

Imagination
to
Realization



XS Administration and Migration

*Presented by: Melissa Hazelwood
SunGard Higher Education*

Wednesday, April 05, 2006

9:30 – 10:30 am

Evaluation Code 657

Session Rules of Etiquette

- Please turn off your cell phone/pager
- If you must leave the session early, please do so as discreetly as possible
- Please avoid side conversation during the session

Thank you for your cooperation!

Introduction

- Session's Purpose:
 - Discuss challenges of document management in terms of administration and migration
 - Explore possible environments regarding document storage and sharing
 - Discuss possible administration solutions
 - Discuss pros and cons of solution
- Session's Benefits
 - Familiarity with different components of a document imaging environment
 - Leave with an idea of what is necessary to administer a production/test BXS environment

Topics of Discussion

- Familiarize yourself with the BXS components in terms of software and hardware relationships
- Production environment
 - Recommended Hardware
 - Disk Xtender
 - Security

Topics of Discussion- Continued

- Test environment
- Migration of images to new hardware
- Pros and cons of imaging solution

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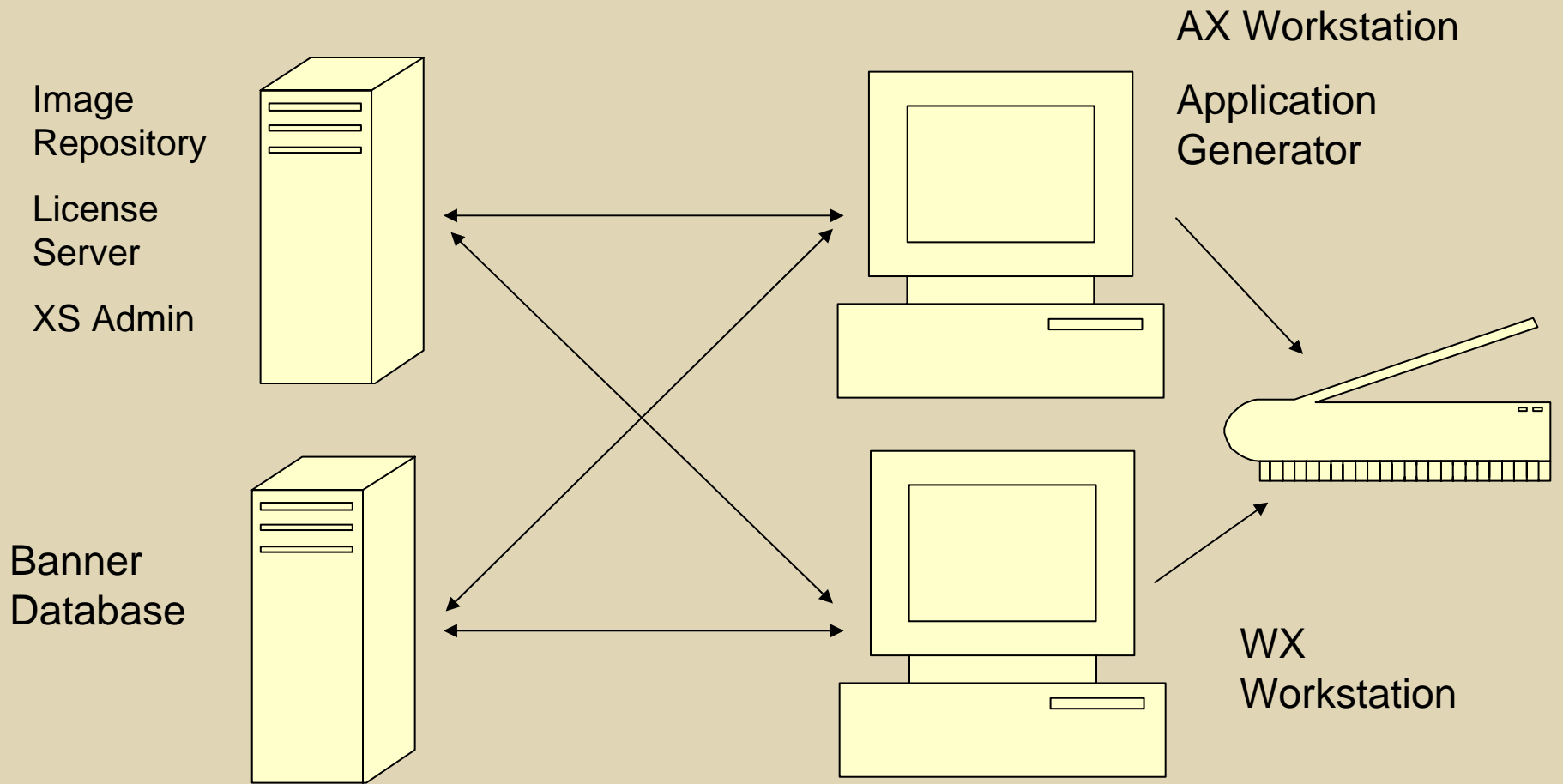


BXS Components

BXS Components

- Administration Components
 - License Server
 - Image Repository (Disk Xtender)
 - Relational Database Management System (RDBMS)
 - XS Administrator (XS Admin)
- Client Components
 - Application Generator
 - Application Xtender (AX)
 - Web Xtender (WX)

BXS Components- Continued



BXS Components- Continued

- License Server
 - Manages XS licenses for all products
 - May be installed on same server as image repository
 - Allows you to designate a set number of AX licenses for particular groups

BXS Components- Continued

- Image Repository
 - Manages images
 - Recommend using Disk Xtender for management
 - Connections from workstations through
 - Remote Procedure Call (RPC)
 - Distributed Component Object Model Call (DCOM)
 - Window's shares
 - Configured in XS Admin
 - Includes backup and restore utility

BXS Components- Continued

- RDBMS- Banner Database
 - BXS objects are found in...
 - OTGMGR
 - Security
 - Image indexes
 - Environment configuration
 - Reference tables
 - BANIMGR
 - BXS module integration tables
 - Synchronization triggers for reference tables

BXS Components- Continued

- XS Admin
 - May be installed on same hardware as license server
 - Maintains configuration of...
 - Data sources
 - License server
 - Disk Xtender
 - Web Xtender

BXS Components- Continued

- Application Generator
 - Application management
 - Create, modify, purge or delete
 - Allows for XML imports/exports
 - Security Management
 - Application, function, and document level for users and groups

BXS Components- Continued

- Application Xtender
 - Allows users to store and retrieve documents
 - Lists only applications that a user has been given access to
 - Allows for revision history, comments and export of documents

BXS Components- Continued

- Web Xtender
 - Most of the capability of the Application Xtender
 - Works with Microsoft Internet Information Service (IIS)
 - AX security settings apply to WX
 - May be implemented as a channel or a tab in Luminis
 - Integration with Workflow

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Production Environment

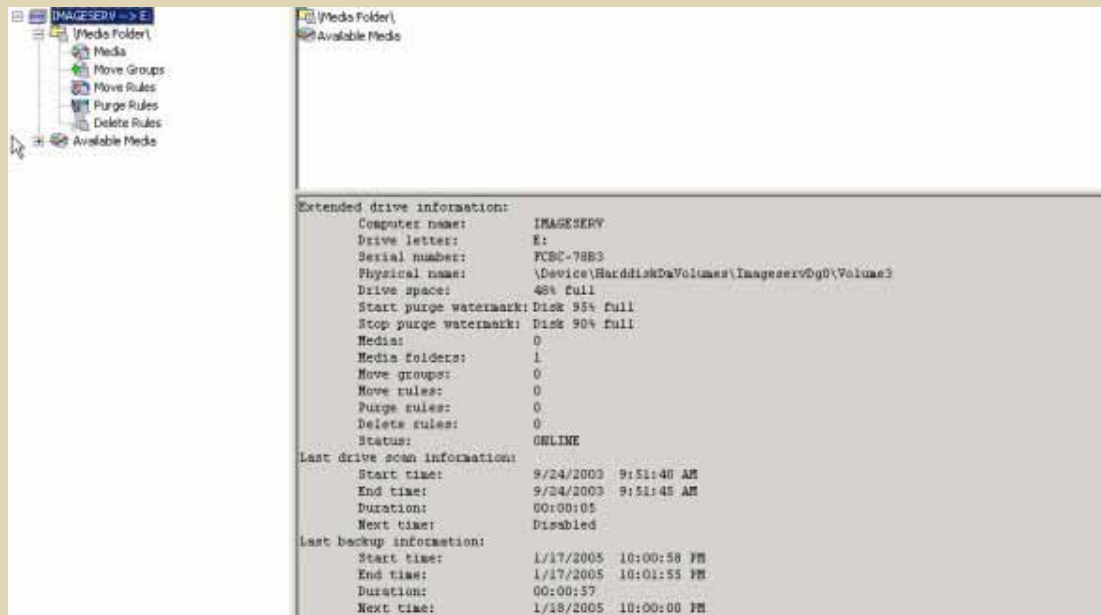
*Recommended Hardware
Disk Xtender
Security
Maintenance*

Production Environment- Recommended Hardware

- RDBMS Server- Example UNIX Environment
 - Sun Fire v890
 - (4 - 8) UltraSparc IV 1.5 GHz CPUs
 - 32 GB RAM
 - 300 GB Disk on directly attached RAID device or connected to SAN
- Image Repository- Example Microsoft Server 2003
 - PowerEdge 6850
 - 64GB RAM
 - 300 GB Disk on directly attached RAID device or connected to SAN
- Client Workstation- Example Windows XP
 - Pentium Processor
 - 256 MB RAM
 - 1 GB hard drive

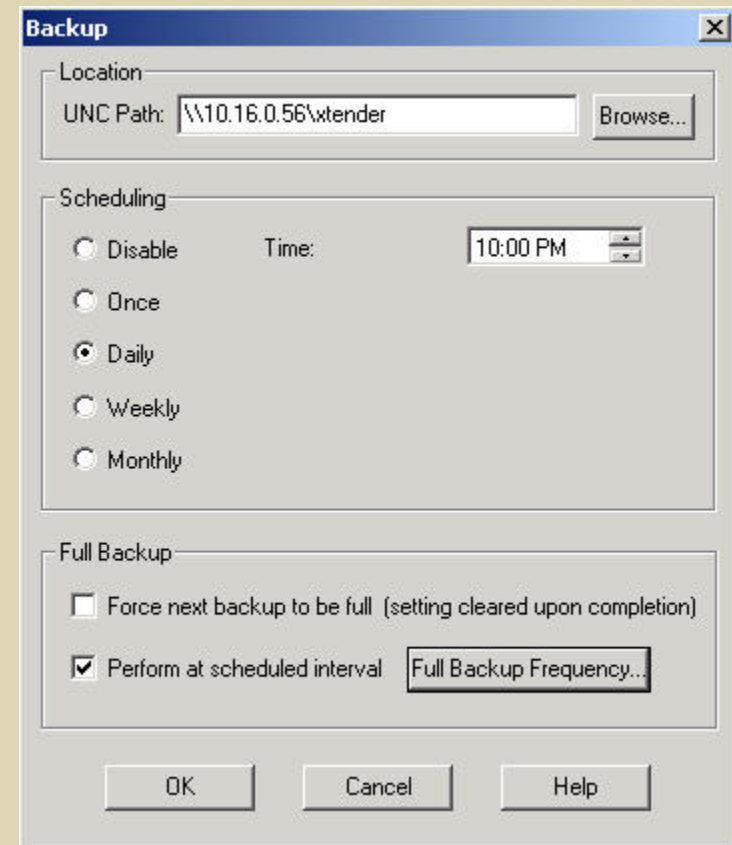
Production Environment- Disk Xtender

- Benefits of Disk Xtender
 - Images are more secure
 - Manages Backup/Recovery situations



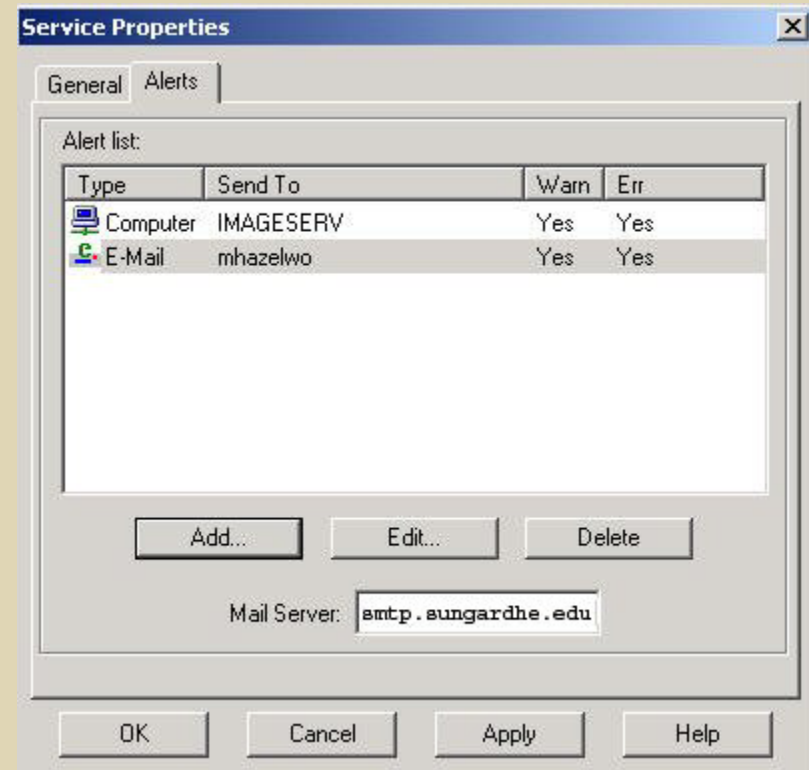
Production Environment- Disk Xtender

- Benefits of Disk Xtender
 - Schedule weekly full backup
 - Schedule daily incremental backup
 - Backups are written to SAN, which is backed daily
 - Backups are NOT compressed
 - Cannot restore just one file



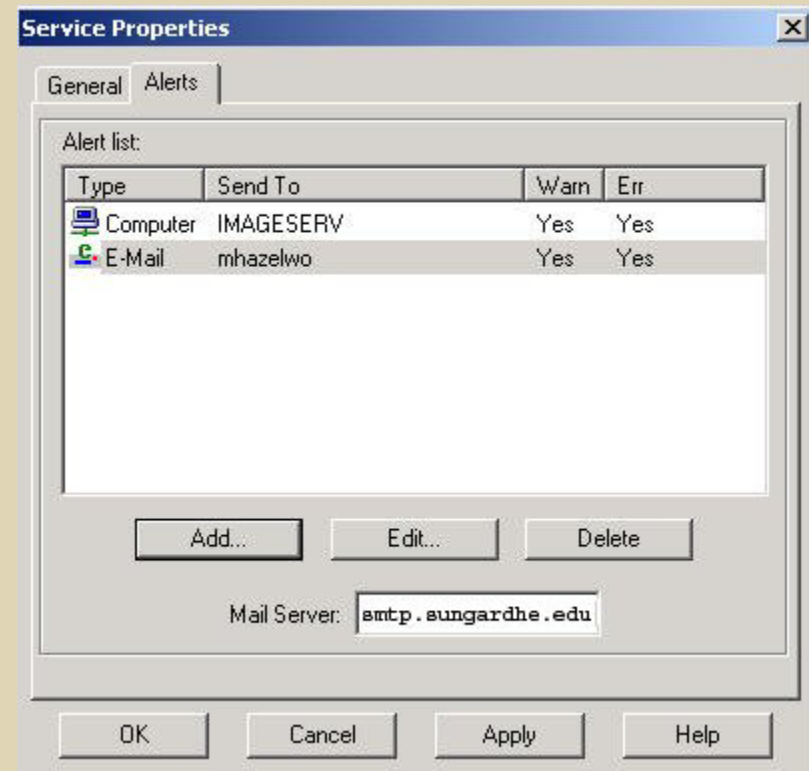
Production Environment- Disk Xtender

- Alerts
 - Computer
 - Domain
 - User
 - Email
- Configured in the License Server Administrator



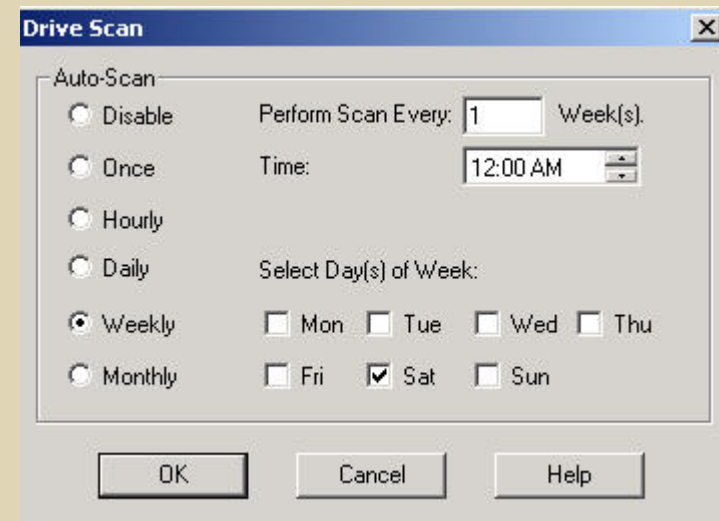
Production Environment- Disk Xtender

- Repair Disk
 - Creates a backup copy of registry information for DX
 - Every time a registry change is made, this file will be updated
 - Should be backup up to a separate location from the production image repository server



Production Environment- Disk Xtender

- Drive Scans
 - Schedule weekly drive scan
 - Completely removes a deleted piece of media from the media folder on the extended drive
 - Also used in conjunction with your move/purge rules



Production Environment- Disk Xtender

- Application Generator
 - Hardcode write path for client applications
 - Recommended that each write path is to a different folder

The screenshot shows the 'Paths' tab of the Application Generator. It contains four rows of configuration fields, each with a dropdown menu and a 'Browse...' button. The paths are:

- Document Write Path: \\IMAGESERV\DOCUMENTS\PROD
- Annotation Write Path: \\IMAGESERV\DOCUMENTS\PROD
- OCR Write Path: \\IMAGESERV\DOCUMENTS\PROD
- Full-Text DB Path: \\IMAGESERV\DOCUMENTS\PROD

Production Environment- Disk Xtender

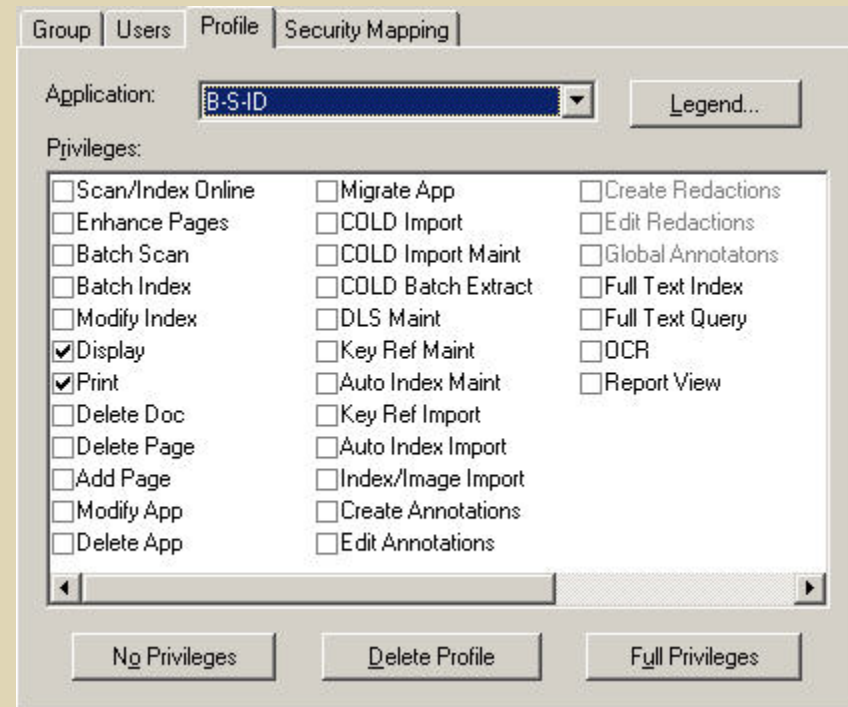
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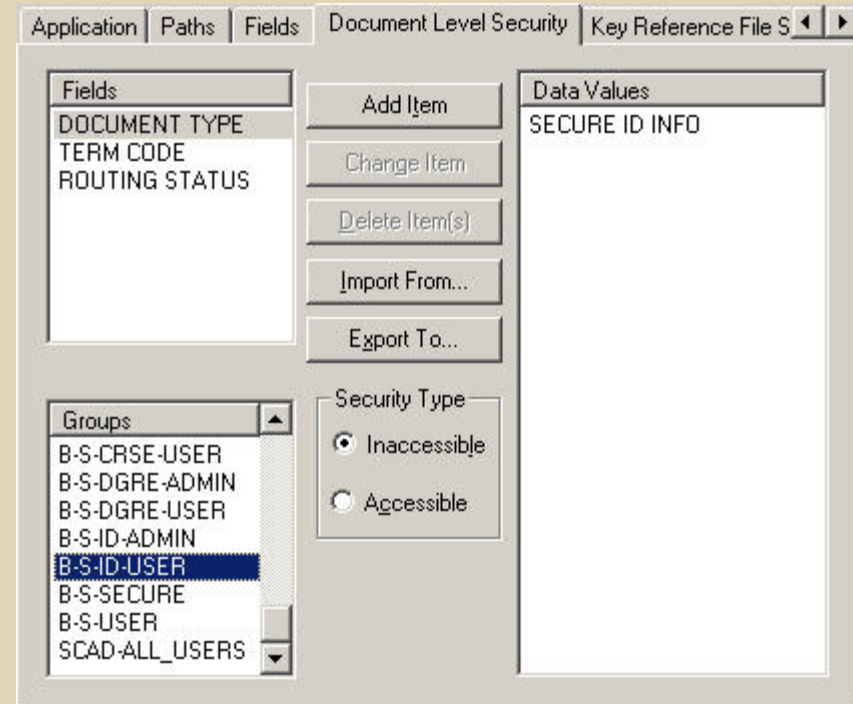
Production Environment- Security

- Xtender Solutions
 - Application Level Security
 - Function Level Security
 - Document Level Security
- Banner FGAC Security
 - Finance Fund-Org
 - Human Resources



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Production Environment- Maintenance

- Banner data is synchronized with AX reference tables with real time triggers
- SunGard Higher Education delivers re-baseline scripts
- Create audits for XS reference tables and run re-baseline scripts when needed
- User passwords are stored in AE_LOGIN. Changes to passwords in Banner and synched when the Banner password is changed.

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Test Environment

Test Environment

- Necessary to test
 - Backup and recovery
 - Upgrades
 - New environment configurations
- Try to purchase identical hardware
 - You may not be able to practice migration of images
 - Performance differences

Test Environment- Continued

- Need additional DX, AX and WX licenses
- Map data source to test Banner instance
- Cannot have two versions of client application on same PC

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Migration of Images to New Hardware

Migration of Images to New Hardware

- Make sure users are unable to access the BXS environment
 - May be turned off in Application Generator
 - Must be done before backup starts or images may be lost
- Create a full backup of extended drive
 - This is usually the most time consuming step in the migration process
- Create repair disk file

Migration of Images to New Hardware- Continued

- Install OS on new server
 - Time is saved if you can map the backup location of the previous server to the new hardware
- Install XS software on new hardware
 - License Server
 - Disk Xtender
 - Register AX and WX licenses
 - XS Admin
- Restore extended drive backup

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Pros and Cons of Imaging Solution

Pros and Cons of Imaging Solution

- Pros
 - Comprehensive Environment
 - Ability to test backups and upgrades with confidence
- Cons
 - Expensive
 - Another environment to manage

Summary

- Organize your security in the beginning
- Make your users provide test plans and document type layouts
- Determine a backup/recovery strategy from the start
 - Estimate for about 2 times the amount of actual space that you are using
 - Repair disk files
 - Full backups
 - Incremental backups
- Double check all indexing efforts
- Create a test environment...it's expensive but its worth it.

Questions & Answers

It's your turn...

Thank You!

Melissa Hazelwood

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Please complete the on-line Evaluation Form
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