

gistUnit

gist Unit of Measure, extends the base units from top to cover Rations and lesser used units (this allows someone to exclude Luminosity if they don't want it)

Base URI: https://ontologies.semanticarts.com/o/gistUnit
Version URI: https://ontologies.semanticarts.com/o/gistUnit9.0.0

Default Namespace:

Default Comment: rdfs:comment

Default Comment: rdfs:comment Default Label : rdfs:label

<u>Namespaces</u>

gist https://ontologies.semanticarts.com/gist/

<u>Imports</u>

JRI: https://ontologies.semanticarts.com/o/gistTop9.0.0

Location: gistTop9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:numerator

Domain:gist:RatioUnit Range:gist:UnitOfMeasure Relates a RatioUnit such as meter(s)/second to the numerator Unit (e.g. meter).

> rdfs:label Numerator

gist:denominator Domain:gist:RatioUnit

Range:gist:UnitOfMeasure
Relates a RatioUnit such as meters/second
to the denominator Unit (e.g. second).

rdfs:label

Units and Measures

These are the remaining base units that were not essential for the definition of top level concepts

gist:unitSymbol

Domain:gist:UnitOfMeasure Range:string
The standard symbol for the unit NOT using
any special characters. E.g. square meter
would be m^2 rather than m².

rdfs:label Unit Symbol

aist:unitSvmbolUnicode

Domain:gist:UnitOfMeasure Range:string
The standard symbol for the unit preferred
for pretty printing, may use special
characters. E.g. square meter would be m²
rather than m^2.

rdfs:label Unit Symbol Unicode

gist:unitSymbolHTML

Domain:gist:UnitOfMeasure Range:string
The standard symbol for the unit in HTML
format for pretty printing, may use special
characters. E.g. to show square meter as
m² rather than m^2, the value of this
property would be "<![CDATA[m²]]>"
This is for when Unicode not supported and
the display will be HTML format.

rdfs:label

Unit Symbol HTML

gist:RatioUnit

A UnitOfMeasure composed of a numerator unit and a denominator unit.

--- AND ---

rdfs:label

Ratio Unit

rdfs:comment

EXAMPLE: Miles per hour.

rdfs:comment

NOTE: If needed, a conversion factor for a RatioUnit can be (recursively) derived from the conversion factors of the numerator and denominator units. E.g., the derived conversion factor from km/minute to meters/ second is 1000/60 or 16 2/3.

gist:UnitOfMeasure

gist:numerator

some gist: UnitOfMeasure

gist:denominator some gist:UnitOfMeasure

rdfs:label Currency Unit

gist:CurrencyUnit
A unit of money. Note: this is the only unit

whose conversion factors include time (i.e., the conversion rates change on a

daily basis).

--- AND ---

gist:SimpleUnitOfMeasure

gist:hasBaseUnit

has gist: USDollar

gist:CountingUnit

A unit of counting, especially 'each', but also units such as dozens.

--- AND ---

rdfs:label

Counting Unit

gist:SimpleUnitOfMeasure

gist:hasBaseUnit

has gist:_each

gist:DataSizeUnit

A unit to measure amounts of digital information.

--- AND ---

rdfs:label

Data Size Unit

gist:SimpleUnitOfMeasure

gist:hasBaseUnit

has gist:_bit

gist:TemperatureUnit

Unit of measurement for expressing temperature. Per SI, the base of temperature is in Kelvin, to allow for all units to be expressed relative to a real (in this case absolute) zero.

--- AND ---

rdfs:label Temperature Unit

gist:SimpleUnitOfMeasure

gist:hasBaseUnit

has gist:_kelvin

gist:conversionOffset

some double

gist:ElectricalCurrentUnit

Unit of electrical current, which is charge per unit time. The SI unit is the ampere. (Note that electrical current is a composed unit.)

--- AND ---

rdfs:label Electrical Current Unit

gist:SimpleUnitOfMeasure

gist:hasBaseUnit

has gist:_ampere

gist:LuminousIntensityUnit

The measure of brightness. The SI unit is the candela.

--- AND ---

rdfs:label

Luminous Intensity Unit

gist:SimpleUnitOfMeasure

gist:hasBaseUnit

has gist:_candela

gist:MoleUnit

Amount of chemical material. Measured in Avogadro units (moles) of 6.02 x 10^23 molecules.

--- AND ---

rdfs:label Mole Unit

gist:SimpleUnitOfMeasure

gist:hasBaseUnit

has gist:_mole

gistMagnitude

gist Magnitudes

Base URI : https://ontologies.semanticarts.com/o/gistMagnitude Version URI: https://ontologies.semanticarts.com/o/gistMagnitude9.0.0 Default Namespace:

Default Comment: rdfs:comment Default Label : rdfs:label

Namespaces Namespaces

https://ontologies.semanticarts.com/gist/

https://ontologies.semanticarts.com/o/gistUnit9.0.0

Location: gistUnit9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:ProductMagnitude

A magnitude expressed as a product of primitives. (E.g., Force = M*A). --- AND ---

> rdfs:label **Product Magnitude**

> gist:Magnitude

gist:hasUoM some gist:ProductUnit

gist:Count

A measure that involves countable amounts ('eaches' as well as cases, etc.). Can be decimal.

--- AND ---

rdfs:label

rdfs:comment

NOTE: Count is not disjoint with all the other magnitudes, as there are some magnitudes that could conceivably be counted.

gist:Magnitude

gist:hasUoM some gist: CountingUnit

gist:RatioMagnitude

This is a number whose unit of measure is a ratio.

--- AND ---

rdfs:label

Ratio Magnitude

rdfs:comment

NOTE: A RatioMagnitude just has one decimal value.

rdfs:comment

EXAMPLE: Speed. The ratio magnitude is 60, the unit of measure might be MilesPerHour.

gist:Magnitude

gist:hasUoM

some gist:RatioUnit

gist:Temperature

The degree or intensity of heat present in a substance or object, especially as expressed according to a comparative

--- AND ---

rdfs:label

Temperature

gist:hasUoM

some gist:TemperatureUnit

gist:Magnitude

gist:ElectricCurrent

A flow of electric charge.

--- AND ---

rdfs:label

Electric Current

gist:hasUoM

some gist:ElectricalCurrentUnit

gist:Magnitude

gist:Percentage

A ratio where the numerator and denominator are of the same unit of measure.

gist:Monetary

A special type of magnitude, due to the

way rounding is handled in math and the temporal aspect of conversion. --- AND ---

rdfs:label

Monetary

gist:Magnitude

gist:hasUoM

some gist: CurrencyUnit

rdfs:label Percentage

rdfs:comment

NOTE: there are various ways to represent percentage: 50/100 could be represented as '50' or '0.5'. gist uses the latter, as it involves fewer conversions for subsequent use.

Subclass of

gist:RatioMagnitude

gist:InformationQuantity

An amount of data, such as 6 petabytes, or

640KB.

--- AND ---

rdfs:label

Information Quantity

gist:Magnitude

gist:hasUoM

some gist: DataSizeUnit

gist:LuminousIntensity

A measure of the wavelength-weighted power emitted by a light source in a particular direction per unit solid angle. This is based on the luminosity function, a standardized model of the sensitivity of the human eye.

--- AND ---

rdfs:label

Luminous Intensity

gist:Magnitude

gist:hasUoM

some gist:LuminousIntensityUnit

gist:MolarQuantity

Amount of a substance, as counted molecules.

--- AND ---

rdfs:label

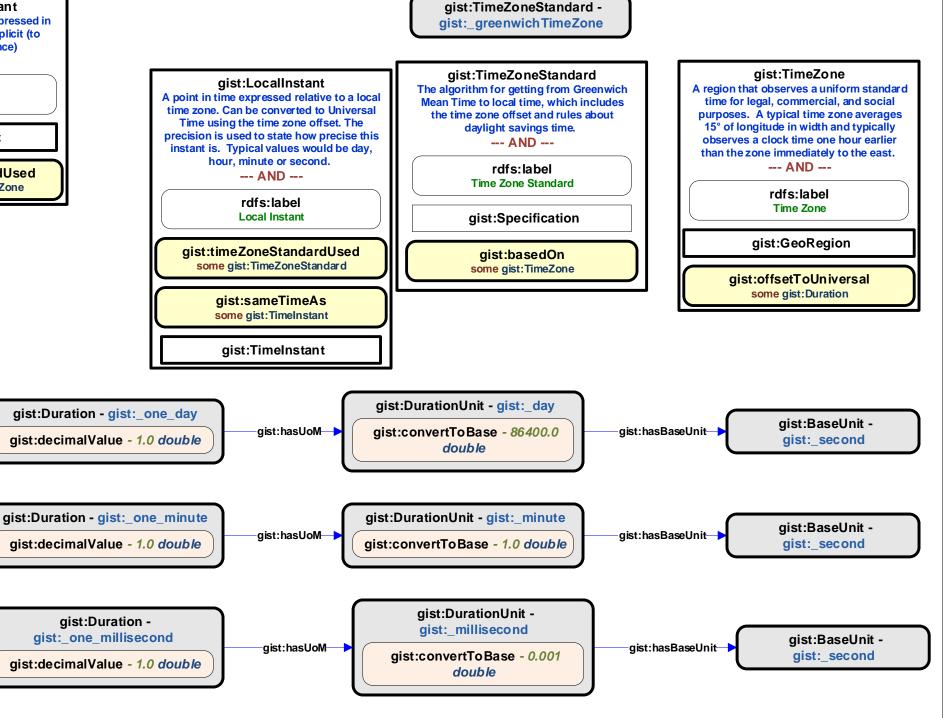
Molar Quantity

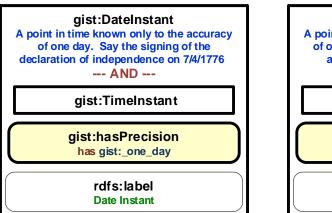
gist:Magnitude

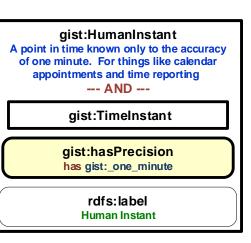
gist:hasUoM

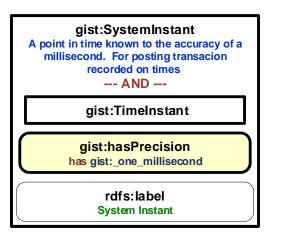
some gist: MoleUnit

gistTime gistTime how timezones and some common precisions are modeled gist:GreenwichInstant By default time instants are expressed in Base URI: https://ontologies.semanticarts.com/o/gistTime grenich, if you need to be explicit (to Version URI: https://ontologies.semanticarts.com/o/gistTime9.0.0 calculate offset for instance) Default Namespace: --- AND ---Default Comment: rdfs:comment Default Label: rdfs:label rdfs:label **Greenwich instant Namespaces** https://ontologies.semanticarts.com/gist/ gist gist:TimeInstant <u>Imports</u> gist:timeZoneStandardUsed https://ontologies.semanticarts.com/o/gistTop9.0.0 has gist:_greenwichTimeZone Location: gistTop9.0.0.owl gist:license https://creativecommons.org/licenses/by-sa/3.0/ gist:sameTimeAs gist:offsetToUniversal Domain:gist:TimeInstant Domain:gist:TimeZone Range:gist:Duration Range:gist:TimeInstant How many hours the timezone if off GMT We can have two local time instants refer to the same time, the same universal time. rdfs:label Offset To Universal rdfs:label Same Time As gist:timeZoneStandardUsed Domain:gist:TimeInstant Range:gist:TimeZoneStandard the "timezone" with Daylight savings adjust rdfs:label **Time Zone Standard Used**









gistPlace gistPlace key GIS style primitives Base URI: https://ontologies.semanticarts.com/o/gistPlace Version URI: https://ontologies.semanticarts.com/o/gistPlace9.0.0 gist:geoContains [T] Default Namespace : gist:geoContainedIn (gist:geoContainedIn) Default Comment: rdfs:comment All the transitive places something is Transitive version of geoDirectlyContains Default Label : rdfs:label located in Domain rdfs:label <u>Namespaces</u> Geo Contained In --- OR --https://ontologies.semanticarts.com/gist/ gist gist:GeoRoute gist:GeoSegment https://ontologies.semanticarts.com/o/gistMeasure9.0.0 Location: gistMeasure9.0.0.owl gist:Landmark gist:license https://creativecommons.org/licenses/by-sa/3.0/ gist:Room gist:GeoSegment gist:fromPlace A single portion of a GeoRegion which has gist:GeoPoint Range:gist:Place been divided (i.e., segmented). origin gist:GeoRegion rdfs:label From Place gist:GeoVolume gist:toPlace gist:fromPlace Range:gist:Place exactly 1 gist:GeoPoint Destination gist:geoOccupiedBy Range what is in the location rdfs:label gist:toPlace --- OR --exactly 1 gist:GeoPoint rdfs:label **Geo Occupied By** gist:GeoRoute gist:GeoRoute gist:GeoSegment gist:geoOccupies An ordered set of GeoPoints that defines a (gist:geoOccupiedBy) path from starting point to ending point. A thing occupies are region gist:Landmark Domain gist:Room --- OR --gist:PhysicalIdentifiableItem gist:GeoPoint gist:OrderedCollection gist:hasPhysicalLocation gist:PhysicalSubstance gist:GeoRegion gist:hasDirectPart Range:gist:Place Where something is located some gist:GeoSegment gist:GeoVolume rdfs:label Range **Has Physical Location** gist:GeoVolume --- OR ---A three-dimensional space on or near the rdfs:label surface of the Earth, such as an oil gist:Place **Geo Contains** reservoir, the body of a lake, or an gist:permanentGeoOccupiedBy What is in the fixed location rdfs:label rdfs:label **Geo Occupies Permanent Geo Occupied By** gist:geoDirectlyContains gist:geoDirectlyContains (gist:geoDirectlyContainedIn) some gist: GeoPoint The subject geospatially contains the gist:permanentGeoOccupies gist:geoDirectlyContainedIn object. E.g. the area of a city contains the (gist:permanentGeoOccupiedBy) the neighborhood is in the city area of its neighborhoods To be in a fixed position on the earth gist:hasMagnitude rdfs:label some gist: Volume rdfs:label rdfs:label Geo Directly Contained In **Geo Directly Contains Permanent Geo Occupies**

Union of all the geo classes --- OR --rdfs:label gist:GeoRoute gist:GeoSegment gist:Landmark gist:Room gist:GeoPoint gist:GeoRegion gist:GeoVolume gist:Room An enclosed area within a building. --- AND ---

rdfs:label

gist:directPartOf

some gist:Building

gist:identifiedBy

some gist:ID

gist:Landmark

Something permanently attached to the Earth. --- AND ---

rdfs:label

Landmark

gist:PhysicalIdentifiableItem

gist:permanentGeoOccupies

some

--- OR ---

gist:GeoVolume

gist:GeoRegion

gist:Building

A man-made structure for dwelling or

working.

rdfs:label

Building

Subclass of gist:Landmark

--- AND ---

rdfs:label

Geo Segment

--- AND ---

rdfs:label

Geo Route

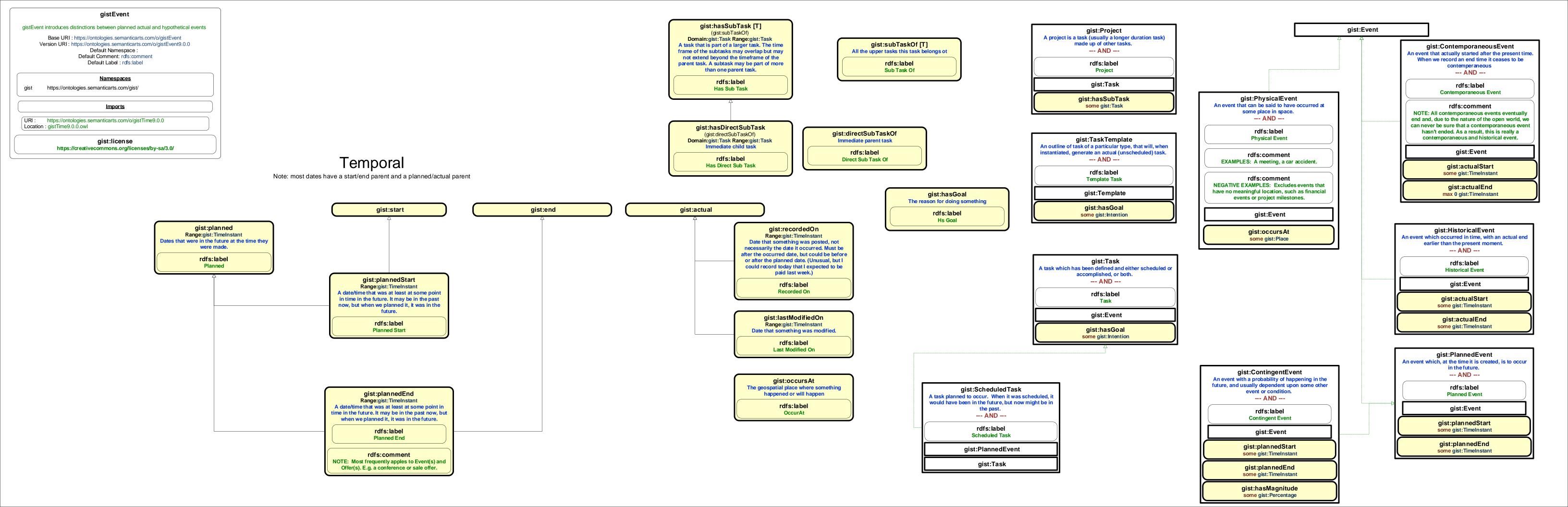
airspace.

--- AND ---

rdfs:label

Geo Volume

gist:Place



gistAddress

gist:Address where we have the various kinds of addresses (postal, building as well as electronic)

Base URI : https://ontologies.semanticarts.com/o/gistAddress Version URI : https://ontologies.semanticarts.com/o/gistAddress9.0.0 Default Namespace :

Default Comment: rdfs:comment
Default Label : rdfs:label

Namespaces

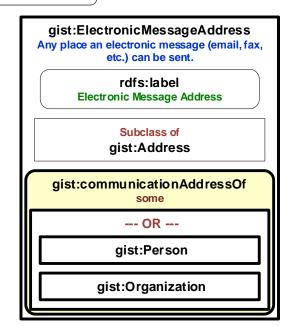
gist https://ontologies.semanticarts.com/gist/

Imports

URI: https://ontologies.semanticarts.com/o/gistPlace9.0.0 Location: gistPlace9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/



gist:hasCommunicationAddress

(gist:communicationAddressOf)
Range:gist:Address
Points to a general class of places you can send messages including postal addresses, fax numbers, phone numbers, email, web site, etc.

rdfs:label

Has Communication Address

gist:hasStreetAddress

(gist:streetAddressOf)
Range:gist:BuildingAddress
A place that can be found on a map, has geo coordinates; you could live or work there.

rdfs:label Has Street Address

gist:communicationAddressOf

Whose address is this

rdfs:label

Communication Address Of

gist:streetAddressOf

Whose street address is this

rdfs:label Street Address Of

gist:Address

A reference to a place (real or virtual) that can be located by some routing algorithm, and where messages or things can be sent to or retrieved from. E.g. PO Box or URL to a pdf file.

rdfs:label Address

Subclass of

gist:Content

gist:TelephoneNumber

A numeric code a telephonic device uses for contacting another telephonic device.

rdfs:label Telephone Number

rdfs:comment

EXAMPLES: Mobile, fax, or landline phone number.

Subclass of

gist:Address

gist:communicationAddressOf some

--- OR ---

gist:Person

gist:Organization

gist:PostalAddress

A set of codes the postal authorities can use to deliver physical mail.

rdfs:label

Postal Address

rdfs:comment

EXAMPLES: a street address, a PO Box, an FPO code, or the route codes.

Subclass of

gist:Address

gist:communicationAddressOf

--- OR ---

gist:Person

gist:Organization

gist:BuildingAddress

An address to which you can send mail, or that you could find in the physical world.

rdfs:label Building Address

Subclass of gist:Address

(N) gist:streetAddressOf some gist:Building

gistOrganization

gistOrganization Government Organizations are introduced

Base URI: https://ontologies.semanticarts.com/o/gistOrganization Version URI: https://ontologies.semanticarts.com/o/gistOrganization9.0.0

Default Namespace :
Default Comment: rdfs:comment
Default Label : rdfs:label

Namespaces

jist https://ontologies.semanticarts.com/gist/

Imports

URI: https://ontologies.semanticarts.com/o/gistTop9.0.0

Location: gistTop9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:GovernmentOrganization -

gist:_united Nations
if the united nations recognizes you as a
country you are a country

gist:recognizedBy

(gist:recognizes)

The entity that formally acknowledges the existence of, as the State recognizes the existence of a particular company

Range

--- OR ---

gist:Person

gist:Organization

rdfs:label

Recognized By

gist:directlyRecognizedBy

The party doing the recognition

rdfs:label

Directly RecognizedBy

gist:recognizes
Recognizes

rdfs:label

Recognizes

gist:GovernmentOrganization

An organization established either by fiat (as a conquering army overtakes a land and declares a government) or by delegation from a fiat government, such as a state or local government or a specific agency.

Differs from a corporation in that it cannot be owned.

--- AND ---

rdfs:label

Government Organization

rdfs:comment

EXAMPLES: The State of Washington
Office of Financial Management; the Food
and Drug Administration; the Scottish
Parliament.

gist:Organization

gist:recognizedBy

some gist:CountryGovernment

rdfs:comment

NOTE: Establishment by a CountryGovernment may be indirect via local, regional, or national GovernmentOrganization(s) that ultimately are recognized by a CountryGovernment.

gist:CountryGovernment

The geopolitical body that runs a geopolitical region recognized as a country.

--- AND ---

rdfs:label

Country Government

gist:GovernmentOrganization

gist:directlyRecognizedBy

has gist:_unitedNations

gist:governs some gist:GeoRegion

gist:GeoPoliticalRegion

A collection of GeoRegions that are being administered by a Government Organization

--- AND ---

rdfs:label

GeoPolitical Region

gist:Collection

gist:hasMember

some gist:GeoRegion

gist:governedBy

some gist:GovernmentOrganization

gist:Group

A collection of People. The group may or may not be an Organization. Many organizations consist of groups of people, but that is not a defining characteristic.

--- AND ---

rdfs:label Group

gist:Collection

gist:hasMember

some gist:Person

gistContent types of content and mediums Base URI: https://ontologies.semanticarts.com/o/gistContent Version URI: https://ontologies.semanticarts.com/o/gistContent9.0.0 Default Namespace : Default Comment: rdfs:comment Default Label : rdfs:label <u>Namespaces</u>

https://ontologies.semanticarts.com/gist/

<u>Imports</u>

https://ontologies.semanticarts.com/o/gistTop9.0.0

Location: gistTop9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:fromAgent The source of a message or shipment Range

--- OR ---

gist:Address

gist:Person

gist:Organization

rdfs:label

From Agent

gist:toAgent

Comment: this is not the inverse of fromAgent. A message can be from someone. If we made it the inverse the person would be "to" the message

--- OR ---

gist:Address

gist:Person

gist:Organization

rdfs:label To Agent

gist:about

(gist:describedIn) Domain:gist:Content Subject matter of a document.

> rdfs:label About

gist:containedText

Range:string

Links to the string corresponding to Text

rdfs:label **Contained Text**

gist:encryptedText

Links to the string corresponding to **EncryptedText**

rdfs:label

Encrypted Text

gist:renderedOn

What media somethign was rendered On

rdfs:label

Rendered On

rdfs:label **Described In**

gist:expressedIn

gist:describedIn

Docuemnt the subject matter appeared in

The language something was expressed in

rdfs:label Expressed In

gist:Message

A specific instance of content sent from an Organization, Person, or Application to at least one other Organization, Person, or Application.

--- AND ---

rdfs:label Message

rdfs:comment

EXAMPLES: An email message, a phone call, a voice message, or a Web Service message.

gist:ContentExpression

gist:fromAgent

--- OR ---

gist:Person

gist:Organization

gist:Address

gist:toAgent some

--- OR ---

gist:Person

gist:Organization

gist:Address

gist:Medium

A physicality on which a work could be implemented or exposed. E.g., paper, clay, or a computer monitor.

gist:Text

Content expressed as words and numbers

(not graphics).

rdfs:label

Text

Equivalent to

--- AND ---

gist:Content

gist:expressedIn some gist:Language

gist:containedText

rdfs:label Medium

Subclass of gist:Category

gist:GeneralMediaType

The real-world media type for content.

rdfs:label

General Media Type

rdfs:comment

EXAMPLE: audio, still image, video, textual, physical (e.g., a statue), or performance (i.e. a play). Or it could be oil or pastel for a painting.

Subclass of

gist:Category

gist:MimeType

A digitized type that computer applications can recognize.

> rdfs:label MIME Type

> Subclass of

gist:Category

gist:ContentExpression

Intellectual Property reduced to text, audio etc. If it contains text (written or spoken), it may be in a language.

> rdfs:label **Content Expression**

> > Subclass of gist:Content

(N) gist:expressedIn some gist:Language

(N) gist:categorizedBy some gist:GeneralMediaType gist:FormattedContent

Content which is in a particular format. (E.g., html, pdf, jpg.) --- AND ---

> rdfs:label Formatted Content

gist:ContentExpression

gist:expressedIn some gist:MimeType

Content which has been expressed, either to print, or through speakers, or on a monitor.

rdfs:label

gist:ContentExpression

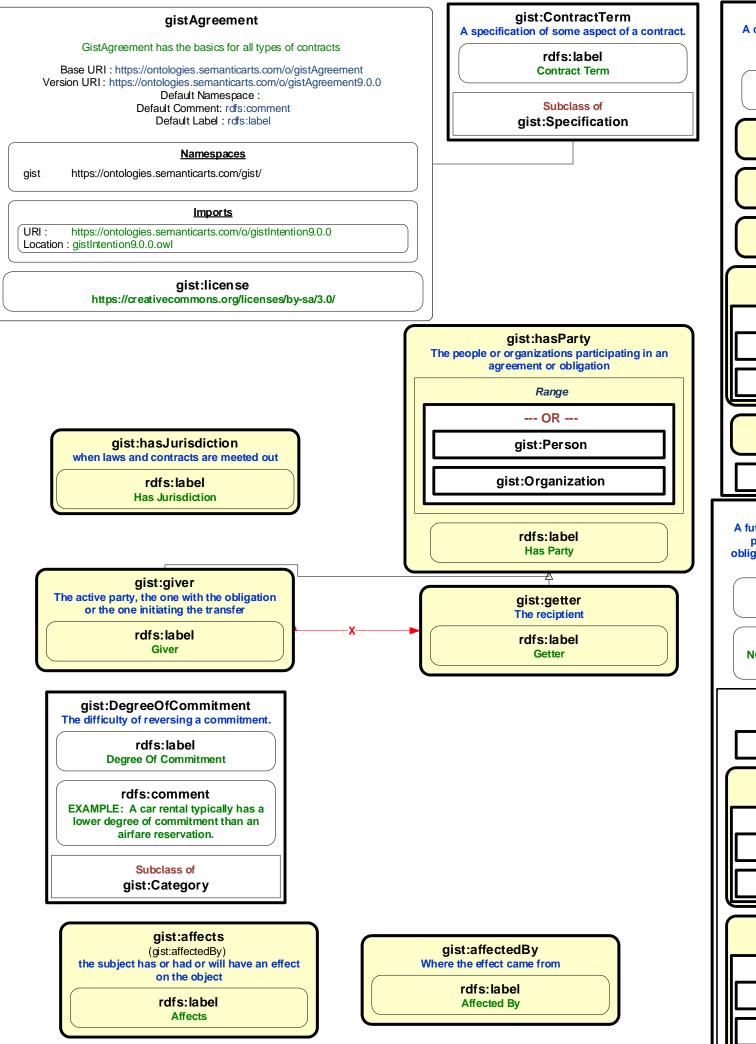
gist:expressedIn some gist:MimeType

gist:RenderedContent

--- AND ---

Rendered Content

gist:renderedOn some gist: Medium



gist:Offer A commitment to buy or sell a described or identified part or service. --- AND --rdfs:label gist:plannedEnd some gist:TimeInstant gist:start some gist:TimeInstant gist:hasMagnitude some gist: Monetary gist:giver --- OR --gist:Person gist:Organization gist:hasDirectPart some gist: CatalogItem gist:ContingentObligation gist:Obligation A future commitment from one organization or person to another. Contracts are sets of obligations to do or forebear, or to indemnify or warrant. rdfs:label Obligation rdfs:comment NOTE: Obligations will often be governed by some Agreement or Offer. Equivalent to --- AND --gist:Commitment gist:giver --- OR --gist:Person gist:Organization gist:getter --- OR --gist:Person

gist:Organization

```
gist:Agreement
   soemthing which two or more People or
    Organizations mutually commit to do
               --- AND ---
               rdfs:label
                Agreement
            gist:Commitment
           gist:hasDirectPart
           min 2 gist:Obligation
             gist:hasParty
                --- OR ---
               gist:Person
            gist:Organization
             gist:Contract
  an Agreement which can be enforced by
               --- AND ---
               rdfs:label
                Contract
            gist:Agreement
         gist:hasJurisdiction
    some gist:GovernmentOrganization
      gist:ContingentObligation
An obligation that is not yet firm. There is some
contingent event, the occurrence of which will
    cause the obligation to become firm.
               rdfs:label
          Contingent Obligation
             rdfs:comment
    NOTE: A contingent obligation might
    have a getter counterparty (as in the
   case of insurance); but it might not (as
          in the case of an offer).
              Equivalent to
               --- AND ---
           gist:Commitment
               gist:giver
                --- OR ---
              gist:Person
           gist:Organization
           gist:triggeredBy
             some gist:Event
```

```
gist:Commitment
 An obligation (possibly unilateral).
           --- AND ---
            rdfs:label
           Commitment
            gist:giver
              some
            --- OR ---
           gist:Person
        gist:Organization
      gist:categorizedBy
   some gist: DegreeOfCommitment
             --- OR ---
         gist:Restriction
        gist:Requirement
          gist:Account
An agreement having a balance, as in a
bank account, or credit card account, or
    Accounts Receivable account.
            --- AND ---
            rdfs:label
             Account
         gist:Agreement
       gist:hasMagnitude
         some gist:Balance
          gist:Balance
An amount decremented or incremented
    by a series of transactions.
            --- AND ---
            rdfs:label
             Balance
         gist:Magnitude
         gist:affectedBy
        some gist: Transaction
        gist:Transaction
An event which has an effect on at least
         one accumulator.
            rdfs:label
           Transaction
```

Subclass of

gist:Event

gistTemporalRelation

gistTe3mporal the parent class of all Temporal Relations

Base URI: https://ontologies.semanticarts.com/o/gistTemporalRelation Version URI: https://ontologies.semanticarts.com/o/gistTemporalRelation9.0.0

Default Namespace : Default Comment: rdfs:comment Default Label : rdfs:label

<u>Namespaces</u>

gist https://ontologies.semanticarts.com/gist/

<u>Imports</u>

URI: https://ontologies.semanticarts.com/o/gistTime9.0.0 Location: gistTime9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:connectedTo

A non owning, non causal, non-subordinate (ie. peer to peer) relationship.

rdfs:label Connected To

gist:TemporalRelation

A relationship existing for a period of time.

rdfs:label Temporal Relation

rdfs:comment

NOTE: A temporal relation must be gist:connectedTo a minimum of two objects. For example, a temporal relation representing a period of employment is connected both to the person and to the role/position they held.

rdfs:comment

EXAMPLES: employs-Employment, hasStreetAddress-EstablishedLocation. One important context for reifying a property.

(N) gist:start some gist:TimeInstant

(N) gist:end some gist:TimeInstant

(N) gist:connectedTo min 2 owl:Thing

gistCategory

gist:Category is how we model Taxonomies and Tags

Base URI: https://ontologies.semanticarts.com/o/gistCategory Version URI: https://ontologies.semanticarts.com/o/gistCategory9.0.0

Default Namespace: Default Comment: rdfs:comment Default Label: rdfs:label

<u>Namespaces</u>

https://ontologies.semanticarts.com/gist/

Imports

https://ontologies.semanticarts.com/o/gistTop9.0.0

Location: gistTop9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:hasTag

Used for folksonomy style categories (non controlled vocabulary)

> rdfs:label has Tag

gist:Tag

This is for folksonomy type terms, which can be made up on the fly by users.

--- AND ---

rdfs:label

gist:Category

gist:hasTag some string

gist:ControlledVocabulary A collection of terms approved and managed by some organization or person. --- AND --rdfs:label **Controlled Vocabulary** gist:Collection gist:hasMember some gist: Category gist:governedBy --- OR --gist:Person

gist:Organization

gist:hasSubCategory **Has Sub Category**

rdfs:label

Has Sub Category

gist:hasSuperCategory

(gist:hasSubCategory) Categories linked in this way are to represent true sub types. The categories aren't subtypes but classes defined by a supercategory will be a superclass of one derrived from its sub

rdfs:label

Has Super Category

gist:hasUniqueSuperCategory

Used for taxos that must have single parents

rdfs:label

Has Unique Super Category

(gist:hasNavigationalChild)

Used for informal hierarchical taxonomies. Supports polyhierarchies

rdfs:label

Has Navigational Parent

gist:hasSuperCategory

gist:hasSubCategory

some gist: Category

gist:Taxon

a category that exists in at least one hierarchy

--- AND ---

rdfs:label Taxon

gist:Category

--- OR ---

some gist: Category

gist:ControlledVocabulary

gist:hasNavigationalChild

Used for informal hierarchical taxonomies. Supports polyhierarchies

rdfs:label

Has Navigational Child

gist:hasNavigationalParent

gist:hasUniqueNavigationalParent [F] Used for taxos that must have single parents

rdfs:label

Has Unique Navigational Parent

gist:Taxonomy

A controlled vocabulary arranged as a hierarchy of concepts.

> rdfs:label Taxonomy

Equivalent to --- AND ---

gist:hasMember some gist:Taxon

gistilitelli

gistIntention the Teleological aspect of systems. Whey are we doing something.

Base URI: https://ontologies.semanticarts.com/o/gistIntention Version URI: https://ontologies.semanticarts.com/o/gistIntention9.0.0

Default Namespace :
Default Comment: rdfs:comment
Default Label : rdfs:label

Namespaces

iist

https://ontologies.semanticarts.com/gist/

mports

JRI: https://ontologies.semanticarts.com/o/gistTop9.0.0

Location: gistTop9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:prevents

Domain:gist:Intention Range:gist:Behavior The intention (say a law) is intended to prevent this kind of behavior (say jaywalking)

> rdfs:label Prevents

gist:allows

Domain:gist:Intention
Range:gist:Behavior
The intention (say a grant) allows a
particular kind of activity (for instance
egress)

rdfs:label

gist:requires

Domain:gist:Intention Range:gist:Behavior An intention that sets out a state of satisfaction (you are required to drive on right side of the road)

> rdfs:label Requires

gist:conformsTo

Range:gist:Intention
The subject conforms to the Object, e.g.
meet an obligation, meet terms of an
offer, adhere to a specification

rdfs:label Conforms To

gist:basisFor

(gist:basedOn)

Reason for an event

rdfs: label Basis For

gist:Restriction

A description of things one is prevented from doing. Most laws are restrictions.

--- AND ---

rdfs:label

Restriction

gist:Intention

gist:prevents

some gist:Behavior

gist:Requirement

A documented physical or functional need that a particular design, product, or process must be able to perform. Alternately, the obligation of a person or organization to behave in a certain way (i.e., drive on the right side of the road).

rdfs:label Requirement

Subclass of gist:Intention

gist:requires some gist:Behavior

gist:Specification

A set of requirements to be satisfied by a material, design, product, or service.

rdfs:label Specification

Subclass of gist:Requirement

gist:Goal

A specific intentional endpoint. One can tell whether it has been achieved, as opposed to an intention, which may not have an evaluation function.

rdfs:label

Subclass of gist:Intention

gist:Permission

A description of things one is permitted to do. This could be broad, such as free speech, but more often is very specific, such as the right of egress through a particular property.

--- AND ---

rdfs:label Permission

gist:Intention

gist:allows

some gist:Behavior

gist:ProductSpecification

Offering something which could be physically warehoused or digitally stored.

--- AND ---

rdfs:label

Product Specification

gist:CatalogItem

gist:categorizedBy some gist:ProductCategory

gist:ServiceSpecification

A description of something that can be done for a person or organization (which produces some form of an act).

--- AND ---

rdfs:label Service Specification

gist:CatalogItem

gist:basisFor some gist:Event

gist:CatalogItem

A description of a product or service to be delivered, given in a sufficient level of detail that a receiver could determine whether delivery constituted discharge of the obligation to deliver.

rdfs:label Catalog Item

rdfs:comment

NOTE: In short, an unambiguous characterization of what it is that a potential buyer is paying for.

Subclass of

gist:Specification

gist:BundledCatalogItem

Any combination of descriptions of things offered together. Could be a kit (several parts offered together), but could also be a product plus a warranty.

--- AND ---

rdfs:label

Bundled Catalog Item

gist:CatalogItem

gist:hasDirectPart

some gist: CatalogItem

gist:ProductCategory

Any of many ways of categorizing products, including models, NATO product codes, and the like.

rdfs:label

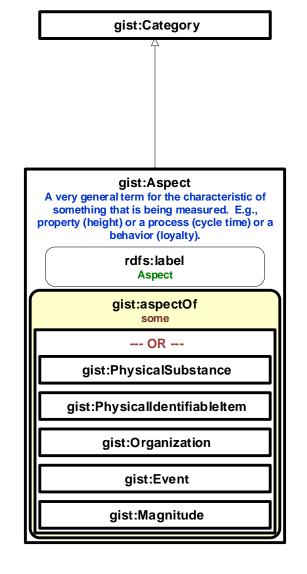
Product Category

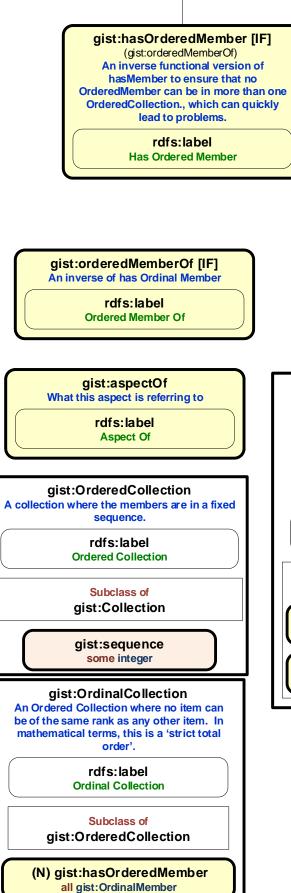
Subclass of

gist:Category

gistMeasure gistMeasure adds the act of measuring to magnitude Base URI: https://ontologies.semanticarts.com/o/gistMeasure Version URI: https://ontologies.semanticarts.com/o/gistMeasure9.0.0 Default Namespace : Default Comment: rdfs:comment Default Label: rdfs:label **Namespaces** https://ontologies.semanticarts.com/gist/ <u>Imports</u> https://ontologies.semanticarts.com/o/gistEvent9.0.0 Location : gistEvent9.0.0.owl gist:license

https://creativecommons.org/licenses/by-sa/3.0/





gist:hasMember

gist:Category gist:OrdinalMember A member of an Ordinal Collection. It necessarily precedes or is preceded by another Ordinal Member in the same collection. (This last condition cannot be formally stated in OWL). rdfs:label **Ordinal Member** (NS) gist:orderedMemberOf some gist:OrdinalCollection Subclass of --- OR --gist:directlyPrecedes some gist:OrdinalMember gist:directlyPrecededBy some gist: Ordinal Member

gist:ReferenceValue

A measure that was neither measured nor estimated

but set by fiat. For instance, a goal. There is no

Measurement associated with a ReferenceValue.

rdfs:label

Reference Value

Subclass of

gist:Magnitude

gist:precedes [T] A generic ordering relation indicating that the Subject has the same order as or comes before the Object. The 'greater than or equal to' symbol is often used for this relation. rdfs:label Precedes

> gist:directlyPrecededBy Inverse of directly precedes

gist:directlyPrecedes

(gist:directlyPrecededBy) A generic ordering relation indicating

that the Subject comes immediately

before the Object.

rdfs:label

Directly Precedes

rdfs:label **Directly Preceded By**

gistDimensionedUnits

gist9.0.0 dimensioned units of measure. This extension allows (and requires) you to have a conversion factor for all units with the same dimension. If you introduce MilesPerHour you will have to supply the conversion to MetersPerSecond (even though the system "knows" how to convert Miles to meters and hours to seconds. You will have to supply and additional conversion when you introduce KilometersPerHour. Any new combination of primtive rations requires a new Dimension. While this is a burden, it allows units to be converted in sparql

Base URI : https://ontologies.semanticarts.com/o/gistUnitDim Version URI : https://ontologies.semanticarts.com/o/gistUnitDim9.0.0

Default Namespace :
Default Comment: rdfs:comment
Default Label : rdfs:label

<u>Namespaces</u>

gist https://ontologies.semanticarts.com/gist/

<u>Imports</u>

URI: https://ontologies.semanticarts.com/o/gistUnit9.0.0 Location: gistUnit9.0.0.owl

gist:license

https://creativecommons.org/licenses/by-sa/3.0/

gist:CoherentUnit

A unit that is expressed in units that have no conversions. It may be a simple unit. It may also be a product or ratio unit that bottoms out in simple units.

--- OR ---

rdfs:comment

NOTE: coherent unit is the physics term for this, informally you might think of it as the standard unit for a given dimension.

rdfs:comment

NOTE: in principle, the CoherentUnit for a ProductUnit or RatioUnit can be inferred by recursively decomposing the products and ratios into their respective CoherentUnits, bottoming out in SimpleUnits

rdfs:comment

EXAMPLEs: a simple unit: kilogram

rdfs:comment

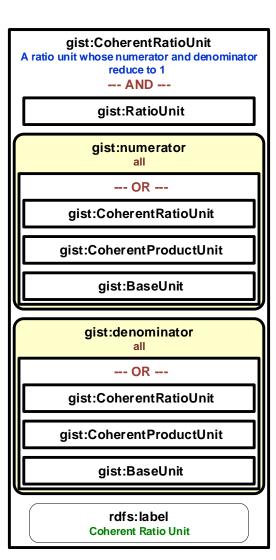
EXAMPLEs: the standard unit for acceleration is meters per square second (feet per square second requires a conversion)

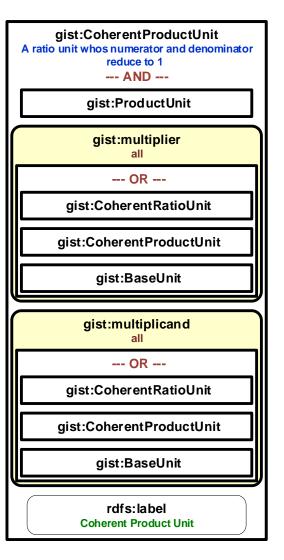
gist:BaseUnit

gist:CoherentRatioUnit

gist:CoherentProductUnit

rdfs:label Coherent Unit





gist:hasStandardUnit
Domain:gist:UnitOfMeasure
Range:gist:CoherentUnit
For a complex unit refers to a unit that
has all the component parts in SI

rdfs:label

Has Standard Unit

gist:hasBaseUnit

Range:double

Note this kind of conversion will only work with temperatures if they are in Kelvin or Rankine (with a true 0). You multiply to get to the base, divide to go from the base. mph to mps is .44704.

The multiple from kph to mps is .277778

. To convert 60 mph to kph is (60 * .44704 / 277778 or 96.56056 kph

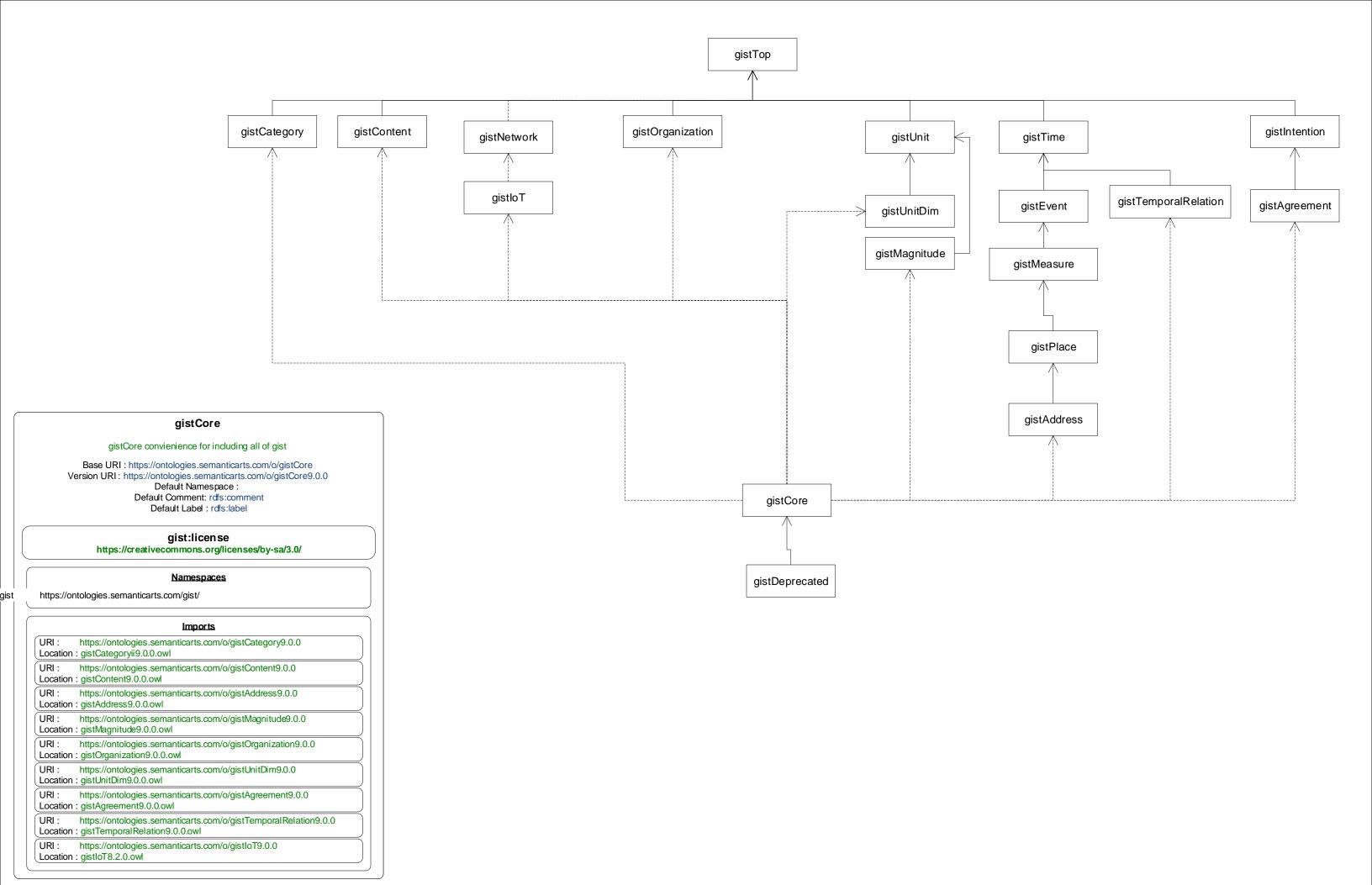
rdfs:label

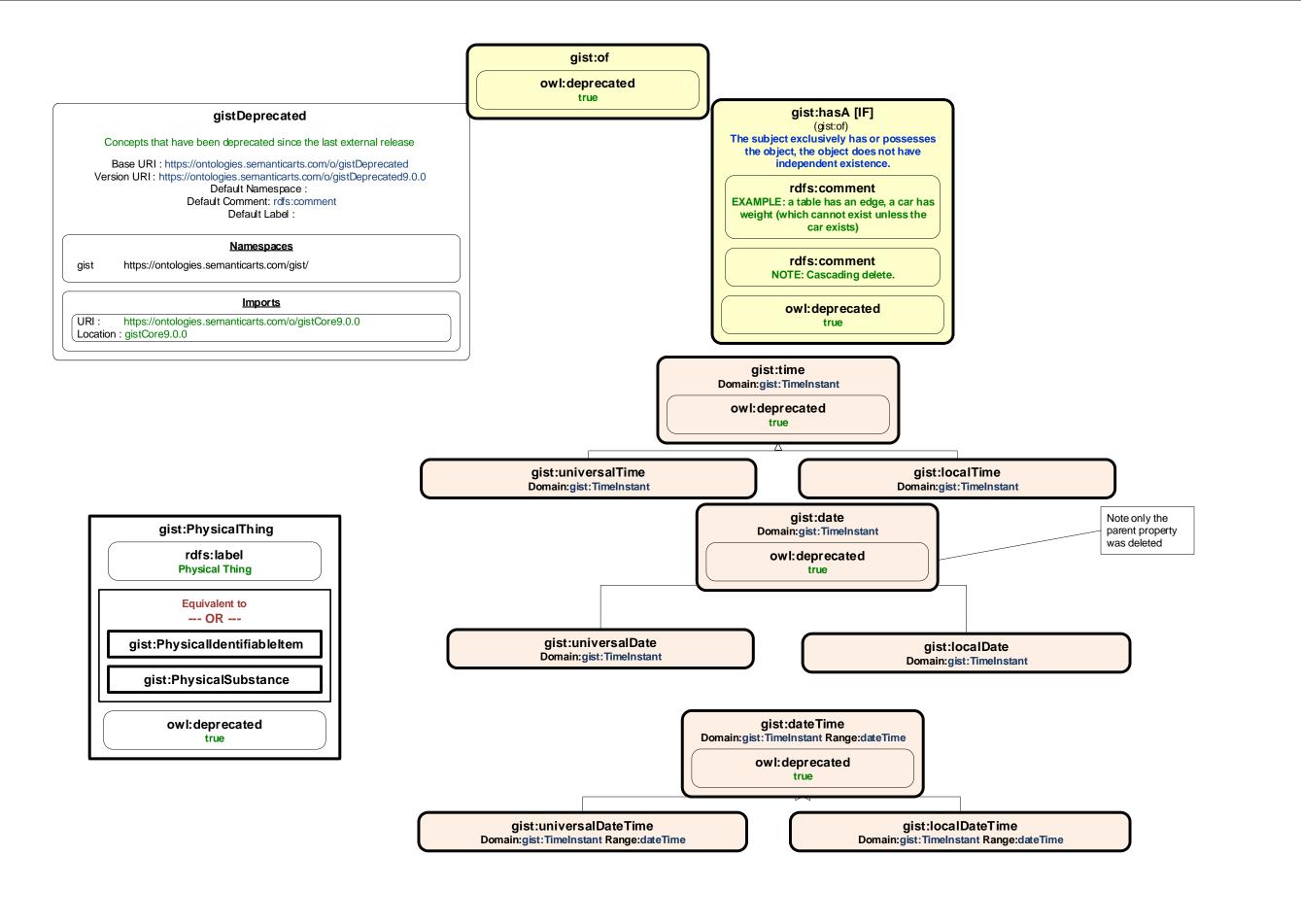
Convert To Standard

gist:convertToBase

gist:convertToStandard

Domain:gist:UnitOfMeasure





gist:party

Range:gist:SocialBeing
The people or organizations participating
in an agreement or obligation

owl:deprecated

true

gist:TimeInterval

rdfs:label Time Interval

rdfs:comment

EXAMPLE: Jan 1 through Jan 8, 2013.

rdfs:comment

NEGATIVE EXAMPLE: "8:00am" (with no date).

rdfs:comment

NOTE: While Time Interval has a Duration, it is not itself a Duration.

rdfs:comment

NOTE: The end should be later than the start, but this is not enforced via OWL.

owl:deprecated

true

(N) gist:start some gist:TimeInstant

(N) gist:end some gist:TimeInstant

(N) gist:hasMagnitude some gist:Duration

Change Log Management

-As you work, record changes on the change log as version X.x until it is time to save out a release (internal or external)

-Then, before saving out a release, update all change log entries marked as "X.x" to the version number you are about to save out (this should be all changes since last release)

KEY for Change Log

V: Visio/Visualization changes only, not affect the owl (callouts, layout, grouping

CL: for clarity only, better comments, fixing typos, laying out differently, etc. AD: purely additive, will not affect anything already existing.

RF: refactoring, no semantic import. Includes changing names where old name is deprecated.

SU: has semantic import from usage perspective, e.g. a comment changes usage which could give semantic errors.

SI: has semantic import from inference perspective. axiom added, removed, changed etc.

BI: Backwards incompatible

gistX.x Change Log

gist9 Change Log		
9.0.0 11/27/2018	42 issues from git went into this release many of which were not backward compatible hence 9.0.0	
9.0.0 11/27/2018	Most are in the gistCouncil persentation of 12/6/2018	
9.0.0 12/6/2018	Also changed gist:occuredAt to gist:occurAt	
9.0.0 3/27/2019	changed gistoccurAt to gist:occursAt	
9.0.0 3/27/2019	Physical Event changed it from ocurs At GeoRegion to occurs At Place	
9.0.0 3/27/2019	geoOccupies range changed from GeoRegion or GeoVolume to Place	
9.0.0 3/27/2019	removed gist:preferredTerm (we can use skos:prefLabel if we need this)	
9.0.0 3/27/2019	Relaxed exactly 1 to some values for RatioUnit and ProductUnit	
9.0.0 3/27/2019	changed all namespaces from http: to https:	

To be included in ChangeLog of next external release: