1359
#14 0x0000000000e6151d in
    wxAppConsoleBase::ProcessPendingEvents() ()
#15 0x0000000000be13a8 in wxApp::Doldle() ()
```

Yue Liu
Best,

Yue
Hi Tim,

Just to add to previous message,

ASSERT INFO:
gui/../core/../core/functions.h(137): assert "Assert failure" failed in ReadFromSocket().