| **Name** | **Type Of Thing** | **Property** | **Definition** | **Equivalent to** | **Parent** | **Mutually Exclusive With** | **Related Thing or Type** | **Inverse Of Property** | **Concept Type** | **Editorial Note** | **Explanatory Note** | **Definition Source** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AutonomousAgent | autonomous agent |  |  | autonomous agent |  |  |  |  | Class |  | Proxy for autonomous agent |  |
| Reference | reference |  | a concept that refers to (or stands in for) another concept |  |  |  |  |  | Class |  |  | http://grammar.about.com/od/rs/g/referenceterm.htm |
| Referent | referent |  | the concept that another concept stands for or refers to |  |  |  |  |  | Class |  |  | http://grammar.about.com/od/rs/g/referentterm.htm |
| appliesTo | reference | applies to | a relation indicating something that is pertinent or relevant to the concept |  | refers to |  |  |  | Relationship Property |  |  |  |
| causes |  | causes | the relationship between an event (the cause) and a second event (the effect), where the second event is understood as a consequence of the first; also, the relationship between a set of factors (causes) and a phenomenon (the effect) |  |  |  |  | is caused by | Relationship Property |  |  |  |
| characterizes | reference | characterizes | describes the character or quality of |  | refers to |  |  |  | Relationship Property |  |  |  |
| classifies | reference | classifies | arranges in classes; assigns to a category |  | refers to |  |  | is classified by | Relationship Property |  |  | Merriam-Webster Dictionary |
| comprises |  | comprises | includes, especially within a particular scope, is made up of |  |  |  |  |  | Relationship Property |  |  |  |
| confers |  | confers | grants or bestows by virtue of some authority |  |  |  |  | is conferred by | Relationship Property |  | This property should be read as describing the conferral of some legal power or duty, some commitment or some social construct, and is a property of some social construct such as an agreement or some legal authority. These concepts, which would describe the kind of thing of which this is a property, and the kinds of thing in terms of which this property is framed, are outside the scope of this mode land so are not shown.  | Merriam-Webster Online Dictionary |
| defines | reference | defines | determines or identifies the essential qualities or meaning of, discovers and sets forth the meaning of, fixes or marks the limits of, demarcates |  | represents |  |  | has definition | Relationship Property |  |  |  |
| denotes | reference | denotes | represents, calls by a distinctive title, term, or expression |  | represents |  |  | has denotation | Relationship Property |  |  |  |
| designates | autonomous agent | designates | to name something officially or appoint someone to a position officially |  |  |  | autonomous agent |  | Relationship Property |  |  | http://www.dictionarycentral.com/definition/designate.html |
| embodies |  | embodies | is an expression of, or gives a tangible or visible form to (an idea, quality, or feeling), makes concrete and perceptible  |  |  |  |  |  | Relationship Property |  | This property should be interpreted as being the property of a union of concrete things and information constructs, and as referring to some abstract thing or to some mediating thing or both, in the informative ontology of conceptual abstractions.  | http://www.merriam-webster.com/dictionary/govern |
| governs |  | governs | prevails or has decisive influence over; exercises authority |  |  |  |  | is governed by | Relationship Property |  | This property should be read as being the property of a logical union of social construct (in the informative abstractions ontology) and legal person, and as referring to 'thing'.  | http://www.merriam-webster.com/dictionary/govern |
| has |  | has | indicates that someone (or something) possesses something, as a characteristic, attribute, feature, capability, and so forth |  |  |  |  |  | Relationship Property | As used in FIBO, this definition of has specifically excludes possession in the sense of ownership. |  | Encarta Webster's Dictionary of the English Language (2004) |
| hasAcquisitionDate |  | has acquisition date | links an asset or owner/controller/controllee to the date of acquisition |  |  |  | xsd:dateTime |  | Simple Property |  |  |  |
| hasAlias |  | has alias | Any other name by which an individual or organization is known |  | has name |  | text |  | Simple Property | Added at SME Review, to meet AML requirements |  |  |
| hasCommonName |  | has common name | a name by which something is frequently referred, without reference to any formal usage or structure |  | has name |  | text |  | Simple Property |  |  |  |
| hasContext |  | has context | provides a context in which something is defined, expressed, or represented |  | has |  |  |  | Relationship Property |  | This property should be read as referring to some context (known as 'mediating thing') in the informative upper ontology which is not included in this model. It should also be read as being the property of some contextually defined thing (known in the informative upper ontology as 'relative thing'). |  |
| hasDefinition |  | has definition | specifies a form of words that conveys the meaning associated with something |  | has representation |  | reference | defines | Relationship Property |  |  |  |
| hasDenotation |  | has denotation | relates a concept (or something else, but typically a concept) to a representation or denotation for that concept |  | has representation |  | reference | denotes | Relationship Property |  |  |  |
| hasDesignation | autonomous agent | has designation | relates an individual or organization to a position, role, or other designation |  |  |  |  |  | Relationship Property |  |  |  |
| hasDispositionDate |  | has disposition date | links something, such as an asset or its owner/controller/controllee to the date something was sold, transferred, destroyed, etc. |  |  |  | xsd:dateTime |  | Simple Property |  |  |  |
| hasFormalName |  | has formal name | a name by which something is known for some official purpose or context, or which is structured in some way such as to always follow the same format regardless of usage |  | has name |  | text |  | Simple Property |  |  |  |
| hasIdentity |  | has identity | provides a means for identifying something that fills a particular role |  | has |  |  |  | Relationship Property |  | This property should be read as being a property of some kind of 'relative thing' as defined externality to this ontology. The property is usually but not exclusively framed with reference to some 'independent thing' but may take other forms and so should be regarded as having a target of 'thing'. |  |
| hasLegalName |  | has legal name | the name used to refer to an person or organization in legal communications |  | has formal name |  | text |  | Simple Property |  |  |  |
| hasMember |  | has member | relates something, typically a group or organization, to some discrete thing identified as a part (member) of it  |  |  |  |  | is member of | Relationship Property |  | This property should be read as being the property of a logical union of group and organization (not shown). |  |
| hasRepresentation |  | has representation | relates a concept to some textual or other symbol which is intended to convey the sense of that concept or to some form of words which sets out the meaning of that concept |  | has |  | reference | represents | Relationship Property |  |  |  |
| hasUniqueIdentifier |  | has unique identifier | has some textual or numeric information which when taken in combination with some associated scheme is unique to the thing and may be used to distinguish it from other things of the same or different type |  |  |  | text |  | Simple Property |  | With reference to a given (possibly implicit) set of objects, a unique identifier (UID) is any identifier which is guaranteed to be unique among all identifiers used for those objects and for a specific purpose. The uniqueness requires and is guaranteed by the existence of a scheme associated with the identifier. |  |
| holds | autonomous agent | holds | is the relationship between a thing and something it possesses, or over which it exercises some ownership or control or has at its discretion the ability to dispose of it as it sees fit  |  |  |  |  | is held by | Relationship Property |  |  |  |
| involves |  | involves | (of a situation or event) includes (something) as a necessary part or result |  |  |  |  |  | Relationship Property |  |  |  |
| isAppointedBy | autonomous agent | is appointed by | indicates the individual or group that has assigned or appointed someone to an office or position |  |  |  | autonomous agent | appoints | Relationship Property |  |  |  |
| isCausedBy |  | is caused by | is the relationship between an event (the effect) and a second event (the cause), where the first event is understood as a consequence of the second; also, the relationship between a set of factors (causes) and a phenomenon (the effect) |  |  |  |  | causes | Relationship Property |  |  |  |
| isClassifiedBy |  | is classified by | indicates the classification scheme used to classify something |  |  |  | reference | classifies | Relationship Property |  |  |  |
| isConferredBy |  | is conferred by | a relationship between a right or obligation and the vehicle, such as an agreement or contract, that vests (or confers) said right or obligation |  |  |  |  | confers | Relationship Property |  | This property should be read as describing some legal power or duty, some commitment or some social construct being conferred as a result of some social construct such as an agreement or some legal authority. These concepts, which would describe the kind of thing of which this is a property, and the kinds of thing in terms of which this property is framed, are outside the scope of this model and so are not shown.  |  |
| isConferredOn |  | is conferred on | that on which the conferred thing is conferred |  |  |  | autonomous agent |  | Relationship Property |  |  |  |
| isControlledBy |  | is controlled by | is influenced, managed, or directed by |  |  |  |  | controls | Relationship Property |  |  |  |
| isGovernedBy |  | is governed by | a relationship between a contract, agreement, jurisdiction, or other legal construct and the regulation, policy, procedure, or legal person that regulates or oversees (governs) it |  |  |  |  | governs | Relationship Property |  | This property should be read as being the property of some thing and as referring to a logical union of social construct (in the informative abstractions ontology) and legal person.  |  |
| isHeldBy |  | is held by | something that is possessed by and at least partially under the control of something which can be used or acted on by the holder, regardless of ownership |  |  |  | autonomous agent | holds | Relationship Property |  |  |  |
| isIssuedBy |  | is issued by | identifies an office or organization responsible for circulating, distributing, or publishing something |  |  |  | autonomous agent |  | Relationship Property |  |  | http://www.thefreedictionary.com/issue |
| isManagedBy |  | is managed by | relates something to another thing that has some role in directing its affairs |  |  |  | autonomous agent | manages | Relationship Property |  |  |  |
| isMandatedBy |  | is mandated by | relates a responsibility, capacity, or action to that which requires it |  | is conferred by |  |  |  | Relationship Property |  | This prooerty should be read as being a property of some social construct as defined in the informative ontology for conceptual abstractions, to some other social construct such as a legal instrument or an agreement.  |  |
| isMemberOf |  | is member of | belonging, either individually or collectively, to a group |  |  |  |  | has member | Relationship Property |  | This property should be read as being framed in terms of a logical union of group and organization (not shown). |  |
| isProvidedBy |  | is provided by | is made available by |  |  |  | autonomous agent | provides | Relationship Property |  |  |  |
| isUsedBy |  | is used by | relates something to a thing that has the ability to employ or deploy it as appropriate |  |  |  | autonomous agent | uses | Relationship Property |  |  |  |
| manages | autonomous agent | manages | relates an autonomous agent to something that it directs in some way |  |  |  |  | is managed by | Relationship Property |  |  |  |
| provides | autonomous agent | provides | makes something available to |  |  |  |  | is provided by | Relationship Property |  |  |  |
| refersTo | reference | refers to | the relationship between a reference and the concept it stands for or refers to, i.e., the referent for that reference |  |  |  |  |  | Relationship Property |  |  |  |
| represents | reference | represents | relates some textual or other symbol or some set of words to some concept that has the sense or meaning the representation is intended to convey |  | refers to |  |  | has representation | Relationship Property |  |  |  |
| uses | autonomous agent | uses | relates an autonomous agent to something that it has the ability to employ in some way |  |  |  |  | is used by | Relationship Property |  |  |  |
| wasFormerlyKnownAs |  | was formerly known as | a name by which something was known in the past |  | has name |  | text |  | Simple Property |  |  |  |
| appoints | autonomous agent | appoints | assigns a job or role to someone, selects or designates to fill an office or a position, fixes or sets by authority or by mutual agreement |  | designates |  | autonomous agent | is appointed by | Relationship Property |  |  | Free Online Dictionary |
| hasPart |  | has part  | indicates any portion of a thing, regardless of whether the portion itself is attached to the remainder or detached; cognitively salient or arbitrarily demarcated; self-connected or disconnected; homogeneous or gerrymandered; material or immaterial; extended or unextended; spatial or temporal |  | has |  |  | is a part of | Relationship Property |  | This property relates a thing to anything which is a proper part of that thing. This is not parthood in the sense of a the role of part which may be played by interchangeable things such as wheels; instead this property relates an independent thing to something which makes up a part of it.  | Stanford Encyclopedia of Philosophy at http://plato.stanford.edu/entries/mereology/ |
| isPartOf |  | is a part of | relates something to a thing that it is some component or portion of, regardless of how that whole-part relationship is manifested, i.e., attached to the remainder or detached; cognitively salient or arbitrarily demarcated; self-connected or disconnected; homogeneous or gerrymandered; material or immaterial; extended or unextended; spatial or temporal; the most generic part relation, reflexive, asymmetric, and transitive |  |  |  |  | has part  | Relationship Property |  | This property represents what is also known in the literature of 'proper parthood',that is the recursive (transitive) relationship whereby things have parts which have parts and so on. This is distinct from a separate meaning of 'has part' which would refer to an item playing the named role of a part such as a nearside front wheel. for the avoidance of doubt, this is not that relationship, and this property applies betwen independent things and other independent things which may make up their parts. | Stanford Encyclopedia of Philosophy at http://plato.stanford.edu/entries/mereology/ |
| controls |  | controls | exercises authoritative or dominating influence over; directs |  |  |  |  | is controlled by | Relationship Property |  |  | The American Heritage(R) Dictionary of the English Language, Fourth Edition |