

Legislative Audit and Fiscal Review Committee
October 17, 2012
NDUS Shadow Systems

Mr. Chairman and members of the Committee, my name is Randall Thursby, CIO for the North Dakota University System. I have been asked to discuss computer shadow systems in the NDUS.

First, I need to define what is considered a shadow system. A shadow system is one best defined as systems that duplicate or substitute the work of a central system such as ConnectND. It is important to distinguish shadow systems from “supplemental systems”, which supplement, rather than duplicate, the information in the central system.

Oracle/PeopleSoft is a powerful financial system, but despite the significant investment by the State of North Dakota and students of the North Dakota University System, Oracle/Peoplesoft system does not meet the needs of all users all of the time. It is hard to imagine a central administrative system that does meet such a high standard.

The NDUS has been concerned about shadow systems for several years. When ConnectND was first implemented one of the directives for implementation was that shadow systems be minimized. In 2008 presentations, discussions and reinforcement on the need to limit shadow systems were held with the institutional presidents, chief academic officers, chief business officers, and chief information officers. Information on shadow systems used with ConnectND were collected and in some cases adjustments to ConnectND were made to reduce the need for some of those systems used by most institutions.

Each year the institutions provide a list of Off-Peoplesoft Computer Systems with financial implications to the State Audit Office. In the university system level we have policy 1901.3 and associated procedures that addresses acquisition of new software and systems. Excerpting language from Procedure 1901.3 item 7,

Information Technology projects (administrative, academic, or research) must have NDUS CIO approval if the IT project interfaces to a major system hosted by the NDUS (ConnectND, ODIN, etc.), impacts the NDUS communications network, or impacts NDUS resources (staffing, systems, etc.). Systems of specific interest are those within the NDUS Strategic Architecture and include:

- a. Equipment and Software for Communications Networks (Voice, Data, Video)
- b. Database Software
- c. Document/Content Management Systems
- d. Data Warehouse/Reporting Software & Systems
- e. Collaboration Software
- f. Identity Management or Directors Services Software
- g. Human Resources Systems

- h. Financial Software Systems
- i. Student Administration Systems
- j. Library Automation Systems
- k. Learning Management Systems
- l. Electronic Mail, Calendar and/or Communications Systems
- m. Customer Relationship Management or Customer Services Systems
- n. Portal Software
- o. Any third-party software that interfaces to or uses data from any NDUS supported application.

This policy and procedure serves as a way to limit shadow systems within the NDUS and also to eliminate unnecessary duplication and costs associated with the acquisition and interface of software.

We are also in the process of collecting survey information on existing shadow systems to ensure they either known and reported annually or that they have been reviewed and approved according to NDUS policy and procedures.