

## OAIS Mapping: MetaArchive

MetaArchive is a digital preservation network that follows the Open Archival Information System (OAIS), which is the current preservation management standard. In order to appreciate what makes MetaArchive unique, it is important to understand its different components, relationships, and goals. Each of these parts of MetaArchive connect to OAIS standards.

MetaArchive was started in 2004 by a small group of universities in the southeastern United States (MetaArchive, n.d., “About us: Mission”). It is now a cooperative of over fifty universities that share and store digital content together. Content copies are distributed across MetaArchive’s wide geographic range (MetaArchive, “How DDP works”). While these member institutions work together to update their preservation plans and to use MetaArchive storage tools, MetaArchive makes clear that each institution maintains control over its own preserved digital content (MetaArchive, n.d., “About us: Mission”). In this regard, MetaArchive meets the OAIS standard of authenticity (Lavoie, 2014). MetaArchive is best described as a dark archive because it does not preserve content for users to access. Instead its content is held in reserve “in the event of a disaster” (Skinner & Blackwell, 2015, p. 46).

Skinner & Blackwell consider MetaArchive an example of how libraries are improving at digital preservation for multiple reasons (2015, p. 46). MetaArchive considers preservation a collaborative process in which their clients take part, not a vended service (Skinner, *MetaArchive*). Rather than having producers and consumers, MetaArchive collaborates with institutions to help them understand how digital preservation is done and why. Additionally,

there are three tiers to MetaArchive membership: collaborative members who discuss preservation, preservation members who utilize MetaArchive storage, and sustaining members who actively work with MetaArchive to preserve content across the network (MetaArchive, “About us”). Members of these three tiers are both producers and consumers. They rely on each other for new digital preservation techniques and discussions and work together to save new digital content. MetaArchive helps institutions in need of financially sustainable digital preservation with flexible and lower-cost membership options (Veve, 2018, p. 211). Veve discusses how multiple smaller libraries and preservation platforms joined MetaArchive because of its low costs (2018, p. 211). These aspects of MetaArchive are helping shape digital preservation by educating institutions on the importance of the OAIS standards (Lavoie, 2014).

MetaArchive has a set digital preservation process that prevents digital content from becoming lost and protects against potential changes to digital content over time. First, MetaArchive helps its member institutions create a submission information package (SIP) with a plugin, an HTML page, archival units, and metadata for the content preserved (The Metadata Cooperative, 2011). Once information is sent from the producer to MetaArchive in the form of an SIP, MetaArchive follows its ingest procedure, then uses LOCKSS software and preserve the desired digital content (Mallery, 2019, p. 126). The ingest procedure consists of providing all the necessary metadata for the SIP, copying the SIP seven times, turning each SIP into an archival information package (AIP), using the AIP to create a LOCKSS manifest page, and developing a LOCKSS plugin (The Metadata Cooperative, 2011). Through LOCKSS, MetaArchive preserves seven copies of each content piece, which is saved as a digital object package (DIP), and uses “automated versioning” to adapt to content changes over time (Skinner, *MetaArchive*). By adhering to this thorough process, MetaArchive meets two important OAIS requirements:

permanent reference, due to the number of copies made of each digital item, and fixity, due to the platform's dedication to monitoring and preventing changes between item copies (Lavoie, 2014). These actions ensure that the content is not lost over time. Finally, MetaArchive uses custodial history to note "any changes in ownership and custody of the resource since its creation," which honors the last OAIS standard of provenance (MetaArchive, n.d., Collection). Each institution with content to preserve pays MetaArchive to have its own server for storage. And rather than delete data, MetaArchive uses a deaccession cycle.

Not only does MetaArchive meet all four of OAIS' four preservation standards, it also helps push digital preservation forward. MetaArchive's defining qualities include its cooperative model, wide geographical preservation, flexibility, relatively low maintenance and low costs. Other scholars like Veve (2018) and Mallery (2019) use MetaArchive as an example of digital preservation today. MetaArchive is a growing resource that institutions can join to contribute to, participate in, and improve their individual digital preservation standards.

## Citations

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