




Building Reports Using Data Marts



Welcome


- This course is designed to introduce the features and functions of the Course Analytics Data Mart.
- Your instructors are:
 - Jennifer Anderson
 - Joe Rutter
- Please tell us your name and where you work, describe how you use course and student data in your job, and one thing you hope you will learn today.

 4.4.05 OUS200C v4a



What is a Data Warehouse?

- A collection of data designed to support decision making. Data warehouses contain a wide variety of data resources that present a coherent picture of conditions at any point in time.
- The term data warehousing generally refers to the combination of many different databases across an entire organization.

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Data Warehouse Benefits

- Provide consistent, accessible information that departments and central administration can share.
- Provide trending capabilities.
- Provide user-friendly and flexible on-line reports.
- Reduces the time needed to prepare and analyze data.
- Makes your life easier!

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Data Sources and Definitions

The diagram illustrates the data architecture. On the left, 'Operational Data Stores' and 'Transactional data (MARX)' (with examples: Grade, Enrollment Counts, Course Schedule) feed into the 'OUS Data Warehouse'. The warehouse also receives 'Near Real-Time data'. Below the warehouse is the 'Metadata Repository'. From the warehouse, data is distributed to 'Data Subsets Organized for Queries and Reports', which includes the 'Course Analytics Data Mart', 'HR Data Mart', and 'Financial Data Mart'. 'Periodic snapshots of data' also feed into the warehouse.


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What is a Data Mart?


- A database designed to help with decision making.
- Whereas a data warehouse combines databases across an organization, data marts focus on a particular subject or department.
- Course Analytics is a single Data Mart derived from the University's Data Warehouse.

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 **What is the ODS?**


- Short for Operational Data Store
 - Student_current, Course Daily
- a database to store time-sensitive operational data
 - Most are updated nightly
- contains current data that is updated through the course of business transactions
- will support queries on near real-time data
 - email lists
 - daily counts of students registering for courses
 - current list of majors

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 **Data Marts or the ODS?**

- Data Marts should be used when you need to view...
 - history as it existed on a specific point in time.
 - trends such as comparing past activity with present.
- ODS (Operational Data Store) should be used when you need...
 - history overlaid with current information.
 - current or near-current data.
 - operational data like a list of email addresses.

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 **Data NOT found in the Course Analytics Data Mart**


- Student "centric" data
- Human resources
- Financial aid
- University financial data
- Degree Audit data

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Data Found in the Course Analytics Data Mart...


- Enrollment and grades by course
 - Exists at the section (call number) and meeting level
- GEC (General Education Curriculum)
- Student demographics by course
- Student athlete info by course
- Course instructors
- Classroom information
- Fiscal information
- Organized by year, quarter, and time of snapshot (cycle point)

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Using This Data You Can..

- Monitor/Evaluate demand for courses
- Monitor registration patterns
- Assess performance in courses
- Review teaching loads and characteristics
- Provide a general departmental "overview"

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Responsible Use of Student Data

Privacy Policy Commitment

Access to and use of university data related to students is controlled by The Ohio State University's FERPA Compliance Policy. FERPA is the Family Educational Rights and Privacy Act which applies to any educational agency or institution that receives federal funding.

The overarching purpose of FERPA is to protect the confidentiality of a student's educational records, as well as the right of a student to inspect those records. The term "education records" means records, files, documents, and other materials which contain information directly related to a student, and are maintained by any employee or agent of the University.

Information regarding the FERPA Compliance Policy of The Ohio State University can be found on the Office of the University Registrar's web site at <http://www.ureg.ohio-state.edu/>.

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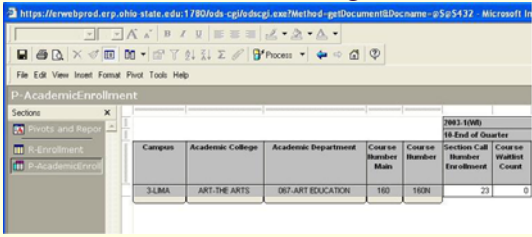
Data... about the data

- This is called “metadata”.
- Metadata describes how and when and by whom a particular set of data was collected, and how the data is formatted.
- Metadata is essential for understanding information stored in data warehouses.
- The O.S.U. Data Warehouse website provides a metadata look-up tool.

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Metadata... Increases Understanding




The screenshot shows a Microsoft Word document with a table titled "P-AcademicEnrollment". The table has the following columns: Campus, Academic College, Academic Department, Course Number Main, Course Number, Section Call Number Enrollment, and Course Waitlist Count. The data row shows: S LMA, ART- THE ARTS, DET-ART EDUCATION, 160, 160N, 23, 0.

- Open the website at: <https://newman.uts.ohio-state.edu/datawh/> or select "Data Warehouse" from OUS Helpful Links list on the Course Analytics page.

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Data Warehouse Resources



The screenshot shows the Ohio State University Data Warehouse website. It features a navigation menu with links for "Change Password", "Documentation", "Downloads", "FAQ", "Metadata", "News", "Request Access", and "Training". The main content area includes "General Information" and "Accessing the Data Warehouse".

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Building Queries and Reports

- Access to the Data Marts is via the eReports system.
- A web-based portal for accessing University data using a tool from Hyperion called Performance Suite.
- Allows great flexibility in building queries and defining report content.
- Available online 24 x 7.

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Preparing Your Computer

- Recommended Platform and OS for Hyperion.
 - Internet Explorer 6
 - Windows OS only client
 - Mac users need a Citrix account or must run Virtual PC
- Recommended Screen Resolution is 1024x768.
- Download and Install the plug-in.
 - If plug-in isn't installed or update is required, the site will prompt you to do so.
 - If you do not have permission to install software on your computer contact your departmental support staff.
- Test your Setup and Account.

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Login to eReports Brio Portal

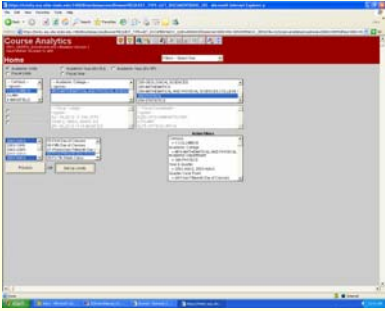
- URL=
<http://ereports.osu.edu>
- Access ID=
 - Your name.n and password.
- Trouble with your login?
 - Call 8-help or email 8help@osu.edu

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Building Queries

- The Course Analytics Home allows the setting of limits and filters.
- These choices ensure that the material you see is relevant to your area of inquiry.



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Building Reports – Demo

- Course and Grade Distributions
 - Create and Process the Query
 - Use the Spotligher on a Pivot Table
 - Export the Result Set to Excel

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Building Reports – Walk Through

- Course Enrollment and Utilization
 - Create and Process the Query
 - Reposition Fields on a Pivot Table
 - Drill Up in Detail on a Pivot Table
 - Increase Granularity and/or Add Fields on a Pivot Table Using Drilling Anywhere
 - Focus on Items to View a Subset of Data

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Need Support?

- Visit the Data Warehouse website at <https://newman.uts.ohio-state.edu/datawh/>
- Visit the OIT Technology Support Center website at <http://8HELP.OSU.EDU>
- Call 8-HELP or email 8HELP@OSU.EDU
 - Tell the agent you are using the Data Warehouse – Course Analytics eReports.
 - The agent will assist you and if necessary assign your request to the Data Warehouse support group.
- We partner with the OIT Technology Support Center
 - So you have a reliable and readily available source of help with security and plugins.
 - So we can easily assign and track your support requests through the help desk system.
 - So we can build up a knowledge database containing common issues and solutions.
