Self: Accounting Portal installation manual

ACCOUNTING PORTAL INSTALLATION MANUAL

Introduction

This document assume that you have a new installed machine in witch you like to install the regional accounting portal from CESGA.

In this document, is assuming that the operating system of the new machine is a basic installation of the Scientific Linux V 5.

The, jpgraph stuff is distributed ready to use with the portal (this may change in a near future), so its installations and configuration is not considered.

Packages to install

After your basic installation of the SL5 was ready, you must install this packages that the accounting portal needs:

- httpd
- php
- php-mysql
- mod_ssl
- mysql
- mysql-server
- gd
- php-gd
- MySQL-python
- perl-DBI <-- usually installed by default

Please note that perhaps the {{mysql}} service is not started by default, so may be you must start this service by hand: Itialize mysql server: `/etc/init.d/mysql start`

Getting the regional portal from CESGA

Actually the CESGA Accounting Portal is distributed as a tarball file at: http://www4.egee.cesga.es /cesga_acct_portal_trunk_100325.tgz

Database initialization

Once you are decompressed the tarball, to build the basic database schema for the portal, please do:

1. Please get the database description file from http://www4.egee.cesga.es/all_databases.sql
2. Execute `mysql < all_databases.sql`

Inside your mysql client, execute:

1. `grant ALL PRIVILEGES on accounting.* to 'dbuser'@'localhost' identified by 'dbpass';`
2. `grant ALL PRIVILEGES on gocdb3.* to 'dbuser'@'localhost' identified by 'dbpass';`
3. `grant ALL PRIVILEGES on acctUsers.* to 'dbuser'@'localhost' identified by 'dbpass';`

Portal configuration

For tunning the installation to you system, you must edit some configuration files:

==== config.inc.php ====

This file contents the parameters for connect for read to the local database (database directly used by the portal, and generated from remote databases) The file is used by PHP code....

Parameters:

```
$DB_SERVER = "127.0.0.1";
$DB_USER = "xxxx";
$DB_PASS = "xxxx";
$GOC_DATABASE = "xxxx";       // GOC DB
$ACC_DATABASE = "xxxx";   // Accounting DB
$USER_DATABASE = "xxxx"
```

==== acct_portal.cfg ====

This file contents information about the path of the portal files and portal configuration:

```
//This is the conf file for the accounting stuff
  // coments alloewd beging by the char /
  //string must by under ""
/* blank lines allowed*/

PORTAL_INSTALLATION_PATH="/var/www/html";
PORTAL_ROOT_PATH="/gridsite/accounting/CESGA";
//PORTAL_ROOT_PATH="/acct_portal_new/trunk"
//home path for the metrics portal

//path for the Oracle Instantclient library
ORACLE_INSTANTCLIENT_LIBRARY="/opt/instantclient_10_2/"

//if this variable is equal to "yes", the the user DNs are decrypted
DECRYPT_USER_DNS="yes"

METRICS_ROOT_PATH="/metrics/trunk";
```

==== All files in the directory acct_portal.conexparam.cfg ====

Each file in this directory contains the configuration needed to connect with the APEL/GOC/CIC databases and for write in the local one. The filename is important. Please see Sistema_de_configuración_del_portal_de_accounting for details. Typically, these files look like this:

```
Host="xxxx";
Name="xxxx";
User="xxxx";
Password="xxxx";
```

==== File various/apelProcessor/config/apel.properties.usercpu.txt ====

This file is used by the Java application that is used for decrypt the user DN's. It have the parameters to connect to the source database (for read encrypted user DN's) and for destination database (for write decrypted user DN's) The for the source database parameters are:

```
DB_SRC_URL=jdbc:mysql://servername:3306/acctUsers
DB_SRC_USER=username
DB_SRC_PASS=password
```

And for the destination database parameters are:

```
DB_DEST_URL=jdbc:mysql://servername:3306/acctUsers
DB_DEST_USER=username
DB_DEST_PASS=password
```

==== File `/etc/sudoers` ====

In this file must by present a line like this:

```
user    ALL=(ALL) NOPASSWD: /[.....]/cron_scripts/prod_portal/voms2users/voms2users.py
```

where `user` use the name of the system user that execute the cron scripts for database sincronization, and {[.....]} is the complete system path for the portal installation.

PHP configuration

You must edit the php.ini and fix these values:

- *max_execution_time = 60*
- *max_input_time = 60*
- *memory_limit = 85M*

Secure server configuration

1. You must create a server/key certificate for your https connexion. A good recipe for do it can be found at:

   http://www.akadia.com/services/ssh_test_certificate.html

1. After done the steps from these URL, you must do also edit the ssl.conf file under the httpd configuration stuff:

   ```
   SSLCACertificatePath    /etc/grid-security/certificates
   <Directory "/var/www/html/acct_portal/$ACCTPORTAL_VERSION/user">
      SSLVerifyClient require
      SSLVerifyDepth  10
      SSLOptions +OptRenegotiate +FakeBasicAuth
   </Directory>
   ```

   Just at the end of the `</VirtualHost>` stuff

2. Create a new file named `/etc/httpd/conf.d/xxxxx-vhost.conf` whith this contents:

   ```
   <VirtualHost xxxxx:80>
      ServerName xxxxx

      Options +FollowSymLinks
      # Redirect http to https
      RewriteEngine On
      RewriteCond %{REQUEST_URI} ^/pru_acct/2.1-altair/user.*$
      RewriteCond %{HTTPS} !=on
      RewriteRule ^.*$ https://%{SERVER_NAME}%{REQUEST_URI} [R]

   </VirtualHost>
   ```

   Where *xxxxx* is the name of the server machine....

cron scripts configuration

For a user with the necessary permissions, edit his crontab (by using the command `crontab -e` and copy the contents of the example file `/var/www/html/acct_portal/$ACCTPORTAL_VERSION/cron_scripts/prod_portal/README_cron.txt`

Instaling certificates

Please copy a valid certificate files for allow connection with the gocdb-pi stuff to this paths:

```
cron_scripts/prod_portal/bin/gocdb-pi/certificate/hostcert.pem
cron_scripts/prod_portal/bin/gocdb-pi/certificate/hostkey.pem
```

Access to the APEL database

The portal use some local specific databases. This local databases are generated from the APEL GOCDB and CIC databases. A cron job periodically synchronize the local database with the APEL/GOCDB/CIC ones. For this, you setup some thinks:

Installation of the ORACLE database client and perl oracle módule

You must download some packages of the "oracle instant client": please go to http://www.oracle.com/technology/software/tech/oci/instantclient/index.html and choose your Operating system for download the rpms for:

Instant Client Package - Basic Instant Client Package - SQL*Plus Instant Client Package - SDK

install the 3 rpm's with: yum localinstall xxxxx.rpm

Now the "oracle instant client" is installed and you can install the oracle perl module: please download this file http://search.cpan.org/CPAN/authors/id/P/PY/PYTHIAN/DBD-Oracle-1.24a.tar.gz

Uncompress the file and install the perl module in this way:

1. cd DBD-Oracle-1.24
2. LD_LIBRARY_PATH=/usr/lib/oracle/11.2/client64/lib ORACLE_HOME=/usr/lib/oracle/11.2/client64 perl Makefile.PL
3. make install

Now you can connect with oracle databases....

Probe it

Please run all the cron scripts by hand to synchronize the romote databases with the local ones.

Support

You can get support and help for installing the local version of the accounting portal by sending a mail to <egee-admin@cesga.es>; please cc at rdiez@cesga.es

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