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 Server 2012 R2 using WAMP Server. This guide will from here on out be speaking of setup and installation on this platform.

Installing WAMP

Before you begin you will need to ensure IIS is disabled. To check you will need to open Server Manager then at the top right click manage select your role and click next until you make it to the features section, in the list in the middle you will see IIS Hostable Web Core. You want the checkbox next to IIS to be empty. Once you've ensured IIS is disabled you may continue to the steps below.

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) 3.1.0" or "WAMP SERVER 43 BITS (X86) 3.1.0"

3.   Open the file directory containing the downloaded installer and run it. Read the installer carefully as there are some prerequisites for installation of WAMP. I will list the links to the downloads below, these are all Microsoft for Visual C++ Redistributable packages. You will need both the x86 (32 bit) and x64 (64 bit) if you are on a 64 bit OS, and only 32 bit if you are on a 32 bit OS.

https://support.microsoft.com/en-us/help/3179560/update-for-visual-c-2013-and-visual-c-redistributable-package

https://www.microsoft.com/en-us/download/confirmation.aspx?id=30679

https://www.microsoft.com/en-us/download/details.aspx?id=52685

https://www.microsoft.com/en-us/download/confirmation.aspx?id=52685

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 only need the WEB BUNDLE, you will need to click the manual install button at the top right to see it.)

3.   Extract the downloaded files into the pre-configured directory in your WAMP server directory (C:\wamp64\www), for this example I have extracted the WEB BUNDLE into "C:\wamp64\www\" then take the installer folder and extract it into "C:\wamp64\www\SimpleRisk\" creating "C:\wamp64\www\SimpleRisk\installer\"

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

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

WampServer

- 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 (éçëñ) - 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 left-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. One of the last steps 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 or depending on your installed version PHP > 7.1.

10. Lastly we need to make some adjustments to the PHP.ini. Left-Click the WAMP task tray icon and select the PHP tree and within you will see PHP.ini click it and it should open in your default text editor. Next search (ctrl+f) for "memory_limit" update this value to 256M.
Now find "max_input_vars" make sure it is not commented out with a ";" if so remove the semi-colon then set the value to "3000". Save the file and you are on to the next steps.

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)

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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.   Navigate to the following directory in the wamp install should be something like "C:\wamp64\bin\mysql\mysql5.7.14" depending on MySQL version used. 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. As of SimpleRisk release 20220401-001 the database installer is now included with the core download and no separate download is required. To access the installer to complete the installation navigate to http://simplerisk in your browser. If you have followed all steps up to this point correctly you should see the following.

Click "continue" to and you will be met with a healthcheck page. Please note we should see all green all the way down the list in Ubuntu installations. As long as everything is green you may proceed and click continue.

You should now see the database configuration page. You will be required to enter the credentials for the MySQL root user which was configured in an earlier step. An example of this page is shown below.

Please note before continuing if you are setting up with an MySQL instance that is not local to the web server you will need to configure the Database IP/Hostname and port. In basic installations this step is not required and these values can be left as their defaults. Click "continue" once the credentials to access the MySQL server have been configured. You will now be able to configure the details of the SimpleRisk database. In a general installation all of these can be left default.

We have now arrived at the final setup screen as seen above. Here you will configure your admin account and assign the details you will use to login to SimpleRisk with for that admin account. Please note that the use of a valid email address is highly recommended as this will be where password recovery emails will be sent. You are also given the opportunity to opt into our mailing list by checking the box at the bottom. In this you will receive product release updates and educational content related to the SimpleRisk platform. Once you see the image below in your browser you are finished and may click the "Go to SimpleRisk" button to login and begin using the application.
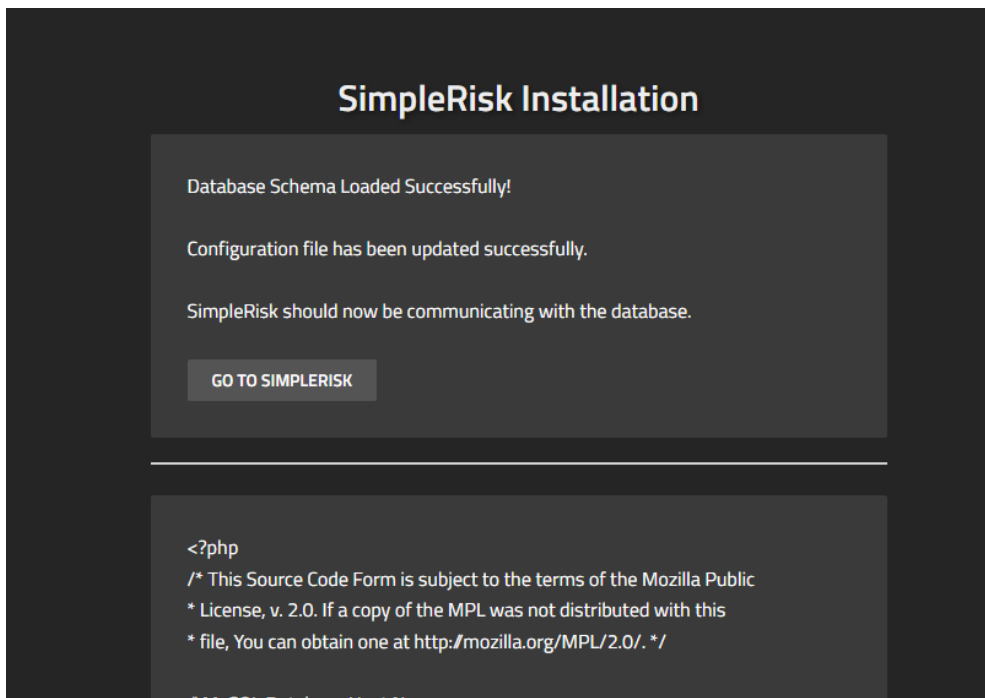
Logging in to SimpleRisk

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:
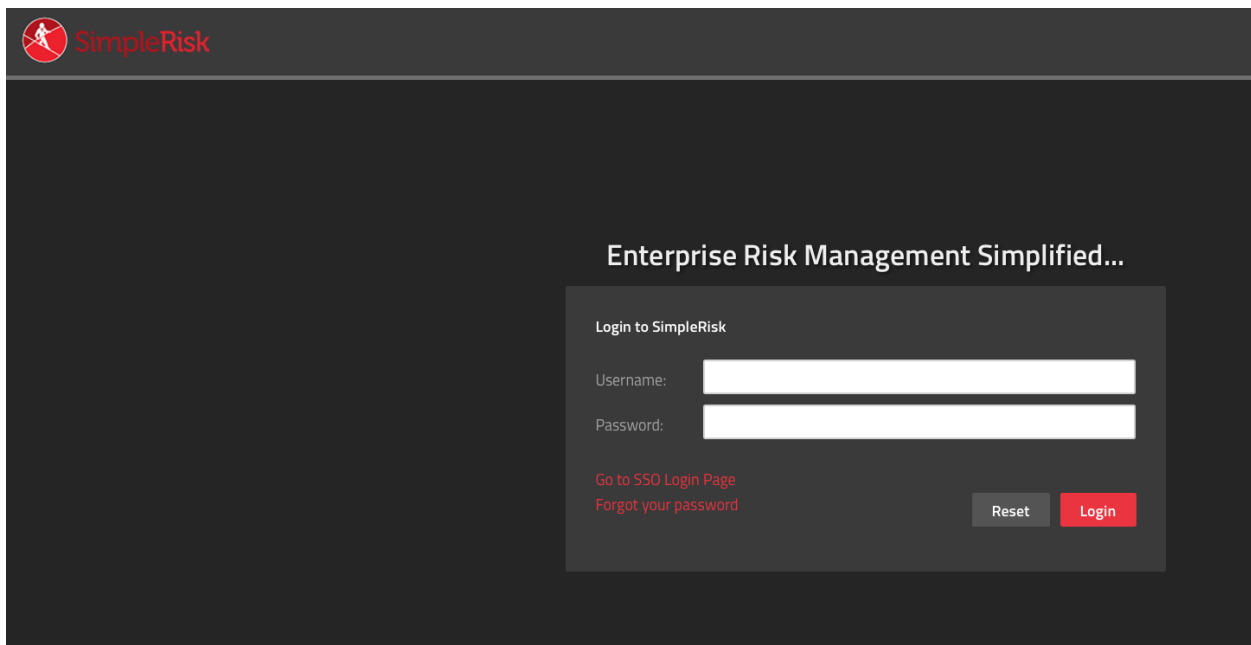
Enter username "admin" and password "admin" to get started. Then, select the "Admin" dropdown at the top right and click on "My Profile".
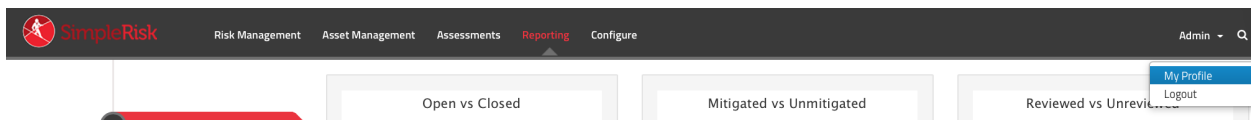
Enter your current password as "admin" and place a new long and randomly generated password into the "New Password" and "Confirm Password" fields. Then click "Submit".

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.

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!