

Some OWL Axioms in N3 logic

Properties

{?P owl:inverseOf ?Q.

?S ?P ?O} => {?O ?Q ?S}.

{?P rdf:type owl:SymmetricProperty.

?S ?P ?O} => {?O ?P ?S}.

{?P rdf:type owl:TransitiveProperty.

?X ?P ?O.

?S ?P ?X}

=> {?S ?P ?O}.

Functional Properties

{?P rdf:type owl:InverseFunctionalProperty.

?X ?P ?O. ?Y ?P ?O}

=> {?X owl:sameAs ?Y}.

{?P rdf:type owl:FunctionalProperty.

?S ?P ?X. ?S ?P ?Y}

=> {?X owl:sameAs ?Y}.

Restrictions

{?R owl:onProperty ?P;
owl:hasValue ?Y.

?X a ?R}

=> {?X ?P ?Y}.

{?R owl:onProperty ?P;
owl:allValuesFrom ?A.

?S owl:onProperty ?P;
owl:allValuesFrom ?A}

=> {?R rdfs:subClassOf ?S}.