

## Using TileMill

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TileMill was once the major application that created MBTiles, but has since been discontinued by its creator, [Mapbox](#). It still gets upkeep from a community of developers, and you can learn more at the [TileMill community website](#). TileMill can even be used to customize maps with markings, indicators, colors, and more features that you may need for your map.

The current version of TileMill has some minor bugs and issues, so we recommend using the [HOT Export Tool](#) instead. If you would still like to give TileMill a shot, check out the information below.

### Installation

The info on installing TileMill is [at this link](#). If you are comfortable installing from the command prompt or terminal window, do so from there to install the latest version. Otherwise, there are easy installation files for older versions of the software on that page under *Platform specific instructions*.

### Creating maps and MBTiles

Once you have installed and opened TileMill, follow these steps:

1. Click and open a project, or click *New Project*, giving the project a filename, and any other details you might like.
2. Design and style your map, adding layers and other details. Check out the [TileMill documentation](#) to learn more.
3. When you are done creating a map, on the top-right, select the dropdown menu for *Export*, and select *MBTiles*.
4. On the left, select the area that you would like to make part of the map. The smaller the area, the wider the zoom you can have without having a massive file size.
5. For *Zoom*, create a good range. 0 has the map appear when zoomed all the way out, and 22 maximizes zoom-in. Don't make the range too large, or the file will not be able to export within a reasonable amount of time (a full 0-22 range can supposedly take years to export with TileMill). If you need a certain zoom range, but it will create a file size that is too large, try selecting a smaller area.
6. Click a point on the map that will be the center.
7. Give the file a good *Filename*.
8. Click the *Export* button on the bottom-right.
9. If the *View exports* pane does not appear, click on the *Export* dropdown again, and click *View exports*.
10. When the file completes downloading, click the *Save* button next to it.
11. Click the *Save MBTiles* button. Complete saving the file.

Troubleshooting:

- If you ever get the alert *Error: Page not found*, simply click on *Projects* on the top-left, and re-open the project (personally, I often get this error in v0.10.1 on my Mac, but not my PC, but it is not much more than a nuisance than an actually serious problem).

## Example

This is a more advanced technique that you may not need. This is great if you need larger, more customized maps than the HOT Export Tool can provide. These steps will guide you through the basic creation and export of MBTiles. For details on creating more advanced maps, check out their [website](#). To see a couple examples of MBTiles created with TileMill, check out [this](#) or [this](#) file; they were created with TileMill v0.10.1 on Windows and MacOS.

1. Follow the link above to install TileMill.
2. Follow the steps above to create a map and export it to an MBTile. At step 2, follow [these steps](#) to add a layer of earthquake markers.
3. When the file completes saving, find it in the file explorer, and move it to your mobile device.
4. Move the file to a folder within the */SurveyCTO/layers/* folder.
5. Try using the layer within a form.