A Digital Library Architecture
For UVA

DLF Spring Forum

April 19, 2004
Digital Library Assumptions:

• All media, all content types integrated into one collection
• A network that is built to be a part of a global network
• The global network will be built by corporations, governments and libraries
• Searching and browsing are equally important
Digital Library Assumptions (cont.):

• We will provide tools to make sophisticated use of our collections
• Any given resource can be presented in any number of contexts
• Increasingly, we will be faced with born-digital materials
• This is going to take a very long time …
The Big Picture

- resources produced by users
- user collections
- resources we produce
- Library selection
- resources we negotiate
- Library processing
- user access services
- information community services
- retrieval
- searching
- our central repository
- outside objects we register
- our objects
- other repositories
The digital library as a network
A data object is one unit of content.

- **Digital object identifier**
  - methods for disseminating “views” of content
  - set of content or metadata items
  - metadata about history and policies
Explicit Relationships
Implicit Relationships

- Defined by rules, i.e. XPath statements
- The PID of the parent is in the child’s metadata
- Child objects are assembled at dissemination time
- Child objects can respond to more than one parent
Explicit Data Modeling

Modern English Collection

Cavalier Daily

Daily Issue

Daily Issue
Quantitative Data Collections

Quantitative Data Collection

Dataset Description Objects

Database Objects
Collecting Scholarly Projects

Modern English Collection

The Whitman Project

Leaves of Grass

Text 1

Text 2