

Security Guidance for Researchers

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Today's Discussion

- Reasons for data security
- Risks
- Countermeasures
- Considerations for travel abroad
- Hawk IRB

Reasons for Data Security



Confidentiality

- Privacy of the subjects
- Sensitivity of the research



Integrity

- Correctness, consistency of research findings
- Intellectual Property Ownership



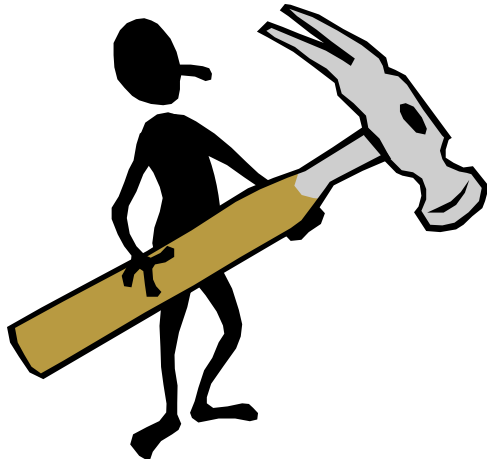
Availability

- Future funding sources
- Personal and Institutional Reputation

Information Security: Risks



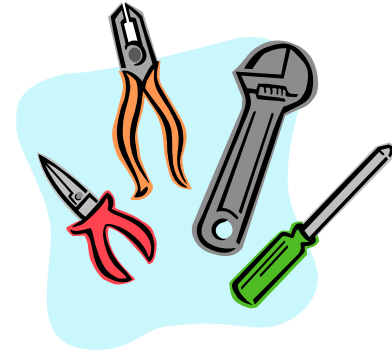
1. Inadequate system administration
2. Physical loss or damage
3. Compromised security (Intruders)
4. Errors or corruption (Failures)
5. Unauthorized access
6. Interception of data



Countermeasures

- Network encryption
- Firewalls
- Drive, file, or folder encryption
- Regular backups
- Plan for emergencies
- Check your data frequently
- Applications and change procedures

Countermeasures



- Restrict logical & physical access
- Run as “user” on the Internet if possible
- Separate accounts
- Good passwords
- Regular reviews
- Logging of activity
- Monitoring/alerting
- Automatic updates of systems
- Regular updates of installed applications

Traveling Abroad

<http://itsecurity.uiowa.edu/bestprac/travelchkls.shtml>

- Change password before (and after)
- Update everything
- Make backups
- Remove sensitive data (use remote access connection to copy...and access)



- Never leave laptop on & logged in, even in hotel
- Be aware of US border patrol authority to seize
- Be aware laptops are a sign of wealth

HawkIRB ↔ IT Security Office

<http://itsecurity.uiowa.edu/hawkirb/>

1. Name the person responsible for maintaining the computer(s) security
 - This may be you, or may be IT support person
2. Register servers that store sensitive information – not laptops or desktops
 - Consider storing data on a server to reduce risk
3. Network scans for vulnerabilities

Questions?

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