Semantic Unit	title		
Semantic components	titleName titleSort titleKeyword		
URI	http://UPMS.org/title		
Definition	The identifier of the name or sort name of an object.		
Rationale	An object may be found by title name or by sort name. Title keyword may assist as a finding aid for user.		
Data Constraint	titleKeyword should be taken from a controlled vocabulary.		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Applicable
Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Mandatory	Mandatory	Optional

Semantic Unit	creator		
Semantic components	creatorName creatorDOB/DOD creatorNationality creatorLocation		
URI	http://UPMS.org/creator		
Definition	Identifies name and biographical information about the creator of the work, and place of creation.		
Data Constraint	none		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Not Applicable
Examples			
Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Mandatory	Mandatory	Optional
Usage/Maintenance/ Creation Notes	Intended use to provide context for creation of work, show provenance, and provide bibliographic information about creator.		

Semantic Unit	dateCreated		
Semantic components	dateCreated		
URI	http://UPMS.org/dateCreated		
Definition	Identifies details about the date an object was created.		
Rationale	Provides provenance information as well as basic information to serve as finding aid for user.		
Data Constraint	Value should be taken from a controlled vocabulary		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Applicable
Examples			
Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Mandatory	Mandatory	Optional
Usage/Maintenance/ Creation Notes	Intended only to identify the agent unambiguously, and to allow linking from other entity types; repositories encouraged to use any richer scheme that may be appropriate		

Semantic Unit	object		
Semantic components	objectFormat objectRunTime objectAspectRatio objectFrameRate		
URI	http://UPMS.org/object		
Definition	Identification of the characteristics of an object where metadata for proper playback and object identification are concerned.		
Rationale	Preservation and playback activities are dependent upon detailed knowledge of object identification information. Accurate identification of the format, run time, aspect ratio, and frame rate are essential to proper playback and to preservation of the object.		
Data Constraint	Format, Run Time, Aspect Ratio, and Frame Rate should be taken from a controlled vocabulary.		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Applicable
Examples	Super8, digibeta, phone video, miniDV, 00:00:00, 16:9, 4:3, 24 fps, 29.97 fps	Super8, digibeta, phone video, miniDV, 00:00:00, 16:9, 4:3, 24 fps, 29.97 fps	Super8, digibeta, phone video, miniDV, 00:00:00, 16:9, 4:3, 24 fps, 29.97 fps
Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Mandatory	Mandatory	Optional
Usage/Maintenance/ Creation Notes	Include any characteristics needed for preservation and/or playback of data object.		

Semantic Unit	MIMETYPE		
Semantic components			
URI	http://UPMS.org/MIMETYPE		
Definition	The IANA MIME media type for the associated file. Some values for this attribute can be found on the IANA website: https://www.iana.org/assignments/media-types/media-types.xhtml		
Rationale	Supports the identification of item registries including application, audio, font, example, image, message, model, multipart, text, and video.		
Data Constraint	None		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Applicable
Examples			
Repeatability	Not repeatable	Repeatable	Repeatable
Obligation	Mandatory	Mandatory	Optional
Usage/Maintenance/ Creation Notes			

Semantic Unit	location		
Semantic components	contentLocation contentLocationValue storageMedium		
URI	http://UPMS.org/location		
Definition	Provides information on how and where an entity can be found. For physical representations, such as system discs or printed versions of digital files, this means the location of the physical object (e.g., shelf location). For digital presentations, this means the location of the digital object in a storage system if all files in the representation can be found in the same location. For files, this means the physical location in one or more storage systems. For bitstreams, this means the location within a file.		
Rationale	Repositories must be able to locate objects, the location of their content, and their respective storage medium.		
Data Constraint	Container		
Object Category	Representation	File	Bitstream
Applicability	Applicable (not applicable to intellectual entity)	Applicable	Applicable
Examples	Cold Storage, Box, Shelf, Hard Drive		
Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Optional	Optional	Optional
Usage/Maintenance/			

Creation Notes	

Semantic Unit	rights		
Semantic components	rightsMD		
URI	http://UPMS.org/rightsMD		
Definition	Records information about copyright and licensing pertaining to a component of the object. This element can either wrap the metadata or reference it in an external location, or both.		
Rationale			
Data Constraint	None		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Not applicable
Examples	Creative Commons, Exclusive		
Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Mandatory	Mandatory	Optional
Usage/Maintenance/ Creation Notes	Rights metadata can be expressed according to current rights description standards (such as CopyrightMD and rightsDeclarationMD) or a locally produced XML schema.		

Semantic Unit	Subject		
Semantic components	subject subjectAnnotation		
URI	http://UPMS.org/subject		
Definition	Subject refers to who is in the film or what is happening. Subject is used to assign topic headings, keywords, or key phrases that portray the intellectual content of the asset.		
Rationale	Helps to build controlled vocabulary of keywords/headings/tags. Supports the identification of item registries including application, audio, font, example, image, message, model, multipart, text, and video.		
Data Constraint	Controlled vocabularies or authorities may be used when assigning descriptive subject terms.		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Applicable
Examples	`<Subject>Easter</Subject>`	`<Subject>Holidays</Subject>`	
Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Mandatory	Optional	Optional
Usage/Maintenance/			

Creation Notes	

Semantic Unit	Description		
Semantic components	descriptionAnnotation descriptionShotList • ATTRIBUTE of shot list: startTime • ATTRIBUTE of shot list: endTime timeAnnotation		
URI	http://UPMS.org/Description		
Definition	Description is an element that uses free-form text or a narrative to report general notes, abstracts, or summaries about the intellectual content of an asset.		
Rationale	Provides additional descriptive metadata about the physical/digital entity beyond subject headings.		
Data Constraint	Controlled vocabulary		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Applicable

Examples	`<Description descriptionType="Shot List" "start time">`
	
	`00:00:21 Sadie & friends`
	`00:00:58 Pomp & Circumstance`
	`00:01:43 Sadie gets her diploma`		

Repeatability	Repeatable	Repeatable	Repeatable
Obligation	Mandatory	Optional	Optional
Usage/Maintenance/ Creation Notes			

Semantic Unit	Preservation		
Semantic components	preservationRecommendations preservationType preservationRationale preservationValue preservationDate		
URI	http://UPMS.org/Preservation		
Definition	Information indicating the decision, plan or steps needed to preserve and object and the context in which the decision was made.		
Rationale	There may be multiple preservations options depending on format, preservability and funds.		
Data Constraint	Container		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Not applicable
Examples	`<PreservationType>high priority</PreservationType>`		

Repeatability	Repeatable		Repeatable	Repeatable
Obligation	Optional		Optional	Optional
Usage/Maintenance/ Creation Notes				

Semantic Unit	event		
Semantic components	eventType eventDate eventAgent eventNotes		
URI	http://UPMS.org/event		
Definition	Informs of the type of event that occurred the date it occurred. What environment was involved and what agent is involved.		
Rationale	An Object may have been acted upon in some way insuring an event for example: ingest, migration, preservation, restoration, etc.		
Data Constraint	Container		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Applicable
Examples	ingest, migration, preservation, restoration, etc.	ingest, migration, preservation, restoration, etc.	ingest, migration, preservation, restoration, etc.
Repeatability	Not Repeatable	Not Repeatable	Not Repeatable
Obligation	Mandatory	Mandatory	Optional

Semantic Unit	agent		
Semantic components	agentName agentType agentNote		
URI	http://UPMS.org/agent		
Definition	Aggregates information about agents (persons, organizations or software) associated with rights management and/or preservation events in the life of an object.		
Rationale			
Data Constraint	Container		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Applicable	Not Applicable
Examples			

Repeatability	Repeatable	Repeatable	Not Applicable
Obligation	Mandatory		Not Applicable
Usage/Maintenance/ Creation Notes	Intended only to identify the agent unambiguously, and to allow linking from other entity types; repositories encouraged to use any richer scheme that may be appropriate		

Semantic Unit	UserTags		
Semantic components	userTagType userTagLocation userTagIdentifier userTagRelation		
URI	http://UPMS.org/Usertag		
Definition	Usertags are user generated keywords applied to an object to help further describe and make connections to other objects in the repository and beyond. UserTags focus on how items connect to user(s) and the personal relationship they have to an item (mini controlled vocabularies within the larger controlled vocabulary, which will vary by user). • userTagType refers to hashtags, keywords, etc. • userTagLocation refers to where the person is tagging from • userTagIdentifier refers to a specific user ID or name • userTagRelation refers to a user's personal connection to the object/media		
Rationale	Usertags support the identification and description of objects and will help to create vital associations.		
Data Constraint	Controlled vocabularies and folksonomies.		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Applicable	Not applicable	Not applicable
Examples			
Repeatability	Repeatable		
Obligation	Optional	Optional	Optional
Usage/Maintenance/ Creation Notes			

Semantic Unit	UserSource
Semantic components	userSourceName userSourceNationality userSourceEducation userSourceRegion
URI	http://UPMS.org/Usersource
Definition	Usersource describes the user adding information in the Usertag field.
Rationale	Usersource will be a completely optional field, but one that will help us to know and understand who is viewing and annotation our objects.

Data Constraint	None		
Object Category	Intellectual Entity/Representation	File	Bitstream
Applicability	Not applicable	Not applicable	Not applicable
Examples	`<UsersourceRegion>Southern Illinois</UsersourceRegion>`		
Repeatability	Not Repeatable		
Obligation	Optional	Optional	Optional
Usage/Maintenance/ Creation Notes			