Secondo Installation Manual @ UNIBZ

This document briefly describes Secondo DBMS installation for Kubuntu Linux 6.06 Dapper Drake. If any important detail is missing, please inform me via e-mail kasperovics(a)inf.unibz.it and I will correct this manual.

Install Necessary Packages

Below are listed the packages I have on my laptop in order to download and compile secondo. All the packages are from a standard Kubuntu Dapper Drake repository. Of course, not all necessary packages are listed - package dependencies should apply.

Package	Version
subversion	1.3.1-3ubuntu1
gcc-4.0	4.0.3-1ubuntu5
flex-old	2.5.4a-7
bison	2.1-0.2ubuntu1
libc6-dev	2.3.6-0ubuntu20
libstdc++6-4.0-dev	4.0.3-1ubuntu5
sun-java5-bin	1.5.0-06-1
sun-java5-demo	1.5.0-06-1
sun-java5-jdk	1.5.0-06-1
sun-java5-jre	1.5.0-06-1
swi-prolog	5.2.13-1
swi-prolog-clib	5.2.13-1
libdb4.3	4.3.29-5build1
libdb4.3++c2	4.3.29-5build1
libdb4.3-dev	4.3.29-5build1
libdb4.3++-dev	4.3.29-5build1
libjpeg62	6b-11
libjpeg62-dev	6b-11
libreadline5	5.1-7build1
libreadline5-dev	5.1-7build1

Download from SVN

There are different ways how you can download something from SVN repository. I prefer graphical applications and Eclipse plugin "Subclipse" is the best I have found for Linux. However, the use a command-line tool `svn` probably is more common.

Login setup

If your linux login match your login in UNIBZ domain, you don't have to read this section. Otherwise you have to do the following trick:

```
echo "Host babbage.inf.unibz.it" >> ~/.ssh/config
echo "User your_windows_login" >>  ~/.ssh/config
```

You might wish to assign a path to Subversion repository to environment variable. This could be done in the following way:

```
echo "SECSVN=\"https://babbage.inf.unibz.it/dis/secondo"" >> ~/.bashrc
```

Checkout and Update

The following command is used to list the content of the repository:</p>

```
svn list $SECSVN
```

Note, that password might be required twice or even more. If you have a solution to this, please let me know. To checkout a repository directory `secondo/` to a current directory use the command:

```
mkdir ~/workspace
cd ~/workspace
svn checkout $SECSVN/secondo
```

You can synchronize your previously checked out local copy with the current repository using `update` command.

Set Compilation and Operation Pathes

Create a file that exports all necessary pathes as environment variables. On my machine the file is called ~/.secondorc. Below follows the content of the file.

```
export SECONDO_BUILD_DIR=$HOME/workspace/secondo
export SECONDO_PLATFORM=linux
export BERKELEY_DB_LIB="db_cxx"
export BERKELEY_DB_DIR=/usr
export J2SDK_ROOT=/usr/lib/jvm/java-1.5.0-sun-1.5.0.06
export SWI_HOME_DIR=/usr/lib/swi-prolog
export PL_LIB_DIR=$SWI_HOME_DIR/runtime/i386
export PL_INCLUDE_DIR=$SWI_HOME_DIR/include
export SECONDO_JAVA=$J2SDK_ROOT/bin/java
```

You can use these definitions wheather calling `source ~/.secondorc` command in a terminal session, where you're going to compile or run secondo, wheather adding it to your `~/.bashrc` file:

```
echo "source ~/.secondorc" >> ~/.bashrc
```

Secondo make file is expecting prolog runtime library to be called `libpl.a`, however, in Kubuntu package the library is called `libplmt.a`. To correct this error you can make a symbolic link running

the following commands:

```
cd /usr/lib/swi-prolog/runtime/i386
sudo ln -sf libplmt.a libpl.a
```

In order to use installed Java2 SDK normally, you might have to setup JAVA_HOME environment variable to point to the installed J2SDK directory. In my computer I have many java programs so I use a system-wide variable. On Kubuntu Linux system it is set with a command:

```
sudo echo "JAVA_HOME=/usr/lib/jvm/java-1.5.0-sun-1.5.0.06" >>
/etc/environment
```

To ensure that you have a correct java version and it is correctly stated in system pathes, run `javac -version`.

Compile

To compile secondo, run the following commands in a terminal session:

```
source ~/.secondorc
cd $SECONDO_BUILD_DIR
make
```

NEW: If you get an error

```
NLLex.cpp: In member function `virtual int NLScanner::yylex()':
NLLex.cpp:982: error: `yy_current_buffer' undeclared (first use this
function)
```

This means you have got a wrong flex version. To correct the error just delete file NLLex.cpp, because it is generated by flex and will be recreated during the next `make`.

Edit Configuration Files

Under Construction

Run

To run Secondo DBMS with a GUI client open two new terminal sessions. In the first session type the following commands:

```
source ~/.secondorc
cd $SECONDO_BUILD_DIR/bin
./SecondoMonitor
startup
```

In the second terminal type:

```
source ~/.secondorc
cd $SECONDO_BUILD_DIR/Javagui
./sgui
```

Import and Commit

With any of the following commands the following option is compulsory -m "Your comment to the changes you're posting … "

If you are going to post your directory to the repository for the first time use `import` command. The following command imports the content of the current directory (but not the current directory itself!) into `secondo/Algebras/DummyAlgebra` directory in the repository.

```
svn import $SECSVN/secondo/Algebras/DummyAlgebra -m "first import";
```

All the files imported are now under the version control. To post current changes to repository use `commit` command. Don't forget `-m` option. To add a new file to the version control use `add` command. To remove file from version control use `delete` command. Both commands `add` and `delete` are actually executed after the first `commit` command.

Download from CVS

I'm going to regularly update Secondo SVN repository on `babbage.inf.unibz.it`, however, if you prefer to download the latest version of Secondo directly from FernUniversität Hagen you have to use `cvs` client. You can obtain a login and password writing a personal e-mail me or to Igor(.)Timko(a)unibz(.)it. To download the latest version of secondo to a directory `~/workspace` run the commands:

```
cd ~/workspace
cvs -d ":pserver:your_login@some.server.com/path/to/cvsroot" login
cvs -d ":pserver:your_login@some.server.com/path/to/cvsroot" export -f -r
HEAD secondo-src
cvs -d ":pserver:your_login@some.server.com/path/to/cvsroot" export -f -r
HEAD secondo-databases
cvs -d ":pserver:your_login@some.server.com/path/to/cvsroot" export -f -r
HEAD secondo-data
```

From:
https://wiki.inf.unibz.it/ - **Engineering-Tech Wiki**

Permanent link:
https://wiki.inf.unibz.it/doku.php?id=contrib:secondo_installation_manual_unibz&rev=1168504825

Last update: **2019/01/16 10:03**