

System Administration

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Today's Topics

- Users
- Privileges and shares
- User groups
- Other Topics:
 - Mapped drives
 - ROI
 - TCO
 - Data retention and deletion
- Thinking "Enterprise"

Users

- Local
- Remote
- Account profiles
 - Guest
 - Administrator
 - Others



Privileges and Shares

- Privileges
- Rights
- Permissions and Sharing permissions



User Groups

- Administrators
- Guest
- Others:
 - User
 - Power User
 - Backup Operator, etc.

User Needs

- What is the user's functional need?
- What is the user's level of "sophistication" or "computer literacy".
- What is the user's job description.
- Do not confuse rank with authority

Assigning Privileges and Permissions

- Based on these considerations, add the user to the appropriate user group(s).
 - Basic = User
 - Advanced = Power User
 - Basic + Temporary = User + Guest
- Apply permissions to workspace
 - Administrator always has full control
 - The user (owner) always has full control
 - Everyone has read access only

Sharing resources

- Files and folders
- Devices
- Important for ArcGIS Geoprocessing Servers



Ownership

- Who ultimately owns a file or folder
- Administrators can take ownership

Security

- We have talked about **data integrity** when we discussed *servers*
- We now need to discuss **data security** in detail as it is an important topic in *system administration*



Data Security

- Why is it important?
 - Aside from ethical reasons
 - There are compelling legal reasons

Professional Hints and Tips

- Users must have SUPR passwords
- Visit <http://www.passwordmeter.com/>
What did you learn?

Primary Target...

- The desktop
- So, how can we secure the desktop?
 - Disable anonymous log in
 - Use **Firewalls**
 - What is a firewall?
 - Employ Intrusion Prevention/ Intrusion Detection software/ hardware at the LAN



Professional Hints and Tips

- Administrators should consider increasing **authentication** requirements
 - What is authentication?
 - Proving your credentials that then give you access to the system and network, where you have privileges and permissions

Authentication

- Single factor
- Two factor
- Three factor

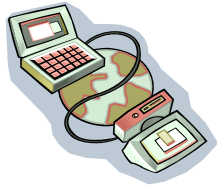


Questions & Other Topics



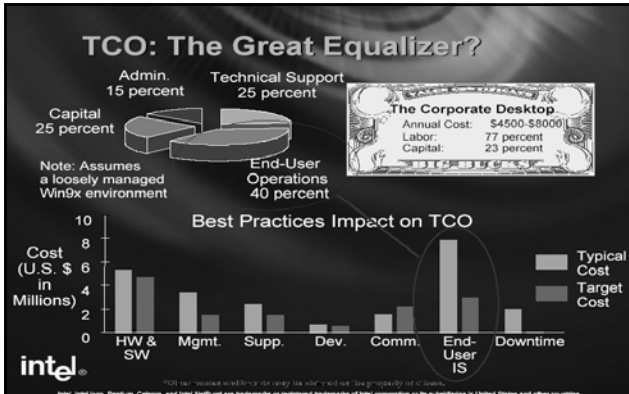
Mapped Drives

- Remote drives
- Same as “Connect to Folder” with ArcGIS



ROI

- Return on investment



Policies

- Writing and seeking approval for administration policies
 - Data retention and deletion policy

Considerations

- Once you decide what must be kept, you must still consider:
 - Format of data in archive
 - Archiving media
 - Archiving frequency
 - Task delegation

Thinking Enterprise

- What is meant by the term “Enterprise”



An Enterprise...

- Is Amorphous
- Shrinks and swells with the scope of the question, problem, or task
- Works toward a “goal” as a group
- Is connected

GIS and the Enterprise

- GIS is part of the enterprise
 - Tends to be a technical resource
 - Information supplier
 - Analyzer
 - Integrator
- GIS is *NOT*
 - The enterprise
 - The decision maker

A GIS Manager Must



- Keep the “goal” of the enterprise in mind
- Communicate the benefits and capabilities of GIS to decision makers
- Understand GIS, networks, servers, system administration, ROI, TCO, and
 - **People**



Key Concepts

- We have explored several important GIS and IT topics
- New terms of significance- Enterprise, ROI, and TCO
 - *Keep these in mind throughout the semester along with effectiveness*

Your Assignment

- Complete the exercise
- Review the GIS TRC “Data Retention and Deletion Policy”

Questions?