

Install SimpleRisk on WAMP Server

Introduction

SimpleRisk is a simple and free tool to perform risk management activities. Based entirely on open source technologies and sporting a Mozilla Public License 2.0, a SimpleRisk instance can be stood up in minutes and instantly provides the security professional with the ability to submit risks, plan mitigations, facilitate management reviews, prioritize for project planning, and track regular reviews. It is highly configurable and includes dynamic reporting and the ability to tweak risk formulas on the fly. It is under active development with new features being added all the time and can be downloaded for free or demoed at <https://www.simplerisk.it/>.

Disclaimer

The lucky security professionals work for companies who can afford expensive GRC tools to aide in managing risk. The unlucky majority out there usually end up spending countless hours managing risk via spreadsheets. It's cumbersome, time consuming, and just plain sucks. When Josh Sokol started writing SimpleRisk, it was out of pure frustration with the other options out there. What he's put together is undoubtedly better than spreadsheets and gets you most of the way towards the "R" in GRC without breaking the bank. That said, humans can make mistakes, and therefore the SimpleRisk software is provided to you with no warranties expressed or implied. If you get stuck, you can always try sending an e-mail to support@simplerisk.it and we'll do our best to help you out. Also, while SimpleRisk was written by a security practitioner with security in mind, there is no way to promise that it is 100% secure. You accept that as a risk when using the software, but if you do find any issues, please report them to us so that we can fix them ASAP.

Installing WAMP Server

Although SimpleRisk can run on just about any platform that runs PHP and MySQL, for the purpose of this guide we will work in Windows using WAMP Server. This guide will from here on out be speaking of setup and installation on this platform. Before we begin the steps to

installation first we must prep the environment. First we must disable IIS these steps can vary differently but on Windows 8 and 10 the following will disable IIS.

Disable IIS

1. Right-Click start menu and click Programs & Features
2. On the left hand border of the menu click "Turn Windows features on or off"
3. Find Internet Information Security tree root and disable it. (This will allow our server to operate traffic on port 80.)

Installing WAMP

1. Navigate to www.wampserver.com and select your language of choice from the top right of the page.
2. Near the center of the top of the page you should find the "Download" link go ahead and navigate there to find the applicable version for your architecture and click the yellow download button should be labeled "WAMP SERVER 64 BITS (X64) 3.0.6" or "WAMP SERVER 43 BITS (X86) 3.0.6"
3. Open your file directory containing the downloaded installer and run it. Read installer carefully as there are some prerequisites for installation of WAMP. A copy of the requirements: -- VC9 Packages (Visual C++ 2008 SP1)

<http://www.microsoft.com/en-us/download/details.aspx?id=5582>

<http://www.microsoft.com/en-us/download/details.aspx?id=2092>

-- VC10 Packages (Visual C++ 2010 SP1)

<http://www.microsoft.com/en-us/download/details.aspx?id=8328>

<http://www.microsoft.com/en-us/download/details.aspx?id=13523>

-- VC11 Packages (Visual C++ 2012 Update 4)

The two files VSU4\vcredist_x86.exe and VSU4\vcredist_x64.exe to be download are on the same page: <http://www.microsoft.com/en-us/download/details.aspx?id=30679>

-- VC13 Packages] (Visual C++ 2013)

The two files VSU4\vcredist_x86.exe and VSU4\vcredist_x64.exe to be download are on the same page: <https://www.microsoft.com/en-us/download/details.aspx?id=40784>

-- VC14 Packages (Visual C++ 2015 Update 3)

The two files vcredist_x86.exe and vcredist_x64.exe to be download are on the same page: <http://www.microsoft.com/fr-fr/download/details.aspx?id=53840>

If you have a 64-bit Windows, you must install both 32 and 64bit versions, even if you do not use Wampserver 64 bit.

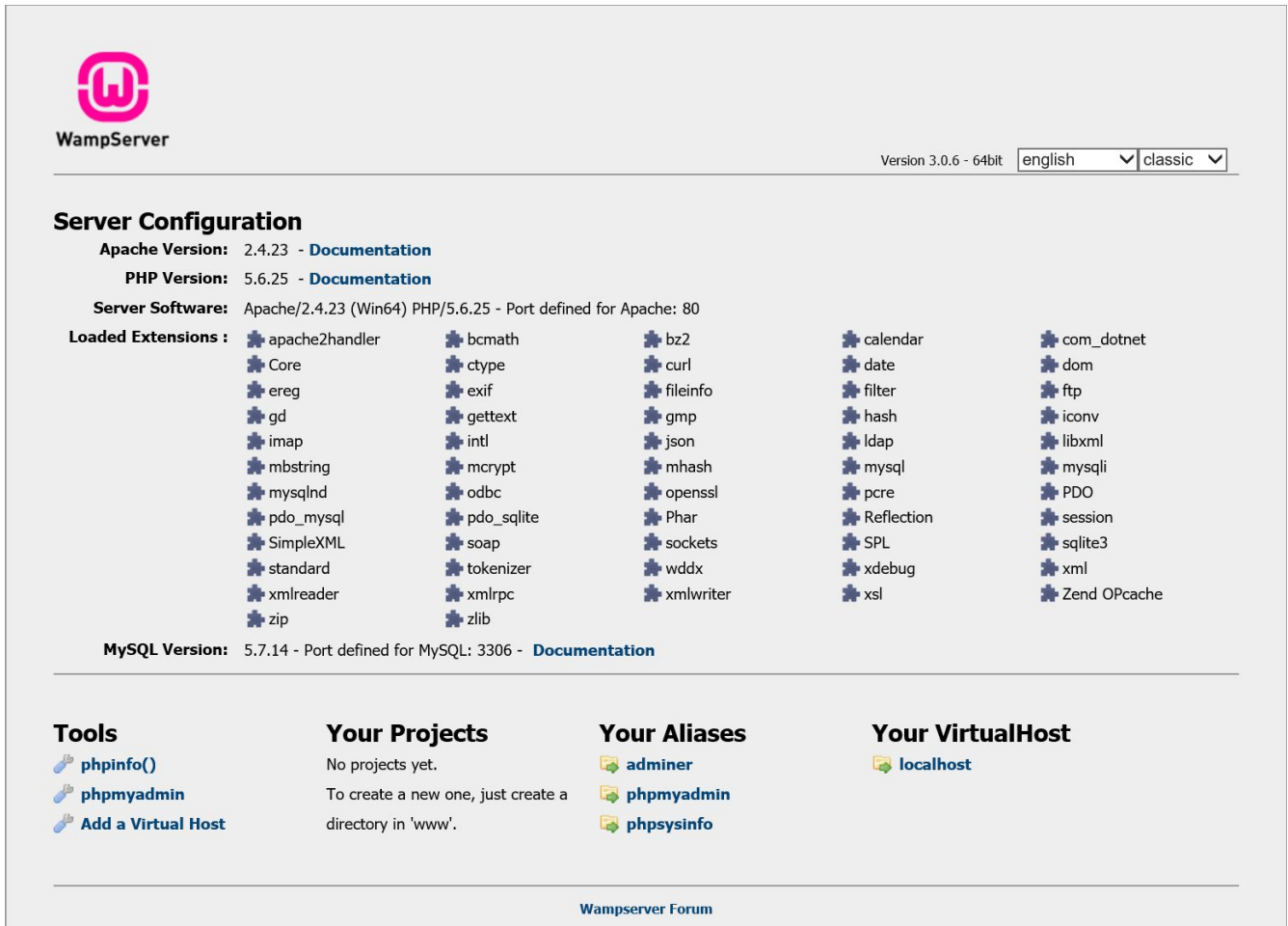
4. Once the former has been installed you can continue through the installer by choosing next. Choose the install directory wisely as you will have to go here frequently during the setup. For this guide I have left it at "C:/wampserver" and will be referred to as installation directory throughout the rest of the guide. (The installer will also ask for what browser you're going to use. This will be your way of connecting to localhost for this example I will use Internet Explorer (iexplore.exe).)

Setting up WAMPServer

1. Navigate to your WAMP server installation directory and open "wampmanager.exe".
2. Download the SimpleRisk software at "<https://www.simplerisk.com/download>" (you will need both the WEB BUNDLE and the INSTALLER files.)
3. Extract the downloaded files into a place you will be able to find easily for this example I

have extracted the WEB BUNDLE into “C:/SimpleRisk” then take the installer folder and extract it into “C:/SimpleRisk” creating “C:/SimpleRisk/installer”

4. While wampmanager is running navigate to “localhost/” in your browser chosen during installation. This page should look like the following.



The screenshot displays the WampServer 3.0.6 - 64bit interface. At the top left is the WampServer logo. To the right of the logo, the version "Version 3.0.6 - 64bit" is shown, followed by two dropdown menus set to "english" and "classic". Below this is the "Server Configuration" section. It lists the Apache Version as 2.4.23 and the PHP Version as 5.6.25, both with links to documentation. The server software is identified as Apache/2.4.23 (Win64) PHP/5.6.25, with the port defined for Apache as 80. A section titled "Loaded Extensions" lists various PHP extensions such as apache2handler, Core, ereg, gd, imap, mbstring, mysqlnd, pdo_mysql, SimpleXML, standard, xmlreader, zip, bcmath, ctype, exif, gettext, intl, mcrypt, odbc, pdo_sqlite, soap, tokenizer, xmlrpc, zlib, bz2, curl, fileinfo, gmp, json, mhash, openssl, Phar, sockets, wddx, xmlwriter, calendar, date, filter, hash, ldap, mysql, pcre, Reflection, SPL, xdebug, xsl, com_dotnet, dom, ftp, iconv, libxml, mysqli, PDO, session, sqlite3, xml, and Zend OPcache. Below the extensions is the MySQL Version: 5.7.14 - Port defined for MySQL: 3306, also with a documentation link. The bottom section is divided into four columns: "Tools" (with links to phpinfo(), phpmyadmin, and Add a Virtual Host), "Your Projects" (indicating no projects yet and how to create one), "Your Aliases" (listing adminer, phpmyadmin, and phpsysinfo), and "Your VirtualHost" (listing localhost). At the very bottom, there is a link to the Wampserver Forum.

5. At the far bottom left of the page choose “add a VirtualHost”

6. You will be on a page for configuring the virtualhost the first dialogue should contain what you want to call the virtual host in this case we call it simplerisk if you are going to be running the server on a local network and wish the other system to have access enter an IP in the second dialogue of where you’d like the virtual host to be found at. The third dialogue box should contain the file path to the simplerisk web bundle we downloaded earlier. Once filled out properly it should look something like this.



Add a VirtualHost - Back to homepage

• Version 3.0.6 - 64bit english

Apache Virtual Hosts `c:/wamp64/bin/apache/apache2.4.23/conf/extra/httpd-vhosts.conf`

VirtualHost already defined:

ServerName : localhost - Directory : c:/wamp64/www

Windows hosts `C:\WINDOWS\system32\drivers\etc\hosts`

Name of the **Virtual Host** No diacritical characters (éçñ) - No space - No underscore(_) **Required**

simplerisk

If you want to use VirtualHost by IP: **local IP** 127.x.y.z **Optional**

Complete absolute **path** of the VirtualHost **folder** Examples: C:/wamp/www/projet/ or E:/www/site1/ **Required**

C:/SimpleRisk/

Start the creation of the VirtualHost (May take a while...)

7. The next step is we need to adjust the virtual host we just created to allow for the SimpleRisk api to function properly. (This is required even if you are not using the API Extra.) To edit the virtual host right-click the WAMP server system tray icon, then choose Apache, inside you will find httpd-vhosts.conf open it. Once open you will need to match your simplerisk virtual host to match the example below. (Note: Setting a "ServerAlias" and changing "Require Local" to "Require all granted" are only necessary if your intend to access your SimpleRisk instance from outside the local network. You will also have to left-click WAMP manager in the task bar and click "Put Online" at the bottom to open the virtual host to the public.) Example:

```
<VirtualHost *:80>
```

```
    ServerName simplerisk
```

```
    DocumentRoot "c:/wamp64/www/simplerisk"
```

```
    <Directory "c:/wamp64/www/simplerisk/">
```

```
        Options +Indexes +Includes +FollowSymLinks +MultiViews
```

```
        AllowOverride All
```

```
        allow from all
```

```
    </Directory>
```

</VirtualHost>

8. Next we need to change the thread stack size to do this open the httpd.conf by left-clicking the wamp task tray icon selecting the apache tree and finally clicking httpd.conf. Now at the very bottom of this text file add the following:

```
<IfModule mpm_winnt_module>
    ThreadStackSize 8388608
</IfModule>
```

9. The last step in setting up WAMP for SimpleRisk will be to change the PHP version to 7.3. Left click the wamp task tray icon and select PHP then Version and lastly 7.3.1.

Accessing Simple Risk and Installing Database

1. Restart all WAMP services by finding the green W in your task tray and left-clicking and selecting “restart all services”. You should be able to now go into your browser when it completes restarting and type “/simplerisk” you should be taken to a page letting you know simplerisk cannot communicate with the database. Looks something like this.

SimpleRisk is unable to communicate with the database. You should double-check your settings in the config.php file. If the problem persists, you can try manually connecting to the database using the command '`mysql -h <hostname> -u <username> -p`' and specifying the password when prompted. If the issue persists, contact support and provide a copy of any relevant messages from your web server's error log.

(!) Fatal error: Call to a member function prepare() on null in C:\SimpleRisk\includes\authenticate.php on line 869				
Call Stack				
#	Time	Memory	Function	Location
1	0.0003	279944	{main}()	...\index.php:0
2	0.0151	4334128	session_start ()	...\index.php:39
3	0.0151	4334400	sess_open()	...\index.php:39
4	0.0151	4334568	sess_gc()	...\authenticate.php:747

2. To install the database we first must set a password on the mysql database since WAMP by default leaves this blank which simplerisk will not allow for an unsecured database. Left click the wampserver manager task tray icon the green W and select MySql then MySql Console.
 3. It will ask for the password leave blank and hit enter then type the following commands in this order
 - 3a. Type "use mysql;"
 - 3b. Type "set password for 'root'@'localhost' = password('<yourpassword>');"
(if using server by ip substitute step for "set password for 'root'@'<chosenIP>' = password('<yourpassword>');
- This should look like the following.

```
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 5
Server version: 5.7.14 MySQL Community Server (GPL)

Copyright (c) 2000, 2016, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use mysql
Database changed
mysql> set password for 'root'@'localhost' = password('testpassword');
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql>
```

4. One last step of preparation before we install the database will be to disable strict mode.

Navigate to the following directory in the wamp install should be something like "C:\wamp64\bin\mysql\mysql5.7.14". Open My.ini in a text editor of choice. Scroll down until you find the code that resembles the screenshot below and remove the ";" before the command "sql-mode=". Now edit this line to read:

sql-mode="NO_ENGINE_SUBSTITUTION"

Save and close the text file. Restart all service through the WAMP task bar icon. An example is displayed below of the My.ini.

```
54
55 ; The default storage engine that will be used when create new tables
56 default-storage-engine=MYISAM
57 ; New for MySQL 5.6 default_tmp_storage_engine if skip-innodb enable
58 ; default_tmp_storage_engine=MYISAM
59
60 ;To avoid warning messages
61 secure_file_priv="c:/wamp64/tmp"
62 skip-ssl
63
64 explicit_defaults_for_timestamp=true
65
66 ; Set the SQL mode to strict
67 ;sql-mode=""
68 sql-mode="NO_ENGINE_SUBSTITUTION"
69
70 ; Don't listen on a TCP/IP port at all. This can be a security enhancement,
71 ; if all processes that need to connect to mysqld run on the same host.
72 ; All interaction with mysqld must be made via Unix sockets or named pipes.
73 ; Note that using this option without enabling named pipes on Windows
74 ; (via the "enable-named-pipe" option) will render mysqld useless!
75 ;
```

5. In your chosen browser navigate to "<http://simplerisk/install/>" this should look like the picture shown below.

SimpleRisk Installer - Health Check

PHP Version

✔ Detected PHP >= 5.5 which should function properly for SimpleRisk.

SimpleRisk Version

✔ The SimpleRisk database installer version (20180104-001) matches the SimpleRisk application version (20180104-001).

Connectivity

✔ SimpleRisk connected to https://register.simplerisk.com.

✔ SimpleRisk connected to https://services.simplerisk.com.

✔ SimpleRisk connected to https://updates.simplerisk.com.

✔ SimpleRisk connected to https://vfeed.simplerisk.com.

PHP Extensions

✔ The PHP "mysql" extension is loaded.

✔ The PHP "pdo" extension is loaded.

✔ The PHP "pdo_mysql" extension is loaded.

✔ The PHP "mcrypt" extension is loaded.

✔ The PHP "json" extension is loaded.

✔ The PHP "phar" extension is loaded.

✔ The PHP "zlib" extension is loaded.

✔ The PHP "mbstring" extension is loaded.

✔ The PHP "ldap" extension is loaded.

File and Directory Permissions

✔ The SimpleRisk directory (C:\wamp64\www\simplerisk) is writeable by the web user.

If everything looks alright with the health check above, click "CONTINUE" to proceed with the installation.

CONTINUE

This page will show if any of the most common issues are present in your environment. If everything looks good here you may hit continue at the bottom.

You will now be taken to the database connection stage of the install. This is where you can edit how SimpleRisk connects to your database. For a simple setup and for our demonstration the only thing you should need to fill out on this page is the MySQL "Database Pass:" field, once entered you may hit the "Validate Database Credentials" button and it will ensure SimpleRisk is able to make a connection to the database to setup the SimpleRisk user with the least privileged required for the program to function. An example of this page is posted below.

SimpleRisk Installer - Database Check

Enter your database information to proceed with SimpleRisk install:

Database Connection Information

Database IP/Host: localhost

Database Port: 3306

Database User: root

Database Pass:

VALIDATE DATABASE CREDENTIALS

6.

Now that you have setup the SimpleRisk database connection your last step is to setup the SimpleRisk install information and the SimpleRisk configuration information, you do not have to enter or change anything on this page for a standard install. The most important thing to note on this page is that you have 2 checks at the top notifying you that SimpleRisk was able to connect to the database and that STRICT_TRANS_TABLES is not enabled. If everything looks correct you may click the install button. An example of this page is posted below.

The screenshot shows a dark-themed web interface for SimpleRisk installation. At the top, two green checkmarks indicate successful database connection and verification of the STRICT_TRANS_TABLES setting. Below this, a section titled 'SimpleRisk Installation Information' contains four input fields: 'SimpleRisk Host' (localhost), 'SimpleRisk Database' (simplerisk), 'SimpleRisk User' (simplerisk), and 'SimpleRisk Pass' (masked with dots). To the right of the last three fields are explanatory notes: '<== Default SimpleRisk Database Name', '<== Default SimpleRisk Username', and '<== Automatically Generated Random Password'. A second section, 'SimpleRisk Configuration Information', follows with six more fields: 'Database Schema' (Default - English), 'Session Last Activity Timeout' (3600), 'Session Renegotiation Timeout' (600), 'Use Database for Sessions' (true), 'Enable Content Security Policy' (false), and 'Default Timezone' (America/Chicago). All these fields are dropdown menus or text inputs. At the bottom left, there is a grey button labeled 'INSTALL'.

Successfully connected to the database.
Verified that STRICT_TRANS_TABLES is not enabled for MySQL.

Enter your database information to proceed with SimpleRisk install:

SimpleRisk Installation Information

SimpleRisk Host: localhost

SimpleRisk Database: simplerisk <== Default SimpleRisk Database Name

SimpleRisk User: simplerisk <== Default SimpleRisk Username

SimpleRisk Pass: <== Automatically Generated Random Password

SimpleRisk Configuration Information

Database Schema: Default - English ▼

Session Last Activity Timeout: 3600

Session Renegotiation Timeout: 600

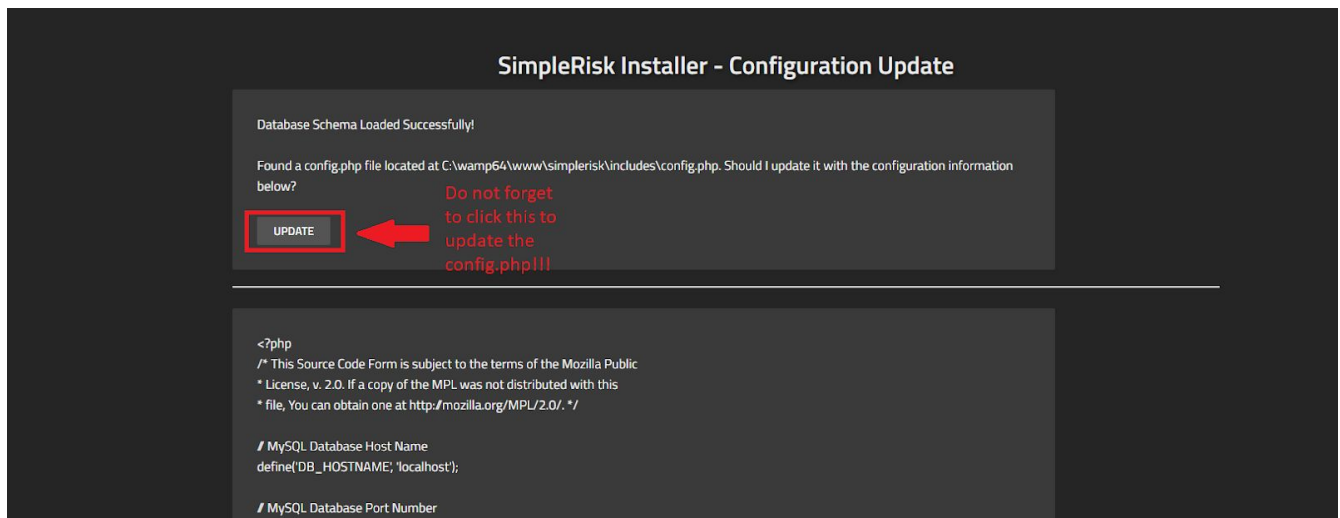
Use Database for Sessions: true ▼

Enable Content Security Policy: false ▼

Default Timezone: America/Chicago ▼

INSTALL

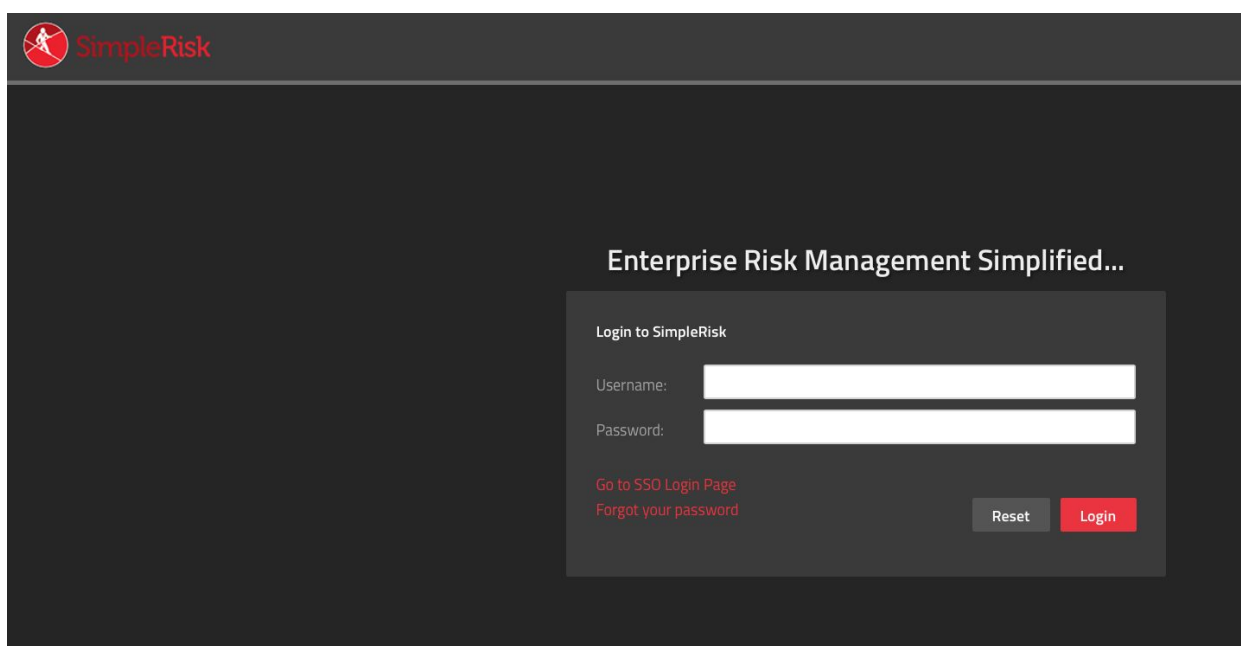
If everything was installed correctly you will be taken to a page that looks like the image below.



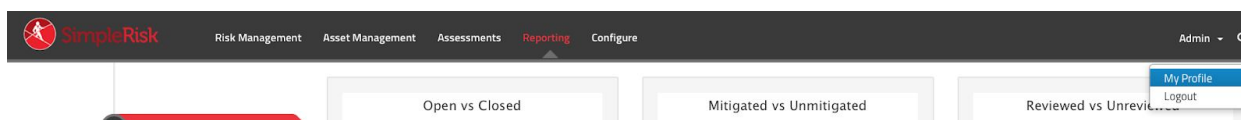
Your final step for setting up the database will be to click the update button and you will have completed your SimpleRisk installation. Next we will cover logging in to your instance.

Logging in to SimpleRisk

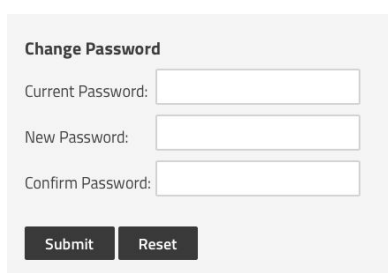
You should now have performed all of the steps you need to for SimpleRisk to be up and running. Now is the moment of truth where we hopefully get to see if all of your hard work paid off. You now need to point your web browser to the URL where SimpleRisk would be installed. If you followed the optional instructions, then it should be located at <http://simplerisk/>. You will know that you've got the right page when you see something like this:



Enter username “admin” and password “admin” to get started. Then, select the “Admin” dropdown at the top right and click on “My Profile”.



Enter your current password as “admin” and place a new long and randomly generated password into the “New Password” and “Confirm Password” fields. Then click “Submit”.

The image shows a "Change Password" form. It has three input fields: "Current Password:", "New Password:", and "Confirm Password:". At the bottom are "Submit" and "Reset" buttons.

You should receive a message saying that your password was updated successfully. If so, then this is your new “admin” password for SimpleRisk. If you received a message saying that “The password entered does not adhere to the password policy”, you can change the policy by selecting “Configure” from the menu at the top followed by “User Management” on the left side. You will see a “Password Policy” section at the bottom of the page where you can change the

policy and try changing your password again.

Registering SimpleRisk

This step is completely optional, but without it upgrades of SimpleRisk will require manual downloads of the new version, backing up your configuration file, extracting the new files, restoring the configuration file, and a database upgrade. It sounds like more effort than it really is, but we've made the process far simpler if you're willing to tell us who you are. To register your SimpleRisk instance, select "Configure" from the menu at the top followed by "Register & Upgrade" from the menu at the left.

The screenshot shows the SimpleRisk web application interface. At the top is a dark navigation bar with the SimpleRisk logo on the left and a menu on the right containing 'Risk Management', 'Asset Management', 'Assessments', 'Reporting', 'Configure' (highlighted in red), and 'Admin' with a search icon. On the left side, a vertical sidebar contains a list of configuration options, each with a circular icon: 'Configure Risk Formula', 'Configure Review Settings', 'Add and Remove Values', 'User Management', 'Redefine Naming Conventions', 'Asset Valuation', 'File Upload Settings', 'Mail Settings', 'Delete Risks', 'Audit Trail', 'Extras', 'Announcements', 'Register & Upgrade' (highlighted with a red arrow), and 'About'. The main content area is divided into several sections. The top section is titled 'Register SimpleRisk' and contains a paragraph explaining the benefits of registration, followed by a 'Disable Registration Notice' button. Below this is an 'Instance ID:' label. The middle section is titled 'Registration Information' and contains a form with five input fields: 'Full Name:', 'Company:', 'Job Title:', 'Phone:', and 'E-mail Address:'. A red 'Register' button is positioned below the form. To the right of the registration form is a box titled 'Upgrade SimpleRisk' with the text 'Please register in order to be able to use the easy upgrade feature.' At the bottom of the page, a light gray banner contains the text 'Please register in order to be able to use the easy upgrade feature.'

Enter your information and select the "Register" button. This will create a unique Instance ID for your SimpleRisk instance and download the Upgrade Extra which enables functionality for one-click backups and upgrades. If you run into issues with the registration process, we recommend that you check to ensure that the "simplerisk" directory and its sub-directories are writeable by the www-data user (or whatever user Apache is running as).

**** This completes your installation of SimpleRisk ****

SimpleRisk Paid Support and Extras

Everything that you've seen up to this point is completely free for you to install and use, forever. That said, we offer a number of ways for you to enhance your SimpleRisk instance with even more functionality. If you like what you see, and find it useful, please consider purchasing one of our inexpensive Paid Support plans or Extra functionality so that we can continue to offer you the best open source risk management tool available. Thank you!