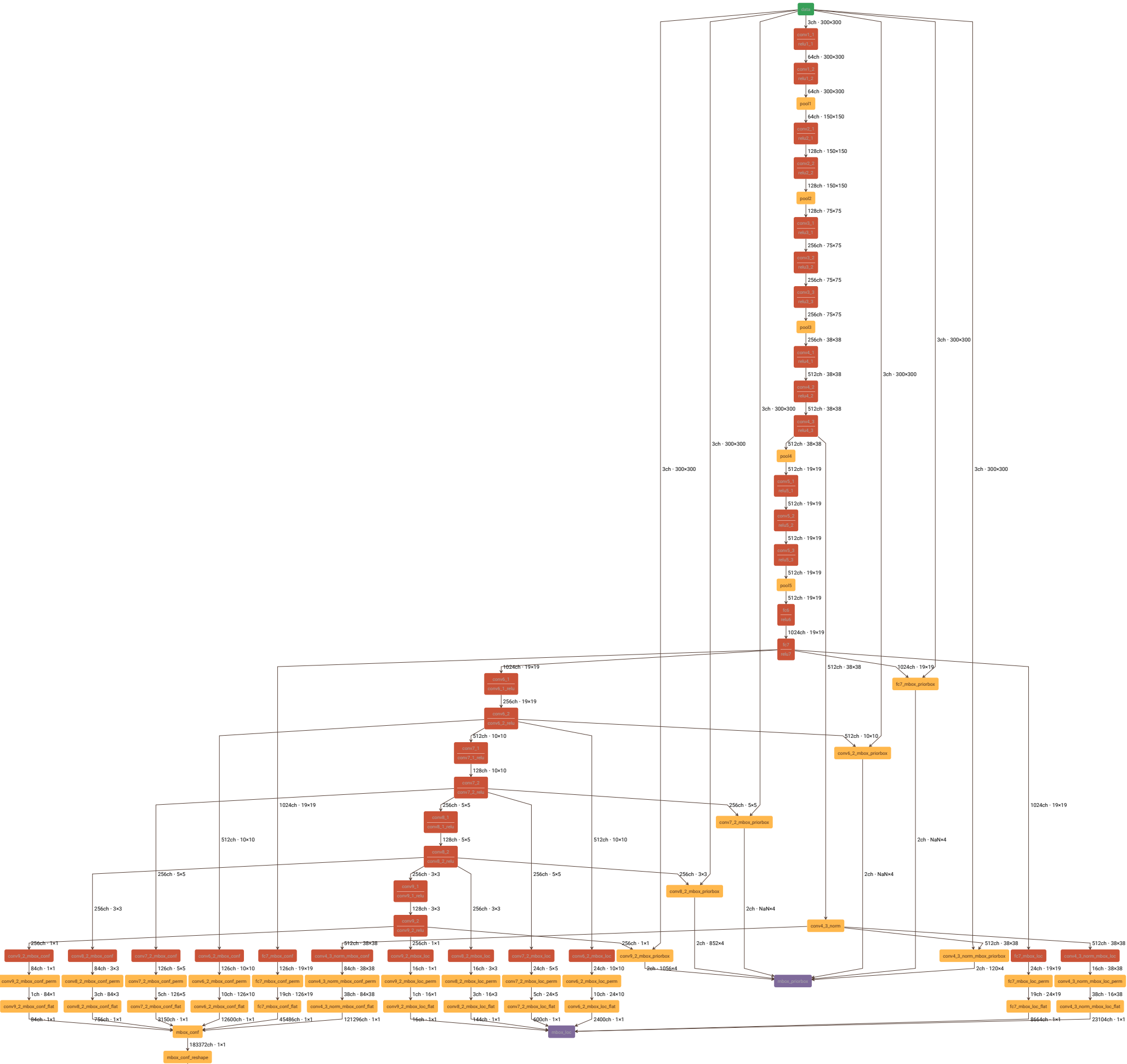


```
1 name: "VGG_VOC0712_SSD_300x300_deploy"
2 input: "data"
3 input_shape {
4   dim: 1
5   dim: 3
6   dim: 300
7   dim: 300
8 }
9 layer {
10  name: "conv1_1"
11  type: "Convolution"
12  bottom: "data"
13  top: "conv1_1"
14  param {
15    lr_mult: 1
16    decay_mult: 1
17  }
18  param {
19    lr_mult: 2
20    decay_mult: 0
21  }
22  convolution_param {
23    num_output: 64
24    pad: 1
25    kernel_size: 3
26    weight_filler {
27      type: "xavier"
28    }
29    bias_filler {
30      type: "constant"
31      value: 0
32    }
33  }
34 }
35 layer {
36  name: "relu1_1"
37  type: "ReLU"
38  bottom: "conv1_1"
39  top: "conv1_1"
40 }
41 layer {
42  name: "conv1_2"
43  type: "Convolution"
44  bottom: "conv1_1"
45  top: "conv1_2"
46  param {
47    lr_mult: 1
48    decay_mult: 1
49  }
50  param {
51    lr_mult: 2
52    decay_mult: 0
53  }
54  convolution_param {
55    num_output: 64
56    pad: 1
57    kernel_size: 3
58    weight_filler {
59      type: "xavier"
60    }
61    bias_filler {
62      type: "constant"
63      value: 0
64    }
65  }
66 }
67 layer {
68  name: "relu1_2"
69  type: "ReLU"
70  bottom: "conv1_2"
71  top: "conv1_2"
72 }
73 layer {
74  name: "pool1"
75  type: "Pooling"
76  bottom: "conv1_2"
77  top: "pool1"
78  pooling_param {
79    pool: MAX
80    kernel_size: 2
81    stride: 2
82  }
83 }
84 layer {
85  name: "conv2_1"
86  type: "Convolution"
87  bottom: "pool1"
88  top: "conv2_1"
89  param {
90    lr_mult: 1
91    decay_mult: 1
92  }
93  param {
94    lr_mult: 2
95    decay_mult: 0
96  }
97  convolution_param {
98    num_output: 128
99    pad: 1
100   kernel_size: 3
101   weight_filler {
102     type: "xavier"
103   }
104   bias_filler {
105     type: "constant"
106     value: 0
107   }
108 }
109 }
110 layer {
111  name: "relu2_1"
112  type: "ReLU"
113  bottom: "conv2_1"
114  top: "conv2_1"
115 }
116 layer {
117  name: "conv2_2"
118  type: "Convolution"
119  bottom: "conv2_1"
120  top: "conv2_2"
121  param {
122    lr_mult: 1
123    decay_mult: 1
124  }
125  param {
126    lr_mult: 2
127    decay_mult: 0
128  }
129  convolution_param {
130    num_output: 128
131    pad: 1
132    kernel_size: 3
133    weight_filler {
134      type: "xavier"
135    }
136    bias_filler {
137      type: "constant"
138      value: 0
139    }
140  }
141 }
142 layer {
143  name: "relu2_2"
144  type: "ReLU"
145  bottom: "conv2_2"
146  top: "conv2_2"
147 }
148 layer {
149  name: "pool2"
150  type: "Pooling"
151  bottom: "conv2_2"
152  top: "pool2"
153  pooling_param {
154    pool: MAX
155    kernel_size: 2
156    stride: 2
157  }
158 }
159 layer {
160  name: "conv3_1"
161  type: "Convolution"
162  bottom: "pool2"
163  top: "conv3_1"
164  param {
165    lr_mult: 1
166    decay_mult: 1
167  }
168  param {
169    lr_mult: 2
170    decay_mult: 0
171  }
172  convolution_param {
173    num_output: 256
174    pad: 1
175    kernel_size: 3
176    weight_filler {
177      type: "xavier"
178    }
179    bias_filler {
180      type: "constant"
181      value: 0
182    }
183  }
184 }
185 layer {
186  name: "relu3_1"
187  type: "ReLU"
188  bottom: "conv3_1"
189  top: "conv3_1"
190 }
191 layer {
192  name: "conv3_2"
193  type: "Convolution"
194  bottom: "conv3_1"
195  top: "conv3_2"
196  param {
197    lr_mult: 1
198    decay_mult: 1
199  }
200  param {
201    lr_mult: 2
202    decay_mult: 0
203  }
204  convolution_param {
205    num_output: 256
206    pad: 1
207    kernel_size: 3
208    weight_filler {
209      type: "xavier"
210    }
211    bias_filler {
212      type: "constant"
213      value: 0
214    }
215  }
216 }
217 layer {
```

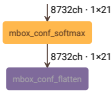
Error Encountered
CONCAT: input dimensions dont agree!

VGG VOC0712 SSD 300x300 deploy (vss)



```
218 name: "relu3_2"
219 type: "ReLU"
220 bottom: "conv3_3"
221 top: "conv3_2"
222 }
223 layer {
224 name: "conv3_3"
225 type: "Convolution"
226 bottom: "conv3_2"
227 top: "conv3_3"
228 param {
229 lr_mult: 1
230 decay_mult: 1
231 }
232 param {
233 lr_mult: 2
234 decay_mult: 0
235 }
236 convolution_param {
237 num_output: 256
238 pad: 1
239 kernel_size: 3
240 weight_filler {
241 type: "xavier"
242 }
243 bias_filler {
244 type: "constant"
245 value: 0
246 }
247 }
248 }
249 layer {
250 name: "relu3_3"
251 type: "ReLU"
252 bottom: "conv3_3"
253 top: "conv3_3"
254 }
255 layer {
256 name: "pool3"
257 type: "Pooling"
258 bottom: "conv3_3"
259 top: "pool3"
260 pooling_param {
261 pool: MAX
262 kernel_size: 2
263 stride: 2
264 }
265 }
266 layer {
267 name: "conv4_1"
268 type: "Convolution"
269 bottom: "pool3"
270 top: "conv4_1"
271 param {
272 lr_mult: 1
273 decay_mult: 1
274 }
275 param {
276 lr_mult: 2
277 decay_mult: 0
278 }
279 convolution_param {
280 num_output: 512
281 pad: 1
282 kernel_size: 3
283 weight_filler {
284 type: "xavier"
285 }
286 bias_filler {
287 type: "constant"
288 value: 0
289 }
290 }
291 }
292 layer {
293 name: "relu4_1"
294 type: "ReLU"
295 bottom: "conv4_1"
296 top: "conv4_1"
297 }
298 layer {
299 name: "conv4_2"
300 type: "Convolution"
301 bottom: "conv4_1"
302 top: "conv4_2"
303 param {
304 lr_mult: 1
305 decay_mult: 1
306 }
307 param {
308 lr_mult: 2
309 decay_mult: 0
310 }
311 convolution_param {
312 num_output: 512
313 pad: 1
314 kernel_size: 3
315 weight_filler {
316 type: "xavier"
317 }
318 bias_filler {
319 type: "constant"
320 value: 0
321 }
322 }
323 }
324 layer {
325 name: "relu4_2"
326 type: "ReLU"
327 bottom: "conv4_2"
328 top: "conv4_2"
329 }
330 layer {
331 name: "conv4_3"
332 type: "Convolution"
333 bottom: "conv4_2"
334 top: "conv4_3"
335 param {
336 lr_mult: 1
337 decay_mult: 1
338 }
339 param {
340 lr_mult: 2
341 decay_mult: 0
342 }
343 convolution_param {
344 num_output: 512
345 pad: 1
346 kernel_size: 3
347 weight_filler {
348 type: "xavier"
349 }
350 bias_filler {
351 type: "constant"
352 value: 0
353 }
354 }
355 }
356 layer {
357 name: "relu4_3"
358 type: "ReLU"
359 bottom: "conv4_3"
360 top: "conv4_3"
361 }
362 layer {
363 name: "pool4"
364 type: "Pooling"
365 bottom: "conv4_3"
366 top: "pool4"
367 pooling_param {
368 pool: MAX
369 kernel_size: 2
370 stride: 2
371 }
372 }
373 layer {
374 name: "conv5_1"
375 type: "Convolution"
376 bottom: "pool4"
377 top: "conv5_1"
378 param {
379 lr_mult: 1
380 decay_mult: 1
381 }
382 param {
383 lr_mult: 2
384 decay_mult: 0
385 }
386 convolution_param {
387 num_output: 512
388 pad: 1
389 kernel_size: 3
390 weight_filler {
391 type: "xavier"
392 }
393 bias_filler {
394 type: "constant"
395 value: 0
396 }
397 dilation: 1
398 }
399 }
400 layer {
401 name: "relu5_1"
402 type: "ReLU"
403 bottom: "conv5_1"
404 top: "conv5_1"
405 }
406 layer {
407 name: "conv5_2"
408 type: "Convolution"
409 bottom: "conv5_1"
410 top: "conv5_2"
411 param {
412 lr_mult: 1
413 decay_mult: 1
414 }
415 param {
416 lr_mult: 2
417 decay_mult: 0
418 }
419 convolution_param {
420 num_output: 512
421 pad: 1
422 kernel_size: 3
423 weight_filler {
424 type: "xavier"
425 }
426 bias_filler {
427 type: "constant"
428 value: 0
429 }
430 dilation: 1
431 }
432 }
433 layer {
434 name: "relu5_2"
```

VGG VOC0712 SSD 300x300 deploy — Netscope CNN Analyzer



Network Analysis

Summary:

ID	name	type	batch	ch_in	dim_in	ch_out	dim_out	ops	mem
1	data	data	3	300x300	3	300x300			activation 270k
2	conv1_1	Convolution	3	300x300	64	300x300		maco 155.52M	activation 5.76M param 1.79k
3	relu1_1	ReLU	64	300x300	64	300x300		comp 5.76M	activation 5.76M
4	conv1_2	Convolution	64	300x300	64	300x300		maco 3.32G	activation 5.76M param 36.93k
5	relu1_2	ReLU	64	300x300	64	300x300		comp 5.76M	activation 5.76M
6	pool1	Pooling	64	300x300	64	150x150		comp 5.76M	activation 1.44M
7	conv2_1	Convolution	64	150x150	128	150x150		maco 1.66G	activation 2.88M param 73.86k
8	relu2_1	ReLU	128	150x150	128	150x150		comp 2.88M	activation 2.88M
9	conv2_2	Convolution	128	150x150	128	150x150		maco 3.32G	activation 2.88M param 147.58k
10	relu2_2	ReLU	128	150x150	128	150x150		comp 2.88M	activation 2.88M
11	pool2	Pooling	128	150x150	128	75x75		comp 2.88M	activation 720k
12	conv3_1	Convolution	128	75x75	256	75x75		maco 1.66G	activation 1.44M param 295.17k
13	relu3_1	ReLU	256	75x75	256	75x75		comp 1.44M	activation 1.44M
14	conv3_2	Convolution	256	75x75	256	75x75		maco 3.32G	activation 1.44M param 590.08k
15	relu3_2	ReLU	256	75x75	256	75x75		comp 1.44M	activation 1.44M
16	conv3_3	Convolution	256	75x75	256	75x75		maco 3.32G	activation 1.44M param 590.08k
17	relu3_3	ReLU	256	75x75	256	75x75		comp 1.44M	activation 1.44M
18	pool3	Pooling	256	75x75	256	38x38		comp 1.48M	activation 369.66k
19	conv4_1	Convolution	256	38x38	512	38x38		maco 1.7G	activation 739.33k param 1.18M
20	relu4_1	ReLU	512	38x38	512	38x38		comp 739.33k	activation 739.33k
21	conv4_2	Convolution	512	38x38	512	38x38		maco 3.41G	activation 739.33k param 2.36M
22	relu4_2	ReLU	512	38x38	512	38x38		comp 739.33k	activation 739.33k
23	conv4_3	Convolution	512	38x38	512	38x38		maco 3.41G	activation 739.33k param 2.36M
24	relu4_3	ReLU	512	38x38	512	38x38		comp 739.33k	activation 739.33k
25	conv4_3_norm	Normalize	512	38x38	512	38x38		maco 739.33k add 739.33k div 1.48M exp 739.33k	activation 739.33k param 2
26	conv4_3_norm_mbox_priorbox	PriorBox	512	38x38	2	120x4			
27	conv4_3_norm_mbox_conf	Convolution	512	38x38	84	38x38		maco 558.93M	activation 121.3k param 387.16k
28	conv4_3_norm_mbox_conf_perm	Permute	84	38x38	38	84x38			
29	conv4_3_norm_mbox_conf_flat	Flatten	38	84x38	121296	1x1			activation 121.3k
30	conv4_3_norm_mbox_loc	Convolution	512	38x38	16	38x38		maco 106.46M	activation 23.1k param 73.74k
31	conv4_3_norm_mbox_loc_perm	Permute	16	38x38	38	16x38			
32	conv4_3_norm_mbox_loc_flat	Flatten	38	16x38	23104	1x1			activation 23.1k
33	pool4	Pooling	512	38x38	512	19x19		comp 739.33k	activation 184.83k
34	conv5_1	Convolution	512	19x19	512	19x19		maco 851.71M	activation 184.83k param 2.36M
35	relu5_1	ReLU	512	19x19	512	19x19		comp 184.83k	activation 184.83k
36	conv5_2	Convolution	512	19x19	512	19x19		maco 851.71M	activation 184.83k param 2.36M
37	relu5_2	ReLU	512	19x19	512	19x19		comp 184.83k	activation 184.83k
38	conv5_3	Convolution	512	19x19	512	19x19		maco 851.71M	activation 184.83k param 2.36M
39	relu5_3	ReLU	512	19x19	512	19x19		comp 184.83k	activation 184.83k
40	pool5	Pooling	512	19x19	512	19x19		comp 1.66M	activation 184.83k
41	fc6	Convolution	512	19x19	1024	19x19		maco 1.7G	activation 369.66k param 4.72M
42	relu6	ReLU	1024	19x19	1024	19x19		comp 369.66k	activation 369.66k
43	fc7	Convolution	1024	19x19	1024	19x19		maco 378.54M	activation 369.66k param 1.05M
44	relu7	ReLU	1024	19x19	1024	19x19		comp 369.66k	activation 369.66k
45	fc7_mbox_priorbox	PriorBox	3	300x300	2	NaNx4			
46	fc7_mbox_conf	Convolution	1024	19x19	128	19x19		maco 419.2M	activation 45.49k param 1.16M
47	fc7_mbox_conf_perm	Permute	126	19x19	19	126x19			
48	fc7_mbox_conf_flat	Flatten	19	126x19	45486	1x1			activation 45.49k
49	fc7_mbox_loc	Convolution	1024	19x19	24	19x19		maco 79.85M	activation 8.66k param 221.21k
50	fc7_mbox_loc_perm	Permute	24	19x19	19	24x19			
51	fc7_mbox_loc_flat	Flatten	19	24x19	8664	1x1			activation 8.66k
52	conv6_1	Convolution	1024	19x19	256	19x19		maco 94.63M	activation 92.42k param 262.4k
53	conv6_1_relu	ReLU	256	19x19	256	19x19		comp 92.42k	activation 92.42k
54	conv6_2	Convolution	256	19x19	512	10x10		maco 117.96M	activation 51.2k param 1.18M
55	conv6_2_relu	ReLU	512	10x10	512	10x10		comp 51.2k	activation 51.2k
56	conv6_2_mbox_priorbox	PriorBox	3	300x300	2	NaNx4			
57	conv6_2_mbox_conf	Convolution	512	10x10	126	10x10		maco 58.06M	activation 12.6k

<http://dgschwend.github.io/netscope/#/editor>

Details:

name	type	batch	ch_in	dim_in	ch_out	dim_out	ops_new	mem_new
data	data	1	3	300x300	3	300x300	maco 0 comp 0 add 0 div 0 exp 0	activation 270000 param 0
conv1_1	Convolution	1	3	300x300	64	300x300	maco 155520000 comp 0 add 0 div 0 exp 0	activation 576000 param 1792
relu_1	ReLU	1	64	300x300	64	300x300	maco 0 comp 5760000 add 0 div 0 exp 0	activation 576000 param 0
conv1_2	Convolution	1	64	300x300	64	300x300	maco 3317760000 comp 0 add 0 div 0 exp 0	activation 576000 param 36928
relu_2	ReLU	1	64	300x300	64	300x300	maco 0 comp 5760000 add 0 div 0 exp 0	activation 576000 param 0
pool1	Pooling	1	64	300x300	64	150x150	maco 0 comp 5760000 add 0 div 0 exp 0	activation 144000 param 0

exp	0		
comp	0		
maco	1658800000	activation	2880000
add	0	param	73856
div	0		
exp	0		
maco	0	activation	2880000
comp	28800000	param	0
add	0		
div	0		
exp	0		
maco	3317760000	activation	2880000
comp	0	param	147584
add	0		
div	0		
exp	0		
maco	0	activation	2880000
comp	28800000	param	0
add	0		
div	0		
exp	0		
maco	0	activation	720000
comp	28800000	param	0
add	0		
div	0		
exp	0		
maco	1658800000	activation	1440000
comp	0	param	295168
add	0		
div	0		
exp	0		
maco	0	activation	1440000
comp	14400000	param	0
add	0		
div	0		
exp	0		
maco	3317760000	activation	1440000
comp	0	param	590080
add	0		
div	0		
exp	0		
maco	0	activation	1440000
comp	14400000	param	0
add	0		
div	0		
exp	0		
maco	3317760000	activation	1440000
comp	0	param	590080
add	0		
div	0		
exp	0		
maco	0	activation	1440000
comp	14400000	param	0
add	0		
div	0		
exp	0		
maco	0	activation	369664
comp	1478656	param	0
add	0		
div	0		
exp	0		
maco	1703411712	activation	793928
comp	0	param	1180160
add	0		
div	0		
exp	0		
maco	0	activation	793928
comp	793928	param	0
add	0		
div	0		
exp	0		
maco	3406823424	activation	793928
comp	0	param	2359808
add	0		
div	0		
exp_n	0	mem_new	
comp	793928	activation	793928
add	0	param	0
div	0		
exp	0		
maco	3406823424	activation	793928
comp	0	param	2359808
add	0		
div	0		
exp	0		
maco	0	activation	793928
comp	793928	param	0
add	0		
div	0		
exp	0		
maco	793928	activation	793928
comp	0	param	2
add	793928		
div	1478656		
exp	793928		
maco	0	activation	0
comp	0	param	0
add	0		
div	0		
exp	0		
maco	558931968	activation	121296
comp	0	param	387156
add	0		
div	0		

<pre>869 top: "conv4_3_norm_mbox_loc_flat" 870 flatten_param { 871 axis: 1 872 } 873 } 874 layer { 875 name: "conv4_3_norm_mbox_conf" 876 type: "Convolution" 877 bottom: "conv4_3_norm" 878 top: "conv4_3_norm_mbox_conf" 879 param { 880 lr_mult: 1 881 decay_mult: 1 882 } 883 } 884 param { 885 lr_mult: 2 886 decay_mult: 0 887 } 888 convolution_param { 889 num_output: 84 890 pad: 1 891 kernel_size: 3 892 stride: 1 893 weight_filler { 894 type: "xavier" 895 } 896 } 897 bias_filler { 898 type: "constant" 899 value: 0 900 } 901 } 902 } 903 layer { 904 name: "conv4_3_norm_mbox_conf_perm" 905 type: "Permute" 906 bottom: "conv4_3_norm_mbox_conf" 907 top: "conv4_3_norm_mbox_conf_perm" 908 permute_param { 909 order: 0 910 order: 2 911 order: 3 912 order: 1 913 } 914 } 915 } 916 layer { 917 name: "conv4_3_norm_mbox_conf_flat" 918 type: "Flatten" 919 bottom: "conv4_3_norm_mbox_conf_perm" 920 top: "conv4_3_norm_mbox_conf_flat" 921 flatten_param { 922 axis: 1 923 } 924 } 925 } 926 layer { 927 name: "conv4_3_norm_mbox_priorbox" 928 type: "PriorBox" 929 bottom: "conv4_3_norm" 930 bottom: "data" 931 top: "conv4_3_norm_mbox_priorbox" 932 prior_box_param { 933 min_size: 38.0 934 max_size: 66.0 935 aspect_ratio: 2 936 flip: true 937 clip: false 938 variance: 0.1 939 variance: 0.1 940 variance: 0.2 941 variance: 0.2 942 step: 8 943 offset: 0.5 944 } 945 } 946 } 947 layer { 948 name: "fc7_mbox_loc" 949 type: "Convolution" 950 bottom: "fc7" 951 top: "fc7_mbox_loc" 952 param { 953 lr_mult: 1 954 decay_mult: 1 955 } 956 } 957 param { 958 lr_mult: 2 959 decay_mult: 0 960 } 961 convolution_param { 962 num_output: 24 963 pad: 1 964 kernel_size: 3 965 stride: 1 966 weight_filler { 967 type: "xavier" 968 } 969 } 970 bias_filler { 971 type: "constant" 972 value: 0 973 } 974 } 975 } 976 layer { 977 name: "fc7_mbox_loc_perm" 978 type: "Permute" 979 bottom: "fc7_mbox_loc" 980 top: "fc7_mbox_loc_perm" 981 permute_param { 982 order: 0 983 order: 2 984 order: 3 985 order: 1 986 } 987 } 988 } 989 layer { 990 name: "fc7_mbox_loc_flat" 991 type: "Flatten" 992 bottom: "fc7_mbox_loc_perm" 993 top: "fc7_mbox_loc_flat" 994 flatten_param { 995 axis: 1 996 } 997 } 998 } 999 layer { 1000 name: "fc7_mbox_conf" 1001 type: "Convolution" 1002 bottom: "fc7" 1003 top: "fc7_mbox_conf" 1004 param { 1005 lr_mult: 1 1006 decay_mult: 1 1007 } 1008 } 1009 param { 1010 lr_mult: 2 1011 decay_mult: 0 1012 } 1013 convolution_param { 1014 num_output: 126 1015 pad: 1 1016 kernel_size: 3 1017 stride: 1 1018 weight_filler { 1019 type: "xavier" 1020 } 1021 } 1022 bias_filler { 1023 type: "constant" 1024 value: 0 1025 } 1026 } 1027 } 1028 } 1029 layer { 1030 name: "fc7_mbox_conf_flat" 1031 type: "Flatten" 1032 bottom: "fc7_mbox_conf_perm" 1033 top: "fc7_mbox_conf_flat" 1034 flatten_param { 1035 axis: 1 1036 } 1037 } 1038 } 1039 layer { 1040 name: "fc7_mbox_priorbox" 1041 type: "PriorBox" 1042 bottom: "fc7" 1043 bottom: "data" 1044 top: "fc7_mbox_priorbox" 1045 prior_box_param { 1046 min_size: 66.0 1047 max_size: 111.0 1048 aspect_ratio: 2 1049 aspect_ratio: 3 1050 flip: true 1051 clip: false 1052 variance: 0.1 1053 variance: 0.1 1054 variance: 0.2 1055 variance: 0.2 1056 step: 16 1057 offset: 0.5 1058 } 1059 } 1060 } 1061 layer { 1062 name: "conv6_2_mbox_loc" 1063 type: "Convolution" 1064 bottom: "conv6_2" 1065 top: "conv6_2_mbox_loc" 1066 param { 1067 lr_mult: 1 1068 decay_mult: 1 1069 } 1070 } 1071 param { 1072 lr_mult: 2 1073 decay_mult: 0 1074 } 1075 convolution_param { 1076 num_output: 24 1077 pad: 1 1078 kernel_size: 3 1079 stride: 1 1080 weight_filler { 1081 type: "xavier" 1082 } 1083 } 1084 bias_filler { 1085 type: "constant" 1086 value: 0 1087 } 1088 } 1089 } 1090 } 1091 layer { 1092 name: "conv6_2_mbox_conf_perm" 1093 type: "Permute" 1094 bottom: "conv6_2_mbox_conf" 1095 top: "conv6_2_mbox_conf_perm" 1096 permute_param { 1097 order: 0 1098 order: 2 1099 order: 3 1100 order: 1 1101 } 1102 } 1103 } 1104 layer { 1105 name: "conv6_2_mbox_conf_flat" 1106 type: "Flatten" 1107 bottom: "conv6_2_mbox_conf_perm" 1108 top: "conv6_2_mbox_conf_flat" 1109 flatten_param { 1110 axis: 1 1111 } 1112 } 1113 } 1114 layer { 1115 name: "conv6_2_mbox_priorbox" 1116 type: "PriorBox" 1117 bottom: "conv6_2" 1118 bottom: "data" 1119 top: "conv6_2_mbox_priorbox" 1120 prior_box_param { 1121 min_size: 66.0 1122 max_size: 111.0 1123 aspect_ratio: 2 1124 aspect_ratio: 3 1125 flip: true 1126 clip: false 1127 variance: 0.1 1128 variance: 0.1 1129 variance: 0.2 1130 variance: 0.2 1131 step: 16 1132 offset: 0.5 1133 } 1134 } 1135 } 1136 } 1137 layer { 1138 name: "conv6_2_mbox_loc_perm" 1139 type: "Permute" 1140 bottom: "conv6_2_mbox_loc" 1141 top: "conv6_2_mbox_loc_perm" 1142 permute_param { 1143 order: 0 1144 order: 2 1145 order: 3 1146 order: 1 1147 } 1148 } 1149 } 1150 layer { 1151 name: "conv6_2_mbox_loc_flat" 1152 type: "Flatten" 1153 bottom: "conv6_2_mbox_loc_perm" 1154 top: "conv6_2_mbox_loc_flat" 1155 flatten_param { 1156 axis: 1 1157 } 1158 } 1159 } 1160 layer { 1161 name: "conv6_2_mbox_conf_perm" 1162 type: "Permute" 1163 bottom: "conv6_2_mbox_conf" 1164 top: "conv6_2_mbox_conf_perm" 1165 permute_param { 1166 order: 0 1167 order: 2 1168 order: 3 1169 order: 1 1170 } 1171 } 1172 } 1173 layer { 1174 name: "conv6_2_mbox_conf_flat" 1175 type: "Flatten" 1176 bottom: "conv6_2_mbox_conf_perm" 1177 top: "conv6_2_mbox_conf_flat" 1178 flatten_param { 1179 axis: 1 1180 } 1181 } 1182 } 1183 layer { 1184 name: "conv6_2_mbox_priorbox" 1185 type: "PriorBox" 1186 bottom: "conv6_2" 1187 bottom: "data" 1188 top: "conv6_2_mbox_priorbox" 1189 prior_box_param { 1190 min_size: 66.0 1191 max_size: 111.0 1192 aspect_ratio: 2 1193 aspect_ratio: 3 1194 flip: true 1195 clip: false 1196 variance: 0.1 1197 variance: 0.1 1198 variance: 0.2 1199 variance: 0.2 1200 step: 16 1201 offset: 0.5 1202 } 1203 } 1204 } 1205 } 1206 layer { 1207 name: "conv6_2_mbox_loc_perm" 1208 type: "Permute" 1209 bottom: "conv6_2_mbox_loc" 1210 top: "conv6_2_mbox_loc_perm" 1211 permute_param { 1212 order: 0 1213 order: 2 1214 order: 3 1215 order: 1 1216 } 1217 } 1218 } 1219 layer { 1220 name: "conv6_2_mbox_loc_flat" 1221 type: "Flatten" 1222 bottom: "conv6_2_mbox_loc_perm" 1223 top: "conv6_2_mbox_loc_flat" 1224 flatten_param { 1225 axis: 1 1226 } 1227 } 1228 } 1229 layer { 1230 name: "conv6_2_mbox_conf_perm" 1231 type: "Permute" 1232 bottom: "conv6_2_mbox_conf" 1233 top: "conv6_2_mbox_conf_perm" 1234 permute_param { 1235 order: 0 1236 order: 2 1237 order: 3 1238 order: 1 1239 } 1240 } 1241 } 1242 layer { 1243 name: "conv6_2_mbox_conf_flat" 1244 type: "Flatten" 1245 bottom: "conv6_2_mbox_conf_perm" 1246 top: "conv6_2_mbox_conf_flat" 1247 flatten_param { 1248 axis: 1 1249 } 1250 } 1251 } 1252 layer { 1253 name: "conv6_2_mbox_priorbox" 1254 type: "PriorBox" 1255 bottom: "conv6_2" 1256 bottom: "data" 1257 top: "conv6_2_mbox_priorbox" 1258 prior_box_param { 1259 min_size: 66.0 1260 max_size: 111.0 1261 aspect_ratio: 2 1262 aspect_ratio: 3 1263 flip: true 1264 clip: false 1265 variance: 0.1 1266 variance: 0.1 1267 variance: 0.2 1268 variance: 0.2 1269 step: 16 1270 offset: 0.5 1271 } 1272 } 1273 } 1274 } 1275 layer { 1276 name: "conv6_2_mbox_loc_perm" 1277 type: "Permute" 1278 bottom: "conv6_2_mbox_loc" 1279 top: "conv6_2_mbox_loc_perm" 1280 permute_param { 1281 order: 0 1282 order: 2 1283 order: 3 1284 order: 1 1285 } 1286 } 1287 } 1288 layer { 1289 name: "conv6_2_mbox_loc_flat" 1290 type: "Flatten" 1291 bottom: "conv6_2_mbox_loc_perm" 1292 top: "conv6_2_mbox_loc_flat" 1293 flatten_param { 1294 axis: 1 1295 } 1296 } 1297 } 1298 layer { 1299 name: "conv6_2_mbox_conf_perm" 1300 type: "Permute" 1301 bottom: "conv6_2_mbox_conf" 1302 top: "conv6_2_mbox_conf_perm" 1303 permute_param { 1304 order: 0 1305 order: 2 1306 order: 3 1307 order: 1 1308 } 1309 } 1310 } 1311 layer { 1312 name: "conv6_2_mbox_conf_flat" 1313 type: "Flatten" 1314 bottom: "conv6_2_mbox_conf_perm" 1315 top: "conv6_2_mbox_conf_flat" 1316 flatten_param { 1317 axis: 1 1318 } 1319 } 1320 } 1321 layer { 1322 name: "conv6_2_mbox_priorbox" 1323 type: "PriorBox" 1324 bottom: "conv6_2" 1325 bottom: "data" 1326 top: "conv6_2_mbox_priorbox" 1327 prior_box_param { 1328 min_size: 66.0 1329 max_size: 111.0 1330 aspect_ratio: 2 1331 aspect_ratio: 3 1332 flip: true 1333 clip: false 1334 variance: 0.1 1335 variance: 0.1 1336 variance: 0.2 1337 variance: 0.2 1338 step: 16 1339 offset: 0.5 1340 } 1341 } 1342 } 1343 } 1344 layer { 1345 name: "conv6_2_mbox_loc_perm" 1346 type: "Permute" 1347 bottom: "conv6_2_mbox_loc" 1348 top: "conv6_2_mbox_loc_perm" 1349 permute_param { 1350 order: 0 1351 order: 2 1352 order: 3 1353 order: 1 1354 } 1355 } 1356 } 1357 layer { 1358 name: "conv6_2_mbox_loc_flat" 1359 type: "Flatten" 1360 bottom: "conv6_2_mbox_loc_perm" 1361 top: "conv6_2_mbox_loc_flat" 1362 flatten_param { 1363 axis: 1 1364 } 1365 } 1366 } 1367 layer { 1368 name: "conv6_2_mbox_conf_perm" 1369 type: "Permute" 1370 bottom: "conv6_2_mbox_conf" 1371 top: "conv6_2_mbox_conf_perm" 1372 permute_param { 1373 order: 0 1374 order: 2 1375 order: 3 1376 order: 1 1377 } 1378 } 1379 } 1380 layer { 1381 name: "conv6_2_mbox_conf_flat" 1382 type: "Flatten" 1383 bottom: "conv6_2_mbox_conf_perm" 1384 top: "conv6_2_mbox_conf_flat" 1385 flatten_param { 1386 axis: 1 1387 } 1388 } 1389 } 1390 layer { 1391 name: "conv6_2_mbox_priorbox" 1392 type: "PriorBox" 1393 bottom: "conv6_2" 1394 bottom: "data" 1395 top: "conv6_2_mbox_priorbox" 1396 prior_box_param { 1397 min_size: 66.0 1398 max_size: 111.0 1399 aspect_ratio: 2 1400 aspect_ratio: 3 1401 flip: true 1402 clip: false 1403 variance: 0.1 1404 variance: 0.1 1405 variance: 0.2 1406 variance: 0.2 1407 step: 16 1408 offset: 0.5 1409 } 1410 } 1411 } 1412 } 1413 layer { 1414 name: "conv6_2_mbox_loc_perm" 1415 type: "Permute" 1416 bottom: "conv6_2_mbox_loc" 1417 top: "conv6_2_mbox_loc_perm" 1418 permute_param { 1419 order: 0 1420 order: 2 1421 order: 3 1422 order: 1 1423 } 1424 } 1425 } 1426 layer { 1427 name: "conv6_2_mbox_loc_flat" 1428 type: "Flatten" 1429 bottom: "conv6_2_mbox_loc_perm" 1430 top: "conv6_2_mbox_loc_flat" 1431 flatten_param { 1432 axis: 1 1433 } 1434 } 1435 } 1436 layer { 1437 name: "conv6_2_mbox_conf_perm" 1438 type: "Permute" 1439 bottom: "conv6_2_mbox_conf" 1440 top: "conv6_2_mbox_conf_perm" 1441 permute_param { 1442 order: 0 1443 order: 2 1444 order: 3 1445 order: 1 1446 } 1447 } 1448 } 1449 layer { 1450 name: "conv6_2_mbox_conf_flat" 1451 type: "Flatten" 1452 bottom: "conv6_2_mbox_conf_perm" 1453 top: "conv6_2_mbox_conf_flat" 1454 flatten_param { 1455 axis: 1 1456 } 1457 } 1458 } 1459 layer { 1460 name: "conv6_2_mbox_priorbox" 1461 type: "PriorBox" 1462 bottom: "conv6_2" 1463 bottom: "data" 1464 top: "conv6_2_mbox_priorbox" 1465 prior_box_param { 1466 min_size: 66.0 1467 max_size: 111.0 1468 aspect_ratio: 2 1469 aspect_ratio: 3 1470 flip: true 1471 clip: false 1472 variance: 0.1 1473 variance: 0.1 1474 variance: 0.2 1475 variance: 0.2 1476 step: 16 1477 offset: 0.5 1478 } 1479 } 1480 } 1481 } 1482 layer { 1483 name: "conv6_2_mbox_loc_perm" 1484 type: "Permute" 1485 bottom: "conv6_2_mbox_loc" 1486 top: "conv6_2_mbox_loc_perm" 1487 permute_param { 1488 order: 0 1489 order: 2 1490 order: 3 1491 order: 1 1492 } 1493 } 1494 } 1495 layer { 1496 name: "conv6_2_mbox_loc_flat" 1497 type: "Flatten" 1498 bottom: "conv6_2_mbox_loc_perm" 1499 top: "conv6_2_mbox_loc_flat" 1500 flatten_param { 1501 axis: 1 1502 } 1503 } 1504 } 1505 layer { 1506 name: "conv6_2_mbox_conf_perm" 1507 type: "Permute" 1508 bottom: "conv6_2_mbox_conf" 1509 top: "conv6_2_mbox_conf_perm" 1510 permute_param { 1511 order: 0 1512 order: 2 1513 order: 3 1514 order: 1 1515 } 1516 } 1517 } 1518 layer { 1519 name: "conv6_2_mbox_conf_flat" 1520 type: "Flatten" 1521 bottom: "conv6_2_mbox_conf_perm" 1522 top: "conv6_2_mbox_conf_flat" 1523 flatten_param { 1524 axis: 1 1525 } 1526 } 1527 } 1528 layer { 1529 name: "conv6_2_mbox_priorbox" 1530 type: "PriorBox" 1531 bottom: "conv6_2" 1532 bottom: "data" 1533 top: "conv6_2_mbox_priorbox" 1534 prior_box_param { 1535 min_size: 66.0 1536 max_size: 111.0 1537 aspect_ratio: 2 1538 aspect_ratio: 3 1539 flip: true 1540 clip: false 1541 variance: 0.1 1542 variance: 0.1 1543 variance: 0.2 1544 variance: 0.2 1545 step: 16 1546 offset: 0.5 1547 } 1548 } 1549 } 1550 } 1551 layer { 1552 name: "conv6_2_mbox_loc_perm" 1553 type: "Permute" 1554 bottom: "conv6_2_mbox_loc" 1555 top: "conv6_2_mbox_loc_perm" 1556 permute_param { 1557 order: 0 1558 order: 2 1559 order: 3 1560 order: 1 1561 } 1562 } 1563 } 1564 layer { 1565 name: "conv6_2_mbox_loc_flat" 1566 type: "Flatten" 1567 bottom: "conv6_2_mbox_loc_perm" 1568 top: "conv6_2_mbox_loc_flat" 1569 flatten_param { 1570 axis: 1 1571 } 1572 } 1573 } 1574 layer { 1575 name: "conv6_2_mbox_conf_perm" 1576 type: "Permute" 1577 bottom: "conv6_2_mbox_conf" 1578 top: "conv6_2_mbox_conf_perm" 1579 permute_param { 1580 order: 0 1581 order: 2 1582 order: 3 1583 order: 1 1584 } 1585 } 1586 } 1587 layer { 1588 name: "conv6_2_mbox_conf_flat" 1589 type: "Flatten" 1590 bottom: "conv6_2_mbox_conf_perm" 1591 top: "conv6_2_mbox_conf_flat" 1592 flatten_param { 1593 axis: 1 1594 } 1595 } 1596 } 1597 layer { 1598 name: "conv6_2_mbox_priorbox" 1599 type: "PriorBox" 1600 bottom: "conv6_2" 1601 bottom: "data" 1602 top: "conv6_2_mbox_priorbox" 1603 prior_box_param { 1604 min_size: 66.0 1605 max_size: 111.0 1606 aspect_ratio: 2 1607 aspect_ratio: 3 1608 flip: true 1609 clip: false 1610 variance: 0.1 1611 variance: 0.1 1612 variance: 0.2 1613 variance: 0.2 1614 step: 16 1615 offset: 0.5 1616 } 1617 } 1618 } 1619 } 1620 layer { 1621 name: "conv6_2_mbox_loc_perm" 1622 type: "Permute" 1623 bottom: "conv6_2_mbox_loc" 1624 top: "conv6_2_mbox_loc_perm" 1625 permute_param { 1626 order: 0 1627 order: 2 1628 order: 3 1629 order: 1 1630 } 1631 } 1632 } 1633 layer { 1634 name: "conv6_2_mbox_loc_flat" 1635 type: "Flatten" 1636 bottom: "conv6_2_mbox_loc_perm" 1637 top: "conv6_2_mbox_loc_flat" 1638 flatten_param { 1639 axis: 1 1640 } 1641 } 1642 } 1643 layer { 1644 name: "conv6_2_mbox_conf_perm" 1645 type: "Permute" 1646 bottom: "conv6_2_mbox_conf" 1647 top: "conv6_2_mbox_conf_perm" 1648 permute_param { 1649 order: 0 1650 order: 2 1651 order: 3 1652 order: 1 1653 } 1654 } 1655 } 1656 layer { 1657 name: "conv6_2_mbox_conf_flat" 1658 type: "Flatten" 1659 bottom: "conv6_2_mbox_conf_perm" 1660 top: "conv6_2_mbox_conf_flat" 1661 flatten_param { 1662 axis: 1 1663 } 1664 } 1665 } 1666 layer { 1667 name: "conv6_2_mbox_priorbox" 1668 type: "PriorBox" 1669 bottom: "conv6_2" 1670 bottom: "data" 1671 top: "conv6_2_mbox_priorbox" 1672 prior_box_param { 1673 min_size: 66.0 1674 max_size: 111.0 1675 aspect_ratio: 2 1676 aspect_ratio: 3 1677 flip: true 1678 clip: false 1679 variance: 0.1 1680 variance: 0.1 1681 variance: 0.2 1682 variance: 0.2 1683 step: 16 1684 offset: 0.5 1685 } 1686 } 1687 } 1688 } 1689 layer { 1690 name: "conv6_2_mbox_loc_perm" 1691 type: "Permute" 1692 bottom: "conv6_2_mbox_loc" 1693 top: "conv6_2_mbox_loc_perm" 1694 permute_param { 1695 order: 0 1696 order: 2 1697 order: 3 1698 order: 1 1699 } 1700 } 1701 } 1702 layer { 1703 name: "conv6_2_mbox_loc_flat" 1704 type: "Flatten" 1705 bottom: "conv6_2_mbox_loc_perm" 1706 top: "conv6_2_mbox_loc_flat" 1707 flatten_param { 1708 axis: 1 1709 } 1710 } 1711 } 1712 layer { 1713 name: "conv6_2_mbox_conf_perm" 1714 type: "Permute" 1715 bottom: "conv6_2_mbox_conf" 1716 top: "conv6_2_mbox_conf_perm" 1717 permute_param { 1718 order: 0 1719 order: 2 1720 order: 3 1721 order: 1 1722 } 1723 } 1724 } 1725 layer { 1726 name: "conv6_2_mbox_conf_flat" 1727 type: "Flatten" 1728 bottom: "conv6_2_mbox_conf_perm" 1729 top: "conv6_2_mbox_conf_flat" 1730 flatten_param { 1731 axis: 1 1732 } 1733 } 1734 } 1735 layer { 1736 name: "conv6_2_mbox_priorbox" 1737 type: "PriorBox" 1738 bottom: "conv6_2" 1739 bottom: "data" 1740 top: "conv6_2_mbox_priorbox" 1741 prior_box_param { 1742 min_size: 66.0 1743 max_size: 111.0 1744 aspect_ratio: 2 1745 aspect_ratio: 3 1746 flip: true 1747 clip: false 1748 variance: 0.1 1749 variance: 0.1 1750 variance: 0.2 1751 variance: 0.2 1752 step: 16 1753 offset: 0.5 1754 } 1755 } 1756 } 1757 } 1758 layer { 1759 name: "conv6_2_mbox_loc_perm" 1760 type: "Permute" 1761 bottom: "conv6_2_mbox_loc" 1762 top: "conv6_2_mbox_loc_perm" 1763 permute_param { 1764 order: 0 1765 order: 2 1766 order: 3 1767 order: 1 1768 } 1769 } 1770 } 1771 layer { 1772 name: "conv6_2_mbox_loc_flat" 1773 type: "Flatten" 1774 bottom: "conv6_2_mbox_loc_perm" 1775 top: "conv6_2_mbox_loc_flat" 1776 flatten_param { 1777 axis: 1 1778 } 1779 } 1780 } 1781 layer { 1782 name: "conv6_2_mbox_conf_perm" 1783 type: "Permute" 1784 bottom: "conv6_2_mbox_conf" 1785 top: "conv6_2_mbox_conf_perm" 1786 permute_param { 1787 order: 0 1788 order: 2 1789 order: 3 1790 order: 1 1791 } 1792 } 1793 } 1794 layer { 1795 name: "conv6_2_mbox_conf_flat" 1796 type: "Flatten" 1797 bottom: "conv6_2_mbox_conf_perm" 1798 top: "conv6_2_mbox_conf_flat" 1799 flatten_param { 1800 axis: 1 1801 } 1802 } 1803 } 1804 layer { 1805 name: "conv6_2_mbox_priorbox" 1806 type: "PriorBox" 1807 bottom: "conv6_2" 1808 bottom: "data" 1809 top: "conv6_2_mbox_priorbox" 1810 prior_box_param { 1811 min_size: 66.0 1812 max_size: 111.0 1813 aspect_ratio: 2 1814 aspect_ratio: 3 1815 flip: true 1816 clip: false 1817 variance: 0.1 1818 variance: 0.1 1819 variance: 0.2 1820 variance: 0.2 1821 step: 16 1822 offset: 0.5 1823 } 1824 } 1825 } 1826 } 1827 layer { 1828 name: "conv6_2_mbox_loc_perm" 1829 type: "Permute" 1830 bottom: "conv6_2_mbox_loc" 1831 top: "conv6_2_mbox_loc_perm" 1832 permute_param { 1833 order: 0 1834 order: 2 1835 order: 3 1836 order: 1 1837 } 1838 } 1839 } 1840 layer { 1841 name: "conv6_2_mbox_loc_flat" 1842 type: "Flatten" 1843 bottom: "conv6_2_mbox_loc_perm" 1844 top: "conv6_2_mbox_loc_flat" 1845 flatten_param { 1846 axis: 1 1847 } 1848 } 1849 } 1850 layer { 1851 name: "conv6_2_mbox_conf_perm" 1852 type: "Permute" 1853 bottom: "conv6_2_mbox_conf" 1854 top: "conv6_2_mbox_conf_perm" 1855 permute_param { 1856 order: 0 1857 order: 2 1858 order: 3 1859 order: 1 1860 } 1861 } 1862 } 1863 layer { 1864 name: "conv6_2_mbox_conf_flat" 1865 type: "Flatten" 1866 bottom: "conv6_2_mbox_conf_perm" 1867 top: "conv6_2_mbox_conf_flat" 1868 flatten_param { 1869 axis: 1 1870 } 1871 } 1872 } 1873 layer { 1874 name: "conv6_2_mbox_priorbox" 1875 type: "PriorBox" 1876 bottom: "conv6_2" 1877 bottom: "data" 1878 top: "conv6_2_mbox_priorbox" 1879 prior_box_param { 1880 min_size: 66.0 1881 max_size: 111.0 1882 aspect_ratio: 2 1883 aspect_ratio: 3 1884 flip: true 1885 clip: false 1886 variance: 0.1 1887 variance: 0.1 1888 variance: 0.2 1889 variance: 0.2 1890 step: 16 1891 offset: 0.5 1892 } 1893 } 1894 } 1895 } 1896 layer { 1897 name: "conv6_2_mbox_loc_perm" 1898 type: "Permute" 1899 bottom: "conv6_2_mbox_loc" 1900 top: "conv6_2_mbox_loc_perm" 1901 permute_param { 1902 order: 0 1903 order: 2 1904 order: 3 1905 order: 1 1906 } 1907 } 1908 } 1909 layer { 1910 name: "conv6_2_mbox_loc_flat" 1911 type: "Flatten" 1912 bottom: "conv6_2_mbox_loc_perm" 1913 top: "conv6_2_mbox_loc_flat" 1914 flatten_param { 1915 axis: 1 1916 } 1917 } 1918 } 1919 layer { 1920 name: "conv6_2_mbox_conf_perm" 1921 type: "Permute" 1922 bottom: "conv6_2_mbox_conf" 1923 top: "conv6_2_mbox_conf_perm" 1924 permute_param { 1925 order: 0 1926 order: 2 1927 order: 3 1928 order: 1 1929 } 1930 } 1931 } 1932 layer { 1933 name: "conv6_2_mbox_conf_flat" 1934 type: "Flatten" 1935 bottom: "conv6_2_mbox_conf_perm" 1936 top: "conv6_2_mbox_conf_flat" 1937 flatten_param { 1938 axis: 1 1939 } 1940 } 1941 } 1942 layer { 1943 name: "conv6_2_mbox_priorbox" 1944 type: "PriorBox" 1945 bottom: "conv6_2" 1946 bottom: "data" 1947 top: "conv6_2_mbox_priorbox" 1948 prior_box_param { 1949 min_size: 66.0 1950 max_size: 111.0 1951 aspect_ratio: 2 1952 aspect_ratio: 3 1953 flip: true 1954 clip: false 1955 variance: 0.1 1956 variance: 0.1 1957 variance: 0.2 1958 variance: 0.2 1959 step: 16 1960 offset: 0.5 1961 } 1962 } 1963 } 1964 } 1965 layer { 1966 name: "conv6_2_mbox_loc_perm" 1967 type: "Permute" 1968 bottom: "conv6_2_mbox_loc" 1969 top: "conv6_2_mbox_loc_perm" 1970 permute_param { 1971 order: 0 1972 order: 2 1973 order: 3 1974 order: 1 1975 } 1976 } 1977 } 1978 layer { 1979 name: "conv6_2_mbox_loc_flat" 1980 type: "Flatten" 1981 bottom: "conv6_2_mbox_loc_perm" 1982 top: "conv6_2_mbox_loc_flat" 1983 flatten_param { 1984 axis: 1 1985 } 1986 } 1987 } 1988 layer { 1989 name: "conv6_2_mbox_conf_perm" 1990 type: "Permute" 1991 bottom: "conv6_2_mbox_conf" 1992 top: "conv6_2_mbox_conf_perm" 1993 permute_param { 1994 order: 0 1995 order: 2 1996 order: 3 1997 order: 1 1998 } 1999 } 2000 } 2001 layer { 2002 name: "conv6_2_mbox_conf_flat" 2003 type: "Flatten" 2004 bottom: "conv6_2_mbox_conf_perm" 2005 top: "conv6_2_mbox_conf_flat" 2006 flatten_param { 2007 axis: 1 2008 } 2009 } 2010 } 2011 layer { 2012 name: "conv6_2_mbox_priorbox" 2013 type: "PriorBox" 2014 bottom: "conv6_2" 2015 bottom: "data" 2016 top: "conv6_2_mbox_priorbox" 2017 prior_box</pre>

```
1886 layer {
1887   name: "conv6_2_mbox_loc_perp"
1888   type: "Permute"
1889   bottom: "conv6_2_mbox_loc"
1890   top: "conv6_2_mbox_loc_perp"
1891   permute_param {
1892     order: 0
1893     order: 2
1894     order: 3
1895     order: 1
1896   }
1897 }
1898 layer {
1899   name: "conv6_2_mbox_loc_flat"
1900   type: "Flatten"
1901   bottom: "conv6_2_mbox_loc_perp"
1902   top: "conv6_2_mbox_loc_flat"
1903   flatten_param {
1904     axis: 1
1905   }
1906 }
1907 layer {
1908   name: "conv6_2_mbox_conf"
1909   type: "Convolution"
1910   bottom: "conv6_2"
1911   top: "conv6_2_mbox_conf"
1912   param {
1913     lr_mult: 1
1914     decay_mult: 1
1915   }
1916   param {
1917     lr_mult: 2
1918     decay_mult: 0
1919   }
1920   convolution_param {
1921     num_output: 126
1922     pad: 1
1923     kernel_size: 3
1924     stride: 1
1925     weight_filler {
1926       type: "xavier"
1927     }
1928     bias_filler {
1929       type: "constant"
1930       value: 0
1931     }
1932   }
1933 }
1934 layer {
1935   name: "conv6_2_mbox_conf_perp"
1936   type: "Permute"
1937   bottom: "conv6_2_mbox_conf"
1938   top: "conv6_2_mbox_conf_perp"
1939   permute_param {
1940     order: 0
1941     order: 2
1942     order: 3
1943     order: 1
1944   }
1945 }
1946 layer {
1947   name: "conv6_2_mbox_conf_flat"
1948   type: "Flatten"
1949   bottom: "conv6_2_mbox_conf_perp"
1950   top: "conv6_2_mbox_conf_flat"
1951   flatten_param {
1952     axis: 1
1953   }
1954 }
1955 layer {
1956   name: "conv6_2_mbox_priorbox"
1957   type: "PriorBox"
1958   bottom: "conv6_2"
1959   bottom: "data"
1960   top: "conv6_2_mbox_priorbox"
1961   prior_box_param {
1962     min_size: 111.0
1963     max_size: 162.0
1964     aspect_ratio: 2
1965     aspect_ratio: 3
1966     flip: true
1967     clip: false
1968     variance: 0.1
1969     variance: 0.1
1970     variance: 0.2
1971     variance: 0.2
1972     step: 32
1973     offset: 0.5
1974   }
1975 }
1976 layer {
1977   name: "conv7_2_mbox_loc"
1978   type: "Convolution"
1979   bottom: "conv7_2"
1980   top: "conv7_2_mbox_loc"
1981   param {
1982     lr_mult: 1
1983     decay_mult: 1
1984   }
1985   param {
1986     lr_mult: 2
1987     decay_mult: 0
1988   }
1989   convolution_param {
1990     num_output: 24
1991     pad: 1
1992     kernel_size: 3
1993     stride: 1
1994     weight_filler {
1995       type: "xavier"
1996     }
1997     bias_filler {
1998       type: "constant"
1999       value: 0
2000     }
2001   }
2002 }
2003 layer {
2004   name: "conv7_2_mbox_loc_perp"
2005   type: "Permute"
2006   bottom: "conv7_2_mbox_loc"
2007   top: "conv7_2_mbox_loc_perp"
2008   permute_param {
2009     order: 0
2010     order: 2
2011     order: 3
2012     order: 1
2013   }
2014 }
2015 layer {
2016   name: "conv7_2_mbox_loc_flat"
2017   type: "Flatten"
2018   bottom: "conv7_2_mbox_loc_perp"
2019   top: "conv7_2_mbox_loc_flat"
2020   flatten_param {
2021     axis: 1
2022   }
2023 }
2024 layer {
2025   name: "conv7_2_mbox_conf"
2026   type: "Convolution"
2027   bottom: "conv7_2"
2028   top: "conv7_2_mbox_conf"
2029   param {
2030     lr_mult: 1
2031     decay_mult: 1
2032   }
2033   param {
2034     lr_mult: 2
2035     decay_mult: 0
2036   }
2037   convolution_param {
2038     num_output: 126
2039     pad: 1
2040     kernel_size: 3
2041     stride: 1
2042     weight_filler {
2043       type: "xavier"
2044     }
2045     bias_filler {
2046       type: "constant"
2047       value: 0
2048     }
2049   }
2050 }
2051 layer {
2052   name: "conv7_2_mbox_conf_perp"
2053   type: "Permute"
2054   bottom: "conv7_2_mbox_conf"
2055   top: "conv7_2_mbox_conf_perp"
2056   permute_param {
2057     order: 0
2058     order: 2
2059     order: 3
2060     order: 1
2061   }
2062 }
2063 layer {
2064   name: "conv7_2_mbox_conf_flat"
2065   type: "Flatten"
2066   bottom: "conv7_2_mbox_conf_perp"
2067   top: "conv7_2_mbox_conf_flat"
2068   flatten_param {
2069     axis: 1
2070   }
2071 }
2072 layer {
2073   name: "conv7_2_mbox_priorbox"
2074   type: "PriorBox"
2075   bottom: "conv7_2"
2076   bottom: "data"
2077   top: "conv7_2_mbox_priorbox"
2078   prior_box_param {
2079     min_size: 162.0
2080     max_size: 213.0
2081     aspect_ratio: 2
2082     aspect_ratio: 3
2083     flip: true
2084     clip: false
2085     variance: 0.1
2086     variance: 0.1
2087     variance: 0.2
2088     variance: 0.2
2089     step: 64
2090     offset: 0.5
2091   }
2092 }
2093 layer {
2094   name: "conv8_2_mbox_loc"
2095   type: "Convolution"
2096   bottom: "conv8_2"
2097   top: "conv8_2_mbox_loc"
2098   param {
2099     lr_mult: 1
2100     decay_mult: 1
2101   }
2102   param {
```

49	fc7_mbox_loc	Convolution	1	1024	19x19	24	19x19	macc 79847424 comp 0 add 0 div 0 exp 0	activation 8664 param 221208
50	fc7_mbox_loc_perm	Permute	1	24	19x19	19	24x19	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
51	fc7_mbox_loc_flat	Flatten	1	19	24x19	8664	1x1	macc 0 comp 0 add 0 div 0 exp 0	activation 8664 param 0
52	conv6_1	Convolution	1	1024	19x19	256	19x19	macc 94633984 comp 0 add 0 div 0 exp 0	activation 92416 param 262400
53	conv6_1_relu	ReLU	1	256	19x19	256	19x19	macc 0 comp 92416 add 0 div 0 exp 0	activation 92416 param 0
54	conv6_2	Convolution	1	256	19x19	512	10x10	macc 117964800 comp 0 add 0 div 0 exp 0	activation 51200 param 1180160
55	conv6_2_relu	ReLU	1	512	10x10	512	10x10	macc 0 comp 51200 add 0 div 0 exp 0	activation 51200 param 0
56	conv6_2_mbox_priorbox	PriorBox	1	3	300x300	2	NaNx4	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
57	conv6_2_mbox_conf	Convolution	1	512	10x10	126	10x10	macc 58060800 comp 0 add 0 div 0 exp 0	activation 12600 param 580734
58	conv6_2_mbox_conf_perm	Permute	1	126	10x10	10	126x10	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
59	conv6_2_mbox_conf_flat	Flatten	1	10	126x10	12600	1x1	macc 0 comp 0 add 0 div 0 exp 0	activation 12600 param 0
60	conv6_2_mbox_loc	Convolution	1	512	10x10	24	10x10	macc 11059200 comp 0 add 0 div 0 exp 0	activation 2400 param 110616
61	conv6_2_mbox_loc_perm	Permute	1	24	10x10	10	24x10	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
62	conv6_2_mbox_loc_flat	Flatten	1	10	24x10	2400	1x1	macc 0 comp 0 add 0 div 0 exp 0	activation 2400 param 0
63	conv7_1	Convolution	1	512	10x10	128	10x10	macc 6553600 comp 0 add 0 div 0 exp 0	activation 12800 param 65664
64	conv7_1_relu	ReLU	1	128	10x10	128	10x10	macc 0 comp 12800 add 0 div 0 exp 0	activation 12800 param 0
65	conv7_2	Convolution	1	128	10x10	256	5x5	macc 7372800 comp 0 add 0 div 0 exp 0	activation 6400 param 295168
66	conv7_2_relu	ReLU	1	256	5x5	256	5x5	macc 0 comp 6400 add 0 div 0 exp 0	activation 6400 param 0
67	conv7_2_mbox_priorbox	PriorBox	1	3	300x300	2	NaNx4	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
68	conv7_2_mbox_conf	Convolution	1	256	5x5	126	5x5	macc 7257600 comp 0 add 0 div 0 exp 0	activation 3150 param 290430
69	conv7_2_mbox_conf_perm	Permute	1	126	5x5	5	126x5	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0

<pre>1303 lr_mult: 2 1304 decay_mult: 0 1305 1306 convolution_param { 1307 num_output: 16 1308 pad: 1 1309 kernel_size: 3 1310 stride: 1 1311 weight_filler { 1312 type: "xavier" 1313 } 1314 bias_filler { 1315 type: "constant" 1316 value: 0 1317 } 1318 } 1319 } 1320 layer { 1321 name: "conv8_2_mbox_loc_perm" 1322 type: "Permute" 1323 bottom: "conv8_2_mbox_loc" 1324 top: "conv8_2_mbox_loc_perm" 1325 permute_param { 1326 order: 0 1327 order: 2 1328 order: 3 1329 order: 1 1330 } 1331 } 1332 layer { 1333 name: "conv8_2_mbox_loc_flat" 1334 type: "Flatten" 1335 bottom: "conv8_2_mbox_loc_perm" 1336 top: "conv8_2_mbox_loc_flat" 1337 flatten_param { 1338 axis: 1 1339 } 1340 } 1341 layer { 1342 name: "conv8_2_mbox_conf" 1343 type: "Convolution" 1344 bottom: "conv8_2" 1345 top: "conv8_2_mbox_conf" 1346 param { 1347 lr_mult: 1 1348 decay_mult: 1 1349 } 1350 param { 1351 lr_mult: 2 1352 decay_mult: 0 1353 } 1354 convolution_param { 1355 num_output: 84 1356 pad: 1 1357 kernel_size: 3 1358 stride: 1 1359 weight_filler { 1360 type: "xavier" 1361 } 1362 bias_filler { 1363 type: "constant" 1364 value: 0 1365 } 1366 } 1367 } 1368 layer { 1369 name: "conv8_2_mbox_conf_perm" 1370 type: "Permute" 1371 bottom: "conv8_2_mbox_conf" 1372 top: "conv8_2_mbox_conf_perm" 1373 permute_param { 1374 order: 0 1375 order: 2 1376 order: 3 1377 order: 1 1378 } 1379 } 1380 layer { 1381 name: "conv8_2_mbox_conf_flat" 1382 type: "Flatten" 1383 bottom: "conv8_2_mbox_conf_perm" 1384 top: "conv8_2_mbox_conf_flat" 1385 flatten_param { 1386 axis: 1 1387 } 1388 } 1389 layer { 1390 name: "conv8_2_mbox_priorbox" 1391 type: "PriorBox" 1392 bottom: "conv8_2" 1393 bottom: "data" 1394 top: "conv8_2_mbox_priorbox" 1395 prior_box_param { 1396 min_size: 213.0 1397 max_size: 264.0 1398 aspect_ratio: 2 1399 flip: true 1400 clip: false 1401 variance: 0.1 1402 variance: 0.1 1403 variance: 0.2 1404 variance: 0.2 1405 step: 100 1406 offset: 0.5 1407 } 1408 } 1409 layer { 1410 name: "conv9_2_mbox_loc" 1411 type: "Convolution" 1412 bottom: "conv9_2" 1413 top: "conv9_2_mbox_loc" 1414 param { 1415 lr_mult: 1 1416 decay_mult: 1 1417 } 1418 param { 1419 lr_mult: 2 1420 decay_mult: 0 1421 } 1422 convolution_param { 1423 num_output: 16 1424 pad: 1 1425 kernel_size: 3 1426 stride: 1 1427 weight_filler { 1428 type: "xavier" 1429 } 1430 bias_filler { 1431 type: "constant" 1432 value: 0 1433 } 1434 } 1435 } 1436 layer { 1437 name: "conv9_2_mbox_loc_perm" 1438 type: "Permute" 1439 bottom: "conv9_2_mbox_loc" 1440 top: "conv9_2_mbox_loc_perm" 1441 permute_param { 1442 order: 0 1443 order: 2 1444 order: 3 1445 order: 1 1446 } 1447 } 1448 layer { 1449 name: "conv9_2_mbox_loc_flat" 1450 type: "Flatten" 1451 bottom: "conv9_2_mbox_loc_perm" 1452 top: "conv9_2_mbox_loc_flat" 1453 flatten_param { 1454 axis: 1 1455 } 1456 } 1457 layer { 1458 name: "conv9_2_mbox_conf" 1459 type: "Convolution" 1460 bottom: "conv9_2" 1461 top: "conv9_2_mbox_conf" 1462 param { 1463 lr_mult: 1 1464 decay_mult: 1 1465 } 1466 param { 1467 lr_mult: 2 1468 decay_mult: 0 1469 } 1470 convolution_param { 1471 num_output: 84 1472 pad: 1 1473 kernel_size: 3 1474 stride: 1 1475 weight_filler { 1476 type: "xavier" 1477 } 1478 bias_filler { 1479 type: "constant" 1480 value: 0 1481 } 1482 } 1483 } 1484 layer { 1485 name: "conv9_2_mbox_conf_perm" 1486 type: "Permute" 1487 bottom: "conv9_2_mbox_conf" 1488 top: "conv9_2_mbox_conf_perm" 1489 permute_param { 1490 order: 0 1491 order: 2 1492 order: 3 1493 order: 1 1494 } 1495 } 1496 layer { 1497 name: "conv9_2_mbox_conf_flat" 1498 type: "Flatten" 1499 bottom: "conv9_2_mbox_conf_perm" 1500 top: "conv9_2_mbox_conf_flat" 1501 flatten_param { 1502 axis: 1 1503 } 1504 } 1505 layer { 1506 name: "conv9_2_mbox_priorbox" 1507 type: "PriorBox" 1508 bottom: "conv9_2" 1509 bottom: "data" 1510 top: "conv9_2_mbox_priorbox" 1511 prior_box_param { 1512 min_size: 264.0 1513 max_size: 315.0 1514 aspect_ratio: 2 1515 flip: true 1516 clip: false 1517 variance: 0.1 1518 variance: 0.1 1519 variance: 0.2</pre>	70	conv7_2_mbox_conf_flat	Flatten	1	5	128x5	3150	1x1	macc 0 comp 0 add 0 div 0 exp 0	activation 3150 param 0
	71	conv7_2_mbox_loc	Convolution	1	256	5x5	24	5x5	macc 1382400 comp 0 add 0 div 0 exp 0	activation 600 param 55320
	72	conv7_2_mbox_loc_perm	Permute	1	24	5x5	5	24x5	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
	73	conv7_2_mbox_loc_flat	Flatten	1	5	24x5	600	1x1	macc 0 comp 0 add 0 div 0 exp 0	activation 600 param 0
	74	conv8_1	Convolution	1	256	5x5	128	5x5	macc 819200 comp 0 add 0 div 0 exp 0	activation 3200 param 32896
	75	conv8_1_relu	ReLU	1	128	5x5	128	5x5	macc 0 comp 3200 add 0 div 0 exp 0	activation 3200 param 0
	76	conv8_2	Convolution	1	128	5x5	256	3x3	macc 2654208 comp 0 add 0 div 0 exp 0	activation 2304 param 295168
	77	conv8_2_relu	ReLU	1	256	3x3	256	3x3	macc 0 comp 2304 add 0 div 0 exp 0	activation 2304 param 0
	78	conv8_2_mbox_priorbox	PriorBox	1	3	300x300	2	852x4	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
	79	conv8_2_mbox_conf	Convolution	1	256	3x3	84	3x3	macc 1741824 comp 0 add 0 div 0 exp 0	activation 756 param 193620
<pre>80 conv8_2_mbox_conf_perm 81 conv8_2_mbox_conf_flat 82 conv8_2_mbox_loc 83 conv8_2_mbox_loc_perm 84 conv8_2_mbox_loc_flat 85 conv9_1 86 conv9_1_relu 87 conv9_2 88 conv9_2_relu 89 conv9_2_mbox_priorbox 90 mbox_priorbox 91 conv9_2_mbox_conf</pre>	80	conv8_2_mbox_conf_perm	Permute	1	84	3x3	3	84x3	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
	81	conv8_2_mbox_conf_flat	Flatten	1	3	84x3	756	1x1	macc 0 comp 0 add 0 div 0 exp 0	activation 756 param 0
	82	conv8_2_mbox_loc	Convolution	1	256	3x3	16	3x3	macc 331776 comp 0 add 0 div 0 exp 0	activation 144 param 36880
	83	conv8_2_mbox_loc_perm	Permute	1	16	3x3	3	16x3	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
	84	conv8_2_mbox_loc_flat	Flatten	1	3	16x3	144	1x1	macc 0 comp 0 add 0 div 0 exp 0	activation 144 param 0
	85	conv9_1	Convolution	1	256	3x3	128	3x3	macc 294912 comp 0 add 0 div 0 exp 0	activation 1152 param 32896
	86	conv9_1_relu	ReLU	1	128	3x3	128	3x3	macc 0 comp 1152 add 0 div 0 exp 0	activation 1152 param 0
	87	conv9_2	Convolution	1	128	3x3	256	1x1	macc 294912 comp 0 add 0 div 0 exp 0	activation 256 param 295168
	88	conv9_2_relu	ReLU	1	256	1x1	256	1x1	macc 0 comp 256 add 0 div 0 exp 0	activation 256 param 0
	89	conv9_2_mbox_priorbox	PriorBox	1	3	300x300	2	1056x4	macc 0 comp 0 add 0 div 0 exp 0	activation 0 param 0
<pre>90 mbox_priorbox 91 conv9_2_mbox_conf</pre>	90	mbox_priorbox	Concat	1	12	120x4	12	120x4	macc 0 comp 0 add 0 div 0 exp 0	activation 5760 param 0
	91	conv9_2_mbox_conf	Convolution	1	256	1x1	84	1x1	macc 193536 comp 0 add 0 div 0 exp 0	activation 84

```

1529 variance: 0.2
1530 top: 300
1531 offset: 0.5
1532 )
1533 }
1534 }
1535 layer {
1536   name: "mbox_loc"
1537   type: "Concat"
1538   bottom: "conv1_3_norm_mbox_loc_flat"
1539   bottom: "fc7_mbox_loc_flat"
1540   bottom: "conv6_2_mbox_loc_flat"
1541   bottom: "conv7_2_mbox_loc_flat"
1542   bottom: "conv8_2_mbox_loc_flat"
1543   bottom: "conv9_2_mbox_loc_flat"
1544   top: "mbox_loc"
1545   concat_param {
1546     axis: 1
1547   }
1548 }
1549 }
1550 layer {
1551   name: "mbox_conf"
1552   type: "Concat"
1553   bottom: "conv1_3_norm_mbox_conf_flat"
1554   bottom: "fc7_mbox_conf_flat"
1555   bottom: "conv6_2_mbox_conf_flat"
1556   bottom: "conv7_2_mbox_conf_flat"
1557   bottom: "conv8_2_mbox_conf_flat"
1558   bottom: "conv9_2_mbox_conf_flat"
1559   top: "mbox_conf"
1560   concat_param {
1561     axis: 1
1562   }
1563 }
1564 }
1565 layer {
1566   name: "mbox_priorbox"
1567   type: "Concat"
1568   bottom: "conv1_3_norm_mbox_priorbox"
1569   bottom: "fc7_mbox_priorbox"
1570   bottom: "conv6_2_mbox_priorbox"
1571   bottom: "conv7_2_mbox_priorbox"
1572   bottom: "conv8_2_mbox_priorbox"
1573   bottom: "conv9_2_mbox_priorbox"
1574   top: "mbox_priorbox"
1575   concat_param {
1576     axis: 2
1577   }
1578 }
1579 }
1580 layer {
1581   name: "mbox_conf_softmax"
1582   type: "Softmax"
1583   bottom: "mbox_conf_reshape"
1584   top: "mbox_conf_softmax"
1585   softmax_param {
1586     axis: 2
1587   }
1588 }
1589 }
1590 layer {
1591   name: "mbox_conf_flatten"
1592   type: "Flatten"
1593   bottom: "mbox_conf_softmax"
1594   top: "mbox_conf_flatten"
1595   flatten_param {
1596     axis: 1
1597   }
1598 }
1599 }
1600 layer {
1601   name: "detection_out"
1602   type: "DetectionOutput"
1603   bottom: "mbox_loc"
1604   bottom: "mbox_conf_flatten"
1605   bottom: "mbox_priorbox"
1606   top: "detection_out"
1607   include {
1608     phase: TEST
1609   }
1610 }
1611 }
1612 detection_output_param {
1613   num_classes: 21
1614   share_location: true
1615   background_label_id: 0
1616   nms_param {
1617     nms_threshold: 0.45
1618     top_k: 400
1619   }
1620 }
1621 save_output_param {
1622   output_directory: "/home/weliyings/hy/caffe-code/faster-rcnn/data/VOCdevkit/results/VOC2007/SSD_300x300_Matn"
1623   output_name_prefix: "comp4_det_test-"
1624   output_format: "VOC"
1625   label_map_file: "data/VOC0712/labelmap_voc.prototxt"
1626   name_size_file: "data/VOC0712/test_name_size.txt"
1627   num_test_image: 4952
1628 }
1629 }
1630 }
1631 code_type: CENTER_SIZE
1632 keep_top_k: 200
1633 confidence_threshold: 0.01
1634 }
1635 }
1636 }
1637 }
1638 }
1639 }

```

92	conv9_2_mbox_conf_perm	Permute	1	84
93	conv9_2_mbox_conf_flat	Flatten	1	1
94	mbox_conf	Concat	1	183372
95	mbox_conf_reshape	Reshape	1	183372
96	mbox_conf_softmax	Softmax	1	8732
97	mbox_conf_flatten	Flatten	1	8732
98	conv9_2_mbox_loc	Convolution	1	256
99	conv9_2_mbox_loc_perm	Permute	1	16
100	conv9_2_mbox_loc_flat	Flatten	1	1
101	mbox_loc	Concat	1	34928

Excel-compatible Analysis Results (experimental)