

# Prototype Data Search Engine & Query Building UI

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## A Search Engine?

- search engine for data services
  - currently: images only
- basic overview of pieces:
  - harvest metadata only
  - build table and indices to support complex queries
  - delegate data delivery back to original DAL service
  - java client application: Octet
    - deployed via Java Webstart, requires Java 1.4

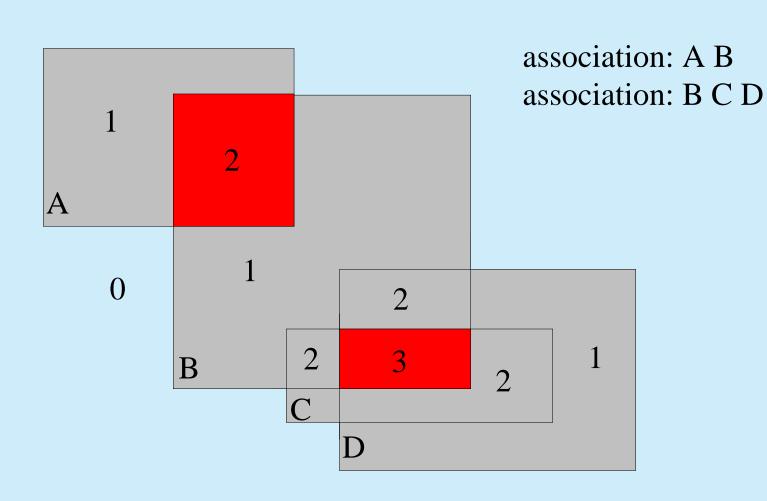


#### **Associations**

- spatial association is a set of observations that all overlap
  - there is a single point contained by all members
  - observations can belong to multiple associations
- server stores pre-computed association relations
  - involves considerable geometry processing (intersection)
  - time-consuming
  - re-usable
  - supports incremental addition of content



## **Spatial Association**

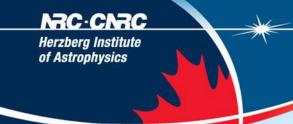




### **Association Queries**

- user defines groups of observations using queries
- association query is a spatial intersection (join) of the results
  - each user-defined group must have at least 1 member

can think of an association query as a spatial join



## **Association Queries**

- vanilla association is a single set of overlapping observations
  - user specifies 2 or more groups using condition
- query returns the part of the association that satisfies conditions, grouped according to user spec
  - each user-defined group must have at least 1 member

can think of a query as template/pattern resulting associations match the template



Now for the live demo of Octet...

http://www.cadc-ccda.hia-iha.nrc-cnrc.gc.ca/cvo/