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ArchiMate® 3.0

Reference Cards

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About ArchiMate® 3.0

The ArchiMate® Specification, an Open Group Standard, is an open and independent modeling language for EA that is supported by different tool vendors and consulting firms. The ArchiMate language enables enterprise architects to describe, analyze, and visualize the relationships among architecture domains in an unambiguous way.

Just as an architectural drawing in classical building architecture describes the various aspects of the construction and use of a building, the ArchiMate Specification offers a common language for describing the construction and operation of business processes, organizational structures, information flows, IT systems, and technical and physical infrastructure. This insight helps stakeholders to design, assess, and communicate the consequences of decisions and changes within and between these architecture domains.

The ArchiMate 3.0 Specification is a major update to the ArchiMate 2.1 Specification, and was published as an Open Group Standard in June 2016. New features included in Version 3.0 include elements for modeling the enterprise at a strategic level, such as capability, resource, and outcome. It also includes support to model the physical world of materials and equipment. Furthermore, the consistency and structure of the language have been improved, definitions have been aligned with other standards, and its usability has been enhanced in various other ways.

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ArchiMate® 3.0 Mapping to the TOGAF® ADM

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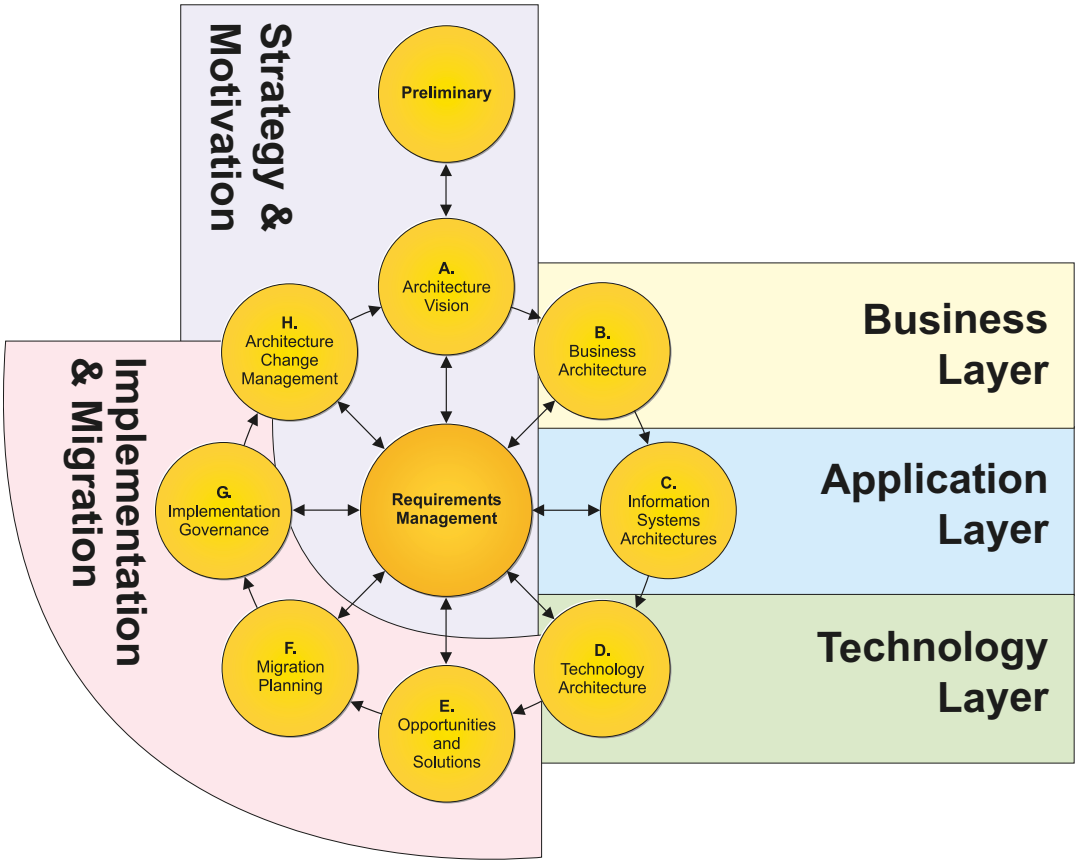

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ArchiMate® 3.0 Relationships

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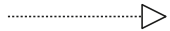
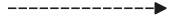
Structural Relationships		Notation
Composition	Indicates that an element consists of one or more other elements.	
Aggregation	Indicates that an element groups a number of other elements.	
Assignment	Expresses the allocation of responsibility, performance of behavior, or execution.	
Realization	Indicates that an entity plays a critical role in the creation, achievement, sustenance, or operation of a more abstract entity.	
Dependency Relationships		**Notation**
Serving	Models that an element provides its functionality to another element.	
Access	Models the ability of behavior and active structure elements to observe or act upon passive structure elements.	
Influence	Models that an element affects the implementation or achievement of some motion element.	
Dynamic Relationships		**Notation**
Triggering	Describes a temporal or causal relationship between elements.	
Flow	Transfer from one element to another.	
Other Relationships		**Notation**
Specialization	Indicates that an element is a particular kind of another element.	
Association	Models an unspecified relationship, or one that is not represented by another ArchiMate relationship.	
Junction	Used to connect relationships of the same type.	

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ArchiMate® 3.0 Motivation Elements

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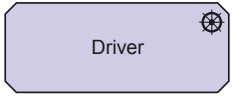
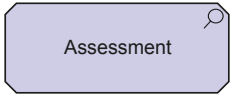
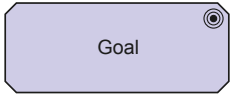
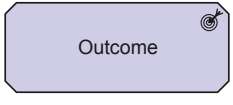
Element	Definition	Notation
Stakeholder	The role of an individual, team, or organization (or classes thereof) that represents their interests in the outcome of the architecture.	
Driver	An external or internal condition that motivates an organization to define its goals and implement the changes necessary to achieve them.	
Assessment	The result of an analysis of the state of affairs of the enterprise with respect to some driver.	
Goal	A high-level statement of intent, direction, or desired end state for an organization and its stakeholders.	
Outcome	An end result that has been achieved.	

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ArchiMate® 3.0 Motivation Elements - continued

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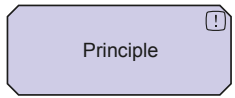
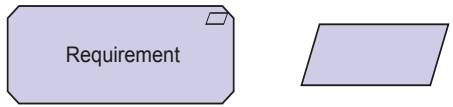
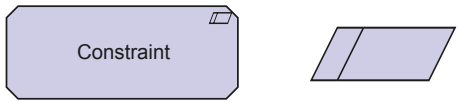
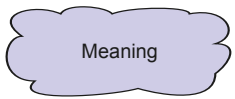
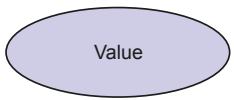
Element	Definition	Notation
Principle	A qualitative statement of intent that should be met by the architecture.	
Requirement	A statement of need that must be met by the architecture.	
Constraint	A factor that prevents or obstructs the realization of goals.	
Meaning	The knowledge or expertise present in, or the interpretation given to, a core element in a particular context.	
Value	The relative worth, utility, or importance of a core element or an outcome.	

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ArchiMate® 3.0 Strategy Elements

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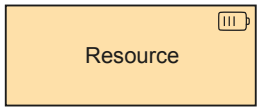
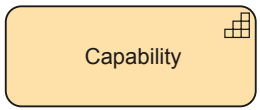
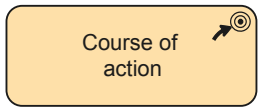
Element	Definition	Notation
Resource	An asset owned or controlled by an individual or organization.	
Capability	An ability that an active structure element, such as an organization, person, or system, possesses.	
Course of action	An approach or plan for configuring some capabilities and resources of the enterprise, undertaken to achieve a goal.	

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ArchiMate® 3.0 Business Layer

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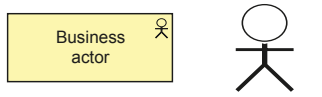
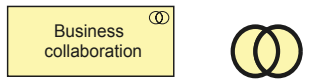
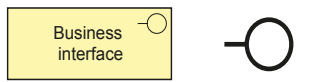
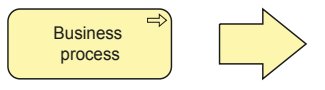
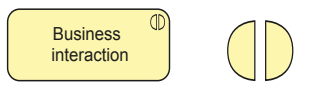
Element	Definition	Notation
Business actor	A business entity that is capable of performing behavior.	
Business role	The responsibility for performing specific behavior, to which an actor can be assigned, or the part an actor plays in a particular action or event.	
Business collaboration	An aggregate of two or more business internal active structure elements that work together to perform collective behavior.	
Business interface	A point of access where a business service is made available to the environment.	
Business process	A sequence of business behaviors that achieves a specific outcome such as a defined set of products or business services.	
Business function	A collection of business behavior based on a chosen set of criteria (typically required business resources and/or competences).	
Business interaction	A unit of collective business behavior performed by (a collaboration of) two or more business roles.	

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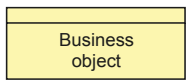
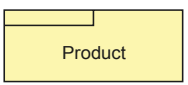
Element	Definition	Notation
Business event	A business behavior element that denotes an organizational state change. It may originate from and be resolved inside or outside the organization.	
Business service	An explicitly defined exposed business behavior.	
Business object	A concept used within a particular business domain.	
Contract	A formal or informal specification of an agreement between a provider and a consumer that specifies the rights and obligations associated with a product.	
Representation	A perceptible form of the information carried by a business object.	
Product	A coherent collection of services and/or passive structure elements, accompanied by a contract/set of agreements, which is offered as a whole to (internal or external) customers.	

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ArchiMate® 3.0 Application Layer

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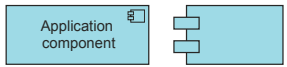
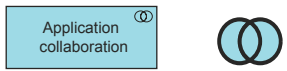
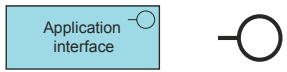
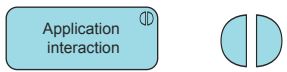
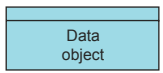
Element	Definition	Notation
Application component	An encapsulation of application functionality aligned to implementation structure, which is modular and replaceable. It encapsulates its behavior and data, exposes services, and makes them available through interfaces.	
Application collaboration	An aggregate of two or more application components that work together to perform collective application behavior.	
Application interface	A point of access where application services are made available to a user, another application component, or a node.	
Application function	Automated behavior that can be performed by an application component.	
Application interaction	A unit of collective application behavior performed by (a collaboration of) two or more application components.	
Application process	A sequence of application behaviors that achieves a specific outcome.	
Application event	An application behavior element that denotes a state change.	
Application service	An explicitly defined exposed application behavior.	
Data object	Data structured for automated processing.	

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ArchiMate® 3.0 Technology Layer

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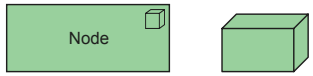
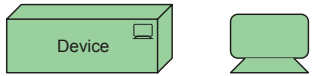
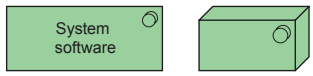
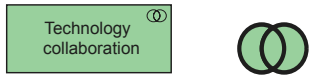
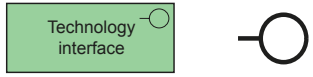
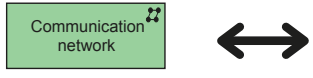
Element	Definition	Notation
Node	A computational or physical resource that hosts, manipulates, or interacts with other computational or physical resources.	
Device	A physical IT resource upon which system software and artifacts may be stored or deployed for execution.	
System software	Software that provides or contributes to an environment for storing, executing, and using software or data deployed within it.	
Technology collaboration	An aggregate of two or more nodes that work together to perform collective technology behavior.	
Technology interface	A point of access where technology services offered by a node can be accessed.	
Path	A link between two or more nodes, through which these nodes can exchange data or material.	
Communication network	A set of structures and behaviors that connects computer systems or other electronic devices for transmission, routing, and reception of data or data-based communications such as voice and video.	

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ArchiMate® 3.0 Technology Layer - continued

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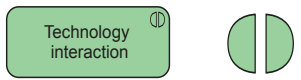
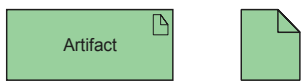
Element	Definition	Notation
Technology function	A collection of technology behavior that can be performed by a node.	
Technology process	A sequence of technology behaviors that achieves a specific outcome.	
Technology interaction	A unit of collective technology behavior performed by (a collaboration of) two or more nodes.	
Technology event	A technology behavior element that denotes a state change.	
Technology service	An explicitly defined exposed technology behavior.	
Technology object	A passive element that is used or produced by technology behavior.	Abstract Element
Artifact	A piece of data that is used or produced in a software development process, or by deployment and operation of a system.	

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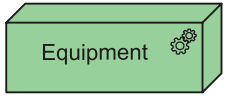
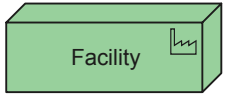
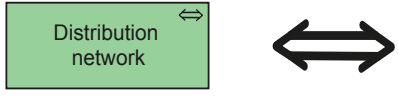
Physical Elements

Element	Definition	Notation
Equipment	One or more physical machines, tools, or instruments that can create, use, store, move, or transform materials.	
Facility	A physical structure or environment.	
Distribution network	A physical network used to transport materials or energy.	
Material	Tangible physical matter or physical elements.	

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Implementation and Migration Elements

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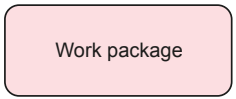
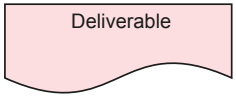
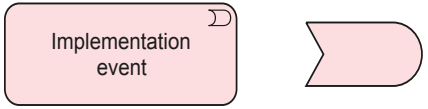
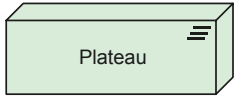
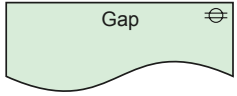
Element	Definition	Notation
Work package	A series of actions identified and designed to achieve specific results within specified time and resource constraints.	
Deliverable	A precisely-defined outcome of a work package.	
Implementation event	A behavior element that denotes a state change related to implementation or migration.	
Plateau	A relatively stable state of the architecture that exists during a limited period of time.	
Gap	A statement of difference between two plateaus.	

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- Vision of Boundaryless Information Flow™, with Enterprise Architecture as a critical element for making the vision a reality; the TOGAF® Architecture Development Method (ADM) provides an important toolset.

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