

Digital Preservation Services from the UConn Library

Preservation and Sustainability Boilerplate January 2021

Note: Feel free to adjust and adapt this general explanation of the CTDA's infrastructure for your particular needs. If you need more or different information please contact the CTDA.

The Connecticut Digital Archive (<a href="https://ctdigitalarchive.org">https://ctdigitalarchive.org</a>) (CTDA), a program of the University of Connecticut Library (UCL), serves as the standards-based long-term digital repository and infrastructure for cultural heritage and research institutions based in the state of Connecticut. The CTDA supports a diverse set of applications, services, and discovery tools that offer long-term management, secure storage, preservation solutions, and – whenever possible – open access to digital assets of enduring value as determined by participating organizations and institutions. Any gallery, library, archive, or museum (GLAM) Institution in Connecticut is eligible to participate in the CTDA.

The CTDA is powered by Drupal, Islandora, and Fedora open-source software platforms. The repository technology is supported by UCL in partnership with the University of Connecticut Information Technology Services (UITS) and Discoverygarden, inc. (DGI) (<a href="https://www.discoverygarden.ca/about">https://www.discoverygarden.ca/about</a>). UITS provides and maintains repository hardware as well as data storage, backup, and recovery. DGI works with CTDA staff to maintain, upgrade, and develop new software for the repository.

The repository can accept new data in any format and structure as explained in the Policies document (<a href="https://confluence.uconn.edu/display/CTDA/Policies">https://confluence.uconn.edu/display/CTDA/Policies</a>). This includes support for all viable bit streams and proprietary file formats. The CTDA program aims to lower the bar of entry for digital preservation for institutions of all sizes. As a result, the repository is configured and operated to maximize opportunities for self-service deposit of digital content. Once under secure management, this content is open to ongoing review and enrichment by collections managers and curators from member institutions to maintain and increase its curatorial value and provide a higher level of assurance of its ongoing availability and usability.

All submissions to the repository are accompanied by a MODS metadata record (<a href="http://www.loc.gov/standards/mods/">http://www.loc.gov/standards/mods/</a>). The repository's submission systems requires all depositors to furnish elements equivalent to the DLF's Shareable Metadata Guidelines MODS Levels of Adoption Level 1 (<a href="https://uisapp2.iu.edu/confluence-">https://uisapp2.iu.edu/confluence-</a>

prd/display/iulDLFAquifer/MODS+Guidelines+Levels+of+Adoption) in accordance to the CTDA MODS Implementation Guidelines

(https://confluence.uconn.edu/display/CTDA/Describing+Your+Objects?preview=/50922349/7 3859578/CTDA Metadata Guidelines 201605.pdf). The CTDA also requires all depositors to furnish elements needed to share records with data providers such as ResearchIt or DPLA. Users have the option to also generate a Dublin Core metadata record upon ingest of digital objects into the repository. A CCO license is applied to all metadata for open access objects. Open access objects and the associated descriptive metadata will be exposed to Internet search engines so that it is exposed and made available to the world.

The repository provides general guidelines for different formats and content for ingest into the system. Additional metadata files may be included as part of the data placed in the





repository. The repository does not perform any explicit check of data, dataset, or metadata quality, beyond confirming the presence of required elements as outlined above. Primary responsibility for developing appropriate data creation, acquisition, and description protocols and workflows is held by users belonging to their respective member institutions.

The CTDA works within evolving "best practices" to be responsible stewards and will work to preserve the metadata and supported digital and media objects. The CTDA will research the "state of the art" preservation practices and offer preservation ideas and recommendations. Choices regarding preservation will be based on the CTDA's community demand. Assessments will be continuously undertaken regarding ongoing technical feasibilities and digital repository "best practices."

At a minimum the CTDA is committed to the preservation of primary content data streams at the bit stream level. The CTDA offers consultation and guidance to our community institutions on ways to acquire or create digital content in a manner that is most amenable to the highest level of future preservation services. PREMIS metadata, including generating checksums and METS container metadata can be requested by content managers at any time, including during ingest of new content.

Basic CTDA Information aligned with IMLS Digital Product form 2020 edition:

### Question B.2

All digital assets will be managed and preserved in the Connecticut Digital Archive, an OAIS-based, preservation-oriented digital repository that is an ongoing service of the UConn Library. Once ingested content is managed according to TRAC principles. The CTDA is currently preparing a submission to Core Trust Seal for certification. The CTDA has been serving non-profit cultural institutions since 2013. CTDA policies relating to preservation are available at: <a href="https://confluence.uconn.edu/display/CTDA/Policies">https://confluence.uconn.edu/display/CTDA/Policies</a>, where information about our policies, infrastructure, governance and management are publicly available.

#### Question C.1

Participants in the CTDA use MODS as the descriptive metadata schema. All browser- and spreadsheet-based ingest forms translate to MODS XML datastreams in the repository, which will then generate DC XML for other uses. Upon ingest, technical metadata about the file is extracted and stored in an XML technical metadata datastream, and an audit trail is started. The system will produce a PREMIS datastream on demand to document all administrative aspects of the file's life cycle to date. Relationship information about the object and its parents/children is stored in a separate RDF XML datastream. All these datastreams form a single Fedora object which are individually addressable and re-usable by the system or external systems.

## Question C.2

The CTDA uses a Fedora/Islandora/Drupal system that is OAIS-based and preservation oriented, following TRAC guidelines. The CTDA uses redundant storage and has disaster recovery procedures in







place, and uses version control, audit trails and PREMIS to ensure data integrity and recovery in case of damage. As mentioned above, metadata is stored in multiple datastreams normal in the Fedora system. The CTDA runs on hardware managed and maintained by the University of Connecticut, and CTDA staff are funded by permanent budget lines at the UConn Library.

### Question C.3

Content ingested by individual organizations is aggregated into the CTDA public interface, where 2+ million digital objects from more than 60 institutions are available for view. Furthermore, content in the CTDA is open to web crawlers and search engines, and as a Service Hub, the CTDA contributes records to the DLPA on a regular basis, making it possible for individual organizations to have a reach and exposure they would not otherwise get.

### Question D.1

Metadata, thumbnails, and access derivatives will be openly available to the public and delivered primarily through the CTDA web portal (<a href="https://ctdigitalarchive.org">https://ctdigitalarchive.org</a>) on its Fedora/Islandora/Drupal repository system that is run and maintained at the University of Connecticut and is accessible through standard web browsers. Additionally, records are contributed to the DPLA.

# Question D.2

The CTDA has over 2 million objects in its repository, contributed by more than 60 institutions across the state in a wide variety of formats. Each object has a globally unique handle from handle.net.

The primary portal is available at: <a href="https://ctdigitalarchive.org">https://ctdigitalarchive.org</a>



