Top-level: client-server architecture

Server

Client 1

Client 2

Client n
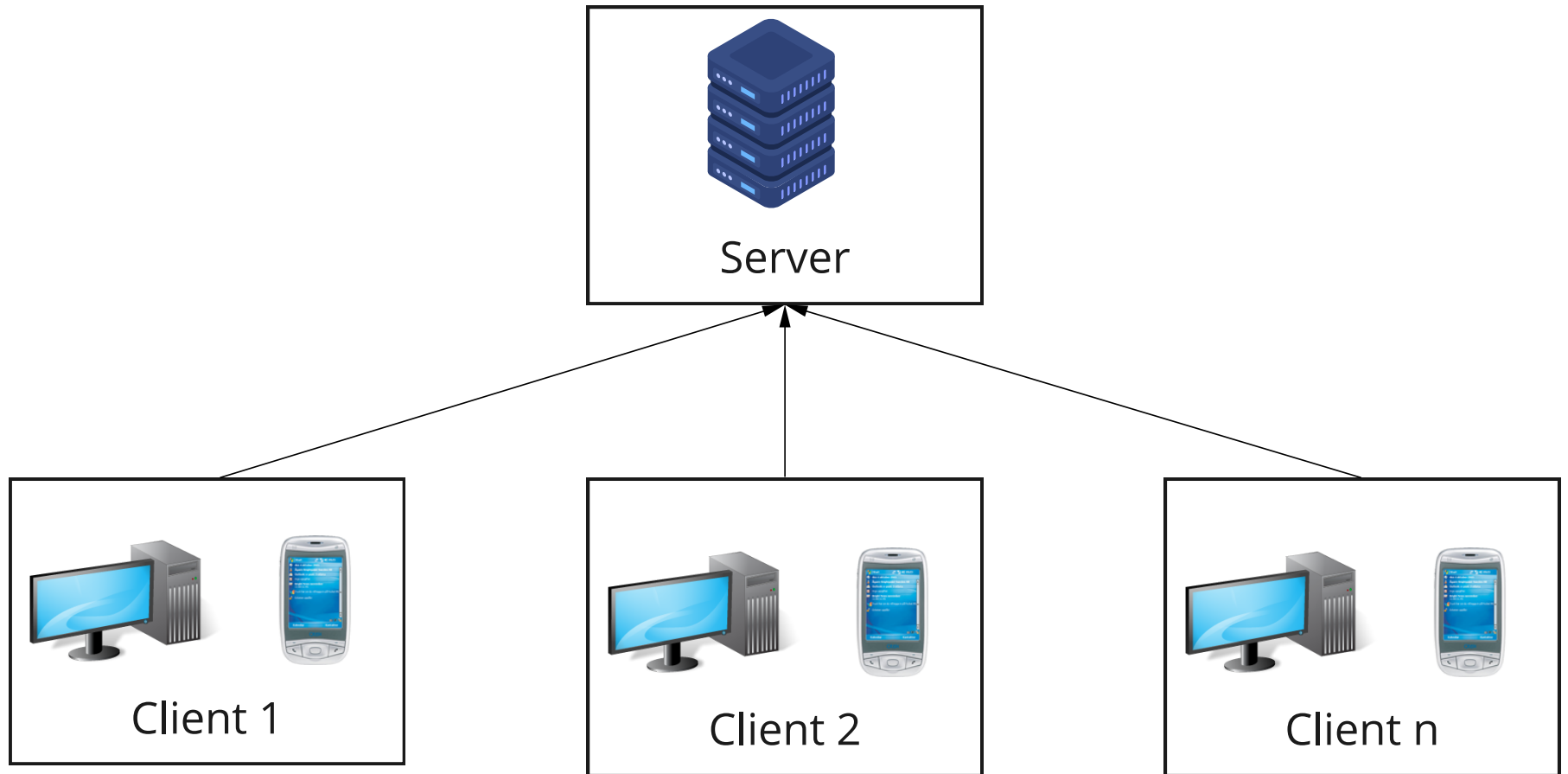
Dteailed description of architecture elements

Message Server

Real-time messaging API (data exchange: messages, profile changes, user presence updates etc.)

Clients (desktop, mobile)

Web API (HTTP request/response)

Web application backend

Store info in DB

Database

Job queue
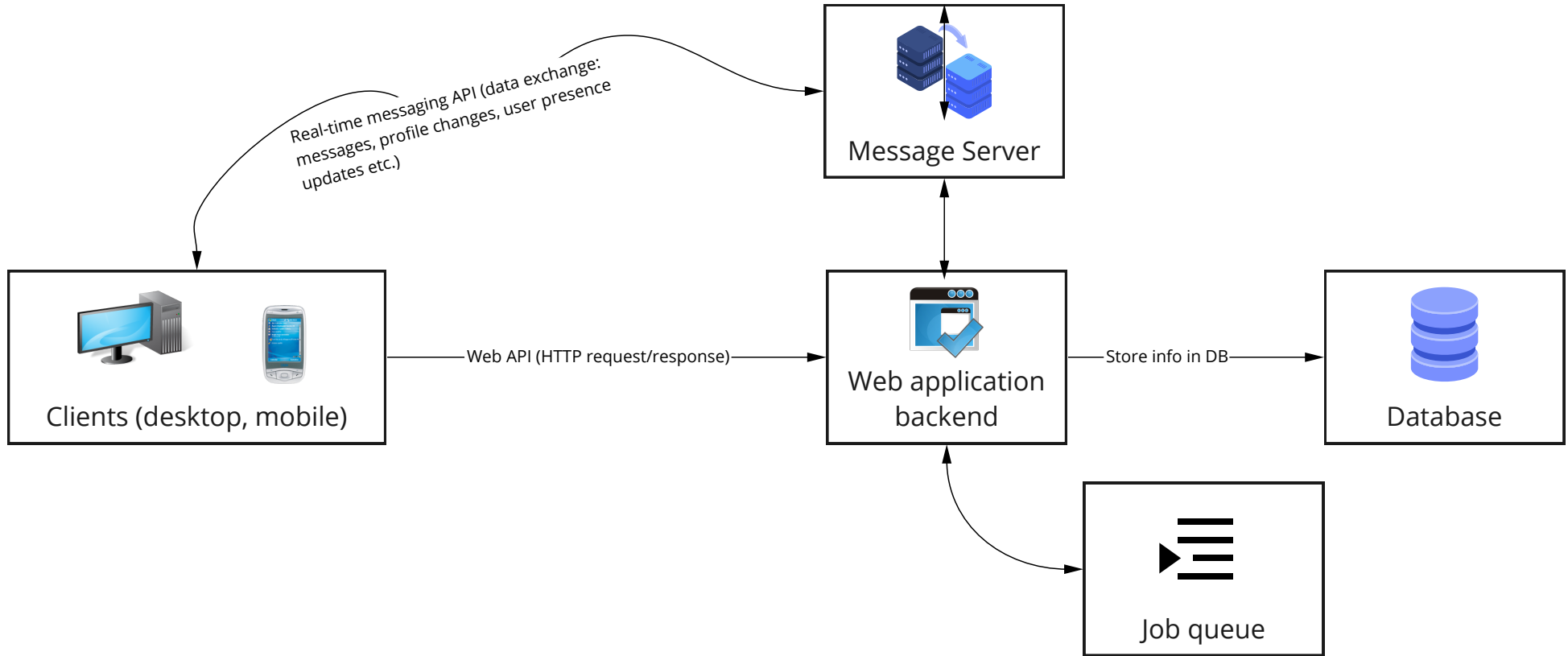
Example (message sent):
new message posted is sent via an API call to the webapp servers, where it is sent to the message servers and is stored in the database. The real-time message servers receive these new messages and send them to connected clients.