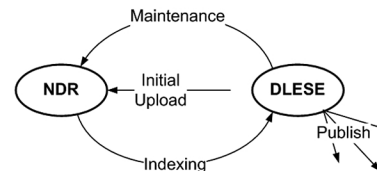


Managing and Maintaining Digital Libraries with NCore: DLESE¹ as a Use Case

Initial Upload: DLESE Collection Metadata is written to the NDR (via NDR API)

Note: Mass upload is a one-time operation necessary to get metadata into the NDR. After mass upload, metadata maintenance and updates are performed in-place, using the NSDL Collection System (NCS).



Indexing of DLESE metadata from NDR: DLESE Collection Metadata is read from the NDR (via NDR API) and indexed locally.

Publish: DLESE Site provides discovery and browsing of resources, as well as DLESE Search Webservice, using indexed metadata.

Mapping the DLESE Model on Top of NCore

The DLESE Collections data is managed by the NCS, which writes the DLESE Collections metadata to the NDR using the NDR API. The key technical point in this process is the overlay of the DLESE collection model onto the Collection Model implemented by the NDR (see Table 1).

	DLESE	NDR	Notes
Collection	Collection Record stores collection-level information.	Collection Agent	Represents DLESE.org as NDR User
		Collection Resource	Based on Public site/ representation of collection
		Collection Metadata	Stores NSDL Collection Management metadata
		Collection MetadataProvider	DLESE Collection-level record stored as Data Stream
		Collection Aggregator	Defines the set of resources in the DLESE collection
Items	Item-level records store item-level information.	Item-level Resources	Based on URL defined in DLESE Item-level record
		Item-level Metadata Objects	DLESE item-level record stored as data stream

Table 1: DLESE and NDR Information Models

Results

The NDR API is used to build the DLESE Index by reading DLESE metadata from the NDR using the NDRAPI, and then building the index. The key technical point in this step is to extract the required metadata from the NDR Objects. Note: only Collection Metadata Provider and Item-level Metadata Objects need to be accessed to extract DLESE Metadata.

The DLESE Search Service is run from the Index, and is used to power the DLESE library search and browse functionality. Key Technical Point: Use of NDR as primary metadata repository required no modifications to DLESE Search Service. The indexes and search service remain the same, which means the DLESE Library interface and all other interfaces that use the service can continue to operate without modification.

1. <http://dlese.org>