# INIT1SD13.pm23 - Ontology enabled indexing of literature

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#### Search for literature

Use Case Number	INIT1SD13.pm23.1
Brief Description	Literature and other datasets that have been indexed using domain ontologies can be searched for and aggregated. The ontologies themselves can be used to discover literature that has been federated over a number of repositories.
Actor(s) for this particular use case	Cancer Researcher
Pre-condition The state of the system before the user interacts with it	A number of literature datasets have been indexed and exposed.
Post condition The state of the system after the user interacts with it	Articles and datasets of interest have been identified.
Steps to take The step-by-step description of how users will interact with the system to achieve a specific business goal or function	<ol> <li>The Cancer Researcher formulates a domain-oriented query</li> <li>The query is parsed for ontological concepts</li> <li>The query is executed against available, distributed literature indices</li> <li>The matching literature results are returned to the Cancer Researcher</li> </ol>
Alternate Flow Things which would prevent the normal flow of the use case	None.
Priority The priority of implementing the use case: High, Medium or Low	Medium.
Associated Links The brief user stories, each describing the user interacts with the system for the one function only of the use case. There would potentially be a number of user stories that make up the use case.	<ul> <li>Ontology enabled indexing of literature</li> <li>INIT1SD13-Ontology enabled indexing of literature</li> </ul>
Fit criterion/Acceptance Criterion How would actor describe the acceptable usage scenarios for the software or service that meets the actor's requirement?	The query must be executed in a federated fashion because literature indices will exist distributely.

### Aggregate literature-based data

Use Case Number	INIT1SD13.pm23.2
Brief Description	Once a set of indexed literature is identified, it can be aggregated using natural language semantics and provided to the user in that form.
Actor(s) for this particular use case	Cancer Researcher
Pre-condition The state of the system before the user interacts with it	A set of literature is identified.
Post condition The state of the system after the user interacts with it	The literature is aggregated based upon semantics.
Steps to take The step-by-step description of how users will interact with the system to achieve a specific business goal or function	<ol> <li>The Cancer Researcher defines the semantic criteria for aggregation.</li> <li>The Cancer Researcher performs the aggregation</li> <li>The Cancer Researcher receives the aggregated data</li> </ol>

Alternate Flow Things which would prevent the normal flow of the use case	None.
Priority The priority of implementing the use case: High, Medium or Low	Low.
Associated Links The brief user stories, each describing the user interacts with the system for the one function only of the use case. There would potentially be a number of user stories that make up the use case.	<ul> <li>Ontology enabled indexing of literature</li> <li>INIT1SD13-Ontology enabled indexing of literature</li> </ul>
Fit criterion/Acceptance Criterion How would actor describe the acceptable usage scenarios for the software or service that meets the actor's requirement?	None.

## Index legacy datasets and existing services

Use Case Number	INIT1SD13.pm23.3
Brief Description	Legacy datasets and existing services have a rich set of data that has not been indexed and is not accessible to natural language searching. It is desirable that users are able to use common tooling to index these datasets using domain ontologies and make them available for searching and discovery.
Actor(s) for this particular use case	Software Engineer
Pre-condition The state of the system before the user interacts with it	A legacy dataset or existing service exists.
Post condition The state of the system after the user interacts with it	The dataset or service is indexed and available.
Steps to take The step-by-step description of how users will interact with the system to achieve a specific business goal or function	<ol> <li>The Software Engineer identifies the legacy dataset or existing service to index.</li> <li>The Software Engineer identifies the ontologies to use to index</li> <li>The Software Engineer sets up the parameters for indexing</li> <li>The Software Engineer performs the indexing</li> <li>The Software Engineer exposes the index as a searchable and discoverable service</li> </ol>
Alternate Flow Things which would prevent the normal flow of the use case	The Software Engineer sets up a strategy for index maintenance.
Priority The priority of implementing the use case: High, Medium or Low	Low.
Associated Links The brief user stories, each describing the user interacts with the system for the one function only of the use case. There would potentially be a number of user stories that make up the use case.	<ul> <li>Ontology enabled indexing of literature</li> <li>INIT1SD13-Ontology enabled indexing of literature</li> </ul>
Fit criterion/Acceptance Criterion How would actor describe the acceptable usage scenarios for the software or service that meets the actor's requirement?	None.