

EGI CRM Quick HowTo

VtigerCRM V5.4.0



European Grid Infrastructure
Towards a sustainable grid infrastructure



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1. Information

1.1 General Introduction

This guide describes the basic steps to reinstall the EGI CRM service. The service will be reinstalled as it was on April 30th

The server was running under CentOS release 6.5 (Final), and had the following basic infrastructure packages installed (later versions of the same software might also work)

- httpd-2.2.15-30.el6.centos.x86_64
- mysql-5.1.73-3.el6_5.x86_64
- php-5.3.3-27.el6_5.x86_64

1.2 Package Content

1. **checksums.md5:** MD5 message digest for each file
2. **crm.egi.eu.conf:** HTTPD Apache configuration file
3. **crm_weekly_report.sh:** Cron that calls a PHP script (available in the files installed through vtigercrm_201405.tar.gz)
4. **crons.txt:** The crons that were setup in the original server
5. **EGICRM_QuickHowTo.pdf:** Documentation on how to setup the service again (this file)
6. **EGICRM_TechnicalDetails.pdf:** Technical documentation on specific functionalities, customizations and implementations.
7. **List_Contacts.csv, List_Organizations.csv:** Common separated value lists for the Contacts and Organizations entities (snapshot at shutdown)
8. **vtigercrm_201405.tar.gz:** EGI_CRM web interface core files
9. **vtigercrm_201405_mysqldump.sql.gz:** MySQL dump of all DBs

1.3 MD5 message digest

```
6f3ab1ef7c5605e1c83c83d5a0fc7399 crm.egi.eu.conf
3141d0c57128c3d5bb93e2191ed55950 crm_weekly_report.sh
c731c73227986bb196804272b0ac0527 crons.txt
2682532ebf9271b9d31c98a0fbcc27e6 EGICRM_TechnicalDetails.pdf
cbf4fbd5b3beb494f2633a771a90e200 List_Contacts.csv
db8722628d4fdf621d7a8425c2322dd2 List_Organizations.csv
f891bd9abcae2ba4dd23b95e8a92a9fb vtigercrm_201405_mysqldump.sql.gz
539887a69c6b8df67f58bd307f818ab2 vtigercrm_201405.tar.gz
```

2. Instalation instructions

The following instructions should be adapted to your local setup. For example, substitute <HTTPROOT> by the relevant apache document root.

2.1 Setup the MySQL DB

1) Login as root;

```
:: mysql -u root -p
```

2) Create a Database

```
:: CREATE DATABASE `vtigercrm540`;
```

3) Exit Mysql

```
:: quit;
```

4) Restore all data from “MySQL-dump_vtigercrm540.sql” file

```
:: mysql -uroot -p < MySQL-dump_vtigercrm540.sql
```

5) Create a DB username/password to the system

```
:: CREATE USER 'setup_a_username'@'localhost' IDENTIFIED BY 'setup_a_password';
```

```
:: GRANT ALL PRIVILEGES ON `vtigercrm540` . * TO 'setup_a_username'@'localhost';
```

Change 'setup_a_username' by a username you choose.

Change 'setup_a_password' by a password you choose for this user.

This username/password will used to setup the web interface.

2.2 Setup EGI_CRM web interface

1) Unpack the “vtigercrm_201405.tar.gz” file inside your webserver document root

```
:: cd <HTTPROOT>
```

```
:: tar -zxvf vtigercrm_201405.tar.gz
```

At this point you should have a folder named “vtigercrm” with the structure for the web interface.

2) Configure the files to allow DB connections (use the user/password you setup in previous section)

2.1) CRM config file

```
:: cd <HTTPROOT>/vtigercrm
```

```
:: vim config.inc.php
```

```
:: change hte lines with the username/password you choose in the previous section:
```

```
$dbconfig['db_username'] = 'setup_a_username';
```

```
$dbconfig['db_password'] = 'setup_a_password';
```

2.2) Cron's config file

```
:: cd <HTTPROOT>/vtigercrm/cron
```

```
:: vim LIP_DB_connect.php
```

```
:: change hte lines with the username/password you choose in the previous section:
```

```
$username = "setup_a_username";
```

```
$password = "setup_a_password";
```

2.3) Metrics config file

```
:: cd <HTTPROOT>/vtigercrm/metrics_css
:: vim metrics_DB_connect.php
    $user = "setup_a_username";
    $pass = "setup_a_password";
```

3) Setup the LDAP configuration to allow login via EGI SSO

```
:: cd <HTTPROOT>/vtigercrm/include/ldap
:: vim config.ldap.php
:: change hte lines with the username/password you choose in the previous section:
    $AUTHCFG['authType']    = 'LDAP';
    $AUTHCFG['ldap_host']    = 'you_should_get_this_through_EGI';
    $AUTHCFG['ldap_port']    = 'you_should_get_this_through_EGI';
    $AUTHCFG['ldap_username'] = 'cn=crm,dc=egi,dc=eu';
    $AUTHCFG['ldap_pass']    = 'you_should_get_this_through_EGI';
    $AUTHCFG['ldap_basedn']  = 'ou=People,dc=egi,dc=eu';
```

At shutdown time, the configuration were “\$AUTHCFG['ldap_host'] = 'ldaps://aldor.ics.muni.cz';” and “\$AUTHCFG['ldap_port'] = '636';”

2.3 Setup crm.egi.eu virtual host

The httpd configuration (crm.egi.eu.conf distributed with this document) is an example on how to configure the local host to respond as <http://crm.egi.eu>. For this setup to work, your local machines has to be under a DNS alias implemented by the owner of the egi.eu domain.

```
:: host crm.egi.eu
crm.egi.eu is an alias for vt.my.domain.
vt.my.domain has address XX.XX.XX.XX
```

3. EGI CRM customizations

This platform was implemented and customized by LIP following requests from EGI management. You should ensure that the customizations remain valid for other versions of the vtiger software, or at the time of redeployment.

3.1 Major customizations

3.1.1 Google Analytics

Insert the following piece of code before closing the </head> tag in Smarty/templates/Header.tpl

```
<head>
(...)
<script src="http://www.google-analytics.com/urchin.js" type="text/javascript">
</script>
<script type="text/javascript">
_uacct = "UA-XXXXXXX"; ----> Please insert your own Google Analytics ID
urchinTracker();
</script>
</head>
```

3.1.2 Enable DEBUG

1) Activate vtiger debug mode (<HTTPROOT>/vtigercrm/logs/vtigercrm.log)

```
:: grep DEBUG `pwd`/config.performance.php
'LOG4PHP_DEBUG' => true,
```

2) Change log4php.properties so that it contains:

```
log4php.rootLogger=DEBUG,A1
log4php.appender.A1=LoggerAppenderRollingFile
log4php.appender.A1.MaxFileSize=3MB
log4php.appender.A1.MaxBackupIndex=10
log4php.appender.A1.layout=LoggerLayoutTTCC
log4php.appender.A1.layout.ContextPrinting="true"
log4php.appender.A1.layout.DateFormat="%c"
log4php.appender.A1.File=logs/vtigercrm.log
```

3) Add Debug to specific functions (just add the following line to the beginning of the function:

```
Ex: function Name() {
    global $adb; //Define $adb as a global variable
    $adb->setDebug(true);
}
```

3.1.3 LDAP Authentication

1) For LDAP to work, some changes had to be deployed in vtiger540 code. For specific code changes, please see the relevant section in EGICRM_TechnicalDetails.pdf document distributed with this file.

2) Connecting via LDAPS requires the validation of the remote server certificate which means that the whole trust chain must be verified, hence the CA certificates need to be installed.

2.1) First configure ldap to search for CA root certs.

```
:: vi /etc/openldap/ldap.conf  
(...)  
TLS_CACERTDIR /etc/openldap/cacerts
```

2.2) Download the CA certs and install them in /etc/openldap/cacerts In this case the certificate for aldor.ics.muni.cz is signed by TERENA which uses the AddTrust commercial provider. The trust chain is as follows:

Terena Server Certificate CA Certificate chain:

- + AddTrust External CA Root
- + UTN-USERFirst-Hardware
- + TERENA SSL CA

The root certificates can be downloaded from TACAR at:

<http://www.terena.org/activities/tcs/repository/> Download the three certificates in PEM format and copy them to /etc/openldap/cacerts. Create the hash links for each one of the files by repeating the following command and replacing ca_root_file.pem by the appropriate file name.

```
:: ln -s ca_root_file.pem `openssl x509 -hash -noout -in ca_root_file.pem`.0
```

3.1.4 New Home Dashboard

The module of the HOME page of the CRM was build from scratch by LIP. You can have access to the module files at “ /modules/Home“ through the root folder of the web interface. Some Javascript files were added in “jsLIP/” at the root folder of the web interface.

For specific code changes, please see the relevant section in EGICRM_TechnicalDetails.pdf document distributed with this file.

3.1.5 Create Workflows for Add/Edit Organizations and Contacts

All necessary files are in “modules/Workflow” through the root folder of the web interface. The workflow functionality is a complex functionality. For specific code changes, please see the appropriate section in EGICRM_TechnicalDetails.pdf document distributed with this file.

3.1.6 Validation rules for web forms (Organizations/Accounts modules)

All changes were made in the core files of the system.

For specific code changes, please see the EGICRM_TechnicalDetails.pdf document distributed with this document,

3.1.7 Metrics scripts

The metrics module is deployed through the “metrics_css” folder in the “<HTTPROOT>/vtigercrm” directory. It consists of several php scripts (to query and digest data from the MySQL DV) and js and css templates used within the Metrics Portal accessible from the Home module.

```
# ls -l
total 272
-rwxr-xr-x 1 apache apache 80 Mar 22 2013 default.php
drwxr-xr-x 6 apache apache 4096 Mar 22 2013 fpdf17
-rwxr--r-- 1 apache apache 1505 Mar 22 2013 header.php
-rwxr-xr-x 1 apache apache 4449 Mar 22 2013 index.php
drwxr-xr-x 3 apache apache 4096 Mar 22 2013 js
-rwxr-xr-x 1 apache apache 7126 Mar 22 2013 list_users.php
-rwxr-xr-x 1 apache apache 38344 Mar 22 2013 metrics_report_accounts.php
-rwxr-xr-x 1 apache apache 43238 Mar 22 2013 metrics_report_activity_pdf.php
-rwxr-xr-x 1 apache apache 41021 Mar 22 2013 metrics_report_activity.php
-rwxr-xr-x 1 apache apache 13212 Mar 22 2013 metrics_report_contacts.php
-rwxr-xr-x 1 apache apache 37173 Mar 22 2013 metrics_report_conversations.php
-rwxr-xr-x 1 apache apache 7091 Mar 22 2013 metrics_report_index_functions.php
-rwxr-xr-x 1 apache apache 4047 Mar 22 2013 metrics_report_index.php
-rwxr-xr-x 1 apache apache 37775 Mar 22 2013 metrics_report_user_activity.php
drwxr-xr-x 2 apache apache 4096 Mar 22 2013 Reports
```

The same php scripts also update the Report Repository with a montly report pdf produced via a cron job (see the crons.txt exsample distributed with this file):

```
0 6 1 * * (date; rm -f <HTTPROOT>/vtigercrm/metrics_css/Reports/CRMMontlyReport.pdf; php
<HTTPROOT>/vtigercrm/metrics_css/metrics_report_activity_pdf.php; chown -R apache:apache
<HTTPROOT>/vtigercrm/metrics_css/Reports) >> /var/log/EGIRports.log 2>&1
```

3.1.8 SMARTY templates

Many templates where customized to fullfill the EGI requests. All templates are included in “Smarty/templates” folder at root foldes of the web interface.

For further details, please see the relevante section in EGICRM_TechnicalDetails.pdf document distributed with this file.

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