```
1: procedure ANALYZE(profiles)
2:     profiles = sorted(profiles, priority)
3:     for required in profiles do
4:         transmitted_nodes = []
5:         for receiver in profile.receivers() do
6:             route = profile.route
7:             for node in route do
8:                 if node in transmitted_nodes and multicast == True then
9:                     Continue
10:                end if
11:                provided = node.provided
12:                [output, remaining, received] = convolve(required, provided)
13:                node.provided = remaining
14:                required = received
15:                transmitted_nodes.append(node)
16:            end for
17:            [recv_output, recv_remaining, ] = convolve(required, receiver)
18:        end for
19:    end for
20: end procedure
```