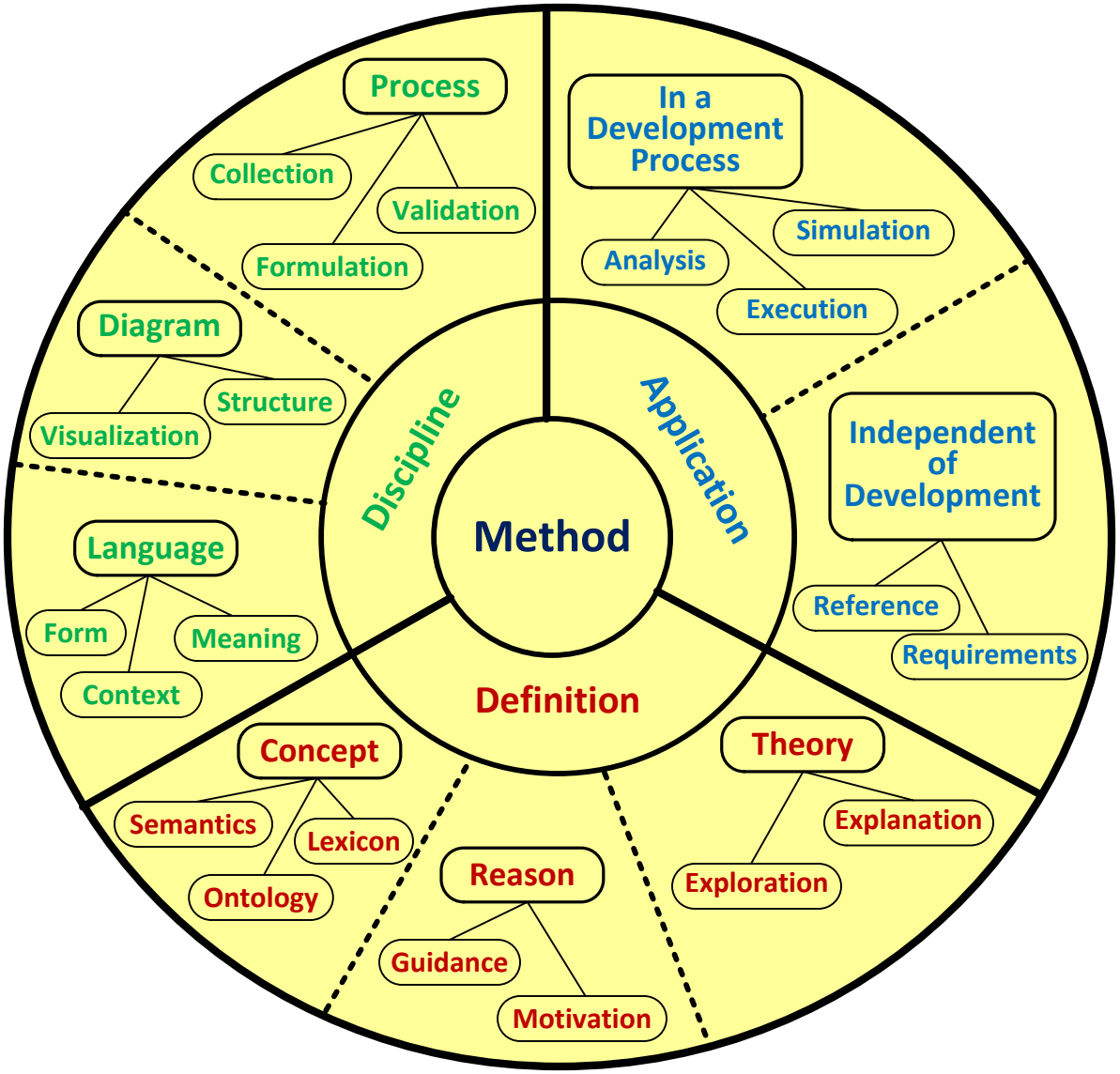
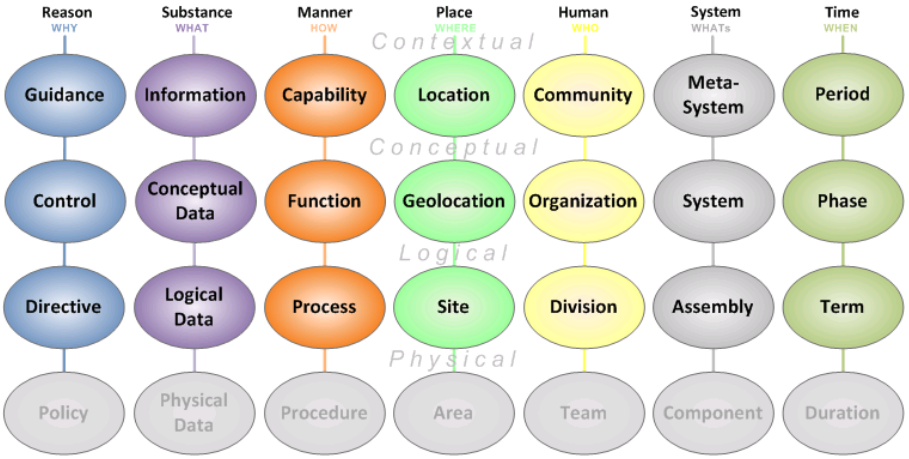
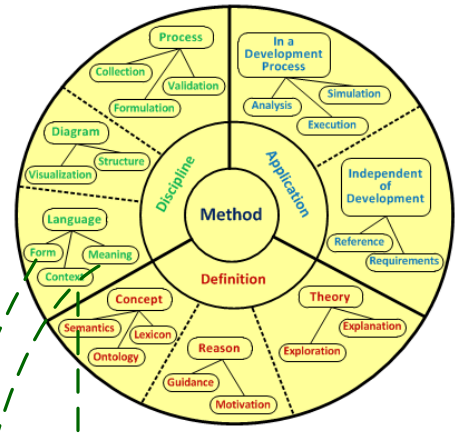


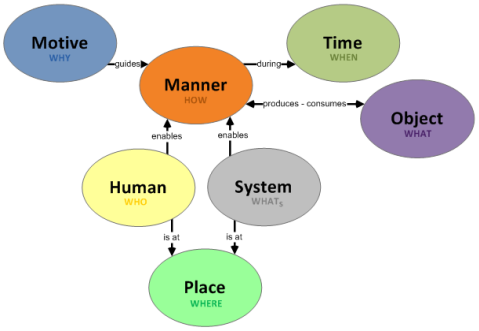
42 Modeling Method Conceptual Model

Updated 27 September, 2011



42 Enterprise Architecture Capture Framework

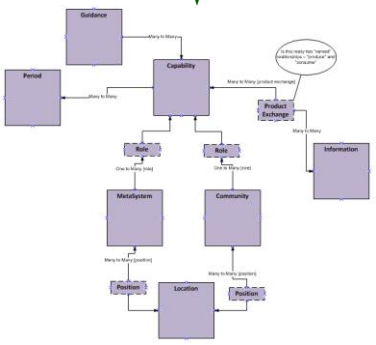




42 MetaModel

Contextual	Guidance	Information	Capability	Location	Community	Metasystem	Period
Conceptual	Control	Conceptual Data	Function	Geolocation	Organization	System	Phase
Logical	Directive	Logical Data	Process	Site	Division	Assembly	Term

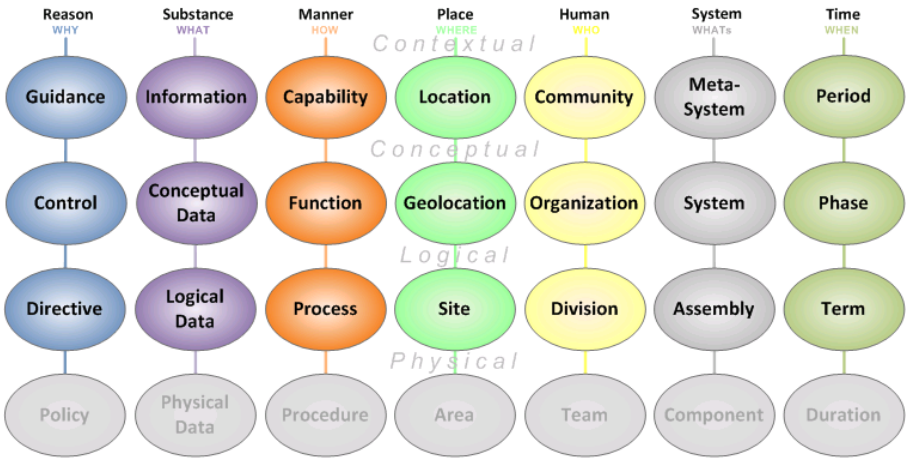
42 Lexicon



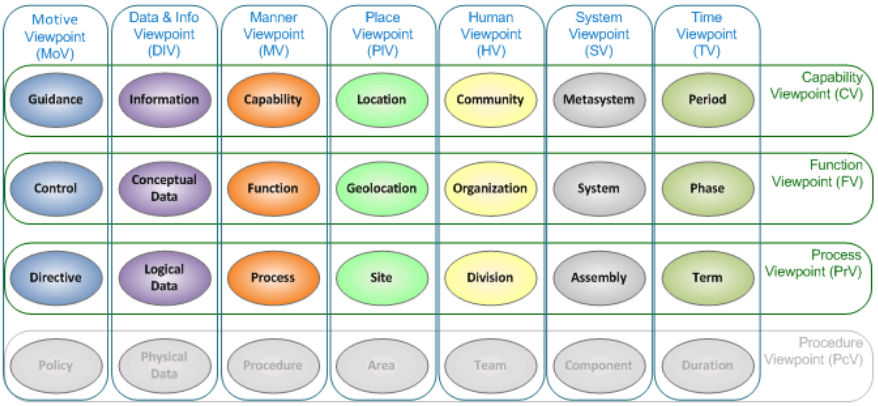
42 Logical Data Model

42 Modeling Method Language Discipline

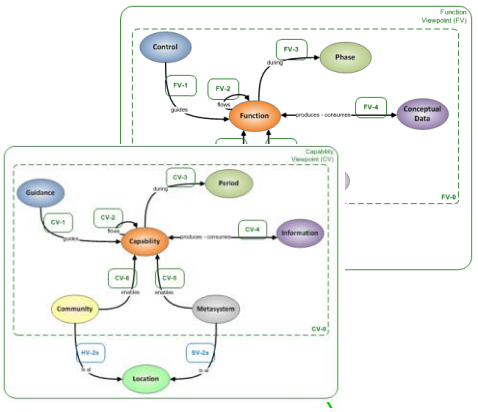
Updated 21 September, 2011



42 Enterprise Architecture Capture Framework

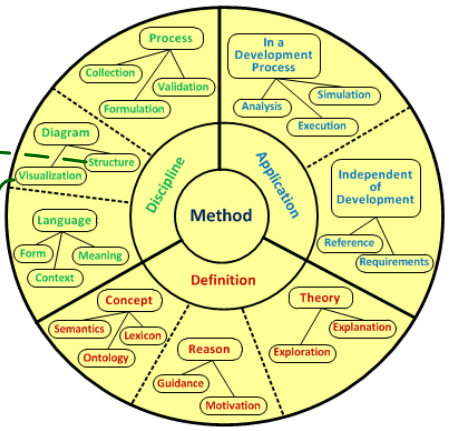


42 Viewpoints



42 Views

42 Shapes



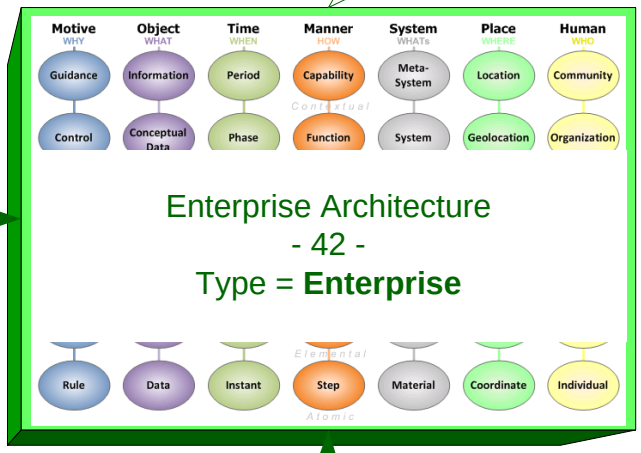
42 Modeling Method Diagram Discipline

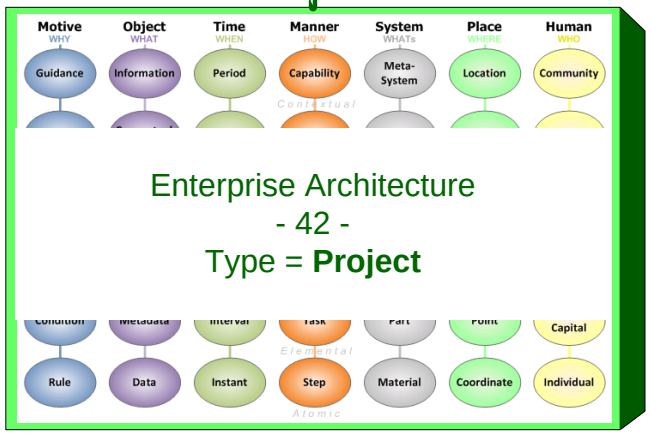
Updated 21 September, 2011

An “**Enterprise**” architecture is a “statement of requirement” whose objective is to document the depth and breadth of an enterprise concept using zero to many reference architectures.

A “**Project**” architecture is a “statement of work” (with enough detail to enable task management) whose objective is to create (or enable) one or many enterprise concepts.

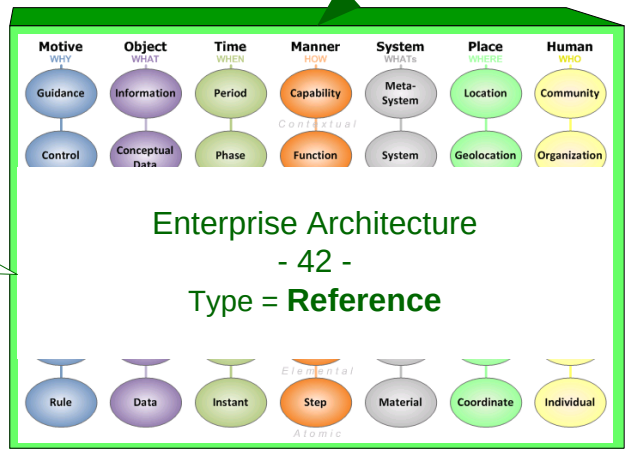
creates (enables) [1…*]





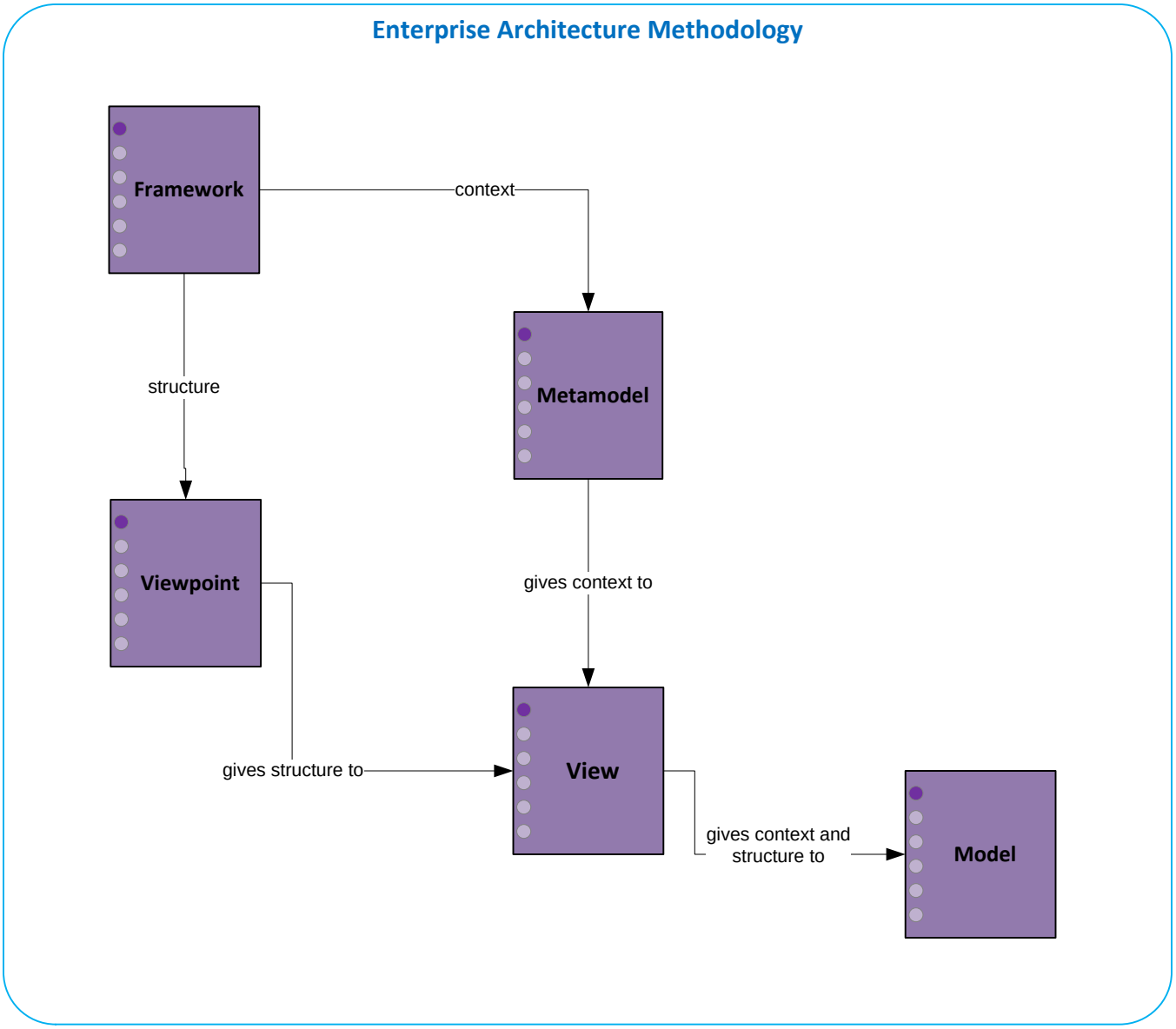
Using [0…*]

A “**Reference**” architecture is a completed (created by a standards body) architecture (at some level of abstraction) whose objective is to establish a “reference” for other architectures to conform to or provide established standard structural elements.

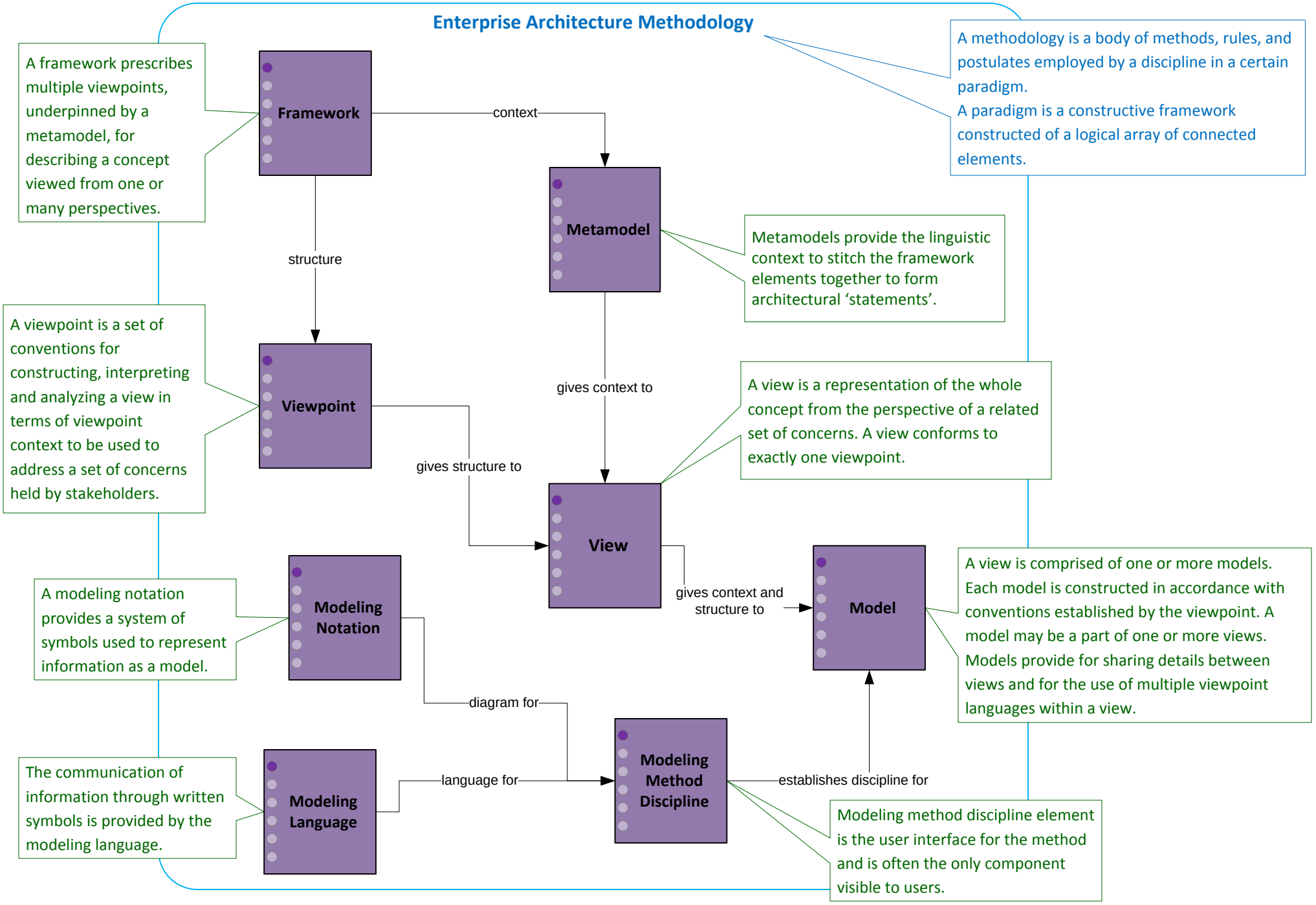


Enterprise Architecture Type Definitions

Updated 21 September, 2011

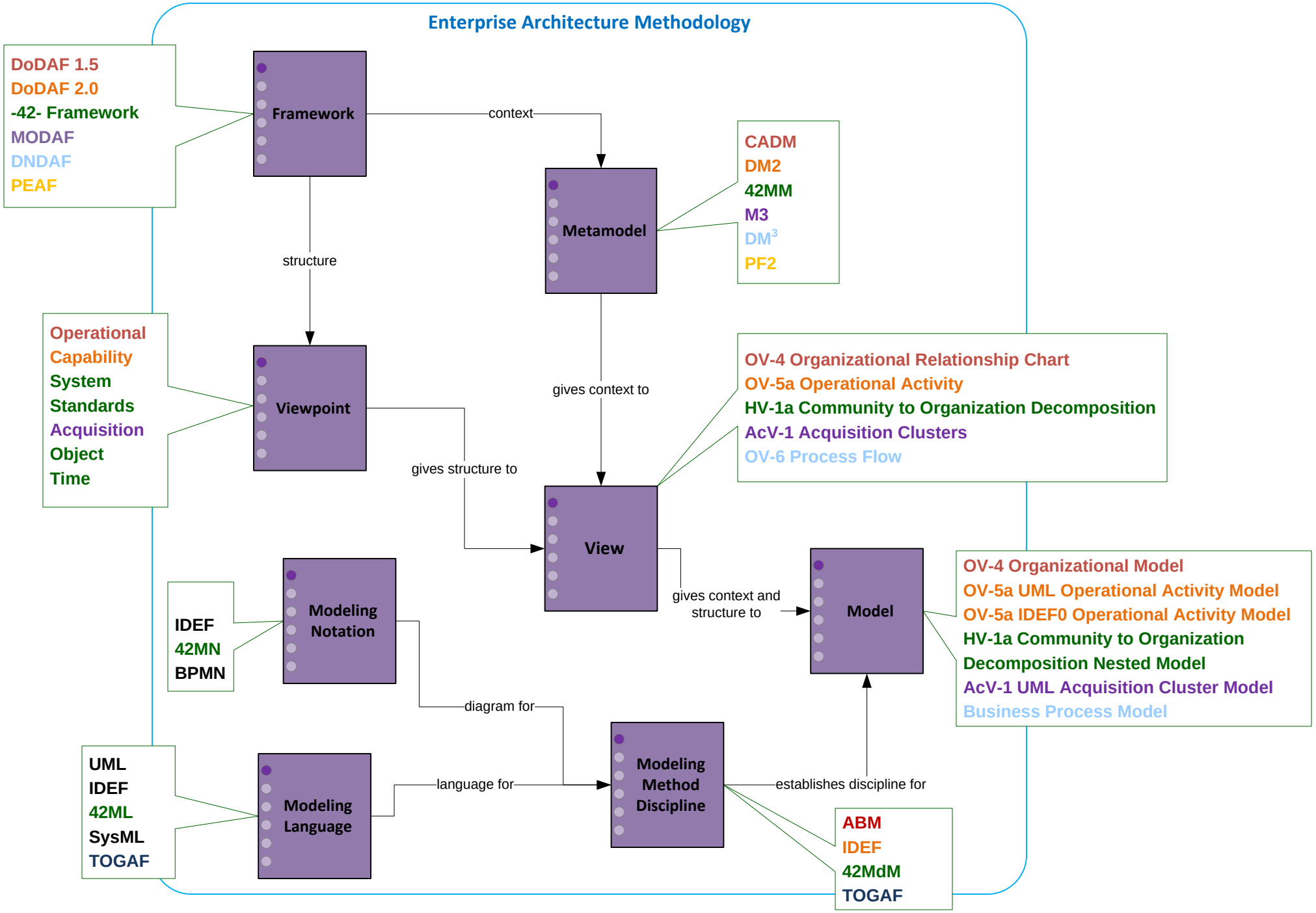


42 Enterprise Architecture Methodology Contextual Model



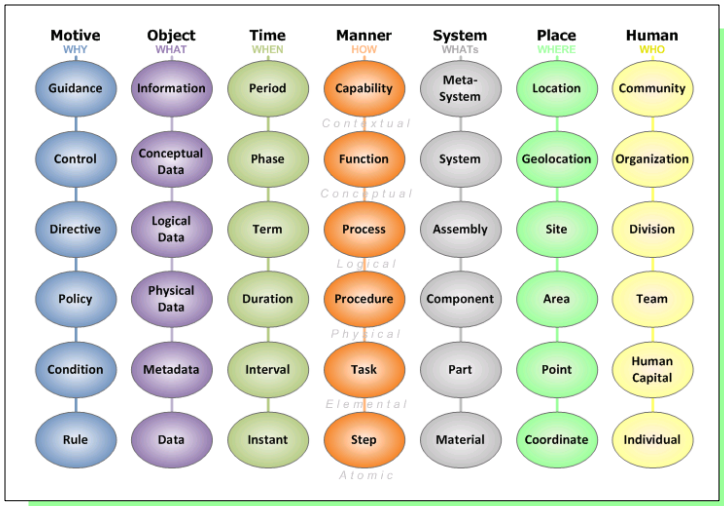
Enterprise Architecture Methodology Paradigm

Updated 1 November, 2012

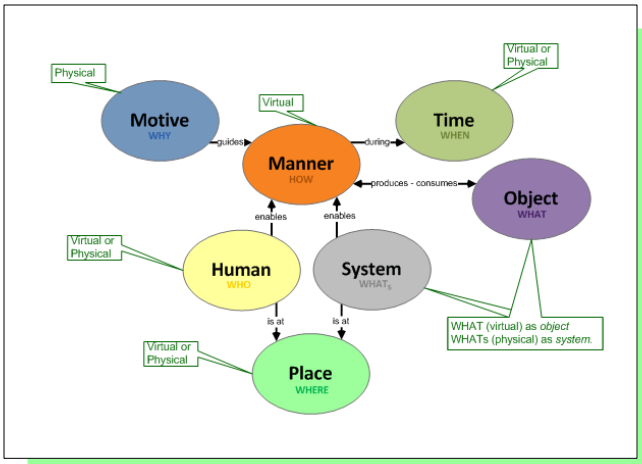


Enterprise Architecture Methodology Paradigm

Updated 1 November, 2012



-42- Enterprise Architecture Capture Framework

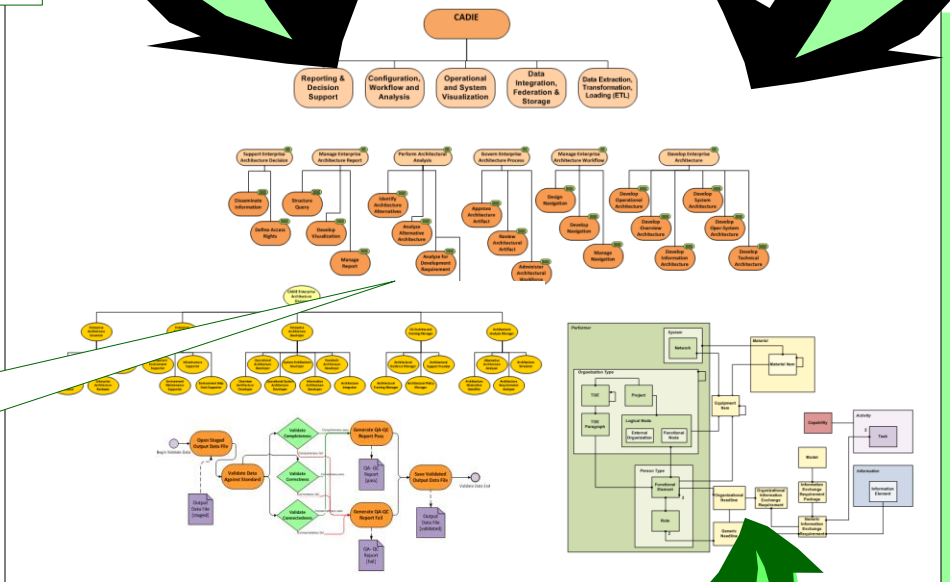


-42- Enterprise Architecture Metamodel

Framework
Captures
Concept

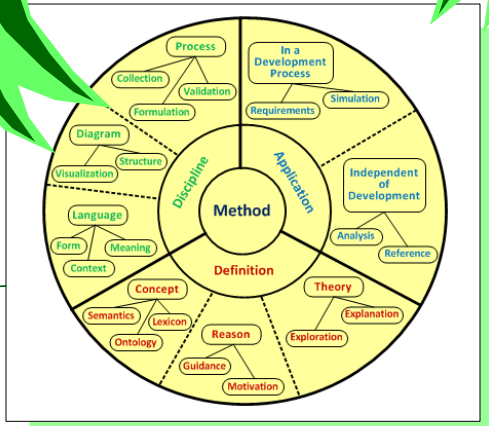
Metamodel
Structures
Concept

EA **Models**
Describe
Enterprise



Enterprise Architecture

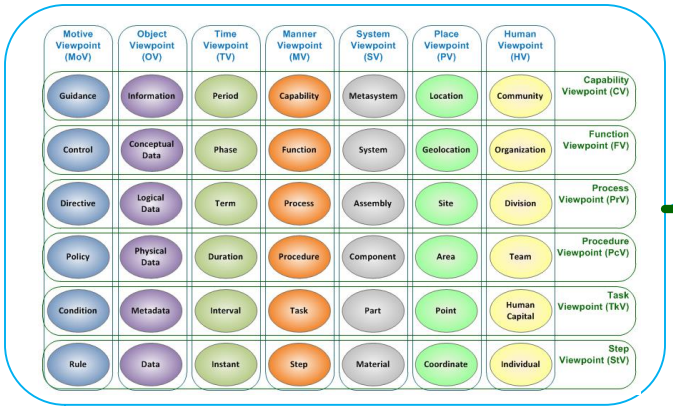
Method
Enables
Modeling



-42- Modeling Method

Enterprise Architecture Methodology Example

Updated 1 November, 2012



Type(s)

A viewpoint is a set of conventions for constructing, interpreting and analyzing a view in terms of viewpoint languages and notations, modeling methods and analytic techniques to be used to address a set of concerns held by stakeholders.

Conceptual Viewpoint Model

Motive Viewpoint (MoV)
Contains views that answer the questions of *Why* expressed as Guidance, Control, Directive, Policy, Condition and Rule object types.

Object Viewpoint (OV)
Contains views that answer questions of *What* (virtual) expressed as Information, Conceptual, Logical, Physical, Metadata and Data object types.

Time Viewpoint (TV)
Contains views that answer the questions of *When* expressed as Period, Phase, Term, Duration, Interval and Instant object types.

Manner Viewpoint (MV)
Contains views that answer the questions of *How* expressed as Capability, Function, Process, Procedure, Task and Step object types.

System Viewpoint (SV)
Contains views that answer the questions of *What* (physical) expressed as Metasystem, System, Assembly, Component, Part and Material object types.

Place Viewpoint (PlV)
Contains views that answer the questions of *Where* expressed as Location, Geolocation, Site, Area, Point and Coordinate object types.

Human Viewpoint (HV)
Contains views that answer the questions of *Who* expressed as Community, Organization, Team, Division, Human Capital and Individual object types.

Capability Viewpoint (CV)
Capability affinity relationships described through functional, sequence and communication flow.

Function Viewpoint (FV)
Function affinity relationships described through functional, sequence and communication flow.

Process Viewpoint (PrV)
Process affinity relationships described through functional, sequence and communication flow.

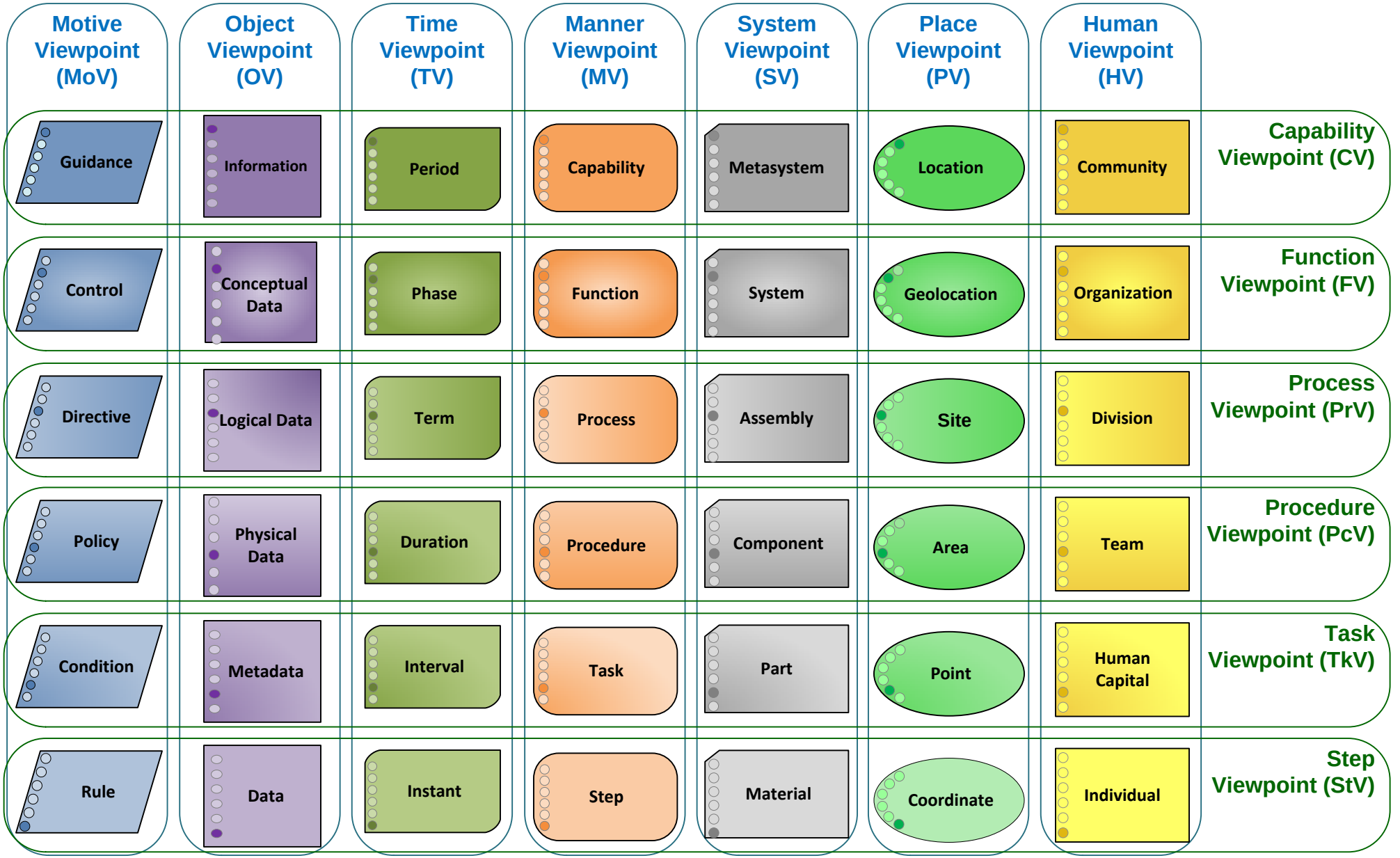
Procedure Viewpoint (PrV)
Procedure affinity relationships described through functional, sequence and communication flow.

Task Viewpoint (TkV)
Task affinity relationships described through functional, sequence and communication flow.

Step Viewpoint (StV)
Step affinity relationships described through functional, sequence and communication flow.

42 Framework to ViewPoint

Updated 2 September, 2012



-42- Enterprise Information Capture Framework

Viewpoints

Updated 11 Mar, 2013

Motive | Object | Manner | Location | Human | System | Time

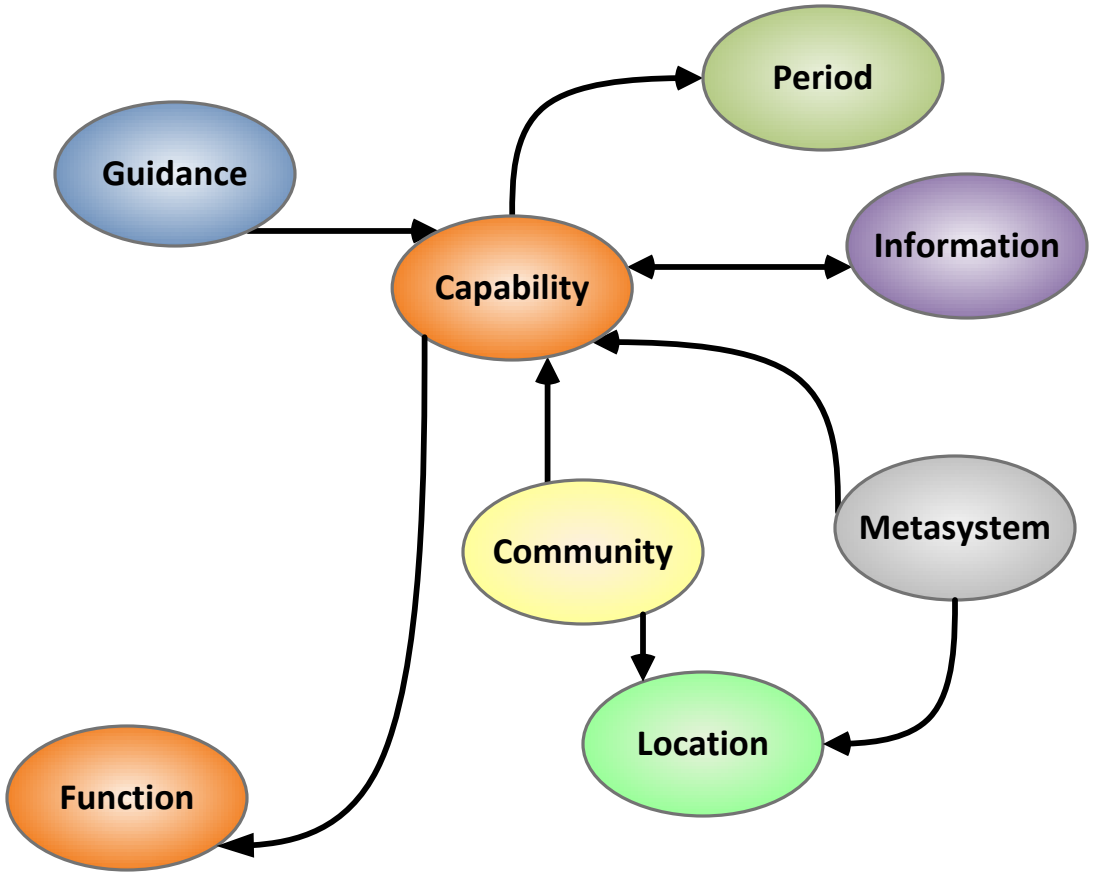
Individual(s)

Unique singular entity

Guidance | Information | Capability | Location | Community | Meta-System | Period
Control | Conceptual Data | Function | Geolocation | Organization | System | Phase
Directive | Logical Data | Process | Site | Division | Assembly | Term
Policy | Physical Data | Procedure | Area | Team | Component | Duration
Condition | Metadata | Task | Point | Human Capital | Part | Interval
Rule | Data | Step | Coordinate | Individual | Material | Instant

Type(s)

Type of individual entity



Association(s)

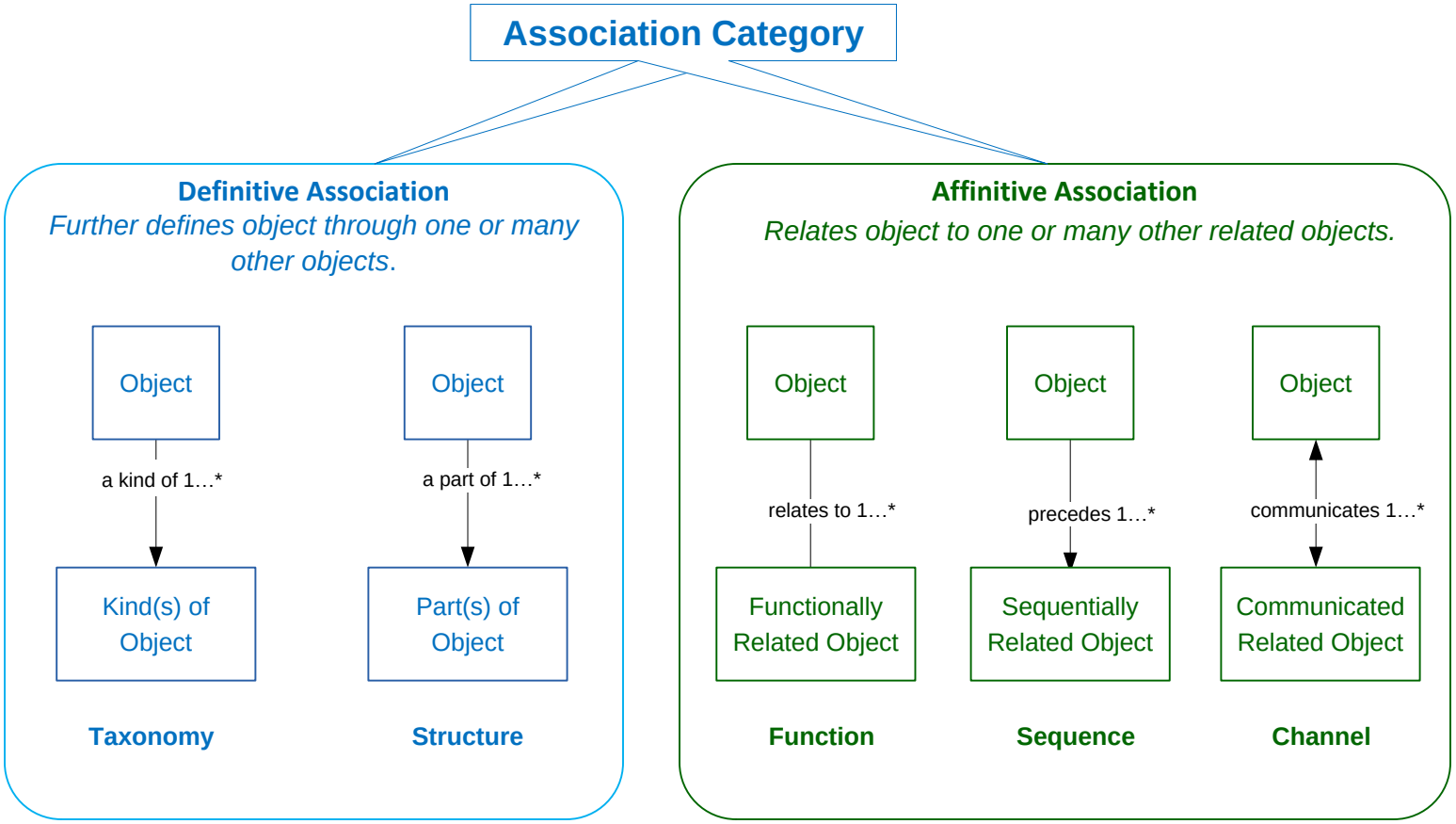
Relates individual types

42 Framework to Metamodel

Updated 21 September, 2011

Definitive link types are derived from Brachman 1983. IDEF5 "*Is-a*" diagrams are used in IDEF5 to show "is-a" relationships between kinds in an IDEF5 model. IDEF5 provides three types of is-a links: 1) generalization-specialization, 2) AKO (a kind of), and 3) description-subsumption. ***we don't use "ds" in modeling EA often enough to warrant documenting it

Affinitive link types are derived from multiple modeling paradigms. IDEF0 describes functional relationships. IDEF3 defined sequential or temporal based associations. C4ISR 1999 introduced the communication relationship through its requirement to capture information exchanges between objects.



42 Modeling Method

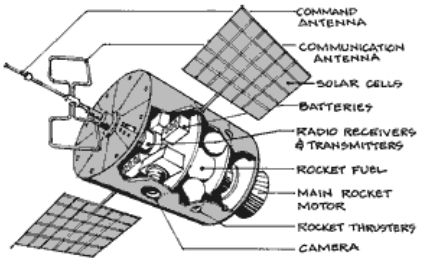
Association Categories

Updated 28 January, 2013

SV-0a

Taxonomy is a definitive association that expresses a *taxonomic* relationship (**a kind of)** between two connected objects and is typically an un-named object.

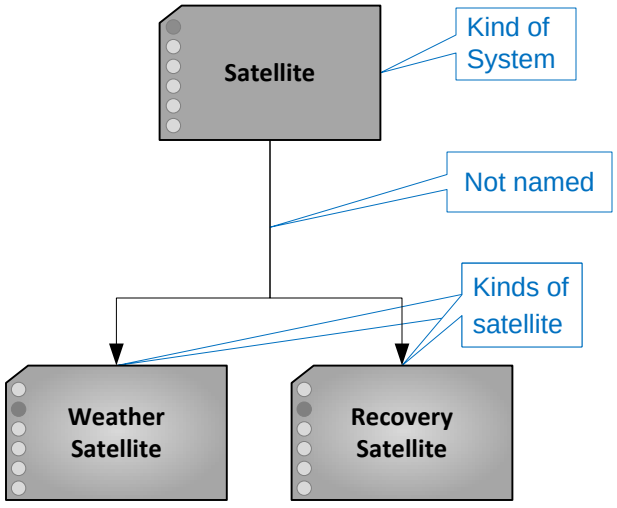
SV-1a



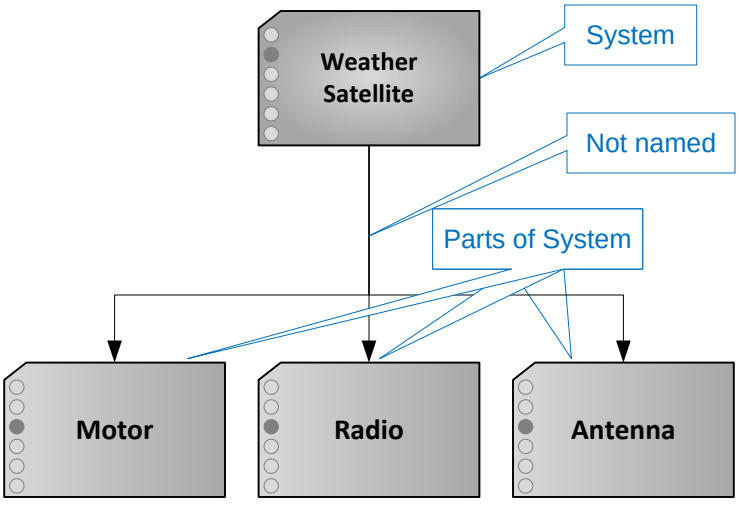
Structural is a definitive association that expresses a *structural* relationship (**a part of)** between two connected objects and is typically an un-named object.

Definitive Association

Further defines object through one or many other objects.



Taxonomic decomposition



Structural decomposition

42 Modeling Method

Definitive Association Category Examples

Updated 19 September, 2011

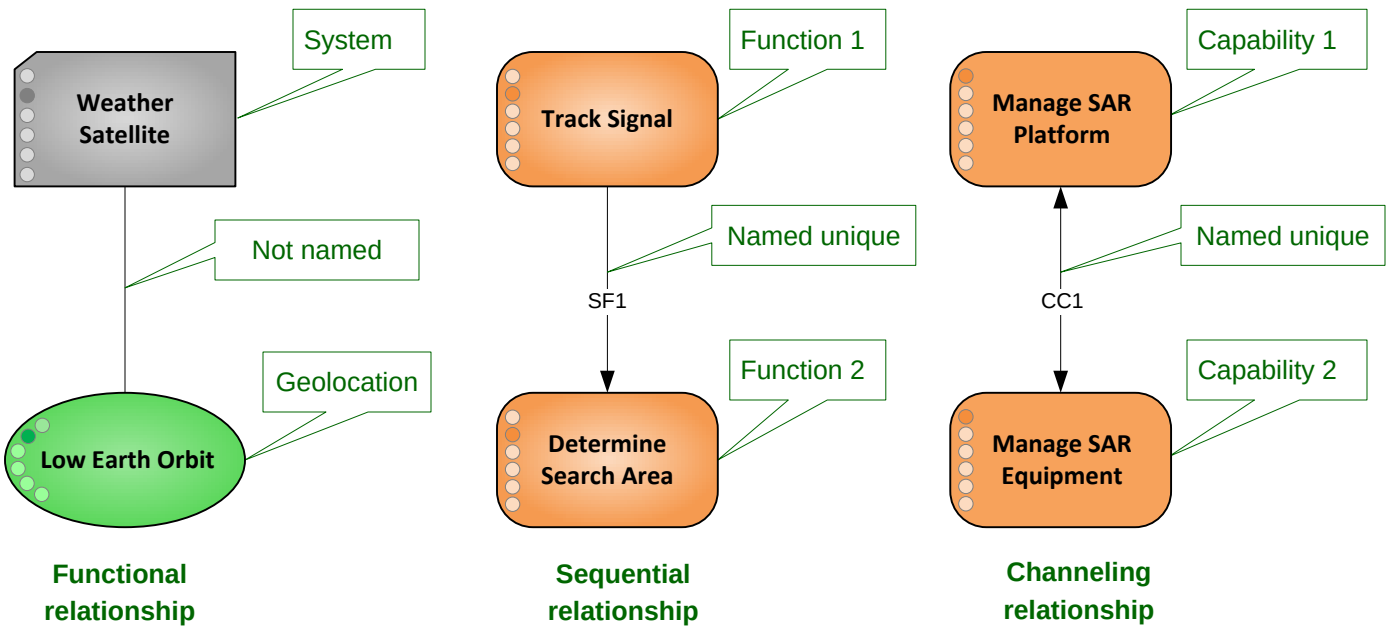
Functional is an affinitive association that expresses a functional relationship between two connected objects and is typically not a named object.

Sequential is an affinitive association that expresses a temporal relationship between two connected objects and is uniquely named object.

Channeling relationship represents communication or access between two connected objects and is a uniquely named object.

Affinitive Association

Relates object to one or many other related objects.



Functional relationship

Sequential relationship

Channeling relationship

42 Modeling Method

Affinitive Association Category Examples

Updated 22 October, 2012