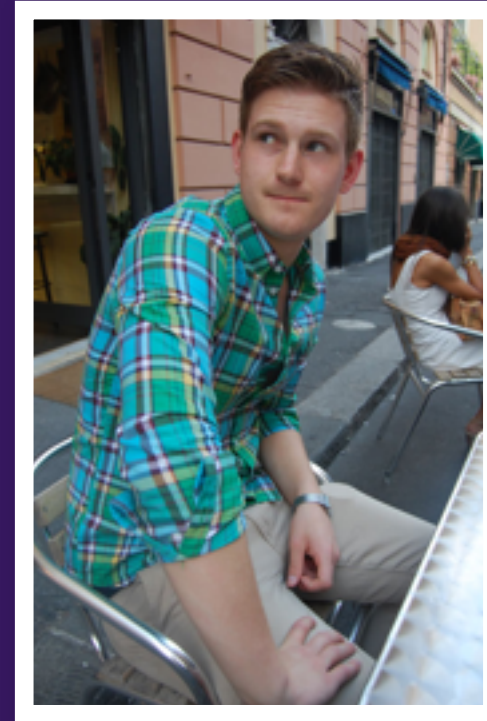


The (Almost) Realtime Web

Why you need to care about WebSockets



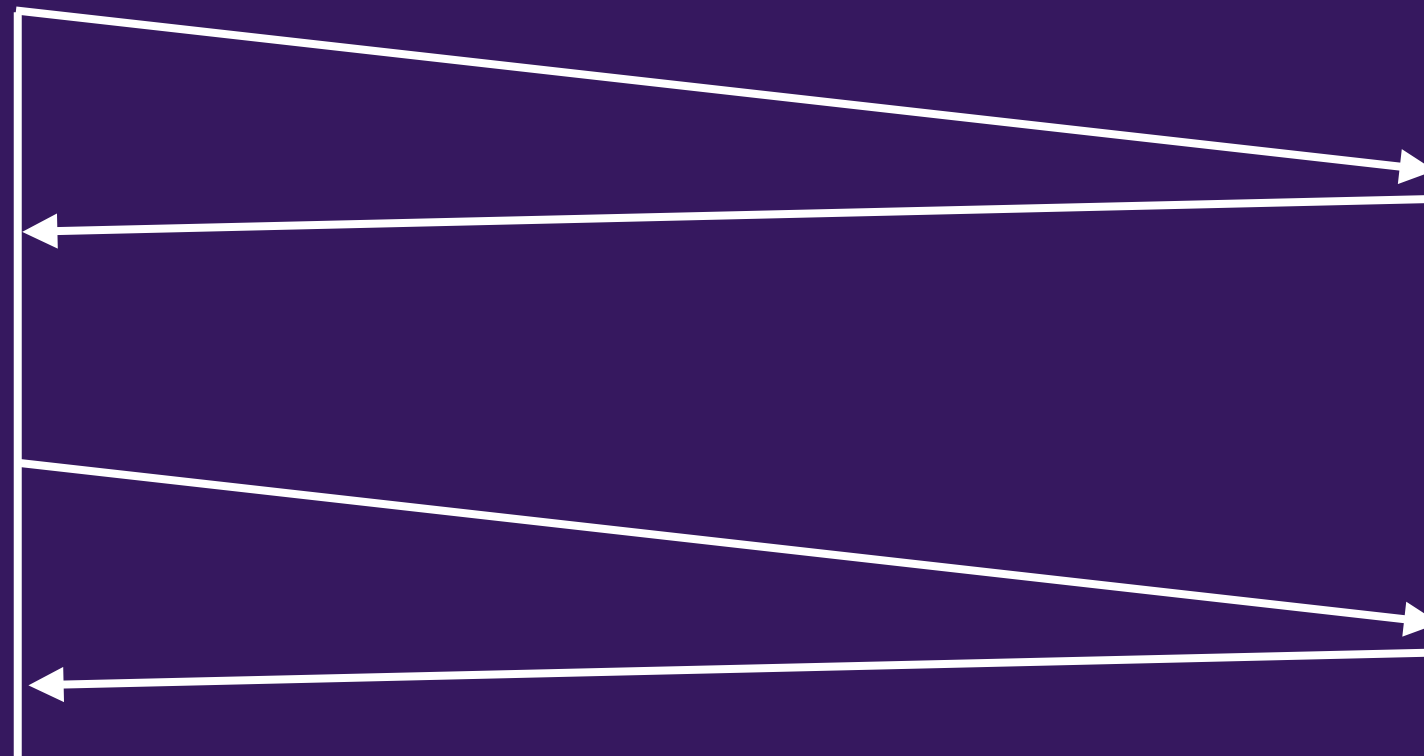
Calle Wester



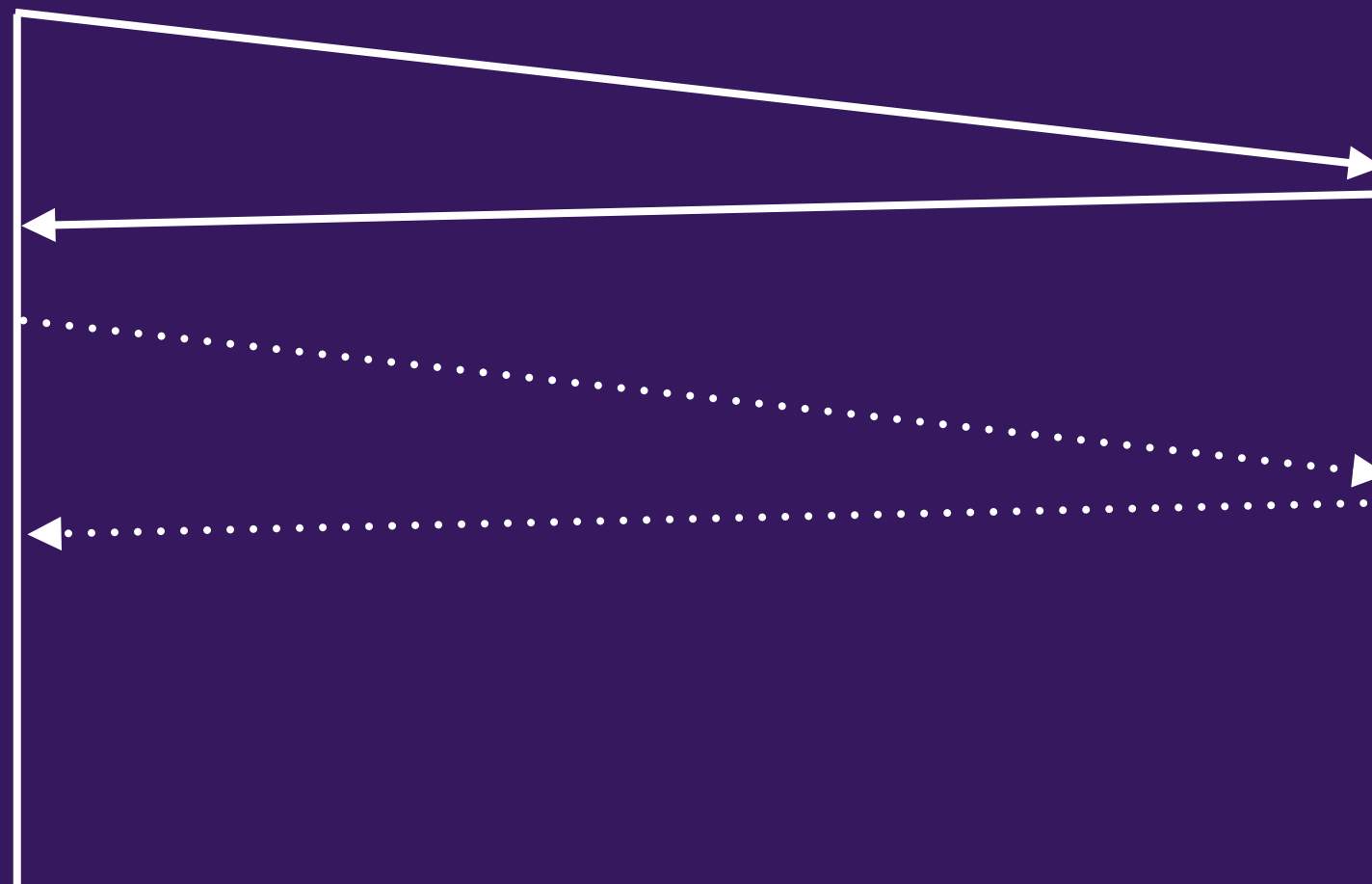
Fredrik Wärensberg

The Web in Real Time.

The 90's The Request-Response Cycle



2005 Ajax



2006: Comet/Long Polling



Web 2.0:
Now cleaner
than ever



2006: Comet/Long Polling



2009: WebSockets



How a Connection Is Established



Browser Support & Fallback Strategies



10



...use an existing library!

So, What Are My Options?

Java jWebSocket, ...

.NET SignalR, ...

JavaScript Socket.IO, ...

Erlang Cowboy, ...

Python Tornado, ...

...

...

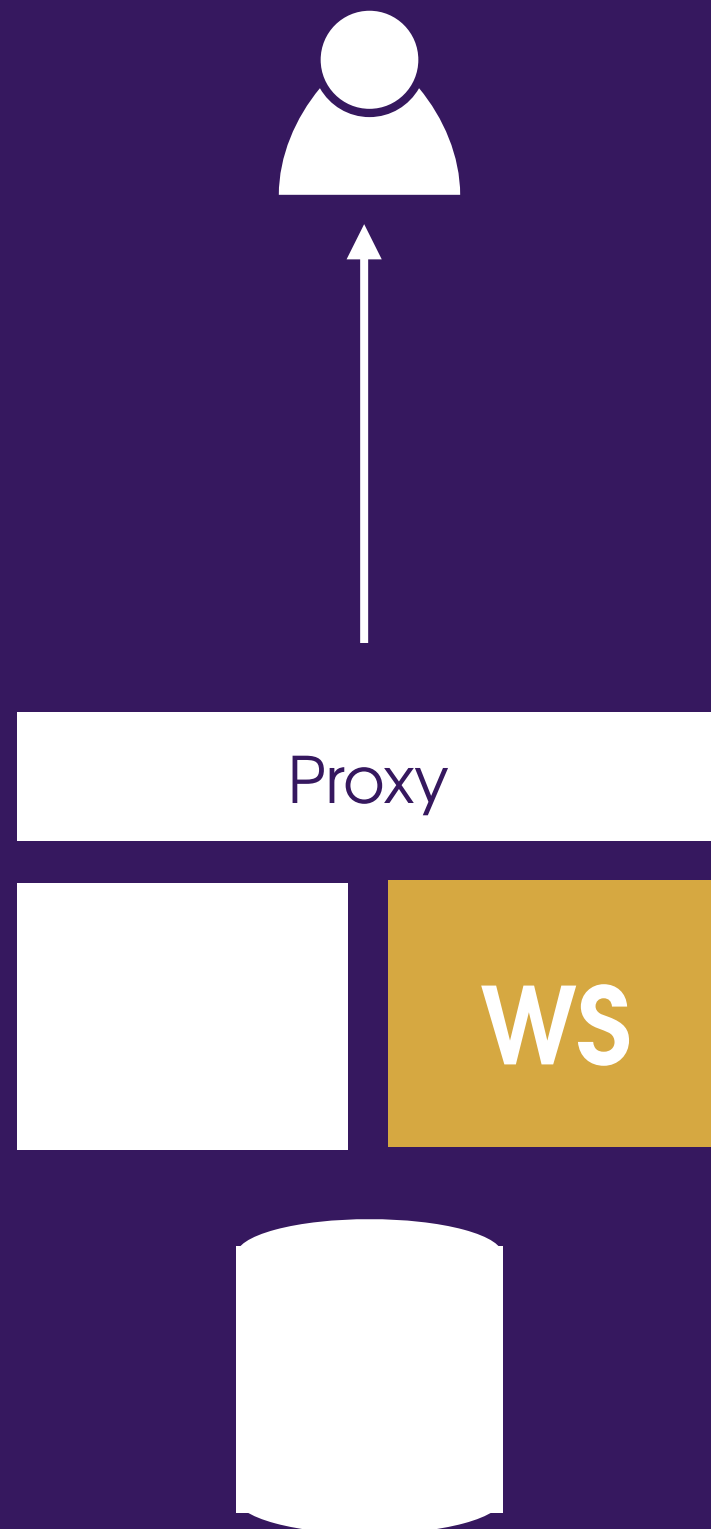
Demo Time!

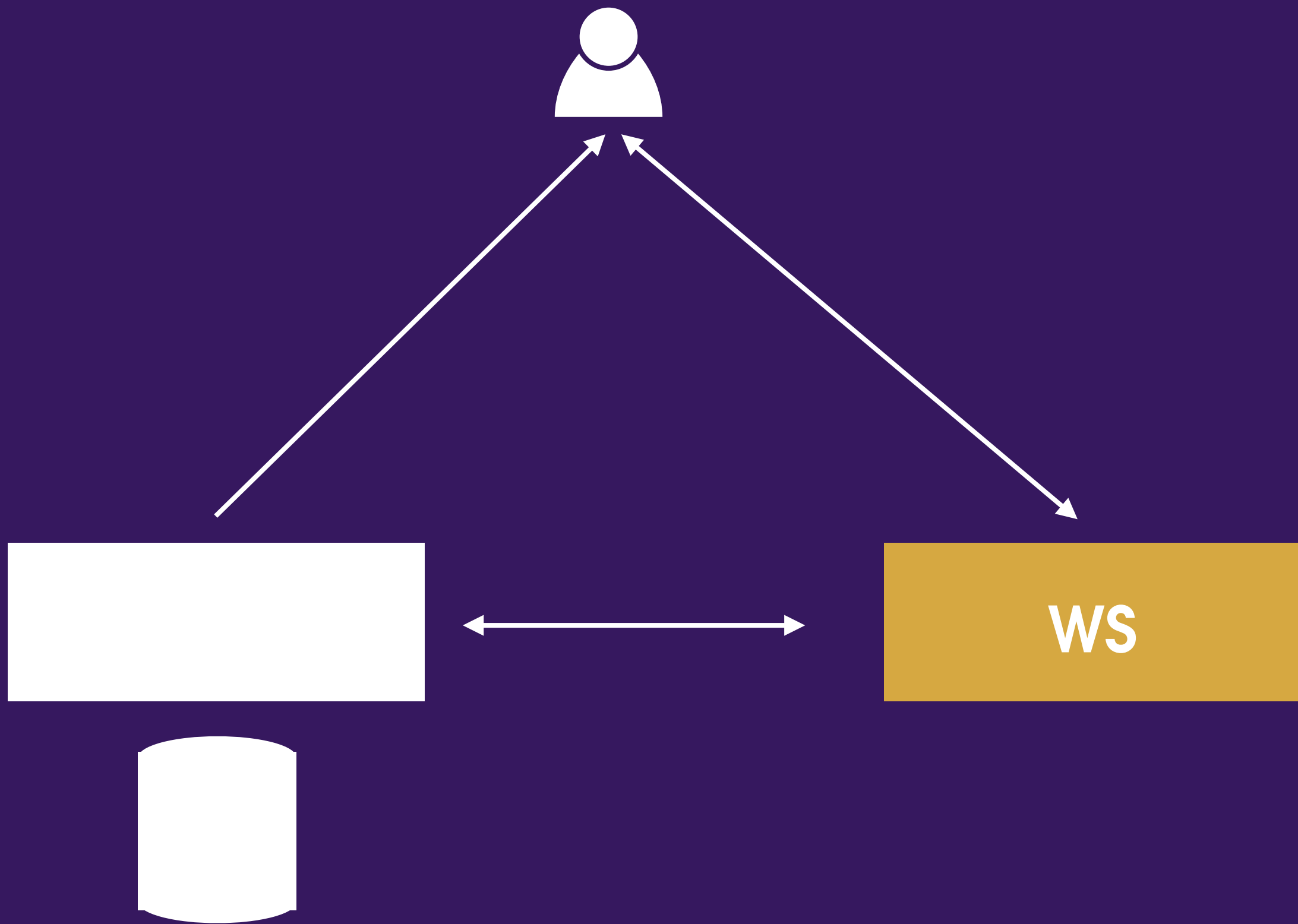
Use Case #1: Monitoring

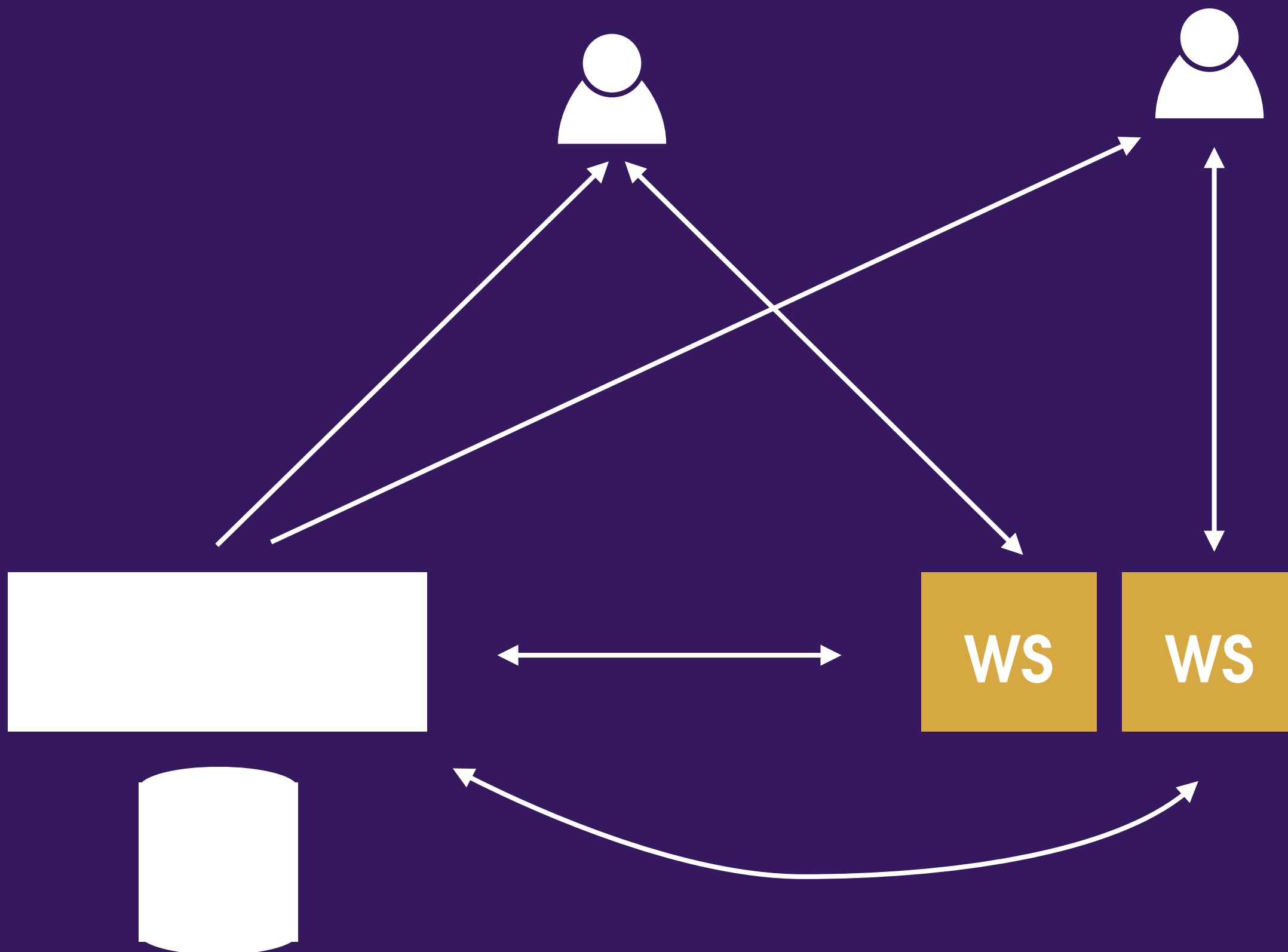
<http://fnnl.se:9000/edge->











Use Case #2: Collaboration

<http://goo.gl/edge-draw>

```
this.socket.on('game:turn:next', this.didFinishTurn)
this.socket.on('game:end', this.didFinishRound)
this.socket.on('game:reset', this.didStartRound)
this.socket.on('game:player:joined', this.playerJoined)
this.socket.on('game:player:left', this.playerLeft)
```

Smarter Clients

Use Case #3: Games

<http://goo.gl/edge-king>

Defining Your Application Protocol

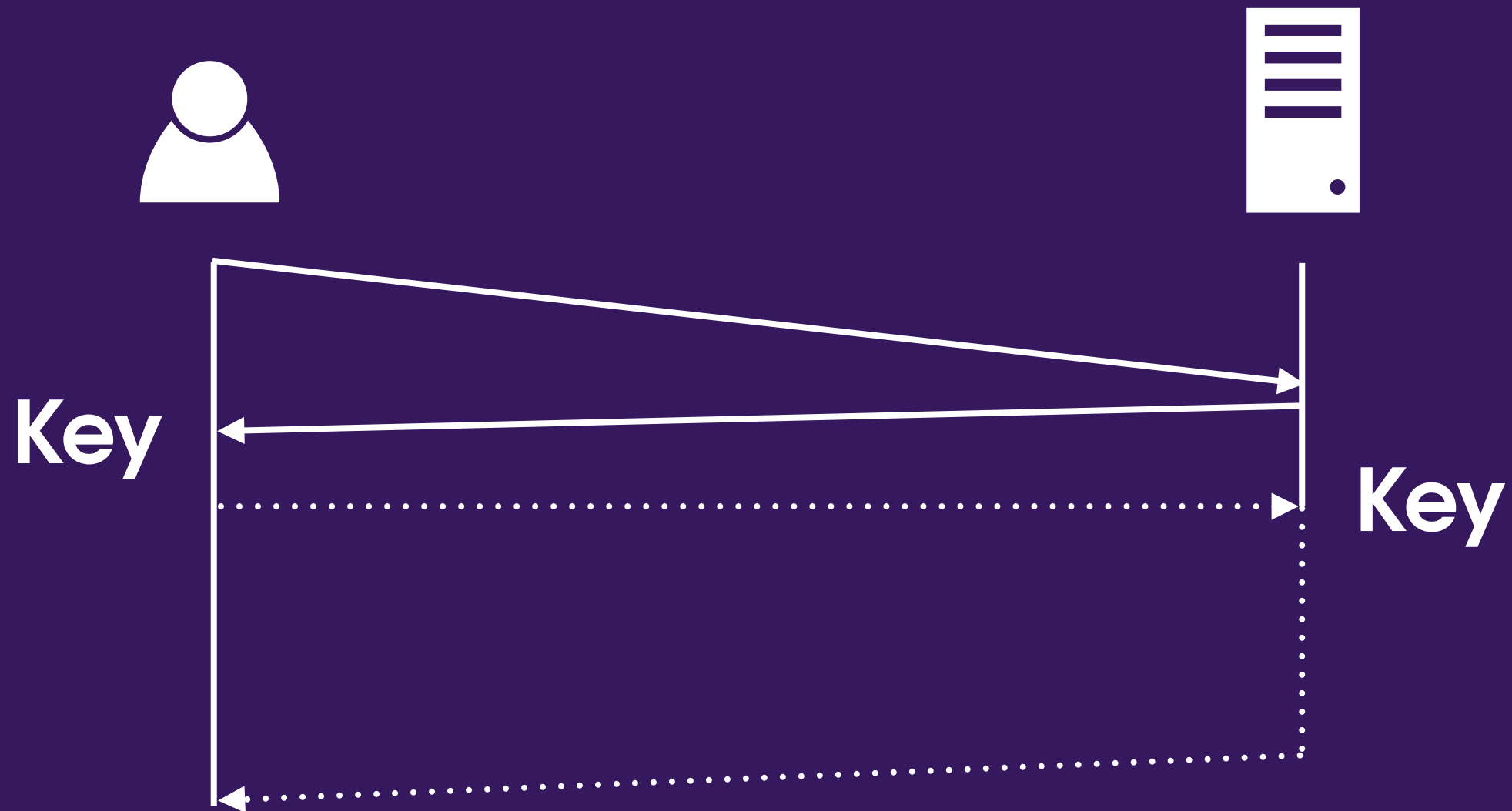
```
game.on('objects collided', function(o1, o2)
{
    io.sockets.emit('objects collided',
        o1.id,
        o1.getState(),
        o2.id,
        o2.getState())
})
```

```
player.on('still', function() {  
    // Broadcast player still  
    io.sockets.emit('still player'  
        player.id,  
        player.getState()  
    })  
})
```

The Future of WebSockets

<http://github.com/frekw/edge>

Shared Sessions



```
motion.on('move', function(direction) {  
    socket.emit('move', direction);  
})
```

```
socket.on('move', socket_move =  
function(direction) {  
    if (player == null) return;  
  
    // Start moving  
    player.move(direction)  
})
```