



USHAHIDI GUIDE

A STEP-BY-STEP GUIDE ON HOW TO USE THE
USHAHIDI PLATFORM

Part I: Installing the Ushahidi Platform

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Ushahidi

The first Ushahidi platform was launched during Kenya's post-election violence in January 2008. Ushahidi means "witness" in Swahili. The Ushahidi platform is free and open source. The software allows individuals and groups to collaborate in creating live multi-media maps for all kinds of projects. For example, the Ushahidi platform has been used for projects focusing on local governance, environmental monitoring, public health mapping, human rights monitoring, citizen-based election observation, nonviolent protests, disaster response and crisis mapping.

We recently launched the second version of the Ushahidi platform (Ushahidi 2.0), which allows for the use of apps or plugins to further extend and customize the platform. We also added geometry mapping so you can map infrastructure or areas and not just dots.

This guide will give you a step-by-step overview on how to set up your own Ushahidi map and how to make full use of all the features that the Ushahidi software offers. If you'd like to learn more, we have additional resources available online for you:

<http://forums.ushahidi.com>

<http://community.ushahidi.com>

<http://wiki.ushahidi.com/doku.php>

<http://www.ushahidi.com/get-involved/resources>

This guide will be updated based on the feedback we receive for from you. So please do get in touch with any suggestions or questions you may have. Finally, a big thank you to Anahi Ayala Iacucci for authoring this much needed guide for the community.

About this Guide

This is a guide on how to use the Ushahidi platform. Within, we will explain how to download and install the Ushahidi platform, review the platform's administrative capabilities, and briefly introduce the more advanced options for customizing and extending your deployment through plugins and themes. The guide will then introduce the main features of the Ushahidi platform, explaining all the tabs and functions that your users will interact with once your map is live on the web.

As we cover Ushahidi's administrative section we will explain how to manage the platform and will describe the different settings that users can use to can customize the platform, i.e. choosing the most appropriate base map for your project, syncing the platform with FrontlineSMS or other external systems for receiving and processing SMS messages, setting up the email address, and so on.

This guide is meant to be a comprehensive learning guide for brand new users of the Ushahidi platform as well as a reference for those who are more technically savvy or have used it in the past in an administrative capacity. That said, we have some recommendations on where to start in this book given your level of expertise. Note that the Ushahidi community is a very active community and that you can always find someone to help you out if you have any problem not mentioned in this guide. If you are looking for guidance or help, please see the following guides and join these dedicated Skype chat groups:

1. Channel for Deployers, Researchers and Non-Tech volunteers - Share your best practices & Tips List: <http://list.ushahidi.com/?1>
2. Ushahidi Developer Chat. 1. What you are working on 2. Any challenges? 3. What would you like to work on next?. List at: <http://list.ushahidi.com/>

- IF YOU ARE A USER GO TO SECTION 4. THE USER INTERACE
- IF YOU ARE AN ADMINISTRATOR AND WANT TO PROCESS MESSAGES COMING INTO YOUR PLATFORM GO TO SECTION 3. THE ADMINISTRATION SECTION
- IF YOU ARE AN ADMINISTRATOR AND WANT TO CUSTOMIZE YOUR PLATFORM OR CHANGE SETTINGS, GO TO SECTION 2. HOW TO CUSTOMIZE YOUR PLATFORM
- IF YOU HAVE ANY PROBLEM AND NEED SOME GUIDANCE OR HELP GO TO SECTION 2.5 GET HELP BOX

1. Installing the Ushahidi platform

If you've ever installed WordPress, Drupal, or another, popular, downloadable content management system (CMS) or blogging platform, installing Ushahidi will be a walk in the park. If not, not to worry; like many popular web applications available today, Ushahidi features an installer to walk you through the process.

While we'll be providing as much detail as possible with each step, this guide assumes you're comfortable with the following: what PHP and MySQL are, unzipping .zip files, connecting to a remote server via FTP, and setting permissions on directories and files on a remote server. If any of that didn't make sense, you may want to consult with a web developer or someone in the Ushahidi community that has done this before.

1.1 Server requirements

Before we get to downloading and installing the application, let's consider what's required on your server (or, more likely, the server owned by the hosting company you've purchased an account with) to run Ushahidi¹:

- PHP v5.2.3+
- MySQL v5.1+
- Apache v1.3+, Apache 2.0+, lighttpd, Microsoft IIS

These requirements are fairly standard to most modern, PHP-based web applications available today. Since both PHP and MySQL are freely available products, it's very likely your server meets these requirements.

Ushahidi will perform a check on your server to see if you have the right versions of PHP and MySQL during the installation process and deliver a warning in case of a problem. If you don't meet the requirements, you'll have to move to a different hosting provider or contact them to see if provided more updated versions is an option.

1.2 Downloading the application

There are 2 ways to download Ushahidi. The easiest is to visit the website, <http://ushahidi.com/downloads>, and download the complete application as a .ZIP file.

For the more tech-savvy, the source code is available on github.com, a popular, hosted version control system.

1.3 Uploading files & setting permissions

Once you downloaded the files, unzip them and upload them to the server. Once uploaded, you have to change the permissions on a few files and directories. If we don't do this, the Ushahidi installer will recognize this and remind you that this needs to be done during the first step of the installation process, so you may as well change them now.

¹ The "+" sign beside the version numbers means "this version or higher."

There are two ways to do this: a CHMOD command or using your FTP client. For the purposes of this guide and keeping it simple, we won't be getting into the more technical process of CHMOD commands. Let's consider what you can do with your FTP client.

Most FTP clients – such as Transmit or Cyberduck for OS X, WS FTP or FileZilla for Windows – allow you to set these permissions without needing to do so from the command line.

Here's an example of that. *Figure 2* is an example of using Transmit for OS X to set the permission on the same config.php as in the CHMOD example above. I'm able to use Command-I to get info on this file, the same as I'm able to do on the filesystem. In that window, you can see I'm able to check the boxes or enter the value of the level of permissions I want to grant on that file.

Most FTP clients provide similar functionality, either in the same way, or by right-clicking on the file or folder. If you don't see the option to set permissions in your preferred client check the documentation to see if it is a feature.

With that figured out, again, here are the files and folders that need full read/write/execute (777) permissions:

- application/config/config.php
- application/config
- application/cache
- application/logs
- media/uploads
- .htaccess

If this is still confusing, not to worry, but you should enlist the help of someone more technical to assist you with this process. The Ushahidi Skype chat, forums, and wiki are also available as resources to help you.

Once those are set, we're ready to go.

1.4 Installing the software

With the files uploaded and the permission set, you can start installing the application itself.

Begin by visiting your website, either at the "root" directory, subdirectory, or subdomain where you put the files (most likely the "root" directory, meaning you'll want to visit <http://yourdomain.org>. (Let's assume, for the purposes of this guide, that you are installing this into the root folder.)

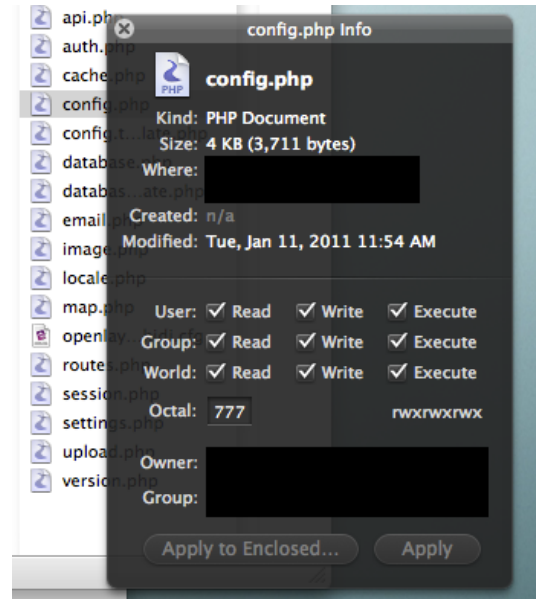


Figure 2. This is an example of using the Transmit FTP client for OS X to set the permissions of a particular file.

You'll be automatically redirected to the *installer* subdirectory. If all of the files were uploaded, you should see this (fig. 1):

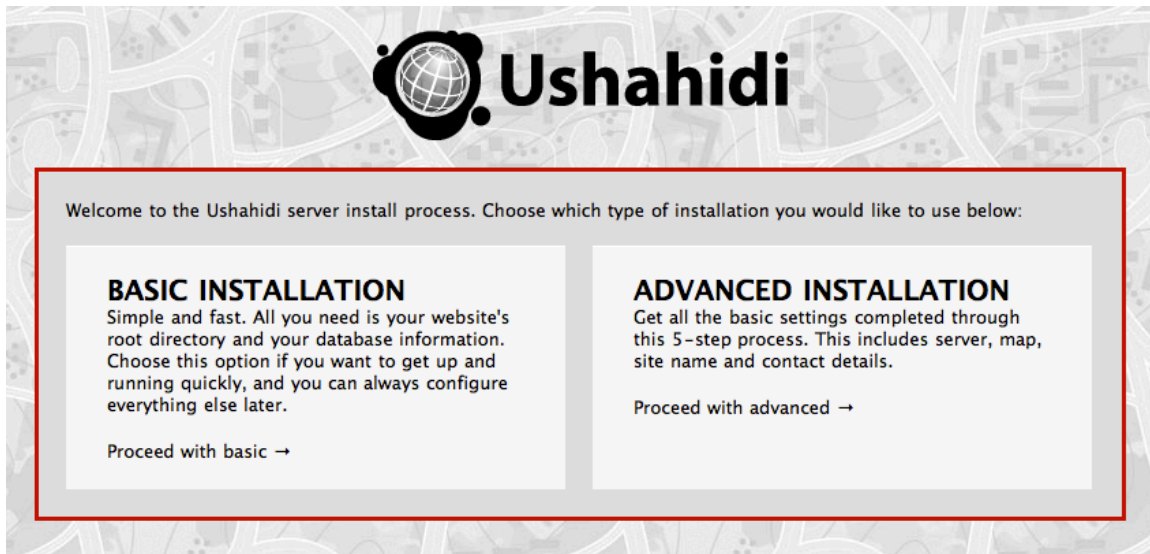


Fig. 1

You've got two options for installation: Basic and Advanced. The descriptions provided under each option describe the difference between the two; let's review those here.

Basic Installation

All you need is your website's root directory and your database information. Choose this option if you want to get up and running quickly; you can always configure everything else later.

Advanced Installation

Get all the basic settings completed through this 5-step process. This includes server, map, site name and contact details.

If you're familiar with Ushahidi or the installation process, basic will get you into the administration faster for configuration and setup. However, if this is your first time, advanced will help you make sure the basics are covered before getting into other settings like categories, SMS, etc. As we're assuming this is your first time, let's proceed with the *advanced* installation; all the parts of the *basic* installation are included within, anyhow.

Click the *Advanced installation* box and you'll be taken to the first screen in the installation process, describing what you'll need to begin. While those are listed for you on this first screen, let's break those down into what we need.

Database

1. Database name
2. Database username
3. Database password
4. Database host

Mail Server

1. Site alert email address
2. Mail Server Username
3. Mail Server Password
4. Mail Server Port
5. Mail Server Host

General

1. Site name & tagline
2. Site Email Address

6. Mail Server Type

Map

1. Map Provider
2. API Key

Database

Also before we proceed, you'll have wanted to setup a MySQL database for your website (Ushahidi will not do this for you). If you're unsure how to do this but using a fairly standard website hosting provider, you likely have access to cPanel or another GUI to help set this up, or other documentation to help.

General

The "Site Email Address" will be one that is publicly displayed on the website; something to take into consideration before you launch as you may want to create a new account for this.

Mail Server

This one can be tricky; more on this when we get to that screen.

Map

Ushahidi provides several options for "base layers" for the map displayed on your website – many options Google, Yahoo, and OpenStreetMap. Technically, you don't need a "Map Provider" to start but should you want to use Google Maps as your base layer, you'll need to obtain an API key from them.

Click on the Advanced Installation box to begin.

The first screen [Fig. 2] is for entering our database information. By now you'll want your database created and the login information handy, so enter that under "database name," "user name," and "password."



Fig. 2

There's a few other fields to take into account:

Base Path: As noted in the installer, this is automatically detected.

Database Host: Most of the time, this will be "localhost," which is why it is prefilled for you. If you're running on an more custom configured server, such as Amazon S3 or a private server, your database may be running somewhere else, meaning you'll want to replace localhost with the right domain. This was likely provided for you when you or someone on your team setup the database; contact your hosting provider if you're unsure.

Table Prefix: As noted in the installation instructions, if you're installing multiple Ushahidi instances from one database, you'll need to change the table prefix. However, this is highly discouraged; you should have one database per deployment. It's recommended you leave this field blank.

Once you have entered all of this information, click the *Continue* button to move on.

The next screen [Fig. 3] covers general information about the website. Your website name, tagline (or slogan), default language, and site email address are all straightforward.

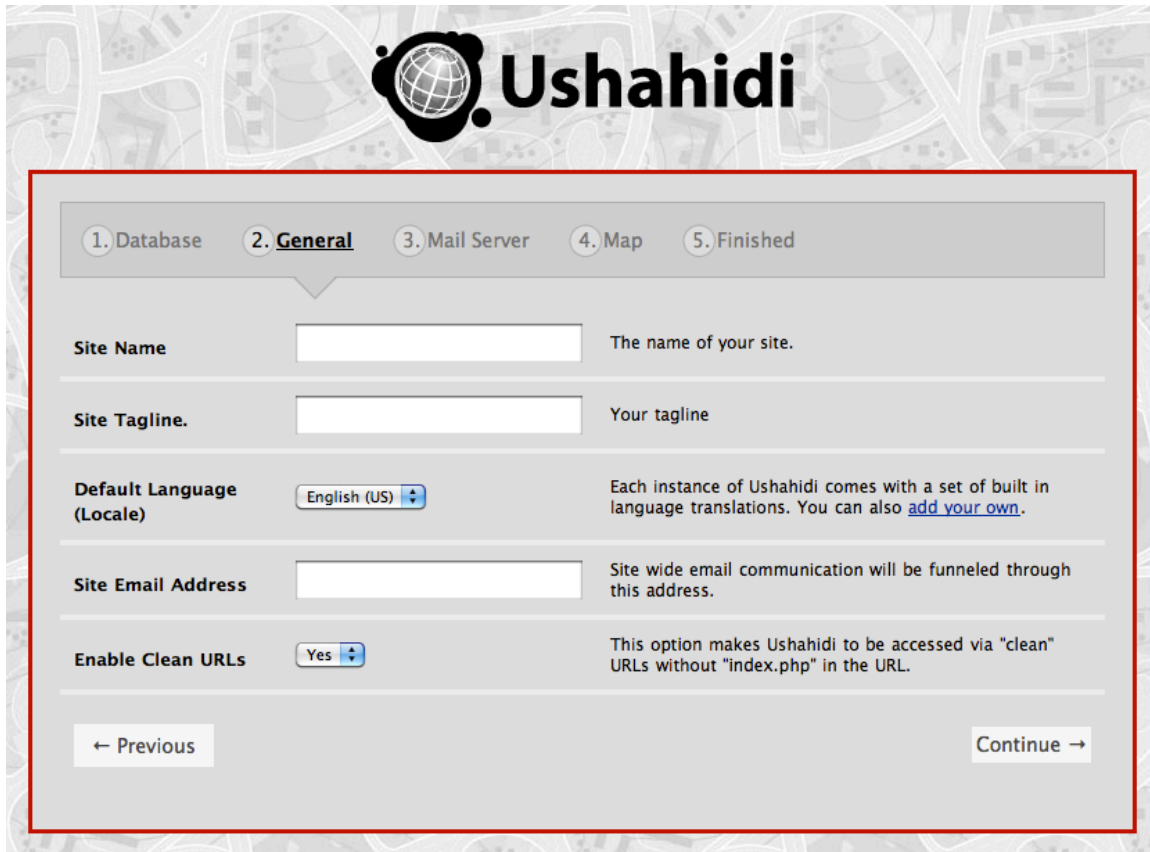


Fig. 3

Site email address: Keep in mind this will be the email address displayed on the website to accept reports, should you enable that functionality.

Clean URLs: What are “Clean URLs?” Clean URLs are URLs that do not display string information in the URL and show only the page and path. This is better explained with an example:

Without Clean URLs enabled, here’s what the URL for your about page (once we complete the installation) would look like:

`http://yourdomain.com/index.php?page=about`

With Clean URLs set to “YES,” your about page will look like this:

`http://yourdomain.com/index.php/about`

Clean URLs are preferred as it makes things clearer to the user and improves search engine optimization for your website. It’s recommended you keep this enabled.

Fill out these fields, click the *Continue* button again, and it's on to Step 3: configuring your mail server [Fig. 4].

Ushahidi

1. Database 2. General 3. **Mail Server** 4. Map 5. Finished

Site Alert Email Address When your site visitors sign up for email alerts, they will receive emails from this address. This email address does not have to be the same as the Site Email Address.

Mail Server Username If you're using Gmail, Hotmail, or Yahoo Mail, enter a full email address as a username.

Mail Server Password The password you normally use to login in to your email.

Mail Server Port Common Ports: 25, 110, 995 (Gmail POP3 SSL), 993 (Gmail IMAP SSL) .

Mail Server Host Examples: mail.yourwebsite.com, imap.gmail.com, pop.gmail.com.

Mail Server Type Internet Message Access Protocol (IMAP) or Post Office Protocol (POP). [What's the difference?](#)

Enable or disable SSL Some mail servers give you the option of using SSL when making a connection. Using SSL is recommended as it gives you an added level of security.

Fig. 4

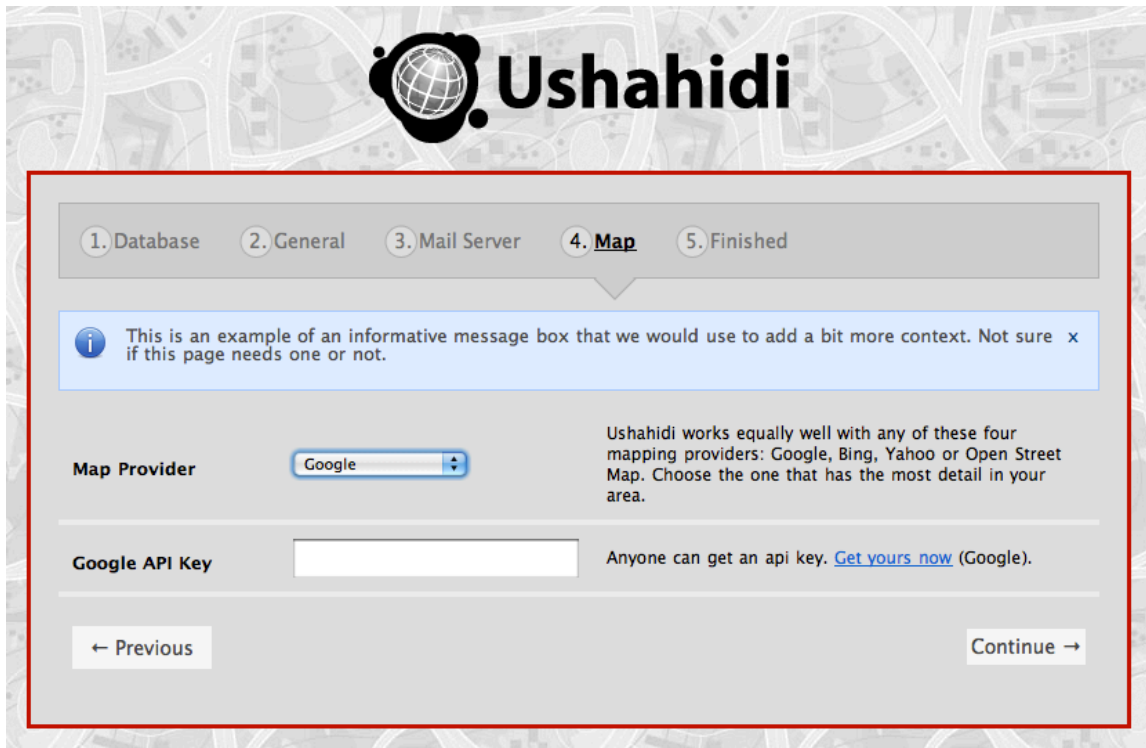
Setting up the mail server is important to receive reports via email as well as send out alerts to subscribed users and administrators. As mentioned, this can be tricky depending on your email provider.²

If you're able to use Gmail, Hotmail, or Yahoo, as your email provider (Gmail especially), that can simplify the process. Hints are provided alongside the installer to help you with what you should enter. Again, if you can use one of these, it can make this process much simpler.

If you're using an email address off your domain, you'll probably want to check the documentation, knowledgebase, or FAQ to figure out what the proper settings are for the "Mail Server Username," "Mail Server Port," and "Mail Server Host" fields.

² See section 2.2.4

Click the *Continue* button when you're ready, and it's on the last step to configure the map options [Fig. 5].



[Fig. 5]

The last step is, fortunately, the simplest. Choose the Map you would like – Google, Yahoo, or OpenStreetMap (OSM) – in the dropdown.

Because of the way Ushahidi is configured as well, even if you choose Yahoo or OSM, you'll need to enter a Google API key. Click the link beside that field to get one for your domain and enter in the value provided.

That's it – click the *Continue* button to finish up.



[Fig. 6]

You are done!

Follow the links provided to see your website, log in to the administration dashboard, or get right to the next important steps in setting up your website: further configuring the map settings³ and connecting your instance to an SMS server.⁴

Before you start exploring with your new instance, there's two last things you need to do. Now that the installer is complete, we need to set the permissions on `application/config/config.php` and `application/config/database.php` to 755. This is a critical step but not one Ushahidi will do for you. Not doing so opens up your deployment to a big security risk.

The second thing you'll want to do is delete the "installer" folder from your website's file system.

1.5 Upgrading

For the purposes of this guide, before we move into learning the application itself, at some point you're going to want to upgrade your Ushahidi deployment to keep up with minor security updates and all the cool new features.

The upgrade process begins with a crucial first step, one that's universal for upgrading any web application: *backup the application files and the database*. This is very important so that, should anything go wrong, you can restore your website to it's current state. We can't

³ See section 2.2.2

⁴ See section 2.2.3

fully stress how much you should do this before proceeding. While the Ushahidi team has put a lot of effort and testing into making sure this process goes smoothly, always plan for the worst.

Now that your website is backed up, step two is to download the newest version of the application from one of the two sources we described earlier: the ushahidi.com website (recommended) or from our repository on GitHub. Once you have that, just like with our first installation, unzip the files on your computer.

Next we have to upload these files to the server, but let's be careful not to overwrite files and directories we changed during the initial installation. Let's have a look at the complete application directory structure and review what we need to set aside while we upload the new files and folders.

Since the 2.0 release of Ushahidi, we've taken steps to remove most of the folders you'll will *not* want to replace during the upgrade process. These include the "plugins," "themes," and "media" folders.

There's two other files you'll want to either download to your computer or move to another part of the server: the `config.php` and `database.php` files within the `application/config/` folder.

That in mind, you'll want to replace the following files and folders (folders are listed in bold):

application

`favicon.ico`

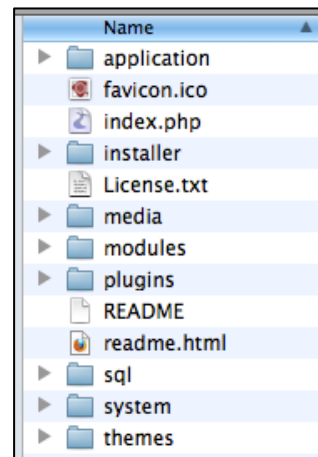
`index.php`

installer

modules

sql

system



Upload these folders and files from the unzipped application folder on your computer, replacing the folders and files currently on your system. Since you're replacing the files, we won't have to do anything with the permissions as we did with the initial installation. Once those are uploaded, move or upload the `config.php` and `database.php` files back to their place.

With all these files in place on the server, access your website's administration section to begin the upgrade process. This should only take a few moments, and you're ready to get back to running your website.