

Description logic view: DOLCE Temporal Relations

Classes

endurant

perdurant

temporal-region

time-interval

Object properties

concluded-by

\sqsubseteq temporally-includes

$\text{!http://www.loa-cnr.it/ontologies/TemporalRelations.owlconcluded-by}_i \equiv \text{!http://www.loa-cnr.it/ontologies/TemporalR}$

\exists concluded-by Thing \sqsubseteq perdurant

$\top \sqsubseteq \forall$ concluded-by perdurant

concludes

\sqsubseteq temporally-included-in

$\text{!http://www.loa-cnr.it/ontologies/TemporalRelations.owlconcluded-by}_i \equiv \text{!http://www.loa-cnr.it/ontologies/TemporalR}$

\exists concludes Thing \sqsubseteq perdurant

$\top \sqsubseteq \forall$ concludes perdurant

e-temporal-location

\sqsubseteq exact-location

$\text{!http://www.loa-cnr.it/ontologies/TemporalRelations.owl-e-temporal-location}_i \equiv \text{!http://www.loa-cnr.it/ontologies/Temp}$
 $\text{temporal-location-of}_i^-$

\exists e-temporal-location Thing \sqsubseteq endurant

$\top \sqsubseteq \forall$ e-temporal-location temporal-region

e-temporal-location-of

\sqsubseteq exact-location-of

$\text{!http://www.loa-cnr.it/ontologies/TemporalRelations.owl-e-temporal-location}_i \equiv \text{!http://www.loa-cnr.it/ontologies/Temp}$
 $\text{temporal-location-of}_i^-$

\exists e-temporal-location-of Thing \sqsubseteq temporal-region

$\top \sqsubseteq \forall$ e-temporal-location-of endurant

exact-location

exact-location-of

follows

\sqsubseteq temporal-relation-i

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owl} \text{precedes}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelation}$
TransitivePropertyfollows

\exists follows Thing \sqsubseteq perdurant

$\top \sqsubseteq \forall$ follows perdurant

mediated-relation

mediated-relation-i

meets

\sqsubseteq temporally-connected

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owl} \text{met-by}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelation}$

\exists meets Thing \sqsubseteq perdurant

$\top \sqsubseteq \forall$ meets perdurant

met-by

\sqsubseteq temporally-connected

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owl} \text{met-by}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelation}$

\exists met-by Thing \sqsubseteq perdurant

$\top \sqsubseteq \forall$ met-by perdurant

precedes

\sqsubseteq temporal-relation

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owl} \text{precedes}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelation}$
TransitivePropertyprecedes

\exists precedes Thing \sqsubseteq perdurant

$\top \sqsubseteq \forall$ precedes perdurant

present-at

\sqsubseteq e-temporal-location

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owl} \text{present-at}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelation}$
of-presence-of $_i^-$

\exists present-at Thing \sqsubseteq endurant

$\top \sqsubseteq \forall$ present-at time-interval

started-by

\sqsubseteq temporally-includes

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owlstarts}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations}$
 by_i^-

$\exists \text{ started-by Thing} \sqsubseteq \text{perdurant}$

$\top \sqsubseteq \forall \text{ started-by perdurant}$

starts

$\sqsubseteq \text{temporally-included-in}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owlstarts}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations}$
 by_i^-

$\exists \text{ starts Thing} \sqsubseteq \text{perdurant}$

$\top \sqsubseteq \forall \text{ starts perdurant}$

temporal-location

$\sqsubseteq \text{exact-location}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporal-location}_i \equiv \text{[http://www.loa-cnr.it/ontologies/Tempo}$
 location-of_i^-

$\exists \text{ temporal-location Thing} \sqsubseteq \text{perdurant}$

$\top \sqsubseteq \forall \text{ temporal-location temporal-region}$

temporal-location-of

$\sqsubseteq \text{exact-location-of}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporal-location}_i \equiv \text{[http://www.loa-cnr.it/ontologies/Tempo}$
 location-of_i^-

$\exists \text{ temporal-location-of Thing} \sqsubseteq \text{temporal-region}$

$\top \sqsubseteq \forall \text{ temporal-location-of perdurant}$

temporal-relation

$\sqsubseteq \text{mediated-relation}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporal-relation-i}_j \equiv \text{[http://www.loa-cnr.it/ontologies/Tempo}$
 relation_j^-

$\exists \text{ temporal-relation Thing} \sqsubseteq \text{perdurant}$

$\top \sqsubseteq \forall \text{ temporal-relation perdurant}$

temporal-relation-i

$\sqsubseteq \text{mediated-relation-i}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporal-relation-i}_j \equiv \text{[http://www.loa-cnr.it/ontologies/Tempo}$
 relation_j^-

$\exists \text{ temporal-relation-i Thing} \sqsubseteq \text{perdurant}$

$\top \sqsubseteq \forall \text{ temporal-relation-i perdurant}$

temporally-coincides

$\sqsubseteq \text{temporal-relation}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-coincides}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-coincides}_i^-$

$\exists \text{ temporally-coincides Thing } \sqsubseteq \text{ perdurant}$

$\top \sqsubseteq \forall \text{ temporally-coincides perdurant}$

temporally-connected

$\sqsubseteq \text{ temporal-relation}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-connected}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-connected}_i^-$

$\exists \text{ temporally-connected Thing } \sqsubseteq \text{ perdurant}$

$\top \sqsubseteq \forall \text{ temporally-connected perdurant}$

temporally-included-in

$\sqsubseteq \text{ temporal-relation-i}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-included-in}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-included-in}_i^-$

$\text{TransitivePropertytemporally-included-in}$

$\exists \text{ temporally-included-in Thing } \sqsubseteq \text{ perdurant}$

$\top \sqsubseteq \forall \text{ temporally-included-in perdurant}$

temporally-includes

$\sqsubseteq \text{ temporal-relation}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-included-in}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-includes}_i^-$

$\text{TransitivePropertytemporally-includes}$

$\exists \text{ temporally-includes Thing } \sqsubseteq \text{ perdurant}$

$\top \sqsubseteq \forall \text{ temporally-includes perdurant}$

temporally-overlaps

$\sqsubseteq \text{ temporal-relation}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-overlaps}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owltemporally-overlaps}_i^-$

$\exists \text{ temporally-overlaps Thing } \sqsubseteq \text{ perdurant}$

$\top \sqsubseteq \forall \text{ temporally-overlaps perdurant}$

time-of-presence-of

$\sqsubseteq \text{ e-temporal-location-of}$

$\text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owlpresent-at}_i \equiv \text{[http://www.loa-cnr.it/ontologies/TemporalRelations.owlpresent-at}_i^-$

$\exists \text{ time-of-presence-of Thing } \sqsubseteq \text{ time-interval}$

$\top \sqsubseteq \forall \text{ time-of-presence-of endurant}$

Data properties

Individuals

Datatypes

string