CNS /Update Newsletter Feature

Bridges System Construction This Summer

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UF Information Technology

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The Enterprise Resource Planning computer system will grow significantly this summer. Phase II of the system construction begins in July and will continue through September. The goal of Phase II is to create full-size, production-class computer systems for the applications that will "go live" through July 1, 2004 -- Finance, Human Resources, Cognos, Enterprise Performance Management, and Campus Community.

In addition, Phase II will provide servers for training, for system development and will augment the existing systems for development, testing and production. The total number of servers in the ERP system will grow from 36 to 82. On-line disk storage will grow from 1.2 terabytes (1,200 gigabytes) to more than 7 terabytes.

Figure 1. Three-tier architecture with network and storage

Phase I produced a development environment, a beta-testing environment and production environment for the portal. Storage, backup and network security were addressed. A physical three-tier system architecture with network and storage was put in place (See Figure 1). The network switches protect the system from unwanted traffic and route appropriate traffic over an internal network to one of several Web servers. The Web tier provides the interaction with the user through their browser. The Web servers operate independently and can be removed and maintained without system downtime. The Web servers send processing requests to the application servers. Application servers also operate independently. If additional system performance is required, additional application servers can be added. Like the Web servers, application servers can be removed and maintained and restored to service without system downtime. The application servers are responsible for the work of the system -- they process security, create dynamic menus, construct pages, create database requests, process database
results and create displays.

The database tier services requests from the application servers. The storage systems provide secure, scalable storage to multiple database servers. Tape storage libraries provide backup for the storage systems.

This architecture is replicated for the lab, development, testing, production and training environments. The modular nature of the architecture improves uptime and scales well. Additional servers can be added to increase throughput in the Web and application tiers.

Following the completion of Phase II construction, the system will be tested and tuned. In January 2004, the system will be used for beta testing and production testing. Campus Community goes into production in May 2004.

Additional information on Phase II and system architecture can be found in the IT section of the UF Bridges Web site at www.bridges.ufl.edu/it [http://www.bridges.ufl.edu/it]. The UF Bridges IT Advisory User Council meets every third Tuesday. See the UF Bridges pagelet in the UF portal (http://my.ufl.edu [http://my.ufl.edu]) for times and dates.

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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