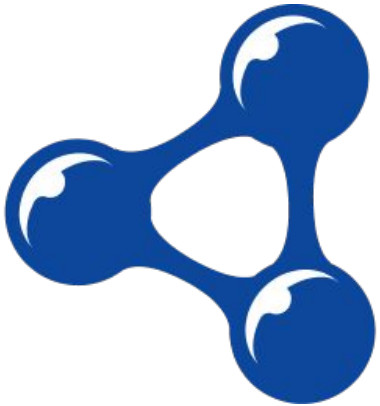
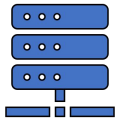
RDF

Resource Description Framework

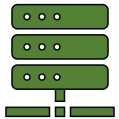


Distributed data

Entity-by-entity



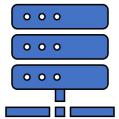
50-PH50A	Submerged Pump	System 50	1460.0	16.0
50-PA52	Centrifugal Pump	System 50	150.0	3.8



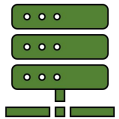
50-PH50B	Submerged Pump	System 50	1460.0	16.0

Distributed data

Entity-by-entity



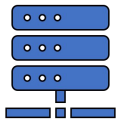
TagNumber	Type	SystemNumber	DesignFlow (m3)	DiffPressure (barg)
50-PH50A	Submerged Pump	System 50	1460.0	16.0
50-PA52	Centrifugal Pump	System 50	150.0	3.8

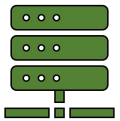


TagNumber	Type	SystemNumber	DesignFlow (m3)	DiffPressure (barg)
50-PH50B	Submerged Pump	System 50	1460.0	16.0

Distributed data

Property-by-Property



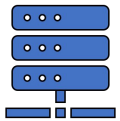


Type	SystemNumber
Submerged Pump	System 50
Centrifugal Pump	System 50
Submerged Pump	System 50

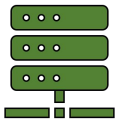
DesignFlow (m3)	DiffPressure (barg)
1460.0	16.0
150.0	3.8
1460.0	16.0

Distributed data

Property-by-Property



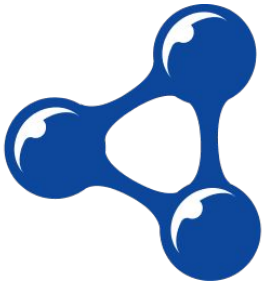
	Type	SystemNumber
50-PH50A	Submerged Pump	System 50
50-PA52	Centrifugal Pump	System 50
50-PH50B	Submerged Pump	System 50



	DesignFlow (m3)	DiffPressure (barg)
50-PH50A	1460.0	16.0
50-PA52	150.0	3.8
50-PH50B	1460.0	16.0

Distributing data

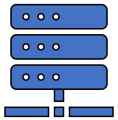
Cell-by-cell



	Type
50-PH50A	Submerged Pump

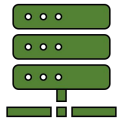
	DiffPressure (barg)
50-PH50B	16.0

	DesignFlow (m3)
50-PA52	150.0



	DesignFlow (m3)
50-PH50A	1400.0

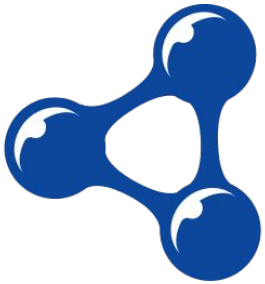
	Type
50-PH50B	Submerged Pump



	SystemNumber
50-PA52	System 50

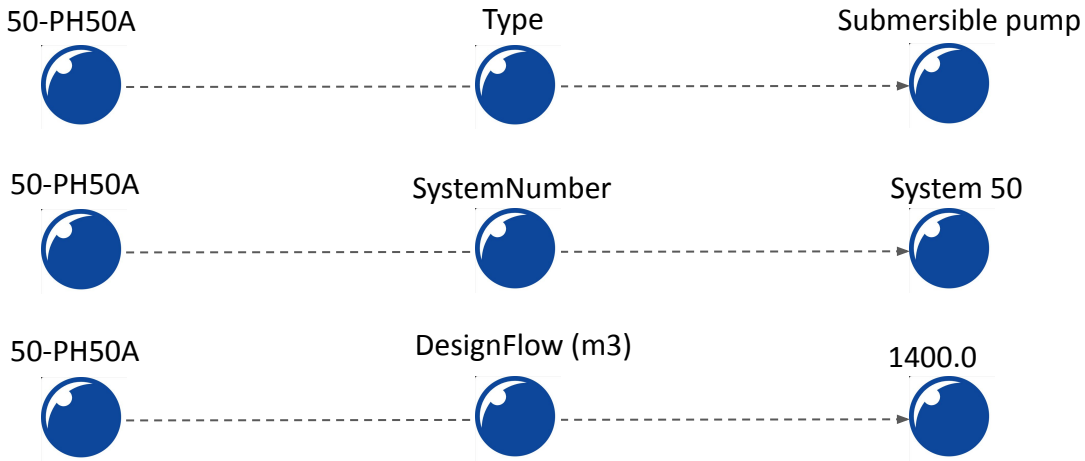
	SystemNumber
50-PH50A	System 50

Reordering the boxes

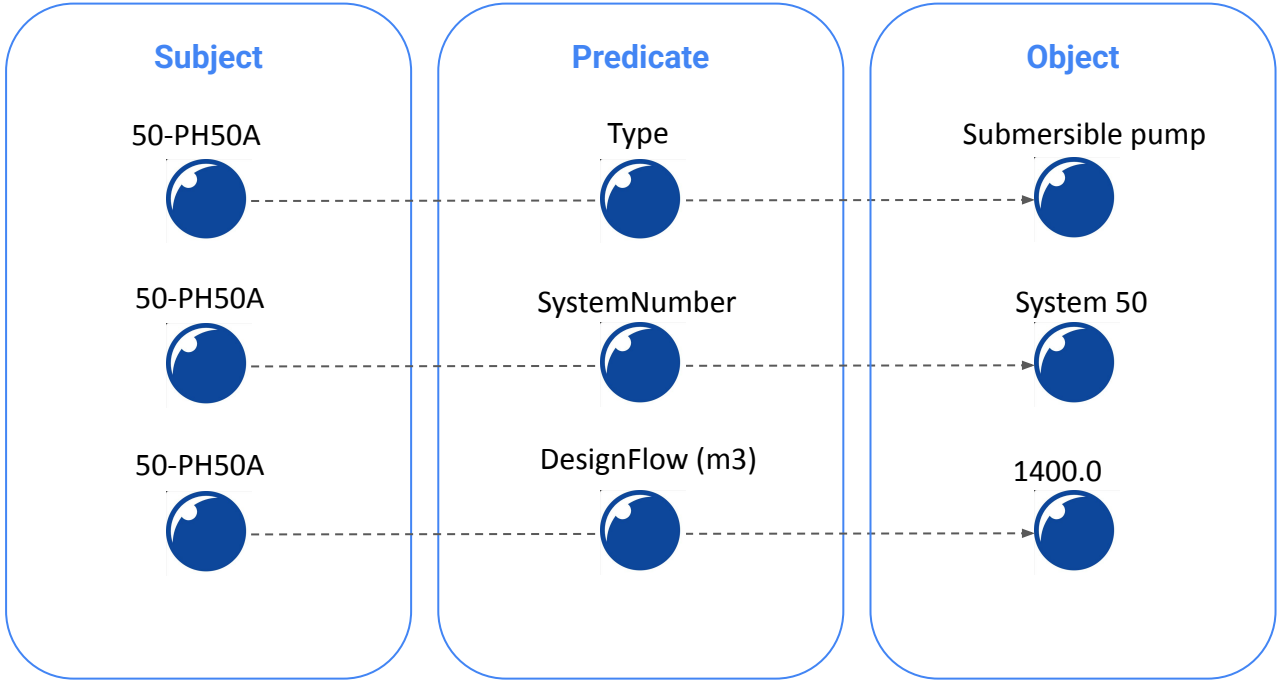


50-PH50A	Type	Submersible Pump
50-PH50A	SystemNumber	System 50
50-PH50A	DesignFlow (m3)	1400.0

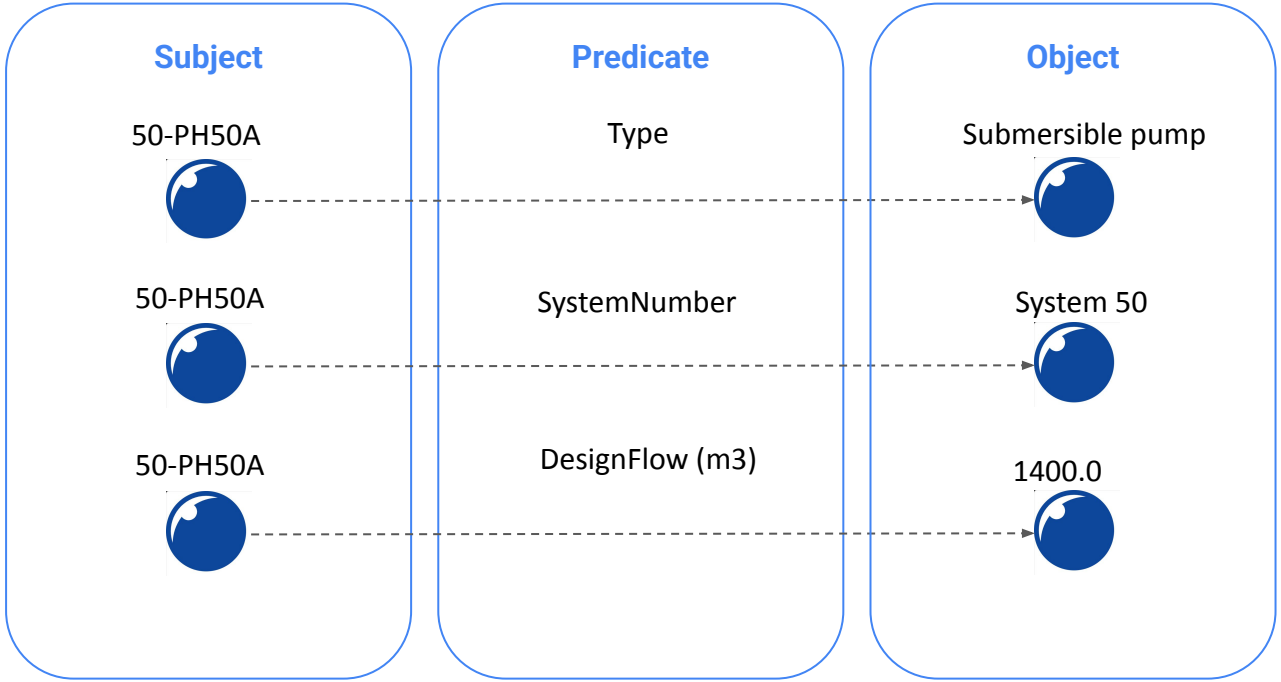
Triples


50-PH50A
Type
Submersible pump
50-PH50A
SystemNumber
System 50
50-PH50A
DesignFlow (m3)
1400.0

Triples


Subject
Predicate
Object
50-PH50A
Type
Submersible pump
50-PH50A
SystemNumber
System 50
50-PH50A
DesignFlow (m3)
1400.0

Triples


Subject
Predicate
Object
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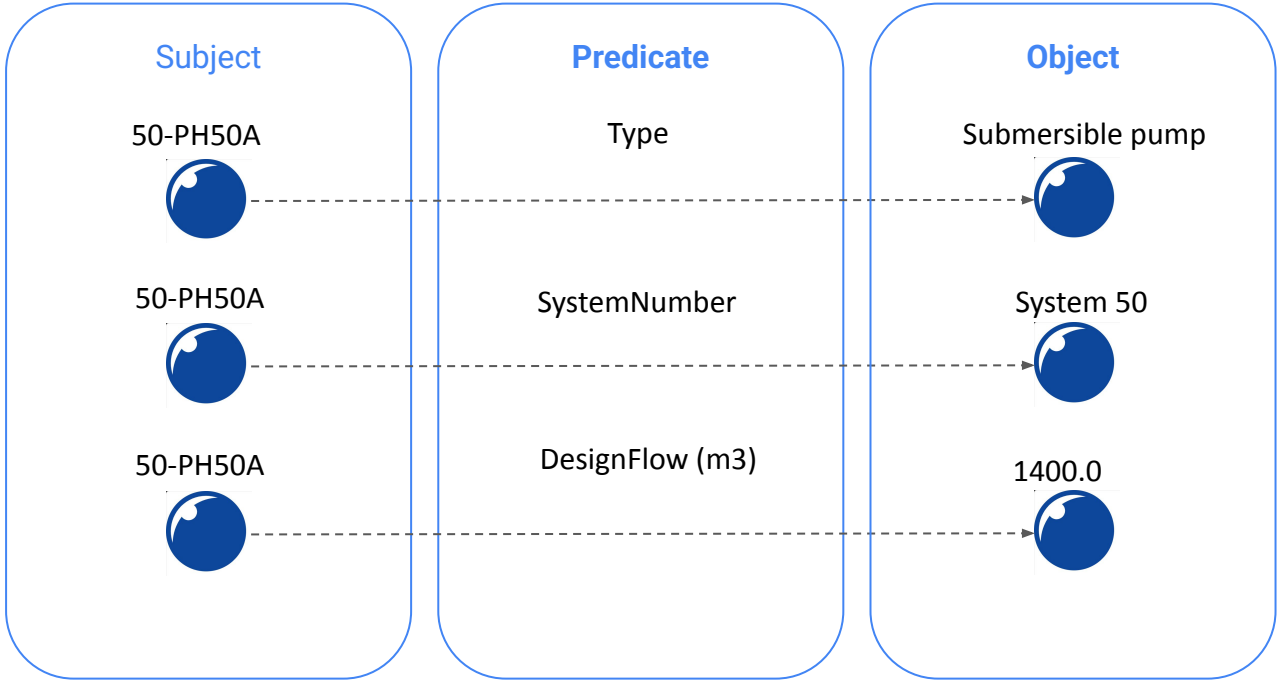
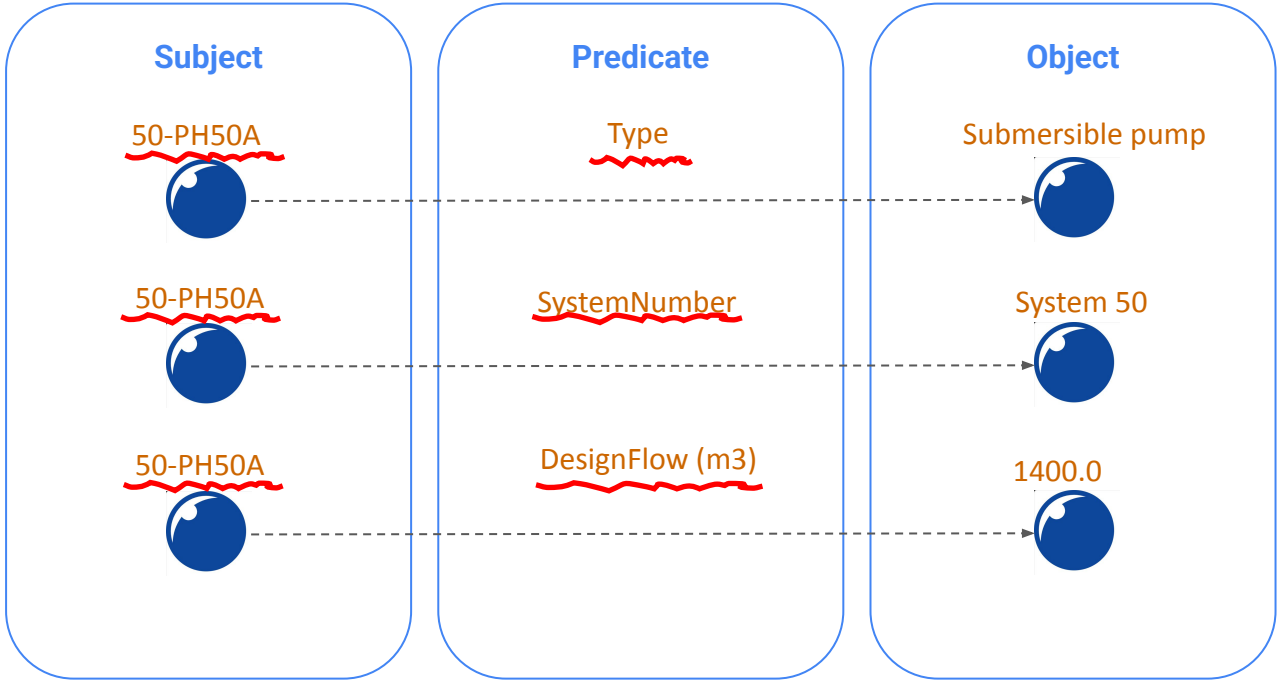
Type
Submersible pump
50-PH50A
SystemNumber
System 50
50-PH50A
DesignFlow (m3)
1400.0

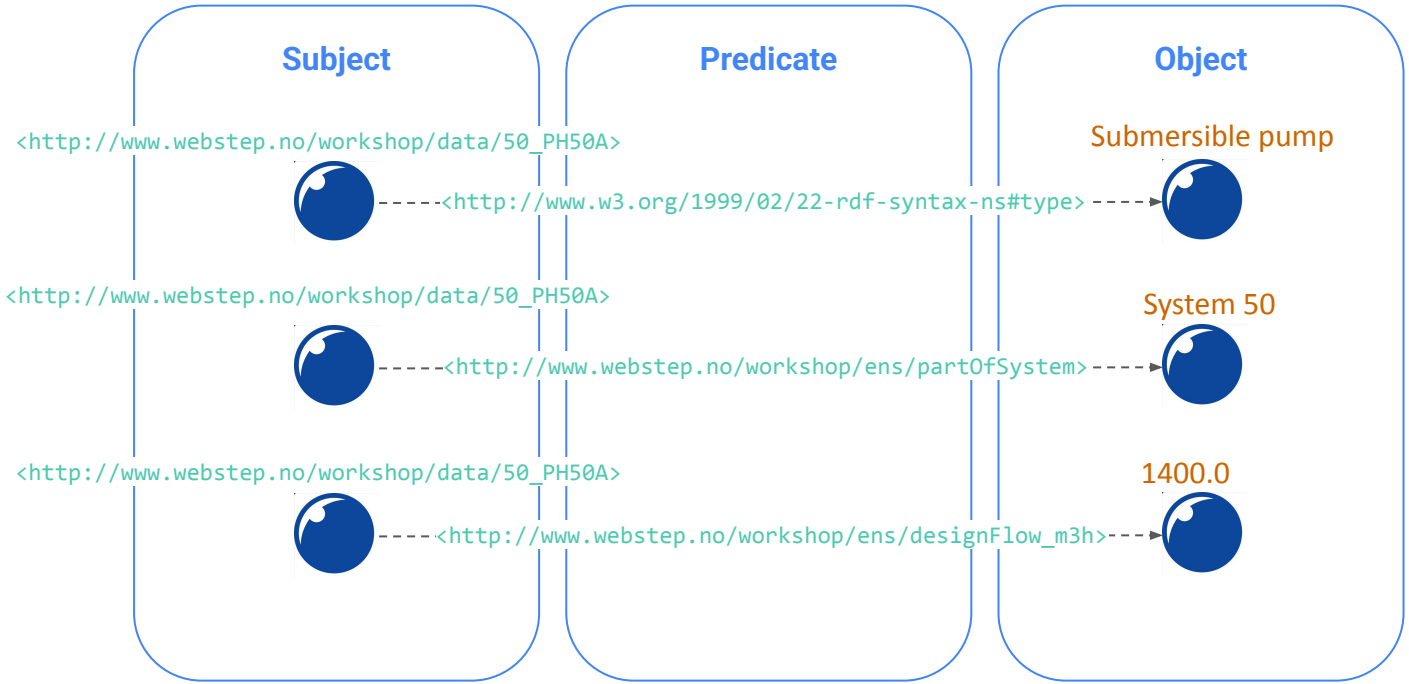
Triples


Subject
Predicate
Object
50-PH50A
Type
Submersible pump
50-PH50A
SystemNumber
System 50
50-PH50A
DesignFlow (m3)
1400.0

RDF triples


Subject
Predicate
Object
50-PH50A
Type
Submersible pump
50-PH50A
SystemNumber
System 50
50-PH50A
DesignFlow (m3)
1400.0

RDF triples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Object
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Submersible pump
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System 50
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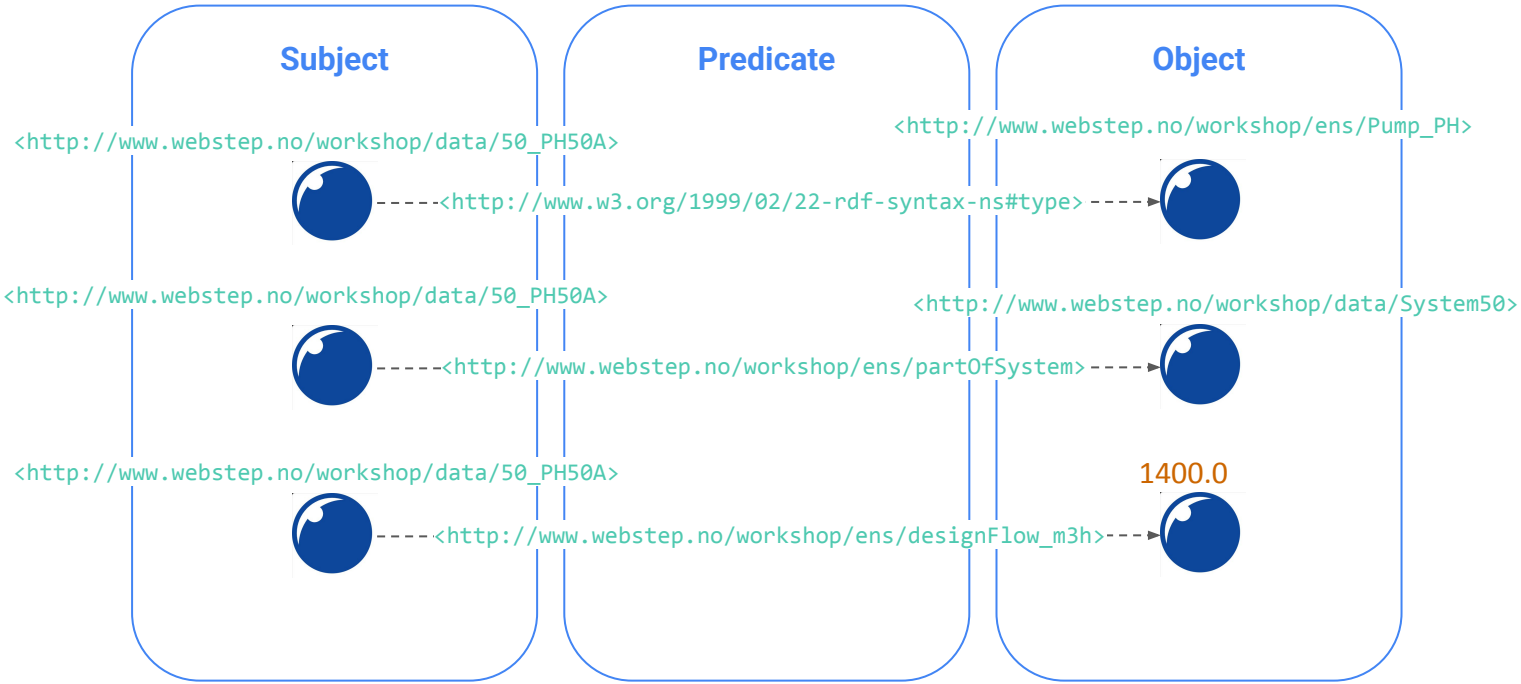
RDF triples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Object
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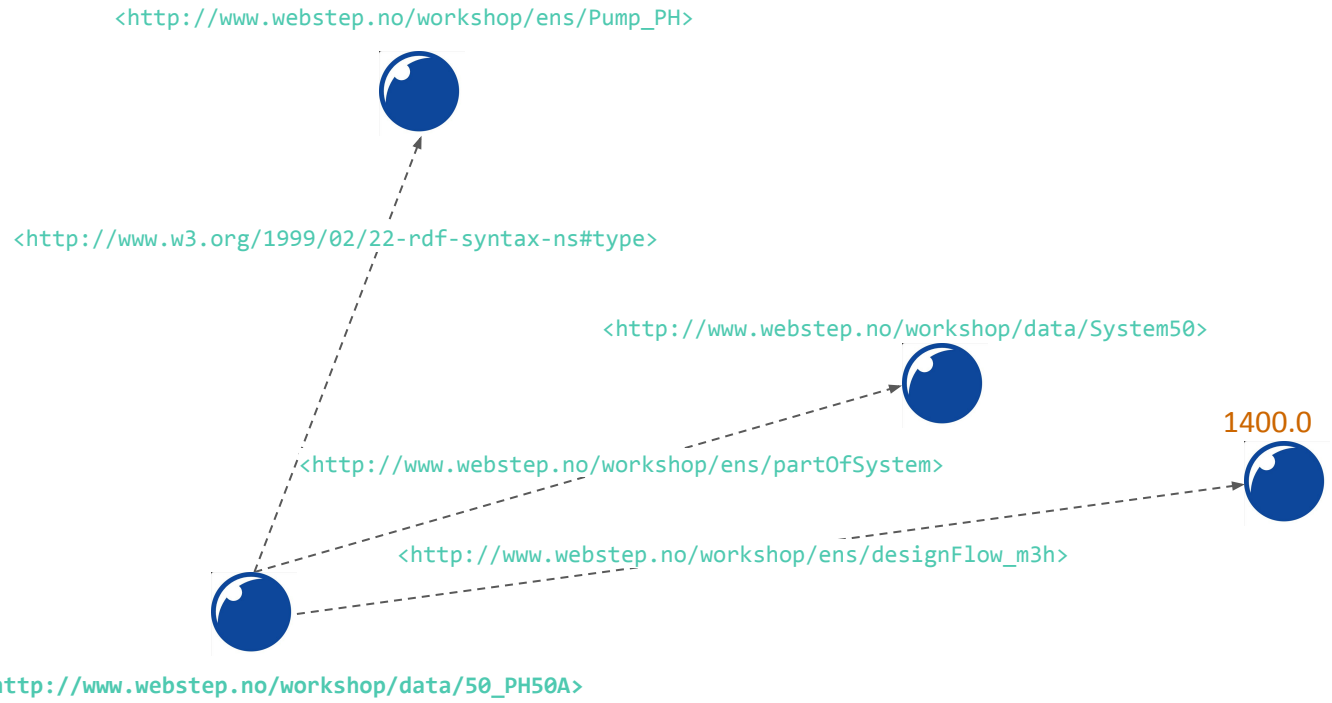
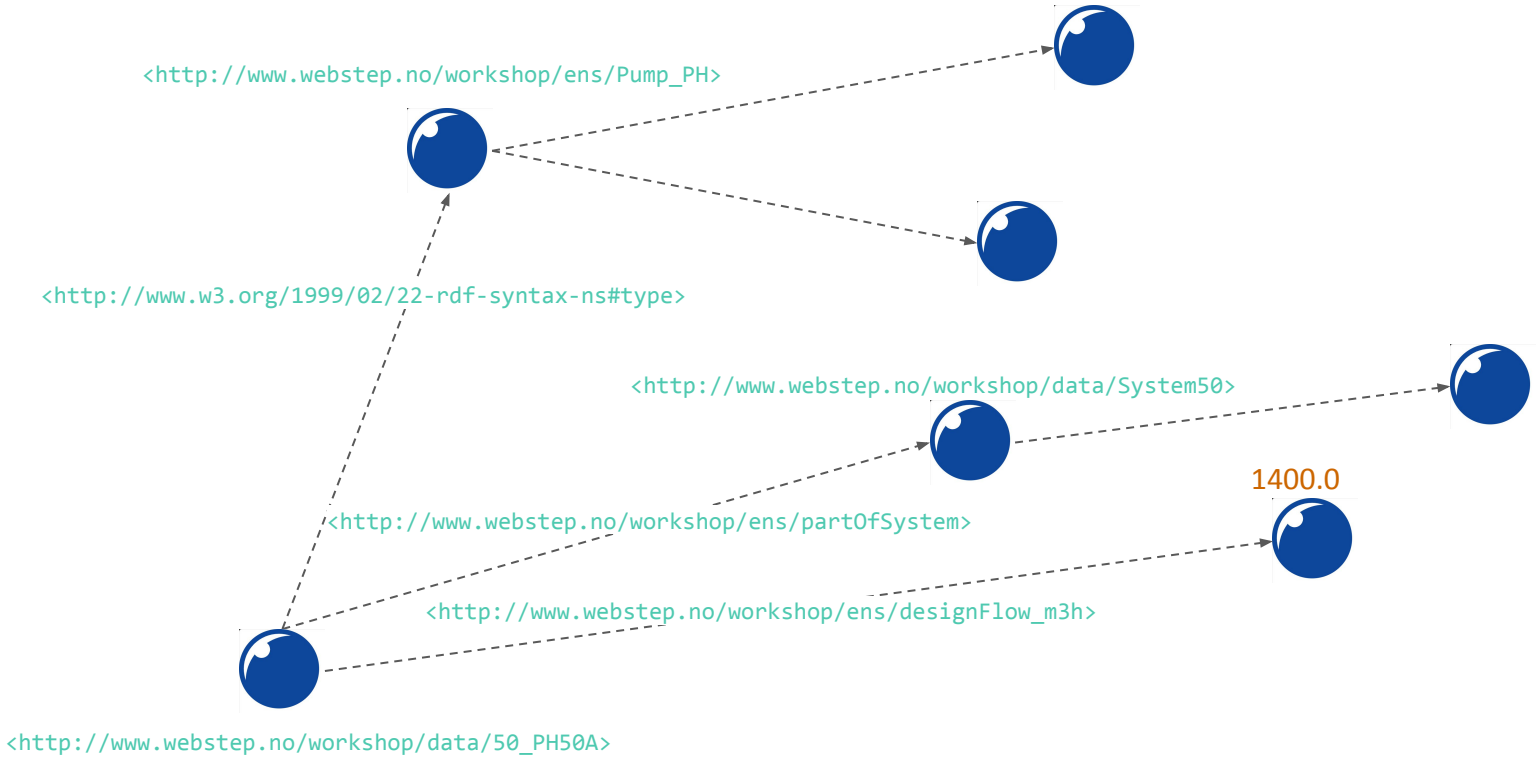
1400.0

Contours of a graph



Contours of a graph



RDF Concepts vocabulary

http://www.w3.org/1999/02/22-rdf-syntax-ns#

1. Express graphs

- `rdf:Statement` – abstract class for reified triples.
- `rdf:subject`, `rdf:predicate`, `rdf:object` – link a reified `rdf:Statement` to its components.

2. Describe resources

- `rdf:value` – a generic property often used as “main value” of something.

3. Classify resources

- `rdf:type` – asserts membership of a resource in a class.

4. Represent literals

- `rdf:langString` – class of plain language-tagged strings.
- `rdf:PlainLiteral` (legacy).
- `rdf:XMLLiteral` – literal content in XML.
- `rdf:HTML`, `rdf:JSON` – literal datatypes for structured markup/data.

5. Represent lists

- `rdf:List` – class of well-formed RDF lists.
- `rdf:first` – points to the first element of a list.
- `rdf:rest` – points to the rest of the list.
- `rdf:nil` – denotes the empty list.

6. Represent (historical) containers

- `rdf:Bag`, `rdf:Seq`, `rdf:Alt` – container classes.
- `rdf:_1`, `rdf:_2`, **…** – container membership properties.