73 - PHP-phpMyAdmin -MySQL

mysql & mysql-client
- Install `mysql` and `mysql-client` from SuSE CD via Yast.
- In SuSE till 7.3 :Set `START_MYSQL=yes` and `HTTPD_SEC_MOD_PHP=yes` ....in Yast
- In SuSE 8.0 and 8.1: Start run level editor(yast2) and add mysql in run levels 3 & 5

Running mysql
- Start mysql server: `rcmysql start`
- Change the `root` password of `mysql` server via the command:
  `mysqladmin -u root -p password '`*new-password*`'`
  (Only press on ENTER when password asked here)

Info:
- mysql daemon user: `mysql`
- TCP Port   `3306`

Files:
`/usr/bin/mysql_install_db`
> Script started once when the server is started for the first time.
> It installs the databases and instruct the user on how to change the mysql
> root password.

Monitoring MySQL's well working via mysql client:

mysql -p	- Starts the monitor program in terminal and enter the mysql root passsword
mysql> **show databases;**	- Displays all the MySQL Databases
mysql> **use mysql;**	- Uses the `mysql` database
mysql> **show tables;**	- Displays the tables of `mysql` database
mysql> **select * from user;**	- Displays `user` table form `mysql` database
mysql> **quit**	

phpMyAdmin
> - Install `phpMyAdmin` from SuSE CD
>
> - Copy the phpMyAdmin directory content to the Virtual Host's `DocumentRoot`'s
> - Set the DirectoryIndex of VirtualHost to `index.php`
> - Edit the file `config.inc.php` in the (in phpMyAdmin directory)
>> Change the root password the the one given above for mysql server
>> ~Line 49
>> `$cfgServers[1]['password'] = '`*mysql-root-password*`';`
> - make sure this file(`config.inc.php`) is not readable from
> - Make sure that PHP4 Module is started in Apache
>> (`/etc/sysconfig/apache`)
> - Make sure Apache recognizes the `.php3` files as running under php4
>   module. Edit Apache configuration file(`/etc/httpd/httpd.conf`)
>> `DirectoryIndex .....Index.php3....`
>> `AddApplication ....... .php3`
>
> - Restart Apache (`rcapache restart`)
> - In browser `http://`*VirtualHostName*`/`

Language:
-To run older phpMyAdmin in German, just edit the line 57 in `config.inc.php3` in
  phpMyAdmin directory and change it from :

`require("english.inc.php3");`   to   `require("german.inc.php3");`

Note: the new phpMyAdmin from SuSE 8.0 is version 2.2.3 and allows the language to be
  changed via the interface.

Security:
1) When phpMyAdmin is logged onto MySQL using a `mysql` username that has all the
access rights, it can disturb a lot in other's databases.

To avoid this:
- Make a copy of phpMyAdmin in each user's `/public_html` directory
- Edit the file `config.inc.php3` in `phpMyAdmin` directory to include only the user's
   access name and password as default.
- Add the user its password and access rights to mysql database
- Make sure that the file `config.inc.php3` is only writable by `root`
- Let the user be authenticated for access to his `phpMyAdmin` directory via Apache
   authentication.
- Access the phpMyAdmin management via
        `http://servername/~username/phpMyAdmin/`
- Locally the MySQL databases are located in `/var/lib/mysql`

2) When the phpMyAdmin is installed the file `config.inc.php` is readable by all.
This is a security risk since the file has the mysql root password in clear text format.
To avoid this:
        - Make the file owned by apache user (wwwrun) and access rights of 400

New user of the Mysql database:
        - Click on `+mysql` on left panel
        - Click on `Browse` in `user` line
        - Click on `insert new row`
        - Enter:
                - Host Address or name
                - Name of user
                - At `Password` field:
                        - Click on button in `Function` column
                        - Select `PASSWORD`
                        - Enter the password in clear text
                        - Select `Y` or `N` for each SQL command allowed or not by the user.
                        - Click on `Save` Button
                - To change the user's access rights click on `edit` at the end of user's
                   line in the users table.

-The user accounts that phpMyAdmin uses to login to MySQL are set in
  `config.inc.php` in phpMyAdmin directory.

What if:

1) <u>Situation:</u>   I can't log-in as `root` user in MySQL server,
or I have forgotten its root password.
   <u>Solution:</u>
   If running MySQL on SuSE Distribution:
   as Root:

- Stop the mysql server
  ```
  rcmysql stop
  ```

- Start the mysql server with options to avoid using the users rights granting table.

  ```
  /usr/bin/safe_mysqld --user=mysql --datadir=/var/lib/mysql \
        --skip-grant-tables
  ```

- Start mysql client and empty the old password
  ```
  mysql -u root
  mysql> USE mysql;
  mysql> UPDATE user SET password=''
       > WHERE user='root' AND host='localhost';
  mysql> quit
  ```

- Restart the Mysql server with normal operation
  ```
  rcmysql restart
  ```

- Finally change the empty root password to a new one
  ```
  mysqladmin -u root -h localhost password 'newpassword'
  ```

2) Exporting/Importing a database into SQL Format (Coma separated text data)
   Exporting to SQL format file? issue the following command:
   ```
   mysqldump -u root -h localhost --password=Password --opt\
                             DatabaseName > SQLFilename
   ```
   Import from the SQL File into Database:
   ```
   mysql -u root -h localhost DatabaseName < SQLFilename
   ```