

DOL开发环境配置

Description

DOL 是基于数据流处理网络的平台无关的 MPSoC 编程环境。

How to install

1. 下载文件

```
sudo wget http://www.accellera.org/images/downloads/standards/systemc/systemc-2.3.1.tgz
sudo wget http://www.tik.ee.ethz.ch/~shapes/downloads/dol_ethz.zip
```

2. 解压文件

```
$ sudo mkdir dol
$ sudo unzip dol_ethz.zip -d dol
$ sudo tar -zxvf systemc-2.3.1.tgz
```

3. 编译systemc

```
$ cd systemc-2.3.1
$ mkdir objdir
$ cd objdir
$ ../configure CXX=g++ --disable-async-updates
$ make install
```

下图为运行configure的截图

```
Installation prefix (aka SYSTEMC_HOME):
/home/baib/systemc-2.3.1
Header files : <SYSTEMC_HOME>/include
Libraries    : <SYSTEMC_HOME>/lib-linux
Documentation: <SYSTEMC_HOME>/docs
Examples     : <SYSTEMC_HOME>/examples

Architecture : linux
Compiler (flags): g++

Build settings:
Enable compiler optimizations : yes
Include debugging symbols     : no
Coroutine package for processes: QuickThreads
Disable async_request_update  : yes
Phase callbacks (experimental) : no
Additional settings           :

-----
WARNING: The selected SystemC library configuration is non-conforming
to IEEE Std. 1666-2011. See INSTALL.
-----
```

4.编译dol

进入刚刚dol的文件夹

```
$ cd ../dol
```

修改build_zip.xml文件 找到下面这段话,就是说上面编译的systemc位置在哪里,

```
#<property name="systemc.inc" value="YYY/include"/>
#<property name="systemc.lib" value="YYY/lib-linux/libsystemc.a"/>
```

把YYY改成上页pwd的结果(注意,对于 64位 系统的机器,lib-linux要改成lib-linux64)
然后是编译

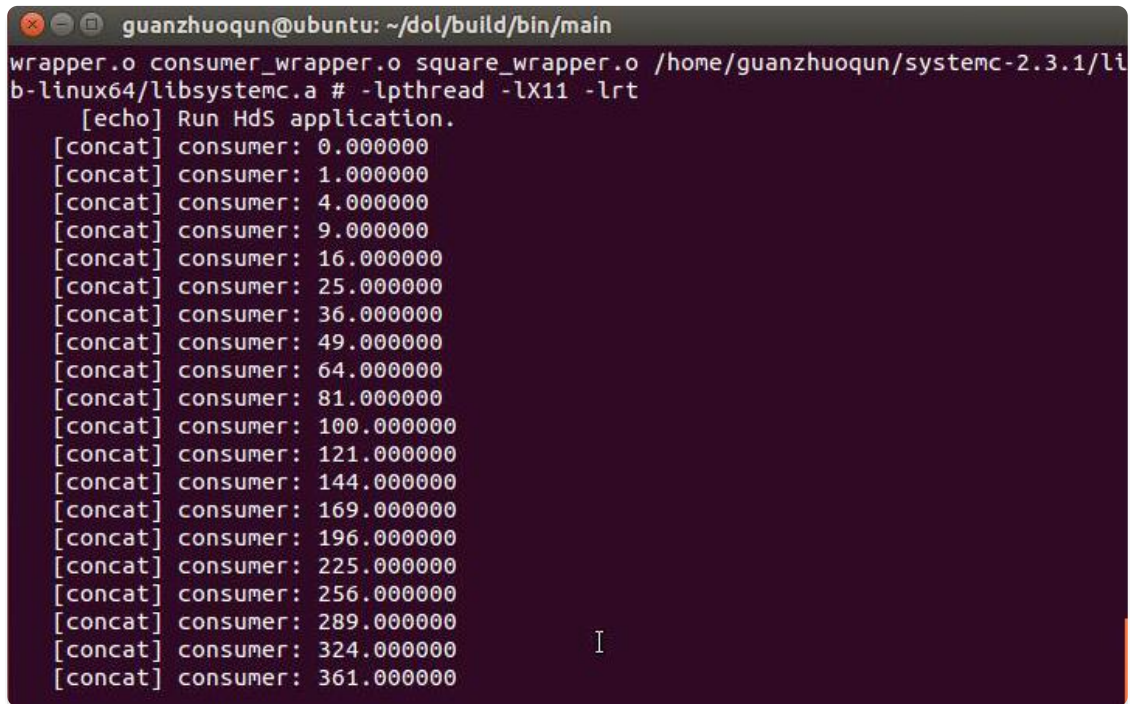
```
$ant -f build_zip.xml all
```

成功会显示build successful

Run example1:

```
$ cd dol/build/bin/main
$ ant -f runexample.xml -Dnumber=1
```

成功结果如图



```
guanzhuoqun@ubuntu: ~/dol/build/bin/main
wrapper.o consumer_wrapper.o square_wrapper.o /home/guanzhuoqun/systemc-2.3.1/lib-
b-linux64/libsystemc.a # -lpthread -lX11 -lrt
[echo] Run HdS application.
[concat] consumer: 0.000000
[concat] consumer: 1.000000
[concat] consumer: 4.000000
[concat] consumer: 9.000000
[concat] consumer: 16.000000
[concat] consumer: 25.000000
[concat] consumer: 36.000000
[concat] consumer: 49.000000
[concat] consumer: 64.000000
[concat] consumer: 81.000000
[concat] consumer: 100.000000
[concat] consumer: 121.000000
[concat] consumer: 144.000000
[concat] consumer: 169.000000
[concat] consumer: 196.000000
[concat] consumer: 225.000000
[concat] consumer: 256.000000
[concat] consumer: 289.000000
[concat] consumer: 324.000000
[concat] consumer: 361.000000
```

###Experimental experience

通过本次试验我学会了在虚拟机上配置dol环境；学会了Github仓库的建立；对markdown的语法进行了初步学习，有点小麻烦