

```
large grazers
                                                                                                           P. leo
                                                                 C. taurinus
                                                                  N. granti
                                                                                                           P. pardus
                                                                  E. quagga
         Group 10
                                                                  A. melampus
                                                                  E. thomsonii
                                                                  A. buselaphus
         Group 11 •••••
                                                                                             Group 2
         riparian*
                                                            Group 5
                                                                                           small carnivores
                                                             hyraxes
                                                                                                    C. caracal
                                                                  H. brucei
                                                                  P. capensis
                                                                                                    C. aureus
        Group 12
                                                                                                    C. mesomelas
         Group 13
                                                            Group 6
                                                                                                    L. serval
         kopje*
                                                                 P. anubis
                                                                 G. camelopardalis
                                                                  M. kirkii
   -----
                                                                  S. caffer
                                                                  L. africana
         Group 14
 1 "guides": [{"name": "topG", "y": 0}, ..., {"name": "plantG", "x": 125}],
2 "constraintDefinitions": [
                                                                                                                   C
3
    {
4
       "name": "plants",
                                                                                                                  8 sets
       "sets": {"partition": "group1", "include": [7,8,9,10,11,12,13,14]},
       "forEach": [
6
                                                                                                          129 constraints
8
                                                                                                         129 constraints
9
                                                                                                         129 constraints
                                                                                                         129 constraints
10
                                                                                             padding added to 129 nodes
11
```

```
{"constraint": "position", "position": "right", "of": "plantG", "gap": 185},
{"constraint": "position", "position": "left", "of": "herbivoreG", "gap": 200},
{"constraint": "position", "position": "below", "of": "topG", "gap": 0},
{"constraint": "position", "position": "above", "of": "bottomG", "gap": 0},
{"constraint": "padding", "amount":1},

padding ac
12
                   {"constraint": "cluster"}
13
              ]
14
         },
15
              "sets": ["plants"],
16
              "forEach": [{"constraint": "order", "axis": "y", "by": "group1", "gap": 25}]
17
         },
18
19
20
              "name": "herbivores",
              "sets": {"partition": "group1", "include": [3,4,5,6]},
21
                                                                                                                                                                                                                                  4 sets
22
              "forEach": [
                   {"constraint": "align", "axis": "y"},
{"constraint": "position", "position": "right", "of": "herbivoreG", "gap": 185},
{"constraint": "position", "position": "left", "of": "carnivoreG", "gap": 185},
{"constraint": "position", "position": "below", "of": "topG", "gap": 250},
{"constraint": "position", "position": "above", "of": "bottomG", "gap": 50},
23
                                                                                                                                                                                                                     4 constraints
24
                                                                                                                                                                                                                    23 constraints
```

"forEach": [{"constraint": "order", "axis": "y", "by": "group1", "gap": 75}]

{"constraint": "position", "position": "right", "of": "carnivoreG", "gap": 185}, {"constraint": "position", "position": "below", "of": "topG", "gap": 450}

{"constraint": "order", "axis": "x", "by": "group1", "reverse": true, "gap": 40}, {"constraint": "order", "axis": "y", "by": "group1", "gap": 40}

"sets": {"partition": "group1", "include": [1,2]},

{"constraint": "align", "axis": "y"},

23 constraints

23 constraints

23 constraints

31 constraints

2 constraints

9 constraints

9 constraints

9 constraints

9 constraints

2 sets

1 set

4 WebCoLa groups created

25

26

27

28

29 30

31

32

33

34

35

36

37

38

39

40

41

42

43

44 45

46

47

48

49

50

51

},

},

]

1

}

},

{"constraint": "hull"}

"sets": ["herbivores"],

"name": "carnivores",

"sets": ["carnivores"],

"forEach": [

"forEach": [

```
2632 new edges added
        258 constraints
```