

Business Intelligence and Analytics

Ways to access data in the MIT Data Warehouse

- Cognos Query Studio
- Cognos Workspace Advanced
- Cognos Report Studio
- Tableau
- FileMaker
- Access
- SQL Developer
- [Enter your favorite database tool here]

Cognos environments

- Production
 - reports.mit.edu/ibmcognos
 - Vetted reports in steady state
 - Run reports from here
- Test
 - reports-test.mit.edu/ibmcognos
 - Reports still being developed and vetted
 - Develop reports here
- Steps to get your report from Test to Production
<https://wikis.mit.edu/confluence/x/ogvBQ>
 1. Define your business question
 2. Find your Cognos package
 3. Develop your report in Test > School & Areas
 4. Request a transport to Production
cognos-transport@mit.edu
 5. Share the Production report with your users

Get help!

Find it online

- Data Warehouse: <http://ist.mit.edu/warehouse>
- Supported Browsers: <http://ist.mit.edu/software/browsers>
 - Preferred browser: current version of Firefox ESR
- MIT Knowledgebase articles
 - Data Warehouse: <http://kb.mit.edu/confluence/x/ZoBYBg>
 - Cognos Reporting Tool:
<http://kb.mit.edu/confluence/x/OoUBCQ>
 - Query Studio: <http://kb.mit.edu/confluence/x/Rr0wCQ>
 - Report Studio: <http://kb.mit.edu/confluence/x/RL0wCQ>
 - Workspace Advanced:
<http://kb.mit.edu/confluence/x/SL0wCQ>
 - Tableau: <http://kb.mit.edu/confluence/x/ILswCQ>

Email us

- Warehouse: warehouse-help@mit.edu
- Cognos: cognos-help@mit.edu
- Tableau: tableau-help@mit.edu

Visit us

- **Weekly Data Warehouse User Group**
 - **What:** Data Warehouse, Cognos, & Tableau questions/problems
 - **When:** Thursdays 1:30-3pm
 - **Where:** NE49-3098 (3rd floor, Little Cayman)
- **Data Visualization & Tableau**
 - **When:** Fridays 10:15-11:15am
 - **Where:** W92-106 (Back Bay)
Take the shuttle to the W92 stop

Cognos Query Studio

- ad hoc querying
- see the data as you pull it
- easy to learn
- basic filtering and formatting
- easy conversion of queries to Report Studio to apply advanced functionality or formatting

Cognos Workspace Advanced

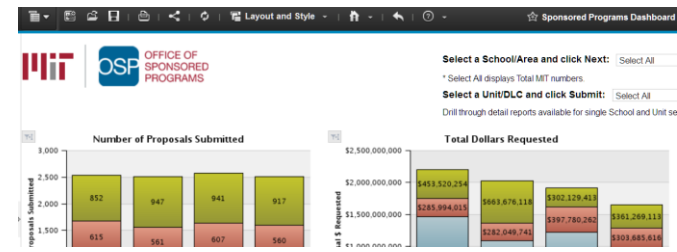
- ad hoc querying and data exploration
- see the data as you pull it
- simple reports
- functionality between that of Query Studio and Report Studio

Cognos Report Studio

- print-ready reports
- advanced calculations, filters, conditionals/variables, & visualizations
- prompts
- drill-through between reports
- caution: high learning curve

Cognos Workspace

- interactive dashboards
- consume multiple Cognos reports/charts at once



Tableau

- visualizing your data
- interactive dashboards
- ad hoc querying
- connect to various data sources
- drill down
- ad hoc hierarchy design
- caution: high learning curve

TRANSFORM YOUR DATA INTO INFORMATION

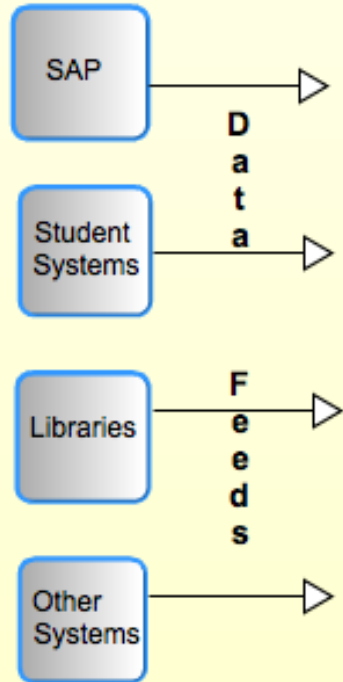
DATA TOOLS & SERVICES FROM IS&T

IT PARTNERS
JUNE 16, 2015

Data Warehouse Context Diagram

DATA PROVIDERS

Systems of Record



Data Warehouse

ETL Process

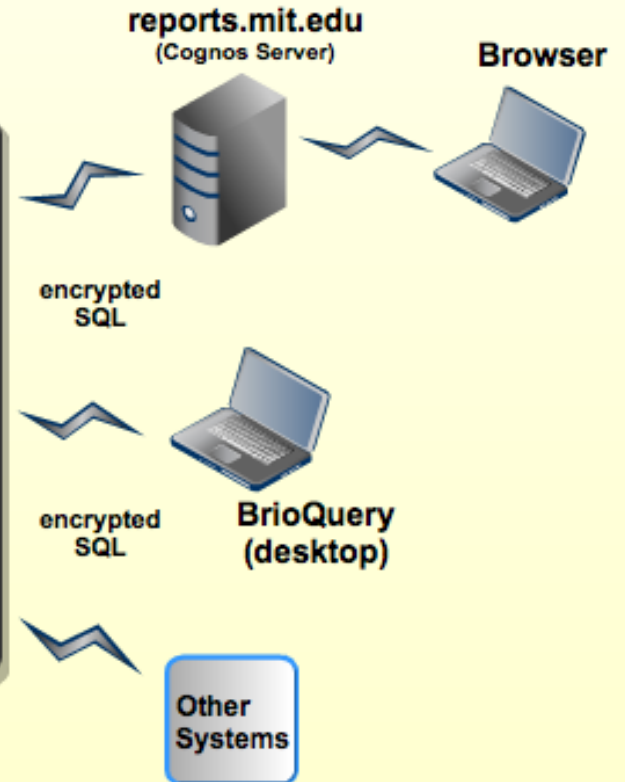
Move files
Decrypt Files
Check Files
Translate Data
Load Data
Data Verification
Archive Files



Oracle Database

Roles Database
Authorizations

DATA CONSUMERS



Data in the Data Warehouse

- Academic Chairs
- Alumni Biographic, Occupation & Degree
- Benefits
- Budgets (Nimbus)
- Classification of Instructional Programs (CIP)
- Concur Travel
- Coop Textbook
- Course Listing
- CyberSource MIT Storefront transactions
- Department Master Hierarchy (and other hierarchies)
- EHS Contact, Room set, Sara, Training data
- Facilities/Plant Maintenance Orders
- Fidelity - Benefits
- Finance
- Student Financial Aid
- Fund data (Resource Development)
- Graduate Admissions
- Graduate Awards
- HR (Employees, Positions, & Appointments) Cyborg & SAP
- IAP Credit & Non-Credit Activities
- Instructor - Who is Teaching What
- Institutional Research - Honors & Awards
- IPEDS Institution data
- Kerberos
- Keys
- Libraries (Financial, Orders, Circulations, Collection Management, Serials Control Processing)
- Metadata (Table, view, & field definitions, data models, report templates)
- MIT Card data and pictures
- MIT ID
- Moira List data
- Online Subject Evaluation
- OSP Proposals and Award Cost Sharing
- Overhead Rates
- Payroll (Distributions, Deductions & Certifications)
- Pension
- Person
- Procurement (Purchasing, Requisition & Credit Card)
- Publication data - Journal Articles and Books from Academic Analytics
- Request Tracker
- Roles and Authorizations
- Space & Building
- Space Management
- Student Biographic
- Student Degree
- Student Degree Audit
- Student Pre-registration
- Student Term Enrollment
- Subject Enrollment
- Student Grades and Academic
- Training & Events
- TLO Patents
- Vacation/Absences/Leaves
- Zip code (US & Canada)

Cognos Production vs. Test Environments

Production

reports.mit.edu

Reports are stable and validated ("ready for prime time")

No one can edit reports in any folder within the School & Area Reports folder

Run validated reports

Test

reports-test.mit.edu/ibmcognos

Reports are still being tested and validated; format and/or content may change, and calculations may be inaccurate

Users who have permissions for a DLC's folders can edit reports in that DLC's School & Area Reports folder

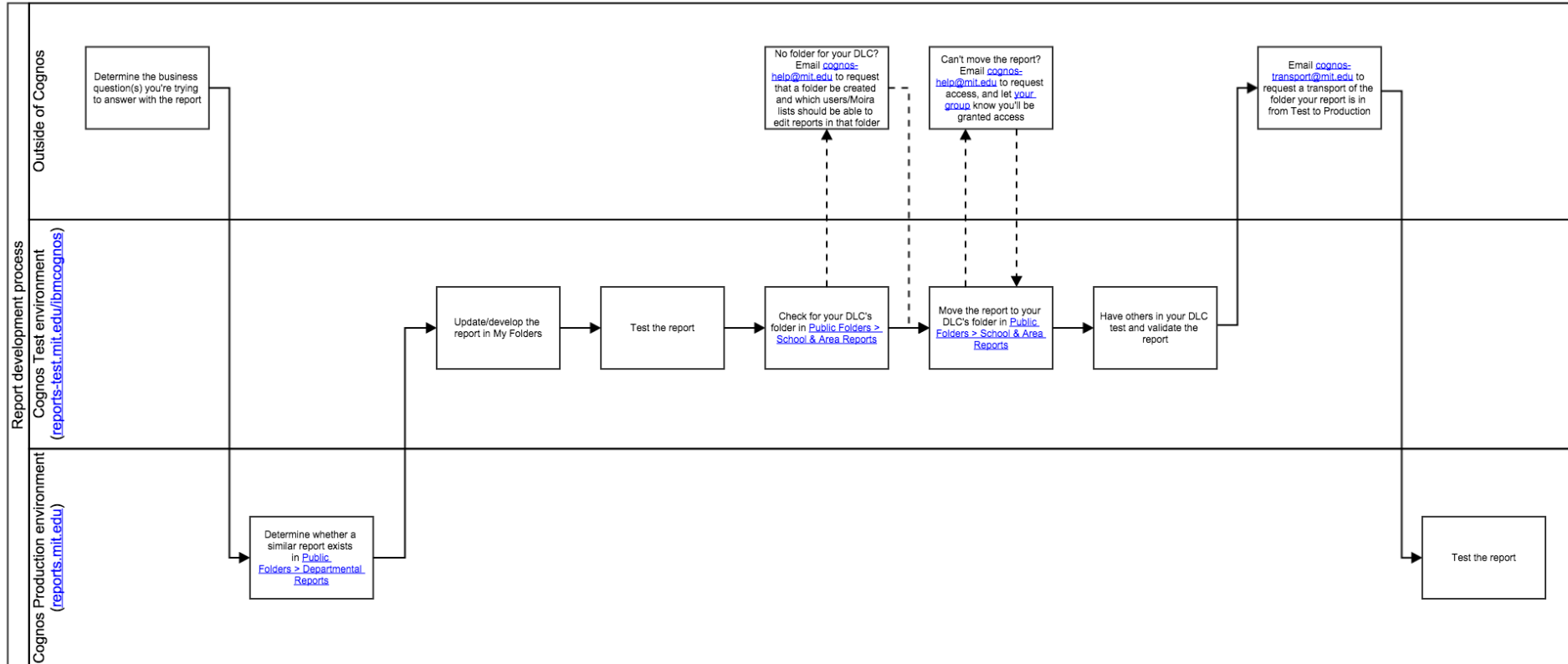
Develop and test reports

Use same "production" data

Only you can see reports in your My Folders

Everyone can see reports in any folder within Public Folders

Report Development Process



Questions?

- Ask now
- Stop by weekly drop-in sessions
 - Thursdays, 1:30-3pm in NE49, 3rd floor
 - Tableau-specific: Fridays, 10:15-11:15am in W92
- Email us (see handout for contact info)
- Check MIT Knowledge Base: kb.mit.edu