

# Database Architecture For Consortia



How it Effects Your Use of Aleph

SUNY View

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# SUNY Libraries

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- 64 institutions
  - 61 involved in Aleph migration
  - 54 in production as of March 2005
  - 7 to complete migration as of July 2006
- serving 413,000 students
- supporting 6,688 programs of study
- Collection sizes: 25,000 to 2.3 million
- 18 million volumes combined

# Consortium-based Functionality

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- Physical union catalog
  - bib and holdings data from each campus
  - to be maintained by weekly batch updates
- Unmediated borrowing across campuses
  - requires “UBC” software for circulation among the various campus ADMs
- Ability to share authority files
  - future consideration

# Aleph Shared Servers Configuration

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- 50 campuses housed on 3 shared servers
- For each campus on each server
  - shared “a” tree
  - separate “u” trees
  - separate “alephe”
  - separate 01,10,30,50,60 libraries
  - Oracle instances
    - separate for each campus with 300,000+ bibs
    - shared for smaller campus databases
      - 3 to 6 campuses (up to ~300,000 bibs total)

# Challenges

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- ❑ Provide for campus autonomy within shared environment
- ❑ Central shared server support for hardware, OS, Oracle and Aleph system administration
- ❑ Server configuration and maintenance
  - multiple oracle instances
  - port management
  - maintain consistency across servers
    - ❑ aleph “a” trees, patches, fixes
    - ❑ processes (startup, shutdown, backups, downtime, etc.)
    - ❑ opening libraries, baseline templates for each campus
  - coordinate multiple campus processes across servers

# Challenges

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- Separate campus Aleph environments
  - central planning/testing
    - initial testing to work out major bugs before working with campuses
  - flexibility in rolling out updates
    - server changes
    - patches updates and version upgrades
    - variations in campus schedules and campus staff availability
    - scheduling training
- Central updating for “system wide” changes
  - campuses responsible for local customizations
- Updates times 50+

# Challenges

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- Each campus operates autonomously
  - web OPAC design, patron logons, circulation policies, budgets, cataloging practices, workflow decisions, etc.
  - requires wide range of troubleshooting skills
    - staff client, networking, log files, utils, etc.
  - local staffing needed for support
  - impact of local practice on SUNY wide initiatives
    - use of item status, borrower status and borrower ID codes?
    - non-unique patron IDs and varying circulation policies on SUNY wide universal borrowing

# Challenges

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## ***Aleph table editing support is distributed across each campus***

- not dependent on others for updating
- requires knowledge of table structures and interdependencies
- server access and impact on security
- requires knowledge of Unix and vi
- opportunities for “oops” – silly and serious
- impact on troubleshooting and problem resolution



# Challenges

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## □ Report Writing

- selected customized reports have been created and made available on Web Custom Services Menu
- requests are accepted centrally and addressed on case by case basis
- availability of oracle user account
  - 3<sup>rd</sup> party ODBC clients installed locally by local staff
  - local campus staff turn to local campus DBA support
  - read only
  - restricted by IP address
  - restrictions on account to minimize impact
- ARC?

# Challenges

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## □ Aleph Support

- SUNY Service and Support Portal
  - “Footprints” web-based problem reporting application (central staff assigned to address requests)
  - Ex Libris PRBs
- SUNY Aleph Implementation Portal
- SUNY Aleph list
- ALEPH-NA list
- Colleagues at other campuses

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**Thank You!**