Messaging

Internal to the DPN network, *messaging* is the mechanism employed for inter-node communication.

Example Scenarios

Scenarios of when DPN nodes exchange messages include:

- Content is ingested into a DPN first node and needs to be replicated across DPN replicating nodes
- Upon successful ingest and replication of DPN content, a DPN first node informs the entire DPN network of a registry entry creation
- For audit purposes, a DPN node requests the registry entry for a specific DPN package
- In the event of content loss or corruption, a DPN node requests a specific DPN package
- etc

Technology

In order not to prescribe any given implementation, DPN messaging need only abide by AMQP. The messaging architecture is *distributed* and *federated*. By *distributed* what is meant is that there is no external message broker or messaging infrastructure to the DPN nodes themselves. What is meant by *feder ated* is that all of the DPN message brokers are interconnected and ensure that messages are replicated across nodes as if there were a single, logical message broker.