

# MOVIELABS COMMON ONTOLOGY

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# An Ontology for Metadata

“A set of concepts and categories in a subject area or domain that shows their properties and the relations between them.” Wikipedia

Provides a framework and vocabulary for metadata related to a creative work.

## What is an Ontology?

## Why Should I Care...

## Benefits

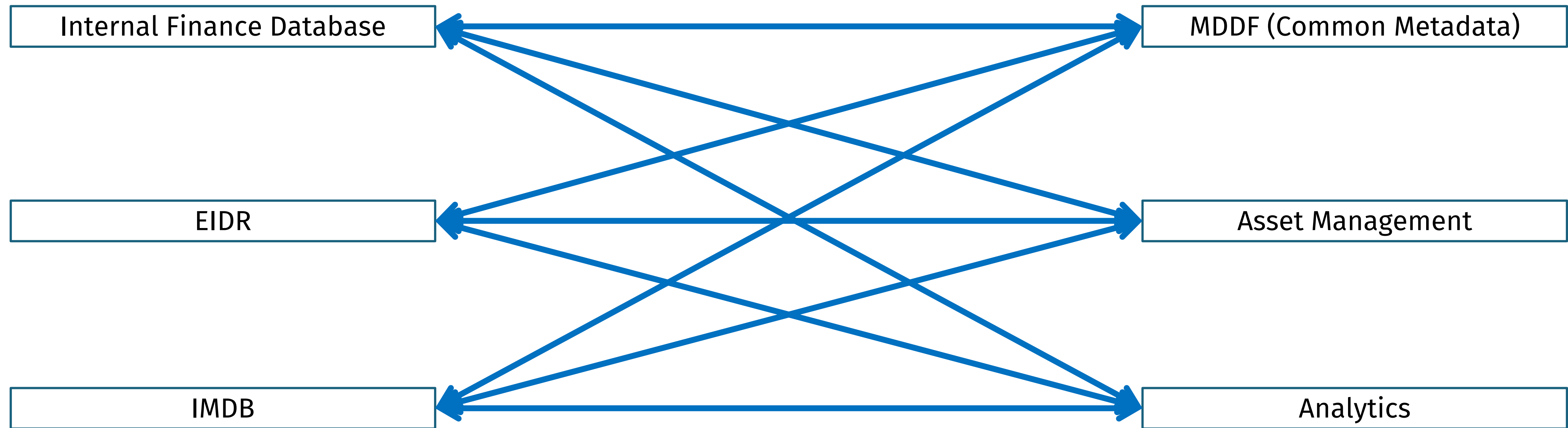
Simplify the interchange of data between systems

Map between internal silos

Map and ingest from outside vendors

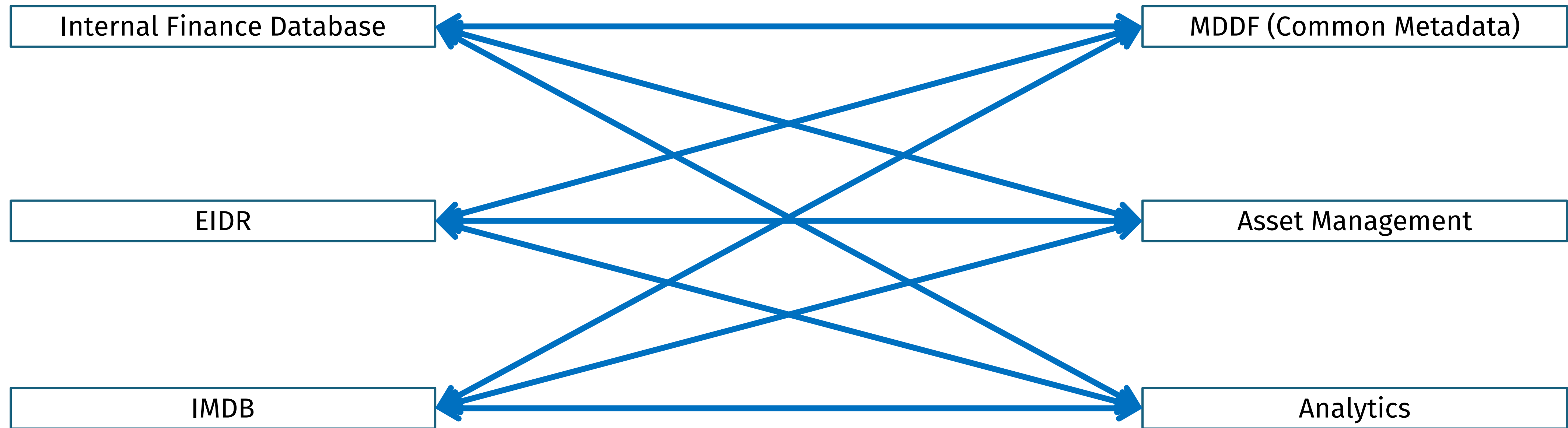
Share data with other partners or studios

# Traditional ETL



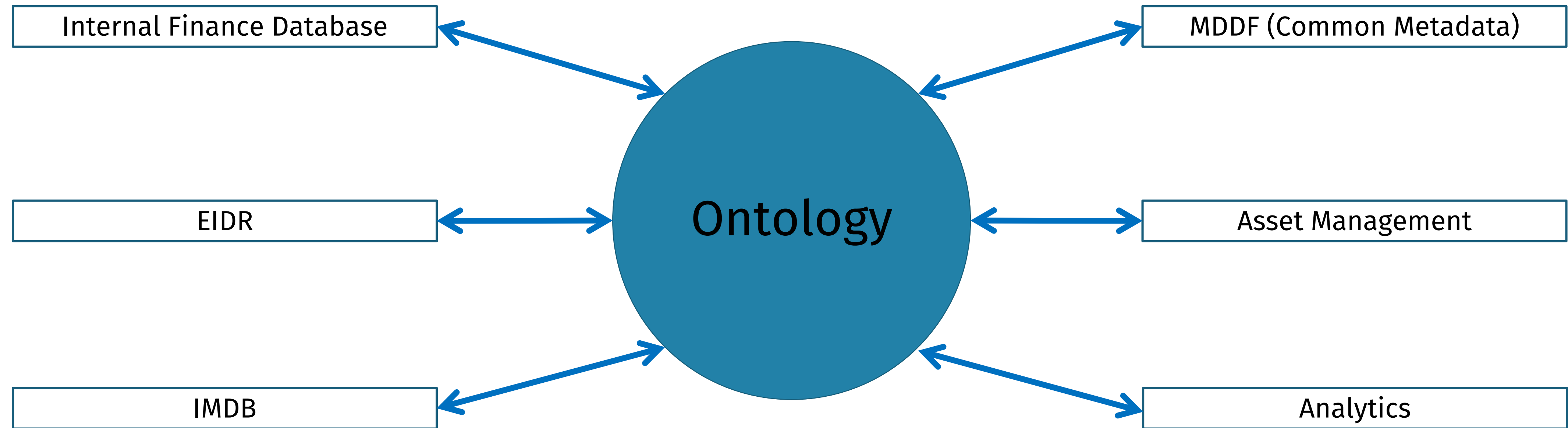
Multiple mappings from each source to every other:  
different terminology, normalizations and schemas every time

# Traditional ETL



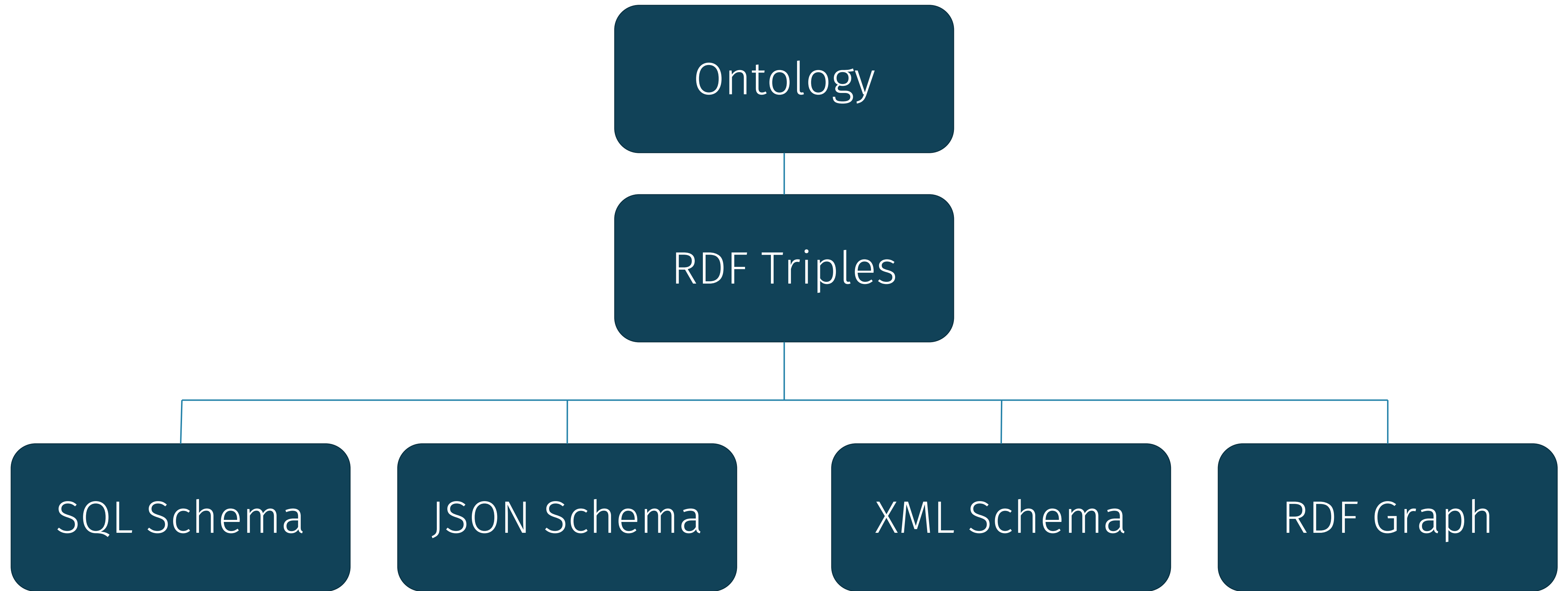
Multiple mappings from each source to every other:  
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# Applying an Ontology & Mapping

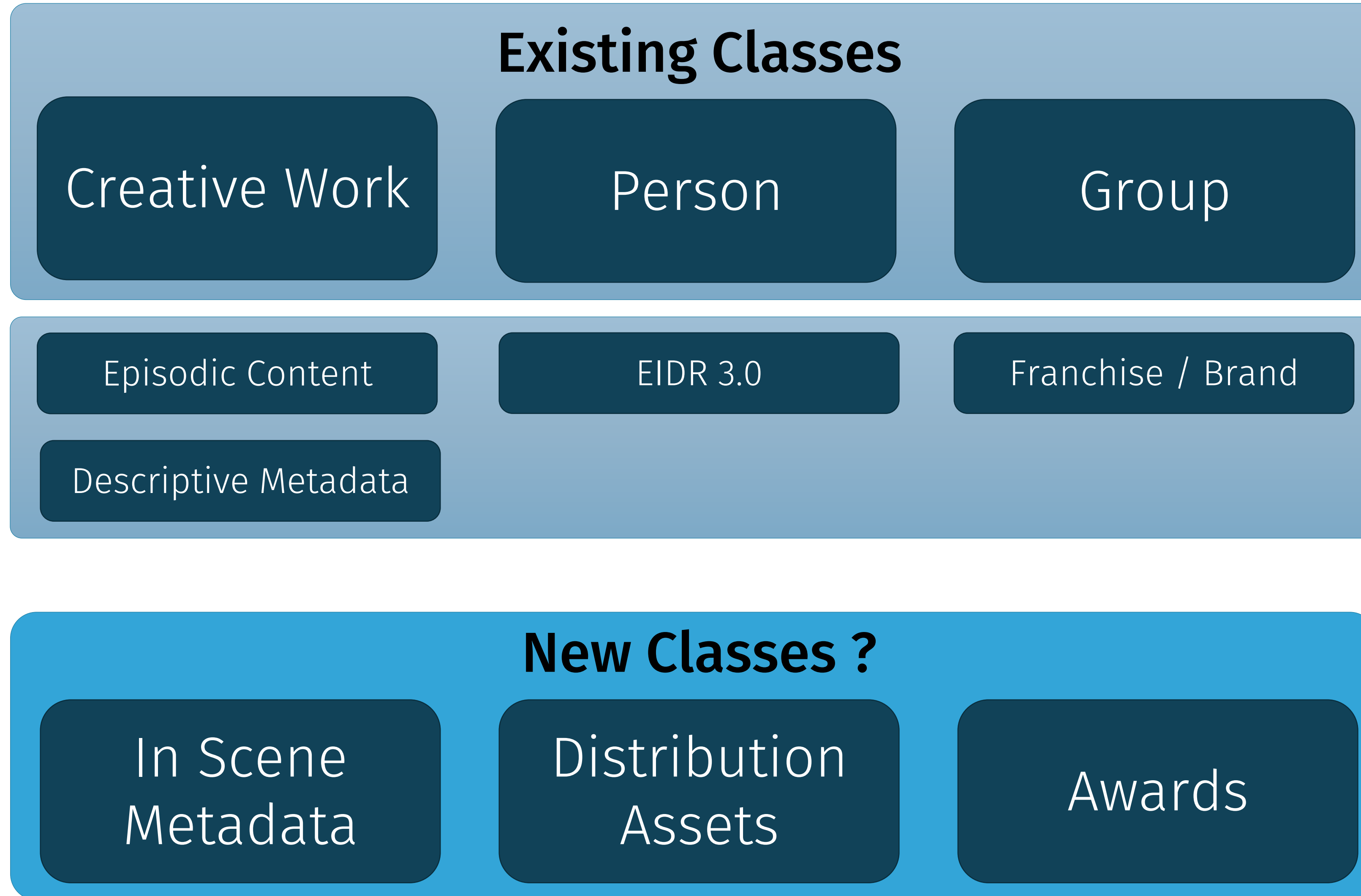


**Single Mapping and normalization for each source to Common Ontology**

# Ontologies are not Schemas



# Extensible





## Driving Principles

### What is Different

Existing open schemas did not cover industry use cases

Covers the major elements of title metadata

Describe international details, language, country

Extensible, either in public or private domain

Source (provenance) of every element

External identifiers and references for many fields, allowing other systems to be linked

Focus on practicality and implementation, we built a working prototype as a graph and in MongoDB

# Common Ontology Classes

## Creative Work

- Identifiers
- Titles
- Contributors
- Release date and consumption metrics
- Descriptive data (keywords, rating, run length, locations, cost)

## Person

- Identifiers
- Names
- Birth, Death, Gender, etc.
- Work to which person has contributed

## Groups

- Creative Works
- Type

Identifiers  
Titles  
Releases Dates  
Consumption  
Original Language  
Run Time  
Associated Companies  
Ratings  
Rankings  
Keywords  
Based On  
Cost  
Artwork  
Text  
Contributors

# Roadmap

## Current status

- White Paper published
- RDF available
- JSON schema implementation ready
- EIDR, IMDb mappings.

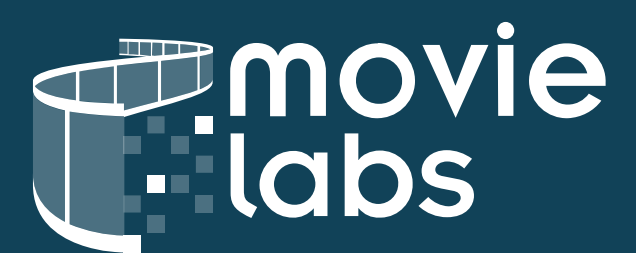
## Future Steps

- Focus on use cases
- Extend ontology (Groups, TV, Manifestations)
- Common Metadata and other mappings
- Evangelize with industry
- Generate momentum with open-source applications

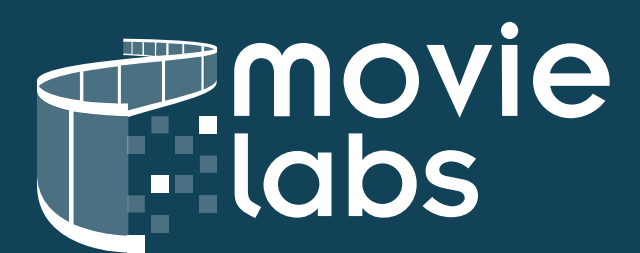
<https://movielabs.com/creative-works-ontology/>

NodeJS code base to create conformant JSON data  
AWS Neptune Instantiation

**THANK YOU**



# BACKUP



# Tested Implementation

Important that ontology was practical

Built prototype to test and demonstrate (MongoDb & Graph)

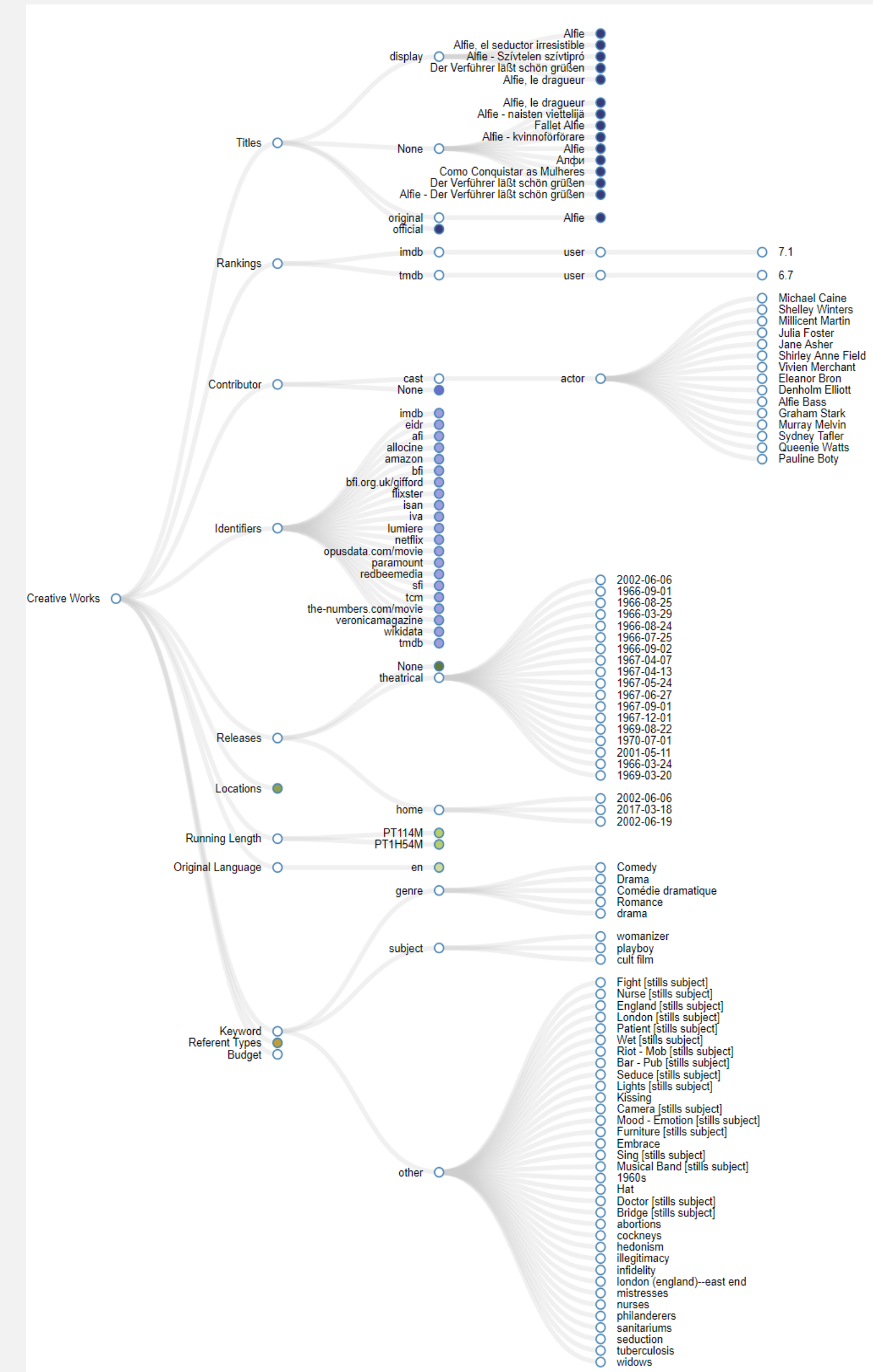
Includes data from over a dozen different sources

Over 250,000 film titles

All normalized, using controlled vocabulary, ISO

With mapping tools new sources can be incorporated in as little as a few hours

# Alfie (1966)



# Creative Work Class

<b>Identifiers</b>	Identifiers for work in other systems	URI	Id, type
<b>Titles</b>	The name of the work		Language, Country, Type( <i>official, original, AKA</i> )
<b>Releases</b>	Release dates		Date Distribution( <i>theatrical, broadcast, home</i> ) Channel( <i>festival, wide, pvod, disc, digital</i> ), Format( <i>dvd, 3d, iMax, 70mm</i> )
<b>Consumption</b>	Consumption metrics		Time period( <i>dates, weeks</i> ), Units( <i>currency, theatres, views</i> ), Amount
<b>Original Languages</b>	Original language of work		Language
<b>Associated Locations</b>	Locations associated with the work	Y	Country, Location( <i>coordinates</i> ), Type( <i>filming, setting, funding, production</i> )
<b>Approximate Length</b>	The approximate running length		
<b>Associated Companies</b>	Companies associated with the work	Y	Type (studio, production, producer)
<b>Ratings</b>	Film classification or rating	Y	Country, System
<b>Rankings</b>	User or critic rankings		Type (user, critic, aggregated)
<b>Keywords</b>	Descriptive keywords		Type (genre, subject)
<b>Based On</b>		Y	Type (book, comic, person, character, play, musical, game)
<b>Cost</b>	Costs associated with film		Type(Production, marketing)
<b>Artwork</b>	Artwork associated with film	Y	Type(Poster,
<b>Text</b>	Descriptive text related to work	Y	Type(synopsis, review, copyright)
<b>Contributors</b>	Cast & Crew associated with work	Y	Name, role, portrayal, billing order