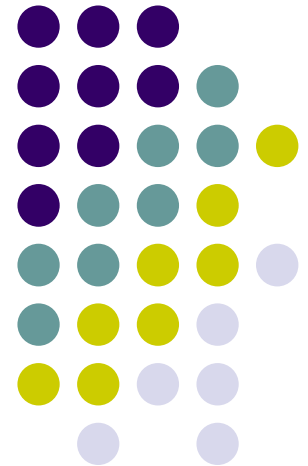


Scalable, Reliable Marshalling and Organization of Distributed Large Scale Data Onto Enterprise Storage Environments

Joseph JaJa, Mike Smorul,
Fritz McCall, Yang Yang



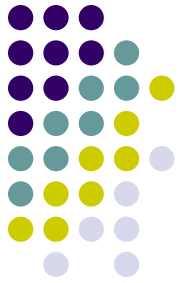
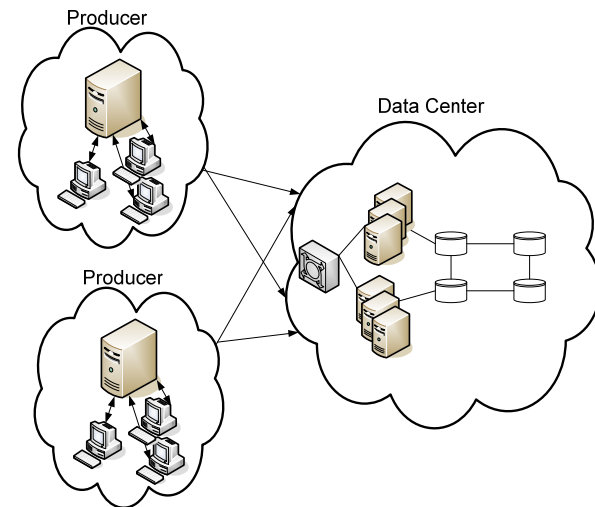
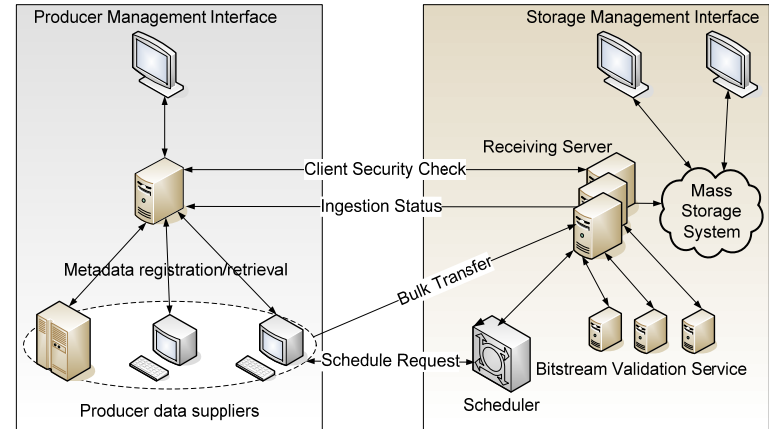
Producer-Archive Workflow Network (PAWN)



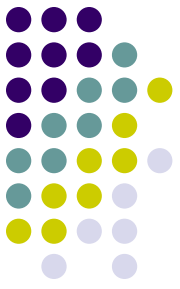
- PAWN is:
 - A way to create self describing information packets containing objects along with all necessary provenance, structural, and contextual metadata.
 - An application of archival technique to mass storage ingestion
 - A way to enforce minimal standards on groups ingesting data.

Architecture

- Producer
 - Arrange, annotate
 - Manage clients
- Data Center
 - Validate transmission
 - Transform into appropriate form
- Web service calls for light communication
- Multipart messages for bulk data



Distributed Scalable Ingestion



- Multiple distributed archival receiving stations.
- Flexible dataflow and agreement per producer
- Independent trust relationships between producers and archive
- Data Grid is geographically distributed with multiple entrance points
- Client driven resource reservation to efficiently distribute ingestion load