

OSM-Struktur

- ▶ OSM Dateien im XML-Format OSM Dateien im XML-Format (reines Text-Format) bestehen im Wesentlichen aus nodes, ways und relations.
 - Nodes, ways und relations werden über eindeutige IDs identifiziert
 - Nodes beinhalten die Koordinaten
 - Ways referenzieren auf nodes
 - Relations referenzieren auf nodes, ways, und / oder relations
 - Nodes, ways und relations können mittels tags zusätzliche Informationen enthalten

OSM-Struktur

▶ OSM Header

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <osm version="0.6" generator="Overpass API">
3 <note>The data included in this document is from www.openstreetmap.org. It has
   there been collected by a large group of contributors. For individual
   attribution of each item please refer to
   http://www.openstreetmap.org/api/0.6/[node|way|relation]/#id/history </note>
4 <meta osm_base="2012-05-11T12:56:02Z"/>
5
6 <node id="238204" lat="48.4640749" lon="10.0969717"/>
7 <node id="238205" lat="48.4629505" lon="10.0922762"/>
8 <node id="238206" lat="48.4627958" lon="10.0923542"/>
9 <node id="238207" lat="48.4646021" lon="10.1014350"/>
10 <node id="238208" lat="48.4638928" lon="10.0970747"/>
11 <node id="238226" lat="48.4613202" lon="10.0871012"/>
12 <node id="238227" lat="48.4595040" lon="10.0826428"/>
13 <node id="238229" lat="48.4574545" lon="10.0780902"/>
```

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▶ OSM Nodes

```
<node id="238242" lat="48.4544556" lon="10.0392420"/>
<node id="238243" lat="48.4534794" lon="10.0457990"/>
<node id="238244" lat="48.4558645" lon="10.0309503"/>
<node id="238245" lat="48.4571111" lon="10.0218780">
  <tag k="TMC:cid_58:tabcd_1:Class" v="Point"/>
  <tag k="TMC:cid_58:tabcd_1:Direction" v="negative"/>
  <tag k="TMC:cid_58:tabcd_1:LCLversion" v="9.00"/>
  <tag k="TMC:cid_58:tabcd_1:LocationCode" v="12541"/>
  <tag k="TMC:cid_58:tabcd_1:NextLocationCode" v="12542"/>
  <tag k="TMC:cid_58:tabcd_1:PrevLocationCode" v="12540"/>
</node>
<node id="238246" lat="48.4567800" lon="10.0237328"/>
<node id="238247" lat="48.4557307" lon="10.0308649"/>
<node id="238248" lat="48.4576547" lon="10.0160334"/>
<node id="238249" lat="48.4578254" lon="10.0107376"/>
<node id="238250" lat="48.4576660" lon="10.0107805"/>
```

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▶ OSM Ways

```
... <tag k="oneway" v="yes"/>
... </way>
... <way id="5081267">
... <nd ref="34554937"/>
... <nd ref="34554938"/>
... <nd ref="34554939"/>
... <nd ref="34554947"/>
... <nd ref="34554946"/>
... <nd ref="34554936"/>
... <nd ref="34554937"/>
... <tag k="created_by" v="Potlatch 0.10f"/>
... <tag k="highway" v="service"/>
... <tag k="maxspeed" v="20"/>
... <tag k="oneway" v="yes"/>
... </way>
... <way id="5081268">
```
