

HEP_OSlibs_SL6: RPM with dependencies needed to run on SLC6

As of Jan 2013, a meta package with the dependencies needed to run HEP software on a SLC6 host has been prepared. It is currently in test and it is possible to install it on SLC6 hosts by following the instructions on:

<https://twiki.cern.ch/twiki/bin/view/LCG/SL6DependencyRPM>

Issue with PC installed with SLC6

Typical error

With Stefan, we noticed that a freshly installed SLC6 machine does not have **libcrypto.so.6** installed. This is required for Python to use md5, and translates into a cryptic message:

```
"ImportError: No module named _md5"
```

We we look for an appropriate solution but in the meantime (2012-06-18) the workaround is to install:

```
lxplus446:~/> rpm -qi openssl098e-0.9.8e-17.el6_2.2.x86_64
Name           : openssl098e                Relocations: (not relocatable)
Version        : 0.9.8e                Vendor: Scientific Linux CERN, http://cern.ch/linux
Release        : 17.el6_2.2           Build Date: Wed 25 Apr 2012 09:02:33 AM CEST
Install Date:  Mon 07 May 2012 10:49:24 AM CEST   Build Host: lxbslc7-amd64.cern.ch
Group          : System Environment/Libraries  Source RPM: openssl098e-0.9.8e-17.el6_2.2.src.rpm
Size           : 2338924                License: OpenSSL
Signature      : DSA/SHA1, Wed 25 Apr 2012 10:14:01 AM CEST, Key ID 5e03fde51d1e034b
Packager       : CERN Linux Support <linux.support@cern.ch>
URL            : http://www.openssl.org/
Summary        : A compatibility version of a general cryptography and TLS library
Description    :
The OpenSSL toolkit provides support for secure communications between
machines. OpenSSL includes a certificate management tool and shared
libraries which provide various cryptographic algorithms and
protocols. This version of OpenSSL package is provided for compatibility
with the previous Red Hat Enterprise Linux release.
```

This RPM is already installed on lxplus6

How to debug

```
python -v -c 'import hashlib'
```

Should help, and normally that is due to missing dependencies of:

```
`${MYSITEROOT}/lcg/external/Python/2.6.5p2/x86_64-slc6-gcc46-opt/lib/python2.6/lib-dynload/_hashlib.so
```

Running i686 software on SLC6

To run the i686 config on a newly installed SLC6 machine the following packages are needed:
compat-libstdc++.i686 libz.i686 freetype.i686 krb5-devel.i686 bzip2-libs.i686

Setting up nightlies on SLC6

- install libcrypto etc.

- [install distcc](#)
- check if `/build/nightlies` exists/has correct permissions
- check firewall settings for allowing acron (and distcc(which ports?))
- create distcc directory `/build/nightlies/.distcc/` (error `distcc[6310] (dcc_mkdir) ERROR: mkdir '/build/nightlies/.distcc/state' failed: No such file or directory?? mkdir works for lhcbsoft?`)
- check for static libraries <http://software.intel.com/en-us/articles/error-ld-cannot-find-lm/>

SLC6 and GDB

Where running gdb on the LCGCMT python on SLC6 there is this error: `$ gdb python gdb: symbol lookup error: gdb: undefined symbol: PyUnicodeUCS4_FromEncodedObject`

The solution is to preload the system python.so: `$ export LD_PRELOAD=/usr/lib64/libpython2.6.so $ gdb python GNU gdb (GDB) Red Hat Enterprise Linux (7.2-56.el6) [...]`

Missing gcc on SLC5 with config `x86_64-slc5-xxx`

If gcc is missing from the `LD_LIBRARY_PATH` and the system `libstdc++` is missing symbols, you can force cmt to detect the host as SLC5 by defining the following environment variable:

```
export CMTEXTRATAGS=host-slc5
```

-- BenjaminCouturier - 18-Jun-2012

This topic: LHCb > Slc6

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