

Webacula v.7.x

Installation Manual

Copyright 2007, 2008, 2009, 2010, 2011, 2012, 2014 Yuriy Timofeev tim4dev@gmail.com

October 4, 2014

Contents

1	About this manual	4
2	System Requirements	4
3	Install	4
3.1	Make directory tree	4
3.2	config.ini	6
3.3	Setting up to run bconsole under Webacula	6
3.3.1	Without using sudo	6
3.3.2	With sudo	6
3.4	Apache	7
3.4.1	mod_rewrite	7
3.5	PHP	7
3.6	Bacula setup	7
3.7	Webacula install	8
4	Webacula setup	8
4.1	Webacula and Bacula ACLs	8
4.2	Users and roles	10
5	Upgrade from prior version	10
5.1	Upgrade from 5.5.1 to 5.5.2	11
5.2	Upgrade from 5.x to 7.x	11

List of Figures

1	Webacula ACLs	9
---	-------------------------	---

1 About this manual

The basic features of Webacula see in README file.

This manual should give you to install or upgrade Webacula installation.

If you find errors or typos please [send a bug report](#).

Thanks.

Webacula has a number of email lists. For general information subscribing to or unsubscribing from these lists, please see [Webacula Mailing Lists](#).

2 System Requirements

To check the installed system packages, run from command line:

```
docs/check_system_requirements.php
```

NOTE. The successful execution of the script does not indicate that your system is fully ready to work with Webacula.

Webacula also requires:

- Bacula 7.0 or later
- Zend Framework version from 1.10.0 to 1.12.3 [Please see the system requirements appendix](#) for more detailed information.
- PHP 5.3.2 or later with PDO extension active.
- Apache and `mod_rewrite`. Or equivalent web-server, for example, nginx and `ngx_http_rewrite_module`
- Installed `php-gd` package
- Installed <http://php.net/dom> for use the RSS feed
- Browser compatibility: all jQuery UI plugins are tested for IE 6.0+, Firefox 3+, Safari 3.1+, Opera 9.6+, Google Chrome

3 Install

3.1 Make directory tree

Login as root and make directory `/var/www/webacula` (for example). Copy Webacula distribution to this directory.

Download **minimal Zend Framework package** and extract. Copy the contents from directory
`ZendFramework-*--minimal/library/Zend`
to
`webacula/library/Zend`

NOTE. If you use the Zend Framework for multiple sites, then you can place it in a folder that is part of your PHP include path. By doing this, you will have access to the Zend Framework components in all PHP scripts.

The tree which should turn out as a result :

```
/var/www/webacula/  
|-- application  
|   |-- controllers  
|   |-- models  
|   '-- views  
...  
|-- data  
|   '-- cache  
...  
|-- docs  
|-- install  
|-- html  
|-- languages  
'-- library  
    |-- MyClass  
    '-- Zend (here is Zend Framework package)  
        |-- Acl  
        |-- Auth  
        |-- Cache  
        ...
```

PHP session is stored in the table `webacula_php_session`.

Some directory description:

application/ All source code. Should be available to reading for the Web-server and no access through the client Web-browser.

html/ Public code. Should be available to reading for the Web-server and for the client Web-browser.

data/ IMPORTANT. This directory, subdirectory and files in it must NOT be available to access through the client Web-browser.

data/cache/ Cache directory for Zend_Cache. Should be available to writing the Web-server and no access through the client Web-browser.

3.2 config.ini

Specify the parameters to connect to the Catalog database, timezone and other in `application/config.ini`

3.3 Setting up to run bconsole under Webacula

Create system group account (if not yet created) :

```
groupadd bacula
```

Add apache to group:

```
usermod -aG bacula apache
```

IMPORTANT. Check `/opt/bacula/sbin/bconsole` it should be the binary ELF file, not a shell script!

Next, setup `bconsole` can be executed under Apache webserver.

3.3.1 Without using sudo

```
chown root:bacula /opt/bacula/sbin/bconsole
chmod u=rwx,g=rx,o= /opt/bacula/sbin/bconsole
```

```
chown root:bacula /opt/bacula/etc/bconsole.conf
chmod u=rw,g=r,o= /opt/bacula/etc/bconsole.conf
```

Edit `application/config.ini`

```
bacula.sudo = ""
bacula.bconsole = "/opt/bacula/sbin/bconsole"
```

3.3.2 With sudo

Edit `application/config.ini`

```
bacula.sudo = "/usr/bin/sudo"
bacula.bconsole = "/opt/bacula/sbin/bconsole"
```

Run `visudo` and changes

```
# (!!! comment here !!!) Defaults requiretty
apache ALL=NOPASSWD: /opt/bacula/sbin/bconsole
```

Check out the run `bconsole` :

```
# su -l apache -s /bin/sh \
-c "/usr/bin/sudo /opt/bacula/sbin/bconsole -n -c /opt/bacula/etc/bconsole.conf"
```

3.4 Apache

Configuration for Apache see in `install/apache/webacula.conf` file.

NOTE. Specific directories on your system may be different.

Next, restart your Webserver.

3.4.1 mod_rewrite

Setup `mod_rewrite` see `html/.htaccess`. Edit `RewriteBase` parameter if necessary.

NOTE. Specific directories on your system may be different.

Check `mod_rewrite` installed :

```
$ apachectl -t -D DUMP_MODULES 2>&1 | grep rewrite
```

```
rewrite_module (shared)
```

For testing `mod_rewrite` change `RewriteBase` parameter, if necessary, in `webacula/html/test_mod_rewrite/.htaccess` file.

And use URL like http://localhost/webacula/test_mod_rewrite/ for test `mod_rewrite`.

3.5 PHP

Increase values in `/etc/php.ini` :

```
memory_limit = 32M
max_execution_time = 3600
```

3.6 Bacula setup

To show messages of the Job output, you must make changes in `bacula-dir.conf` file :

```
Messages {
    Name = Standard
    ...
    catalog = all, !skipped, !saved
}
```

and restart Bacula Director.

See also manual of Bacula "Chapter 15. Messages Resource".

3.7 Webacula install

If necessary change settings in `install/db.conf` file.

IMPORTANT. Change passwords in a file `install/db.conf`. Use `password-to-hash.php <password>` and insert the resulting hash as `webacula_root_pwd`.

Next create Webacula tables, Webacula built-in roles and Webacula built-in users.

For MySQL:

```
cd install/MySQL
```

For PostgreSQL:

```
cd install/PostgreSql
```

For Sqlite:

```
cd install/SqLite
```

And further run scripts for your DBMS is running on localhost:

```
./10_make_tables.sh  
./20_acl_make_tables.sh
```

If your DBMS is running on a remote host, specify the appropriate option on the command line, for example, MySQL:

```
./10_make_tables.sh      --host my.domain.tld  
./20_acl_make_tables.sh  --host my.domain.tld
```

Change file `html/.htaccess` :

```
SetEnv APPLICATION_ENV production  
RewriteBase /webacula
```

After that, you can login under the superuser `root` and the password which specified in a file `install/db.conf` in parameter `webacula_root_pwd`.

4 Webacula setup

4.1 Webacula and Bacula ACLs

Bacula ACLs — Bacula Console Access Control List — it is necessary to understand as it is described in the original documentation in section "Bacula Main Reference", "Configuring the Director", "The Console Resource".

In Webacula are implemented following Bacula ACLs :

- JobACL
- ClientACL
- StorageACL
- PoolACL
- FileSetACL
- WhereACL

Special keyword ***all*** when is present, any resource or command name will be accepted.

Webacula ACLs — it as a matter of fact access to certain menu items of Webacula.

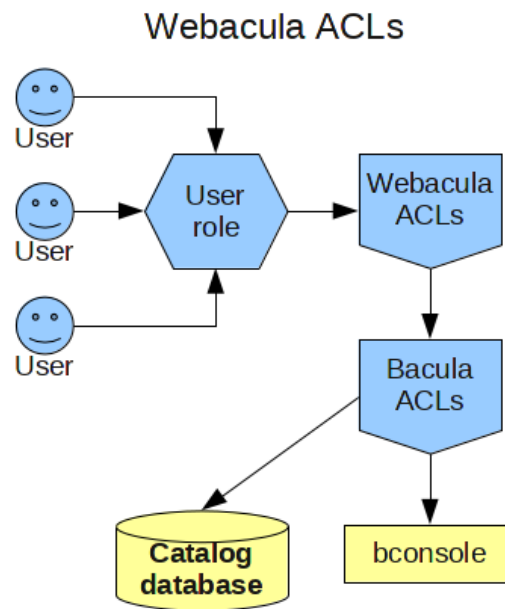


Figure 1: Webacula ACLs

If the user (more precisely — a role) does not have any a ACL rule, that user has no rights.

ACL rules are applied in the order which is defined by field value "order".

Bacula and Webacula ACLs can conflict. For example, usage of a Bacula command **status** is allowed to the user, but access to Webacula menu item **Director** at the same time is forbidden.

In this case the user sees the message like :

```
You try to use Webacula menu "director".  
Webacula ACLs : Access denied.
```

And on the contrary. Access to Webacula menu item **Director** can be allowed. And usage of a Bacula command **status** can be forbidden.

In this case the user sees the message like :

```
You try to run Bacula Console with command "status".  
Bacula ACLs : Access denied.
```

NOTE. Pay attention that in the first case access has been forbidden by a *Webacula* ACL rule, and in the second a *Bacula* ACL rule.

4.2 Users and roles

In Webacula the concept of users and roles is used. Each user has the role. There is no user without a role.

In other words you should create a role at first, and then create the user and assign to it a certain role.

The role can inherit from other role.

After install, Webacula has two built in roles :

- **root_role** — default built-in superuser role.
- **operator_role** — typical built-in role for backup operator.

Users who have the role **root_role** is assigned are superusers, they have all rights to all. This role cannot be deleted and the role name cannot be changed.

After installation **root_role** is assigned to the user with a login name **root**.

The role **operator_role** can fulfill any operations except of the administrator functions : creation, change, assignment of roles, users.

5 Upgrade from prior version

IMPORTANT. Now there is no separate Webacula database. All Webacula tables are allocated in a Bacula database and have a prefix **webacula_**.

5.1 Upgrade from 5.5.1 to 5.5.2

Upgrade the code as usual. And make changes to the database schema (for example, MySQL)

```
ALTER TABLE webacula_jobdesc ADD COLUMN short_desc VARCHAR(128) NOT NULL;  
CREATE INDEX webacula_idx3 ON webacula_jobdesc (short_desc);
```

```
ALTER TABLE webacula_users MODIFY COLUMN last_ip varchar(40) DEFAULT NULL;
```

Change application/config.ini if necessary:

```
;; Show human readable short Job description instead of Bacula Job names (default = 0)  
; available options : 0 | 1 | 2  
; 0 - only show Bacula Job Name (behavior as in earlier versions)  
; 1 - only show human readable short Job description instead of Bacula Job Name  
; 2 - show both  
show_job_description = 2
```

5.2 Upgrade from 5.x to 7.x

Now the Webacula Users password hasher implements the [Portable PHP password hashing framework](#), which is used in WordPress, Drupal and other. Supported all databases: MySQL, PostgreSQL, Sqlite3.

IMPORTANT. This hasher NOT compatible from prior Webacula versions!

So I suggest to use the mechanism "Forgot password".