Florida Center
For Library Automation

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DAITSS and the Florida Digital Archive

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Florida Center for Library Automation

iPRES 2006

State Universities

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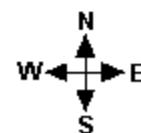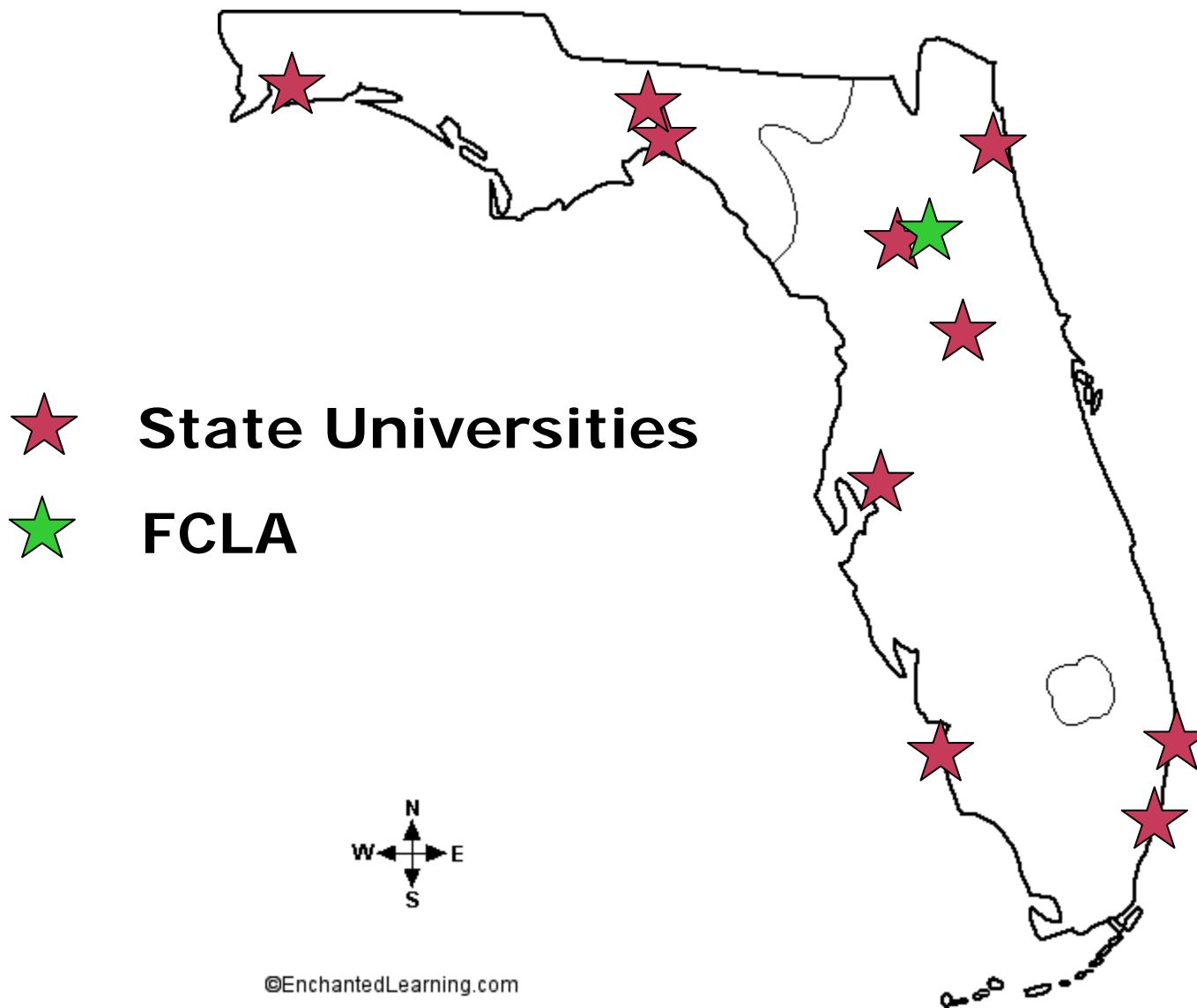
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Florida Digital Archive

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: mission :   : menu :

The mission of the Florida Digital Archive is to provide a cost-effective, long-term preservation repository for digital materials in support of teaching and learning, scholarship, and research in the state of Florida.

In support of this mission, the Florida Digital Archive guarantees that all files deposited by agreement with its affiliates remain available, unaltered, and readable from media. For those materials designated to receive full preservation treatment, the Florida Digital Archive will maintain a usable version using the best format migration tools available.

◎ **Digital Archive Information**

◎ **Publications and Presentations**

◎ **Software and Documentation**

◎ **Other Good Resources**

◎ **IMLS Grant Information**

○ **News**

The Florida Digital Archive is based on DAITSS, a preservation repository management application, which when completed will be released as Open Source Software.

- Preservation repository functions only
- Designed as a "dark archive"
- Implements OAIS functional architecture
- Preservation strategies based on format transformation

DAITSS

Dark Archive in the Sunshine State

OAIS Functional Architecture

PRODUCER

CONSUMER

Preservation Planning

Descriptive Info

Data Management

Descriptive Info

Ingest

SIP

AIP

Archival Storage

AIP

Access

queries

result sets

orders

DIP

Administration

MANAGEMENT

DAITSS Functional Architecture

L I B R A R Y

SIP

Ingest

Data Management

Mgmt DB

AIP

Storage management

Access

DIP

L I B R A R Y
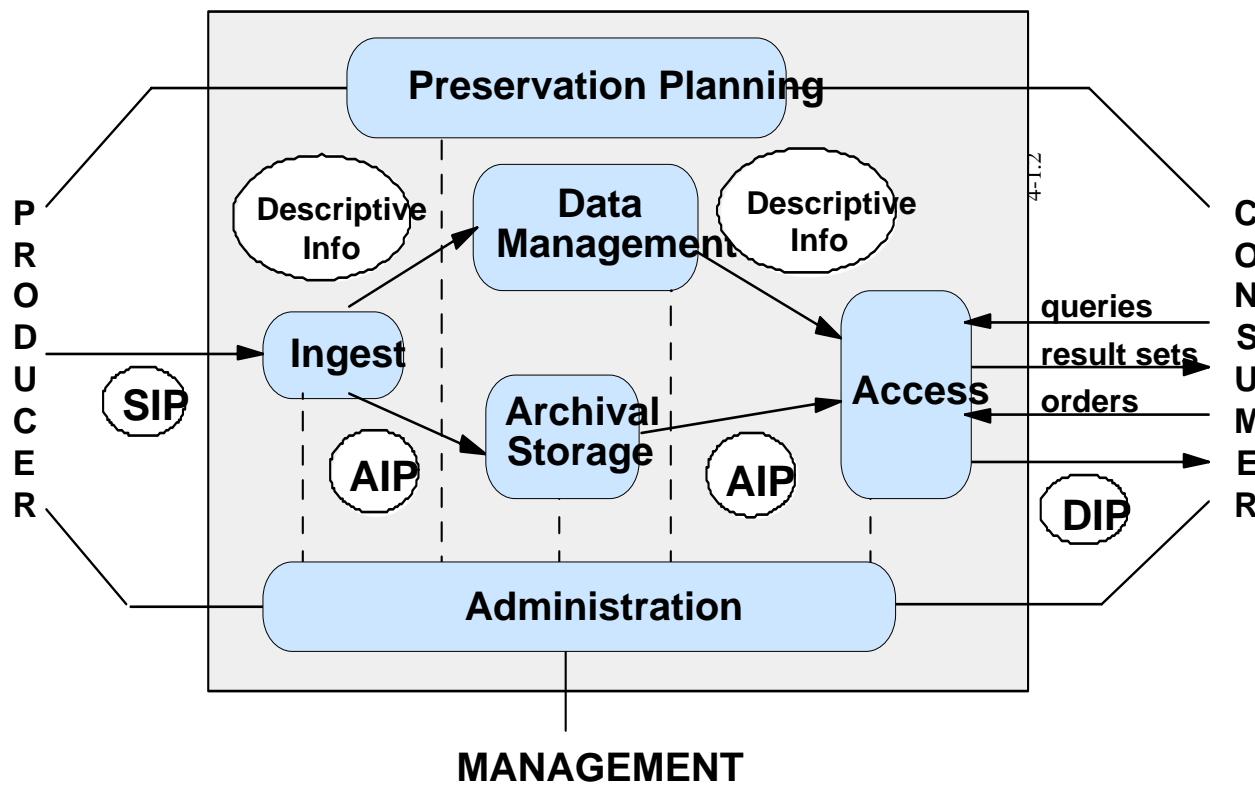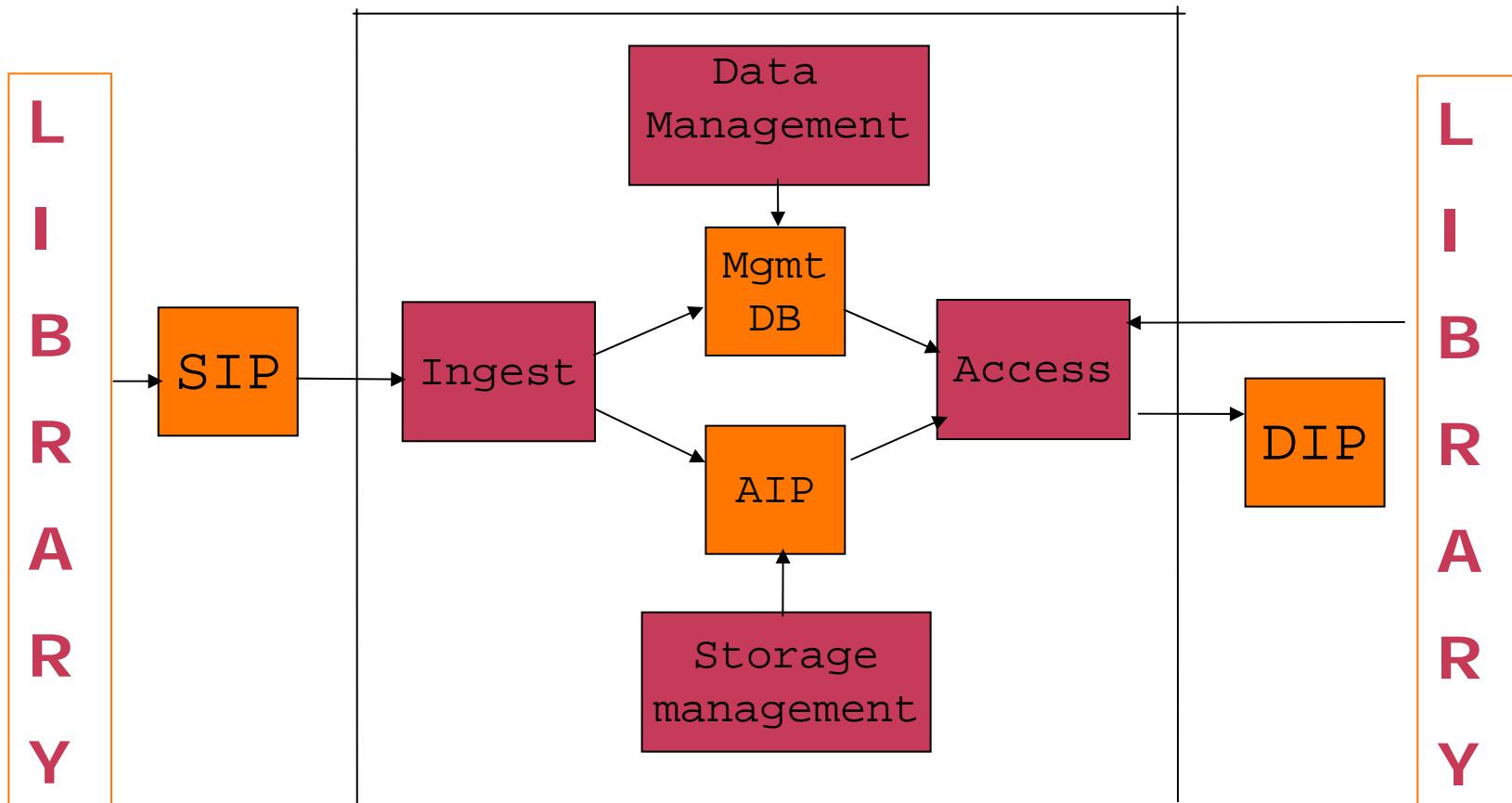
DAITSS Functional Architecture
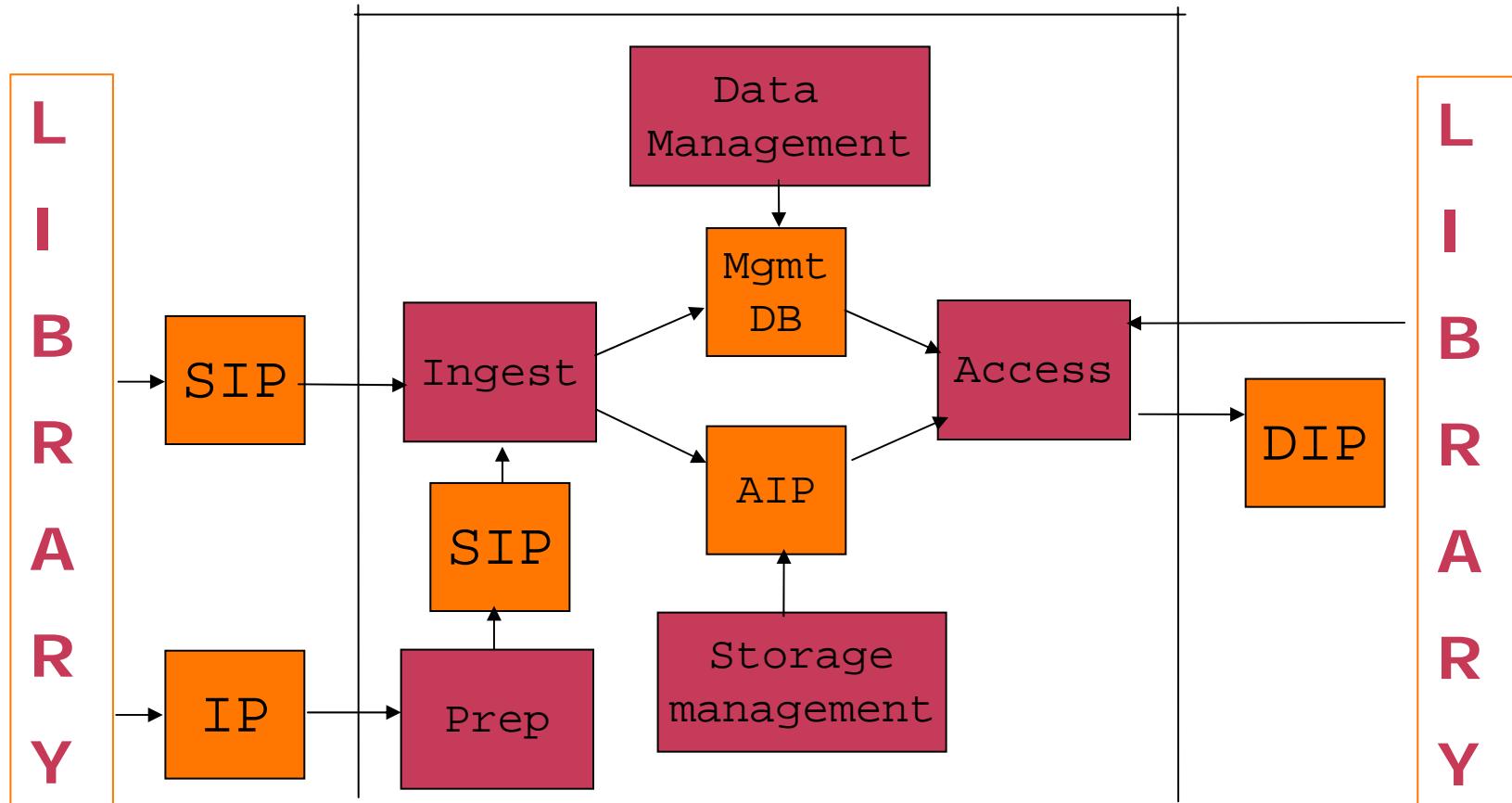
Preservation based on format transformation

- Treatment is based on background reports and action plans
- Files in recognized formats can get full preservation treatment
- Localized versions replace external references with local ones
- Normalized versions are more "preservable"
- Migrated versions are successor formats

- AIFF 1.3
- AIFF-C 1.0
- JFIF 1.02
- PDF 1.2 – 1.6
- Plain text
- TIFF 5.0, 6.0
- WAVE
- XML 1.0
- XML DTD 1.0
- JPEG2000
- AVI
  - MPEG, pcm
- Quicktime

Ingest processes

for each SIP
- validate SIP
- extract metadata
- process each file ====➜
- update database
- copy metadata in XML
- create AIP descriptor
- write n master copies of AIP to storage
- send Ingest or Error Report

for each file
- check for viruses
- verify checksums
- identify & validate format
- extract technical metadata
- download external references
- localize if necessary
- normalize if possible
- migrate if necessary
- record events
- record relationships

Dissemination process

- Validate dissemination request
- Retrieve the AIP
- Write AIP to input directory where it becomes a SIP
- Re-ingest the SIP
- Select the original and "last best" representations for DIP
- Create a DIP descriptor
- Zip and checksum the DIP
- Write the DIP to the requestor's pickup directory
- Write a Dissemination report to the requestor

The Florida Digital Archive in Production

- In production since November 2005
- Agreements with nine university libraries
- 21,494 AIPs : 182,203 files : 3.7 TB (one copy)
- Mostly ETDs and TIFF masters for digital collections
- Staff: 4 developers, 1 operations technician
- Biggest problems
  - developing while running production
  - writing to tape
  - bad descriptors
  - third party tools

Next steps

- Complete DAITSS 1.2 (November 2006)
- Install at the University of Tennessee
- Release DAITSS 1.2 as Open Source
- Begin work on DAITSS 2.0
  - make easier to "plug in" formats
  - full PREMIS conformance
  - ability to accept zipped SIPs
  - support digital signatures (in & out)
  - GUI for administration

For more information

http://www.fcla.edu/digitalArchive/

    Digital Archive Information = FDA

    Software and Documentation = DAITSS

http://www.fcla.edu/digitalArchive/pdfs/DAITSS.pdf

    DAITSS overview

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