

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
- Think "Enterprise"

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Users

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



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Privileges and Shares

- Privileges
- Rights
- Permissions and Sharing permissions



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User Groups

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

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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*

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Assigning Privileges and Permissions

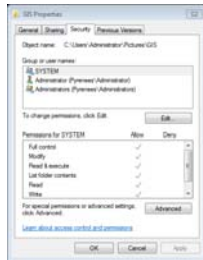
- Based on these considerations, add the user to the appropriate user group(s). This gives them *Privileges*
 - Basic = User
 - Advanced = Power User
 - Basic + Temporary = User + Guest
- Apply *Permissions* to their workspace
 - Administrator always has full control
 - The user (owner) always has full control
 - *Everyone* has read access only (if any)

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Sharing Resources

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



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Ownership

- Who (one account) ultimately owns a file or folder
- Administrators can take ownership

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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*



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Data Security

- Why is it important?
 - Aside from ethical reasons
 - There are compelling legal reasons
<https://gov.idaho.gov/mediacenter/execorders/eo15/7.15.15%20Cybersecurity%20Taskforce.pdf>

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Professional Hints and Tips

- Create passwords that are:
 - Strong, Unique, Random
 - Do not use the same username/password combo more than once
- Visit
<http://www.passwordmeter.com/>

What did you learn?

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Primary Target...

- Personal information
- 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
(AKA **IP-ID** or **IDS** [Intrusion detection systems])



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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

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Authentication

- Single factor
- Two factor
- Three factor



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Questions & Other Topics



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