

```

1  open util/boolean
2
3  conc state Server [id: ServerID] {
4      requests: buf[ClientID]
5
6      default state Sending {
7          trans send {
8              //There is a request by a client
9              when !requests.isEmpty
10             do {
11                 //Send an integer to the buffer of the client
12                 //making the request
13                 one x: Message |
14                     Client[requests.first]/messages.Add[x]
15                 requests.delete[0] // Clear that request
16             }
17             goto Waiting
18         }
19
20         transition wait {
21             when requests.isEmpty
22             goto Waiting
23         }
24     }
25
26     state Waiting {
27         trans send {
28             when !requests.isEmpty
29             goto Sending
30         }
31     }
32 }
33
34 conc state Client[id: ClientID]{
35     messages: buf[Message]
36
37     default state sending {
38         trans send {
39             when {
40                 //Assuming that the max buffer size for each
41                 //2, send request to a server that has space in
42                 //buffer.
43                 one id: ServerID | !((Server[id]/requests) > 2)
44             }
45             do {
46                 //Send a message to a server process
47                 one id: ServerID | Server[id]/requests.Add(this)
48             }

```

```
49      }  
50  
51      }  
52  
53  }
```