

# JOSM

Java OpenStreetMap Editor



Simon Legner (simon04)

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# Outline

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## Introducing JOSM

## JOSM Development

- Contributing to JOSM?

- Release Concept

- Recent Changes

## Hands On

- Filters

- Styles (MapCSS)

- Presets

- Validator

## Introducing JOSM (1)

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- offline editor for OpenStreetMap project
- written in Java, thus multi-platform
- initially developed by Immanuel Scholz
- current contributors: Stefan Breunig, David Earl, Gabriel Ebner, Dave Hansen, Paul Hartmann, Karl Guggisberg, Matthias Julius, Alexei Kasatkin, Jiri Klement, Ulf Lamping, Simon Legner, Raphael Mack, Upliner Mikhalych, Vincent Privat, Frederik Ramm, Dirk Stöcker, ...
- <http://josm.openstreetmap.de/>

## Introducing JOSM (2)

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### Features

- loading GPS tracks
- displaying background imagery
- downloading bboxes from OSM database
- editing objects
- uploading changes
- validating data
- handling conflict

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# Introducing Myself

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- Simon Legner ([simon04](#))
- studying computer science at University of Innsbruck

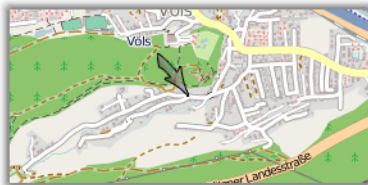
# How did you contribute to OpenStreetMap ?

| simon04                       | Nodes | Ways  | Relations | OSM Data Date  |
|-------------------------------|-------|-------|-----------|----------------|
| ... created:                  | 42837 | 4541  | 69        | Feb 13th, 2011 |
| ... touched:                  | 38322 | 6090  | 272       | Feb 13th, 2011 |
| ... are the last modifier of: | 44153 | 6325  | 93        | Feb 24th, 2012 |
| ... have the following ranks: | #2926 | #2370 | #1587     | Feb 24th, 2012 |

[more](#)



Your [first Node](#) in OSM, do you remember?  
(Thu Aug 07 22:18:52 CEST 2008)



Your ["last" Node](#) ...  
(Sat Jan 28 00:18:13 CET 2012)

And this is your [first Way](#) in OSM (Fri Aug 08 11:21:45 CEST 2008)  
... and your [first Relation](#) in OSM (Sun Mar 08 13:22:29 CET 2009)

<http://hdyc.neis-one.org/?simon04>

## How did you contribute to JOSM?

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Your first Ticket [#6364](#): “can’t remove tag with preset”

- cleaning up `plan.at` import
- remove unneeded tags of numerous objects
- wanted to use `custom preset`
- but empty tags weren’t deleted



# How to contribute?

- use JOSM
- report bugs
- up/down vote tickets



logged in as [simon04](#) | [Logout](#) | [Preferences](#) | [Help/Guide](#) | [About Trac](#)

[Wiki](#) | [Timeline](#) | [Changelog](#) | [Browse source](#) | **[View tickets](#)** | [New ticket](#) | [Search](#)

[+11](#) | [← Previous ticket](#) | [Back to query](#) | [Next ticket →](#)

**Ticket #7450 (new enhancement)** [Modify ↓](#)

**Warning against misaligned imagery** Opened **10 days** ago  
Last modified **3 days** ago

- update documentation/help
- translate program/documentation
- design fancy new icons
- write code

# JOSM Development: Release Concept

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- tested
  - no severe bugs
  - “complete translations”
  - released approx. monthly
- latest (nightly-build)

<http://josm.openstreetmap.de/wiki/Releases>

<http://josm.openstreetmap.de/wiki/DevelopersGuide/Schedule>

# JOSM Development: Recent Changes

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see startup page notes, [summarized changelog](#), [SVN changelog](#)

- major changes/enhancements
- minor enhancements
  - Paste without mouse pointer in draw area should paste to center ([r5052](#))
  - add "Add selection to relation" to popup menu of relation toggle dialog ([r5082](#))
  - Add Map Paint Styles to View menu ([r5086](#), [r5088](#))
  - Warning against misaligned imagery for new users ([r5091](#))
  - make target highlighting not feel sluggish ([#7503](#))
  - add "Select previous/next Gap" to relation editor as popup menu of the relation members ([r5081](#))
  - **Remote Control**: add command for opening local files (e.g., /open\_file?filename=... ([r5085](#)))
  - **Remote Control**: /load\_object in combination with addtags ([r5095](#))
  - Toggle **edit toolbar** (in View menu or in popup menu) ([r5092](#))
- sub-minor enhancements
  - better label layout in **VersionInfoPanel** ([r5050](#))
  - load map images in background, in case they are loaded over a network. Show temporary image in the meantime. ([r5054](#))

## Recent big(ger) changes

- expert mode
- fix several shortcut conflicts (remapping required)

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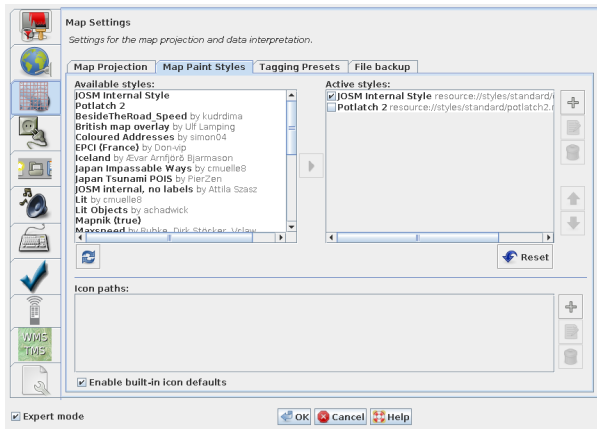
## Hands On: Filters

| E                                   | H                                   | Text  | I                                   | M |
|-------------------------------------|-------------------------------------|---|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | landuse   natural   building                                  | <input type="checkbox"/>            | A |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | forest   wood   | <input checked="" type="checkbox"/> | A |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | {type:way highway}   highway=bus_stop   amenity=bus_station   | <input checked="" type="checkbox"/> | A |
| <input type="checkbox"/>            | <input type="checkbox"/>            | -"openGeoDB:name" -boundary {fixme:"check import"   highwa... | <input checked="" type="checkbox"/> | A |

E ...enabled    H ...hidden (vs. grayed out)    I ...inverted

```
# [EH ] hide landuses
landuse | natural | building
# [EHI] find bugs
fixme
# [ HI] map public transport
(type:way highway) | highway=bus_stop | amenity=bus_station
```

# Hands On: Styles (MapCSS) (1)



<http://josm.openstreetmap.de/wiki/Styles>

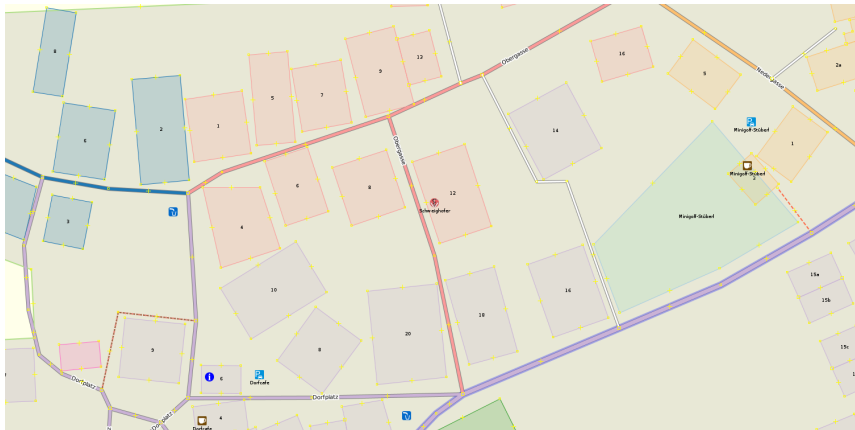
## Hands On: Styles (MapCSS) (2)

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```
way[highway=residential] {  
  color: #E8E8E8; width: 5;  
  casing-color: gray; casing-width: 7;  
}  
  
way[name="Burggraben"] {color: #FB9A99}  
  
way[name^="Bu"] {color: #FB9A99}  
area[building][addr:street^="Bu"] {  
  color: #FB9A99; fill-color: #FB9A99;  
}
```

# Hands On: Styles (MapCSS) (3)

{Aa, Ab, ..., Zz} → {, , , , , , , , , , 



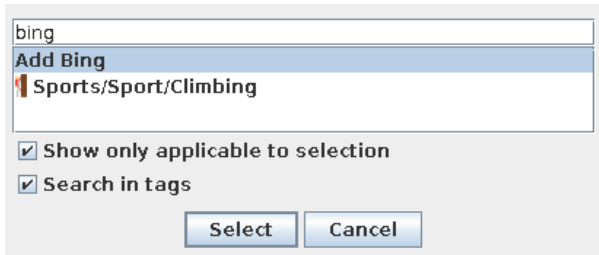
<https://github.com/simon04/coloured-addresses.mapcss>



## Hands On: Presets (1)

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```
<presets xmlns="http://josm.openstreetmap.de/tagging-preset-1.0">
  <item name="Add Bing">
    <key key="source" value="Bing"/>
  </item>
</presets>
```



## Hands On: Presets (2)

---

```
<presets xmlns="http://josm.openstreetmap.de/tagging-preset-1.0">
  <item name="International (icn): Guidepost" type="node">
    <label text="International (icn): Guidepost" />
    <key key="tourism" value="information" />
    <key key="information" value="guidepost" />
    <key key="network" value="icn" />
    <key key="bicycle" value="yes" />
    <key key="icn" value="yes" />
    <text key="icn_ref" text="Junctionnr." />
    <link href="http://wiki.openstreetmap.org/wiki/..." />
  </item>
</presets>
```

## Hands On: Presets (3)




 **International (icn): Guidepost**  
Junctionnr.:

[More information about this feature](#)

**🚧 Facilities/Tourism/Guidepost ...**  
**i Facilities/Tourism/Other Information Points ...**  
**International (icn): Guidepost ...**

| Key         | Value       |
|-------------|-------------|
| bicycle     | yes         |
| icn         | yes         |
| information | guidepost   |
| network     | icn         |
| tourism     | information |

<http://josm.openstreetmap.de/wiki/TaggingPresets>

<http://josm.openstreetmap.de/wiki/Presets>

## Hands On: Validator

---

```
// Check roundabouts to have at least 3 connected highways
public class RoundaboutTest extends Test {
    public RoundaboutTest() { super(tr("Checks Roundabouts")); }

    @Override public void visit(Way way) {
        if (way.hasTag("junction", "roundabout") && way.isClosed()) {
            Set<OsmPrimitive> highways = new HashSet<OsmPrimitive>();
            for (Node i : way.getNodes())
                for (OsmPrimitive j : i.getReferrers())
                    if (j.hasKey("highway") && j != way)
                        highways.add(j);
            if (highways.size() < 3)
                errors.add(new TestError(this, Severity.WARNING,
                    tr("Faintly connected roundabout"), 4200, way));
        } } }
}
```

## Summary

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- JOSM is a powerful, extensible OSM editor
- contributions are welcome!
- I'm looking forward to discussions and meeting other contributors

Thank You!



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