System overview

General overview of the system architecture and functionalities

System components

There are the following types of clients components in a Bit Repository system:

Pillars

Pillars are responsable for maintaining copies of the store material and providing bit preservation related operations on these

There are the following types of pillars seen from the data perspective:

- A full copy pillar, which contains full copies of delivered files identified uniquely with a service level agreement
- A checksum pillar (with specific checksum type), which contains derived copies of delivered files, in form of a checksum. The checksums are identified uniquely with a service level agreement in the same way as for full copies pillars.

Clients

Clients which can be used to perform operations on the bit repository, e.g. PutFile, GetFile. See Operations for a full listing.

Services

Services actively perform tasks without user triggering, see Reference services for examples of services.

Infrastructure

Provides the communication infrastructure for integrating the components. This consists of:

- An ActiveMQ Message Bus.
- A Monitoring Service

Principles

- Components have no direct knowledge of each others location. Communication is rather performed indirectly by using the specified Queues and topics.
- All communication is asynchronous.