

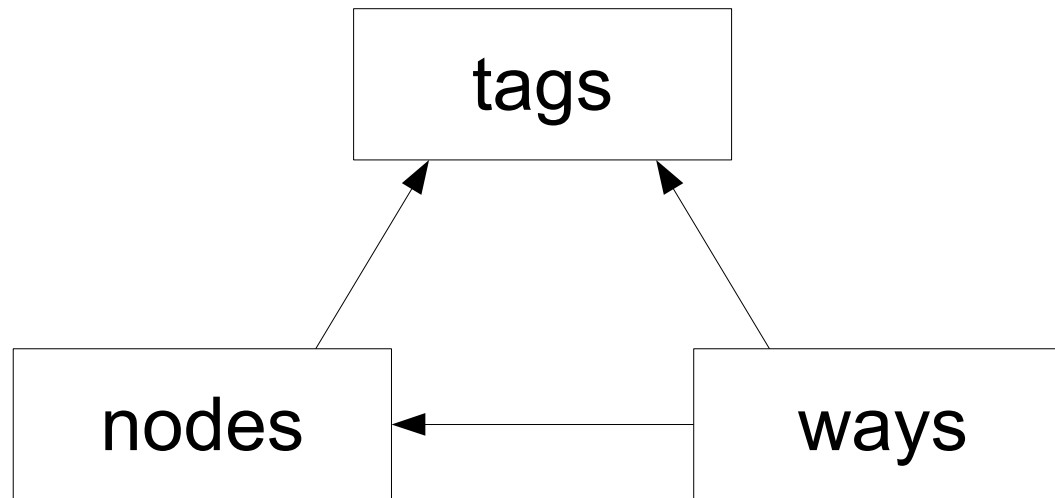
Relation Toolbox:

Editing Relations Should Be Easy

Ilya Zverev, SotM-EU 2011

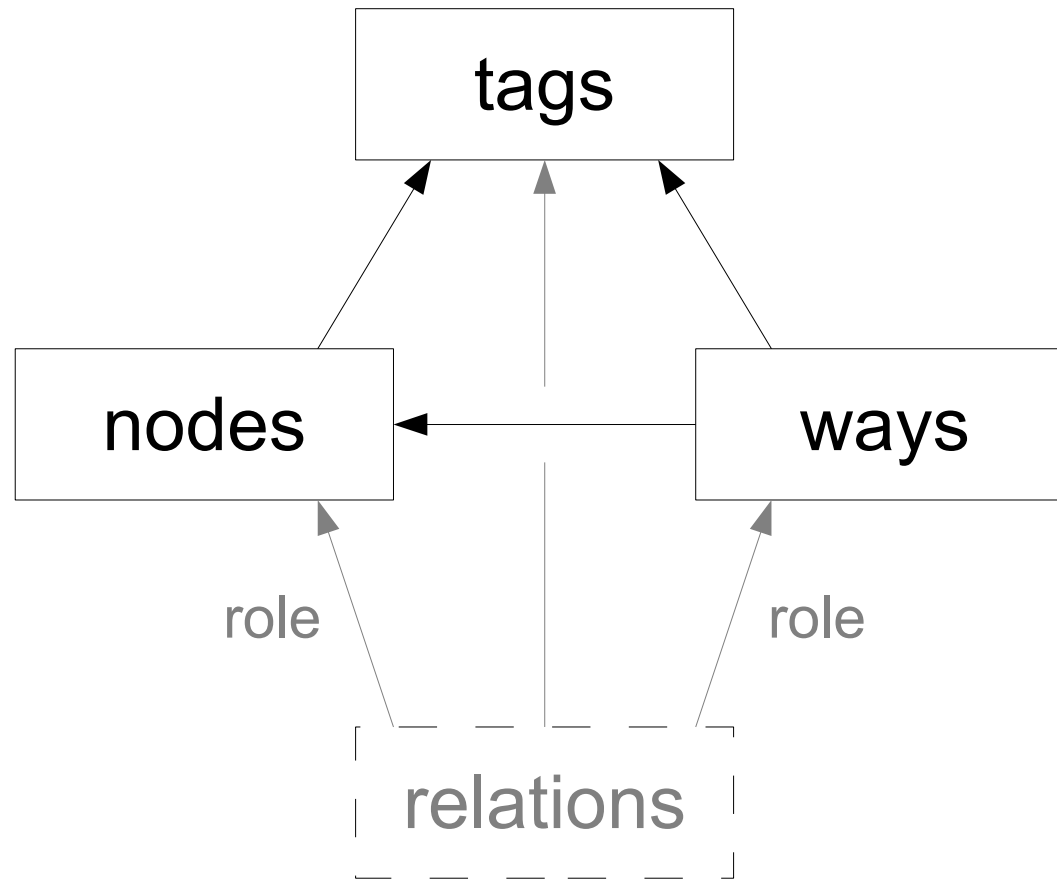
OpenStreetMap Data Model

(as presented to other people)

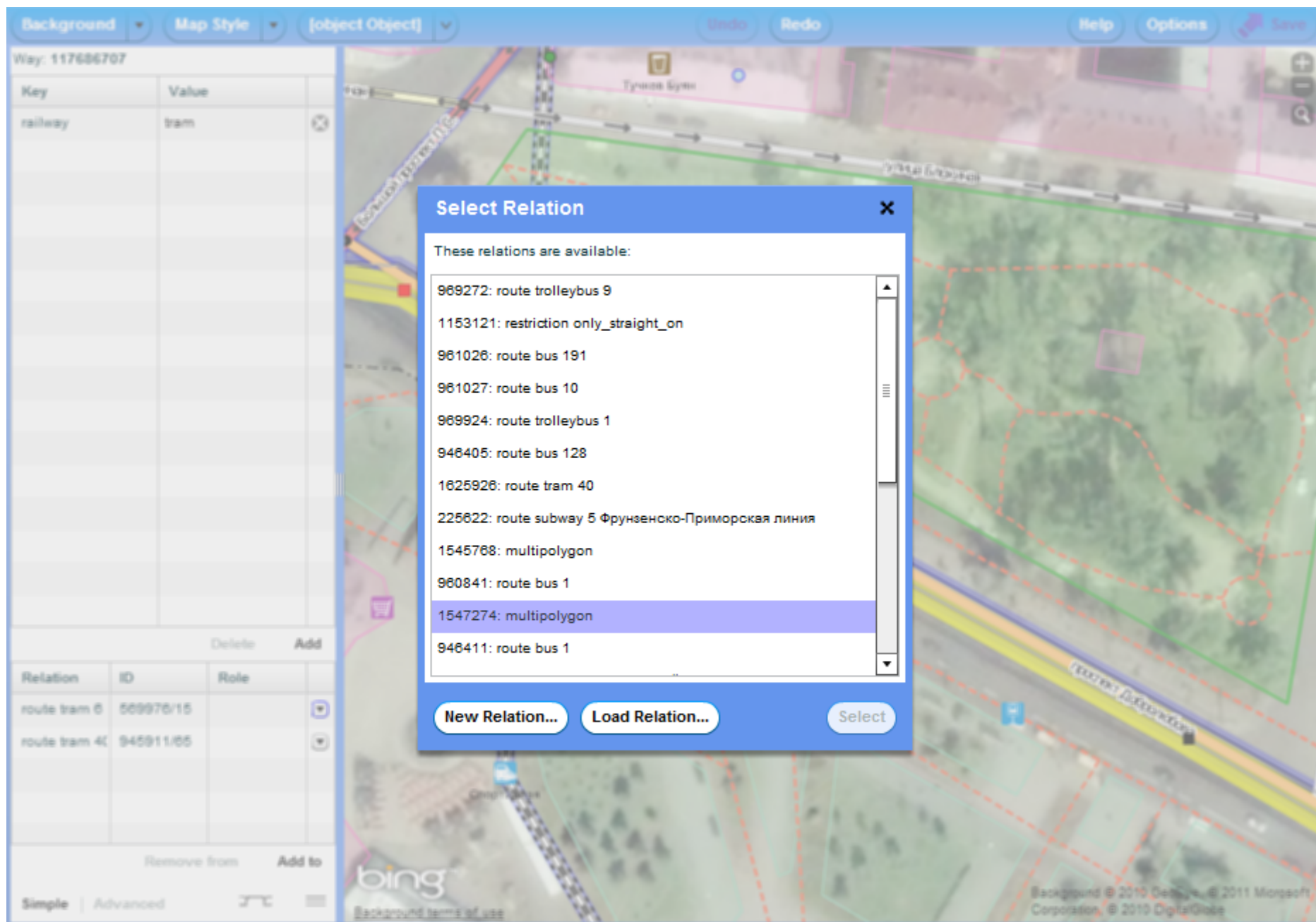


OpenStreetMap Data Model

(as presented to other people)







30.2915730 3.14 km (no object) t to add to selection (Ctrl to toggle); Shift-Ctrl to rotate selected; Alt-Ctrl to scale selected; or change selection

Edit relation #569,976 in layer 'Data Layer 1'

Tags and Members

Parent Relations

Child Relations

Tags

Relations/Route

Key	Value
ref	6
route	tram
to	Финляндский вокзал
type	route

Members

Role	Refers to
	incomplete [id: 33,065,978]
	incomplete [id: 32,501,560]
	incomplete [id: 32,500,350]
	railway (58 nodes) [id: 117,686,707]
	railway (2 nodes) [id: 117,686,710]
	incomplete [id: 117,686,697]
	incomplete [id: 117,830,838]
	incomplete [id: 117,830,822]
stop	incomplete [id: 1,326,509,882]
stop	incomplete [id: 1,326,509,655]
stop	incomplete [id: 1,325,324,265]
stop	incomplete [id: 1,326,509,861]
stop	ст. м. Спортивная (59.9514374, 30.29353...
stop	1326509662 (59.9565851, 30.3192092) [id...
stop	incomplete [id: 1,325,324,265]

Apply Role:

Selection

railway (58 nodes) [id: 117,686,707]

OK

Cancel

Help

Layers

Data Layer 1

Properties: 1 / Memberships: 2

Transport/Railway/Tram

Key	Value
railway	tram

Member Of	Role	P...
route ("40", 78 members, incomplete) [id: ...]		66
route ("6", 34 members, incomplete) [id: ...]		16

+ Add

Edit

Delete

Sel.: Rel.:0 / Ways:1 / Nodes:0

Relations: 57

bridge ("Биржевой мост", 4 members) [id: 1,625,700]

bridge ("Тучков мост", 7 members, incomplete) [id: ...]

multipolygon (1144739, 2 members) [id: 1,144,739]

multipolygon (1312627, 10 members, incomplete) [id: ...]

multipolygon (1530010, 2 members) [id: 1,530,010]

multipolygon (1530756, 2 members, incomplete) [id: ...]

multipolygon (1544009, 4 members) [id: 1,544,009]

Command Stack

Filter Hidden:0 Disabled:0

← Tabs?!

Tags and Members Parent Relations Child Relations

Tags

Relations/Route

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Members

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Selection

Selection

railway (58 nodes) [id: 117,686,707]

3

Apply Role: outer

OK Cancel Help

Layers

Data Layer 1

Properties: 1 / Memberships: 2

Transport/Railway/Tram

Key	Value
railway	tram

Member Of

Member Of	Role	P...
route ("40", 78 members, incomplete) [id: ...]		66
route ("6", 34 members, incomplete) [id: ...]		16

+ Add Edit Delete

Sel.: Rel.:0 / Ways:1 / Nodes:0

Relations: 57

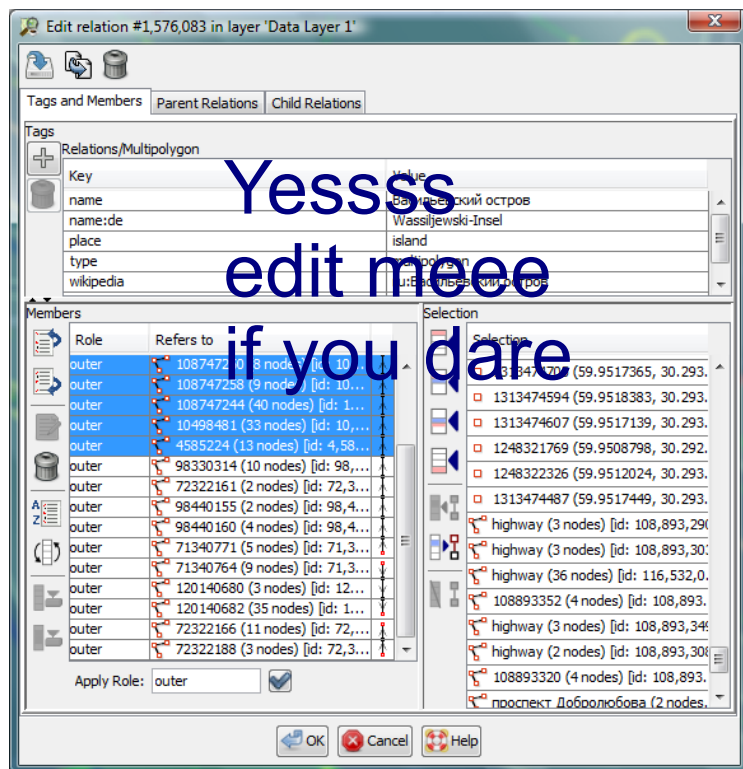
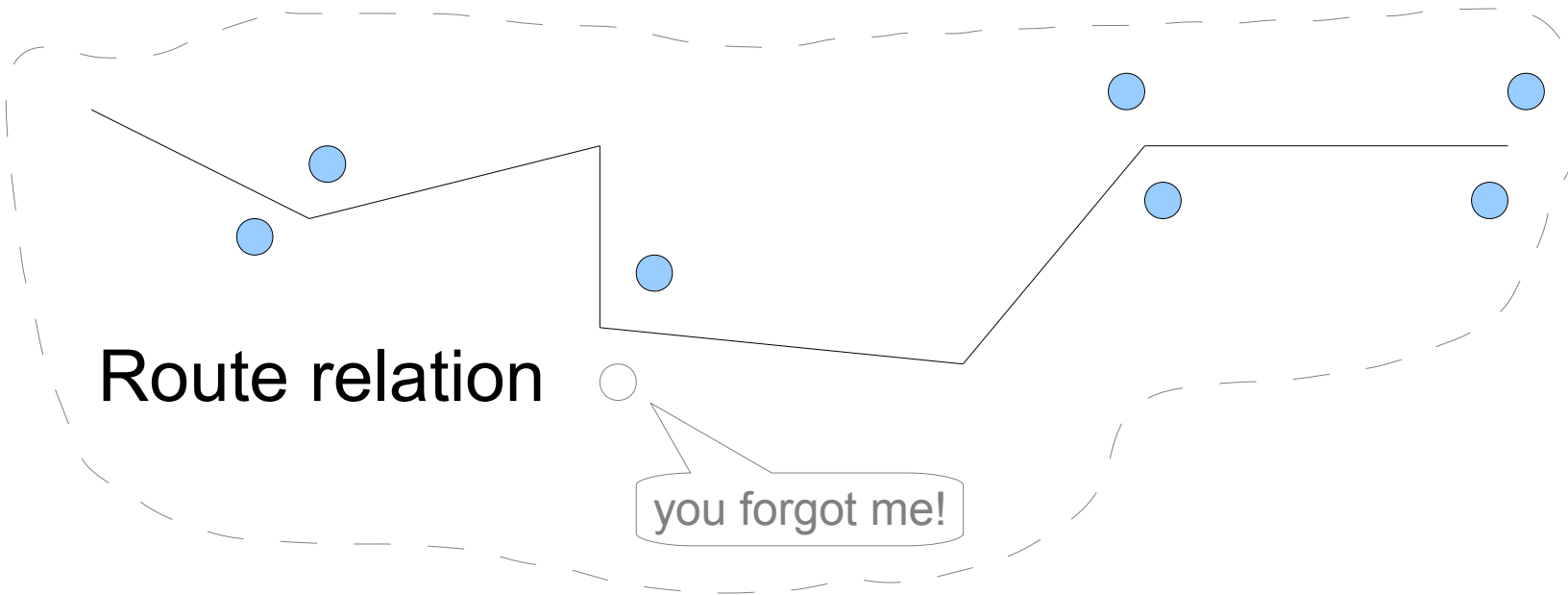
- bridge ("Биржевой мост", 4 members) [id: 1,625,700]
- bridge ("Тучков мост", 7 members, incomplete) [id: ...]
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- multipolygon (1530756, 2 members, incomplete) [id: ...]
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Command Stack

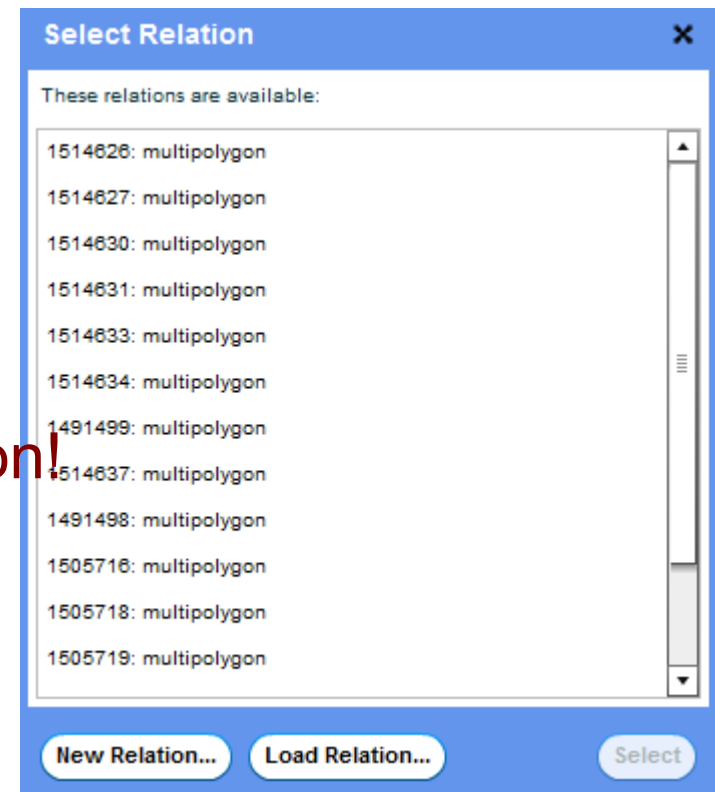
Filter Hidden:0 Disabled:0

30.2915730 3.14 km (no object)

to add to selection (Ctrl to toggle); Shift-Ctrl to rotate selected; Alt-Ctrl to scale selected; or change selection



You need
to add a hole
to a multipolygon!
(any of them,
probably)



Members → Relations

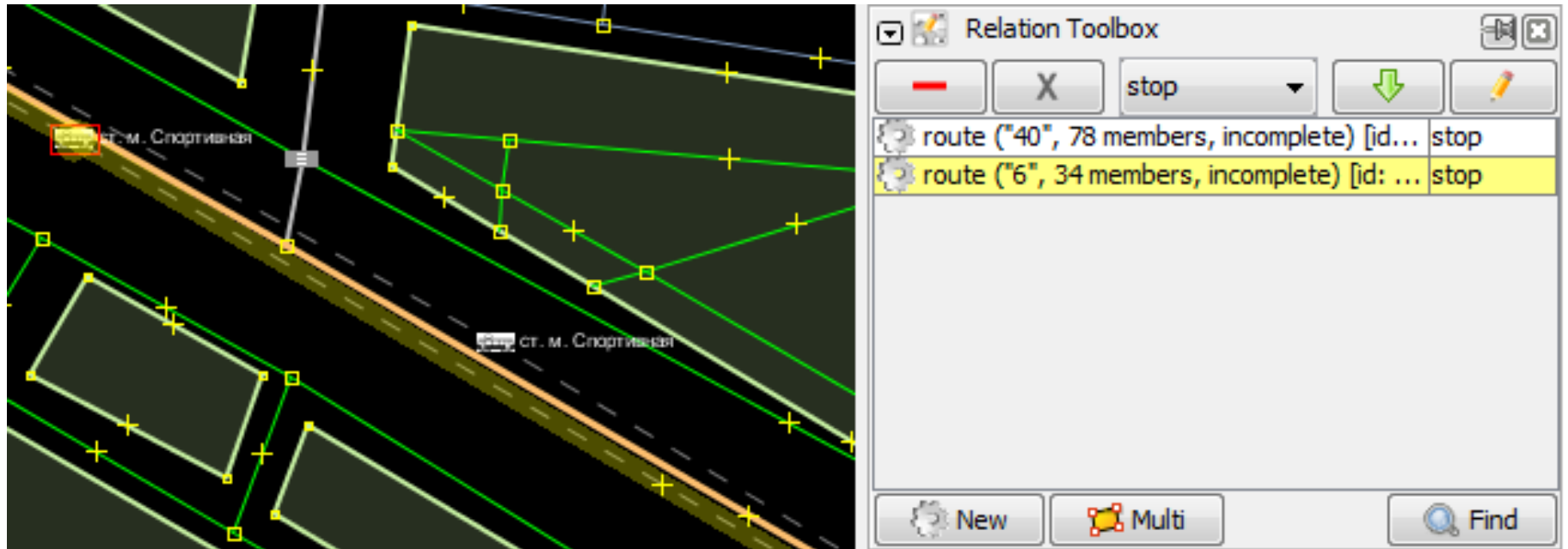
Relation	ID	Role	
route tram 40	945911/65		▼
route tram 6	589978/15		▼

Remove from Add to

Simple | Advanced  

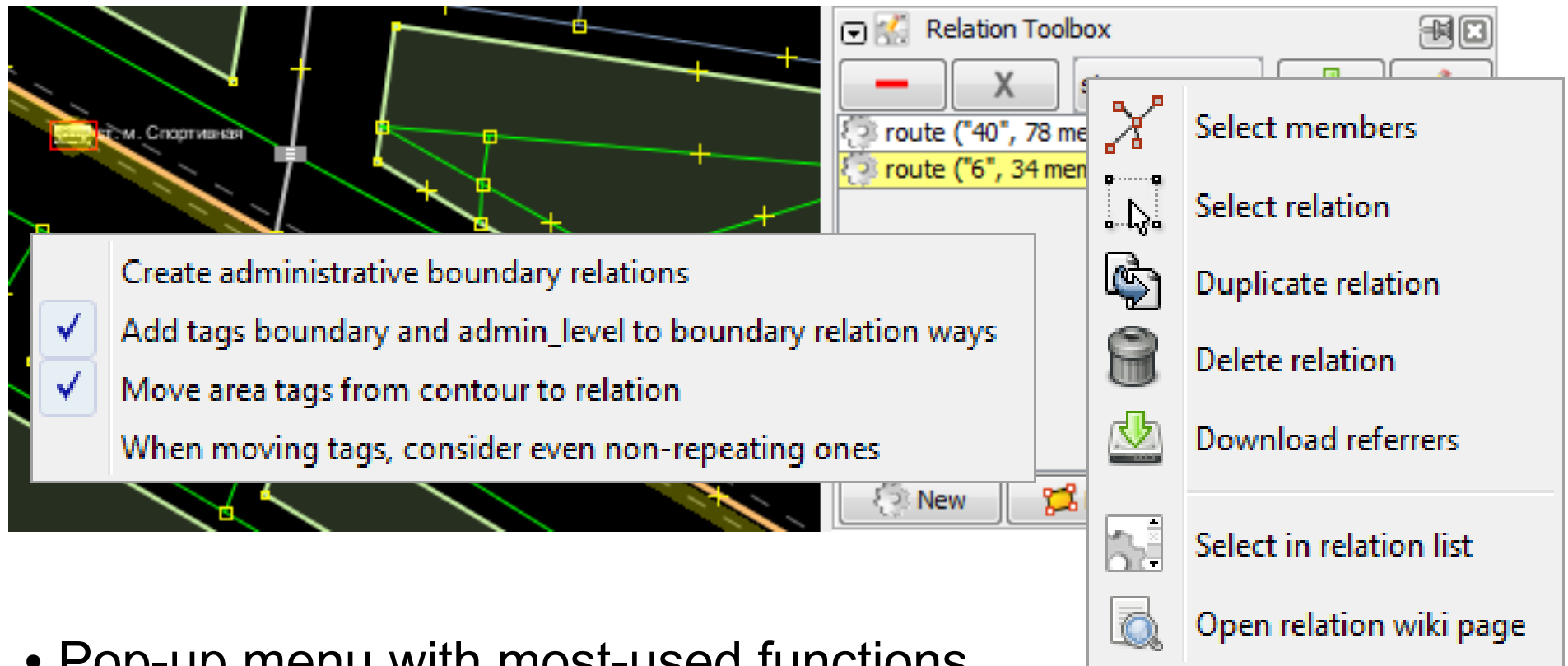
▼  Properties: 1 / Memberships: 2  		
Transport/Railway/Tram		
Key	Value	
railway	tram	
Member Of	Role	P...
route ("40", 78 members, incomplete) [i...		66
route ("6", 34 members, incomplete) [id:...		16
 Add  Edit  Delete		

Relation Toolbox



- *Chosen relation*: independent from selection
- It is highlighted, members are visible without lists
- Simple add/remove button and role chooser
- Service buttons: edit, create new, download incomplete etc.

Relation Toolbox



- Pop-up menu with most-used functions
- Multipolygon properties at hand
- When integrated, the plugin can be reduced to buttons in toolbar

What can be improved

- Status of chosen relation: number of rings and segments, are members sorted
- «Sort» button and a dialog for arranging members
- Relation-specific contextual functions: find stops for PT route; wizards for creating relations
- Better visualization on the map: color-code area relations, highlight errors

So, to the point

- Relations are scary, because editing them is uncomfortable
- This can be fixed
- Users don't care for data structures, they need a button
- Make user-friendly relation tools
- Example: Relation Toolbox

Thanks!