







CentOS 6.10 系统中安装 synopsys 公司的 Design Compiler 2012。

1.请掌握必要的 Linux 知识，否则你将获得成吨的困难。

Linux 系统：CentOS 6.10 64 位。

32 位系统不适用本教程。

Synopsys 软件包可从下载：链接：<https://pan.baidu.com/s/1gflaCE3> 密码：ds5r

 hspice_vG-2012.06-SP1	2017/3/6 8:33	WinRAR 压缩文...	1,213,235...
 installer_v2.8 (1)	2017/3/6 7:01	WinRAR 压缩文...	13,447 KB
 NewSynopsysLicmaker	2017/3/10 19:54	WinRAR 压缩文...	1,139 KB
 scl_v11.4	2017/3/6 7:26	WinRAR 压缩文...	261,593 KB
 syn_vG-2012.06-SP2	2017/3/6 7:44	WinRAR 压缩文...	478,729 KB
 vcs_vG-2012.09	2017/3/6 8:33	WinRAR 压缩文...	

2.解压文件。

推荐 Windows 下使用管理员权限解压文件，Linux 下解压得安装软件支持 7z 以及 rar。当然我是 linux 下解压的，windows 下解压可能有错，若有错则去 linux 下解压。

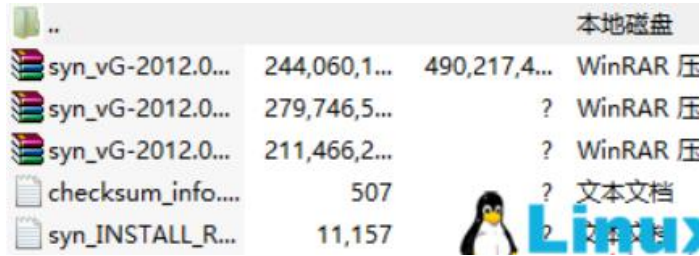
➤ 让 Ubuntu 12.10 支持 RAR 和 7Z 文件解压缩 <http://www.linuxidc.com/Linux/2012-11/74223.htm>

解压 install2.8：

 install_bin		文件夹
 install.now	0	? NOW 文件
 installer	4,847	? 文件
 setup.sh	496	? SH 文件

这是 linux 下需要的文件，上述所有文件拷贝到 linux 下安装文件文件夹下的 install 文件夹。

Dc 解压：



拷贝三个压缩包即可，三个压缩包不用再解压。到 linux 安装文件文件夹下的 dc 目录。

Scl 解压：



三个压缩包不用再解压。只需三个压缩包拷贝到 linux 安装文件文件夹下的 scl 目录。

3.Linux 系统下：

我的工作目录是 /home/kingstacker/workfile/synopsys；

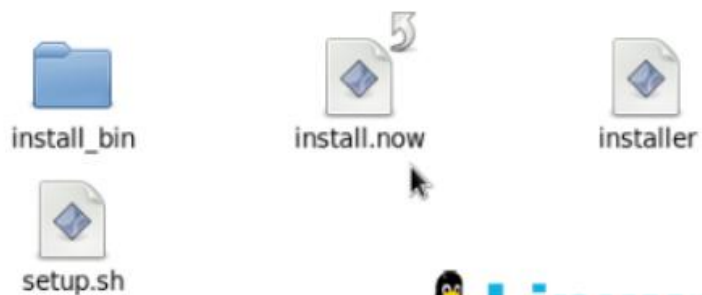
在 synopsys 目录下新建四个文件夹：dc，scl，license，installfile。dc 安装 design compiler，

scl 安装许可程序 scl,license 放 synopsys.dat 文件。

在 installfile 文件夹下新建文件夹：dc， install， scl，

并拷贝已解压文件。

复制刚刚解压文件到 installfile 文件夹下的 install：



复制解压文件到 installfile 文件夹下的 dc：



复制解压文件到 installfile 文件夹下的 scl：



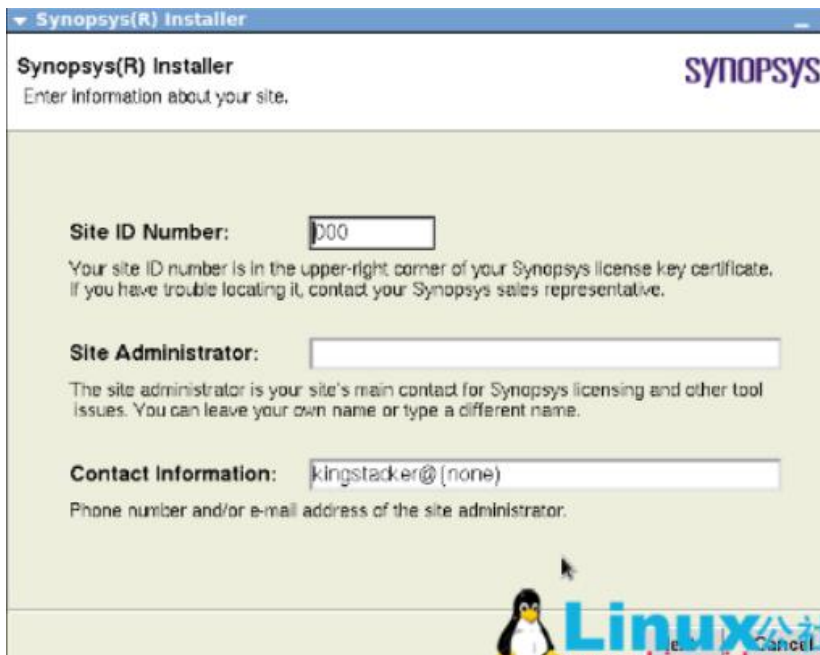
4.安装软件包。

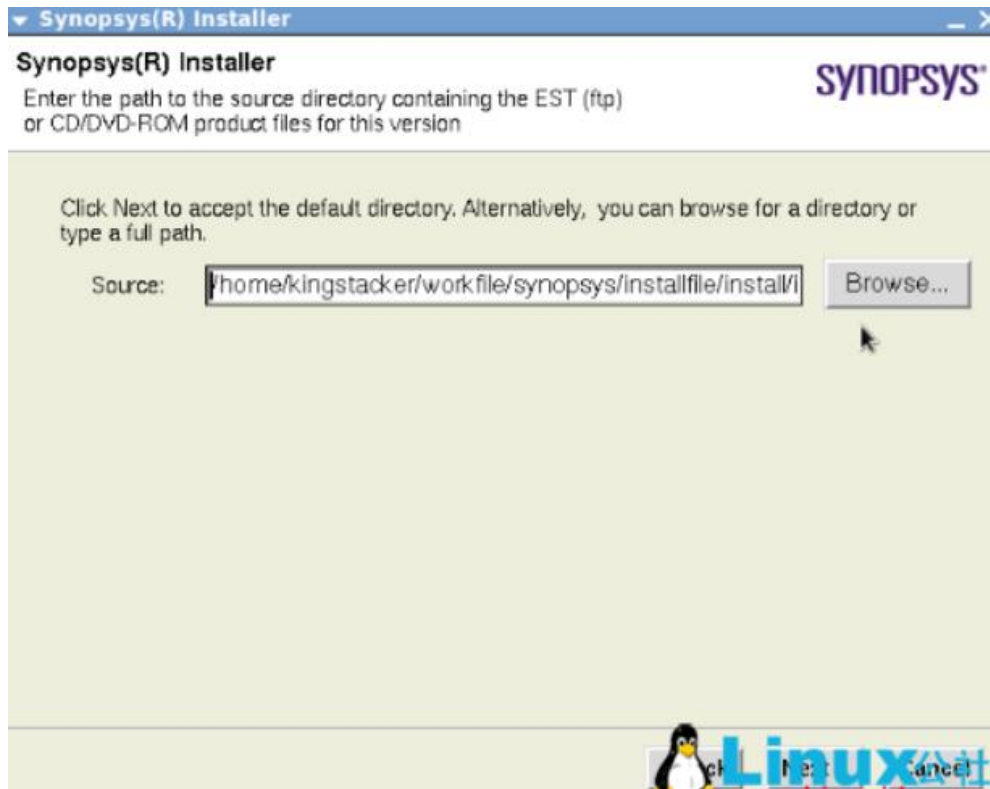
在终端中给 installfile 文件夹下的 install 文件夹中 setup.sh 权限并打开：

```
kingstacker@kingstacker:~/workfile/synopsys/installfile/install/installer_v2.8$ ls
install_bin  installer  install.now  setup.sh
kingstacker@kingstacker installer_v2.8$ chmod +x setup.sh
kingstacker@kingstacker installer_v2.8$ ./setup.sh
ypcat: can't get local yp domain: Local domain name not set
```

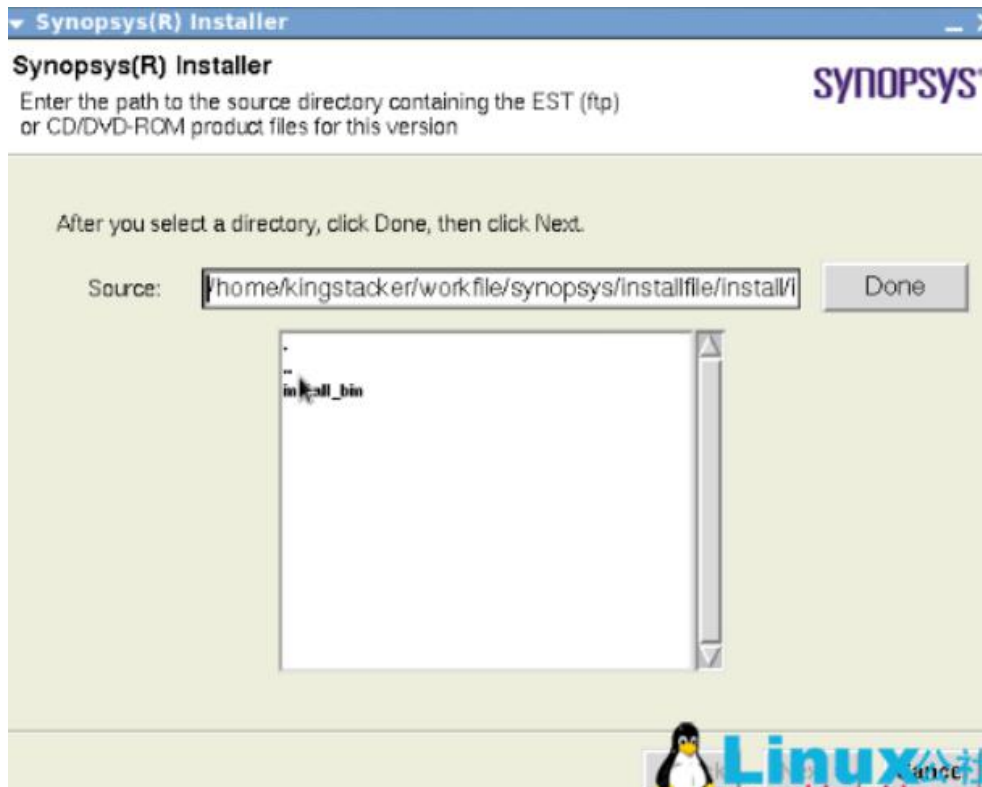


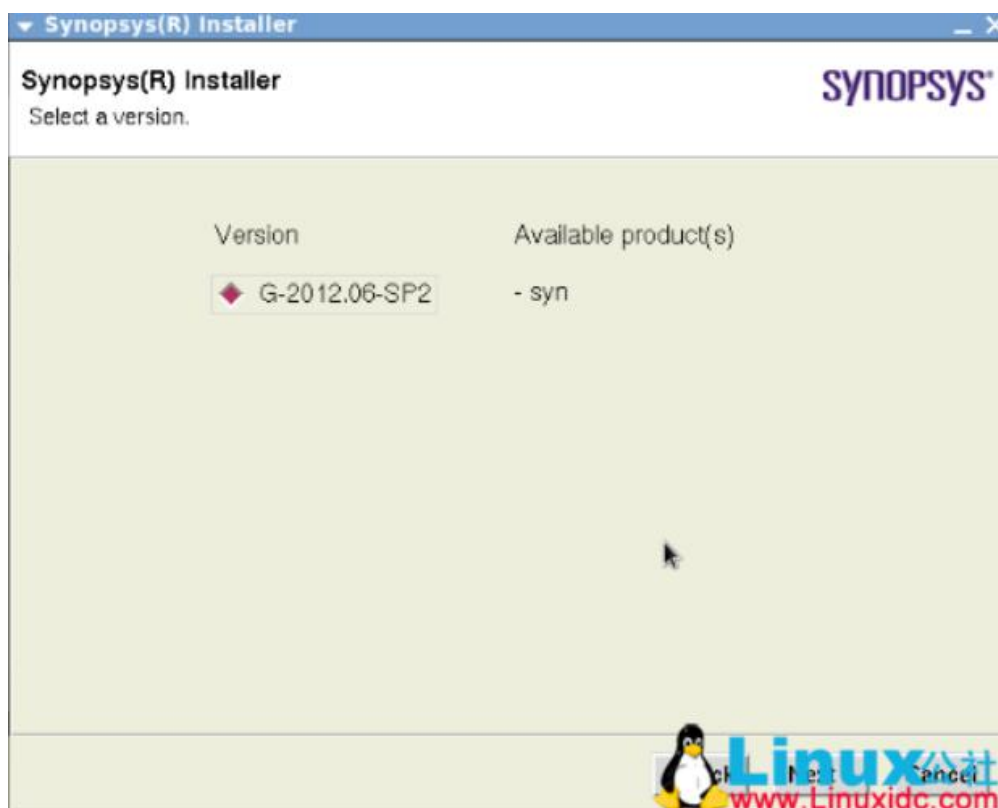
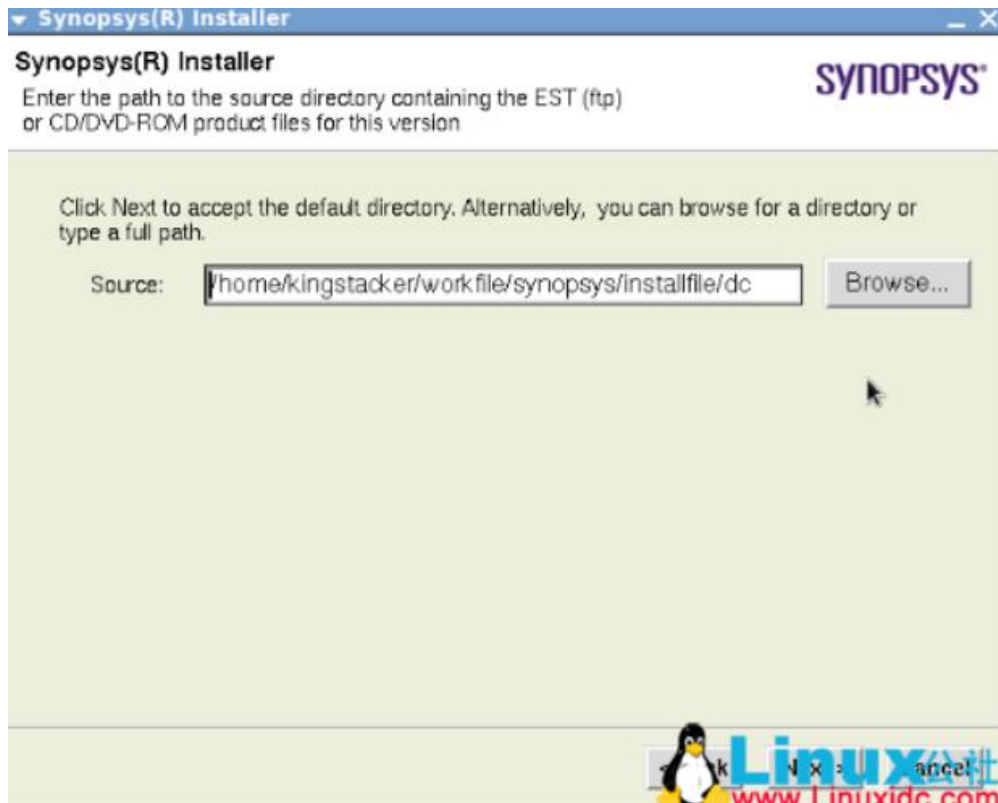
安装 dc :





找到 dc 文件夹（放三个 tar 的那个）；





Synopsys(R) G-2012.06-SP2 version

SYNOPSYS®

Select the platforms on which to install the products.

All platforms may not be available for each product. Check the Installation Guide or the product version notes for platform availability.

- amd64 - Red Hat Enterprise Linux; 64-bit**
- linux - Red Hat Enterprise Linux**



选择 amd64.

Synopsys(R) G-2012.06-SP2 version

SYNOPSYS®

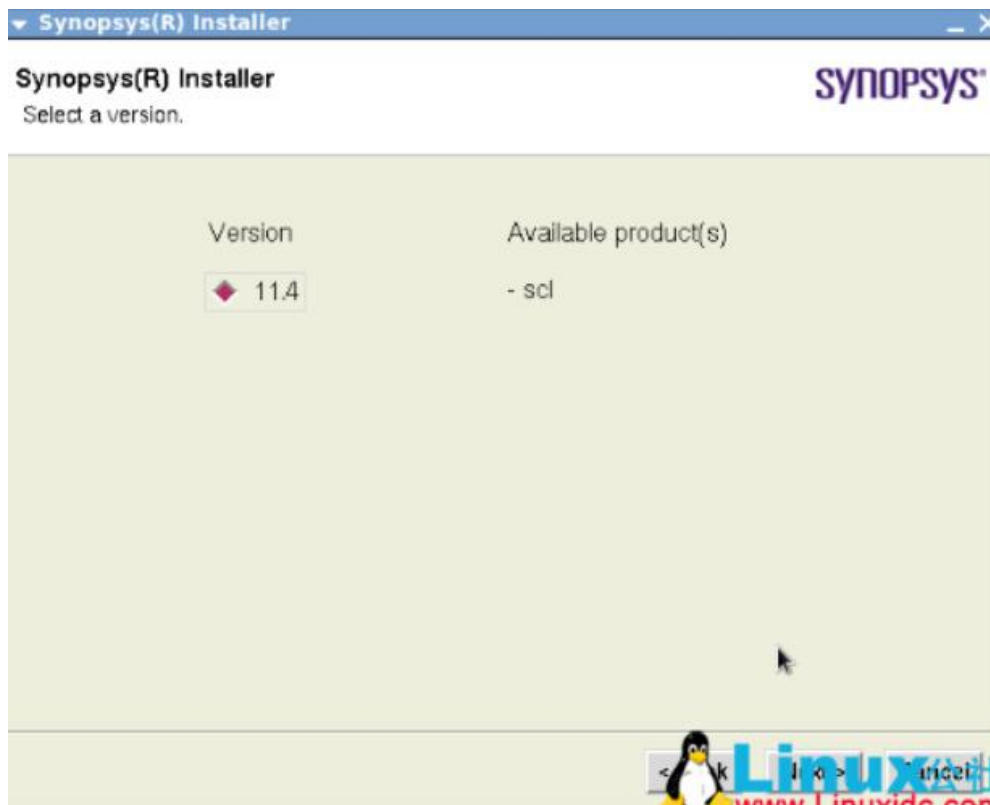
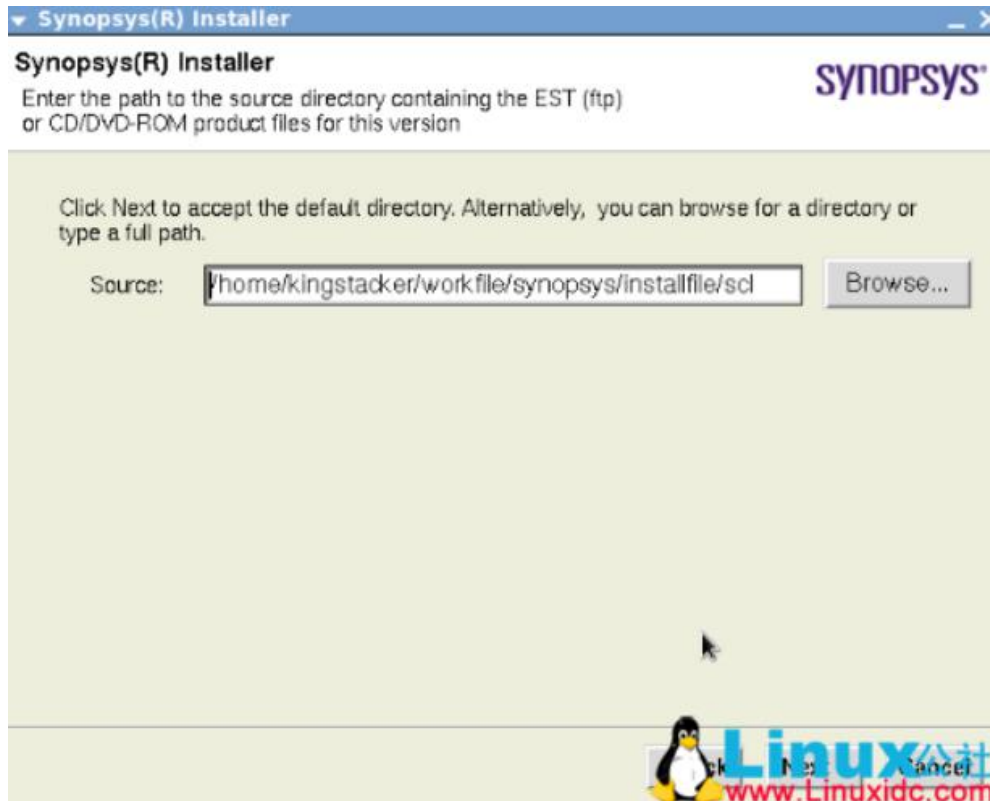
Select the destination directory.

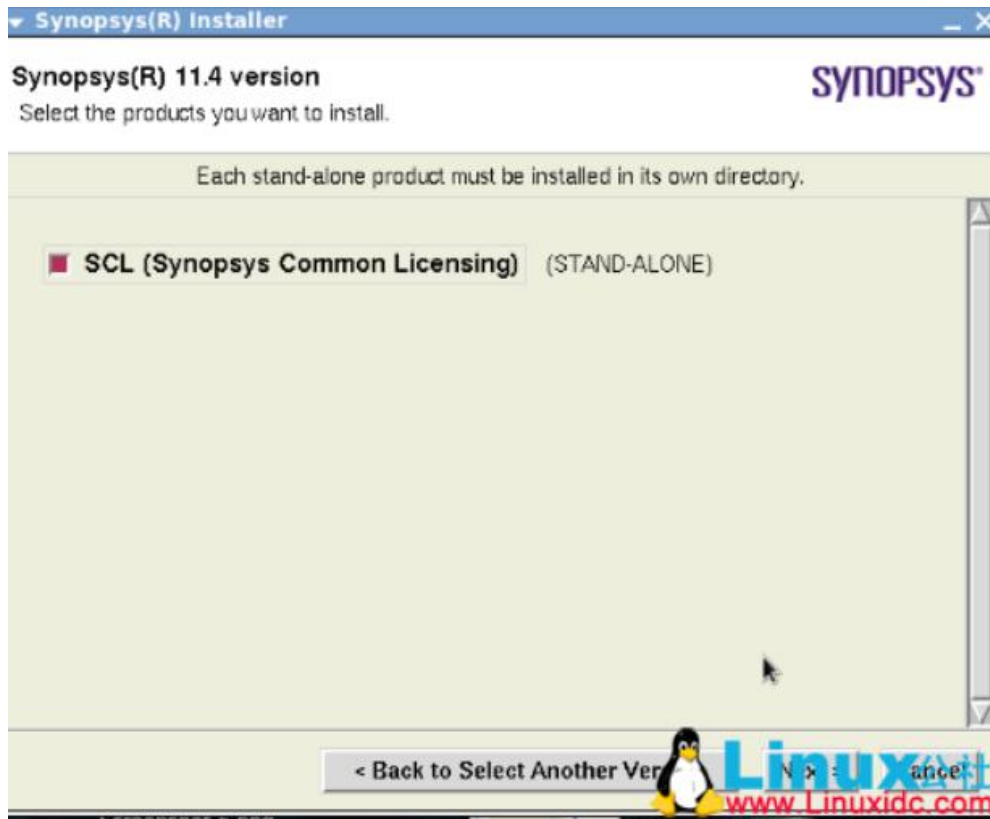


选择安装地方，我的是/home/kingstacker/workfile/synopsys/dc 上图不对注意，坐等安装完成，
x掉 installer 界面，别点 finish，可能出错。

安装 scl :

跟安装 dc 相似，

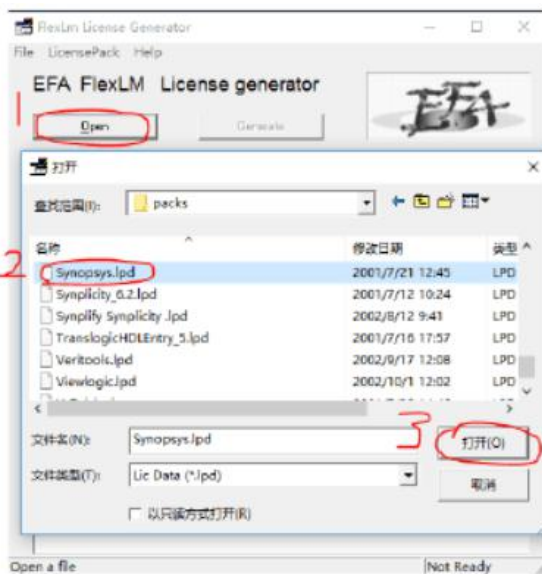




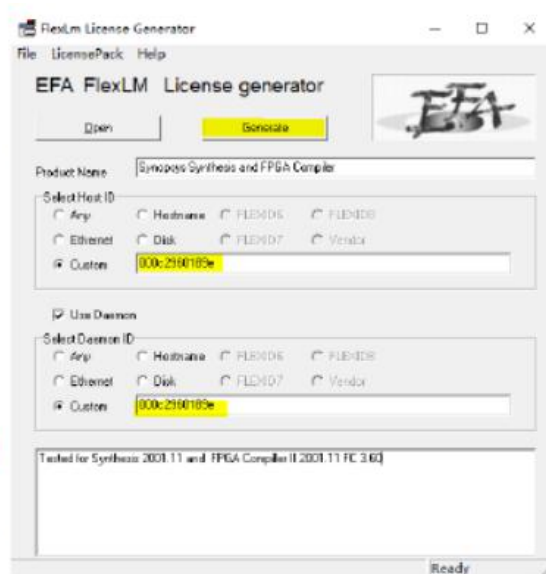
记得选择 amd64 位。安装完成退出。

5. 破解生成 license 文件。在 windows 下破解生成 synopsys.dat 文件：

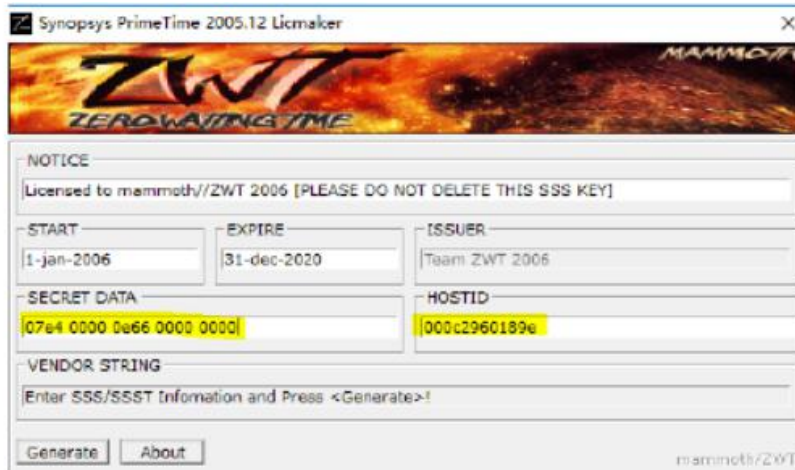
- 制作 license (注：各种 synopsys license 制作包大同小异)
 - 键入命令 `$ ifconfig -a`，记录 eth0 的 MAC 地址
 - 在 Windows (不一定是本机，也可以是其他电脑) 中进行操作，关掉一切杀毒软件
 - 运行 license 制作包中的 LicGen.exe
 - 点开 Open 按钮，选择 synopsys.lpd，如图 5(a)所示
 - 如图 5(b)所示在两处 Host ID->Custom 键入 eth0 的 MAC 地址，点击 Generate 生成的内容 Save 成 synopsys.dat (注意应去掉冒号; 如果save不可点击,需要把synopsys.src中的所有2019的时间改为2029)
 - 将生成的 synopsys.dat 文件保存到 Synopsys SSS Feature Keygen 文件夹中
 - 打开 cmd，进入 Synopsys SSS Feature Keygen 目录后运行 `sssverify.exe synopsys.dat`，复制生成的 SECRET DATA，如图 5(c)和图 5(d)
 - 打开 Synopsys SSS Feature Keygen 文件夹中的 KeyGen.exe，如图 5(e)所示，键入 SECRET DATA 和 eth0 的 MAC 地址，生成 license.dat
 - 如图 5(f)所示，将 license.dat 中的 FEATURE SSS 内容粘贴到 synopsys.dat 中，如果 synopsys.dat 中存在则替换
 - 如图 5(g)所示，在相应位置修改 localhost 和 snpslmd path；其中在 ubuntu 中键入命令 `$ hostname` 可获取 localhost，而 snpslmd 后面的链接地址设置成绝对路径 `~/eda/synopsys/scl/linux/bin/snpslmd` (附录 A 为 synopsys.dat 更改后的部分内容)



(a) 选择 Synopsys.lpd



(b) 生成 synopsys.dat



(e) 生成 license.dat

```
#Synopsys SCL v10.9.1 License File, Generated by Team ZWT 2006.
#For EVALUATION only. If you like this software, BUY it!

SERVER <host_name> 000c2960189e 27000
VENDOR snpslmd
USE SERVER
FEATURE SSS snpslmd 1.0 31-dec-2020 uncounted 0EFAB50928B9EDBDB856 \
  VENDOR_STRING="69656 d1d88 34cc3 35f9b 39561 08bdd 779a4 23589 \
  aa9a3 196" HOSTID=000c2960189e ISSUER="Team ZWT 2006" \
  NOTICE="Licensed to mammoth//ZWT 2006 [PLEASE DO NOT DELETE THIS \
  SSS KEY]" SN-RK:1978-0:001224:0 START=1-jan-2006
```

(f) license.dat

```
SERVER ubuntu 000c2960189e 27000
DAEMON snpslmd =/eda/synopsys/scl/linux/bin/snpslmd
FEATURE SSS snpslmd 1.0 31-dec-2020 uncounted 0EFAB50928B9EDBDB856 \
  VENDOR_STRING="69656 d1d88 34cc3 35f9b 39561 08bdd 779a4 23589 \
  aa9a3 196" HOSTID=000c2960189e ISSUER="Team ZWT 2006" \
  NOTICE="Licensed to mammoth//ZWT 2006 [PLEASE DO NOT DELETE THIS \
  SSS KEY]" SN-RK:1978-0:001224:0 START=1-jan-2006
PACKAGE EFA Synopsys_1 snpslmd 2019.12 70DU9021D4097528EC8B COMPONENTS-
A54SXA A7 AARKOS-A ace core aceadl acehdl/beta status acehdl/
```

(g) 修改后的 synopsis.dat

图 5 license 制作过程

验证 license

- 将制作好的 license 拷贝到~/eda/synopsys/license 目录下，同时终端进来该目录
- 如图 6 所示，键入命令\$ ~/eda/synopsys/scl/linux/bin/sssverify synopsis.dat，出现 PASSED 表示 OK

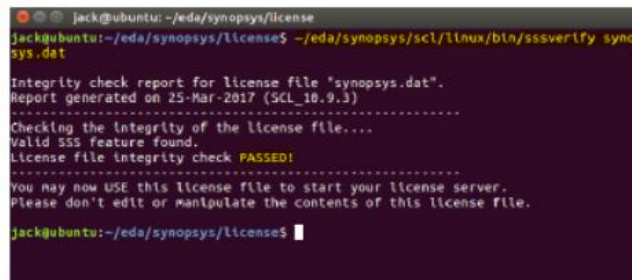


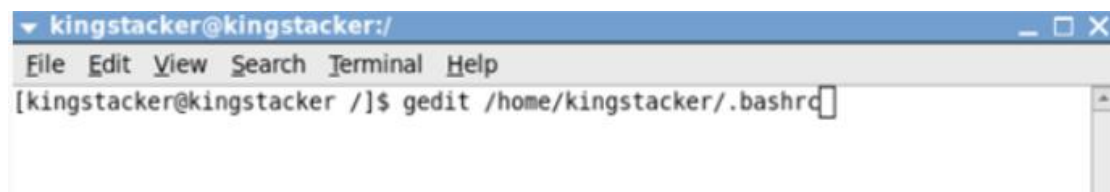
图 6 验证 license

贴下本人此文件，用户名 kingstacker，网卡号 e03f49de0ee3.第二行目录为 snpslmd 文件的路径，请比对更改前两行，

```
1 SERVER kingstacker e03f49de0ee3 27000 #your hostname and MAC
2 VENDOR snpslmd /home/kingstacker/workfile/synopsys/sc1/amd64/bin/snpslmd #your DIR
3
4 INCREMENT SSS snpslmd 1.0 31-dec-2020 uncounted 8E8AC46A9072C940FD \
5 VENDOR_STRING="4632b b746a 85d97 583cb e754c 615b8 32c90 1ff55 \
6 e6b1e 102" HOSTID=e03f49de0ee3 ISSUER="Synopsys Inc. [12/28/2012 \
7 10:00:00 19688]" NOTICE="Licensed to mammoth//ZWT 2006 [PLEASE DO \
8 NOT DELETE THIS SSS KEY]" SN=RK:0:0:1 START=1-jan-2006
9 PACKAGE EFA_Synopsys_1 snpslmd 2019.12 50A0405169FA0249B11C COMPONENTS="A3200DX A42MX A500K A54SX
10 \
11 A54SXA A7 AIM_DEBUG AIM_DEBUG_MEMSSE AIM_DECRYPT AIM_DEVELOPER AIM_DEVELOPER_MEMSSE \
12 AIM_ENCRYPT ALTGEN1 ALTGEN2 AN-Impl3D AN-Impl3D_all AN-Impl3D_ise AN-Impl3D_ise_all APACM \
13 APATD APCS APDP APEX20K APEX20KC APEX20KE APEXII APGA4AP APGACS APGADP APGAHPO APGASolar \
14 APGASolarII APGATime APGApwr APHPO APPower APRV APSolar APSolarII APTIME APXtalk APPwr \
15 ARKOS-A ARKOS-B ARKOS-C ARKOS-D ARKOS-E ARKOS-Ice ARKOS-Mcomp ARKOS-Rtlcomp ARKOS-Scomp \
16 ARKOS-Simul Astro Astro-Express Astro-MV Astro-Rail Astro-Talk AstroBeta AstroExp AstroGA \
17 AstroRail AstroRailSA AstroSpecialBeta AstroXtalk" ck=197
18 PACKAGE EFA_Synopsys_2 snpslmd 2019.12 2060708199D1AE3BE773 COMPONENTS="BASIC_ANALYSES \
19 BASIC_ANALYSES_MEMSSE BATCH_MEASURE BATCH_MEASURE_MEMSSE BATT_TOOL BATT_TOOL_MEMSSE BC-FPGA \
20 BC-FPGA-HDL BC-FPGA-VHDL BC-HDL BC-Schedule BC-VHDL BETA_LIBRARY BOA-BRT BUILD_DATE \
21 BUILD_NUMBER BUNDLE_MCAD_PROJECTION Behavioral-Analyzer Behavioral-Compiler" ck=193
22 PACKAGE EFA_Synopsys_3 snpslmd 2019.12 B0B010D190A68E42575A COMPONENTS="CA-CP-Advanced
23 CA-CP-Basic \
24 CA-CP-Standard CA-Chip-Edit CA-Foundation CA-Frame CA-Hier-Timer CA-Optimization CA-Timer \
25 CA-Utils CADENCE_DIVA_NETLISTER CADENCE_FRAMEWAY CADENCE_FRAMEWAY_MEMSSE CADENCE_NETLISTER \
26 CADENCE_NETLISTER_MEMSSE CBA-ApolloGA-Interface CBA-Blk-Export CBA-Blk-Import \
27 CBA-CadenceSE-Interface CBA-DS-Beta CBA-Frame CBA-Logical-DS CBA-Logical-MA CBA-Physical-DS \
28 CBA-Physical-MA CBA-Transport CD-Compiled-Lib-Gen CD-Compiled-Sys-Gen CD-GDI CD-GDI-Lib
29 CD-MSSC-Cross-Probe CD-MSSC-NetList CD-Model-Developer CD-Present-Builder \
```

把 synopsys.dat 文件放到 license 文件夹。

6. 编辑用户环境变量：



```
kingstacker@kingstacker: /
File Edit View Search Terminal Help
[kingstacker@kingstacker /]$ gedit /home/kingstacker/.bashrc
```

贴本人 bashrc 文件，请对照更改，别瞎改，系统可能会炸的.如果在 windows 上改,需要在 notepad++里把行尾符变换为 Unix 行尾符：

```
# .bashrc
```

```
# Source global definitions
```

```
if [ -f /etc/bashrc ]; then
```

```
    ./etc/bashrc
```

```
fi
```

```
# User specific aliases and functions
```

```
#synopsys tool list configuration
```

```
#synopsys_home
```

```
export synopsys_home="/home/kingstacker/workfile/synopsys"
```

```
#dc_home
```

```
export PATH="$PATH:${synopsys_home}/dc/amd64/syn/bin"
```

```
#hspice_home
```

```
export PATH="$PATH:${synopsys_home}/hspice/hspice/bin"
```

```
#dve
```

```
export PATH="$PATH:${synopsys_home}/vcs/gui/dve/bin"
```

```
#vcs_home
```

```
export PATH="$PATH:${synopsys_home}/vcs/bin"
```

```
#scl_home
```

```
export PATH="$PATH:${synopsys_home}/scl/amd64/syn/bin"
```

```
#license
```

```
export SNPSLMD_LICENSE_FILE="/home/kingstacker/workfile/synopsys/license/synopsys.dat"
```

```
export LM_LICENSE_FILE="/home/kingstacker/workfile/synopsys/license/synopsys.dat"
```

```
export DISPLAY=unix:0
```

```
#set home directory
```

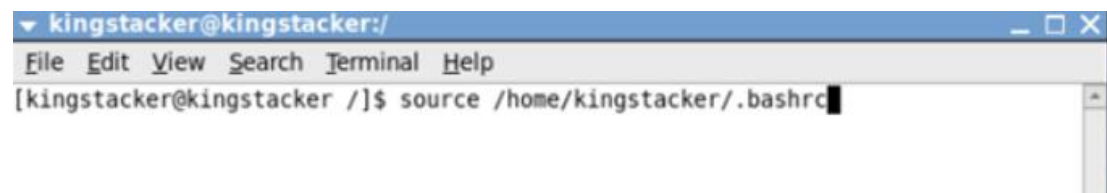
```
export SYNOPSYS="/home/kingstacker/workfile/synopsys"
```

```
export VCS_HOME="/home/kingstacker/workfile/synopsys/vcs"
```

```
export DVE_HOME="/home/kingstacker/workfile/synopsys/vcs/gui/dve"
```

```
export VCS_ARCH_OVERRIDE="linux"
```

7.更新 bashrc 文件：

A terminal window with a blue title bar containing the text "kingstacker@kingstacker:". Below the title bar is a menu bar with "File", "Edit", "View", "Search", "Terminal", and "Help". The main area of the terminal shows the command prompt "[kingstacker@kingstacker /]\$" followed by the command "source /home/kingstacker/.bashrc" and a cursor at the end of the line.

```
kingstacker@kingstacker:/  
File Edit View Search Terminal Help  
[kingstacker@kingstacker /]$ source /home/kingstacker/.bashrc
```

8.重启电脑，ok。


9.打开 dc：


```
kingstacker@kingstacker /]$ dc_shell

Design Compiler Graphical
DC Ultra (TM)
DFTMAX (TM)
Power Compiler (TM)
DesignWare (R)
DC Expert (TM)
Design Vision (TM)
HDL Compiler (TM)
VHDL Compiler (TM)
DFT Compiler
Library Compiler (TM)
Design Compiler(R)

Version G-2012.06-SP2 for RHEL64 -- Aug 31, 2012
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between you, or your company, and Synopsys, Inc.
```



打开图形界面：


```
kingstacker@kingstacker:/
File Edit View Search Terminal Help

DC Ultra (TM)
DFTMAX (TM)
Power Compiler (TM)
DesignWare (R)
DC Expert (TM)
Design Vision (TM)
HDL Compiler (TM)
VHDL Compiler (TM)
DFT Compiler
Library Compiler (TM)
Design Compiler(R)

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Initializing...
Error: could not open command log file "//command.log" (G-015)
dc_shell> start_gui
dc_shell> dc_shell>
```



Applications Places System Wed May 17, 22:10 kingstacker

Design Vision - TopLevel_1

File Edit View Select Highlight List Hierarchy Design Attributes Schematic Timing Test Power Window Help

Hier |

Logical Hie Cells (Hierarchical)

Cell Name	Ref Name	Cell Path
-----------	----------	-----------


Error: could not open command log file "//command.log" JSD:513

```
dk_shell> start_gui
dk_shell> exit
dk_shell>
```

Log History Options

dk_shell>

Ready



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www.Linuxidc.com