OEOS Installation Manual

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OEOS v0.5.0
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Toby McDonald, Lead Developer
Tfinnm Development
Toby_McDonald@email.com

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Configuring the Server

Hardware requirements will depend on the HTTP server used and number of units in service. In general you should refer to the HTTP server's hardware requirements, however, you should generally budget for ~300 B/s of bandwidth per unit, although ambulances and command units may use as much as 1kB/s or more. The server will also need to be online 24/7, so a reliable internet connection is critical, and an uninterruptable power supply is highly recommended.

In order for OEOS to function, the server requires three additional pieces of software, and HTTP server, such as NGINX or Apache HTTPD, PHP, and an SQL server, such as MySQL. There are free prepackaged solutions, such as XAMPP, LAMP, or WAMP, which provide all these tools in a mostly preconfigured way. For departments and agencies without existing web infrastructure or technical knowledge, these may be a preferred solution as they simplify the process of installation and configuration.

OEOS is developed on a WAMP server using MySQL 5.7.31, Apache HTTPD 2.4.46, and PHP 7.3.21.

Once you have these working, there will be some additional configuration required. Firstly, you will need to configure your HTTP server to use HTTP/2 with APLN, which will require SSL and a valid certificate. If you are using a recent version of NGINX, this should be preconfigured, otherwise you should follow the instructions listed on the server's documentation. For Apache, this can be found here: HTTP/2 guide - Apache HTTP Server Version 2.4. You may also be able to find other, easier to follow guides else where on the internet for your specific server.

You may also need to port forward from your router to your server to ensure that client devices (such as your MDTs) can connect from outside your network. This process will varying by router manufacturer but should be extensively documented by the manufacturer. The ports you need to forward will vary by HTTP server and configuration, but they are generally 80 and 443.

You will need to enable the event scheduler on your SQL server. This will vary by SQL server, but for MySQL, you can append `event-scheduler=on` to the [mysqld] section of my.ini.

Finally, error_reporting should be set to E_Error in php.ini to prevent error message from causing further problems if something goes wrong. OEOS' built-in error handler will deal with most problems in a better way, and E_Error will still trigger PHP's built in error handler for any errors severe enough to cause problems.

Installing OEOS

Once your server is configured and OEOS has been downloaded, move all the files and folders in OEOS into the HTTP Server's root directory, this typically ends in either /www/ or /www/html/.

Once OEOS has been moved into this folder, open db.php and enter the login details for your SQL server as shown below.

```php
<?php
$db_server = "localhost";
$db_user = "Your Username Goes Here";
$db_password = "Your Password Goes Here";
$db_db = "oeos";
?>
```

If the version of OEOS you downloaded included the automatic installer, make sure your HTTP server is started, then type localhost into the address bar in a web browser on the server or type the server's IP address into a browser on another computer on the network and OEOS will finish the install. The installer will also allow you to configure the default admin account. After the installer is complete, delete Installer.php and OEOS.sql.

If you do not have the installer, run OEOS.sql on your SQL server. Once finished, delete OEOS.sql. This will create a default admin user account with a username of admin and a password of admin, as well as a unit account with the same details. For security, we recommend creating a new admin account once you log in and deleting this default one, but at the very least you should change the password if you are going to continue using the default account.

Customizing OEOS

If you use the OEOS installer, all customization is done through a convenient UI in the installer, simply follow the on-screen instructions and you will be able to do all typical customization without needing any of the following steps. If you are installing OEOS without the installer, or if you want to change the customization after OEOS has been installed, the following steps will outline how to customize OEOS.

Changing the Agency/Region Name

The Agency/Region name is the name displayed near the OEOS logo (shown below), and it typically used for the name of the city, county, agency, etc. managing the system.
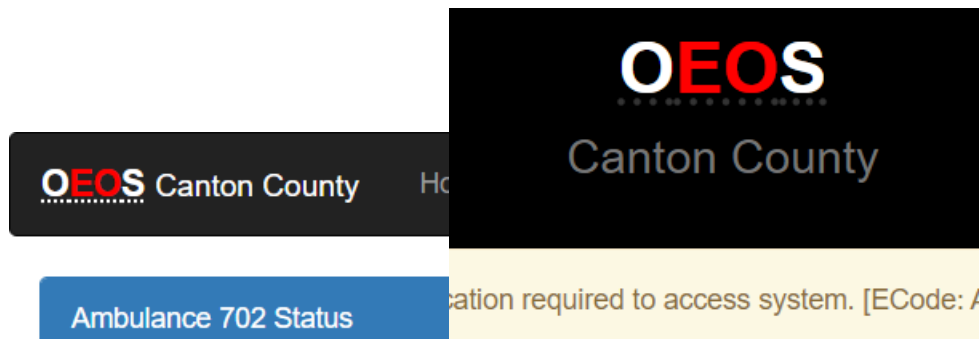

To change this, open Options.php, find the line starting with $name = " and ending with ";, and change the content between the quotes with the name you want displayed. It is very important that you do not remove the quotes or the semicolon.

```php
<?php
    $name = "Your name goes here";
```

Changing The Admin Contact Information

On many error pages, system administrator contact information will be displayed to the user.
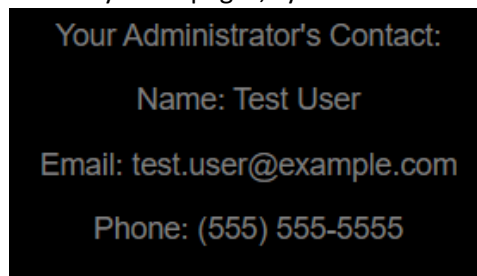
This contact information can be changed the same as the region name in Options.php.

```php
$adminname = "Test User";
$adminemail = "test.user@example.com";
$adminphone = "(555) 555-5555";
```