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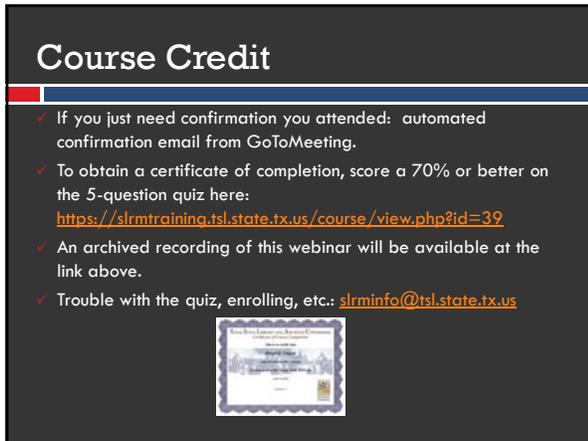
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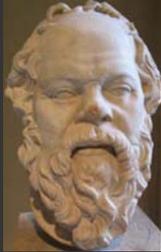
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### The only true wisdom...



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### Goals

- ✓ To provide free digital preservation training to Texas government agencies
- ✓ To explain the risks of storing permanent records electronically only
- ✓ To help you explain this challenge to others
- ✓ To offer some recommendations for storage and file formats
- ✓ To let you know that we are here to answer questions

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### Agenda

- Fragility of digital information
- Why is digital preservation important?
- Storage and backups
- File formats

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## Preservation Challenges

- Storage media
  - All media deteriorates over time
  - Theft and loss

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## Fragility of digital information

- Disk rot (gradual decay of CDs and DVDs)



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## Fragility of digital information

- Fragility of hard drives and flash drives



Hard disk drives (internal or external): 3-5 years?      Flash media: 10 years?

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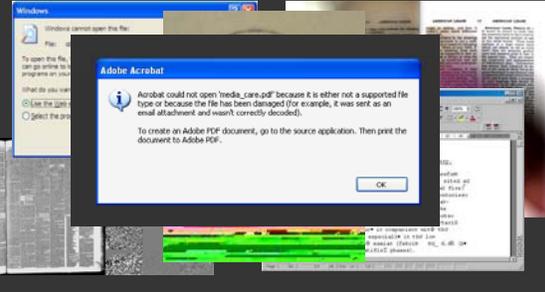
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### Fragility of digital information

- Unintelligibility of data



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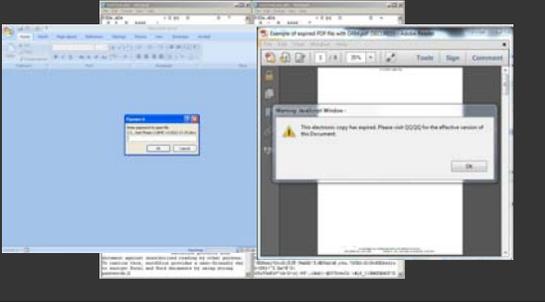
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### Fragility of digital information

- Encrypted, expired, or password-protected



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### ...But it's not just a technology issue

- Policies
- Staff
- Training
- Governance
- Sustainable funding

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## Do something.

- With electronic records, doing nothing will guarantee failure!

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Q&A

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## Storage Choices

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## The best storage option?

- A network server that gets backed up regularly
- More than one location



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## Storage Media

- LOCKSS and the “3 copy rule”
  - Data redundancy – 2-3 backup copies
  - Combination of cloud backup, external USB hard drive, flash drive



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## Where to store media

- Cool, dry locations
  - State Agencies: <http://bit.ly/BulletinOne>, Sec. 6.96
  - Local Governments: <http://bit.ly/BulletinB>, Sec. 7.76
- As many different locations as possible

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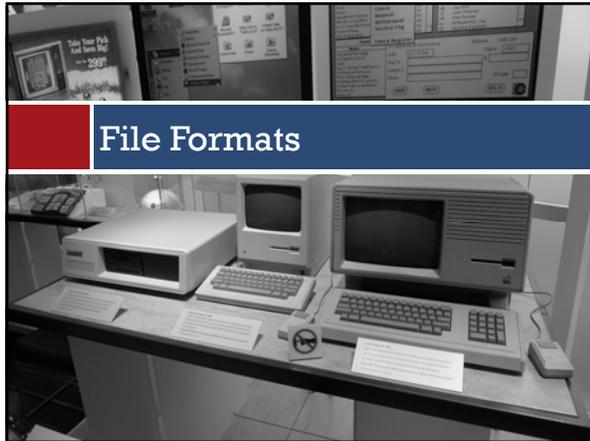
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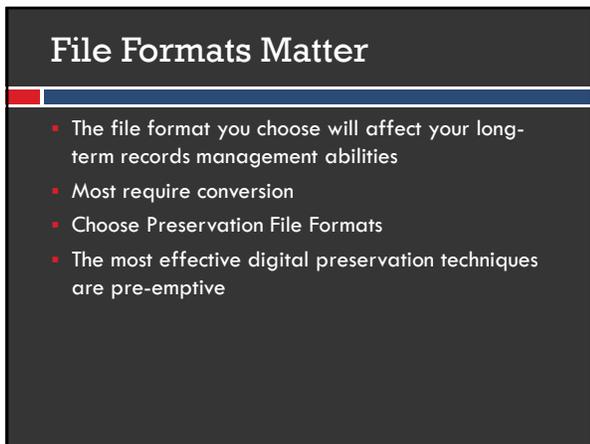
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## File Formats for Preservation

- A preservation file format:
  - Preserves all the data within the file
  - Looks the same regardless of hardware/software
  - Doesn't rely on outside resources to render correctly
  - Can't be "locked" (password-protected, encrypted)
  - Has open standards: offers published documentation
  - Is ubiquitous (widely used)

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## File Formats: Text

- Recommended:
  - PDF "Archival" (PDF/A) (.pdf)
  - OpenDocument text (.odt)
  - Extensible Markup Language (.xml)
  - Rich Text Format (.rtf)
  - Text file (.txt)



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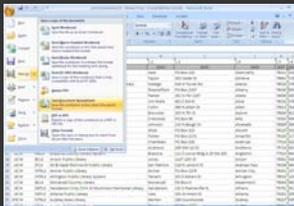
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## File Formats: Spreadsheets

- Recommended:
  - OpenDocument spreadsheet (.ods)
  - Comma-separated Values (.csv or .txt)



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### File Formats: Images

- Recommended:
  - JPEG 2000 (.jp2)
  - Portable Network Graphics (.png)



The image shows a screenshot of a 'JPEG2000 Options' dialog box. It has three radio buttons: 'Lossless compression' (unselected), 'Lossy compression' (selected), and 'Quality' (selected). The 'Quality' option has a slider set to 80. Below it are 'Compression ratio' (10 to 1) and 'File size' (1000 kB) options. There are 'Cancel' and 'OK' buttons at the bottom. To the left of the dialog is the logo for 'the jpeg 2000 alliance'.

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### File Formats: Sound Recordings

- Recommended:
  - Wave/Broadcast Wave (BWF) (.wav)
  - Free Lossless Audio Codec (.flac)



The image shows a green audio waveform on a black background. The waveform consists of several distinct pulses of varying amplitudes, representing sound recording data.

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### File Formats: Video Recordings

- Recommended:
  - Matroska Media Container (.mkv)



The image shows the logo for Matroska Video (MKV). It features two large curly braces '{ }' in black, with a blue circular arc below them. The letters 'MKV' are printed in bold black text below the arc.

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## File Formats: Email

- Recommended:
  - MBOX (.mbox) 
  - ...unless it doesn't need to be stored in the email account: TXT, PDF, print...

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## Part 2...

- For Digital Content Managers
  - Creating policies
  - Identifying your archive's scope
  - Preservation methods: migration, normalization, emulation, analog
  - Training and continuing education opportunities

Register:  
<https://www2.gotomeeting.com/register/162681890>

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## Thank you for attending!

- Take the 5-question quiz to receive a Certificate of Completion:  
<https://slrmtraining.tsl.state.tx.us/course/view.php?id=39>
- Questions for Angela: [aossar@tsl.state.tx.us](mailto:aossar@tsl.state.tx.us) or (512) 463-6623.
- To exit
  - Unhide the Control Panel (click the red arrow key)
  - File / Exit – Leave Webinar
  - Please answer exit survey that will pop up! ☺ The survey will not pop up until you leave the webinar.

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