

TOGAF 9ⁱ to Essential Meta Model Concept Mapping

TOGAF Phase	TOGAF Concept	Description	Essential Concept(s) Meta Model Navigation	Description	Notes
Preliminary Phase	Assumption	A statement of probable fact that has not been fully validated at this stage, due to external constraints. For example, it may be assumed that an existing application will support a certain set of functional requirements, although those requirements may not yet have been individually validated.	Assumption EA Support/Strategy Management	Represents an assumption that exists across one or more EA elements.	
	Constraint	An external factor that prevents an organization from pursuing particular approaches to meet its goals. For example, customer data is not harmonized within the organization, regionally or nationally, constraining the organization's ability to offer effective customer service.	Constraint EA Support/Strategy Management	Class to define and manage constraints that have been identified in the architecture. A constraint relates to a specific element in the model but can have related elements from the other layers (Business, Information, Application, Technology and EA Support)	
	Driver	An external or internal condition that motivates the organization to define its goals. An example of an external driver is a change in regulation or compliance rules which, for example, require changes to the way an organization operates; e.g., Sarbanes-Oxley in the US.	Business Driver Business/Conceptual	Class to manage business drivers (internal and external influences) which motivate the organisation to its business objectives.	
			Information Driver Information/Conceptual	Class to define and manage the internal and external influences that motivate the Information Objectives.	
			Application Driver Application/Conceptual	Class to define and manage the internal and external influences that motivate the Application Objectives.	
Technology Driver Technology/Conceptual			Class to define and manage the internal and external influences that motivate the Technology Objectives.		

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	Goal	A high-level statement of intent or direction for an organization. Typically used to measure success of an organization.	Business Objective Business/Conceptual	A strategic business goal for an enterprise	
			Information Architecture Objective Information/Conceptual	A strategic goal associated with the Information Architecture of the enterprise	
			Application Architecture Objective Application/Conceptual	A strategic goal associated with the Application Architecture of the enterprise	
			Technology Architecture Objective Technology/Conceptual	A strategic goal associated with the Technology Architecture of the enterprise	
	Measure	An indicator or factor that can be tracked, usually on an on-going basis, to determine success or alignment with objectives and goals.	Business Service Quality EA Support/ Utilities	A service quality that applies to provision of services to the Business. These can be used to capture the "non-functional" business requirements.	The Service Quality class is a meta class that defines measures and metrics. If there is a requirement to track the actual values this can be done using the Service Quality Values
			Information Service Quality EA Support/ Utilities	Class to define Service Qualities that apply to Information and Data elements, e.g. Timeliness, Accuracy, Completeness	
			Application Service Quality EA Support/ Utilities	A service quality that Application Services provide when supporting a Business Process, Activity or Task. These can be used to capture the "non-functional" requirements of an application.	
			Technology Service Quality EA Support/ Utilities	A Service Quality for Technology Services such as performance, serviceability etc.	

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	Objective	A time-bounded milestone for an organization used to demonstrate progress towards a goal; for example, "Increase capacity utilization by 30% by the end of 2013 to support the planned increase in market share".	Business Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Business Layer of the architecture.	Strategic Plans hold the detail and dependencies of the transition from one state to another, the Objectives that will be met and the Issues that will be addressed. Captures a timespan for the change.
			Information Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Information Layer of the architecture	
			Application Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Application Layer of the architecture	
			Technology Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Technology Layer of the architecture	
	Principle	A qualitative statement of intent that should be met by the architecture. Has at least a supporting rationale and a measure of importance.	Business Principle Business/Conceptual	High level rules that govern the manner in which business capabilities are delivered by the enterprise	
			Information Architecture Principle Information/Conceptual	High level rules that govern the manner in which information assets are created and managed by the enterprise	
			Application Architecture Principle Application/Conceptual	High level rules that govern the manner in which application capabilities are implemented by the enterprise	
			Technology Architecture Principle Technology/Conceptual	High level rules that govern the manner in which technology capabilities are implemented in the enterprise	
	Requirement	A quantitative statement of business need that must be met by a particular architecture or work package.	Issue EA Support/ Strategy Management	Represents an issue that exists across one or more EA elements. Also provides a means to define the Strategic Plans that are expected to resolve the issue.	Contained within the Strategic Requirement Class
			Need EA Support/ Strategy Management	Represents a need that exists across one or more EA elements. Also provides a means to define the Strategic Plans that are expected to meet the need.	

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	Work Package	A set of actions identified to achieve one or more objectives for the business. A work package can be a part of a project, a complete project, or a program.	Business Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Business Layer of the architecture	The Strategic Plans also link to Objectives and Change Activities (Programmes and Projects). The Strategic Plans define WHAT you plan to do and the Projects define HOW you plan to make change to the architecture.
			Information Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Information Layer of the architecture	
			Application Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Application Layer of the architecture	
			Technology Strategic Plan EA Support/Strategy Management	A Strategic plan for elements in the Technology Layer of the architecture	
Business Architecture	Actor	A person, organization, or system that has a role that initiates or interacts with activities; for example, a sales representative who travels to visit customers. Actors may be internal or external to an organization. In the automotive industry, an original equipment manufacturer would be considered an actor by an automotive dealership that interacts with its supply chain activities.	Individual Actor Business/Physical	A specific named individual that performs a role in a process. Individual Actors take on Individual Business Roles (defined in the organisation design) to execute Physical processes/activities.	A system should not be captured as an Actor; this would be mapped in the application layer.
			Group Actor Business/Physical	A specific named organisation that performs a role in a process. Group Actors are used to capture how the enterprise is actually organised, in terms of the real companies, divisions and teams that make up an overall organisation	
	Business Service	Supports business capabilities through an explicitly defined interface and is explicitly governed by an organization. TOGAF Description: The "Function/Service" represents "what" the organisation produces and serves as a complete catalogue of all the "outputs" of an organisation. It is not a model of the activities of the organisation or a representation on how the organisation go about to produce these outputs (that should be reflected in the "Business Process Flow Model"). To ensure a customer service	Product Type Business/Logical	Defines the logical level representations of Products delivered by an enterprise. Product Types are realisations of Product Concepts, and group the actual, physical products by type. E.g. in the motor manufacturer example, product types would be 'Car', 'Truck' as realisations of the 'Vehicle' concept. As a further example, a service company would define the types of a particular service (e.g. financial services) that they provide.	Attributes are available on Product Type to define whether they are internally facing, externally facing or both

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		oriented enterprise, like Public Service, each service itself should be expressed as an "output" that is delivered to the customer.			
	Capability	A business-focused outcome that is delivered by the completion of one or more work packages. Using a capability-based planning approach, change activities can be sequenced and grouped in order to provide continuous and incremental business value.	Business Capability Business/Conceptual	Models the capabilities of a business or enterprise. Capabilities belong to business domains and represent the services that a business offers or requires or Business Process "areas"	
	Control	A decision-making step with accompanying decision logic used to determine execution approach for a process or to ensure that a process complies with governance criteria. For example, a sign-off control on the purchase request processing process that checks whether the total value of the request is within the sign-off limits of the requester, or whether it needs escalating to higher authority.	Business Rule Business/Logical	Class to manage the definition of business rules	Business Rules enable rules to be defined for the business (in contrast to a Business Process). These can then be applied at steps in a process / activity flow. Examples are things like pricing rules.
	Event	An organizational state change that triggers processing events; may originate from inside or outside the organization and may be resolved inside or outside the organization.	Time Based Business Event Business/Logical	Business Events that are raised by schedules or are timed events	These are contained within the Business Event class. See also Event in the Application Layer for System Events.
			External Business Event Business/Logical	Business Events that are raised by parties external to the enterprise	
	Function	Delivers business capabilities closely aligned to an organization, but not necessarily explicitly governed by the organization. Also referred to as "business function".	Business Process Business/Logical	Business Processes implement the Business Capabilities, and consist of Business Activities. Processes are performed by Business Roles. Business Processes represent specifications or designs of how processes should be performed.	
	Location	A place where business activity takes place and can be hierarchically decomposed.	Site Business/Physical	A specific (and named) physical location where processes or activities take place.	
	Organization Unit	A self-contained unit of resources with line management responsibility, goals, objectives, and measures. Organizations may include external parties and business partner organizations.	Group Actor Business/Physical	A specific named organisation that performs a role in a process. Group Actors are used to capture how the enterprise is actually organised, in terms of the real companies, divisions and teams	

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				that make up an overall organisation	
	Process	A process represents flow of control between or within functions and/or services (depends on the granularity of definition). Processes represent a sequence of activities that together achieve a specified outcome, can be decomposed into sub-processes, and can show operation of a function or service (at next level of detail). Processes may also be used to link or compose organizations, functions, services, and processes.	Business Process Business/Logical	Business Processes implement the Business Capabilities, and consist of Business Activities. Processes are performed by Business Roles. Business Processes represent specifications or designs of how processes should be performed.	Can model to task level if required.
	Product	Output generated by the business. The business product of the execution of a process.	Product Concept Business/Conceptual	Defines conceptual level representations of Products. Used to define fundamentally WHAT a type of product is, e.g. a motor manufacturer might have a 'Vehicle' concept defined to cover all the types of vehicle that they manufacture, such as car, truck etc., whereas a service organisation would define the classes of service that they provide.	
			Product Type Business/Logical	Class to capture types of products that are produced by the enterprise. Product Types are realisations of Product Concepts, and group the actual, physical products by type. E.g. in the motor manufacturer example, product types would be 'Car', 'Truck' as realisations of the 'Vehicle' concept. As a further example, a service company would define the types of a particular service (e.g. financial services) that they provide.	
		Product Business/Physical	Class to capture the products that are produced by the enterprise. Products are instances of Product Types. E.g. in the motor manufacturer example, products could be 'Focus', 'Mustang' as instances of the 'Car' type. Equally, a service company would capture the service offerings.		

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	Role	The usual or expected function of an actor, or the part somebody or something plays in a particular action or event. An actor may have a number of roles.	Individual Business Role Business/Logical	A Business Role that is taken on by an individual person	Business Roles are used to represent the DESIGN of the organisation, in terms of the roles that are required and how they are related. Business Roles perform Business Processes. Business Roles are groups, departments, teams or job roles within the enterprise, representing many levels of granularity as to how the processes are performed. Roles can also own a process
			Group Business Role Business/Logical	A Business Role that is taken on by an organisation or team	
	Service	An element of behaviour that provides specific functionality in response to requests from actors or other services. A service delivers or supports business capabilities, has an explicitly defined interface, and is explicitly governed. Services are defined for business, information systems, and platforms.	Business Process Business/Logical	Business Processes implement the Business Capabilities, and consist of Business Activities. Processes are performed by Business Roles. Business Processes represent specifications or designs of how processes should be performed.	
Information Systems Architectures (Information and Data)	Data Class	An encapsulation of data that is recognized by a business domain expert as a thing. Logical data entities can be tied to applications, repositories, and services and may be structured according to implementation considerations.	Data Subject Information/Conceptual	Class to capture data subjects in the Information Layer. Data Subjects define the 'types' of Data used in the enterprise and provide the semantic grounding for Data Objects.	
	Logical Data Entity	A boundary zone that encapsulates related data entities to form a logical location to be held; for example, external procurement information.	Data Object Information/Logical	Class to capture and manage Data Objects used by systems to provide Information to the applications and processes. Data Objects provide a logical grouping of Data Attributes and realise conceptual Data Subjects.	Contained within the Data Object Type class.
			Data Object Attribute Information/Logical	Describes an individual attribute of data. Data Attributes are used and grouped, logically, by Data Objects.	

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	Logical Information		Information View Information/Logical	A refined view of the high level, conceptual elements that capture the type of Information items used in the course of running the business. An Information View can also include the relevant attributes of the view, if required (e.g. to show how one View of a Concept differs from another). An Information View describes in more detail a certain view of a Concept, e.g. Cost per Product for Site.	Contained within the Information View Type class.
	Physical Data Component	A boundary zone that encapsulates related data entities to form a physical location to be held. For example, a purchase order business object, comprising purchase order header and item business object nodes.	Data Representation Information/Logical	A specific representation of a Data Object, for example MAT_MAS, which is SAP's representation of a Product Item.	Contained within the Data Representation Type class.
	Physical Information		Information Representation Information/Logical	A specific representation of an Information View using a specific technology. Example technologies would include XML schema, a relational database schema and can also include things like paper forms. The relationship to the Technology layer is to a Technology Product Role, which defines how a Technology Product is being used, e.g. Oracle RDBMS, ebXML schema.	Contained within the Information Representation Type Class.
Information Systems Architectures (Application)	Application Component	An encapsulation of application functionality aligned to implementation structure. For example, a purchase request processing application. See also Logical Application Component and Physical Application Component.	Application Service Application/Logical	A well-defined component of functional behaviour that provides a logical grouping of related Application Functions. e.g. ExchangeRates Service, CreditCardPayment Service or logical application such as CRM System, ERP System. The specification of the service - in terms of what it does - is defined by the set of Application Functions that it provides.	Application Service covers both Application Component and Physical Application Component.
	Event	An organizational state change that triggers processing events; may originate from inside or outside the organization and may be resolved inside or outside the organization.	Time Based System Event Application/Logical External System Event Application/Logical	System Events that are raised by schedules or are timed events System Events that are raised by parties external to the enterprise.	These are contained within the System Event class. See also Event in the Business Layer for Business Events.

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	Information System Service	The automated elements of a business service. An information system service may deliver or support part or all of one or more business services.	Application Capability Application/Conceptual	Provides the abstract perspective on the functional behaviour required to support the business. Capabilities are mapped to the Business Domain and Business Capability that they support. One of the additional purposes of this meta class is to provide a grounding for Applications Functions, enabling one to model that a particular Application Function "is a one of these <Application Capabilities>"	
	Logical Application Component	An encapsulation of application functionality that is independent of a particular implementation. For example, the classification of all purchase request processing applications implemented in an enterprise.	Application Service Application/Logical	A well-defined component of functional behaviour that provides a logical grouping of related Application Functions. e.g. ExchangeRates Service, CreditCardPayment Service or logical application such as CRM System, ERP System. The specification of the service - in terms of what it does - is defined by the set of Application Functions that it provides.	Can include a Composite Application Service, i.e. an Application Service that is made up of one or more Application Services
	Physical Application Component	An application, application module, application service, or other deployable component of functionality. For example, a configured and deployed instance of a Commercial Off-The-Shelf (COTS) Enterprise Resource Planning (ERP) supply chain management application.	Application Provider Application/Logical	An Application Provider provides one or more Application Services. To provide a service, the Application Provider should provide - through its Application Function Implementations - all of the Application Functions of the Application Service that this Application Provider provides. e.g. a specific implementation of SAP R/3 - the ERP System, the Finance System, Cast Iron Expenses project.	Can include an Application Provider that is made up of one or more Application Providers
	Service	An element of behaviour that provides specific functionality in response to requests from actors or other services. A service delivers or	Application Service Application/Logical	A well-defined component of functional behaviour that provides a logical grouping of related Application Functions. e.g.	Can include a Composite Application Service, i.e. an Application Service that is

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		supports business capabilities, has an explicitly defined interface, and is explicitly governed. Services are defined for business, information systems, and platforms.		ExchangeRates Service, CreditCardPayment Service or logical application such as CRM System, ERP System. The specification of the service - in terms of what it does - is defined by the set of Application Functions that it provides.	made up of one or more Application Services
			Application Function Technology/Logical	A discrete piece of functional behaviour that an application provides. e.g. GetAllExchangeRates, MakeCreditCardPayment	
Technology Architecture	Logical Technology Component	An encapsulation of technology infrastructure that is independent of a particular product. A class of technology product; for example, supply chain management software as part of an Enterprise Resource Planning (ERP) suite, or a Commercial Off-The-Shelf (COTS) purchase request processing enterprise service.	Technology Component Technology/Logical	Logical types - or classes - of Technology that are used to provide Technology Capabilities. e.g. Application Server, Message Oriented Middleware, Operating System. These should be real types of technology that are available today (or are state of the art) but not actual products.	Can include Technology Composites, i.e. Technology Components made up of other Technology Components that have a defining architecture which describes the Technology Components are used to make the composite.
	Physical Technology Component	A specific technology infrastructure product or technology infrastructure product instance. For example, a particular product version of a Commercial Off-The-Shelf (COTS) solution, or a specific brand and version of server.	Technology Product Technology/Logical	A commercially available Technology Product that an organisation can buy in order to provide Technology Components.	Contained within Technology Provider
	Platform Service	A technical capability required to provide enabling infrastructure that supports the delivery of applications.	Technology Capability Technology/Conceptual	Technology Capabilities are conceptual constructs that describe WHAT a piece of technology does or needs to do.	The contained technologies slot is part of a DEFINITION of a Capability to describe Capabilities considered part of (contained in - not used to deliver) a larger Capability. To DESIGN how a new Capability could be delivered by using existing Capabilities, a Technology Capability Architecture is used.
	Service	An element of behaviour that provides specific functionality in response to requests from actors or other services. A service delivers or supports business capabilities, has an explicitly	Technology Component Technology/Logical	Logical types - or classes - of Technology that are used to provide Technology Capabilities. e.g. Application Server, Message Oriented Middleware, Operating	Can include Technology Composites, i.e. Technology Components that are made up of other Technology

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		defined interface, and is explicitly governed. Services are defined for business, information systems, and platforms.		System. These should be real types of technology that are available today (or are state of the art) but not actual products.	Components and have a defining architecture which describes the Technology Components that are used to make the composite.
			Technology Function Technology/Logical	Technology Function defines, at a finer level of granularity, what technical functions a component offers. e.g. a relational database might offer create(), update(), read(), delete()	
	Technology Component	An encapsulation of technology infrastructure that represents a class of technology product or specific technology product.	Technology Component Technology/Logical	Logical types - or classes - of Technology that are used to provide Technology Capabilities. e.g. Application Server, Message Oriented Middleware, Operating System. These should be real types of technology that are available today (or are state of the art) but not actual products.	Can include Technology Composites, i.e. Technology Components that are made up of other Technology Components and have a defining architecture which describes the Technology Components that are used to make the composite.
Opportunities and Solutions	Contract	An agreement between a service consumer and a service provider that establishes functional and non-functional parameters for interaction.	Contract EA Support/Obligation Management	Class to capture the details of the agreement for a contract or deal.	Can link to any EA class. Captures details of the supplier, customer the products (services) being provided, any licensing and the cost elements.
	Gap	A statement of difference between two states. Used in the context of gap analysis, where the difference between the Baseline and Target Architecture is identified.	Business Driver Business/Conceptual	Class to manage business drivers (internal and external influences) which motivate the organisation to its business objectives.	This class has a 'classified as' slot, which enables you to classify the driver as a gap.

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			Information Driver Information/Conceptual	Class to define and manage the internal and external influences that motivate the Information Objectives.	The Strategic Plans also link to Objectives and Change Activities (Programmes and Projects). The Strategic Plans define WHAT you plan to do and the Projects define HOW you plan to do it.
			Application Driver Application/Conceptual	Class to define and manage the internal and external influences that motivate the Application Objectives	
			Technology Driver Technology/Conceptual	Class to define and manage the internal and external influences that motivate the Technology Objectives.	
			Business Strategic Plans EA Support/ Strategy Management	A Strategic plan for elements in the Business Layer of the architecture	
			Information Strategic Plans EA Support/ Strategy Management	A Strategic plan for elements in the Information Layer of the architecture	
			Application Strategic Plans EA Support/ Strategy Management	A Strategic plan for elements in the Application Layer of the architecture	
			Technology Strategic Plan EA Support/ Strategy Management	A Strategic plan for elements in the Technology Layer of the architecture	
			Milestone	Detail of the transition architecture components contained in each milestone on the Roadmap.	
Roadmap	An abstracted plan for business or technology change, typically operating across multiple disciplines over multiple years. Normally used	Roadmap Model EA Support/ Strategy Management	A Roadmap Model defines the roadmap for change in the organisation. This is not a project plan or a programme plan but		

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		in the phrases Technology Roadmap, Architecture Roadmap, etc.		captures the transitions between different configurations of the organisation via Milestones, which capture a particular configuration. These milestones can range in granularity from very high views of the entire organisation down to specific architectures for a particular aspect of the organisation.	
	Transition Architecture	A formal description of the enterprise architecture showing periods of transition and development for particular parts of the enterprise. Transition Architectures are used to provide an overview of current and target capability and allow for individual work packages and projects to be grouped into managed portfolios and programs.	Architecture State EA Support/ Strategy Management	An Architecture State groups a set of related architectures in a particular context or configuration. Such contexts could be temporal, e.g. reflecting architectures that are valid today or in the future. Equally, this context could represent the set of architectures required to achieve a particular goal. Naming of Architecture States is important. Architecture States should be named for the configuration of architectures that they group. What does this state do for the organisation? Avoid names such as 'Current State' or 'Future State' as these Architecture States can be used in different contexts.	
	Service Quality	A pre-set configuration of non-functional attributes that may be assigned to a service or service contract.	Business Service Quality EA Support/Utilities	A service quality that applies to provision of services to the Business. These can be used to capture the "non-functional" business	The Service Quality class is a meta class that defines measures and metrics. If

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				requirements.	there is a requirement to track the actual values this can be done using the Service Quality Values
			Application Service Quality EA Support/Utilities	A service quality that Application Services provide when supporting a Business Process, Activity or Task. These can be used to capture the "non-functional" requirements of an application.	
			Information Service Quality EA Support/Utilities	Class to define Service Qualities that apply to Information and Data elements, e.g. Timeliness, Accuracy, Completeness	
			Technology Service Quality EA Support/Utilities	A Service Quality for Technology Services such as performance, serviceability etc.	

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