



## **WIZ – INSTALLATION**

	<b>WIZ – INSTALLATION</b>	CONSORZIO PISA RICERCHE
		Revision: 1
		Date: June 30, 2012
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## Introduction

The WIZ application uses the following software packages:

- postgres
- postgis
- php
- java
- tomcat
- geoserver
- httpd-apache

This guide refers to the first installation of WIZ in a Debian system.

### 1. POSTGRES

Install postgres with the following command:

```
apt-get install postgresql
```

Set the password for the postgres user

```
sudo -u postgres psql postgres
\password postgres
```

As an option, a postgres administration tool can be installed

```
apt-get install pgadmin3
```

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Modify the files `/etc/postgresql/9.1/main/postgresql.conf` e  
`/etc/postgresql/9.1/main/pg_hba.conf` to allow the access on a different machine from localhost.

## 2. POSTGIS

Install postgis with the following command:

```
apt-get install postgis
apt-get install postgresql-9.1-postgis
#creo un template postgis
sudo su postgres
createdb postgistemplate
createlang plpgsql postgistemplate
psql -d postgistemplate -f /usr/share/postgresql/9.1/contrib/postgis-1.5/postgis.sql
psql -d postgistemplate -f /usr/share/postgresql/9.1/contrib/postgis-1.5/spatial_ref_sys.sql
psql -d postgistemplate -f /usr/share/postgresql/9.1/contrib/postgis_comments.sql
```

## 3. JAVA

Modify the file `/etc/apt/sources.list` by adding the line

```
deb http://www.duinsoft.nl/pkg/debs all
```

Import the gpg key

```
apt-key adv --keyserver keys.gnupg.net --recv-keys 5CB26B26
```

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Install java

```
sudo apt-get update
sudo apt-get install update-sun-jre
```

## 4. TOMCAT

Install Tomcat

```
apt-get install tomcat7
```

Change the tomcat port (8081)

```
vi /etc/tomcat7/server.xml
```

Restart tomcat to accept changes

```
/etc/init.d/tomcat7 restart
```

## 5. GEOSERVER

Go to the tomcat webapps folder and download the geoserver war

```
cd /var/lib/tomcat7/webapps/
wget http://downloads.sourceforge.net/geoserver/geoserver-2.1.3-war.zip
```

Decompress the archive and re-start tomcat

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```
unzip geoserver-2.1.3-war.zip
/etc/init.d/tomcat7 restart
```

## 6. APACHE

Install the apache webserver following the instructions on the website:

```
http://httpd.apache.org/docs/2.4/install.html
```

Enable mod\_proxy for geoserver:

```
sudo a2enmod proxy
sudo a2enmod proxy_http
```

Add in `site-available/default` the lines: (replace [PORT] with the desired port)

```
ProxyPass /geoserver http://localhost:[PORT]/geoserver
ProxyPassReverse /geoserver http://localhost:[PORT]/geoserver
```

Modify `mods-available/proxy.conf` as follows: (replace [SUBNET] with the ip range desired)

```
ProxyRequests On
<Proxy *>
    AddDefaultCharset off
    Order deny,allow
    Deny from all
```

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```
Allow from [SUBNET]
```

```
</Proxy>
```

## 7. PHP

Install the necessary package with the command:

```
apt-get install php5 php5-cli libapache2-mod-php5 php5-dev php5-gd
apt-get install php5-curl php5-pgsql
```

Add extension DBASE for php:

```
wget http://pecl.php.net/get/dbase-5.0.1.tgz
tar -xzf dbase-5.0.1.tgz
cd dbase-5.0.1
phpize
./configure
make
make install
```

Activate the extensions dbase and curl by adding to the `php.ini` file the following lines: (ex. `/etc/php5/apache2/php.ini`)

```
extension=dbase.so
extension=curl.so
```

In `php.ini` modify the parameters with the following:

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```

post_max_size = 10M

upload_max_filesize = 20M

date.timezone = "Europe/Rome"

max_execution_time = 60

```

## 8. YII

Download and install the Yii framework following the instructions on the developers site:

```
http://www.yiiframework.com/doc/guide/1.1/en/quickstart.installation
```

Give writing permissions to the `yii` folder in the Apache path

```
chmod -R 755 yii/
```

## 9. WIZ

### Setup of Folder structure

Decompress the archive in the folder `acque`. The folder `acque` has to be placed at the same level as the folder `yii`:

```

/..

/yii

```



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/acque

Inside `acque`, give writing permissions to the apache user to the following folders:

/assets  
 /protected/runtime  
 /epanet\_downloads  
 /epanet\_uploads  
 /uploads

### Setup of the database

Create a spatial database `acqueDB`

Populate the database tables

```
psql -d acqueDB < create_acque.sql

# se non si hanno i permessi:

# sudo -u postgres psql -d acqueDB < create_acque.sql
```

### Setup of Geoserver

Replace the folder `data` of geoserver with the one provided with the CD.

```
cp -R data/ /var/lib/tomcat7/webapps/geoserver/
```