

# Assessing Need for an Automated File Format Obsolescence/Endangerment Notification System for Digital Archives

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## Questions

1. What types of file formats are digital archives currently managing?
2. What are the basic needs of digital archivists in managing the file format obsolescence/endangerment problem?
3. What types of tools can best help digital archives in sustaining their digital collections over time?

## Method

- This is the first interview in an iterative design process.
- Study is comprised of semi-structured interviews (see generalized questions under Data).
- Interviews were transcribed and analyzed qualitatively using a matrix analysis method.
- Implications were then made from these results and are being used to inform the development of a file format obsolescence/endangerment notification system.

## Data

What file formats are you currently managing?

WAV, MP3, Access, dBase, SQL server, HTML, GIF, JPEG, BMP, PNG, WMV, TIFF, WMP, MPEG, Realplayer, PDF, Java, ASP, CSS, Word, Excel, Powerpoint, aep, avi, htc, ico inf, mso, php, xml, GIS, Mr. Sid/DjVu, ARC, etc.

For how long are you intending to or required to preserve the items in your collection?

Indefinitely, or until the "End of the Republic"

What aspects of your digital objects are most important to preserve over time?

Varied per institution, collection, and purpose of the digital object.

What measures do you take or activities do you currently perform to manage file format obsolescence in your collection(s)?

Answers range: "nothing yet," "educate data producers," "migrate on ingest"

Would an automated file format obsolescence/endangerment notification system be helpful?

Yes.

What other tools could help you?

Automatic validation and authenticity checks, automatic migration tools.

## Implications

- 100% of interviewees agreed that having an automated file format obsolescence/endangerment notification system incorporated into their current work flow would be helpful.
- System must be capable of dealing with all file formats currently being managed and be extensible enough to handle new and unforeseen file formats.
- A useful system must support preservation and access to digital object accessibility for an indefinite amount of time.
- The system will need to allow for individual settings and controls at the local level.
- Other useful tools include automatic validation and authenticity checking functions and automatic migration functions.

## Next Steps

1. Develop a universally accepted matrix for evaluating file format endangerment levels which is flexible and applicable to each institution's individual needs.
2. Use the data gathered and the resulting implications to inform the development of a file format endangerment notification system.



Based on the final of the proposed system structure based on interview feedback and systems currently utilized in digital libraries.