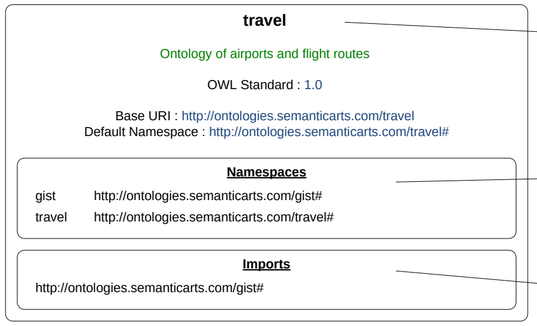
Diagramming Convention Examples - 1

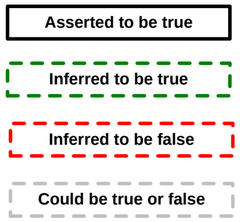


Each page represents a single ontology. An ontology models some part of the enterprise.

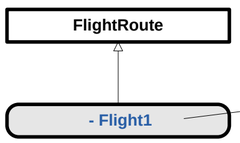
A namespace represents a vocabulary. The namespaces references the source of a definition for the vocabulary.. The same term can mean different things in different vocabularies. Namespaces can be used to disambiguate them.

Ontologies can include other ontolgies.

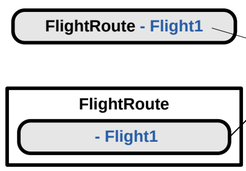
Line colors show where a fact has been inferred (derived) form some other assertions in the model.



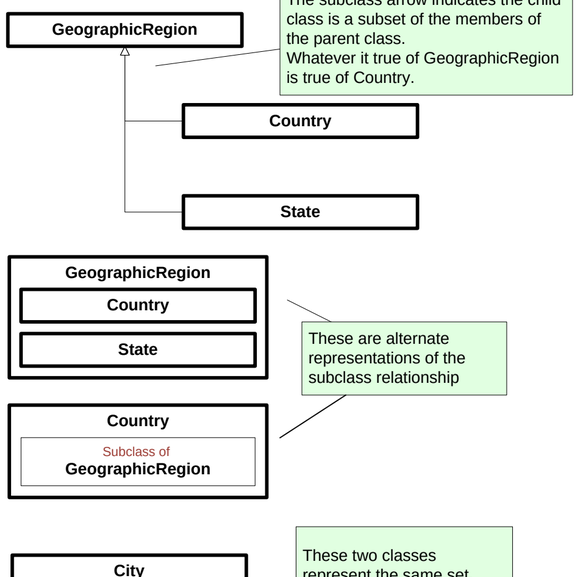
A class represents a set of things that share some common characteristics.



A grey box represents a member (instance) of a class. This is similar to a row in a table. Flight1 is its unique identifier. The arrow says what class it is a member of.

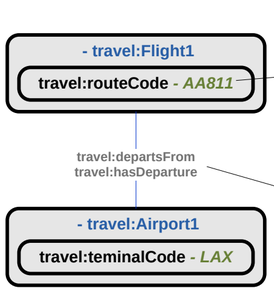


These are alternate representations of the same thing.



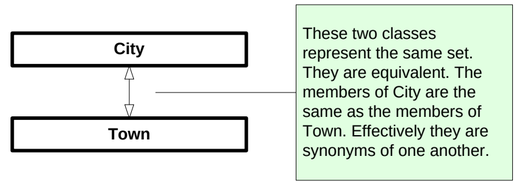
A Country is a GeographicRegion. The subclass arrow indicates the child class is a subset of the members of the parent class.
Whatever it true of GeographicRegion is true of Country.

These are alternate representations of the subclass relationship

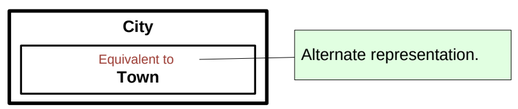


Flight1 has a routeCode AA811
Represents an attribute of an instance. Similar to a particular field in a table.

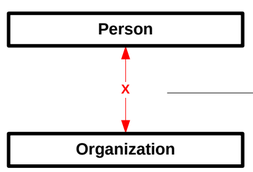
Represents two relationships between two instances.
Flight1 departsFrom Airport1 and
Airport1 hasDeparture Flight1



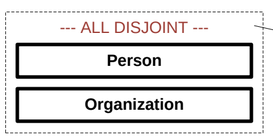
These two classes represent the same set. They are equivalent. The members of City are the same as the members of Town. Effectively they are synonyms of one another.



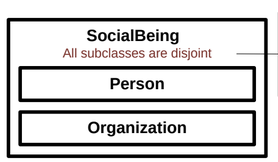
Alternate representation.



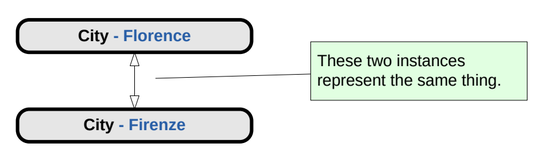
Person and Organization can have no members in common. They are disjoint classes.



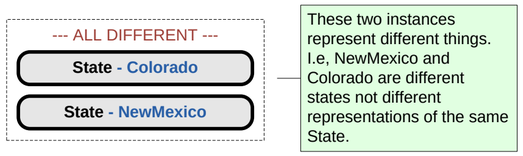
An alternative representation of disjoint classes.



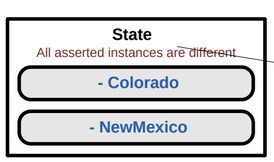
All the subclasses of this class are disjoint. i.e. Person and Organization are mutually exclusive.



These two instances represent the same thing.

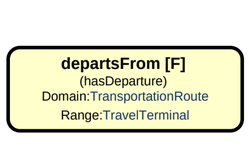


These two instances represent different things. I.e, NewMexico and Colorado are different states not different representations of the same State.

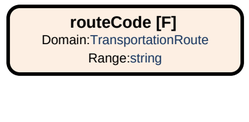


Alternative representation

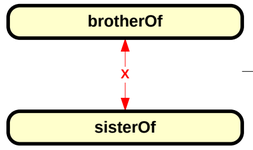
Diagramming Convention Examples - 2



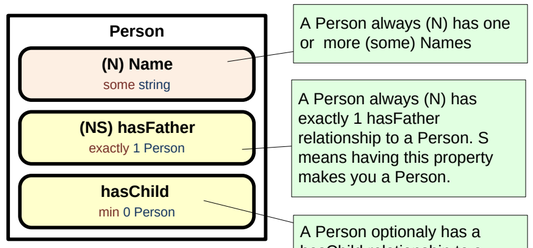
A property departsFrom describing a type of relationship between two instances.
If applies to the relationship between TransprotationRoutes and TravelTerminals



A property describing an attriute with a literal value (in this case a string.) of a TransportationRoute.



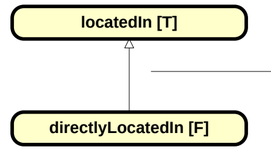
Two instances cannot have both the brotherOf property and the sisterOf property.



A Person always (N) has one or more (some) Names

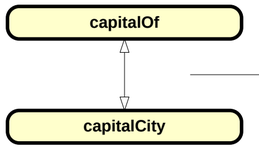
A Person always (N) has exactly 1 hasFather relationship to a Person. S means having this property makes you a Person.

A Person optionaly has a hasChild relationship to a Person

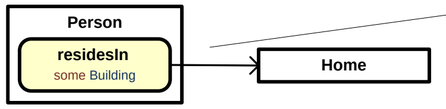


directlyLocatedIn In is a sub-property of locatedIn.
T – Transitive
S - Symetric
F – Functional
IF – Inverse Functional

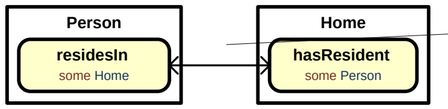
The capitalOf property is equivilant to the CapitalCity property. They are synonyms.



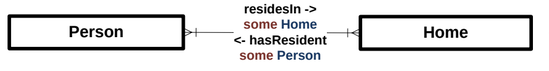
Alternate representation.



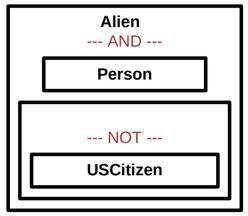
A Peron residesIn one or more Homes. (The arrow is optional)



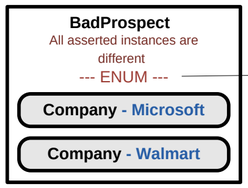
A Peron residesIn one or more Homes and a Home hasResisent one or more Persons (The arrow is optional)



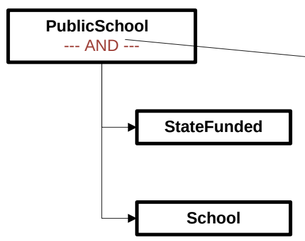
Alternate representation



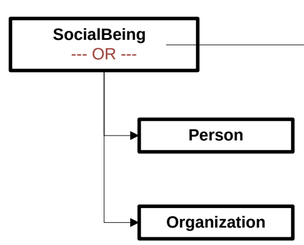
An Alien is a Peson who is NOT a US Citizen



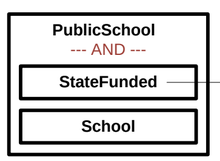
A BadProspect is defined as the instances Microsoft and Walmart. An enumerated list.



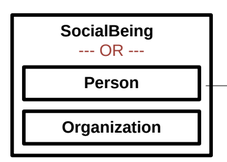
A PublicSchool is the set of things that are both Schools AND StateFunded.



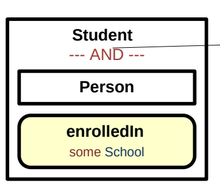
A SocialBeing is either a Person OR an Organization.



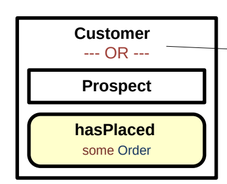
Alternate representation.



Alternate representation.



A Student is a Person who has enrolledIn School.



A Customer is either a Prospect or hasPlaced an Order