

## DELIVERABLE D1: INTERNAL LINKS ESTABLISHED

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0.1	26-03-2014	Victor de Boer	First version
0.2	16-04-2014	Victor de Boer	Final version

This deliverable describes the internal links established in the DSS project.

## OVERVIEW

The figure below gives a global overview of the internal and external links. The links take form of RDF triples of which the subject and object are in separate named graphs (datasets). We here list the internal links. In Deliverable D7, we list the external links.

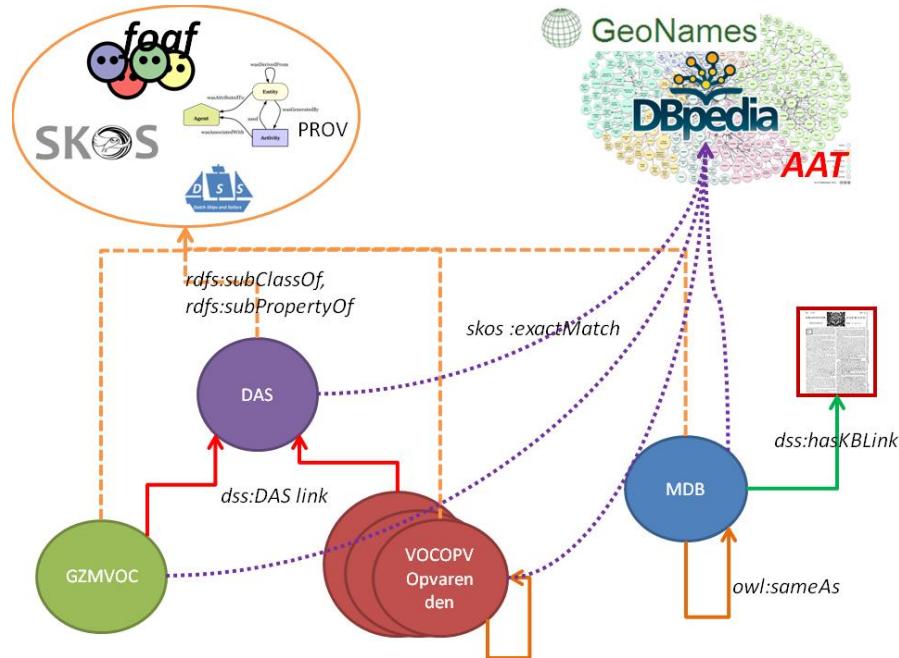


FIG 1: INTERNAL AND EXTERNAL LINKS IN THE DSS DATA CLOUD

## GZMVOC TO DAS

The Generale Zeemonsterollen dataset uses explicit codes references to DAS voyages. These were used to generate explicit links between GZMVOC and DAS. We use two different RDF properties, which correspond to the original metadata fields. All links are stored in a separate named graph ([http://purl.org/collections/nl/dss/gzmvoc/gzmvoc\\_2\\_das.ttl](http://purl.org/collections/nl/dss/gzmvoc/gzmvoc_2_das.ttl)). The table below lists the number of links. In total 5303 links are established.

Predicate	#Triples	#Distinct subjects	#Distinct objects
<a href="#">dss:gzmvoc/has_das_link_heen</a>	<a href="#">3607</a>	<a href="#">3607</a>	<a href="#">1665</a>
<a href="#">dss:gzmvoc/has_das_link_terug</a>	<a href="#">1696</a>	<a href="#">1696</a>	<a href="#">1134</a>

## VOC OPVARENDEN TO DAS

The original VOC Opvarenden dataset uses explicit codes references to DAS voyages. These were used to generate explicit links between VOC Opvarenden and DAS. We use three different RDF properties, which correspond to the original metadata fields. All links are stored in a separate named graph ([http://purl.org/collections/nl/dss/vocopy/vocopy\\_2\\_das.ttl.gz](http://purl.org/collections/nl/dss/vocopy/vocopy_2_das.ttl.gz)). The table below lists the internal links. In total 1,128,416 links are established.

Predicate	#Triples	#Distinct subjects	#Distinct objects	Domain(s)	Range(s)
<a href="#">dss:vocopy/has_dasuitreis</a>	<a href="#">767581</a>	<a href="#">767581</a>	<a href="#">3135</a>	<a href="#">rdfs:Resource</a>	<a href="#">rdfs:Resource</a>
<a href="#">dss:vocopy/has_tblSchipKaapDASURI</a>	<a href="#">45350</a>	<a href="#">45350</a>	<a href="#">3182</a>	<a href="#">rdfs:Resource</a>	<a href="#">rdfs:Resource</a>
<a href="#">dss:vocopy/has_vwPersoonDASURI</a>	<a href="#">315485</a>	<a href="#">314932</a>	<a href="#">5832</a>	<a href="#">rdfs:Resource</a>	<a href="#">rdfs:Resource</a>

## MDB SAMEAS LINKS

In the MDB dataset many ships occur multiple times, however it is initially unknown which ships are which. We therefore assume that all ships are unique and only at a later state attempt to identify recurring ships. This is done using different algorithms, designed and implemented within the context of the Master thesis of VU student Robin Ponstein. A sample of his results were evaluated by Jur Leinenga and an acceptable precision was found. Still, the links are stored in a separate named graph

([http://purl.org/collections/nl/dss/mdb/mdb\\_ship\\_sameas.ttl](http://purl.org/collections/nl/dss/mdb/mdb_ship_sameas.ttl)) with appropriate provenance and content confidence metadata. The table below lists the sameas links currently in the Huygens data store

Predicate	#Triples	#Distinct subjects	#Distinct objects
<a href="#">owl:sameAs</a>	<a href="#">33435</a>	<a href="#">7291</a>	<a href="#">7291</a>

## SCHEMA LINKS

A number of dataset-specific properties have been mapped to a common DSS schema, which essentially establish internal links as well. We do not list the numbers but refer the reader to deliverable D2.