Working Specifications

This section contains draft specifications that have since been revised. A link to the revised specifications will be provided once they have undergone review.

The One To Many (OTM) Specification defines two APIs to support communication between digital content repository systems (Repository) and distributed digital preservation systems (DDP) in order to facilitate depositing, deletion, restoration, and auditing of digital content managed by one or both systems. The APIs defined are the OTM Repository Gateway API (Gateway) for the Repository and the OTM Bridge API (Bridge) for the DDP. The Gateway and the Bridge APIs handle intermediary communication between the Repository and DDP and allow each system to operate without any knowledge of the internals of the other system. Each API is designed to facilitate deployment either as part of or extension to the Repository (in the case of the Gateway) or the DDP (in the case of the Bridge) or as a stand-alone application. They each provide an HTTP-based approach for authentication, communication, and data transfer.

- Preservation Flow - An overview of the entire preservation process (start here!)
- OTM Repository Gateway Specification - The preservation Gateway functions as an aggregating cache for preservation requests originating with a repository and destined for a DDP via the OTM Bridge.
- OTM Bridge API Specification - The Bridge API provides a consistent interface for systems (including repositories) to integrate with DDP platforms. The Bridge also serves as a staging point for content being transferred into or out of a DDP.
- OTM Chronopolis Preservation Workflow Specification - The Chronopolis workflow providing an example of preserving content coming in from the OTM Bridge.

Usage Requirements

Repository

In order for a Repository system to make use of an application which has been developed to support the Gateway API Specification, the following requirements would need to be in place:

- The Gateway application must be deployed and made available to the Repository
- The Repository must support the addition of preservation targets (DDPs)
- The Repository must support the selection of content for preservation storage

The following are recommended capabilities for a Repository that is to make use of a Gateway, but not required:

- The Repository should support the selection of content for restore
- The Repository should display details about object preservation status

DDP

In order for a Distributed Digital Preservation system to make use of an application which has been developed to support the Bridge API Specification, the following requirements would need to be in place:

- The DDP must deploy and run the Bridge application
- The DDP must provide the Bridge application access to a staging storage location that is also available to the DDP
- The DDP must Implement tooling to interact with the Bridge application API
- The DDP must support at least minimal versioning capability