# PIBASE.ligands installation guide. ver 200905

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**Abstract**

This document describes how to set up a local PIBASE.ligands installation.

PIBASE.ligands can be installed locally on top of an existing PIBASE (v200808) installation by downloading the database tables from `http://pibase.janelia.org/ligands_download.html`. In addition to this MySQL interface, a software package is also available that enables a web interface to the database.

The database schema is described here: `http://pibase.janelia.org/files/pibase_schema_v200905.pdf`

## 1 Downloading data

All PIBASE.ligands files are available for download at `http://pibase.janelia.org/ligands_download.html` under the GPL license.

### 1.1 MySQL data dump

PIBASE.ligands installation *requires* a working PIBASE installation ( `http://pibase.janelia.org/files/pibase_installation_guide.pdf` ). Once you have the PIBASE database installed, download the PIBASE.ligands MySQL dump ( pibase_ligands_dump.20090519.out.gz ) and load it into the PIBASE database:

```
zcat pibase_ligands_dump.20090518.out.gz | mysql -u YOURUSERNAME -p YOURDATABASENAME
```

## 2 Web interface

To install the web interface to the PIBASE.ligands database, you must first have a working PIBASE web server installed. Once you have the PIBASE web interface installed, download the PIBASE.ligands web server package (pibase_ligands_src_v200905.tar.gz) and uncompress it in a temporary directory:

```
cd yourinstalldirectory
tar xvfz pibase_ligands_src_200905.tar.gz
```

Next, there are a few lines to edit in pibase.pm to reflect your database specifications and local directory structure. Then, just copy over the html, cgi-bin, and perl library to your webserver, and it should be ready to query.

In detail:

1. Edit pibase.pm to reflect your MySQL database speccs. ( src/perl_api/pibase.pm lines 57-60).

   ```
   my $pibase_specs = {
      db => 'pibasemysqldatabasename',
      host => 'mysqlserverhostname',
      user => 'pibaseusername' ,
      pass => 'pibasepassword',
      root => 'doesntmatterforthewebserver',
   }
   ```

   If you have a non-standard mysql installation, you can also specify a mysql_socket key that points to the mysql socket to be used by the perl DBI mysql interface.

2. Edit pibase.pm to reflect the html and cgi-bin directories of your web server. ( src/perl_api/pibase.pm lines 216, 217).

   ```
   $pibase_specs->{web_pilig}->{html_dir} = "/var/www/websites/pibase/html/" ;
   $pibase_specs->{web_pilig}->{cgi_dir} = "/var/www/websites/pibase/cgi-bin/" ;
   ```

3. Edit pibase.pm to reflect the correct URLS for the html and cgi-bin directories of your web server. ( src/perl_api/pibase.pm lines 219, 220).

   ```
   $pibase_specs->{web_pilig}->{base_url} = "http://localhost/pibase";
   $pibase_specs->{web_pilig}->{basecgi_url} = "http://localhost/pibase-cgi";
   ```

4. Edit pibase.pm to reflect the directories where you uncompressed the bdp_topology_graphs and subsets_files tar files for the original PIBASE web server. ( src/perl_api/pibase.pm lines 209, 213).

   ```
   $pibase_specs->{web_pilig}->{bdp_topology_graphs_baseurl} =
      $pibase_specs->{web_pilig}->{base_url}.'/data_files/bdp_topology_graphs'

   $pibase_specs->{web_pilig}->{subsets_files_basedir} =
      $pibase_specs->{web_pilig}->{html_dir}.'/data_files/subsets_files' ;
   ```

5. The static html pages (web/html/*.html) assume that the CGI directory sits ../cgi-bin relative to the html directory; if this isn't true for your webserver, edit the form submit lines in the html pages to reflect the path to your CGI directory

6. Lastly, copy the contents of the html, cgi, and perl_api directories to your webserver

```
cp -r web/html/* yourwebserver/html
cp -r web/cgi-bin/* yourwebserver/cgi-bin
cp -r src/perl_api yourwebserver/cgi-bin/perl_lib
```

That should be it, the webserver should be functional now.