Compilation on the switch

Thursday, November 10, 2016 10:37 AM

Trying to compile ZMQ on the switch. Ran into this issue.

CC src/src_libzmq_la-tweetnacl.lo

CXXLD src/libzmq.la

g++: error: /usr/lib/gcc/i686-linux-gnu/4.9/../../i386-linux-gnu/crti.o: No such file or directory

g++: error: /usr/lib/gcc/i686-linux-gnu/4.9/crtbeginS.o: No such file or directory

g++: error: /usr/lib/gcc/i686-linux-gnu/4.9/crtendS.o: No such file or directory

g++: error: /usr/lib/gcc/i686-linux-gnu/4.9/../../i386-linux-gnu/crtn.o: No such file or directory

Makefile:2283: recipe for target 'src/libzmq.la' failed

make[1]: *** [src/libzmq.la] Error 1

make[1]: Leaving directory '/mnt/usb/ZMQ/libzmq'

Makefile:4025: recipe for target 'install-recursive' failed

make: *** [install-recursive] Error 1 root@localhost:/mnt/usb/ZMQ/libzmq#

I also faced this issue:

possibly undefined macro: AC MSG ERROR

From < http://stackoverflow.com/questions/8811381/possibly-undefined-macro-ac-msg-error>



Had to install pkg-config and then run autogen again and then ./configure.. Triggered a build using sudo make. Need to check how it would behave.

And it worked

NOTE: I also Un-installed and Installed GCC.

Ran into this issue while make install of Monitor-automata

make[2]: Leaving directory '/mnt/usb/Monitor-automata'

make[1]: Leaving directory '/mnt/usb/Monitor-automata'
root@localhost:/mnt/usb/Monitor-automata# Monitor-automata

Monitor-automata: error while loading shared libraries: libzmq.so.5: cannot open shared object file: No such file or directory

root@localhost:/mnt/usb/Monitor-automata#

Fix is as below.

Is this on Ubuntu? I had something similar and figured I need to add /usr/local/lib to Idconfig
Add /usr/local/lib to a line in Id.so.conf:
\$ sudo touch /etc/ld.so.conf
and rerun Idconfig
\$ sudo Idconfig

dpkg -L libxml2 using this command to trace the libxml2 on the switch.

It has libxml2 already installed. Need to install other Softwares such as libxml and libxml-dev

I also need to compile NETCONF server side today on the switch and see how it goes.

Other libraries required on the switch for Monitor-automata compilation. libxml2-dev is required.

Use this command to check if the library path ito libxml2 is included as part of LD linking

10/21/2017 OneNote Online

How to print the Id(linker) search path --> this is under linux commands tab of this document

Created another folder on my VM called mon-auto-exp-for-ONL --> Idea is to try and link OpenNSL library in this folder on my UBUNTU VM and see how it goes. This I did not try eventually...

NOTE: I could execute the example applications provided with the package just by following the INSTALL document.

I tried the default CDP package i.e. 3.0.2.4 -cdp on the DEF installer available on my switch. :-)

HUGE SUCCESS!!!

Below is the logs:

root@localhost:/mnt/usb/opennsl-3.2.0.4-cdp/bin/as5712# chmod +x example_bst root@localhost:/mnt/usb/opennsl-3.2.0.4-cdp/bin/as5712# ./example_bst

Initializing the system.

Platform default configuration is used

Platform Boot flags: 0x0 DMA pool size: 16777216

PCI unit 0: Dev 0xb854, Rev 0x03, Chip BCM56854_A2, Driver BCM56850_A0

Initializing platform

Device Configuration - SUCCESS!

SOC unit 0 attached to PCI device BCM56854_A2

Boot flags: Cold boot

rc: unit 0 device BCM56854_A2

Set age timer to 300.

rc: common SDK init complete

Common SDK init completed

rc: platform SDK init complete

OF-DPA is initialized successfully.

Adding ports to default vlan.

Default BST profiles are set successfully.

BST callback for triggers is registered.

BST feature is enabled.

User Menu: Select one of the following options

- 1. Enable/Disable BST feature.
- 2. Display BST statistics of a port.
- 3. Clear BST statistics of a port.
- 9. Launch diagnostic shell
- 0. Quit the application.

0

Exiting the application.

root@localhost:/mnt/usb/opennsl-3.2.0.4-cdp/bin/as5712# ./example_bst

Initializing the system.

Platform default configuration is used

Platform Boot flags: 0x0 DMA pool size: 16777216

PCI unit 0: Dev 0xb854, Rev 0x03, Chip BCM56854_A2, Driver BCM56850_A0

Initializing platform

Device Configuration - SUCCESS!

SOC unit 0 attached to PCI device BCM56854_A2

Boot flags: Cold boot

rc: unit 0 device BCM56854_A2

Set age timer to 300.

rc: common SDK init complete

Common SDK init completed

rc: platform SDK init complete OF-DPA is initialized successfully.

Adding ports to default vlan.

Default BST profiles are set successfully.

BST callback for triggers is registered.

BST feature is enabled.

User Menu: Select one of the following options

- 1. Enable/Disable BST feature.
- 2. Display BST statistics of a port.
- 3. Clear BST statistics of a port.
- 9. Launch diagnostic shell
- 0. Quit the application.

```
Enter the port number.
BST Counter: opennslBstStatIdUcast for COS queue: 0 is: 0
BST Counter: openns|BstStat|dUcast for COS queue: 1 is: 0
BST Counter: opennslBstStatIdUcast for COS queue: 2 is: 0
BST Counter: opennslBstStatIdUcast for COS queue: 3 is: 0
BST Counter: opennslBstStatIdUcast for COS queue: 4 is:0
BST Counter: opennslBstStatIdUcast for COS queue: 5 is: 0
BST Counter: opennslBstStatIdUcast for COS queue: 6 is: 0
BST Counter: opennslBstStatIdUcast for COS queue: 7 is:0
BST Counter: opennslBstStatIdMcast for COS queue: 0 is: 0
BST Counter: opennslBstStatIdMcast for COS queue: 1 is: 0
BST Counter: opennslBstStatIdMcast for COS queue: 2 is: 0
BST Counter: opennslBstStatIdMcast for COS queue: 3 is: 0
BST Counter: opennslBstStatIdMcast for COS queue: 4 is: 0
BST Counter: openns|BstStatIdMcast for COS queue: 5 is: 0
BST Counter: opennslBstStatIdMcast for COS queue: 6 is: 0
BST Counter: opennslBstStatIdMcast for COS queue: 7 is: 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 0 is : 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 1 is: 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 2 is: 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 3 is: 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 4 is: 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 5 is: 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 6 is: 0
BST Counter: opennslBstStatIdPriGroupShared for COS queue: 7 is: 0
BST Counter: opennslBstStatldPriGroupHeadroom for COS queue: 0 is: 0
BST Counter: opennslBstStatIdPriGroupHeadroom for COS queue: 1 is: 0
BST Counter: opennslBstStatIdPriGroupHeadroom for COS queue: 2 is: 0
BST Counter: openns|BstStat|dPriGroupHeadroom for COS queue: 3 is: 0
BST Counter: opennslBstStatldPriGroupHeadroom for COS queue: 4 is: 0
BST Counter: opennslBstStatIdPriGroupHeadroom for COS queue: 5 is : 0
BST Counter: opennslBstStatldPriGroupHeadroom for COS queue: 6 is: 0
BST Counter: opennslBstStatldPriGroupHeadroom for COS queue: 7 is:0
```

Compilation was successful on the switch. Sample application worked! Now I am one step closer to my graduation perhaps!!! Good news of my life!!! :-) :-):-) 24.11.2016

There is a sample application on the Kingston pendrive under Monitor-automata. Copied OpenNSL include folder under monitor-automata/src

And then included the header files in my source files as #include "./include/blablabla/blablabla.h"

Changed the Makefile.am to compile util.c --> which is copied in the same place where monitor-automata.c is present.

Also included _CFLAGS to point to -I"../src/include"

And then linked the library as lopennsl along with the other libraries listed in MakeFile.am

It was a simple change I made in monitor-automata.c i.e. to invoke only opennsl_driver_init() function from