

STAR-CD V4.06 安装手册

Linux, Unix版

CDAJ-China



概述

- 本手册详细描述了**STAR-CD V4.06 (Linux, Unix版)**的安装流程。
- 本手册的流程是基于**Linux x86**体系而写的,但是也同样适用于其它的**Linux**和**Unix**体系。
- 安装完成后,如果正确设置好了**license**,马上就可以使用**STAR-CD V4.06**了。
- 目录
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 - 12. 对**license**进行配置

1. 准备开始安装

- 从CDAJ下载网站或安装光盘中获取相应操作系统的安装包，使用tar命令将安装包展开。

【Command】

```
% tar -xvf STAR-CD_4.06.007-Linux_x86.tar
```

- 使用tar命令展开安装包后，执行安装程序“setup”，开始安装。
（在执行setup之前，您可能需要先获取系统的root权限）

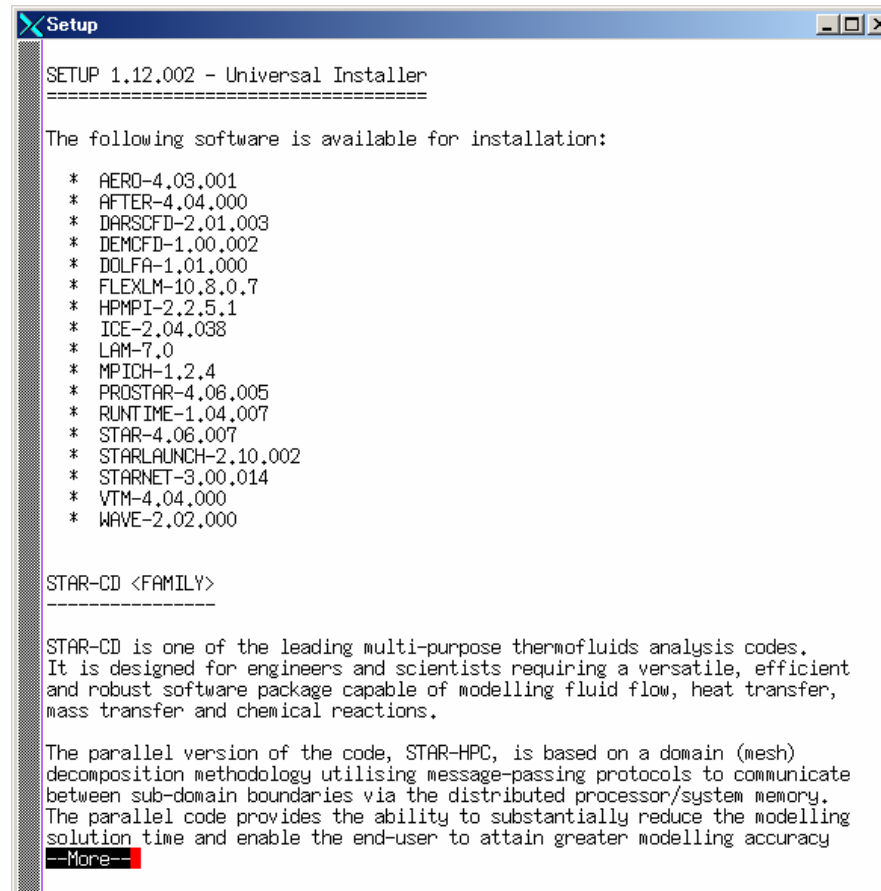
【Command】

```
% ./setup
```

```
168 May 14 13:54 .  
432 May 14 13:46 ..  
896 Apr 27 10:54 Packages  
293324800 May 14 13:53 STAR-CD_4.06.007-Linux_x86.tar  
27170 Apr 25 23:29 setup  
392 Apr 25 23:29 tools
```

2. 启动安装

- STAR-CD V4.06.007的安装程序启动之后，按[Enter]键或[空格]键，向下浏览STAR-CD组件及其捆绑软件的相关说明。



```
Setup
-----
SETUP 1.12.002 - Universal Installer
=====

The following software is available for installation:

* AERO-4.03.001
* AFTER-4.04.000
* DARSCFD-2.01.003
* DEMCFD-1.00.002
* DOLFA-1.01.000
* FLEXLM-10.8.0.7
* HPMPPI-2.2.5.1
* ICE-2.04.038
* LAM-7.0
* MPICH-1.2.4
* PROSTAR-4.06.005
* RUNTIME-1.04.007
* STAR-4.06.007
* STARLAUNCH-2.10.002
* STARNET-3.00.014
* VTM-4.04.000
* WAVE-2.02.000

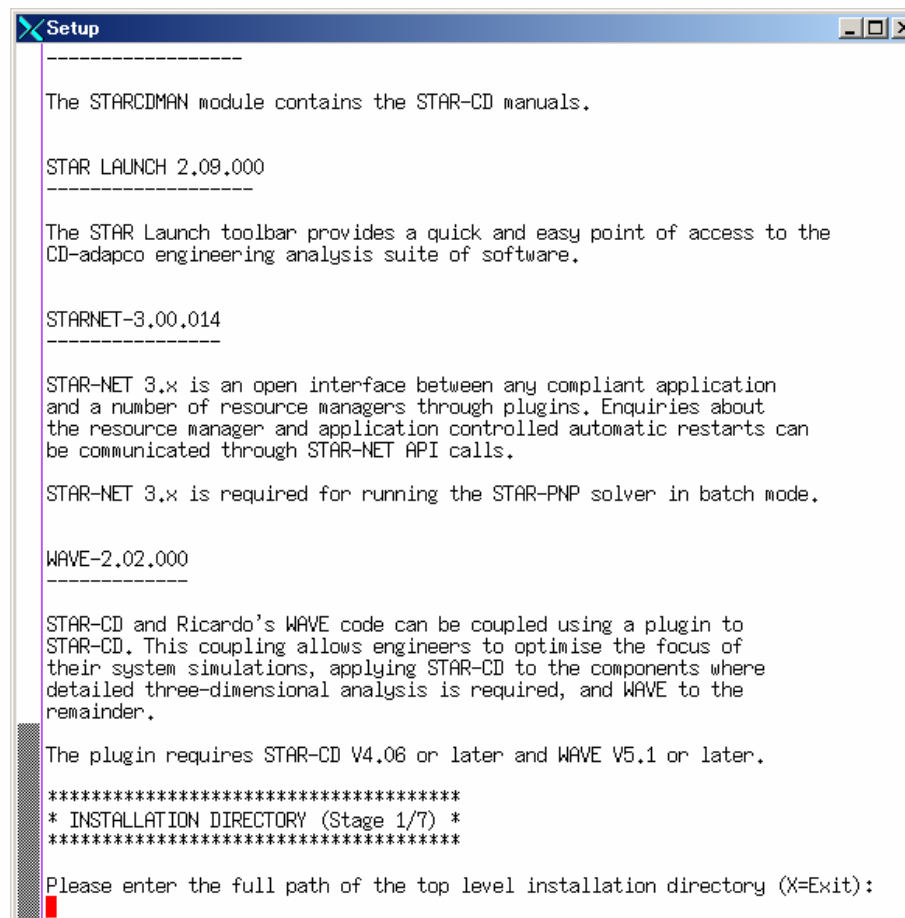
STAR-CD <FAMILY>
-----

STAR-CD is one of the leading multi-purpose thermofluids analysis codes.
It is designed for engineers and scientists requiring a versatile, efficient
and robust software package capable of modelling fluid flow, heat transfer,
mass transfer and chemical reactions.

The parallel version of the code, STAR-HPC, is based on a domain (mesh)
decomposition methodology utilising message-passing protocols to communicate
between sub-domain boundaries via the distributed processor/system memory.
The parallel code provides the ability to substantially reduce the modelling
solution time and enable the end-user to attain greater modelling accuracy
--More--
```

3. 指定安装路径

- 指定安装目录的绝对路径，（如/opt/starcd406），按[Enter]键确认。



4. 选择安装软件(Software)

- 选择进行安装的软件。
- 建议进行最大化安装，也就是选择安装所有STAR-CD组件及其捆绑软件。
 - 输入[A]键 → [Enter]键 （选择所有的组件及捆绑软件）
 - 输入[N]键 → [Enter]键 （前进到下一步）

```

Setup
Please enter the full path of the top level installation directory (X=Exit):
/home/ukyo03/masaoka/test/V406_install-test/STARDIR

*****
* SOFTWARE SELECTION (Stage 2/7) *
*****

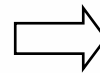
*****
* SOFTWARE SELECTION (Stage 2/7) *
*****

The following options can be toggled on or off by entering their numbers.
A keyword can be used to toggle any option that contains the keyword.
You may enter more than one option on the same line separated by a space.
In order to continue to the next stage you must select at least one option:

1. [ ] AERO-4.03.001
2. [ ] AFTER-4.04.000
3. [ ] DARSCFD-2.01.003
4. [ ] DEMCFD-1.00.002
5. [ ] DOLFA-1.01.000
6. [ ] FLEXLM-10.8.0.7
7. [ ] HPMP-2.2.5.1
8. [ ] ICE-2.04.038
9. [ ] LAM-7.0
10. [ ] MPICH-1.2.4
11. [ ] PROSTAR-4.06.005
12. [ ] RUNTIME-1.04.007
13. [ ] STAR-4.06.007
14. [ ] STARLAUNCH-2.10.002
15. [ ] STARNET-3.00.014
16. [ ] VTM-4.04.000
17. [ ] WAVE-2.02.000
A. Select all options
U. Unselect all options

Please enter your selection (X=Exit B=Back N=Next):
A

```



```

Setup
15. [ ] STARNET-3.00.014
16. [ ] VTM-4.04.000
17. [ ] WAVE-2.02.000
A. Select all options
U. Unselect all options

Please enter your selection (X=Exit B=Back N=Next):
A

*****
* SOFTWARE SELECTION (Stage 2/7) *
*****

The following options can be toggled on or off by entering their numbers.
A keyword can be used to toggle any option that contains the keyword.
You may enter more than one option on the same line separated by a space.
In order to continue to the next stage you must select at least one option:

1. [X] AERO-4.03.001
2. [X] AFTER-4.04.000
3. [X] DARSCFD-2.01.003
4. [X] DEMCFD-1.00.002
5. [X] DOLFA-1.01.000
6. [X] FLEXLM-10.8.0.7
7. [X] HPMP-2.2.5.1
8. [X] ICE-2.04.038
9. [X] LAM-7.0
10. [X] MPICH-1.2.4
11. [X] PROSTAR-4.06.005
12. [X] RUNTIME-1.04.007
13. [X] STAR-4.06.007
14. [X] STARLAUNCH-2.10.002
15. [X] STARNET-3.00.014
16. [X] VTM-4.04.000
17. [X] WAVE-2.02.000
A. Select all options
U. Unselect all options

Please enter your selection (X=Exit B=Back N=Next):
N

```

5. 选择安装包(Packages)

- 选择进行安装的包。
- 建议进行最大化安装，也就是选择安装所有的包。
 - 输入[A]键 → [Enter]键 （选择所有的包）
 - 输入[N]键 → [Enter]键 （前进到下一步）

```

Setup
*****
* PLATFORMS SELECTION (Stage 3/7) *
*****

Automatically selecting the only platform available.

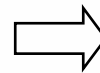
*****
* PACKAGES SELECTION (Stage 4/7) *
*****

The following options can be toggled on or off by entering their numbers.
A keyword can be used to toggle any option that contains the keyword.
You may enter more than one option on the same line separated by a space.
In order to continue to the next stage you must select at least one option:

1. [ ] AERO-4.03.001 > linux_2.4-absoft_9.0a-glibc_2.2.2
2. [ ] AFTER-4.04.000 > linux_2.4-absoft_9.0a-glibc_2.2.2
3. [ ] DARSCFD-2.01.003 > linux_2.4-absoft_9.0a-glibc_2.2.2
4. [ ] DEMCFD-1.00.002 > linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2
5. [ ] DOLFA-1.01.000 > linux_2.4-glibc_2.2.2
6. [ ] FLEXLM-10.8.0.7 > linux_2.4-x86-glibc_2.2.2
7. [ ] HPMPI-2.2.5.1 > linux_2.4-x86-glibc_2.2.2
8. [ ] ICE-2.04.038 > linux_2.2-x86-glibc_2.2.0
9. [ ] ICE-2.04.038 > linux_2.4-absoft_9.0a-glibc_2.2.2
10. [ ] ICE-2.04.038 > linux_2.4-x86-glibc_2.3.2
11. [ ] LAM-7.0 > linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
12. [ ] MPICH-1.2.4 > linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
13. [ ] PROSTAR-4.06.005 > linux_2.2-x86-glibc_2.2.0
14. [ ] PROSTAR-4.06.005 > linux_2.4-x86-glibc_2.3.2
15. [ ] RUNTIME-1.04.007 > linux_2.4-x86-glibc_2.2.2
16. [ ] STAR-4.06.007 > linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso
17. [ ] STARLAUNCH-2.10.002 > linux_2.4-x86-glibc_2.2.2
18. [ ] STARNET-3.00.014 > generic
19. [ ] VTM-4.04.000 > linux_2.4-absoft_9.0a-glibc_2.2.2
20. [ ] WAVE-2.02.000 > linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso
A. Select all options
U. Unselect all options

Please enter your selection (X=Exit B=Back N=Next):
A

```



```

Setup
A. Select all options
U. Unselect all options

Please enter your selection (X=Exit B=Back N=Next):
A

*****
* PACKAGES SELECTION (Stage 4/7) *
*****

The following options can be toggled on or off by entering their numbers.
A keyword can be used to toggle any option that contains the keyword.
You may enter more than one option on the same line separated by a space.
In order to continue to the next stage you must select at least one option:

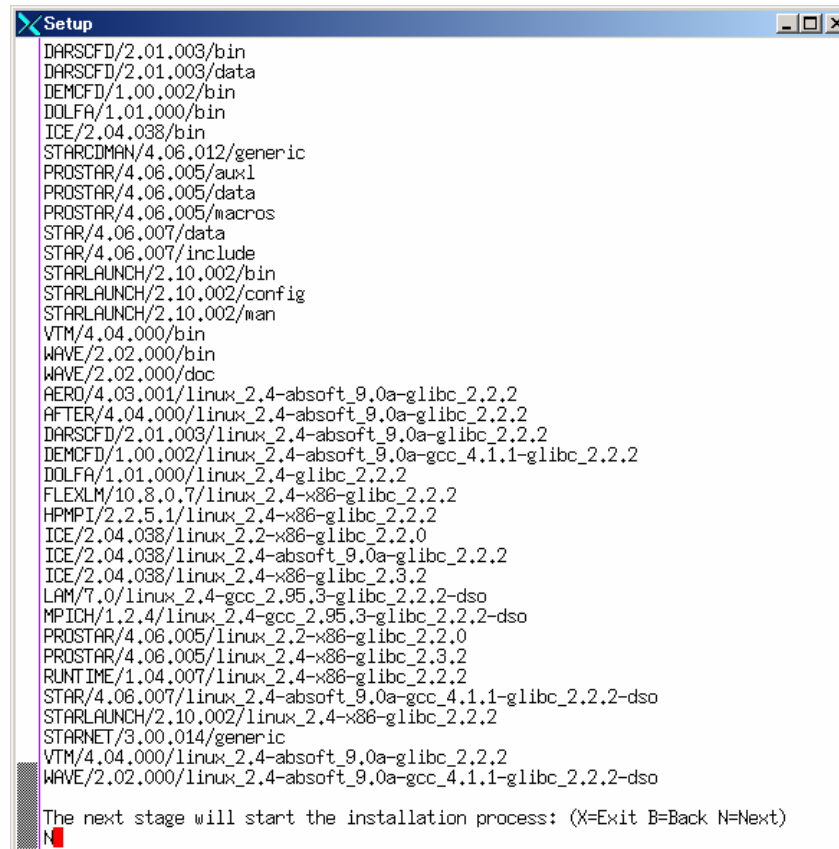
1. [X] AERO-4.03.001 > linux_2.4-absoft_9.0a-glibc_2.2.2
2. [X] AFTER-4.04.000 > linux_2.4-absoft_9.0a-glibc_2.2.2
3. [X] DARSCFD-2.01.003 > linux_2.4-absoft_9.0a-glibc_2.2.2
4. [X] DEMCFD-1.00.002 > linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2
5. [X] DOLFA-1.01.000 > linux_2.4-glibc_2.2.2
6. [X] FLEXLM-10.8.0.7 > linux_2.4-x86-glibc_2.2.2
7. [X] HPMPI-2.2.5.1 > linux_2.4-x86-glibc_2.2.2
8. [X] ICE-2.04.038 > linux_2.2-x86-glibc_2.2.0
9. [X] ICE-2.04.038 > linux_2.4-absoft_9.0a-glibc_2.2.2
10. [X] ICE-2.04.038 > linux_2.4-x86-glibc_2.3.2
11. [X] LAM-7.0 > linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
12. [X] MPICH-1.2.4 > linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
13. [X] PROSTAR-4.06.005 > linux_2.2-x86-glibc_2.2.0
14. [X] PROSTAR-4.06.005 > linux_2.4-x86-glibc_2.3.2
15. [X] RUNTIME-1.04.007 > linux_2.4-x86-glibc_2.2.2
16. [X] STAR-4.06.007 > linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso
17. [X] STARLAUNCH-2.10.002 > linux_2.4-x86-glibc_2.2.2
18. [X] STARNET-3.00.014 > generic
19. [X] VTM-4.04.000 > linux_2.4-absoft_9.0a-glibc_2.2.2
20. [X] WAVE-2.02.000 > linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso
A. Select all options
U. Unselect all options

Please enter your selection (X=Exit B=Back N=Next):
N

```

6. 确认安装包

- 确认所选择的安装包以及相关的安装路径。
- 确认完毕之后，使用以下操作前进到下一步。
 - 输入[N]键 → [Enter]键 （前进到下一步）



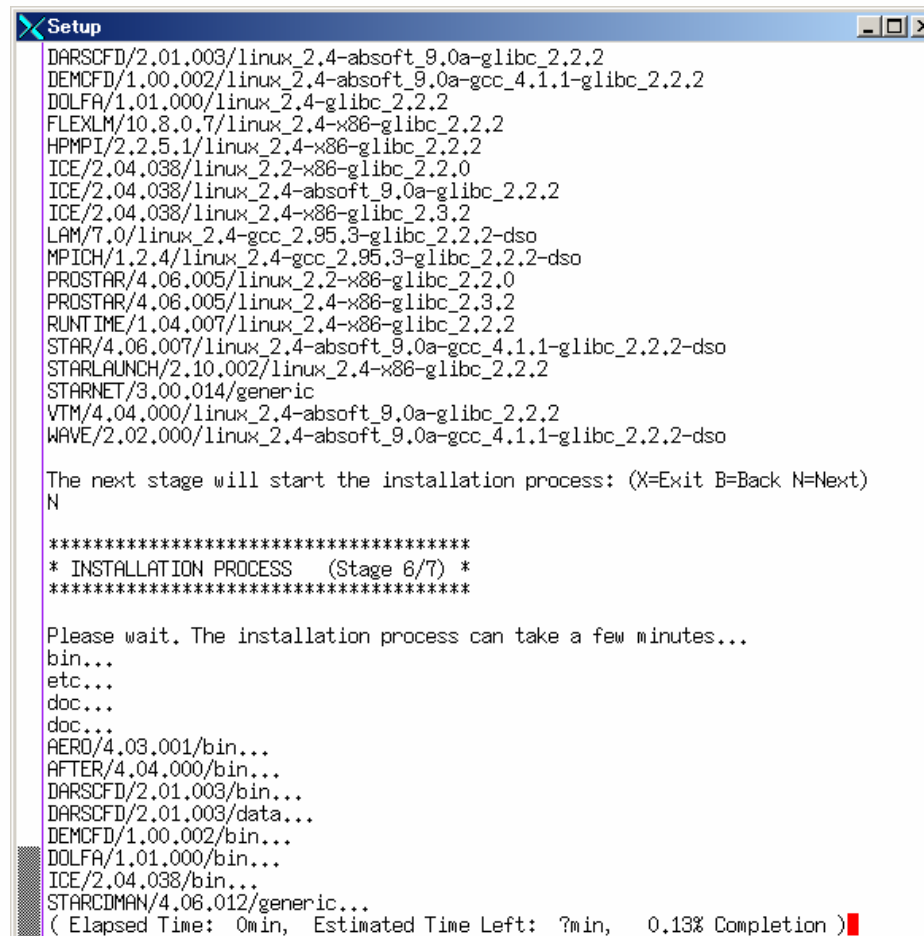
```

Setup
DARSCFD/2.01.003/bin
DARSCFD/2.01.003/data
DEMCFD/1.00.002/bin
DOLFA/1.01.000/bin
ICE/2.04.038/bin
STARCDMAN/4.06.012/generic
PROSTAR/4.06.005/aux1
PROSTAR/4.06.005/data
PROSTAR/4.06.005/macros
STAR/4.06.007/data
STAR/4.06.007/include
STARLAUNCH/2.10.002/bin
STARLAUNCH/2.10.002/config
STARLAUNCH/2.10.002/wan
VTM/4.04.000/bin
WAVE/2.02.000/bin
WAVE/2.02.000/doc
AERO/4.03.001/linux_2.4-absoft_9.0a-glibc_2.2.2
AFTER/4.04.000/linux_2.4-absoft_9.0a-glibc_2.2.2
DARSCFD/2.01.003/linux_2.4-absoft_9.0a-glibc_2.2.2
DEMCFD/1.00.002/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2
DOLFA/1.01.000/linux_2.4-glibc_2.2.2
FLEXLM/10.8.0.7/linux_2.4-x86-glibc_2.2.2
HPMPI/2.2.5.1/linux_2.4-x86-glibc_2.2.2
ICE/2.04.038/linux_2.2-x86-glibc_2.2.0
ICE/2.04.038/linux_2.4-absoft_9.0a-glibc_2.2.2
ICE/2.04.038/linux_2.4-x86-glibc_2.3.2
LAM/7.0/linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
MPICH/1.2.4/linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
PROSTAR/4.06.005/linux_2.2-x86-glibc_2.2.0
PROSTAR/4.06.005/linux_2.4-x86-glibc_2.3.2
RUNTIME/1.04.007/linux_2.4-x86-glibc_2.2.2
STAR/4.06.007/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso
STARLAUNCH/2.10.002/linux_2.4-x86-glibc_2.2.2
STARNET/3.00.014/generic
VTM/4.04.000/linux_2.4-absoft_9.0a-glibc_2.2.2
WAVE/2.02.000/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso

The next stage will start the installation process: (X=Exit B=Back N=Next)
N
  
```

7. 执行安装

- 安装开始，窗口中会显示出安装进度，请耐心等待安装完成。



```

X Setup
DARSCFD/2.01.003/linux_2.4-absoft_9.0a-glibc_2.2.2
DEMCDFD/1.00.002/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2
DOLFA/1.01.000/linux_2.4-glibc_2.2.2
FLEXLM/10.8.0.7/linux_2.4-x86-glibc_2.2.2
HPMPI/2.2.5.1/linux_2.4-x86-glibc_2.2.2
ICE/2.04.038/linux_2.4-x86-glibc_2.2.0
ICE/2.04.038/linux_2.4-absoft_9.0a-glibc_2.2.2
ICE/2.04.038/linux_2.4-x86-glibc_2.3.2
LAM/7.0/linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
MPICH/1.2.4/linux_2.4-gcc_2.95.3-glibc_2.2.2-dso
PROSTAR/4.06.005/linux_2.2-x86-glibc_2.2.0
PROSTAR/4.06.005/linux_2.4-x86-glibc_2.3.2
RUNTIME/1.04.007/linux_2.4-x86-glibc_2.2.2
STAR/4.06.007/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso
STARLAUNCH/2.10.002/linux_2.4-x86-glibc_2.2.2
STARNET/3.00.014/generic
VTM/4.04.000/linux_2.4-absoft_9.0a-glibc_2.2.2
WAVE/2.02.000/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso

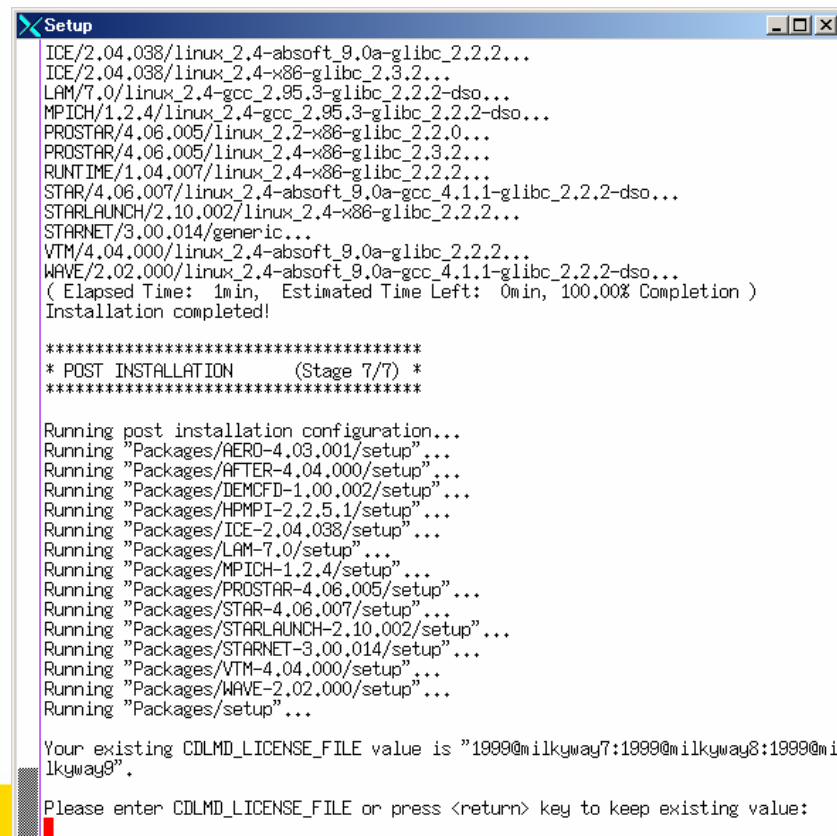
The next stage will start the installation process: (X=Exit B=Back N=Next)
N

*****
* INSTALLATION PROCESS (Stage 6/7) *
*****

Please wait. The installation process can take a few minutes...
bin...
etc...
doc...
doc...
AERO/4.03.001/bin...
AFTER/4.04.000/bin...
DARSCFD/2.01.003/bin...
DARSCFD/2.01.003/data...
DEMCDFD/1.00.002/bin...
DOLFA/1.01.000/bin...
ICE/2.04.038/bin...
STARCDMAN/4.06.012/generic...
( Elapsed Time: 0min, Estimated Time Left: ?min, 0.13% Completion )
  
```

8. 设定环境变量CDLMD_LICENSE_FILE

- 通过环境变量CDLMD_LICENSE_FILE来指定license文件或license服务器。
- 若要指定license文件，请输入license文件所在的绝对路径。
- 若要指定license服务器，请输入1999@（license服务器名）。
- 若要沿用此前本机安装过的旧版本STAR-CD的license配置，直接输入[Enter]键即可。
- 指定完毕后，输入 [Enter]键，前进到下一步。



```
Setup
ICE/2.04.038/linux_2.4-absoft_9.0a-glibc_2.2.2...
ICE/2.04.038/linux_2.4-x86-glibc_2.3.2...
LAM/7.0/linux_2.4-gcc_2.95.3-glibc_2.2.2-dso...
MPICH/1.2.4/linux_2.4-gcc_2.95.3-glibc_2.2.2-dso...
PROSTAR/4.06.005/linux_2.2-x86-glibc_2.2.0...
PROSTAR/4.06.005/linux_2.4-x86-glibc_2.3.2...
RUNTIME/1.04.007/linux_2.4-x86-glibc_2.2.2...
STAR/4.06.007/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso...
STARLAUNCH/2.10.002/linux_2.4-x86-glibc_2.2.2...
STARNET/3.00.014/generic...
VTM/4.04.000/linux_2.4-absoft_9.0a-glibc_2.2.2...
WAVE/2.02.000/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso...
(Elapsed Time: 1min, Estimated Time Left: 0min, 100.00% Completion)
Installation completed!

*****
* POST INSTALLATION (Stage 7/7) *
*****

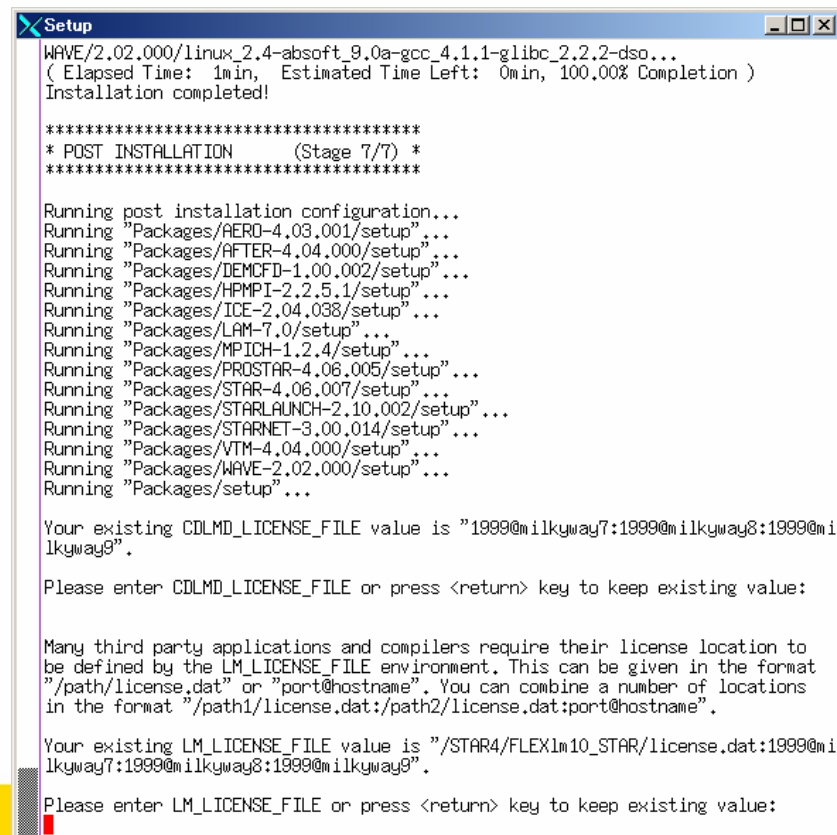
Running post installation configuration...
Running "Packages/AERO-4.03.001/setup"...
Running "Packages/AFTER-4.04.000/setup"...
Running "Packages/DEMCFD-1.00.002/setup"...
Running "Packages/HPMPI-2.2.5.1/setup"...
Running "Packages/ICE-2.04.038/setup"...
Running "Packages/LAM-7.0/setup"...
Running "Packages/MPICH-1.2.4/setup"...
Running "Packages/PROSTAR-4.06.005/setup"...
Running "Packages/STAR-4.06.007/setup"...
Running "Packages/STARLAUNCH-2.10.002/setup"...
Running "Packages/STARNET-3.00.014/setup"...
Running "Packages/VTM-4.04.000/setup"...
Running "Packages/WAVE-2.02.000/setup"...
Running "Packages/setup"...

Your existing CDLMD_LICENSE_FILE value is "1999@milkyway7:1999@milkyway8:1999@milkyway9".

Please enter CDLMD_LICENSE_FILE or press <return> key to keep existing value:
```

9. 设定环境变量LM_LICENSE_FILE

- 通过环境变量LM_LICENSE_FILE来指定license文件或license服务器。
- 若要指定license文件，请输入license文件所在的绝对路径。
- 若要指定license服务器，请输入1999@（license服务器名）。
- 若要沿用此前本机安装过的旧版本STAR-CD的license配置，直接输入[Enter]键即可。
- 指定完毕后，输入 [Enter]键，前进到下一步。



```
Setup
WAVE/2.02.000/linux_2.4-absoft_9.0a-gcc_4.1.1-glibc_2.2.2-dso...
(Elapsed Time: 1min, Estimated Time Left: 0min, 100.00% Completion)
Installation completed!

*****
* POST INSTALLATION (Stage 7/7) *
*****

Running post installation configuration...
Running "Packages/AERO-4.03.001/setup"...
Running "Packages/AFTER-4.04.000/setup"...
Running "Packages/DEMCFD-1.00.002/setup"...
Running "Packages/HPMPI-2.2.5.1/setup"...
Running "Packages/ICE-2.04.038/setup"...
Running "Packages/LAM-7.0/setup"...
Running "Packages/MPICH-1.2.4/setup"...
Running "Packages/PROSTAR-4.06.005/setup"...
Running "Packages/STAR-4.06.007/setup"...
Running "Packages/STARLAUNCH-2.10.002/setup"...
Running "Packages/STARNET-3.00.014/setup"...
Running "Packages/VTM-4.04.000/setup"...
Running "Packages/WAVE-2.02.000/setup"...
Running "Packages/setup"...

Your existing CDLM_LICENSE_FILE value is "1999@milkyway7:1999@milkyway8:1999@milkyway9".

Please enter CDLM_LICENSE_FILE or press <return> key to keep existing value:

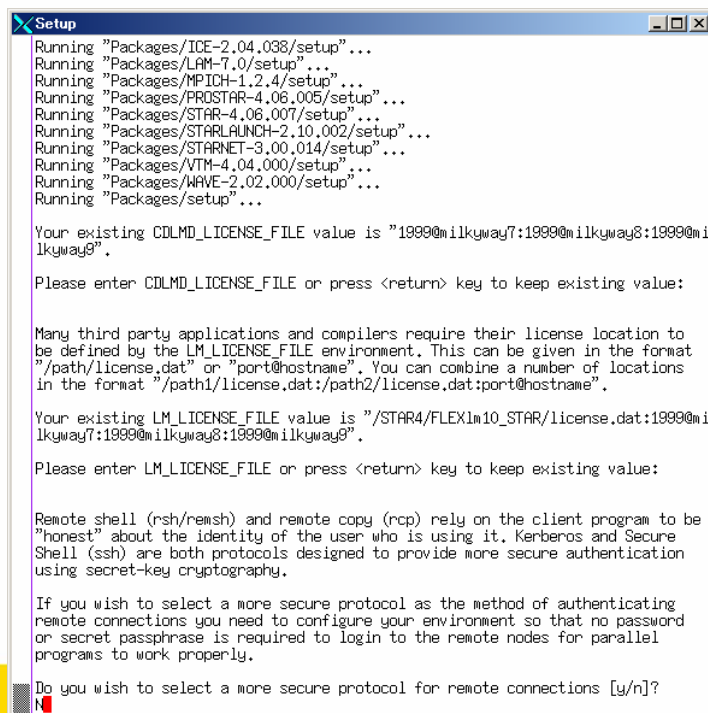
Many third party applications and compilers require their license location to be defined by the LM_LICENSE_FILE environment. This can be given in the format "/path/license.dat" or "port@hostname". You can combine a number of locations in the format "/path1/license.dat:/path2/license.dat:port@hostname".

Your existing LM_LICENSE_FILE value is "/STAR4/FLEXlm10_STAR/license.dat:1999@milkyway7:1999@milkyway8:1999@milkyway9".

Please enter LM_LICENSE_FILE or press <return> key to keep existing value:
```

10. 设定远程连接安全协议

- 设定远程连接的协议。
- 远程连接默认使用rsh/rcp协议。若要选用更加安全的协议，如kerberos、ssh/scp，请按照以下输入：
 - 输入[Y]键 → [Enter]键 （变更默认的协议）
 - 若使用kerberos则输入[k]键，若使用ssh则输入[s]键 → [Enter]键 （前进到下一步）
- 若选用远程连接默认的rsh/rcp协议，请按照以下输入：
 - 输入[N]键 → [Enter]键 （前进到下一步）



```

Setup
Running "Packages/ICE-2.04.038/setup"...
Running "Packages/LAM-7.0/setup"...
Running "Packages/MPICH-1.2.4/setup"...
Running "Packages/PROSTAR-4.06.005/setup"...
Running "Packages/STAR-4.06.007/setup"...
Running "Packages/STARLAUNCH-2.10.002/setup"...
Running "Packages/STARNET-3.00.014/setup"...
Running "Packages/VTM-4.04.000/setup"...
Running "Packages/WAVE-2.02.000/setup"...
Running "Packages/setup"...

Your existing CDLMD_LICENSE_FILE value is "1999@milkyway7:1999@milkyway8:1999@milkyway9".

Please enter CDLMD_LICENSE_FILE or press <return> key to keep existing value:

Many third party applications and compilers require their license location to be defined by the LM_LICENSE_FILE environment. This can be given in the format "/path/license.dat" or "port@hostname". You can combine a number of locations in the format "/path1/license.dat:/path2/license.dat:port@hostname".

Your existing LM_LICENSE_FILE value is "/STAR4/FLEX1m10_STAR/license.dat:1999@milkyway7:1999@milkyway8:1999@milkyway9".

Please enter LM_LICENSE_FILE or press <return> key to keep existing value:

Remote shell (rsh/remsh) and remote copy (rcp) rely on the client program to be "honest" about the identity of the user who is using it. Kerberos and Secure Shell (ssh) are both protocols designed to provide more secure authentication using secret-key cryptography.

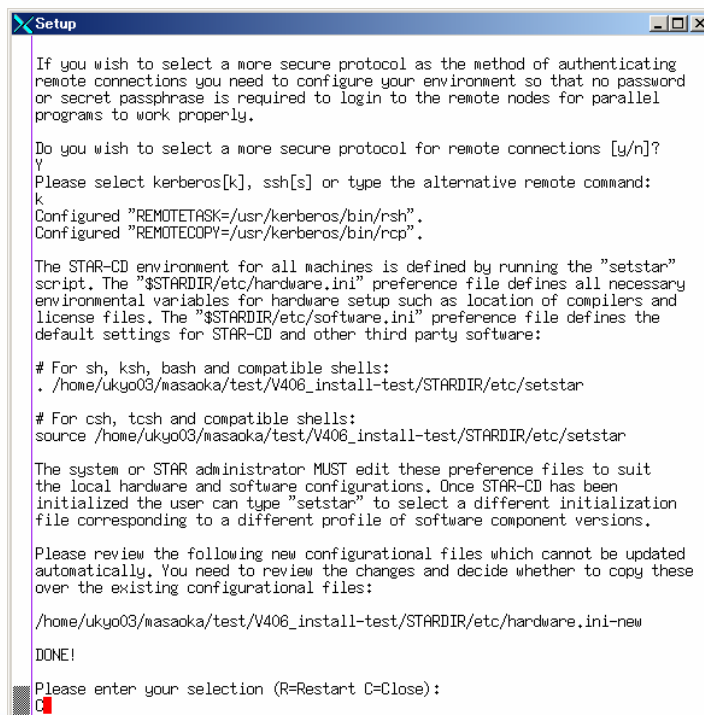
If you wish to select a more secure protocol as the method of authenticating remote connections you need to configure your environment so that no password or secret passphrase is required to login to the remote nodes for parallel programs to work properly.

Do you wish to select a more secure protocol for remote connections [y/n]?
  
```

11. 完成安装

- 至此，安装已经全部完成了。
- 若要结束安装，请按照以下输入：
 - 输入[C]键 → [Enter]键 （安装结束）
- 若要重新安装，请按照以下输入：
 - 输入[R]键 → [Enter]键 （执行重新安装）

执行重新安装之后，返回到「3. 指定安装路径」。



```

Setup
If you wish to select a more secure protocol as the method of authenticating
remote connections you need to configure your environment so that no password
or secret passphrase is required to login to the remote nodes for parallel
programs to work properly.

Do you wish to select a more secure protocol for remote connections [y/n]?
y
Please select kerberos[k], ssh[s] or type the alternative remote command:
k
Configured "REMOTETASK=/usr/kerberos/bin/rsh".
Configured "REMOTECOPY=/usr/kerberos/bin/rcp".

The STAR-CD environment for all machines is defined by running the "setstar"
script. The "$STARDIR/etc/hardware.ini" preference file defines all necessary
environmental variables for hardware setup such as location of compilers and
license files. The "$STARDIR/etc/software.ini" preference file defines the
default settings for STAR-CD and other third party software:

# For sh, ksh, bash and compatible shells:
. /home/ukyo03/masaka/test/V406_install-test/STARDIR/etc/setstar

# For csh, tcsh and compatible shells:
source /home/ukyo03/masaka/test/V406_install-test/STARDIR/etc/setstar

The system or STAR administrator MUST edit these preference files to suit
the local hardware and software configurations. Once STAR-CD has been
initialized the user can type "setstar" to select a different initialization
file corresponding to a different profile of software component versions.

Please review the following new configurational files which cannot be updated
automatically. You need to review the changes and decide whether to copy these
over the existing configurational files:

/home/ukyo03/masaka/test/V406_install-test/STARDIR/etc/hardware.ini-new

DONE!

Please enter your selection (R=Restart C=Close):
C
  
```

12. 对 license 进行配置

- 在客户机上正确使用STAR-CD需要注意以下事项：
 - ① 在license服务器端需要启动license daemon (license的认证系统服务)。
 - ② 客户机（使用STAR-CD的机器）上需要正确设置环境变量。
- 调用网络license的客户机，必须保证和license服务器的网络畅通。
- 下面对上述①、②里的设定方法做详细说明。其中，请注意，字符串\$STARDIR代表的是STAR-CD的安装目录。

12.1. ①启动license daemon (license的认证系统服务)

- 以下就是**license**的启动过程详细说明。请注意，**license daemon**只需要在**license**服务器端启动即可。
- 1. 请将**license**文件「**license.dat**」放置在「**\$STARDIR/license**」目录下。
- 2. 执行**setstar**。**setstar**在「**\$STARDIR/etc**」目录下。
 - **.\$STARDIR/etc/setstar** (B Shell)
 - **source \$STARDIR/etc/setstar** (C Shell)
- 3. 执行下面的命令启动**license daemon**。
 - **nohup \$STARDIR/license/lmgrd -c \$STARDIR/license/license.dat -l \$STARDIR/license/license.log &**

<参考>

执行下面的命令关闭**license daemon**。

- **\$STARDIR/license/lmutil lmdown -c \$STARDIR/license/license.dat**

12.2. ②环境变量的设置

- 设置环境变量。此设置在所有运行STAR-CD的客户机上都必须进行。
- STAR-CD会从以下的环境变量设置或文件中自动寻找license文件或license服务器。
 - 环境变量: LM_LICENSE_FILE
 - 环境变量: CDLMD_LICENSE_FILE
 - ~/.flexlmrc （如果在~/ 路径下存在.flexlmrc文件，也会自动检查此文件中的设置）
 - \$STARDIR/license/license.dat （如果在\$STARDIR/license路径下存在license.dat文件，也会自动检查此license.dat文件）

12.2. ②环境变量的设置（续）

- 本手册的「8. 设定环境变量CDLMD_LICENSE_FILE8」和「9. 设定环境变量LM_LICENSE_FILE」里所设置的环境变量，在文件「\$STARDIR/etc/hardware.ini」里也同样可以定义。
- 通过执行「12.1. ①」里的setstar，自动设置「\$STARDIR/etc/hardware.ini」文件里所定义的环境变量CDLMD_LICENSE_FILE和LM_LICENSE_FILE。
- 如需改动环境变量，可以直接改动「\$STARDIR/etc/hardware.ini」文件里的以下内容：
 - 若要指定license文件： default CDLMD_LICENSE_FILE=（license文件所在的绝对路径）
 - 若要指定license服务器： default CDLMD_LICENSE_FILE=1999@（license服务器名）

```
#
# Default settings
#
default      CDLMD_LICENSE_FILE=1999@host-A:1999@host-B:1999@host-C
default      LM_LICENSE_FILE=1999@host-A:1999@host-B:1999@host-C:$LM_LICENSE_FILE
default      HPC_SCRATCH=/work
default      REMOTETASK=
default      REMOTECOPY=
#
default      GM=/opt/gm
default      MPICHGM=/opt/mpichgm
```

