Subject: Error in creating R3BRoot Docker container
Posted by Maisam.M.Dadkan on Wed, 10 Jun 2020 16:38:11 GMT
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Hi,

I am trying to build a docker container for R3BRoot using the existing Fairroot image. In the second part of installing ucesb I got the following error:

> git clone $USER@lx-pool.gsi.de:/u/johansso/upexps.git

Cloning into 'upexps'...
usage: ssh [-1246AaCfGgKkMNnqsTtVvXxYy] [-b bind_address] [-c cipher_spec]
        [-D [bind_address:]port] [-E log_file] [-e escape_char]
        [-F configfile] [-I pkcs11] [-i identity_file]
        [-J [user@]host[:port]] [-L address] [-l login_name] [-m mac_spec]
        [-O ctl_cmd] [-o option] [-p port] [-Q query_option] [-R address]
        [-S ctl_path] [-W host:port] [-w local_tun[:remote_tun]]
        [user@]hostname [command]
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.

Could anyone help me to solve this issue?
Also, is there a Docker image of R3Broot? I could not find anything in DockerHub.

Best regards,
Maisam

Subject: Re: Error in creating R3BRoot Docker container
Posted by Dmytro Kresan on Thu, 11 Jun 2020 06:50:31 GMT
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Hi,

Do you have an account on GSI Linux? If not, the clone is not possible.

We do not have an R3BRoot docker container.

Best regards,
Dima

Subject: Re: Error in creating R3BRoot Docker container
Posted by Maisam.M.Dadkan on Thu, 11 Jun 2020 09:38:20 GMT
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Thank you Dima,

I have not GSI Linux account at the moment and I am not working at GSI.
I am trying to build a Docker image of R3BRoot including the DNN algorithm of NeuLand to use in Jupyter notebook.
I am not sure the installation of ucesb is mandatory for that or not. Do you have any idea or refer me to someone
might help me with this?

Greets,

Subject: Re: Error in creating R3BRoot Docker container
Posted by Jan Mayer on Fri, 12 Jun 2020 14:11:23 GMT
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Hello,

upexps contains listmode unpackers for individual experiments. You can skip it for the moment until you need to analyze experiments from raw data.

Additional notes:
If you want to use ROOT in Python, including Jupyter Notebooks/Lab, you'll need to make sure a modern Python version is installed and that FairSoft is building ROOT against that Python. As the releases of FairSoft as well as the master branch are quite a bit behind on updating ROOT, I've found it necessary to modify tools/rootconfig.sh

```
if [ "$build_python" = "yes" ];
   then
-     PYTHONBUILD="-Dpython=ON"
+     PYTHONBUILD="-Dpython=ON
-DPYTHON_INCLUDE_DIR=/home/jmayer/.pyenv/versions/3.7.6/include/python3.7m
-DPYTHON_LIBRARY=/home/jmayer/.pyenv/versions/3.7.6/lib/libpython3.7m.so
-DPYTHON_EXECUTABLE=/home/jmayer/.pyenv/versions/3.7.6/bin/python"
   else
     PYTHONBUILD="-Dpython=OFF"
   fi
```

and disable g4py in configure.sh, as it didn't build for me. Newer versions of ROOT integrate better with both Python and Jupyter.

I have a few Jupyter Lab projects using ROOT/FairRoot/R3BRoot in Python, e.g.,
https://github.com/janmayer/NeuLAND-132Sn and
https://github.com/janmayer/NeuLAND-reconstruction-ml - I hope this is helpful.

Jan

Subject: Re: Error in creating R3BRoot Docker container
Posted by Maisam.M.Dadkan on Mon, 15 Jun 2020 11:40:54 GMT
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Dear Jan,

Thank you so much for the instruction and the Python version compatibility issue with ROOT
which I did not know before.

Best Regards,
Maisam