Pharmadex Deployment Guide

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SIAPS
Systems for Improved Access to Pharmaceuticals and Services

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About SIAPS

The purpose of the System for Improved Pharmaceutical Services Access Program (SIAPS) is to ensure the availability of quality pharmaceuticals and effective pharmaceutical services to achieve desired health outcomes. To achieve this goal, SIAPS outcome areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening funding strategies and mechanisms to improve access to medicines, and increase the quality of pharmaceutical services.

Recommended Quote

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BACKGROUND

Pharmadex is a web-based integrated information solution that facilitates the management, documentation, dissemination, and sharing of regulatory information within national medicine regulatory authorities (NMRAs) and their major stakeholders. The system will capture and track whether the dossier requirements for medicine registration submitted by pharmaceutical manufacturers are based on Common Technical Document (CTD) standards.

OBJECTIVE

Correct deployment of Pharmadex software ensures successful operation. In general, deployment of the software consists of the following tasks:

1. Recognize deployment goals and constraints
2. Develop and follow deployment plan

This guide provides in detail specific directions how to achieve the tasks listed above. The user of this guide should have formal education in computer systems and applications.

Additional knowledge of J2EE and modern WEB technologies is required.

GOALS AND CONSIDERATIONS

Goals

Pharmadex is a J2EE/JSF2 based web application accessible through web browsers. The goal of such an application is to provide users access to the functionality of Pharmadex using HTTP and/or HTTPS protocols on the Intranet and/or Internet.

The table below will be useful for planning.

Users	Total	Concurrent	HTTP	HTTPS
Staff users				
Internet				
Intranet				
Applicant's users				
Internet				
Intranet				

Considerations

There are two main technical considerations to implementing Pharmadex

1. Hardware consideration
    - CPU
    - RAM
    - HDD or SSD capacity
2. Internet connection consideration

In addition,

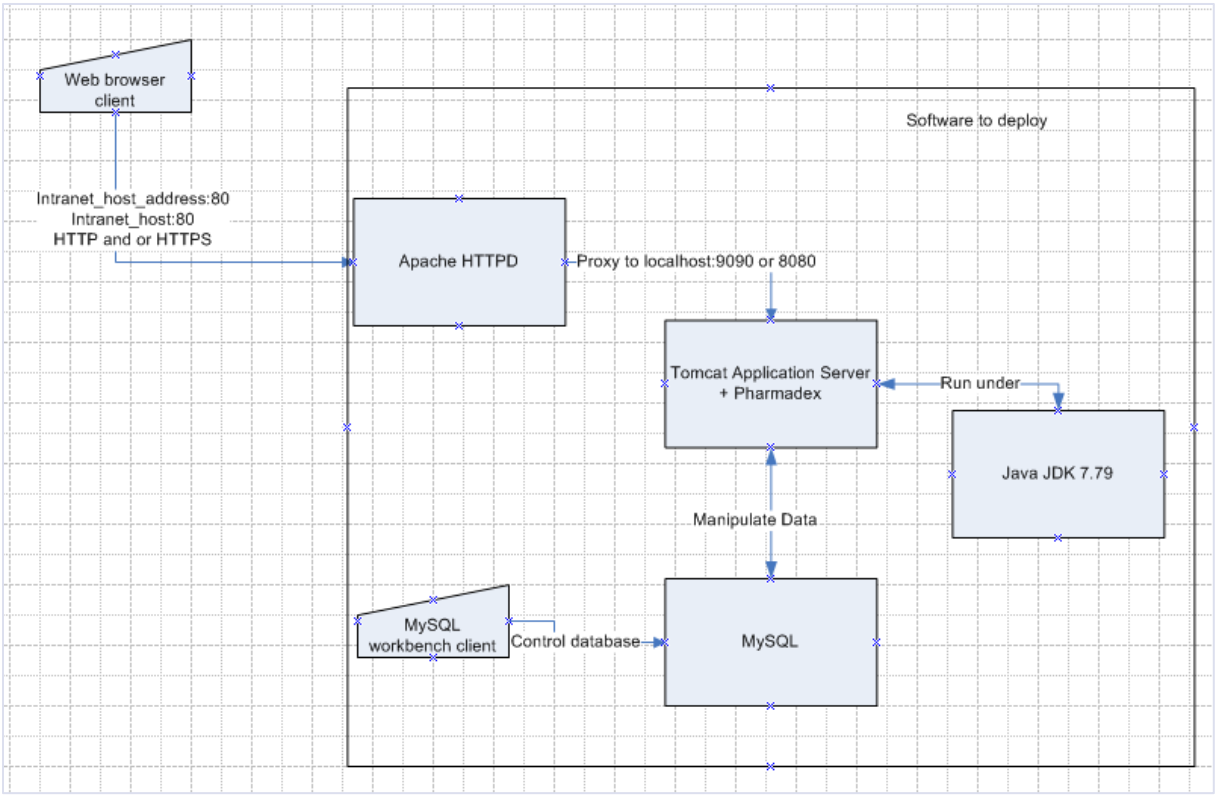
- Operating system should be MS Windows Server 2012 SP2 or above. It may possible to use Linux as the operating system; however, this has yet to be tested.
- It is possible and recommended to use virtualization, for instance on VMware virtual platform

Please use table below for planning purposes

Component	Min required	Expand min consideration
Hardware		
CPU	Intel Xeon, produced after 2012, 2 cores	Pharmadex system does not require very powerful CPUs. It is because there are relatively small amount of transactions required for Dossier data manipulations. In addition, the public release of MySQL RDBMS does not use all capabilities of Symmetric Multiprocessor Architecture. Therefore, there is a low probability that additional CPU power will be required. Consider adding CPUs only if there is 50% or greater CPU usage permanently.
RAM	8GB	Pharmadex requires at least 2GB memory for the application and the rest of the RAM for RDBMS. When the database grows, RDBMS will consume more memory. Therefore, it is a high probability that RAM expansion to 16GB will be needed after a year of exploitation. Consider expanding RAM, if RAM consumption is greater than 80% constantly
HDD or SSD	100GB	The Pharmadex application software consumes up to 3GB of HDD space for the software itself, temporary storage etc. Database will consume up to 20 GB for data and temporary storage. The rest of the space is required for operating system, backups etc. Therefore, 100GB will be enough for a while. Consider expanding storage space when free space is lesser than 30GB and there is no way to clean it up.
Internet connection		
Provider	Internet Exchange Point (IXP) or connection to the national IXP at least 100MB/S Symmetric	It is a good idea to periodically test the provider's Internet connection from geographical locations of selected Internet users. Consider changing the provider if connection tests from many endpoints and using various providers are constantly slow or unstable
Speed	10MB/S to the provider, SDSL	Pharmadex does not impose significant loads on the Internet connection. Clients interact with the system by issuing HTTP POST queries. In addition, file uploads are required. Therefore SDSL 10MB/S or ADSL with at least 10MB/S outgoing is the minimal requirement. Consider upgrading the Internet connection speed only if many Internet based users complain about Pharmadex's response times and other ways to fix it do not work.

DEPLOYMENT PLAN

Deployment diagram



Apache HTTPD is a web gateway for Pharmadex. This software manages web connections for the Pharmadex application. All connection requests for Pharmadex will be passed through (proxy) to the Pharmadex application. Direct connections from the outside to the Pharmadex Application as well as the database are disabled. Only version 2.2.11 of Apache HTTPD should be used.

The Tomcat Application Server is a set of Java libraries (codes and data) that help run web Java applications correctly. Only versions 7.0.68 and 7.069 of the Tomcat Application Server should be used.

Pharmadex is a web-based application created using Java, which works under the control of Tomcat Application Server 7. All codes for this application are in a file named <country_name>.war (for instance mozambique.war). Use the latest version of the <country_name>.war file.

Both Pharmadex and Tomcat run under the **Java Runtime Environment**. Use version 7.79 of Java. There are two Java installations—the Java SE Virtual Machine (JVM) and the Java SE Java Development Kit (JDK). JDK contains JVM and additional software that helps manage the Java application. Use JDK version 7.79.

MySQL is a powerful database management system that manages all Pharmadex data. Use version 5.7 of the Community Edition. It is possible to use the newest version, but testing should be conducted before doing so.

MySQL Workbench is a tool to manage the MySQL database, including updates and backups and restores. This tool should be on both servers and not just the database server. Use only the latest version of MySQL workbench Community Edition. Annex C has some useful examples of how to use this tool.

A defined web address allows the user to use a web browser to access Pharmadex[1]. The recommended web browser is the latest version of **Google Chrome**.

Recommended deployment approaches

Deploying Pharmadex on up to three server boxes:

1. Server 1 - Apache HTTPD (or similar HTTP/HTTPS gateways such as IIS or nginx)
2. Server 2 - Tomcat Application Server + Pharmadex and Java
3. Server 3 - MySQL

Such kind of deployment will be reasonable only when

- The required IT infrastructure already exists.
- Versions of Tomcat Application server software and MySQL software comply with Pharmadex requirements specified earlier
- Hardware and Internet connection considerations listed above are obeyed

For this kind of deployment, Pharmadex application only needs to be added to the existing Tomcat Application Server, the database restored to the existing MySQL database and configuration of the HTTP(HTTPS) gateway.

The main disadvantage of this kind of deployment is its complex administration.

Typical deployment on two boxes:

1. Server 1 - Apache HTTPD, Tomcat Application Server + Pharmadex, Java, MySQL workbench
2. Server 2 - MySQL

[1] Usually there are two addresses – Internet and Intranet

This deployment allows efficient use of hardware. It is recommended for significant loads on the system – upwards of 50 simultaneous users. In addition, this deployment allows sharing of MySQL capabilities for other applications and information systems.

This kind of deployment is less complex for administration than previous one. It is a good initial solution when the dedicated database MySQL server already exists in IT infrastructure.

Deploying all components on one box.

This is the preferred solution for an initial deployment. Detail deployment steps based on this approach are listed below. It should be easy to adapt these steps to the other approaches.

DEPLOYMENT STEPS

General sequence

1. Prepare the IT environment
2. Download the software
3. Install Java JDK
4. Install MySQL and MySQL workbench
5. Restore the database
6. Install Tomcat Application Server
7. Install and check Pharmadex application locally
8. Install Apache HTTPD server, configure virtual servers and check Pharmadex from Intranet
9. Organize database backup

Details

Prepare the IT environment

Please, ensure the following for the server:

1. Operating system on the server is Windows Server 2012 SP2 or later
2. The server allows Remote Desktop connection
3. The server has at least 8GB RAM and 100GB of free disk space available
4. Windows Firewall allows incoming connections on TCP port 80
5. User is Administrator or has administrative rights

In the local DNS intranet please map the address of the application server to a convenient name like “pharmadex.intranet”

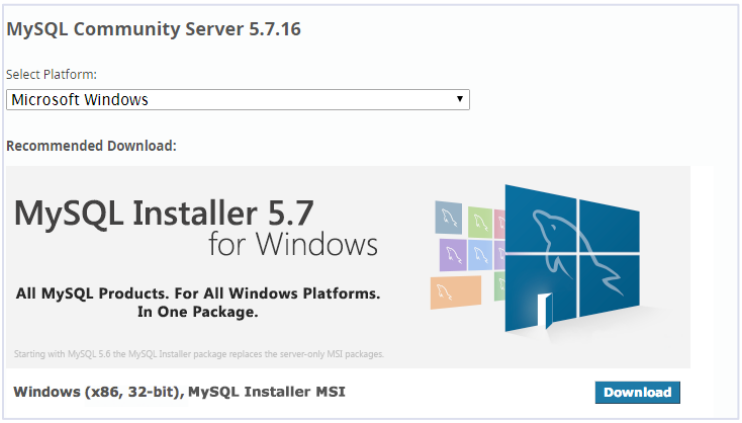
Download the software

Download the software to some folder on the server.

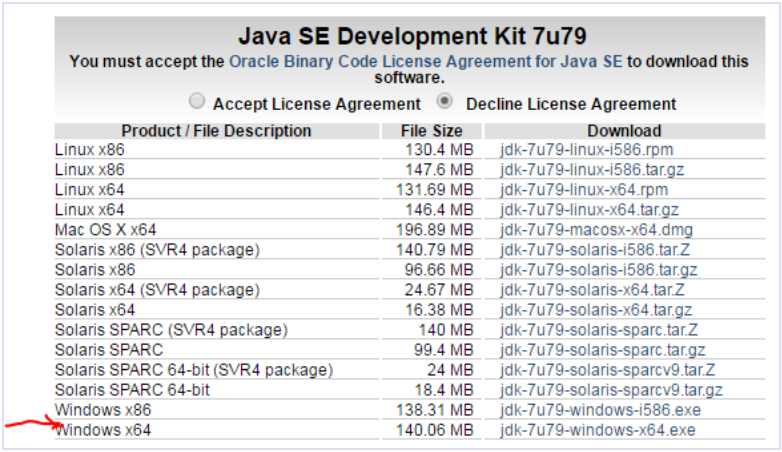
Software	Address to download
Java JDK 7.79	http://www.oracle.com/technetwork/java/javase/downloads/jdk7-downloads-1880260.html
MySQL	Use the version 5.7 from http://dev.mysql.com/downloads/mysql/ (details are below)
MySQL Workbench	Use the latest version from http://dev.mysql.com/downloads/mysql/ (details are below)

Software	Address to download
Additional Microsoft software for MySQL workbench	Microsoft .NET Framework 4 Client Profile (Web Installer) from https://www.microsoft.com/en-us/download/details.aspx?id=17113 Visual C++ Redistributable Packages for Visual Studio 2013 from https://www.microsoft.com/en-us/download/details.aspx?id=40784
Tomcat Application Server	https://tomcat.apache.org/download-70.cgi Use 32-bit/64-bit Windows Service Installer
Apache HTTPD	http://www.apachehaus.com/cgi-bin/download.plx?dli=QVIxWMPNVWz4ERJ9iYrFzSJVlUGRVYSpkTGhmS
Pharmadex application and initial database	Will be provided by MSH. Typical name of Pharmadex application is <country_name>.war

To download MySQL server and MySQL workbench use the Community Edition for Windows 64. Both MySQL and MySQL workbench installers are in common installation packages available for download as shown in the screen below



This installer will install Windows 64 versions. Nevertheless, installer itself is 32 bit.
To install Java JDK, please download JDK installer for Windows 64



Install Java JDK

1. Go to application server
2. If any version of Java is already installed, please uninstall it
3. Install Java JDK to folder c:\java. Follow the default installation steps

Install MySQL and MySQL workbench

1. Read the installation manual (http://dev.mysql.com/doc/refman/5.7/en/windows-installation.html and http://dev.mysql.com/doc/refman/5.7/en/mysql-installer-gui.html)
2. Run MySQL GUI installer
3. Select setup type "Custom"
4. Select MySQL server and MySQL Workbench[2] to install
5. Follow installation steps
   - Set InnoDB data engine and UTF-8 encoding by default
   - Select largest disk for MySQL data and logs
   - When installer asks about server configuration, please select "Server3"
   - Define user with name root and any password (store the password In a safe place)

After these steps please fine tune the installation for Pharmadex needs:

1. Add a user with name "pharm" and password "pharm"[4] with full DBA Administrative role, all possible schema privileges and possibility to connect from any server. Afterwards these rights can be reduced if need. You may use command file createUser.bat and/or createUser.txt (see Annex A).
2. To increase maximal size of file to store into database, do as follows. Add to sections ([client] [mysqldump] [mysql] [mysqld]) of file my.ini line max_allowed_packet=1500M. If these sections are missing, create them.
3. Restart MySQL service

Start MySQL workbench. Create connection to MySQL server as described in Annex B

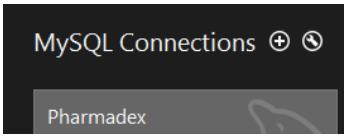
Restore the database

First, ensure that the database dump is available. It is the file with name DumpYYYYMMDDNA.sql, for instance Dump20161212NA.sql.

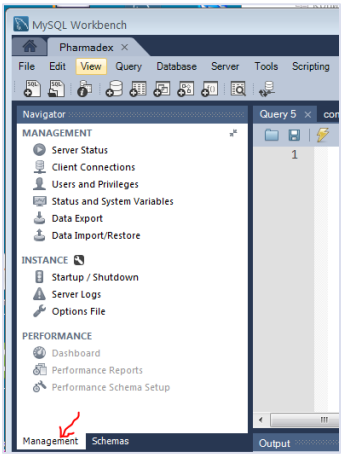
[2] MySQL Workbench may ask for additional Microsoft software, please install what is required
[3] Select Dedicated, if box has been dedicated for MySQL server
[4] It is an initial password. It may be changed later

Run MySQL workbench

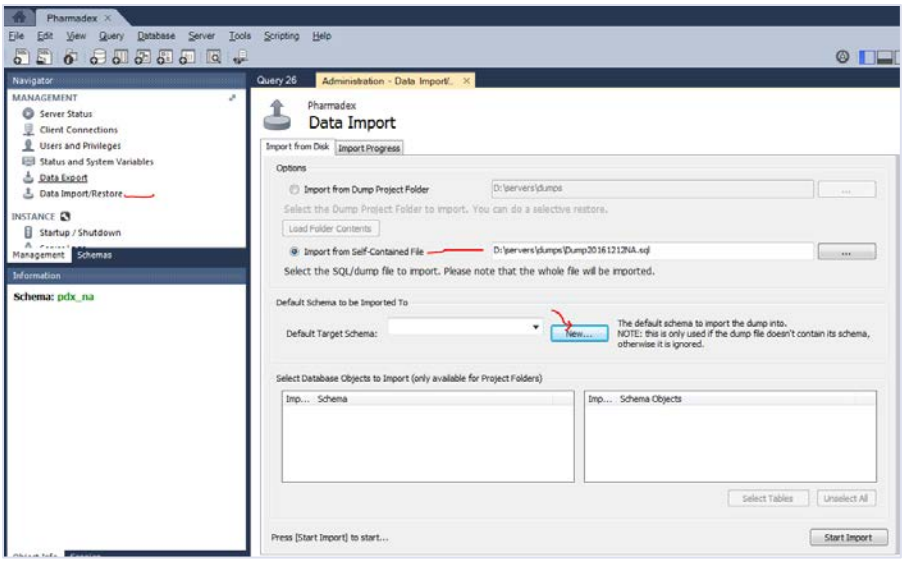
Connect to Pharmadex database



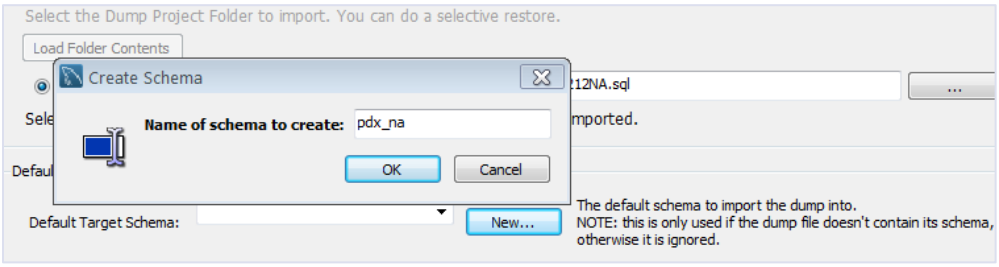
Open Management Navigator Tab



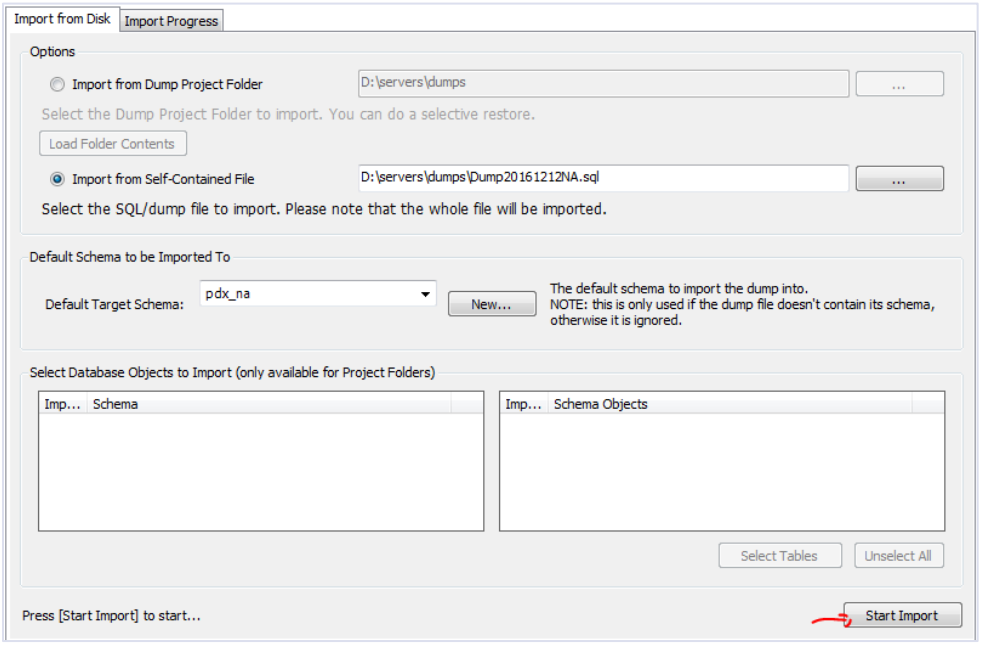
First select tab Administration - Data import/restore, then select Import from Self-Contained File, then select the backup file and click button “New” in section “Default target schema”



Type the database name in the dialog box. For instance, database for Namibia has name pdx_na, for Mozambique pdx_mz, for Ethiopia efmhaca_mris.

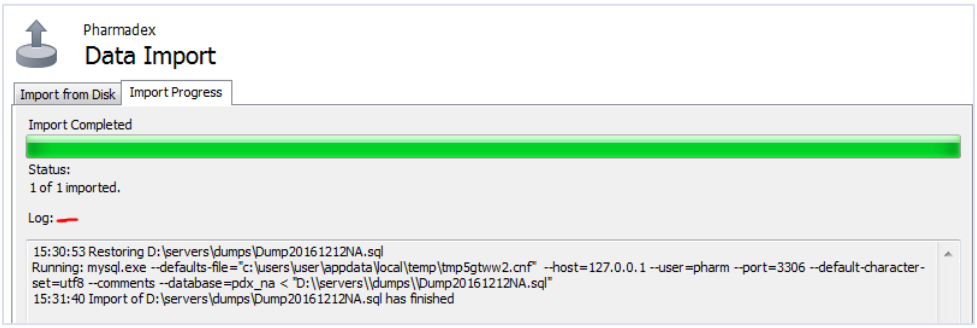


Click “Start import”

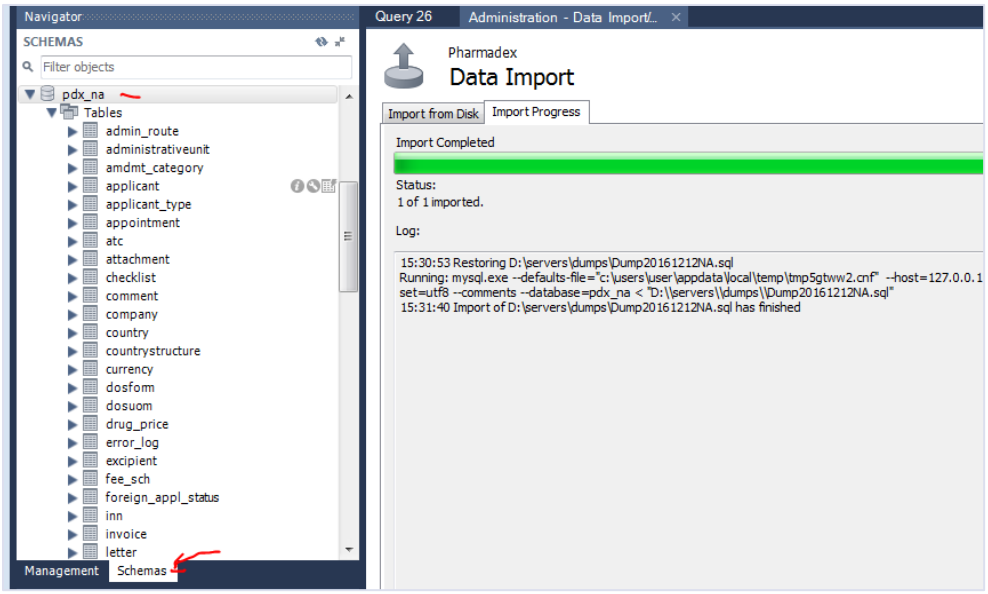


Wait until import is completed. Pay attention to the import log. Sometimes the log may contain error messages. This means that the import is incomplete. Please determine the cause of the error.

Example of correct log is below



To verify restore result, please select the “Schemas” tab and open the database. Example is “pdx_na”

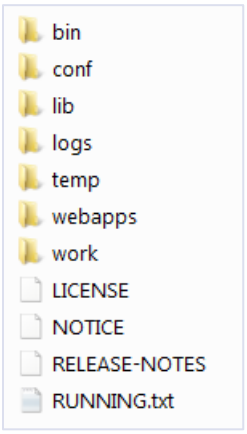


Install Tomcat Application Server

Install

Run Tomcat Application Server Windows Service installer. Strictly follow the installation steps. Allow installation as a Windows service and define a user.

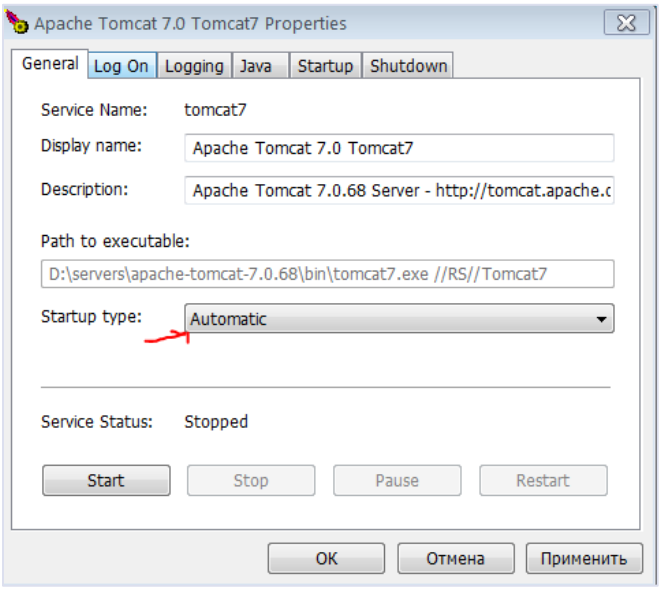
Tomcat Application Server root folder looks as follows:



Fine tuning the configuration

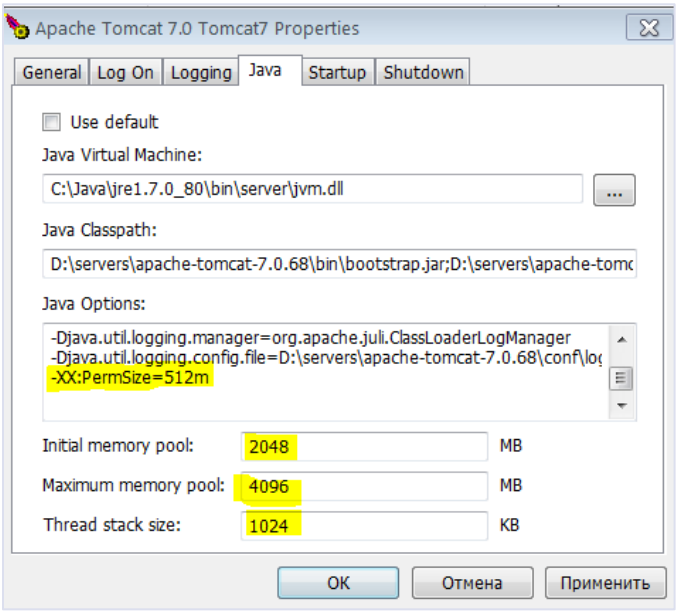
Open the “bin” folder under Tomcat Application Server root folder
Run “tomcat7w”

Change Startup type to Automatic



Go to the Java tab and

- add line as shown below: -XX:PermSize=512m
- set the following parameters: Initial memory pool, Maximum memory pool, Thread stack size

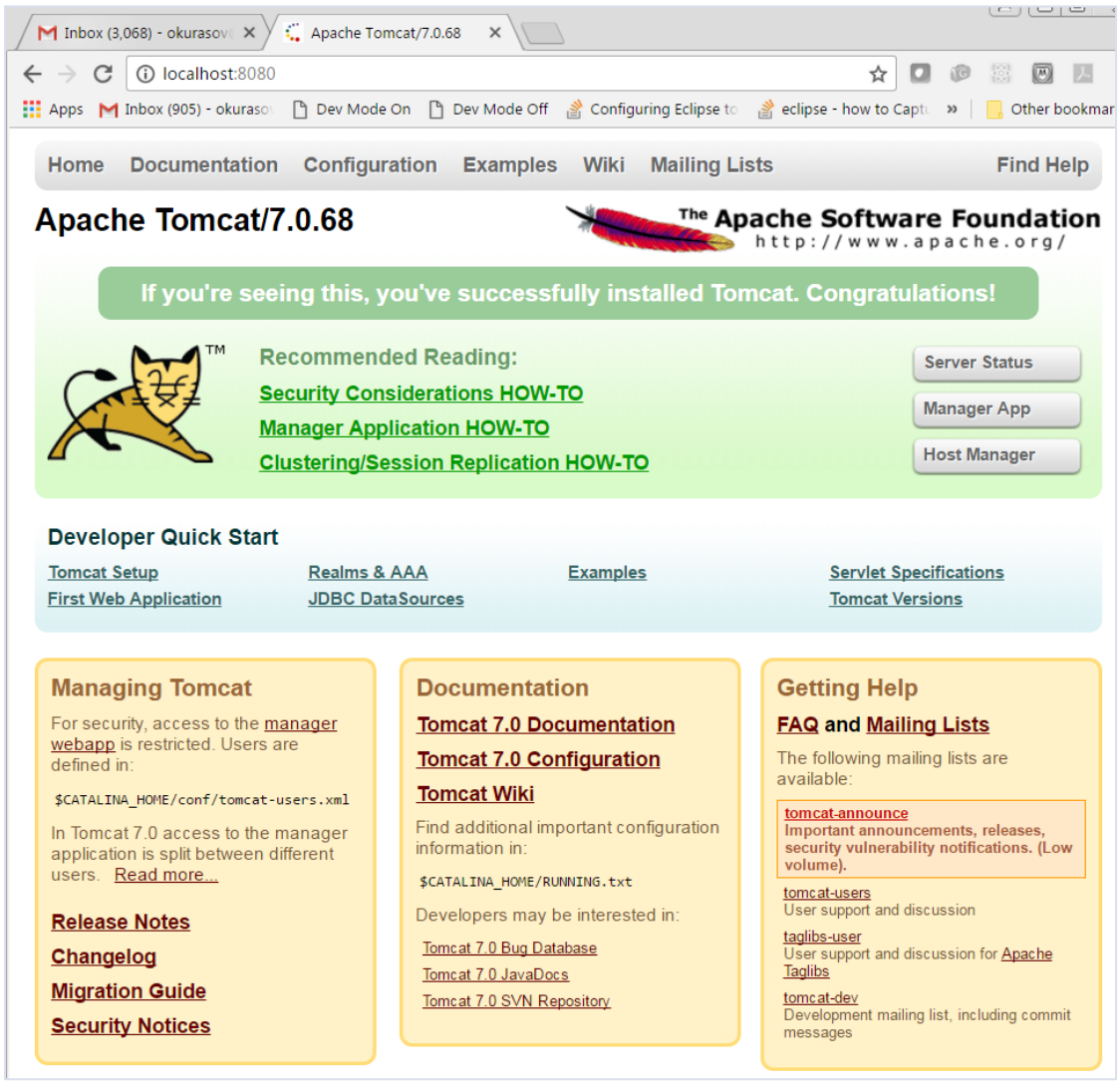


Click Apply, OK

Go to the General Tab and start service. Service should start.

Check installation

Run a web browser on the server and enter in the address line localhost:8080. The result should look as below[5]:



This shows that Apache Tomcat has been installed and is running successfully. Refer to Apache Tomcat documentation for future reference.

Installing and checking Pharmadex application

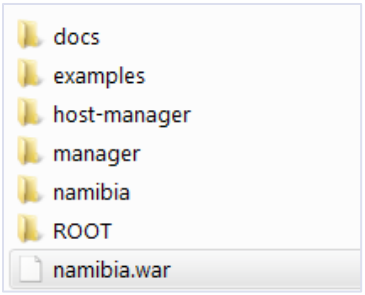
Ensure that MySQL is working.

Stop Apache Tomcat service.

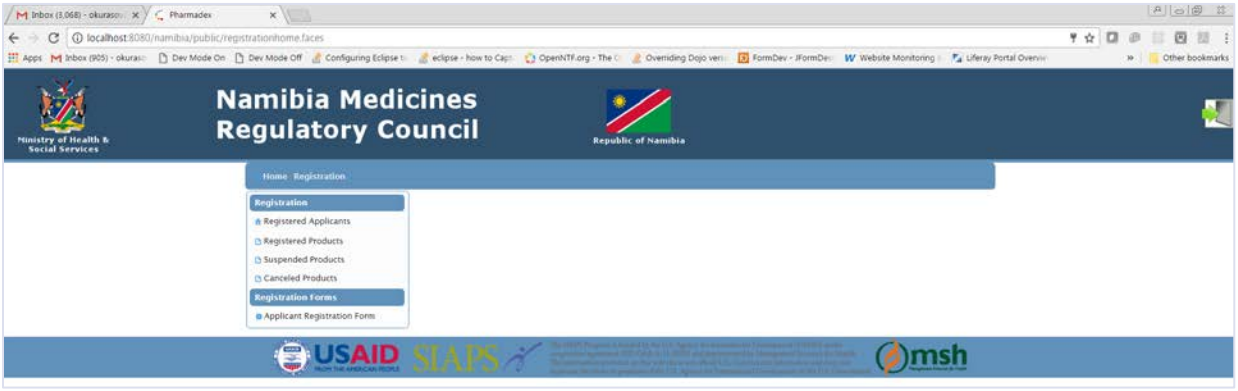
[5] Version may be 7.0.69

Open “webapps” folder under Tomcat Application Server root folder

Copy Pharmadex application <country_name.war> (for instance, namibia.war) to the folder. Start Tomcat service. Wait up to 3 min, folder namibia must appear



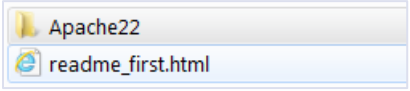
Start web browser on the Application server. Enter address http://*localhost:8080/<country_name>* (for instance http://localhost:8080/namibia). Pharmadex home page should be displayed. For instance Namibia page is:



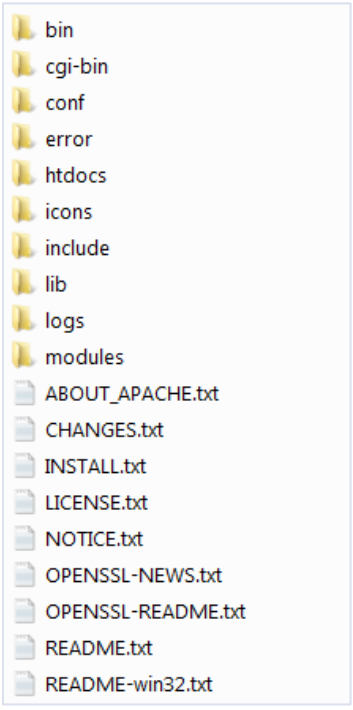
Installing Apache HTTPD server (the gateway)

Expanding Apache HTTPD distributive

Typical name of Apache HTTPD distribution file is httpd-2.2.32-x64.zip. This archive file contains

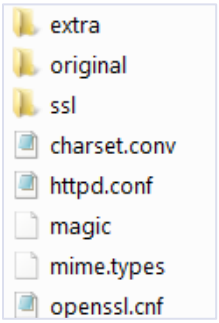


Copy Apache22 folder to another folder on disk. Contents under Apache HTTPD root folder will looks as follows:



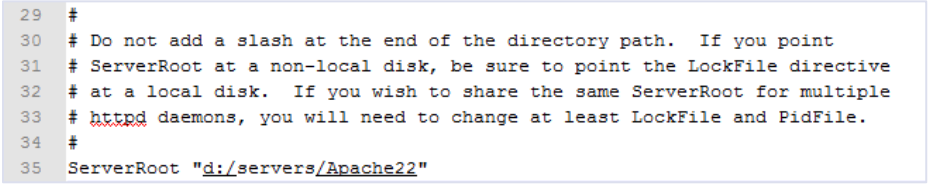
First time configuration

Open the “conf” folder under Apache HTTPD root folder. It looks as follows:



Open file httpd.conf in any text editor (Notepad, Notepad++ etc)

Type the correct path to Apache HTTPD root folder for parameter ServerRoot. For instance:



Repeat this for the DocumentRoot parameter. For instance:

```
#
# DocumentRoot: The directory out of which you will serve your
# documents. By default, all requests are taken from this directory, but
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "d:/servers/Apache22/htdocs"
```

Apply this change for the htdocs directory description. For instance:

```
#
# Note that from this point forward you must specifically allow
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#

#
# This should be changed to whatever you set DocumentRoot to.
#
<Directory "d:/servers/Apache22/htdocs">
    #
    # Possible values for the Options directive are "None", "All",
    # or any combination of:
    #   Indexes Includes FollowSymLinks SymLinksifOwnerMatch ExecCGI MultiViews
    #
    # Note that "MultiViews" must be named *explicitly* --- "Options All"
    # doesn't give it to you.
    #
    # The Options directive is both complicated and important.  Please see
    # http://httpd.apache.org/docs/2.2/mod/core.html#options
    # for more information.
    #
    Options Indexes FollowSymLinks

    #
    # AllowOverride controls what directives may be placed in .htaccess files.
    # It can be "All", "None", or any combination of the keywords:
    #   Options FileInfo AuthConfig Limit
    #
    AllowOverride None

    #
    # Controls who can get stuff from this server.
    #
    Order allow,deny
    Allow from all

</Directory>
```

Repeat this for the cgi-bin directory. For instance:

```
#
# "/Apache22/cgi-bin" should be changed to whatever your ScriptAliased
# CGI directory exists, if you have that configured.
#
<Directory "d:/servers/Apache22/cgi-bin">
    AllowOverride None
    Options None
    Order allow,deny
    Allow from all
</Directory>
```

Temporarily exclude SSL capabilities by commenting out “Include conf/extra/httpd-ahssl.conf”

```
# Secure (SSL/TLS) connections
<IfModule ssl_module>
#Include conf/extra/httpd-ahssl.conf
```

Allow http mod_proxy

```
#LoadModule mime_magic_module modules/mod_mime_magic.so
LoadModule negotiation_module modules/mod_negotiation.so
LoadModule proxy_module modules/mod_proxy.so
#LoadModule proxy_ajp_module modules/mod_proxy_ajp.so
#LoadModule proxy_balancer_module modules/mod_proxy_balancer.so
#LoadModule proxy_connect_module modules/mod_proxy_connect.so
#LoadModule proxy_ftp_module modules/mod_proxy_ftp.so
LoadModule proxy_http_module modules/mod_proxy_http.so
#LoadModule proxy_scgi_module modules/mod_proxy_scgi.so
#LoadModule reqtimeout_module modules/mod_reqtimeout.so
```

Allow inclusion of virtual hosts definitions

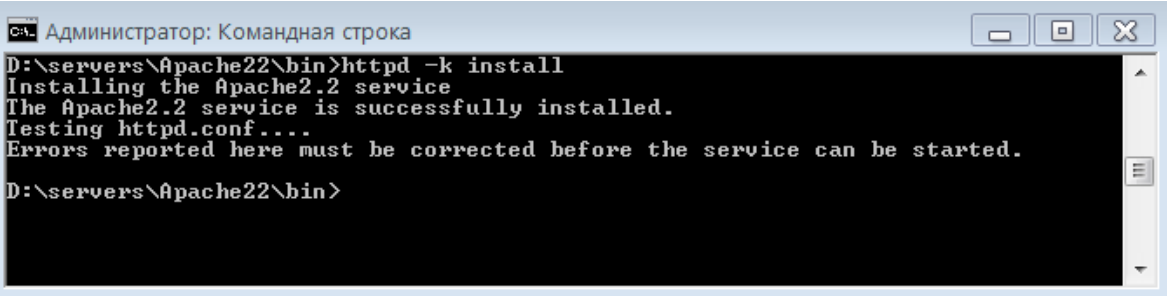
```
# Real-time info on requests and configuration
#Include conf/extra/httpd-info.conf

# Virtual hosts
Include conf/extra/httpd-vhosts.conf

# Local access to the Apache HTTP Server Manual
#Include conf/extra/httpd-manual.conf

# Distributed authoring and versioning (WebDAV)
#Include conf/extra/httpd-dav.conf
```

Setup as Windows service

Run MS DOS prompt with Administrative rights (Run as Administrator).

Go to “bin” folder under Apache HTTPD root folder

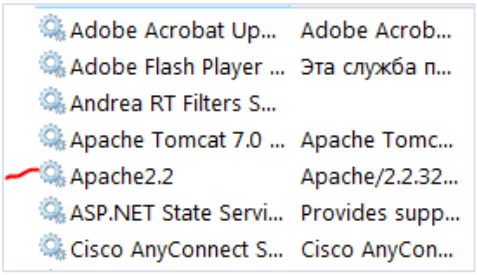
Run httpd – k install



If the installer reports errors in httpd.conf, fix them by following the procedure below:

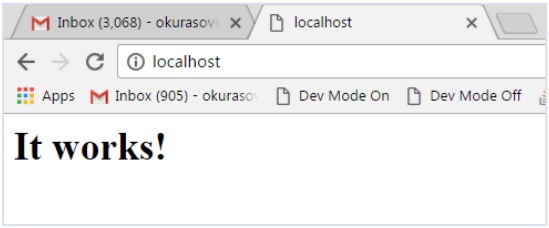
1. Run httpd –k uninstall
2. Fix errors, There are useful commands httpd –S and httpd –t to check installation and configuration files syntax
3. Run httpd –k install

Open Windows services list. Apache2.2 service[6] can be found in the list



Run this service. If Apache HTTPD service will not run, refer to Troubleshooting section in Pharmadex Administrator Manual.

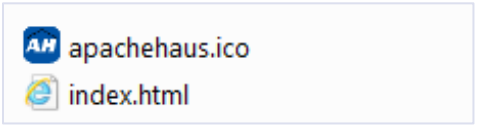
Run browser on the computer where Apache HTTPD installed. Check the gateway by entering http://localhost address in any browser. Result looks like



Creating virtual http server for Pharmadex

Create document folder and index.html

Open folder htdocs under root Apache HTTPD folder. Its contents look as follows:



[6] For some installation packages this name may be different

In the current folder create a folder “pharmadex” and place in it a file with name index.html. Contents of this file should be:

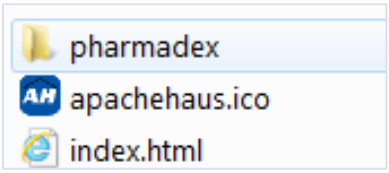
```
<html>
<head>
  <meta http-equiv="Refresh" content="0; URL=/<application_name>">
</head>
</html>
```

Replace ***application name*** with the name of Pharmadex application.

Example contents of index.html for an application with name “namibia” is

```
<html>
<head>
  <meta http-equiv="Refresh" content="0; URL=/namibia">
</head>
</html>
```

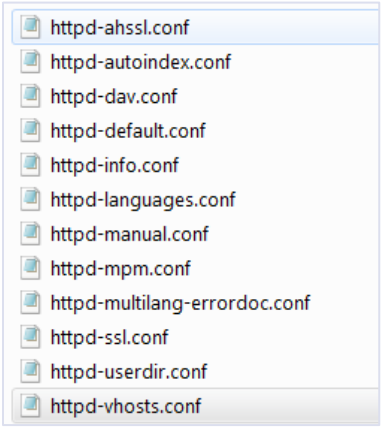
Folder htdocs will now look as follows



Folder htdocs/pharmadex will look as follows

Creating the virtual server

Open folder conf/extra folder under root folder of Apache HTTPD. The contents look as follows



Open file httpd-vhosts.conf in any text editor (Notepad, Notepad++, etc)

Add the following virtual host definition to it

```
<VirtualHost *:80>
  ServerName <your_server_name>
  ServerAlias *.<your_server_name>
  DocumentRoot "htdocs/pharmadex"
  # Configuration of Pharmadex
        ProxyPass /<application_name> http://127.0.0.1:8080/<application_name>
        ProxyPassReverse /<application_name>
http://127.0.0.1:8080/<application_name >
</VirtualHost>
```

Replace **<your_server_name>** with the server name for Intranet Pharmadex that was defined earlier in DNS.

Replace **<application_name>** with the name of the Pharmadex application.

For example:

```
<VirtualHost *:80>
  ServerName pharmadex.intranet
  ServerAlias *.pharmadex.intranet
  DocumentRoot "htdocs/pharmadex"
  # Configuration of Pharmadex
        ProxyPass /namibia http://127.0.0.1:8080/namibia
        ProxyPassReverse /namibia http://127.0.0.1:8080/namibia
</VirtualHost>
```

Restart Apache HTTPD service.

Ensure that service Tomcat Application server is running

Open locally in browser http://pharmadex.intranet

Example of browser's screen is below

Backup Procedure

To avoid data losing, the administrator should ensure that the system creates a daily copy of database. At least once a week, the administrator must copy the latest backup media that is stored in a safe place and away from the server location. Each day administrator should check the status of the backup copy and log it in the backup/system journal. The backup/system journal should contain the following data: type of backup copy (daily or weekly), date and time of backup copy, size of backup copy, name and signature of the person that verified the backup copy.

If it is necessary to restore database from backup, administrator MUST restore the database per instructions in the "Restore database" section (using the appropriate backup copy). The restore event must be noted in the backup/system journal with the reasons that made it necessary to do a restore.

Automatic Backup

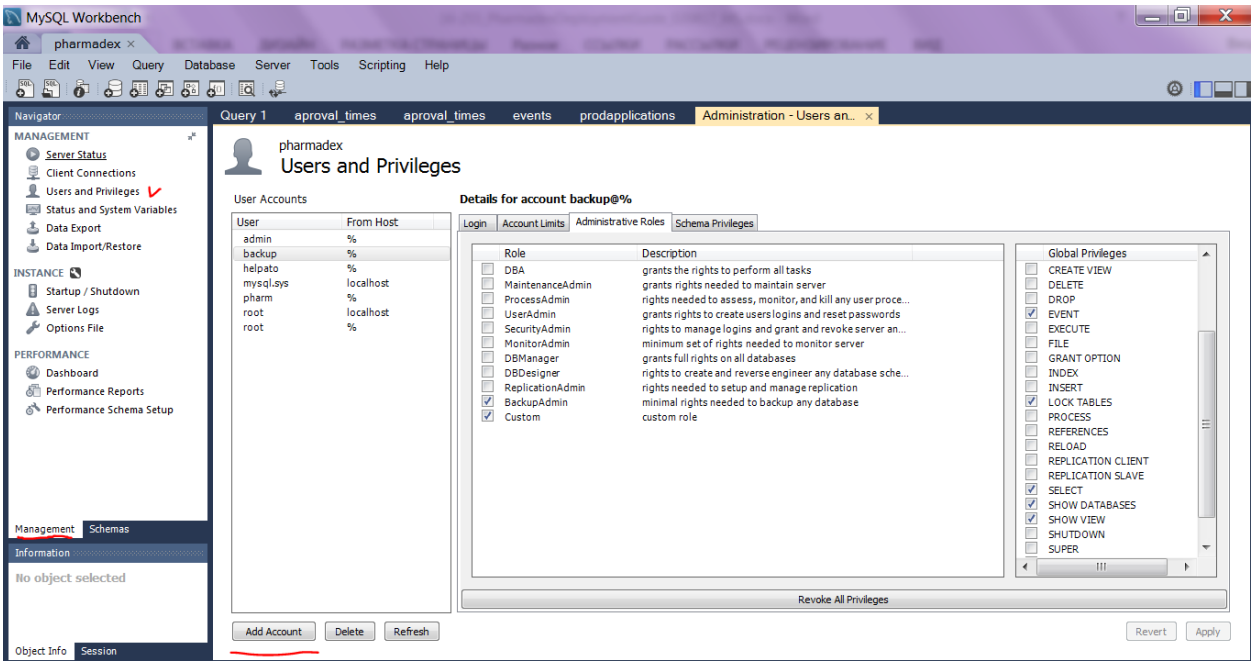
Administrator should establish an automatic backup on the database server. To do that, administrator must do as follows.

1. Create a backup user in database
2. Create a backup script
3. Add the backup script to Windows scheduler on the database server and specify the start time.

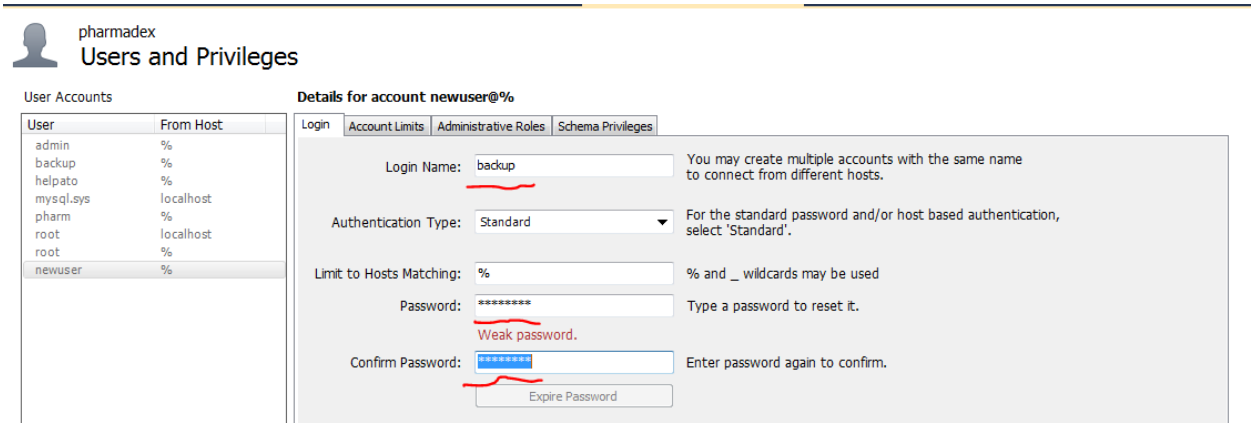
Each daily copy has name YYYY-MMDD.sql, where YYYY-year, MM-month, DD-day of month when backup copy was taken.

Create backup user.

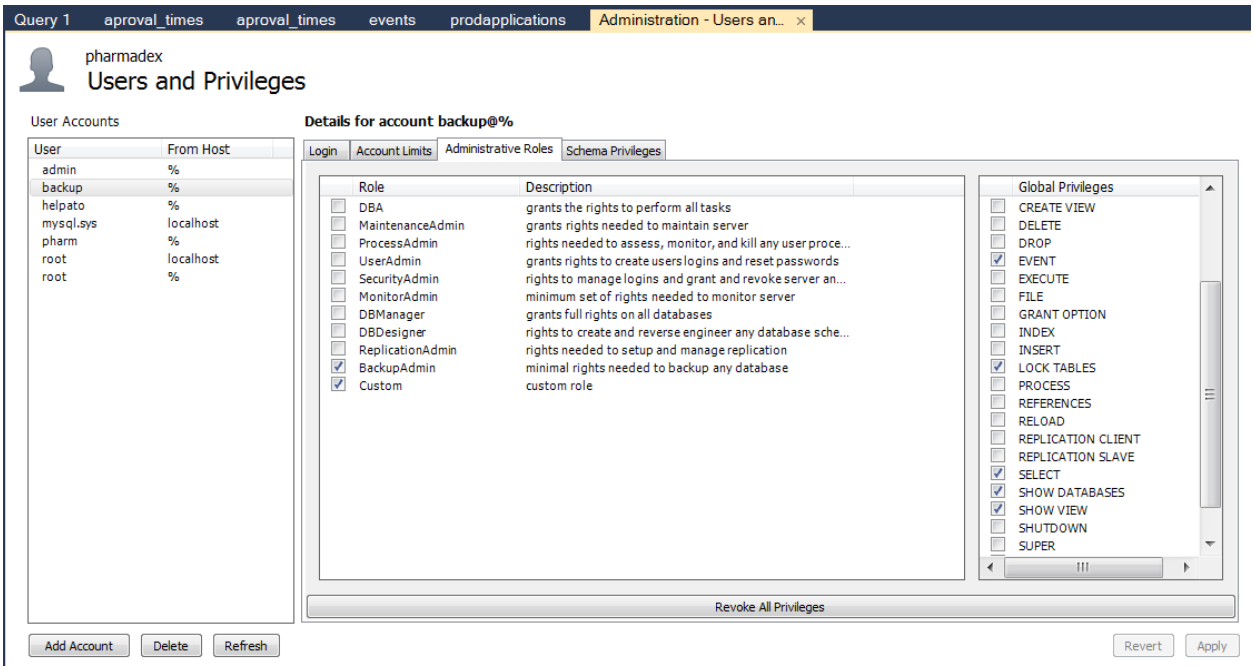
To ensure proper security (because user's password is set explicitly in the backup script), administrator should create a user with minimal privileges for the backup operation.
To do this, administrator should start MySQL Workbench, open the "Management" tab and click on "User and privileges" item on sidebar menu.



Then administrator creates new user by clicking on the “Add account” button.



On the login tab the administrator fills out the user name (login name) and password. This login and password will be used in the next chapter (backup script).
On the tab “Administrative roles” administrator checks the role “Backup admin” in the “Description” field and adds “Show View” on the “Global privileges” field.
Full list of privileges should contain the following: Event, Lock Tables, Select, Show Database, Show View. (See following screenshot)



After that, the administrator saves the new user by clicking on the “Apply” button.

Creating the backup script

Administrator should use the script listed below to start backup procedure. Before using this script, to the administrator must determine that the folder for copying the backup exists, its path and the backup user’s name and password.

Script template.

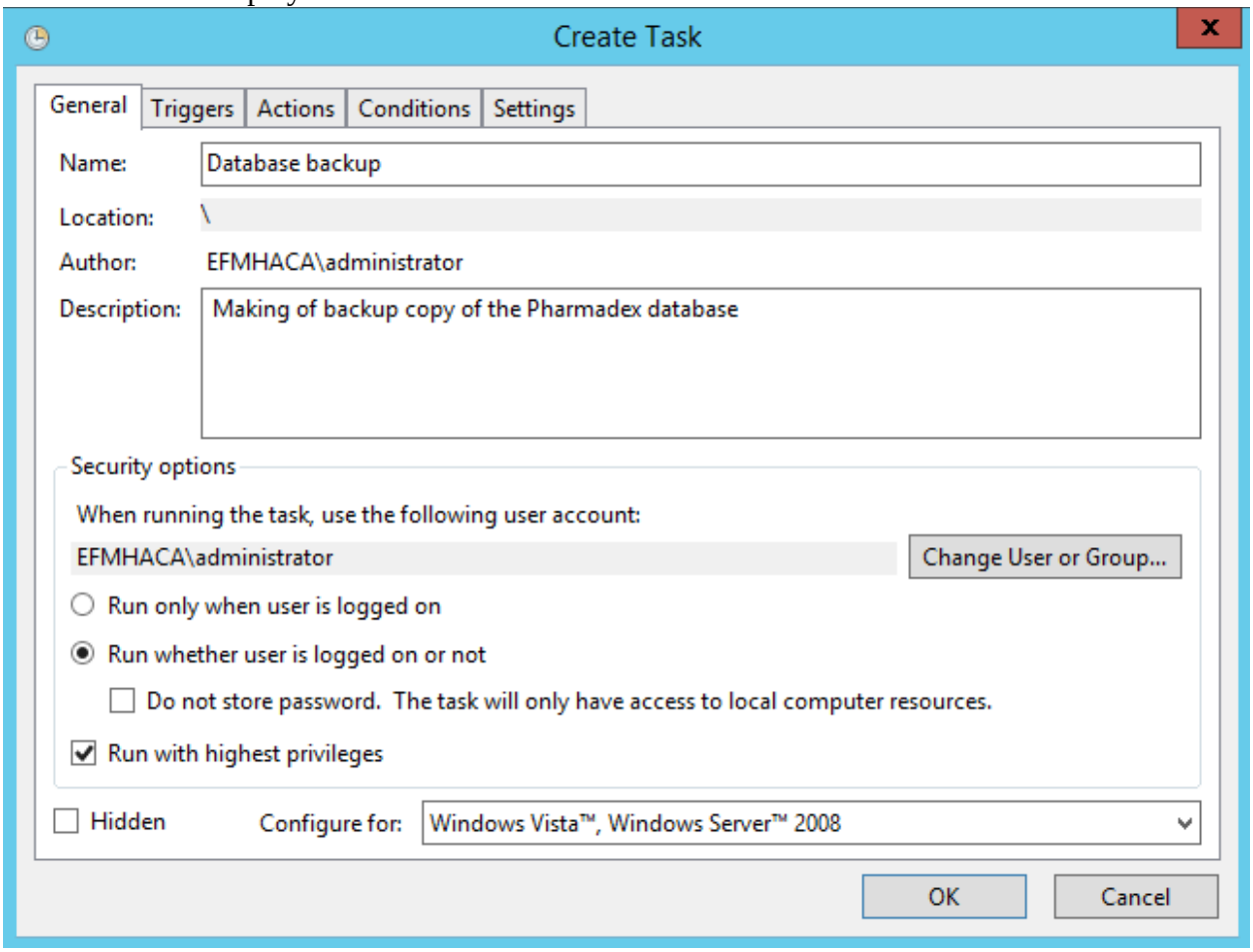
```
@ECHO OFF
cd \
cd c:
cd "C:\Program Files\MySQL\MySQL Server 5.5\bin"
set dd=
set mm=
set yyyy=
FOR /F "TOKENS=3 DELIMS=<space>/." %%A IN ('DATE/T') DO SET dd=%%A
FOR /F "TOKENS=2 DELIMS=/. " %%A IN ('DATE/T') DO SET mm=%%A
FOR /F "TOKENS=4 DELIMS=<space>/." %%A IN ('DATE/T') DO SET yyyy=%%A
set bkpfilename=C:/Temp/"%yyyy%%mm%%dd%.sql"
ECHO starting copy to %bkpfilename% ...
mysqldump -u pharm -ppharm efmhaca_mris > %bkpfilename%.sql
if ERRORLEVEL=0 GOTO ExitOK
ECHO Error %ERRORLEVEL% found > C:/Temp/error.log
EXIT -1
:ExitOK
```

Administrator should change the highlighted path in the string
set bkpfilename=**C:/Temp**/%yyyy%%MM%%DD%.sql
to the actual backup folder name.

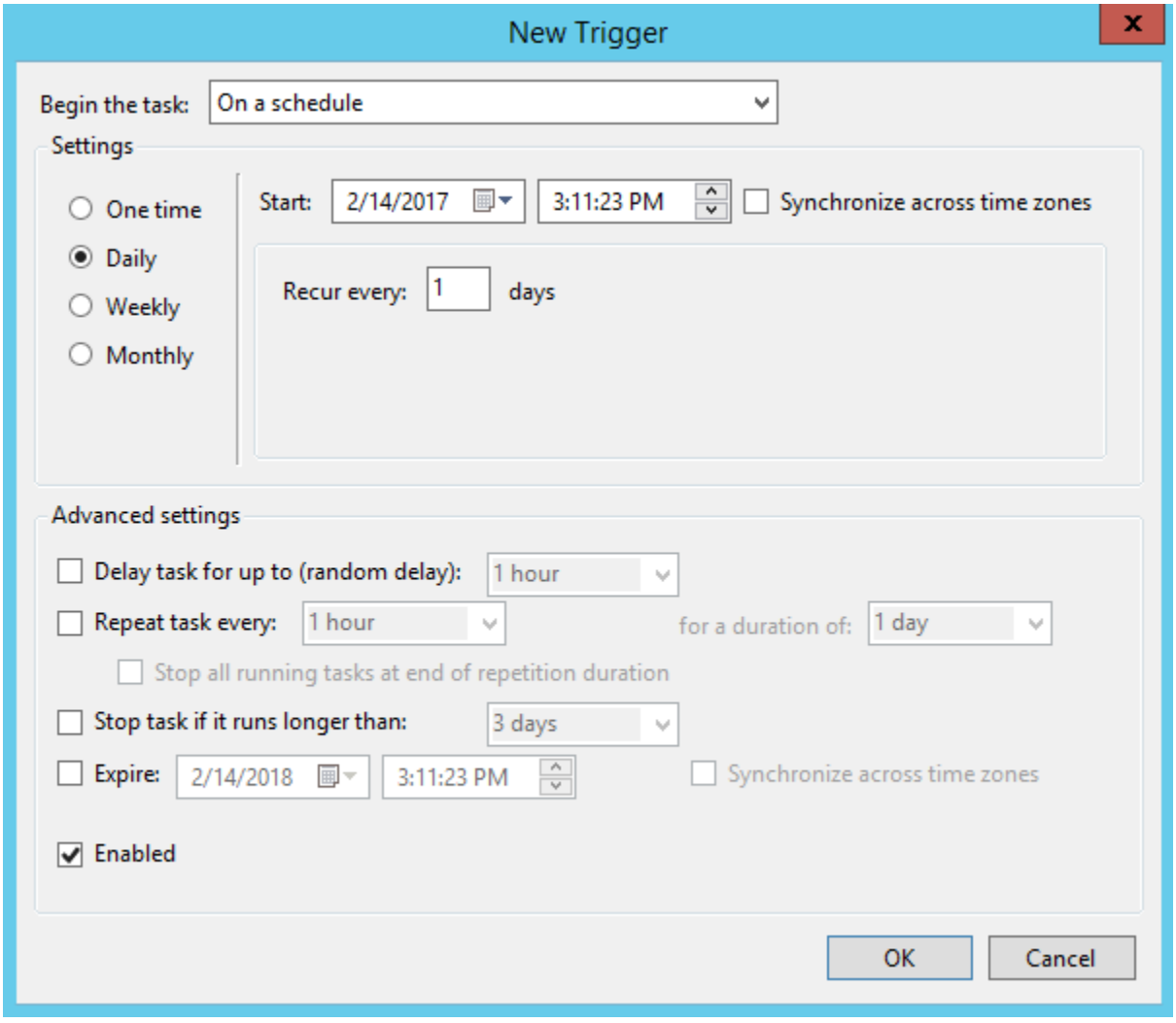
For the command string:- mysqldump -u backup -ppharm efmhaca_mris > %bkpfilename%
the administrator should write the actual parameters.
Replace:
user name (-u), with backup user name, created as specified in previous chapter, currently "backup" in this example;
user password, as for "backup" user, currently "pharmadex"
database – database name (Namibia has name pdx_na, for Mozambique pdx_mz, for Ethiopia efmhaca_mris).

Adding starting of script to Windows task scheduler

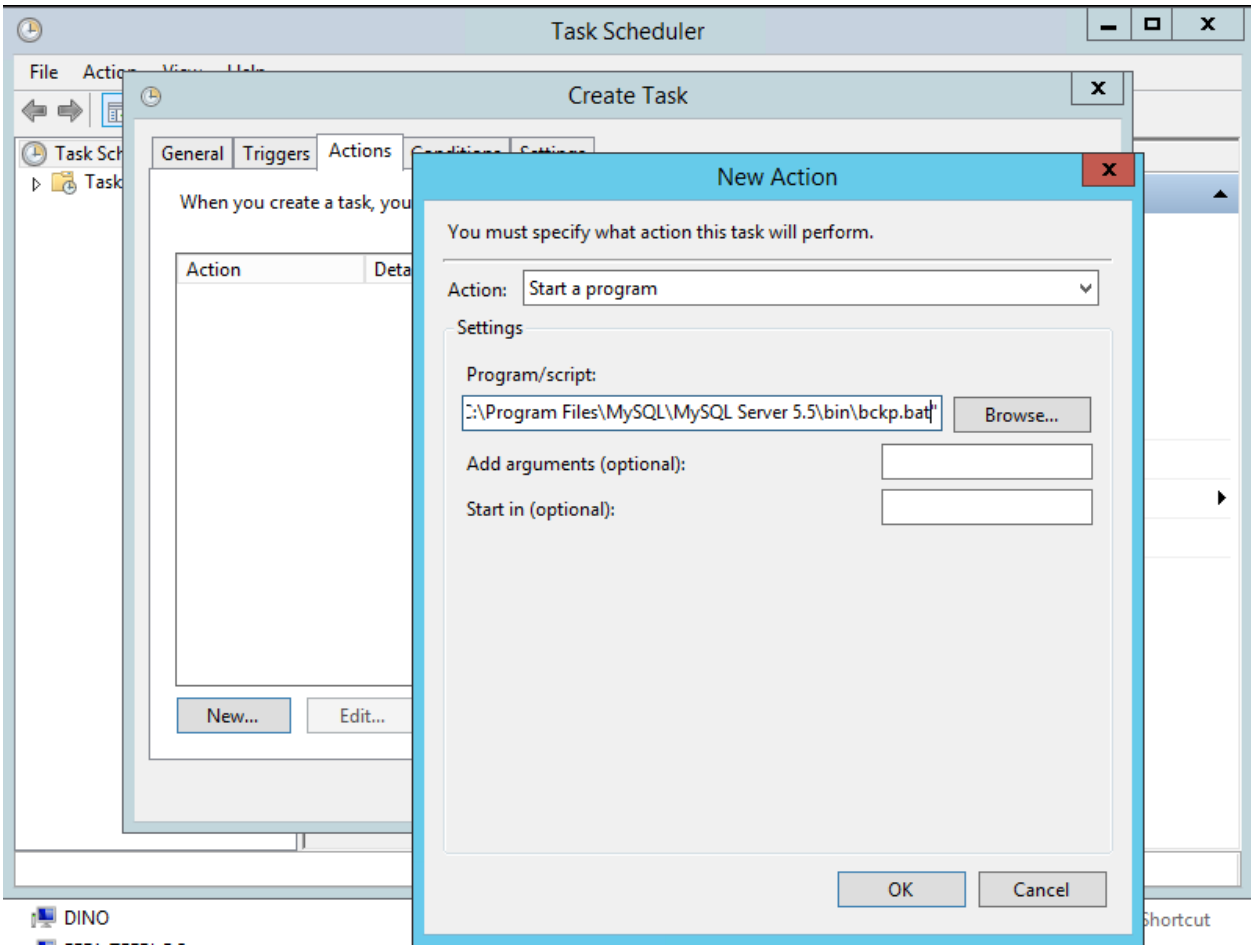
Administrator should place the script in the MySQL folder on the database server (Default is "Program Files/ MySQL/ MySQL Server 5.7/ bin".
Administrator should create an action by starting the task scheduler (Control panel –> Task Schedule).
In task scheduler menu choose the menu item "Action" –> "Create task". The following dialog window will be displayed.



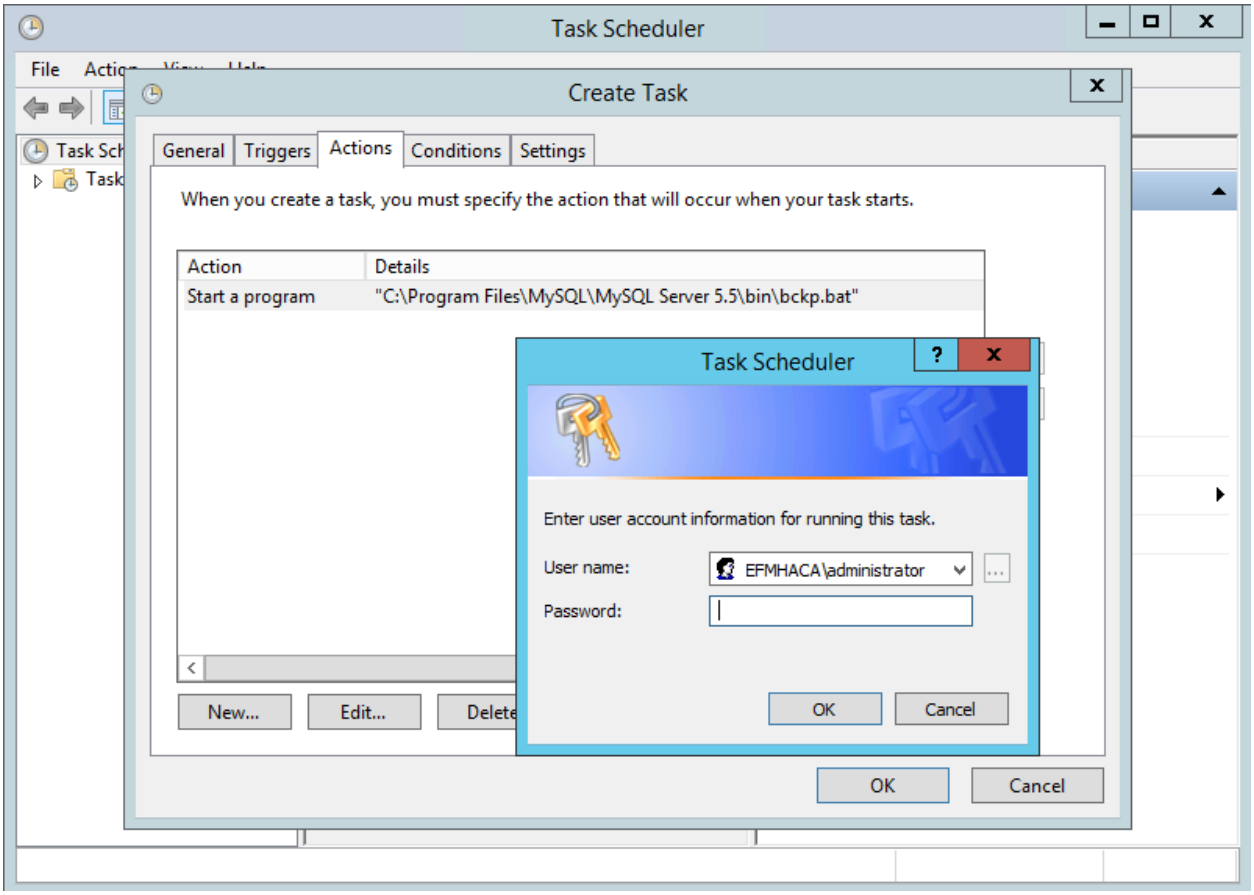
Fill out the name and description of the task and check radio button “Run whether user is logged on or not”. Then move to the “Triggers” tab.



On the “Triggers” tab administrator specifies the schedule of running the backup script. To do this click the “New” button and fill out the dialog window.
In the dialog window check the radio-button “Daily” and fill out fields “Start”. Date is date of first start of backup task (today) and the time when the task will be started. Change time to midnight or another time that is not during business hours. Leave the field “Recur every” as default (1 day).
Save trigger by click on the “OK” button.
Move to the “Actions” field



Add action by clicking the “New” button. In the dialog window select action “Start a program”, specify the path to the script that was created earlier, or click on the “Browse” button and select the script.



After saving the action by clicking the “OK” button, system will require the entry of the administrator’s password.
Enter password and click “OK”
Save task at whole by clicking “OK” in the main dialog window.

ANNEX A. HOW TO CREATE MYSQL USER PHARM

File createUser.bat

```
mysql -u root -p < createUser.txt
```

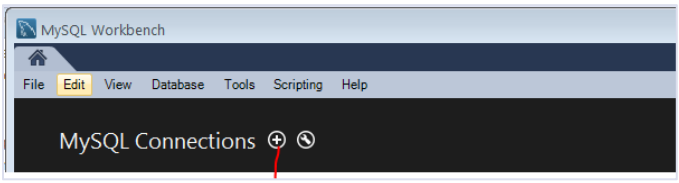
File createUser.txt

```
CREATE USER 'pharm'@'%' IDENTIFIED BY 'pharm';

GRANT ALL PRIVILEGES ON *.* TO 'pharm'@'%'WITH GRANT OPTION;
```

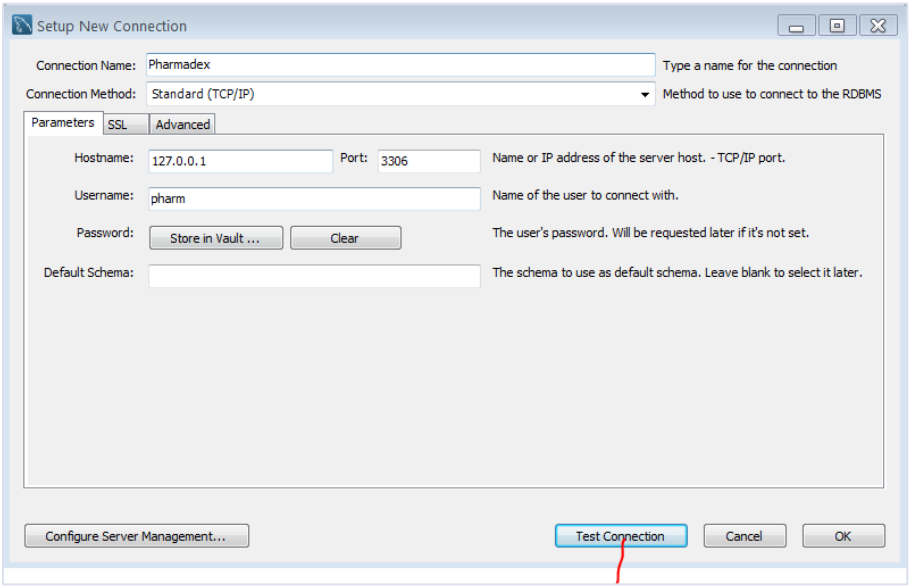
ANNEX B. HOW TO CREATE CONNECTION TO MYSQL SERVER FROM MYSQL WORKBENCH

Run MySQL workbench

Click Add Connection



Fill the form below and click Test Connection



If connection is successful, save it