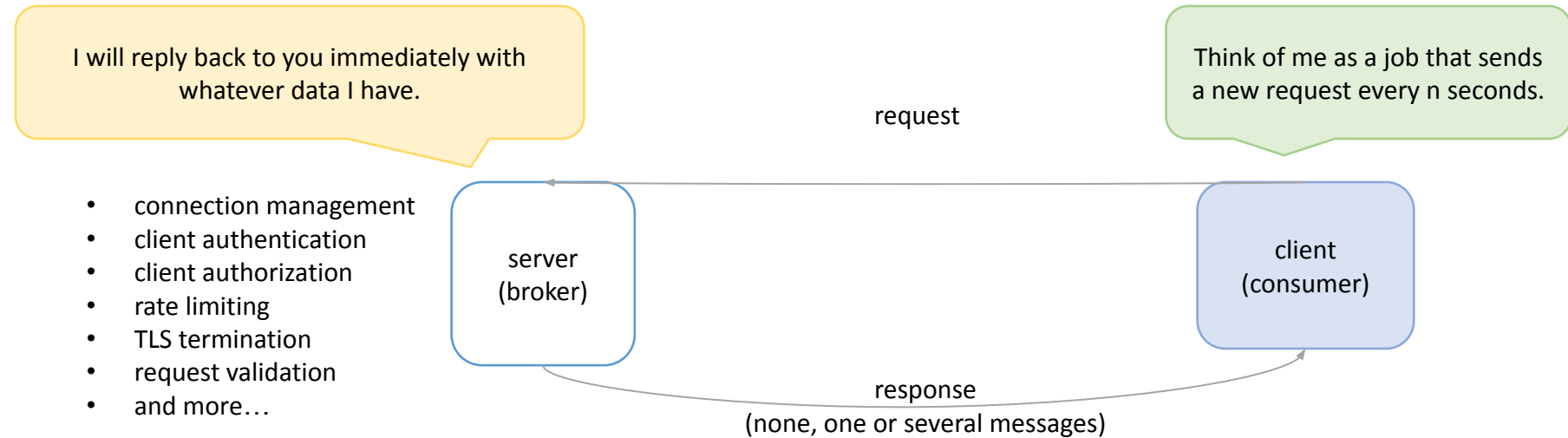


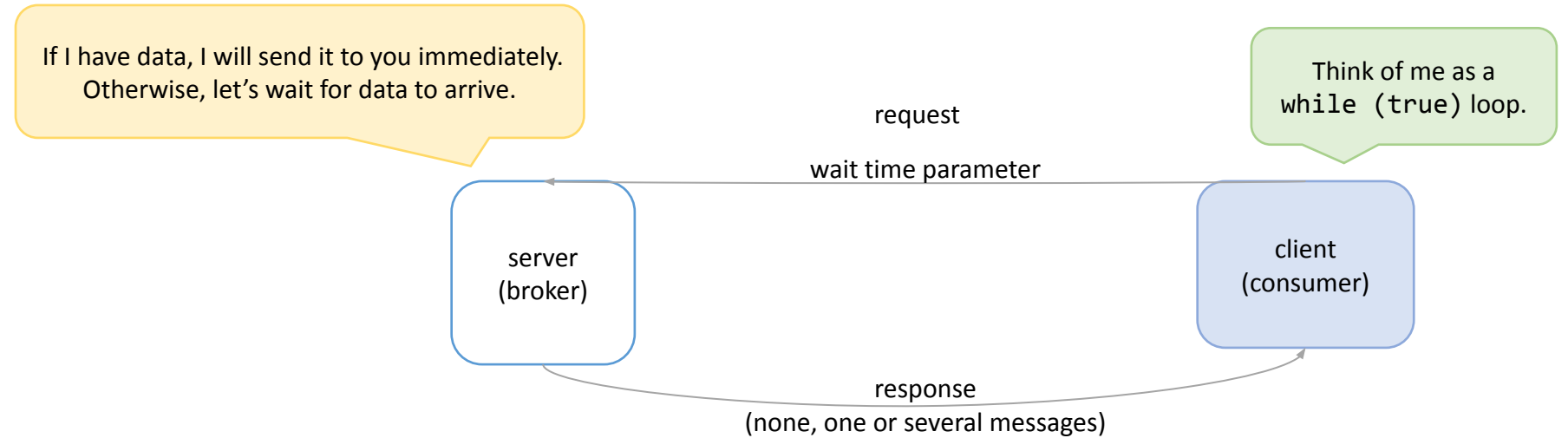
# Push and pull technologies

## pull options

### short polling



### long polling

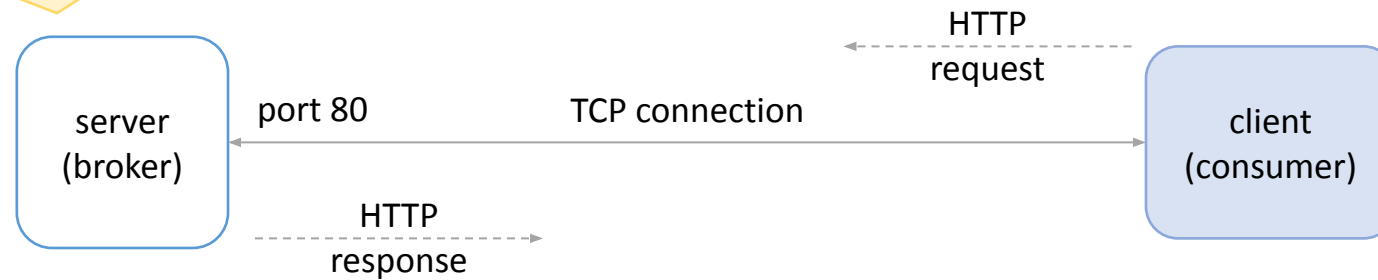


# Push and pull technologies

push options

## WebSocket

The HTTP protocol does not allow me to use this connection at my discretion.

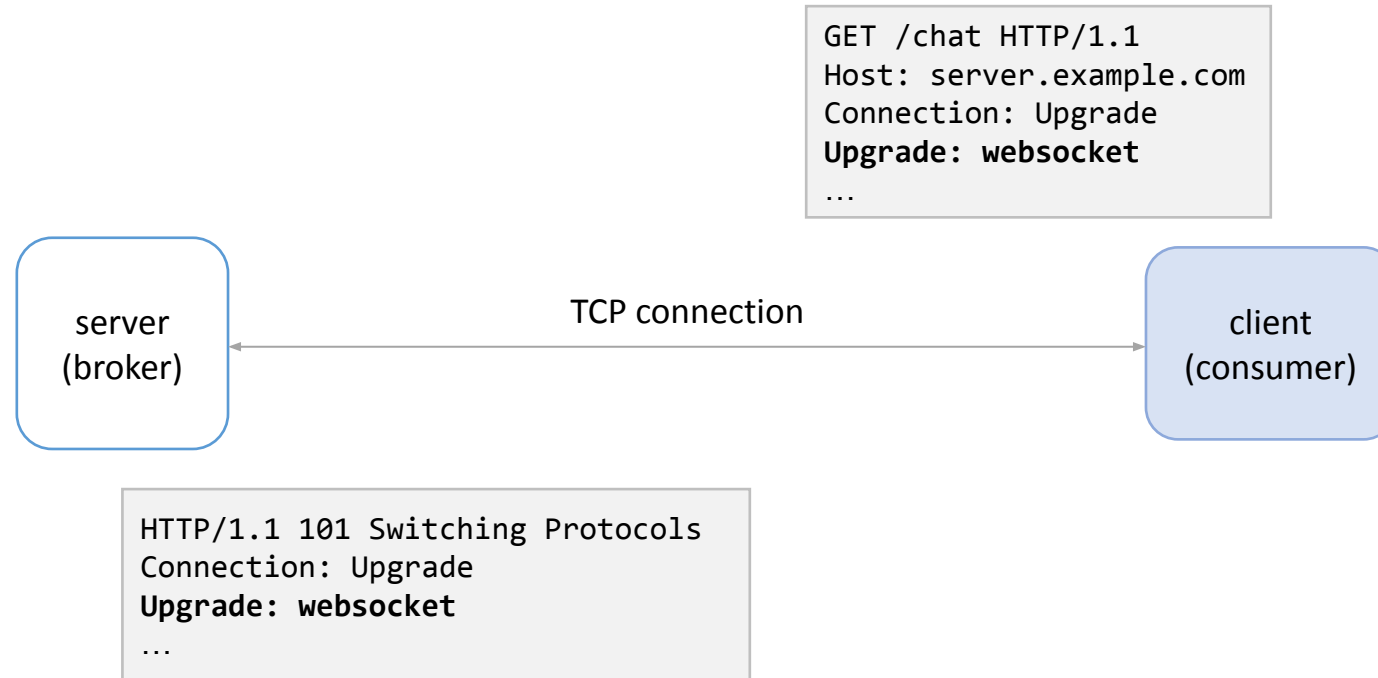


- message-based protocol
- works over HTTP ports 80 and 443 (secure port)
- re-uses the TCP connection initially established for an HTTP request
- supported by all major browsers and web servers

# Push and pull technologies

push options

## WebSocket



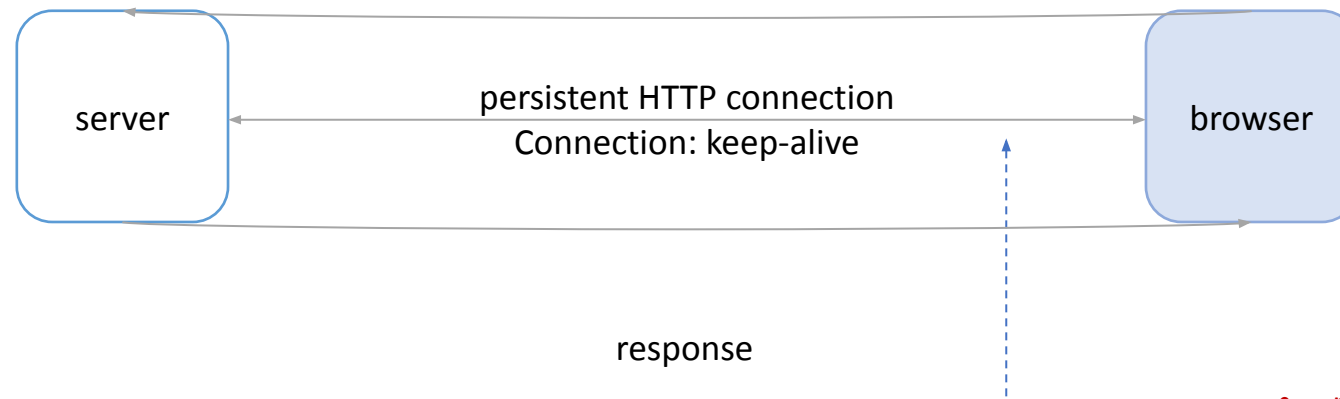
- fast
- bi-directional
- natively supported by browsers
- provides an alternative to raw TCP sockets when they are not allowed for security reasons

# Push and pull technologies

push options

## Server-Sent Events

`http://mail.example.com/inbox.html`



- simplicity  
(both client-side and server-side)
- SSEs are sent over HTTP  
(no need for a custom protocol)

```
// subscribe for messages
var source = new
EventSource(http://mail.example.com/notifications);

// handle messages
source.onmessage = function(event) {
  // do something with the data
  event.data;
};
```

- mono-directional  
(can only push data to the client)
- SSE is limited to UTF-8  
(cannot transmit binary data)
- browsers limit the number of  
open connections