WebGR installation and setup manual
version 1.1

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1 Preface

This manual is written for IT administrators. The information and instructions are short written and you are not instructed which program you use to edit a text file, extract a ZIP archive, access the file structure on a server etc.

2 Technical requirements

2.1 Server

- Operating system: must support Apache, PHP, MySQL, e.g. Windows, Linux

- Apache version >= 2.2.11
- PHP version >= 5.2.8
- MySQL version >= 5.1.30 (Community Server)
- for administration: phpMyAdmin 3.1.1

- for account confirmation e-mails: a mail server, mail transport must be possible over SMTP, Port 25

2.2 Drive space

The server requires about 200 MBytes.

Application and libraries:

The application itself requires about 50 MBytes.

Application data:

The required drive space depends on the number and size of images you want to store and use. Calculate image volume **twice** because a working copy and thumbnail is made.

2.3 Client

Firefox version >= 3.0

Adobe Flash Player version >= 9.0 (needed for annotation interface, file upload)

Javascript recommended (needed for some functions, e.g. alert boxes)

3 Web server setup

You have 2 possibilities to setup your webserver. For the first you already have an virtual or physically host and aren't able to modify the httpd.conf file. In that case you have to create and .htaccess file in your root and public folder which establish a rewrite of the requested URL. The second possibility manage this all only in the httpd.conf of the apache web server. Which method will be the best for you and where you'll find the files, please ask your admins.
All examples that follow use mod_rewrite, an official module that comes bundled with Apache. To use it, mod_rewrite must either be included at compile time or enabled as a Dynamic Shared Object (DSO). Please consult the Apache documentation for your version for more information.

3.1 Create the rewrite rule and a virtual host

Please ask your adminstrators for help.
At the first make sure that the module “mod_rewrite“ was loaded by your apache. If not, ask your administrator how to enable this module.

3.1.1 Create .htaccess files

Make sure that .htaccess overwrites definitions from Apache's httpd.conf. Without the web server will ignore your new files and the system won't run.

Below is a sample `.htaccess` file that utilizes mod_rewrite. It is similar to the virtual host configuration, except that it specifies only the rewrite rules, and the leading slash is omitted from `index.php`.

```
RewriteEngine On
RewriteCond %{REQUEST_FILENAME} -s [OR]
RewriteCond %{REQUEST_FILENAME} -l [OR]
RewriteCond %{REQUEST_FILENAME} -d
RewriteRule ^.*$ - [NC,L]
RewriteRule ^.*$ index.php [NC,L]
```

There are many ways to configure mod_rewrite; if you would like more information, see Jayson Minard's Blueprint for PHP Applications: Bootstrapping.

3.1.2 Modify the httpd.conf

---

just for windows based systems:
Edit C:\WINDOWS\system32\drivers\etc\hosts
You see
```
127.0.0.1       localhost
```
Add the line
```
127.0.0.1       webgr
```

Save and close

For Windows based Systems:
Edit C:\xampp\apache\conf\httpd.conf
OR C:\xampp\apache\conf\extra\httpd-vhosts.conf

For Linux based Systems
/etc/apache2/sites-enabled

Add at the end or to your existing virtual host configuration

```
<VirtualHost my.domain.com:80>
    ServerName   my.domain.com
    DocumentRoot /path/to/server/root/my.domain.com/public
    RewriteEngine off
    <Location />
        RewriteEngine On
        RewriteCond %{REQUEST_FILENAME} -s [OR]
        RewriteCond %{REQUEST_FILENAME} -l [OR]
        RewriteCond %{REQUEST_FILENAME} -d
        RewriteRule ^.*$ - [NC,L]
        RewriteRule ^.*$ /index.php [NC,L]
    </Location>
</VirtualHost>

------------------------------------------------
```

Restart Apache

You should reach the application over http://webgr/
This requires that the index.php and the other source code is available at the mentioned "DocumentRoot" (see above).
(Source: http://www.php.de/tutorials/42725-virtual-hosts-vhosts-einrichten-unter-windows.html)

3.2 Edit php.ini

3.2.1 Set the resource limits

- memory_limit = 128M (used for large image matrix calculations) OR
- ini_set is allowed

3.2.2 Set the File uploads

upload_max_filesize = 64M
This depends on the maximum image file size you want to use.

4 Installation

The process is described for a XAMPP configuration running on Windows XP.

Attention: In doubt please make backups of the files mentioned.

4.1 MySQL database

Use the standard installation, except:

- choose encoding UTF-8
- InnoDB engine is needed

Use phpMyAdmin to administrate the database

- Add new user, user name „webgr“, host „%“.
- user needs rights for insert, update, delete, select, create views etc.

- create database, name is „webgr“

4.2 Firewalls

Make sure that the firewall between web server, database server, and especially mail server is setup correctly.

4.3 Download

Go to the WebGR index on the berliOS site.

http://webgr.berlios.de/

Click on Development and on development website.

Alternatively you can go to berliOS Developer directly:

http://developer.berlios.de/projects/webgr/

You can select your spoken language in the menu.

Select Documentation to get the manuals etc.

http://developer.berlios.de/docman/?group_id=8643

Select Files to list the downloads.

http://developer.berlios.de/project/showfiles.php?group_id=8643

As you can see, the berliOS internal ID for the project is 8643.

Download the latest WebGR PHP package.

You don’t need the WebGR Flex Package for deploying the application. This is just the isolated Flex source code.

The package includes following third party libraries:

- PHPIDS
- Zend Framework

The system admin could later update these to the latest version; however the delivered libraries are the ones used for development and testing.

4.4 Installation WebGR application

1. Extract the archive in htdocs directory of the web server

The strucure should like like this:

xampp/htdocs/webgr_php/application

xampp/htdocs/webgr_php/library

xampp/htdocs/webgr_php/public

xampp/htdocs/webgr_php/sql

2. Set read/write rights for directories:
   - public/images/*
   - public/import_logs/
   - public/infoFiles/ (files for workshops)
   - application/cache/*

   * means every set group owner and permissions recursively

3. edit the file _config.ini in the directory application/config

section APPLICATION:

application host	set the application host for correct links in sent e-mail from WebGR
securityKey	set the security key string for secure identification between server and flash client, e.g. „aslkjfk798sadf7897sdasadf“

section DB_CONNECTION

host	set database management system host, e.g. „db1.zadi.de“
username	set the username to access the database management system
password	set the password to access the database management system

section MAIL_CONF

host	set the host of your mailer, e.g. „mailer.orga.org“
username	set a existing username to access the mailer
password	set the password for this user to access the mailer
fromAdress	set a valid FROM adress for mail transport, e.g. „webgr@institute.orga.org“

4. start the import of database over the browser:

- Start your browser
- Enter virtual host name and „/install“, e.g. „http://webgr/install“ into the adress field of the browser; the install script will be started.
- Enter the given security key (the one you have set in the _config.ini before) in the form and press „submit“.
- The structure (tables and views) will be created.
- Some data (value lists) will be inserted.

5. Try to login as

username: superuser@zadi.de

password: superuser

6. change the superuser's password

Important: Click „My user data“ → „change password“ to change this password.

5 Operation

How to make backups:

Stop the application server.

Stop the database server.

Export the database.

Save the directory application/config to have a backup of the config files

Save the directory public to have a backup of the image files, workshop files, protocol files and log files.

Start the DB server.

Start the application server.