# [Nederlandstalige versie](https://docs.google.com/document/d/1pfySWSz-coegd_TmvVGcUaKzj4RBoG1KXNbveJThFJ0/edit#)

# Mapping for HOT using JOSM

Press **F12** for settings, then the remote control icon on the left.

Tick the box so remote control can work. JOSM is now listening for instructions.

Now press the “wall outlet” with the plug. You’ll want to install the following plugins:

* utilsplugin2
* buildings\_tools
* terracer
* Mapillary
* todo

Optional:

* Opening\_hours\_editor
* Wikipedia

Select Bing imagery under the Imagery menu item.

OpenStreetMap has 3 types of elements, *nodes, ways* and *relations*

* *Nodes* have coordinates and tags
* *Ways* consist of *nodes* and can have tags
* *Relations* can consist of *nodes, ways* or other *relations* as members and can have tags. The members can have roles.

There is one thing that may be hard to get used to in JOSM: if you want to ‘pan’, you have to use the right mouse button and drag. It will be second nature in no time, I promise :-)

The scroll wheel zooms in and out.

*It’s not a coincidence that the keys used in the next section, are all under your left hand.*

To select, use **‘s’**

To add a node, use **‘a’** and click using left mouse button. Move the mouse pointer and click again to draw a way. Press **‘s’**, when you are done. If you want to draw a closed way, you can click the first node again.

If such a closed way represents a building, you probably want to press **‘q’** to create 90 degree corners.

Don’t forget to add *building=yes* as a tag.

With buildings\_tools installed there is a more convenient way to draw buildings, with just 3 clicks, and *building=yes* tag already applied: click **‘b’** and click on 3 corners.

If it’s not mapped entirely correctly, you can use **‘w’** (improve way accuracy) to conveniently drag the corners, then press **‘q’**. You can use this as well to easily draw ways with just the right amount of nodes. Add a way using **‘a’**, but draw it roughly. Then use **‘w’** to add nodes in the bends.

Another really useful tool is **‘x’** (extrude). After having drawn a building, press **‘x’** and then double click on one of the sides. A node will be added at that position. Now drag one of the sides and see an L-shaped building appear.

To draw a round building, draw a line representing the diameter, then press **Shift-O**. Tag it with building=yes.

Not so convenient you may say, after seeing the buildings\_tools. Well the nice thing is, you only need to do this once.

Use **Ctrl-d** to duplicate that hut to other spots on the map.

Use **Ctrl-Alt-mouse drag** to rescale.

If something should become round (again), use **‘o’**

For rectangular buildings, you may want to rotate them: **Ctrl-Shift then drag left mouse button**

That’s it. You can already get started and be extremely productive with just this information.

There might be a few additional ones that come in handy:

**‘p’** to split a way

**‘j’** to join a node to a way (shape of way changes)

**‘n’** to add a node to the nearest way (node moves)

**‘l’** to make a line straight

**Shift-B** to distribute nodes equally (also makes the way connecting them straight)

Pressing some keys twice, changes their ‘mode’, ‘s’ alternates between select and lasso mode

After having added 2 nodes, pressing **‘a’** twice will go into a mode where 15 degree steps are taken, so it becomes easier to draw geometrically correct shapes.

If you want to apply the same tags again (from the previously selected object), press **‘Shift-R’** (repeat)

**‘f’** to follow a line, useful to draw landuse that follows other landuse ,for example  
**Shift-I** (while having several ways selected) to create points at intersections  
**‘g’** to unglue nodes from ways  
**‘Shift-J’** to join overlapping areas

**JOSM start**→Webstart:

<https://josm.openstreetmap.de/download/josm.jnlp>

**JOSM-instellingen aanpassen** → F12

of menu *Bewerken / Voorkeuren* of in de Engelse versie *Edit / Preferences*

 taal kiezen onder *Look and Feel* (NL: *Weergave en Vormgeving) → Language/ Taal*

** Kaartinstellingen**

*Kaarttekenstijlen* : maak *Actieve Stijl* : JOSM standaard en Potlach 2

*Vooraf ingestelde tags*: *Actieve voorkeuzes* : vb Belgium (Mapping in Belgium)

 Plug ins → selecteer : *buildings\_tools , ShapeTools , utilsplugin2*

 Kaartgegevens downloaden om te bewerken

Tab ‘*Slippy-kaart*’ om een gebied te selecteren om te bewerken

Luchtfoto’s voor achtergrond : menu *Afbeeldingen* → Bing

Kaart verslepen : rechtermuistoets inhouden

of Ctrl en cursorpijltjes

**Sneltoetsen**

**A** : modus tekenen

**S** : modus selecteren

**X** : om rechthoek te maken → lijn uittrekken tot rechthoek

**Shift+O** : Cirkel aanmaken van 2 of 3 knopen

**O** : knopen uitlijnen in een cirkel

**L** : knopen uitlijnen in rechte lijn

**Q** : een vorm rechthoekig maken

**C** : 2 of meer wegen samenvoegen

**Shift+J** : Overlappende gebieden of vormen samenvoegen

**B** : gebouw tekenen

**Ctrl+Alt** : grootte van vorm/gebouw wijzigen

**Ctrl+Shift** : vorm draaien

De kaart : [http://www.openstreetmap.org](http://www.openstreetmap.org/)

Wandelen/fietsen : https://hiking.waymarkedtrails.org

Historisch : http://gk.historic.place/historische\_objekte

Over OpenStreetMap : http://www.osm.be