### **MIT Data**

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#### What we'll cover

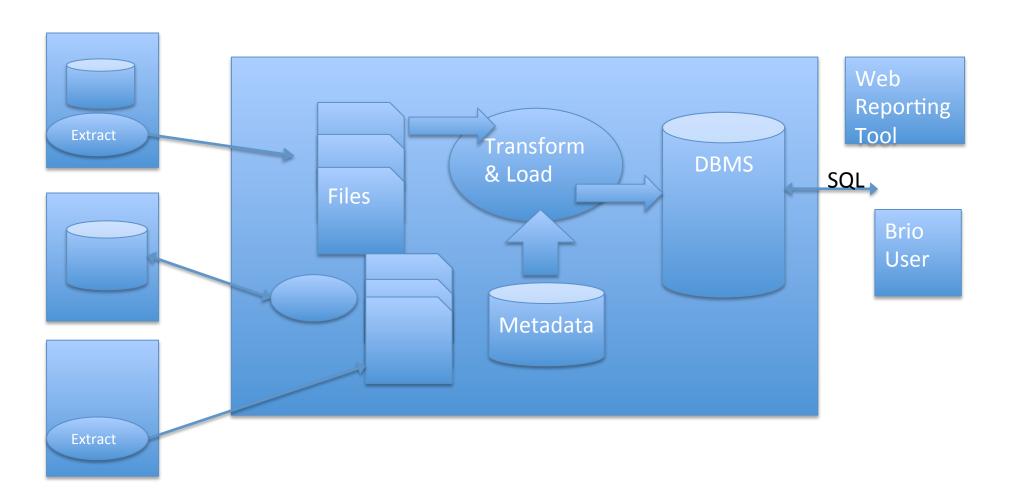
- Structured information only
  - No research data
  - not documents or web content
- What's the MIT Data Warehouse
- What information is available
- How you can access it
  - sql
- Structure of information
  - Quick tour
  - How to join

#### MIT Warehouse Goals

- Provide a common access mechanism for all Institute wide administrative data
- Provides a simpler view of Information
- Helps users make better decisions
- Improve data quality through usage
- Reduce load on Transactional System

#### Source Systems

#### Warehouse Environment



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# MIT Warehouse Design

- Accessed via SQL
  - Any tool
  - ODBC
  - Programming language
  - Encrypted transport
- Oracle DBMS
  - Access control at the database level
  - Views
- Optimized for reporting not transactions
  - Not "normalized"

# Design continued

- Data has to be accurate
  - Stale data is better than inaccurate data
- Structures should make it easy to report
- Data is not corrected or modified in the Warehouse
- Data always comes from a System of Record (SOR)
- Access rules are shared by the Warehouse and transactional systems
  - Access managed by Business Owners

### System Availability

- Approaches 24 x 7
  - Except Saturdays from 3:00 pm 3:10 pm
    - Snapshot
  - Some tables are temporarily unavailable in the early morning as new day's data is loaded
- Most data is loaded every night

#### How to find out what's there

- Warehouse web site
  - See Data section
  - http://web.mit.edu/warehouse
- Metadata is in Database
  - Displayed on the web site
- What's "open"?
  - Where Sensitivity of
    - Public
    - MIT Only
- http://scripts.mit.edu/~opendata/www/ index.php?title=OpenData:Community Portal

# **Examples of Data**

- Course Catalog
- Subjects offered per term
- IAP Sessions
- Textbooks
- Buildings & Rooms

### **Access Steps**

- Request an Account
  - http://ist.mit.edu/services/business/warehouse/access
- Set password
- Install Oracle driver
  - http://ist.mit.edu/services/business/warehouse/gettingstarted
- Optionally Install Brio
- If you don't see a table that is listed as "Public" or "MIT Only" that you need
  - Send mail requesting access mentioning table by name
- If there any problems send mail
  - warehouse-help@mit.edu

### Warehouse SQL Connection Parameters

- Oracle client install
  - Comes with MIT configuration -- tnsnames.ora
  - https://ist.mit.edu/services/business/warehouse/ESSsetupMac-10
- Host -- Warehouse.mit.edu
- Port 1521
- SID -- DWRHS

# Quick tour

#### Web Services

- Web Services
  - Read/Write services
  - https://wikis.mit.edu/confluence/display/WSWG/Web +Service+Documentation
- Authentication
  - http://web.mit.edu/touchstone/www/
- Authorization
  - http://web.mit.edu/rolesdb/www/roleshome.html
- List Management
  - Moira

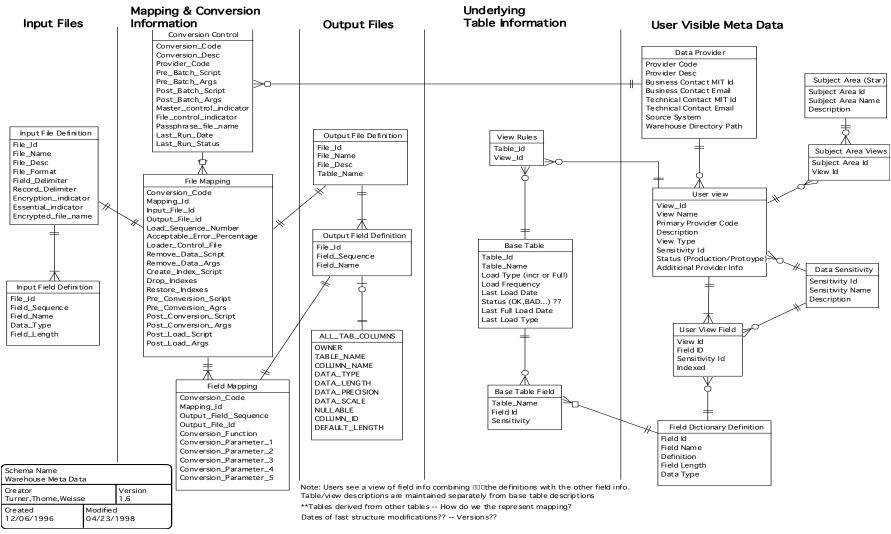
### Questions?

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warehouse-help@mit.edu

#### Metadata

#### Warehouse Meta Data



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