```
1: procedure ANALYZE(profiles)
      profiles = sorted(profiles, priority)
2:
      for required in profiles do
3:
          route = profile.route
4:
          while route.hasNodes() do
5:
             node = route.popNode()
6:
             provided = node.provided
7:
              [output, remaining, received] = analyze(required, provided)
8:
             node.provided = remaining
9:
10:
             required = received
          end while
11:
      end for
12:
13: end procedure
```