

DAITSS - Transitioning to Web Services

Randal Fischer
Carol Chou
Franco Lazzarino

DAITSS

Dark Archive in the Sunshine State

- 59,700 packages
- 5,456,000 files
- 11 TB

What's REST?

- REpresentational State Transfer
- A set of network architecture principles based on the web
- An alternative to RPC - e.g. SOAP - which has turned out to be very brittle

REST Architecture

- Application states are divided up into resources
- Every resource has a universal syntax for naming
- A small set of well defined operations
- A small set of content-types

REST

- Resources are represented by URLs
- Operations are GET, PUT, DELETE and POST
- Returned content types, such as XML, can and should include links to other Resources

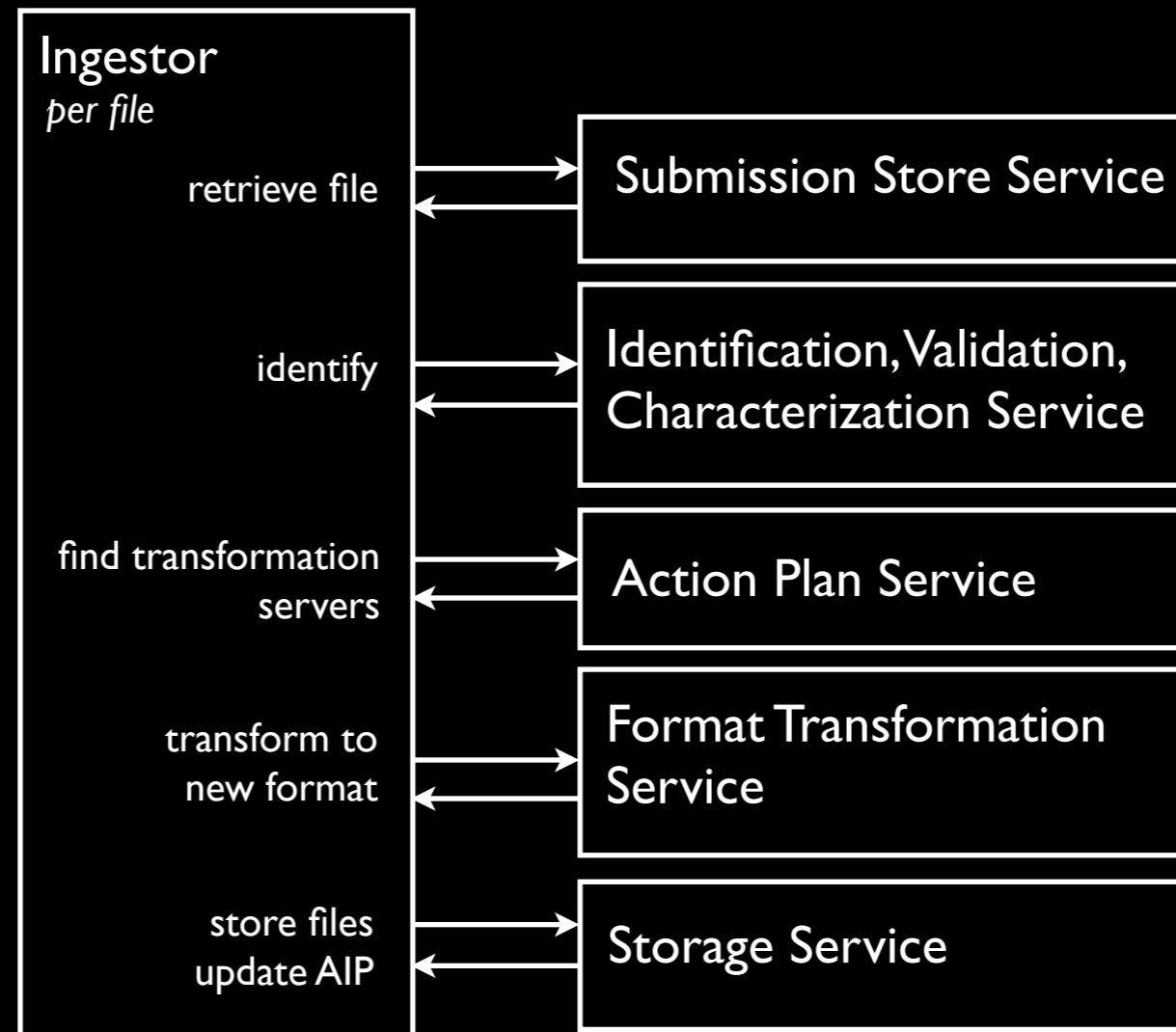
Storage Service

<http://tarchive.fcla.edu/silo008>

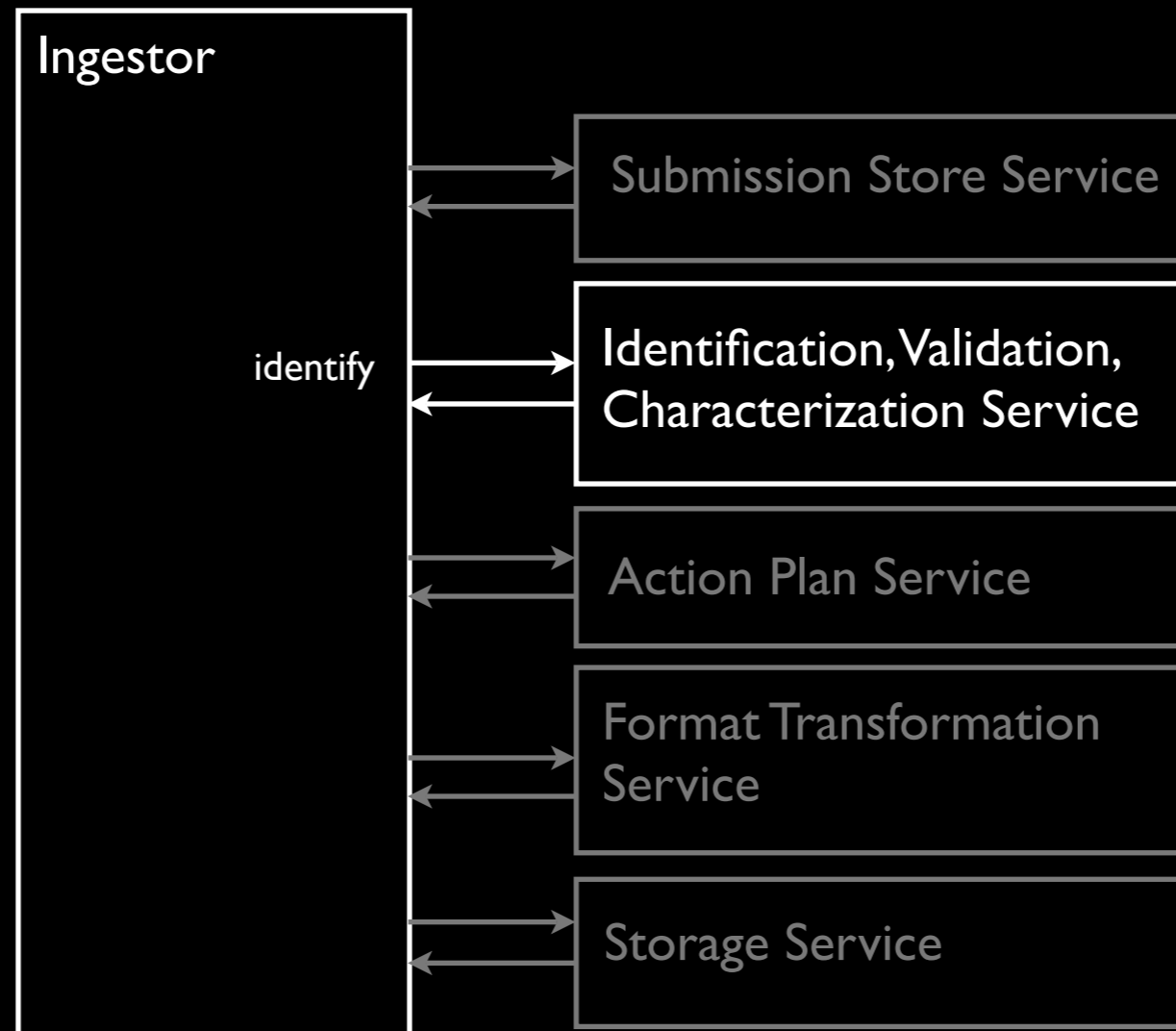
- PUT - send a package
- GET - retrieve a package
- DELETE - deletes a package
- HEAD - metadata for a package

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Ingest as the sequential application of web services



Description Service



Description Service

Send the file (or its location) to be described

Receive a PREMIS XML Document listing:

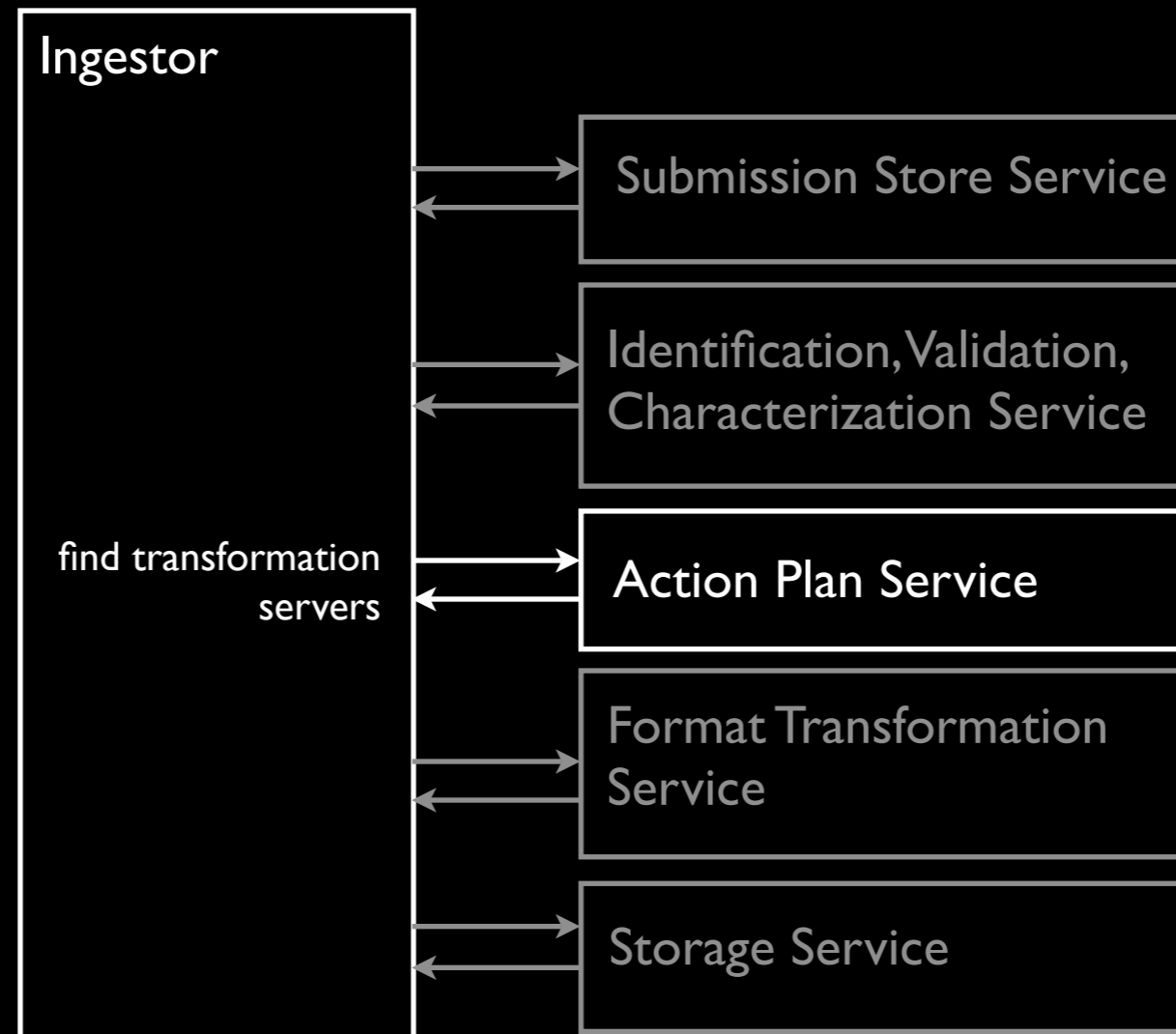
- PRONOM format identifiers
- Metadata - AES, MIX, textMD, etc
- Agent Information
- Event Outcome

Description Services

behind the scenes...

- JHOVE I & II
- Ghostscript
- FFMpeg Libraries
- Libquicktime suite

Action Plan Service



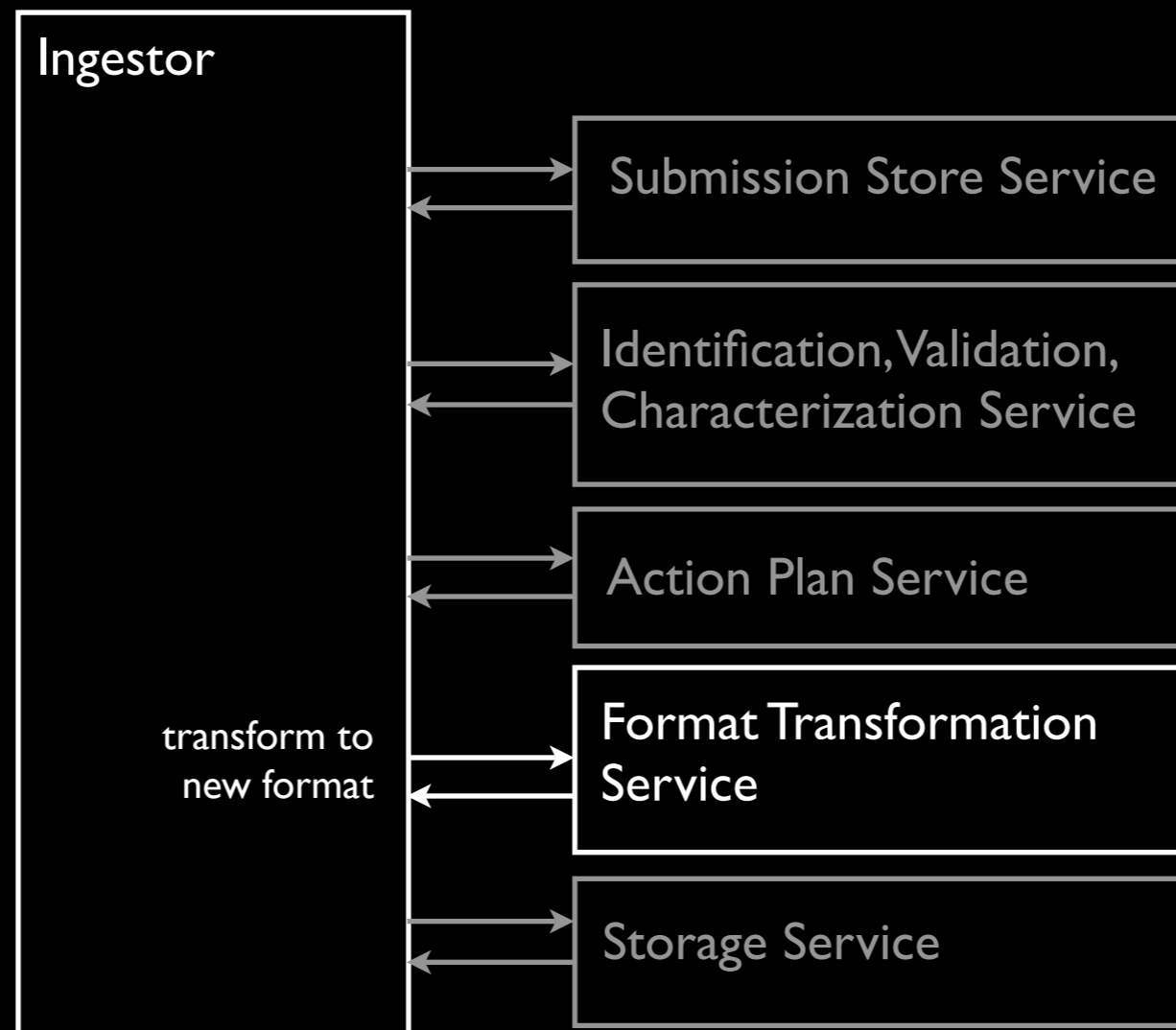
Action Plan Service

Send the description PREMIS document

Receive an XML file with Links:

- Links are URLs for transformation services
- Normalization service
- Migration service
- Hypertext as the engine of application state

Transformation Service



Transformation Service

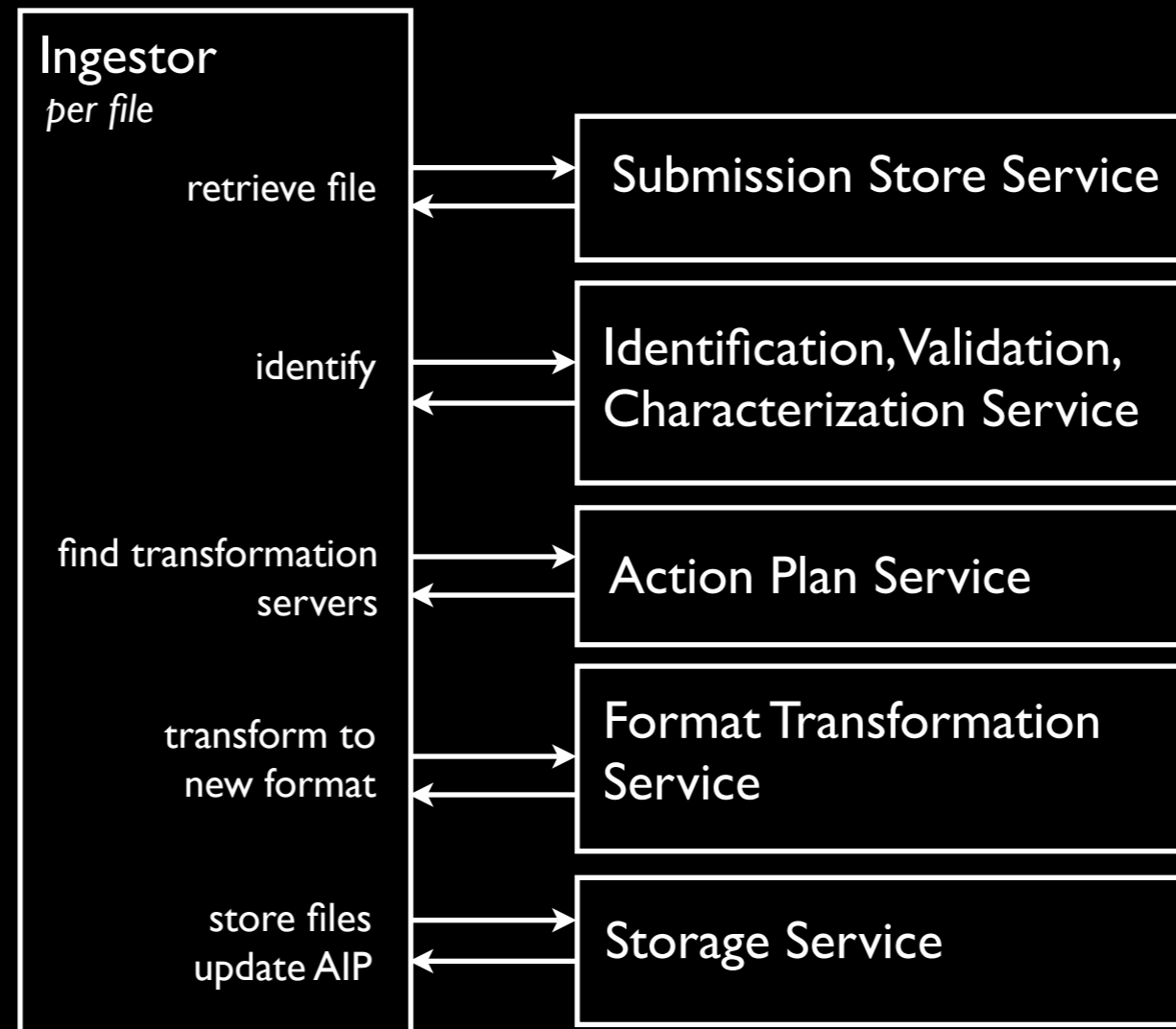
Request: Send the file

Response: the file (or a link) to the new object

- Many-to-many? Use multipart messages
- Agent, Event outcome

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Ingest as the sequential application of web services



Future

- Open our running services for external use
- Encourage mix and match services
- Create new services, e.g. Risk Assessment

Thanks

rf@ufl.edu

<http://fcla.edu/digitalArchive/>

<http://daitss.fcla.edu/>