Subject: femul emulator
Posted by Angel on Mon, 09 Mar 2015 15:38:46 GMT
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As a part of programs installed by the AgataSoftware.py script femul came with multitrade support using boost or std threads. Unfortunately this is disabled by default. If one ore both of these libraries are installed then is there a way to enable multitrade support in femul so it can use the advantages of the multiprocessor systems?

Subject: Re: femul emulator
Posted by stezow on Thu, 12 Mar 2015 07:42:47 GMT
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Hi Angel,

Have you tried before any use of the python script to set the following environment variable ?
CMAKE_OPTIONS="-DGUESS_THREAD=ON"; export CMAKE_OPTIONS

This in principle select cxx11 [recommended ... it seems to be more stable that boost] if the compiler is suitable then try boost.

Note that the tips had been added recently to the CookBook with is now is a GED system here
https://atrium.in2p3.fr/nuxeo/nxdoc/default/8f552ad6-188b-401a-b72b-1fd7bab12351/view_documents
or by browsing from
https://atrium.in2p3.fr/
the Grand Public / Projet AGATA / DataProcessing directory [see attached picture]

Please let us know whether it solve the issue.
if not, please add more informations on the system you are working on, the list of commands performed and the output you got

Cheers
Olivier

File Attachments
1) atrium.tiff, downloaded 588 times

Subject: Re: femul emulator
Posted by Angel on Thu, 12 Mar 2015 12:40:04 GMT
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Hello Olivier,

Thank you for your help!
Exporting CMAKE_OPTIONS="-DGUESS_THREAD=ON" did do the job. Now everyting is compiled with multi-treads support.

It seems that everiting is going well.

Cheers
Angel

Subject: Re: femul emulator
Posted by Angel on Thu, 12 Mar 2015 13:16:45 GMT
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Hello Olivier,
I just did that on the other system that I am using and it did not enable the multi-tread support.
The system is DELL server, 16 cores INTEL(R) E5620 CPU @ 2.40GHz/12MB cache size and 24GB RAM. It is running Ubuntu server 12.04.3 LTS x86_64 with gcc 4.6.3. When I run the scripts for agapro and femul they give the following:
for agapro ->

```
[reconfig] conf
-- The C compiler identification is GNU
-- The CXX compiler identification is GNU
-- Check for working C compiler: /usr/bin/gcc
-- Check for working C compiler: /usr/bin/gcc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: /usr/bin/c++
-- Check for working CXX compiler: /usr/bin/c++ -- works
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
[AGAPRO] OFT, Internal built-in
[AGAPRO] MGT, Internal built-in
-- Found ADF: /home/dagata/AgataSoftware/lib/libADF.so
[ADF] ADF found.
        --> includes in: /home/dagata/AgataSoftware/include,
        --> lib: /home/dagata/AgataSoftware/lib/libADF.so,
        --> ADF.conf: /home/dagata/AgataSoftware/lib/ADF.conf
[AGAPRO] Narval has not been found on this machine
-- Performing Test CHECK_CXX_FLAG_C11
-- Performing Test CHECK_CXX_FLAG_C11 - Failed
[AGAPRO] Compilation with boost [thread], found on your system, possible ...
[AGAPRO] skstream Found in /usr
[AGAPRO] Compilation with skstream
-- Performing Test CHECK_CXX_FLAG_msse4
-- Performing Test CHECK_CXX_FLAG_msse4 - Success
[AGAPRO] Compilation with msse
---------------------------------
[AGAPRO]  + global
-- Found Subversion: /usr/bin/svn (found version "1.6.17")
-- Configuring done
-- Generating done
CMake Warning:
  Manually-specified variables were not used by the project:
```

```
   GUESS_TREAD
--------------------------------

for femul ->

[reconfig] then femul
[reconfig] clean
('[clean] ==> Start cleaning the package ', '--femul')
[clean] in cmakebuild/Release/femul
[clean] DONE
[reconfig] conf
-- The C compiler identification is GNU
-- The CXX compiler identification is GNU
-- Check for working C compiler: /usr/bin/gcc
-- Check for working C compiler: /usr/bin/gcc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: /usr/bin/c++
-- Check for working CXX compiler: /usr/bin/c++ -- works
-- Detecting CXX compiler ABI info
-- Detecting CXX compiler ABI info - done
[AGAPRO] Narval has not been found on this machine
-- Performing Test CHECK_CXX_FLAG_C11
-- Performing Test CHECK_CXX_FLAG_C11 - Failed
[AGAPRO] Compilation with boost [thread], found on your system, possible ...
[AGAPRO] skstream Found in /usr
[AGAPRO] Compilation with skstream
-- Performing Test CHECK_CXX_FLAG_msse4
-- Performing Test CHECK_CXX_FLAG_msse4 - Success
[AGAPRO] Compilation with msse4
[AGAPRO]     SSE FOUND
-- Configuring done
-- Generating done
CMake Warning:
  Manually-specified variables were not used by the project:

   GUESS_TREAD
--------------------------------

When I run femul ->

##########################################
# Using Narval actors without Narval #
##########################################

OS is Linux
Not using threads
Not using root
Library ADF is /home/dagata/AgataSoftware/lib/ADF.conf
--------------------------------
```

The gcc compiler version 4.6.3 supports c11 as an option --std=c++0x. How ever it turns out that this can not be passed as cmake option. Do have any suggestion how to enable it or if not then how to enable boost?

Kindly,
Angel

Subject: Re: femul emulator
Posted by stezow on Thu, 12 Mar 2015 16:51:56 GMT
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Hi Angel

It looks like playing with a gcc compiler to old might give troubles even if it supports cxx11.
In any cases, you can drive the python script to the solution you would like to use with:

CMAKE_OPTIONS="-DWITH_BOOST_THREAD=ON"; export CMAKE_OPTIONS

Let us know whether it is ok.
Note that you may need to used the manual installation of femul with femul since some issues at running time have been reported with the version compiled using the python script

Cheers
Olivier

Subject: Re: femul emulator
Posted by Angel on Fri, 13 Mar 2015 17:02:49 GMT
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Hello Oliveir,

Thank you for your support!!

The solution * CMAKE_OPTIONS="-DWITH_BOOST_THREAD=ON"; export CMAKE_OPTIONS * did solve the problem.
Up to now the analysis is going well and a litle bit faster then it was before.
If somethink else goes wrong I will post it here.

Cheers

Angel

Subject: Re: femul emulator
Posted by Damian Ralet on Wed, 16 Sep 2015 09:20:53 GMT
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Hello Olivier,

THe document from the atrium is not acessible:
https://atrium.in2p3.fr/nuxeo/nxdoc/default/8f552ad6-188b-401a-b72b-1fd7bab12351/view_documents

The message is:
"You don't have the necessary permission to do the requested action."

Cheers,
Damian