

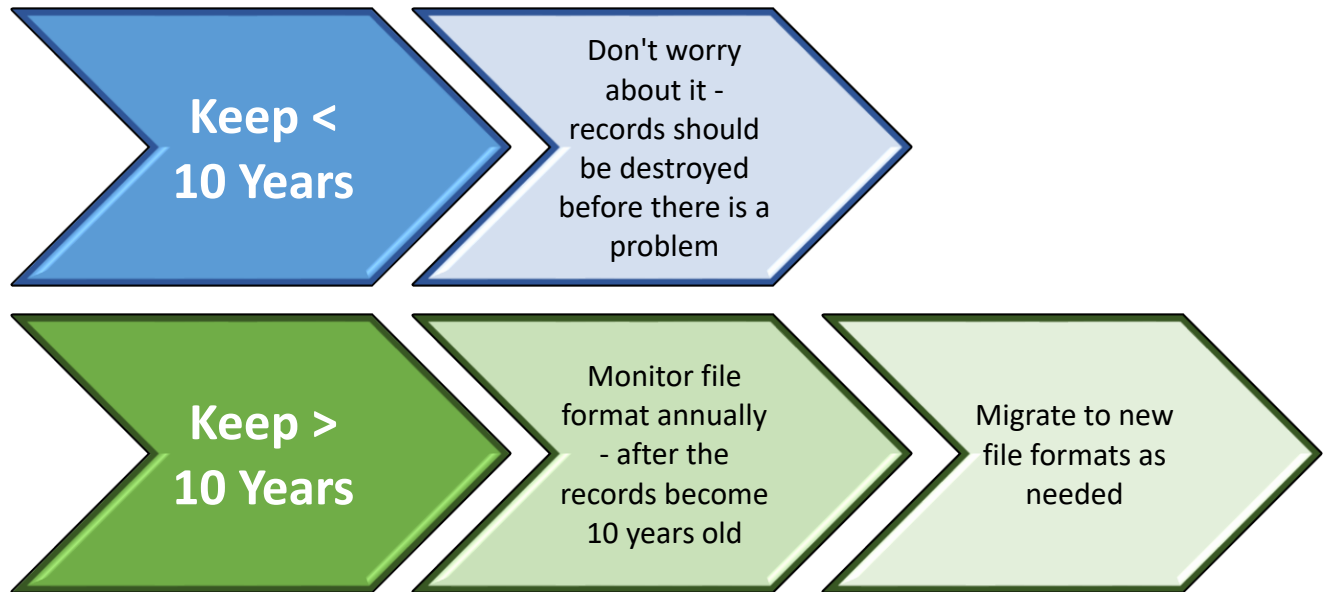


State of Michigan Records Management Services



Tip Sheet: File Formats for Electronic Records

The file format of an electronic record is the product of the software that was originally used to create it. The file format defines the structure and type of data stored in the file, and the way that data is logically arranged within the file. File formats allow a software program to retrieve and correctly interpret the information.



Frequently Asked Questions

Q: Does the State of Michigan require electronic records to be kept in certain formats?

A: DTMB does not require or endorse specific file formats for electronic records.

Q: How long is long-term?

A: Electronic records that need to be retained for more than 10 years are considered to be long-term because of the impact of technology change. Electronic records kept for 10 years or less can generally be stored in their original format for the full retention period.

Q: Should my office convert all its electronic records to another format?

A: It will be easier to manage the migration of electronic records if the office uses fewer file formats. Analyze the electronic records kept by the office and determine if the current file formats are varied and inconsistent. A conversion project might be warranted if the records still need to be kept for another 5 to 10 years or more.

Q: How will we know if a format is becoming obsolete?

A: We don't always know when software will stop supporting files in older formats (meaning the files won't open in a readable/usable way). However, in the past some notice was provided by the vendor. Remember when WordPerfect was dropped, or when Word 97 documents could not be opened by new versions of Word? There are tools available that can inspect a repository and find files in specific formats, and that can recommend migration pathways to new formats.

Q: What should we do when a format becomes obsolete?

A: Identify the records in the obsolete format and select a new format to migrate to. This may be a newer version of the same software, or possibly a PDF or TIFF image. There are tools available that can perform and document the migration activity to support the authenticity of the file.

Managing File Formats

Electronic records are dependent upon specific technology to be accessed and used. However, technology continues to change in unpredictable ways, and that change can cause older technology to become obsolete. Technology vendors have little incentive to support older technology, so users are responsible for monitoring their electronic records, and migrating at risk electronic records to newer technology before they become inaccessible.

Migrating electronic records to new file formats must be done carefully, because each migration has the potential to change the record, and the record's integrity. Migration activities must be properly documented to maintain a record's authenticity. It is not possible to anticipate most of the technology that will exist in the future, so the goal must be to keep electronic records accessible for the next generation of technology that is coming. Preservation planning needs to focus on a 10-year timeframe, which is more realistic and manageable than a 100-year or permanent timeframe.

Recommendations

If an agency has essential electronic records with a retention period of more than 10 years, they should consult the following resources that recommend file formats for commonly used types of electronic records.

- [U.S. National Archives and Records Administration \(NARA\), Table of File Formats](#)
- [U.S. National Archives and Records Administration \(NARA\), Digital File Types](#)
- [U.S. Library of Congress, Recommended Formats Statement](#)
- [Digital Preservation Coalition, File Format Assessments](#)

Contact [Records Management Services](#) if you want a more detailed consultation about selecting file formats and migration.