Plan 1

```
0: (init-fast-motion wairob1 gripper1 tray1 chargespot barside)
0: (init-fast-motion wairob2 gripper2 tray1 chargespot table3)
0: ----- [1.0]
1.0: (start-cleaning table3 gripper2 wairob2)
1.0: ---- [3.0]
3.0: (prepare-cold-drink drink2 robtender barside client2 table2)
3.0: ----- [6.0]
6.0: (init-fast-motion wairob2 gripper2 tray1 table3 table4)
6.0: ----waiting---- [7.0]
7.0: (prepare-cold-drink drink1 robtender barside client1 table3)
7.0: ----waiting---- [10.0]
10.0: (take-drink-gripper wairob1 gripper1 drink2 barside table2 client2)
10.0: (init-fast-motion wairob1 gripper1 tray1 barside table2)
10.0: ----- [11.0]
11.0: (give-drink-gripper wairob1 gripper1 drink2 table2 client2)
11.0: -----waiting---- [12.0]
12.0: (init-fast-motion wairob1 gripper1 tray1 table2 barside)
12.0: ----waiting---- [13.0]
13.0: (take-biscuit wairob1 drink2 gripper1 barside client2 table2)
13.0: (init-fast-motion wairob1 gripper1 tray1 barside table2)
13.0: -----waiting---- [14.0]
14.0: (give-biscuit wairob1 gripper1 table2 client2)
14.0: (init-fast-motion wairob1 gripper1 tray1 table2 barside)
14.0: -----waiting---- [15.0]
15.0: (take-drink-gripper wairob1 gripper1 drink1 barside table2 client1)
15.0: (init-fast-motion wairob1 gripper1 tray1 barside table2)
15.0: -----waiting---- [16.0]
16.0: (give-drink-gripper wairob1 gripper1 drink1 table2 client1)
16.0: ----waiting---- [17.0]
17.0: (start-cleaning table4 gripper2 wairob2)
17.0: (init-fast-motion wairob1 gripper1 tray1 table2 barside)
17.0: ----waiting---- [18.0]
18.0: (take-biscuit wairob1 drink1 gripper1 barside client1 table2)
18.0: (init-fast-motion wairob1 gripper1 tray1 barside table2)
18.0: -----waiting---- [19.0]
19.0: (give-biscuit wairob1 gripper1 table2 client1)
19.0: ----waiting---- [20.0]
20.0: (start-cleaning table2 gripper1 wairob1)
20.0: ----waiting---- [23.0]
```

Plan 2

```
0: (init-fast-motion wairob2 gripper2 tray1 chargespot table1)
0: -----waiting---- [1.0]
1.0: (prepare-cold-drink drink1 robtender barside client1 table3)
1.0: -----waiting---- [4.0]
4.0: (prepare-cold-drink drink2 robtender barside client2 table3)
4.0: -----waiting---- [7.0]
```

```
7.0: (prepare-warm-drink drink3 robtender barside client3 table1)
7.0: ----waiting---- [11.0]
11.0: (init-fast-motion wairob1 gripper1 tray1 chargespot barside)
11.0: -----waiting---- [12.0]
12.0: (take-drink-gripper wairob1 gripper1 drink3 barside table3 client3)
12.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
12.0: -----waiting---- [13.0]
13.0: (init-fast-motion wairob1 gripper1 trav1 table1 table3)
13.0: -----waiting---- [14.0]
14.0: (prepare-warm-drink drink4 robtender barside client4 table1)
14.0: -----waiting---- [15.0]
15.0: (give-drink-gripper wairob1 gripper1 drink3 table3 client3)
15.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
15.0: ----waiting---- [16.0]
16.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
16.0: ----waiting---- [17.0]
17.0: (take-biscuit wairob1 drink1 gripper1 barside client1 table3)
17.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
17.0: ----waiting---- [18.0]
18.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
18.0: -----waiting---- [19.0]
19.0: (give-biscuit wairob1 gripper1 table3 client1)
19.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
19.0: ----waiting---- [20.0]
20.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
20.0: ----waiting---- [21.0]
21.0: (take-drink-gripper wairob1 gripper1 drink4 barside table3 client4)
21.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
21.0: -----waiting---- [22.0]
22.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
22.0: ----waiting---- [23.0]
23.0: (give-drink-gripper wairob1 gripper1 drink4 table3 client4)
23.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
23.0: -----waiting---- [24.0]
24.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
24.0: ----waiting---- [25.0]
25.0: (take-biscuit wairob1 drink2 gripper1 barside client2 table3)
25.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
25.0: ----waiting---- [26.0]
26.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
26.0: -----waiting---- [27.0]
27.0: (give-biscuit wairob1 gripper1 table3 client2)
27.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
27.0: ----waiting---- [28.0]
28.0: (start-cleaning table1 gripper2 wairob2)
28.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
28.0: ----waiting---- [29.0]
29.0: (take-drink-gripper wairob1 gripper1 drink1 barside table3 client1)
29.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
29.0: ----waiting---- [30.0]
30.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
30.0: ----waiting---- [31.0]
```

```
31.0: (init-fast-motion wairob2 gripper2 tray1 table1 table3)
31.0: -----waiting---- [32.0]
32.0: (give-drink-gripper wairob1 gripper1 drink1 table3 client1)
32.0: ----waiting---- [33.0]
33.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
33.0: -----waiting---- [34.0]
34.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
34.0: ----waiting---- [35.0]
35.0: (take-drink-gripper wairob1 gripper1 drink2 barside table3 client2)
35.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
35.0: ----waiting---- [36.0]
36.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
36.0: -----waiting---- [37.0]
37.0: (give-drink-gripper wairob1 gripper1 drink2 table3 client2)
37.0: -----waiting---- [41.0]
41.0: (start-cleaning table3 gripper2 wairob2)
41.0: -----waiting---- [45.0]
```

Plan 3

```
0: (init-fast-motion wairob2 gripper2 tray1 chargespot table3)
0: (init-fast-motion wairob1 gripper1 tray1 chargespot table1)
0: ----- [1.0]
1.0: (prepare-warm-drink drink3 robtender barside client3 table1)
1.0: ----waiting---- [6.0]
6.0: (init-fast-motion wairob2 gripper2 tray1 table3 table1)
6.0: ----waiting---- [7.0]
7.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
7.0: ----- [8.0]
8.0: (take-drink-gripper wairob2 gripper2 drink3 barside table4 client3)
8.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
8.0: ---- [9.0]
9.0: (init-fast-motion wairob2 gripper2 tray1 table1 table4)
9.0: ----waiting---- [10.0]
10.0: (give-drink-gripper wairob2 gripper2 drink3 table4 client3)
10.0: (init-fast-motion wairob2 gripper2 tray1 table4 table3)
10.0: (prepare-warm-drink drink1 robtender barside client1 table4)
10.0: -----waiting---- [15.0]
15.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
15.0: -----waiting---- [16.0]
16.0: (take-drink-gripper wairob1 gripper1 drink1 barside table1 client1)
16.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
16.0: ----waiting---- [17.0]
17.0: (prepare-warm-drink drink4 robtender barside client4 table1)
17.0: ----waiting---- [19.0]
19.0: (give-drink-gripper wairob1 gripper1 drink1 table1 client1)
19.0: -----waiting---- [21.0]
21.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
21.0: (init-fast-motion wairob2 gripper2 tray1 table3 table1)
21.0: ----waiting---- [22.0]
22.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
```

```
22.0: ----waiting---- [23.0]
23.0: (take-drink-gripper wairob2 gripper2 drink4 barside table4 client4)
23.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
23.0: ----waiting---- [24.0]
24.0: (init-fast-motion wairob2 gripper2 tray1 table1 table4)
24.0: ----waiting---- [25.0]
25.0: (give-drink-gripper wairob2 gripper2 drink4 table4 client4)
25.0: ----waiting---- [29.0]
29.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
29.0: ----waiting---- [30.0]
30.0: (start-cleaning table4 gripper2 wairob2)
30.0: (prepare-warm-drink drink2 robtender barside client2 table4)
30.0: ----waiting---- [33.0]
33.0: (init-fast-motion wairob2 gripper2 tray1 table4 table3)
33.0: -----waiting---- [34.0]
34.0: (start-cleaning table3 gripper2 wairob2)
34.0: ----waiting---- [35.0]
35.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
35.0: ----waiting---- [36.0]
36.0: (take-drink-gripper wairob1 gripper1 drink2 barside table1 client2)
36.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
36.0: -----waiting---- [37.0]
37.0: (give-drink-gripper wairob1 gripper1 drink2 table1 client2)
37.0: -----waiting---- [41.0]
41.0: (start-cleaning table1 gripper1 wairob1)
41.0: ----waiting---- [44.0]
```

Plan 4

```
0: (init-fast-motion wairob2 gripper2 tray1 chargespot table1)
0: ----- [1.0]
1.0: (init-fast-motion wairob1 gripper1 tray1 chargespot table3)
1.0: ----waiting---- [3.0]
3.0: (prepare-cold-drink drink5 robtender barside client5 table3)
3.0: ----waiting---- [6.0]
6.0: (prepare-cold-drink drink7 robtender barside client7 table1)
6.0: ----- [9.0]
9.0: (prepare-cold-drink drink6 robtender barside client6 table3)
9.0: ----waiting---- [12.0]
12.0: (prepare-cold-drink drink8 robtender barside client8 table1)
12.0: ----waiting---- [15.0]
15.0: (prepare-warm-drink drink3 robtender barside client3 table1)
15.0: -----waiting---- [20.0]
20.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
20.0: -----waiting---- [21.0]
21.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
21.0: ----waiting---- [22.0]
22.0: (take-drink-gripper wairob1 gripper1 drink3 barside table3 client3)
22.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
22.0: ----waiting---- [23.0]
23.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
23.0: -----waiting---- [24.0]
```

```
24.0: (give-drink-gripper wairob1 gripper1 drink3 table3 client3)
24.0: ----waiting---- [26.0]
26.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
26.0: -----waiting---- [27.0]
27.0: (take-drink-gripper wairob2 gripper2 drink6 barside table1 client6)
27.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
27.0: ----waiting---- [28.0]
28.0: (init-fast-motion wairob1 gripper1 trav1 table3 table1)
28.0: -----waiting---- [29.0]
29.0: (prepare-warm-drink drink2 robtender barside client2 table4)
29.0: -----waiting---- [34.0]
34.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
34.0: ----waiting---- [35.0]
35.0: (take-drink-gripper wairob1 gripper1 drink2 barside table3 client2)
35.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
35.0: -----waiting---- [36.0]
36.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
36.0: -----waiting---- [37.0]
37.0: (prepare-warm-drink drink1 robtender barside client1 table1)
37.0: ----waiting---- [38.0]
38.0: (give-drink-gripper wairob1 gripper1 drink2 table3 client2)
38.0: ----- [40.0]
40.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
40.0: ----- [41.0]
41.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
41.0: ----- [42.0]
42.0: (take-drink-gripper wairob1 gripper1 drink1 barside table3 client1)
42.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
42.0: ----- [43.0]
43.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
43.0: -----waiting---- [44.0]
44.0: (prepare-warm-drink drink4 robtender barside client4 table4)
44.0: -----waiting---- [46.0]
46.0: (give-drink-gripper wairob1 gripper1 drink1 table3 client1)
46.0: -----waiting---- [47.0]
47.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
47.0: ----- [48.0]
48.0: (init-fast-motion wairob1 gripper1 tray1 table1 barside)
48.0: ----waiting---- [49.0]
49.0: (take-drink-gripper wairob1 gripper1 drink4 barside table3 client4)
49.0: (init-fast-motion wairob1 gripper1 tray1 barside table1)
49.0: ----waiting---- [50.0]
50.0: (init-fast-motion wairob1 gripper1 tray1 table1 table3)
50.0: ----waiting---- [51.0]
51.0: (give-drink-gripper wairob2 gripper2 drink6 table1 client6)
51.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
51.0: ----waiting---- [52.0]
52.0: (take-biscuit wairob2 drink6 gripper2 barside client6 table1)
52.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
52.0: ----waiting---- [53.0]
53.0: (give-drink-gripper wairob1 gripper1 drink4 table3 client4)
53.0: ----waiting---- [54.0]
```

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54.0: (give-biscuit wairob2 gripper2 table1 client6)
54.0: ----waiting---- [57.0]
57.0: (start-cleaning table3 gripper1 wairob1)
57.0: ----waiting---- [59.0]
59.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
59.0: -----waiting---- [60.0]
60.0: (take-drink-gripper wairob2 gripper2 drink5 barside table1 client5)
60.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
60.0: -----waiting---- [61.0]
61.0: (init-fast-motion wairob1 gripper1 tray1 table3 table1)
61.0: (give-drink-gripper wairob2 gripper2 drink5 table1 client5)
61.0: ----- [62.0]
62.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
62.0: ----waiting---- [63.0]
63.0: (take-biscuit wairob2 drink5 gripper2 barside client5 table1)
63.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
63.0: -----waiting---- [64.0]
64.0: (init-fast-motion wairob1 gripper1 tray1 table1 table4)
64.0: (give-biscuit wairob2 gripper2 table1 client5)
64.0: ----waiting---- [65.0]
65.0: (init-fast-motion wairob1 gripper1 tray1 table4 table1)
65.0: ----waiting---- [66.0]
66.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
66.0: ----waiting---- [67.0]
67.0: (take-drink-gripper wairob2 gripper2 drink8 barside table4 client8)
67.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
67.0: ----waiting---- [68.0]
68.0: (init-fast-motion wairob2 gripper2 tray1 table1 table4)
68.0: -----waiting---- [69.0]
69.0: (give-drink-gripper wairob2 gripper2 drink8 table4 client8)
69.0: (init-fast-motion wairob2 gripper2 tray1 table4 table1)
69.0: ----waiting---- [70.0]
70.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
70.0: ----waiting---- [71.0]
71.0: (take-biscuit wairob2 drink7 gripper2 barside client7 table4)
71.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
71.0: ----waiting---- [72.0]
72.0: (init-fast-motion wairob2 gripper2 tray1 table1 table4)
72.0: ----waiting---- [73.0]
73.0: (give-biscuit wairob2 gripper2 table4 client7)
73.0: (init-fast-motion wairob2 gripper2 tray1 table4 table1)
73.0: ----waiting---- [74.0]
74.0: (init-fast-motion wairob2 gripper2 tray1 table1 barside)
74.0: ----waiting---- [75.0]
75.0: (take-drink-gripper wairob2 gripper2 drink7 barside table4 client7)
75.0: (init-fast-motion wairob2 gripper2 tray1 barside table1)
75.0: ----waiting---- [76.0]
76.0: (init-fast-motion wairob2 gripper2 tray1 table1 table4)
76.0: ----waiting---- [77.0]
77.0: (give-drink-gripper wairob2 gripper2 drink7 table4 client7)
77.0: ----waiting---- [79.0]
79.0: (start-cleaning table1 gripper1 wairob1)
```

79.0: -----waiting---- [81.0] 81.0: (start-cleaning table4 gripper2 wairob2) 81.0: -----waiting---- [83.0]