Types of Metadata

This type of metadata—information about the content of a resource that aids in finding or understanding it—is referred to as descriptive metadata. The cultural heritage community distinguishes descriptive metadata from other types. Administrative metadata is an umbrella term referring to the information needed to manage a resource or that relates to its creation. Within the administrative metadata sphere is technical metadata, information about digital files necessary to decode and render them, such as file type; preservation metadata supporting the long-term management and future migration or emulation of digital files, for example, a checksum or hash; and rights metadata, such as a Creative Commons license, which details the intellectual property rights attached to the content. Descriptive and administrative metadata are considered distinct from structural metadata, which describes the relationships of parts of resources to one another; examples include pages in a sequence, a table of contents with pointers to the beginnings of milestone sections, and connecting different resolutions or bit depth representations of identical content.

Types of Metadata

Descriptive metadata	For finding or understanding a resource
Administrative metadata - Technical metadata - Preservation metadata - Rights metadata	 - For decoding and rendering files - Long-term management of files - Intellectual property rights attached to content
Structural metadata	Relationships of parts of resources to one another
Markup languages	Integrates metadata and flags for other structural or semantic features within content

A final category of metadata is *markup languages.* These languages mix metadata and content together, a practice only sometimes used with other forms of metadata. Flags inserted in the content denote notable features. For a textual resource, this might mean marking structural elements such as paragraphs; flagging words with semantic information—that the word is a place name or a certain part of speech, for example; or providing formatting information, such as italics.

These various categories of metadata support different use cases in information systems. Discovery is perhaps the most common, with structured metadata allowing users to search for or browse to find resources or information of interest. Many metadata properties are useful to display to users to aid in identification or understanding of a resource. Interoperability, the effective exchange of content between systems, relies on metadata describing that content so that the systems involved can effectively profile incoming material and match it to their internal

structures. Metadata supports digital-object management by providing the information needed to render digital content appropriately or deliver the appropriate version to match a user need. Preservation is achieved through creating metadata that allows the verification of the integrity of content after transfer and at other notable points, and signaling when preservation actions such as a format migration or an integrity check should be undertaken. Finally, metadata supports navigation within parts of items, for example, from one page or section to the next, and among different versions of objects, such as varying resolutions of photographic images.

Metadata Type	Example Properties	Primary Uses
Descriptive metadata	Title Author Subject Genre Publication date	Discovery Display Interoperability
Technical metadata	File type File size Creation date/time Compression scheme	Interoperability Digital object management Preservation
Preservation metadata	Checksum Preservation event	Interoperability Digital object management Preservation
Rights metadata	Copyright status License terms Rights holder	Interoperability Digital object management
Structural metadata	Sequence Place in hierarchy	Navigation
Markup languages	Paragraph Heading List Name Date	Navigation Interoperability