

Overview

The SimpleT_EX architecture has five components. Some are composed of many servers:

- **Web** – Stateless servers, running (J)Ruby on Rails, for managing application UI. Also handles file upload/download.
- **Database** – Handles user information, document structure, and permissions.
- **L^AT_EX Processors** – Stateless servers responsible for generating PDF documents from L^AT_EX source. As demand increases more servers can be brought online.
- **EtherPad Servers** – Hosts EtherPad instances. As demand increases more can be provisioned.
- **Load Listener** – Monitors load of L^AT_EX and EtherPad servers, and can provision additional servers if needed. Also able to remove servers as load decreases.
- **Message Bus** – Implemented via Simple Queue Service (SQS). All requests for L^AT_EX processing, EtherPad instances, and other as-yet-undetermined resources from the web servers will be mediated by the message bus.

Figure 1 shows the relation and responsibilities of these components.

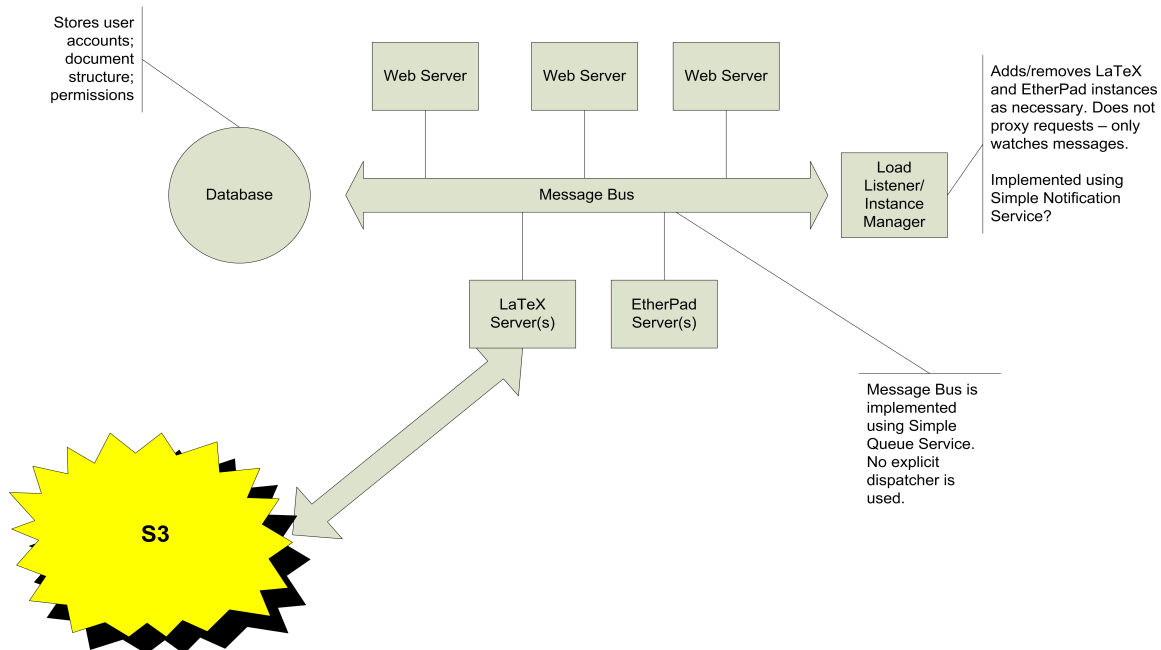


Figure 1: Initial sketch of the SimpleT_EX architecture.