DSpace Semantic Search
Example Queries

1. Same results

a. Queries also possible through traditional search

`dcterms:type value dspace-ont:Learning_Object`	**All learning objects**	**Type:** "learning object"
`dspace-ont:author some (foaf:surname value "Solomou")`	**All items having as author a person with surname "Solomou"**	**Author:** "Solomou"
`dspace-ont:author some (foaf:surname value "Solomou") and dcterms:type value dspace-ont:Working_Paper`	**All items of type "Working Paper" also having as author a person with sur-name "Solomou"**	**Author:** "Solomou" **AND** **Type:** "Working Paper"
`dcterms:type value lom:Slide and dcterms:type value lom:Easy`	**All entities that are of type Slide and are easy to learn**	**Educational Metadata:** "Slide" **AND** **Educational Metadata:** "Easy"
`dcterms:subject value "Linked Da-ta"@en`	**All items that include "Linked Data" among their subjects**	**Subject**: "Linked Data"
`dcterms:instructionalMethod value lom:Expositive`	**All items that use an expositive in-structional method**	**Educational Metadata:** "Expositive"
`dcterms:extent value lom:Three_hours_to_Five_hours`	**All items that need three to five hours in order to be learned**	**Educational Metadata:** "three hours"
[HermiT only] `dcterms:subject some rdf:PlainLiteral [pattern ".*[sS]emantic.*"]` ***Note: see more about patterns, in the end of this document***	**All items that contain "semantic" in their subject**	**Subject:** "semantic"

b. … by browsing

`dcterms:hasPart some dspace-ont:Item`	**All entities that have items as parts**	*Just browse "Collections"*
`dcterms:isPartOf some (dcterms:identifier value "http://apollo.hpclab.ceid.upatras.gr:8000/jspui17-demo/handle/123456789/40"^^xsd:anyURI)`	**All entities that belong to a particular collection**	*Just browse "Collection" with this handle!*
`dcterms:issued value "2010"`	**All entities that have been issued dur-ing 2010**	*Browse by "Issue Date"*

2. Queries that obtain more results

`dspace-ont:sponsorship value dspace-ont:European_Commission`	**All items/authors that are sponsored by a specific institution**	**Sponsor:** "European Commission"
`dcterms:type value dspace-ont:Presentation`	**All items of type "Presentation"**	**Type**: "Presentation"

3. Queries impossible through traditional search

a. Number Restrictions

`dcterms:type min 2 dspace-ont:DspaceType`	**All items that have been characterized with at least two DSpace types (e.g., Article, Book Chapter, …)**	*Not possible*
`dcterms:type min 2 owl:Thing`	**All items that have been characterized with at least two types (LOM, DSpace type, or other)**	*Not possible*
`dcterms:hasPart min 6` *Note: not explicitly declared but gives results because hasPart is the inverse property of isPartOf*	**All collections that contain at least 6 items**	*Not possible*
`inverse dspace-ont:author min 2`	**All authors that are contributors to at least 2 items**	*Not possible*
`dspace-ont:author min 4`	**All items having 4 or more authors**	*Not possible*

b. Other

`dspace-ont:co_author some (foaf:surname value "Kout-somitropoulos")`
 	
`dspace-ont:co_author value dspace-ont:Koutsomitropoulos_Dimitrios`
	All co-authors of author with surname "Koutsomitropoulos"	*Not possible (because of co_author)*

`dcterms:relation some (foaf:surname value "Solomou")`
 	
`dcterms:relation value dspace-ont:Solomou_Georgia`
 	
Note: dcterms:relation is super property of dspace-ont:co_author
	All things that are related to author named "Solomou"	*Not possible*

`dcterms:hasPart some(dcterms:type value dspace-ont:Learning_Object)`	**All collections that contain learning objects**	*Not possible (nested class expression that allows retrieving precisely those collections that contain LOs)*