

bdbms-V1

Installation Document

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Environment:

- Windows XP
- bdbms patch is built and tested on top of
 - postgresql-8.3beta1
 - postgresql-8.3.1

Software Packages:

- Packages are available for downloads at www.cs.purdue.edu/bdbms/downloads

Installation Steps:

1) Install Postgres driver under windows

- Unpack and install file psqldb_08_03_0100.zip

2) Setting User Environment Variables

(Control Panel → System → Advanced Tab → Environment Variables)

- CYGWIN = server
- CYGWIN_ROOT = C:\cygwin
- HOME = C:\cygwin\home\<username>
- PGUSER = <username>
- PGDATABASE = <username>

3) Install Cygwin:

(run cygwin-setup.exe → choose option 'Install from Internet' → Choose any site)

- Make sure the following packages are included (mark them)

- Admin: cygrunsrv
- Devel: gcc, gdb, make, flex, bison, readline
- Libs: zlib
- Utils: patch

4) Configure CygServer

(run Cygwin terminal → execute the commands below)

*** For windows Vista make sure to run cygwin as administrator**

(right-click cygwin shortcut → choose Run As Administrator)

```
> cd /cygdrive/c/cygwin/bin
> cygserver-config
> cygrunsrv -I cygserver -p /usr/sbin/cygserver.exe
> cygrunsrv -S cygserver
```

5) Install libxml

- Copy libxml2-2.6.26.tar.gz to a local drive, e.g., C:\Mywork
- Open cygwin terminal:
 - > cd /cygdrive/c/Mywork
 - > tar -xvf libxml2-2.6.26.tar.gz
- Go under the created directory:
 - > cd libxml2-2.6.26
 - > ./configure --without-zlib
 - > make
 - > make install

6) Install bdbms (Postgres with bdbms extensions)

- Copy postgres tar file (e.g., postgresql-8.3.1.tar.gz) to a local drive, e.g., C:\Mywork\
- Open cygwin terminal:
 - > cd /cygdrive/c/Mywork
 - > tar -xvf postgresql-8.3.1.tar.gz
- Copy, untar, and run bdbms patch under the created directory
 - download bdbms-v1_patch.tar under the created directory postgresql-8.3.1
 - > cd postgresql-8.3.1
 - > tar -xvf bdbms-v1_patch.tar
 - > ./bdbms-v1_patch
- Configure and Make
 - > ./configure --prefix=/cygdrive/c/Mywork/pgsql --with-libxml --enable-debug --enable-cassert --enable-depend CFLAGS="-O0"
 - > make
 - > make install
- Make and install the following packages
 - > cd /cygdrive/c/Mywork/postgresql-8.3.1/contrib/xml2
 - Update the Makefile (as commented inside the Makefile) to exclude libxslt**
 - > make
 - > make install

 - > cd /cygdrive/c/Mywork/postgresql-8.3.1/contrib/adminpack
 - > make
 - > make install

```
> cd /cygdrive/c/Mywork/postgresql-8.3.1/src/tutorial/
> make
> make install
```

** In case Make and Make install do not work under /src/tutorial/, then do the following instead:*

```
> cd /cygdrive/c/Mywork/postgresql-8.3.1/src/tutorial/
> cp ../bdbms/patch/src_tutorial/* ./
- Edit file 'annotation.sql' → replace ... with the correct directory path
```

7) Update the Path system environment variable (Control Panel → System → Advanced Tab → Environment Variables)

- add the following paths to the start of the 'Path' environment variable
C:\cygwin\bin;C:\cygwin\usr\local\lib;C:\cygwin\usr\local\include;C:\Mywork\pgsql\bin;C:\Mywork\pgsql\lib
- Restart

8) Initialize and Create a Database

- Open cygwin terminal:

```
> cd /cygdrive/c/Mywork
> initdb -D /cygdrive/c/Mywork/pgdata -E utf8
> postmaster -D /cygdrive/c/Mywork/pgdata -p 5432 -i &
> createdb -E utf8 -p 5432
```
- connect to the database

```
> psql -p 5432
```
- Run Initial scripts

```
SQL > \i /cygdrive/c/Mywork/postgresql-8.3.1/contrib/adminpack/adminpack.sql
SQL > \i /cygdrive/c/Mywork/postgresql-8.3.1/contrib/xml2/pgxml.sql
SQL > \i /cygdrive/c/Mywork/postgresql-8.3.1/src/tutorial/annotation.sql
SQL > \i /cygdrive/c/Mywork/postgresql-8.3.1/src/bdbms/catalog/1-
AnnotationManagement_tables.sql
SQL > \i /cygdrive/c/Mywork/postgresql-8.3.1/src/bdbms/catalog/2-
AnnotationManagement_functions.sql
```
- Create Example Tables (**Optional**)

```
SQL > \i /cygdrive/c/Mywork/postgresql-8.3.1/src/bdbms/examples/Example.sql
```

9) Downloading and running the demo:

- a. Download file bdbms_demo.xlsm
- b. Add postgres driver:
 - i. Go to control panel->Administrative Tools->Data Sources(ODBC)
 - ii. Press Add
 - iii. Find 'PostgreSQL Unicode' driver and add it.
 - iv. Fill in the database connection information:
 1. Data Source: The driver name that you will use it in the demo to connect to the database. For example, 'bdbms_driver'
 2. Database: the name of the database, the default is the username
 3. Server: Type 127.0.0.1 (for local server)
 4. User name: the username
 5. Port: the default 5432
 - v. Press Test to make sure that connection is successful
 - vi. Hit Save, then OK to quit Administrative Tools
- c. Open the demo file (**Requires Excel 2007**)
 - i. From within Excel 2007, enable Macros by going into the Trust Center and choose enable macros
- d. Refer to the demo video to have a quick start working with the demo file.