CNS /Update Newsletter Feature

Access to University Business Data

CNS Document ID: u040108a
Last Updated: 1/13/04

UF Information Technology

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By Dr. Michael Conlon, UF Director of Data Infrastructure and PeopleSoft Implementation Officer

One of the goals of UF Bridges is to improve access to university business data. The university processes and stores data about its financial transactions, human resources, academic activity, directory information and information about its systems. This data has been stored in a variety of different systems in some rather complex formats. Access to the data has required special permissions, particular technical access technologies and deep knowledge of the data structures and coding systems used in the university business systems. In many cases access would come in the nature of a "report"-a particular summary of data produced for a particular purpose. Standard reports served some of the needs of the community, while ad hoc reports were produced to meet special purposes.

The production of ad hoc reports is a very time-consuming and potentially error-prone process. Requirements must be specified and data extracted with care to ensure that accurate results are obtained. In many cases units were given direct access to the production tables to produce reports. This creates operational problems as reports compete with on-line transactions for the use of the database. Direct access to the data results in competing views with potentially conflicting results and lost effort while discrepancies are resolved.

A data warehouse has been constructed for university business data. Using standardized views and tools, authorized users can obtain data that has been optimized for various access needs.

The figure below shows the progressive refinement of data through four representations.

The On-line Transaction Processing (OLTP) data is the raw data of the running production system. PeopleSoft production systems will have many tens of thousands of tables in constant use. This data is not used directly for reporting. An ETL process is used to create an Operational Data Store (ODS) that has all the data ready for reporting. This data is transformed into a start-schema which is optimized for on-line query and drill-down. A further refinement of the data produces On-line Analytic Processing "cubes"-multi-dimensional summaries useful for "what-if" and other analytic applications.

The warehouse provides a consistent view of university data that is easy to access and produced in a variety of formats to simplify access. You can use university data through the university portal at my.ufl.edu [http://my.ufl.edu]. Click on Enterprise Reporting in the left-hand menu. Check the Bridges web site for training opportunities (www.bridges.ufl.edu/registration [http://www.bridges.ufl.edu/registration]) related to the use of the warehouse, and Cognos reporting tools.

Your Comments are Welcome

We welcome your comments and suggestions on this and all UFIT documentation. Please send your comments to:

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