

```
1 "guides": [ {"name": "left_guide", "x": 250}, {"name": "right_guide", "x": 750} ],
2 "constraintDefinitions": [
3   {
4     "name": "boundary", 1 set that contains all nodes
5     "forEach": [
6       {"constraint": "position", "position": "right", "of": "left_guide", "gap": 10}, 91 constraints
7       {"constraint": "position", "position": "left", "of": "right_guide", "gap": 10} 91 constraints
8     ]
9   },
10  {
11    "sets": {"partition": "type", "exclude": ["unknown", "downstream genes"]}, 4 sets
12    "forEach": [{"constraint": "padding", "amount": 15}] padding added to 47 nodes
13  },
14  {
15    "sets": [{"partition": "type", "exclude": ["unknown"]}], 1 set
16    "forEach": [
17      {
18        "constraint": "order", "axis": "y", "by": "type",
19        "band": 100, "gap": 30, 180 constraints
20        "order": ["extracellular", ..., "downstream genes"]
21      }
22    ]
23  },
24  {
25    "from": {"expr": "node.type === 'downstream genes'"}, 12 sets
26    "sets": {"partition": "group"},
27    "forEach": [
28      {"constraint": "hull", "style": "visible"}, 12 WebCoLa groups created
29      {"constraint": "cluster"}, 145 new edges added
30      {"constraint": "padding", "amount": 5} padding added to 43 nodes
31    ]
32  },
33  {
34    "from": {"expr": "node.type === 'unknown'"}, 1 set
35    "sets": {"keys": ["node._id", "node.neighbors.extract('_id')"]},
36    "forEach": [{"constraint": "align", "axis": "x"}] 1 constraint
37  }
38 ]
```