```
1   /*
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3
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21  OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR
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22  SOFTWARE. */
23
24  open util/boolean
25
26  conc state Server [myid: ServerID] {
27    requests: seq ClientID
28
29    default state Sending {
30      trans send {
31        //There is a request by a client
32        when !requests.isEmpty
33        do {
34          //Send an integer to the buffer of the
35          //client making the request
36          one x: Int |
37          Client[requests.first]/messages.Add[x]
38          // Clear that request
```

```
39            requests.delete[0]
40          }
41        goto Waiting
42      }
43
44      trans wait {
45        when requests.isEmpty
46        goto Waiting
47      }
48    }
49
50    state Waiting {
51      trans send {
52        when !requests.isEmpty
53        goto Sending
54      }
55    }
56  }
57
58  conc state Client[myid: ClientID]{
59    messages: seq Int
60
61    default state Sending {
62      trans send {
63        when {
64          //Assuming that the max buffer size for each
65          //server is 2, send request to a server that has
66          //space in its buffer.
67          one id: ServerID | !(#(Server[id]/requests > 2))
68        }
69        do {
70          one id: ServerID | {
71            !(#(Server[id]/requests > 2)) &&
72            Server[id]/requests.Add[myid]
73          }
74        }
75      }
76    }
77  }
```