



MINISTERSTVO

INVESTÍCIÍ, REGIONÁLNEHO ROZVOJA
A INFORMATIZÁCIE
SLOVENSKEJ REPUBLIKY

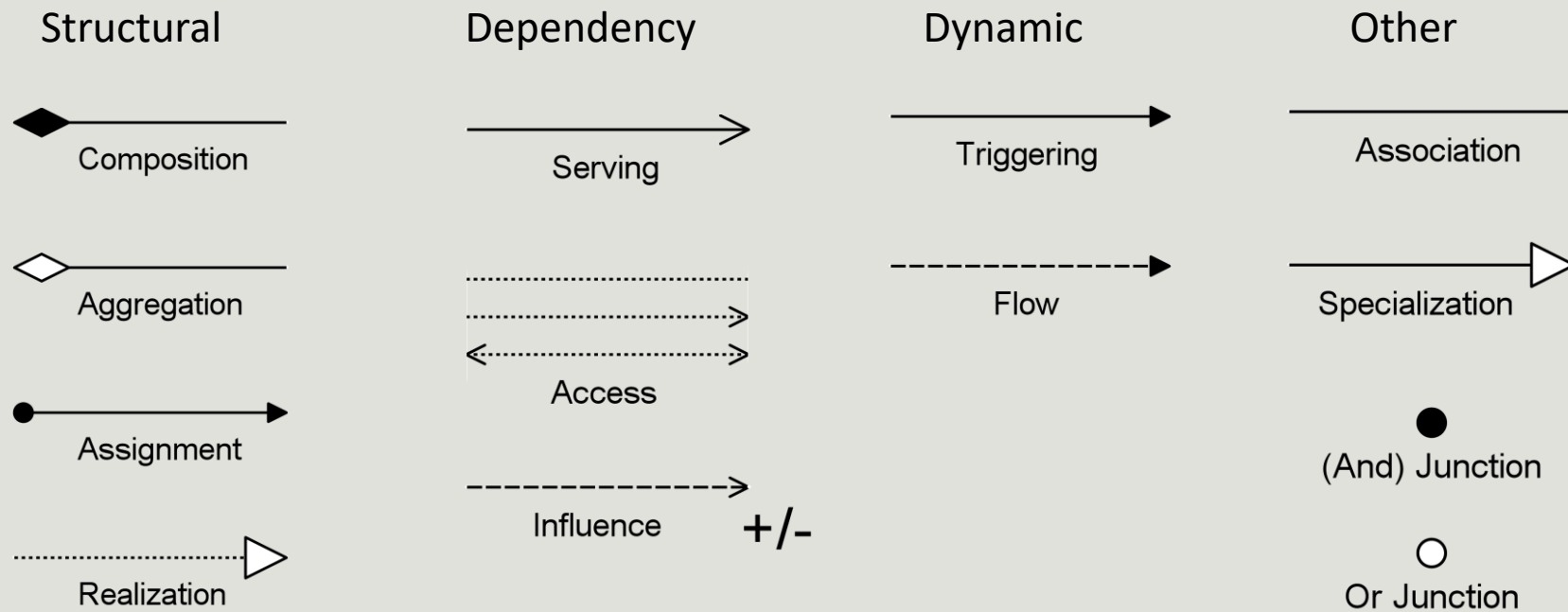
Modelovací jazyk ArchiMate

školenie



RELATIONSHIPS

Prehľad vzťahov



Asociácia - Association

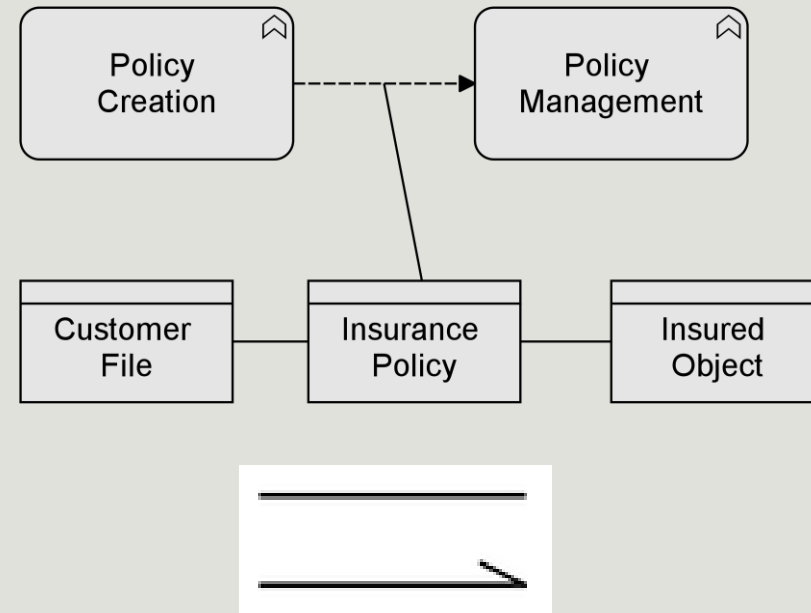
“Weakest” relation

A has an association with B: A has some relationship with B

An association relationship is always allowed between two elements, or between a relationship and an element.

An association models an unspecified relationship, or one that is not represented by another ArchiMate relationship.

An association is undirected by default but may be directed.

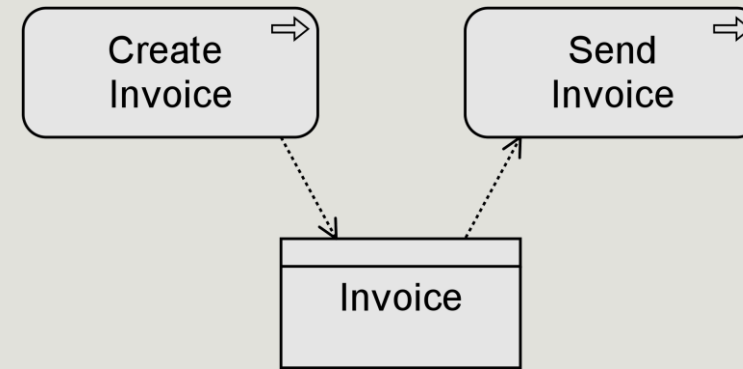


Prístup - Access

The access relationship models the ability of behavior and active structure elements to observe or act upon passive structure elements.

The access relationship indicates that a process, function, interaction, service, or event “does something” with a passive structure element

Typically between behavior or active structure concepts and passive structure concepts in the same layer



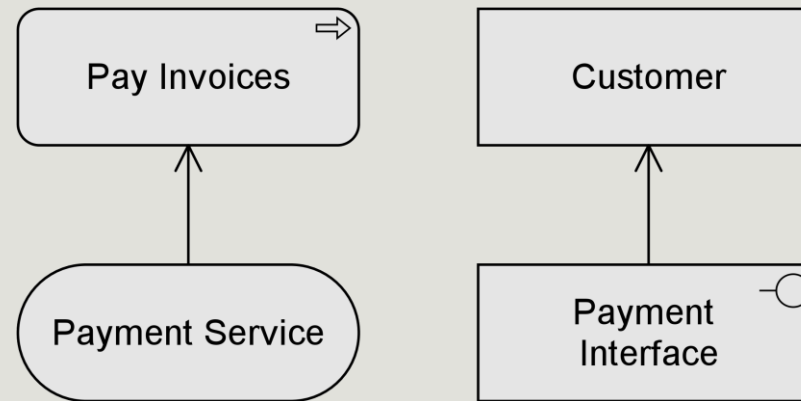
Služit' - Serving

The serving relationship models that an element provides its functionality to another element.

Object A serves Object B

Typically to model how services or interfaces serve entities in their environment

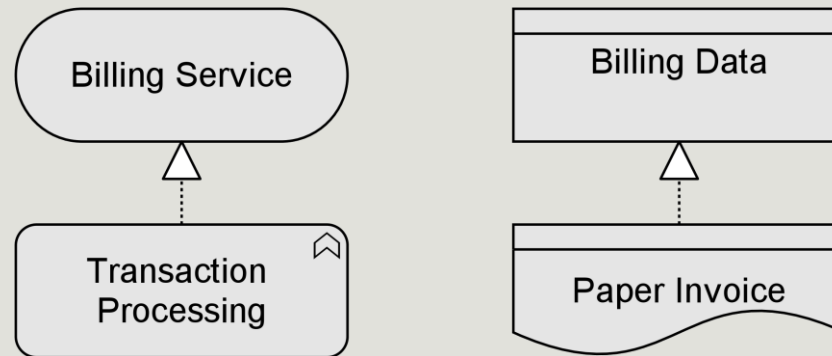
Applied for behavior and structure elements



Realizácia - Realization

The realization relationship indicates that an entity plays a critical role in the creation, achievement, sustenance, or operation of a more abstract entity.

The realization relationship indicates that more abstract entities (“what” or “logical”) are realized by means of more tangible entities (“how” or “physical”).



Priradenie - Assignment

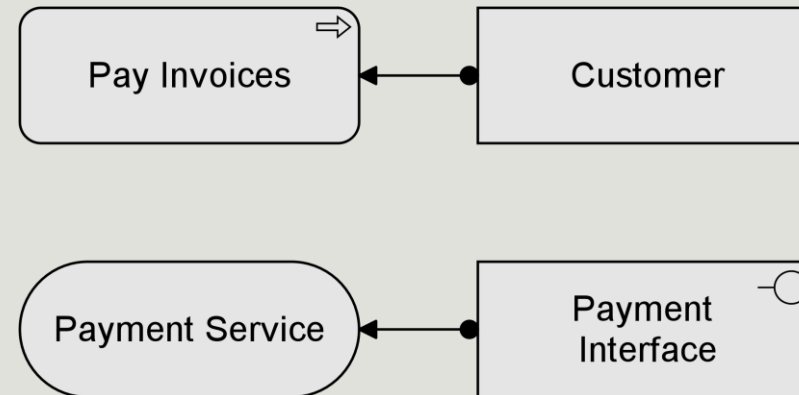
The assignment relationship expresses the allocation of responsibility, performance of behavior, or execution

Relates structure elements to behavior elements

Actor A is responsible for Process X

Application B executes Application function Y

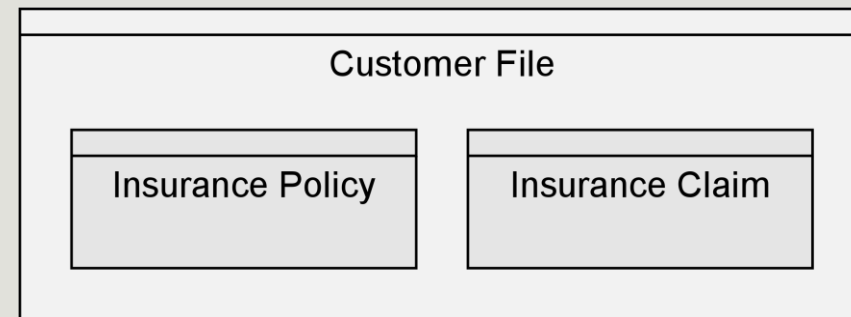
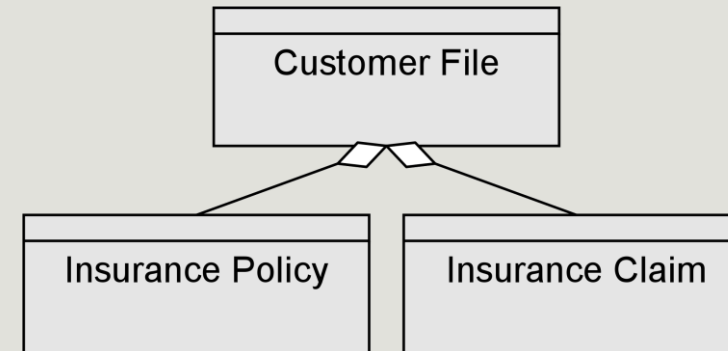
Actor A is assigned to Role B



Agregácia - Aggregation

The aggregation relationship indicates that an element groups a number of other elements.

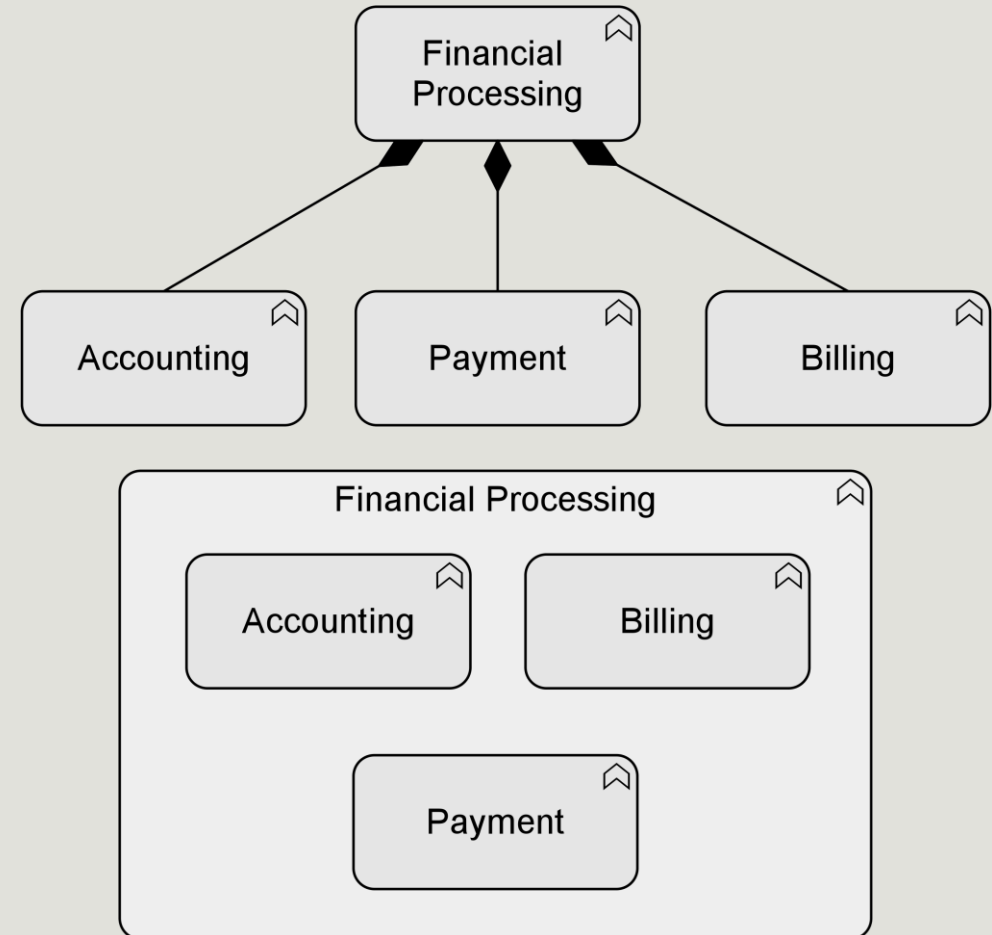
An aggregation relationship is always allowed between two instances of the same element type.



Kompozícia - Composition

The composition relationship indicates that an element consists of one or more other elements.

A composition relationship is always allowed between two instances of the same element type.

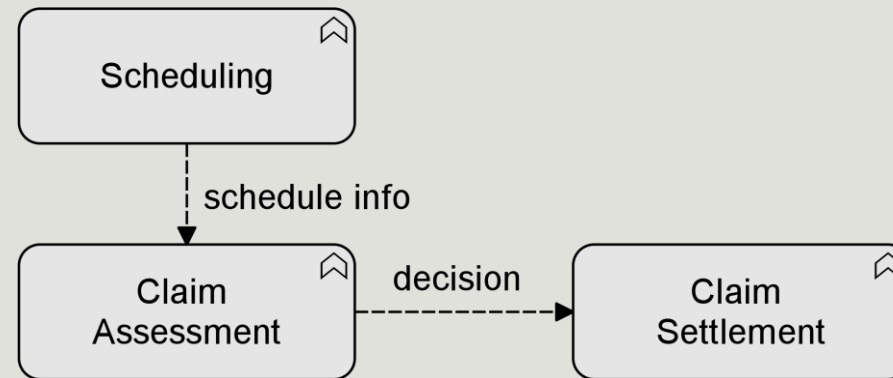


Tok - Flow

The flow relationship represents transfer from one element to another

The flow relationship is used to model the flow of, for example, information, goods, or money between behavior elements.

A flow relationship does not imply a causal relationship.

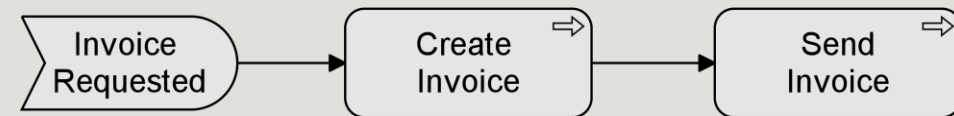


Spúšťanie -Triggering

The triggering relationship describes a temporal or causal relationship between elements

For example: When one process is completed, the next one starts

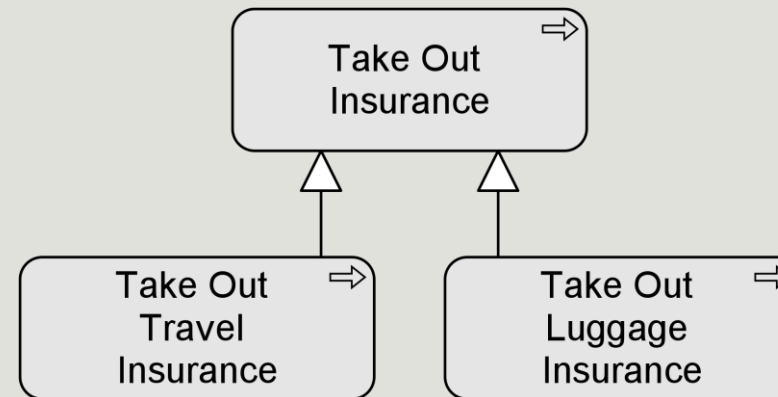
Between behavior elements



Špecializácia - Specialization

The specialization relationship indicates that an element is a particular kind of another element

The specialization relationship can relate any instance of a concept with another instance of the same concept

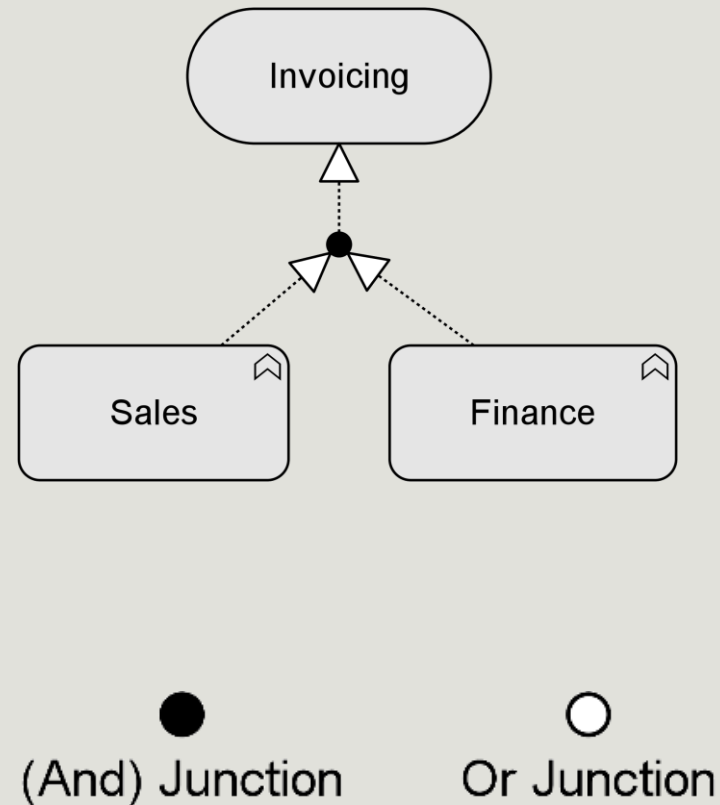


Junkcia - Junction

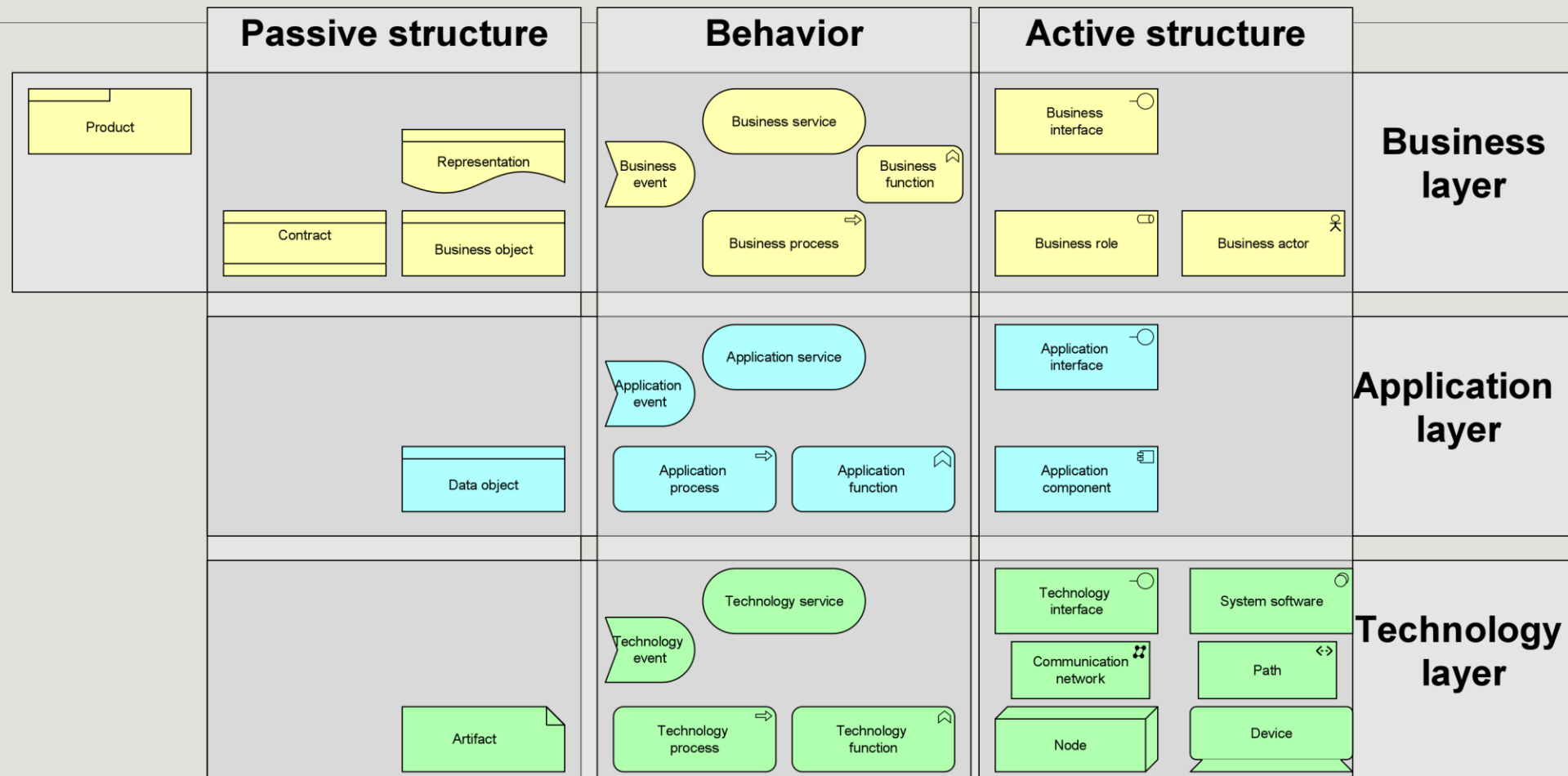
A junction is used to connect relationships of the same type

A junction is not an actual relationship, but rather a relationship connector

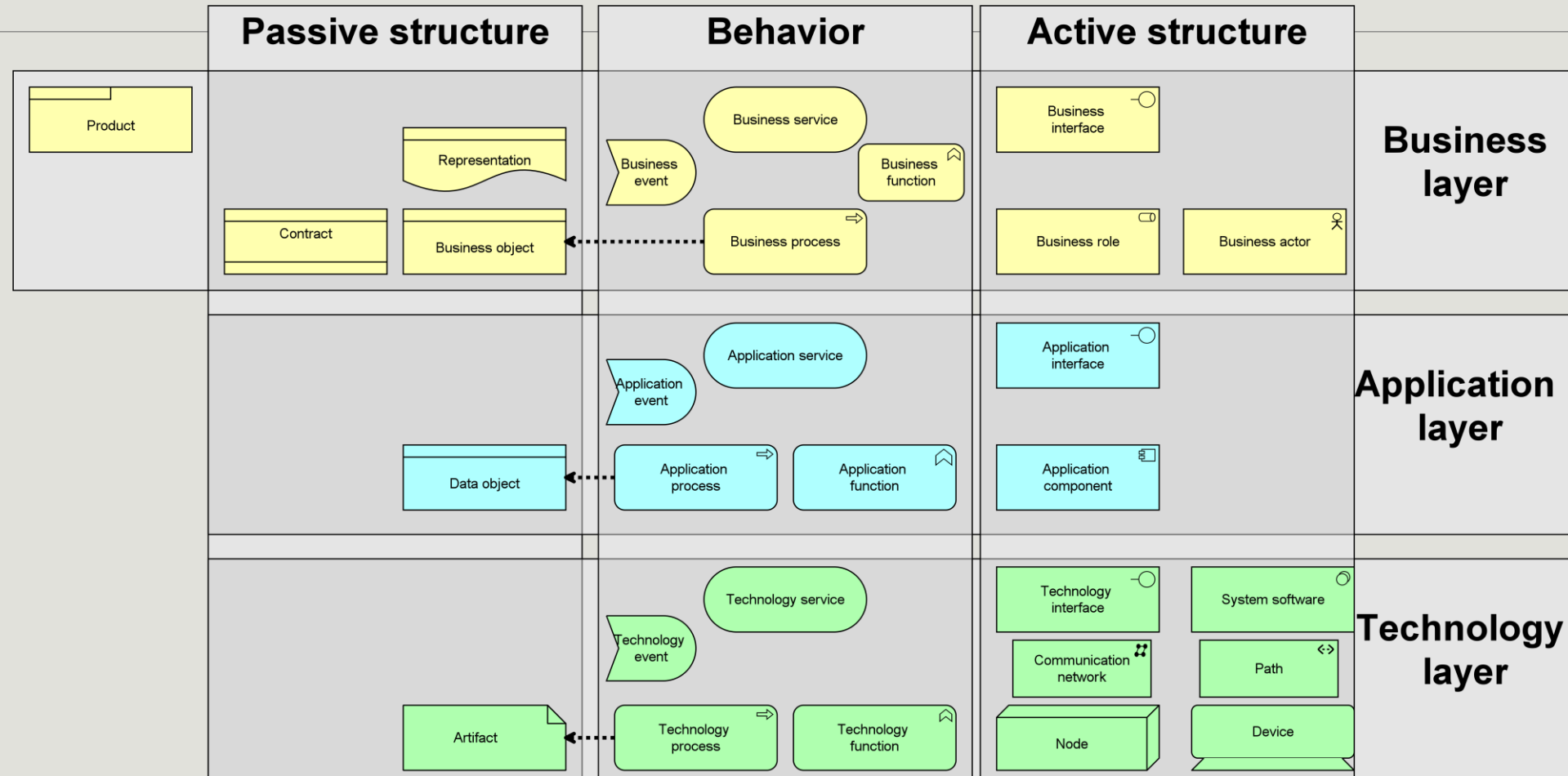
A junction is used to explicitly express that several elements *together* participate in the relationship (*and* junction) or that *one of* the elements participates in the relationship (*or* junction)



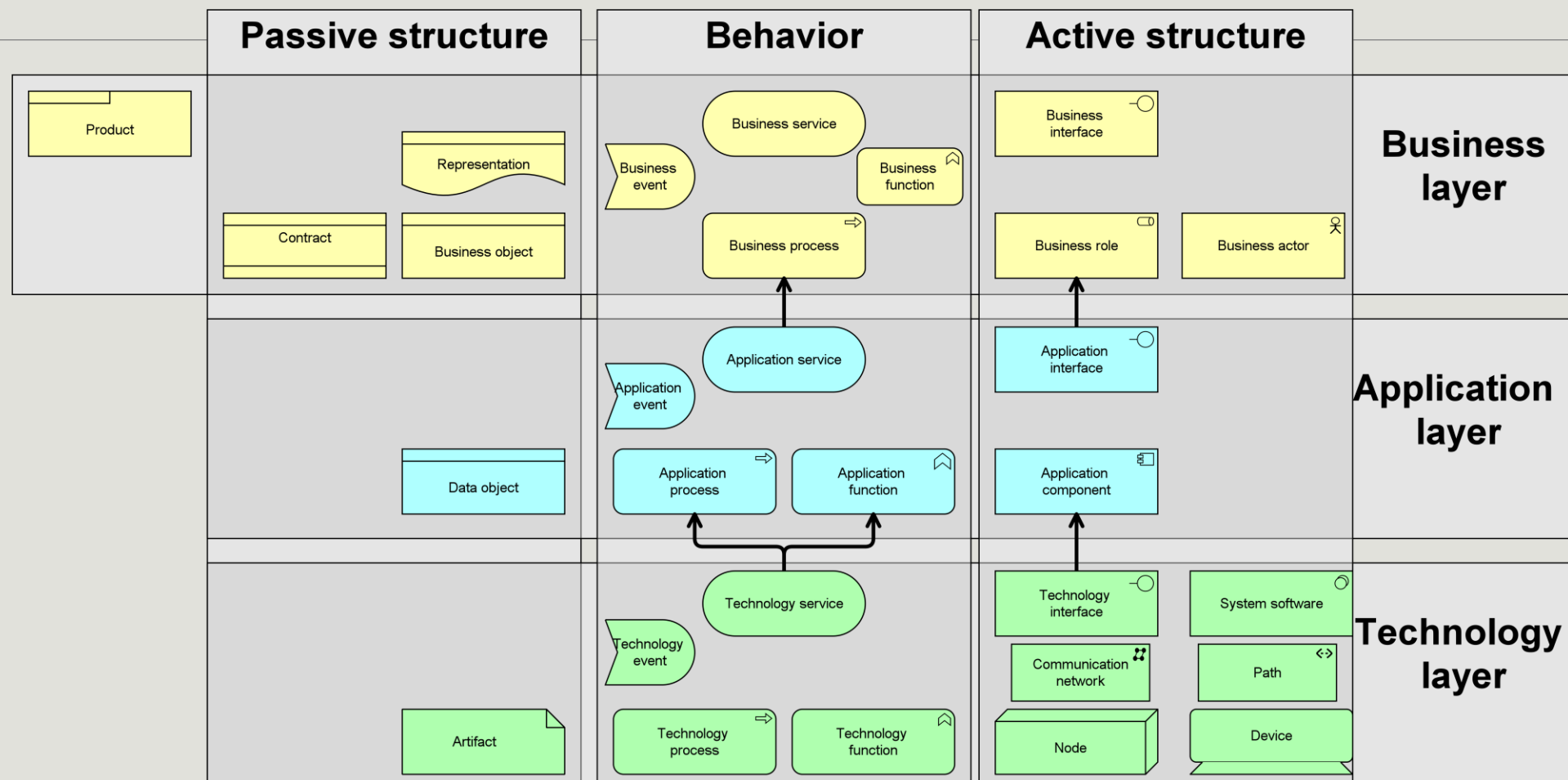
Objekty a vzťahy



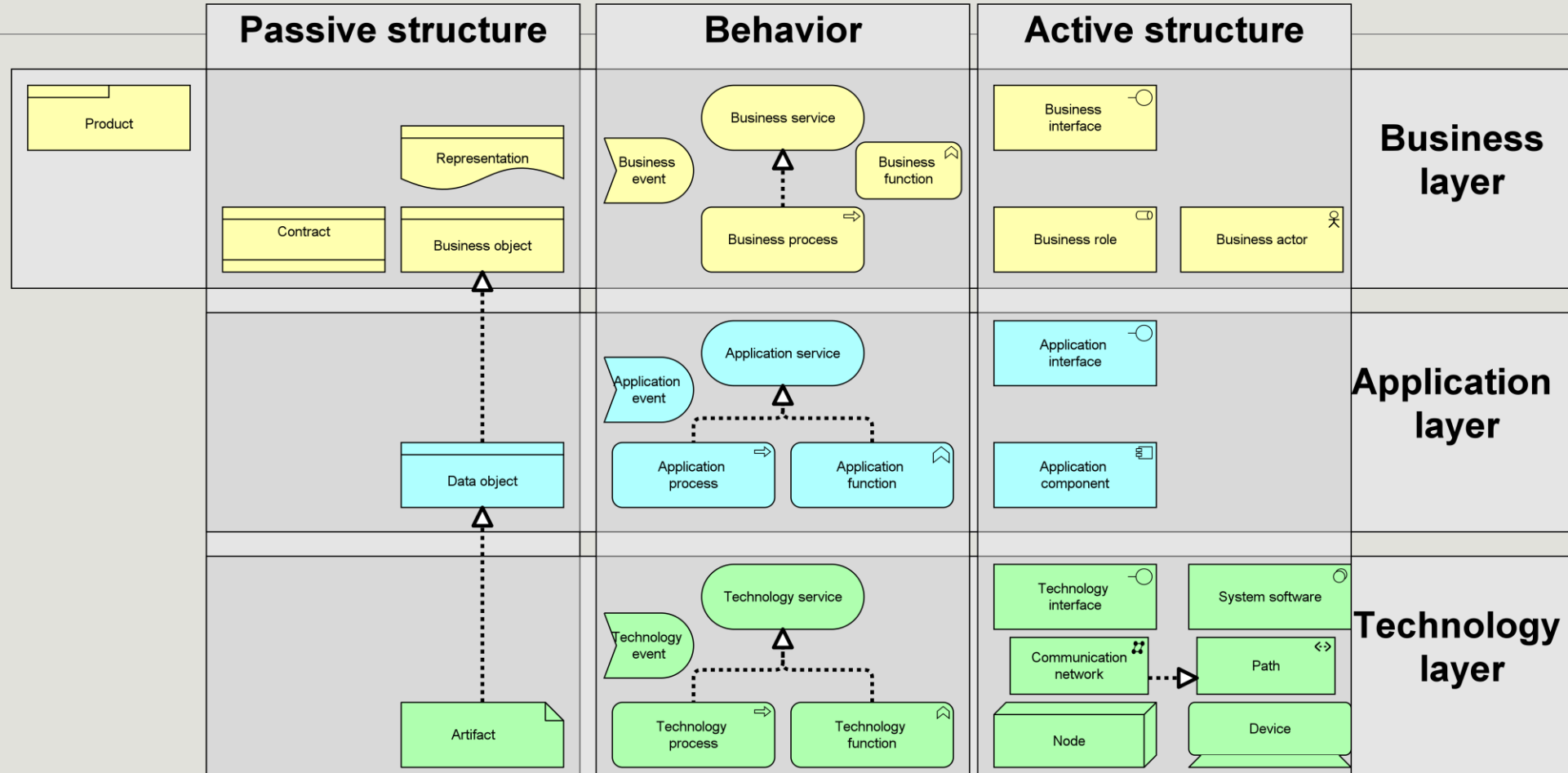
Prístup - Access



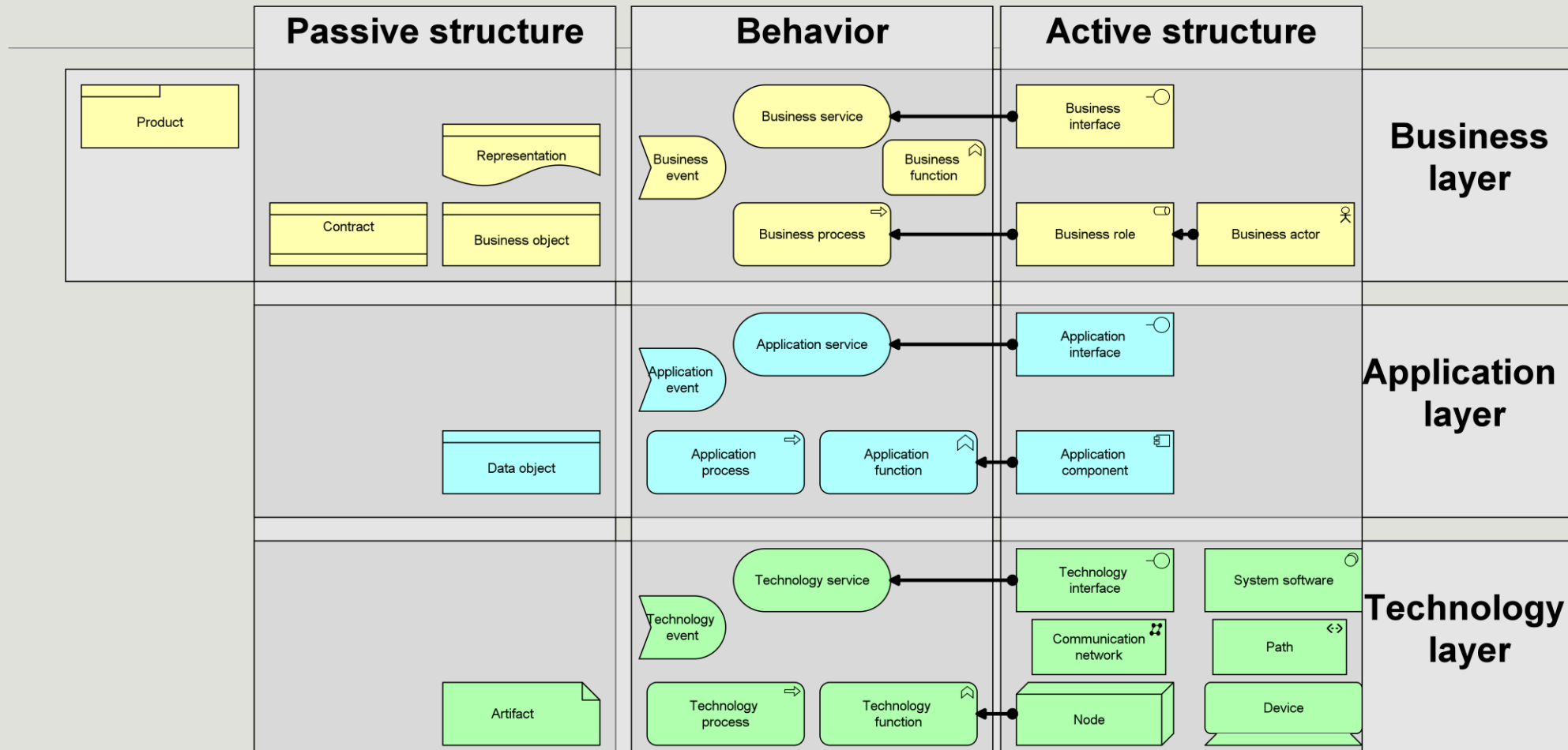
Služit' - Serving



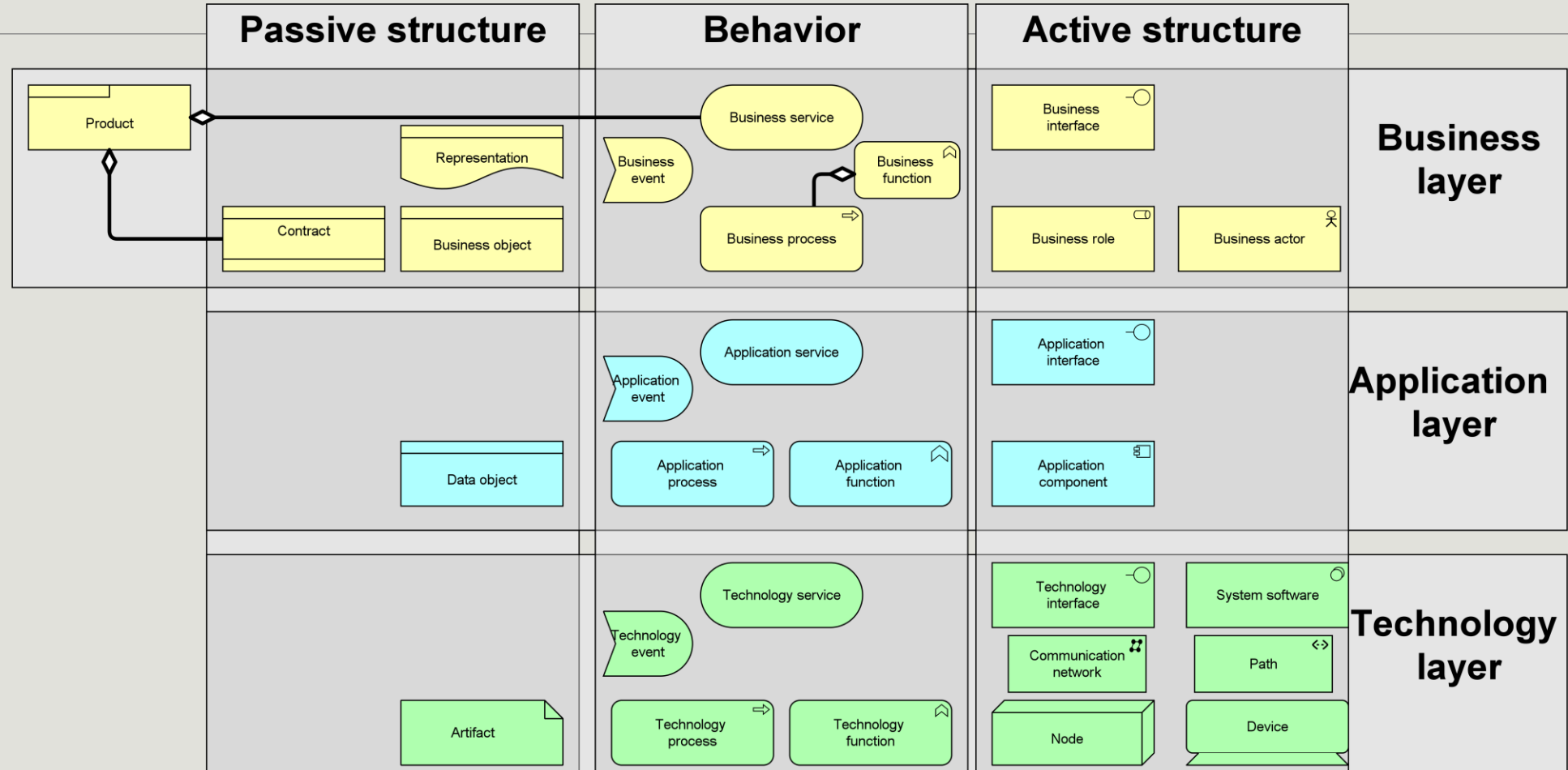
Realizácia - Realization



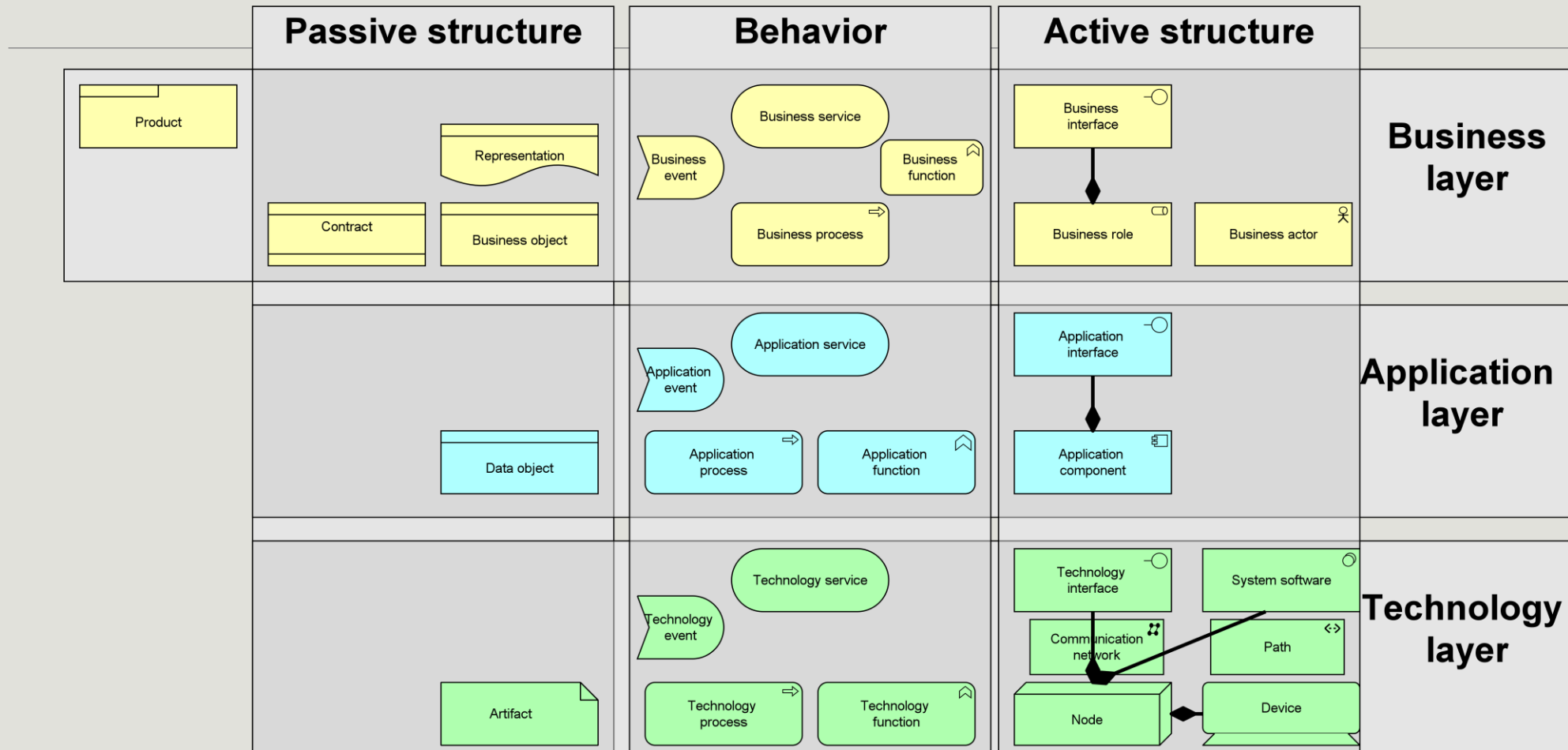
Priradenie - Assignment



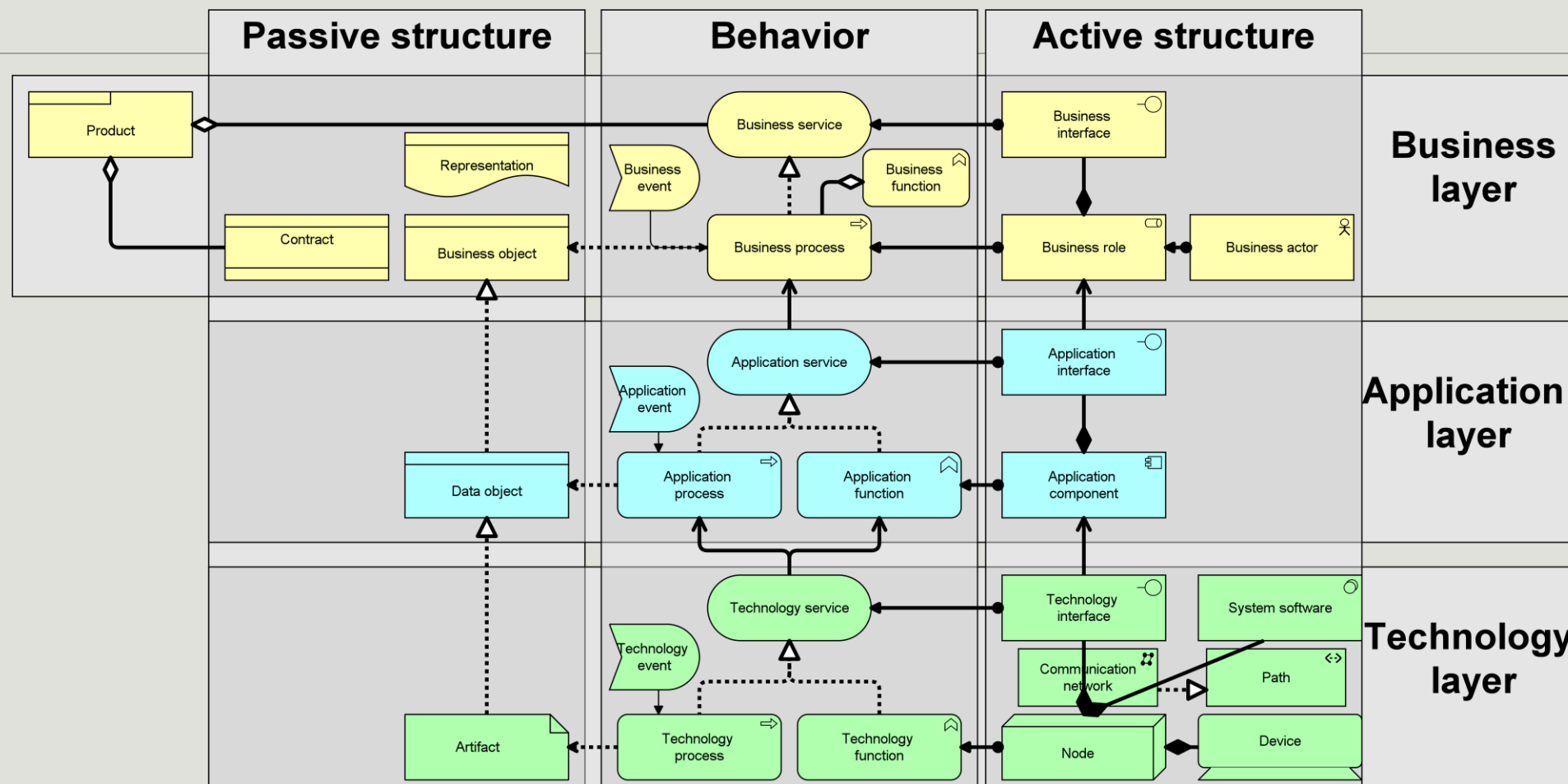
Agregácia - Aggregation



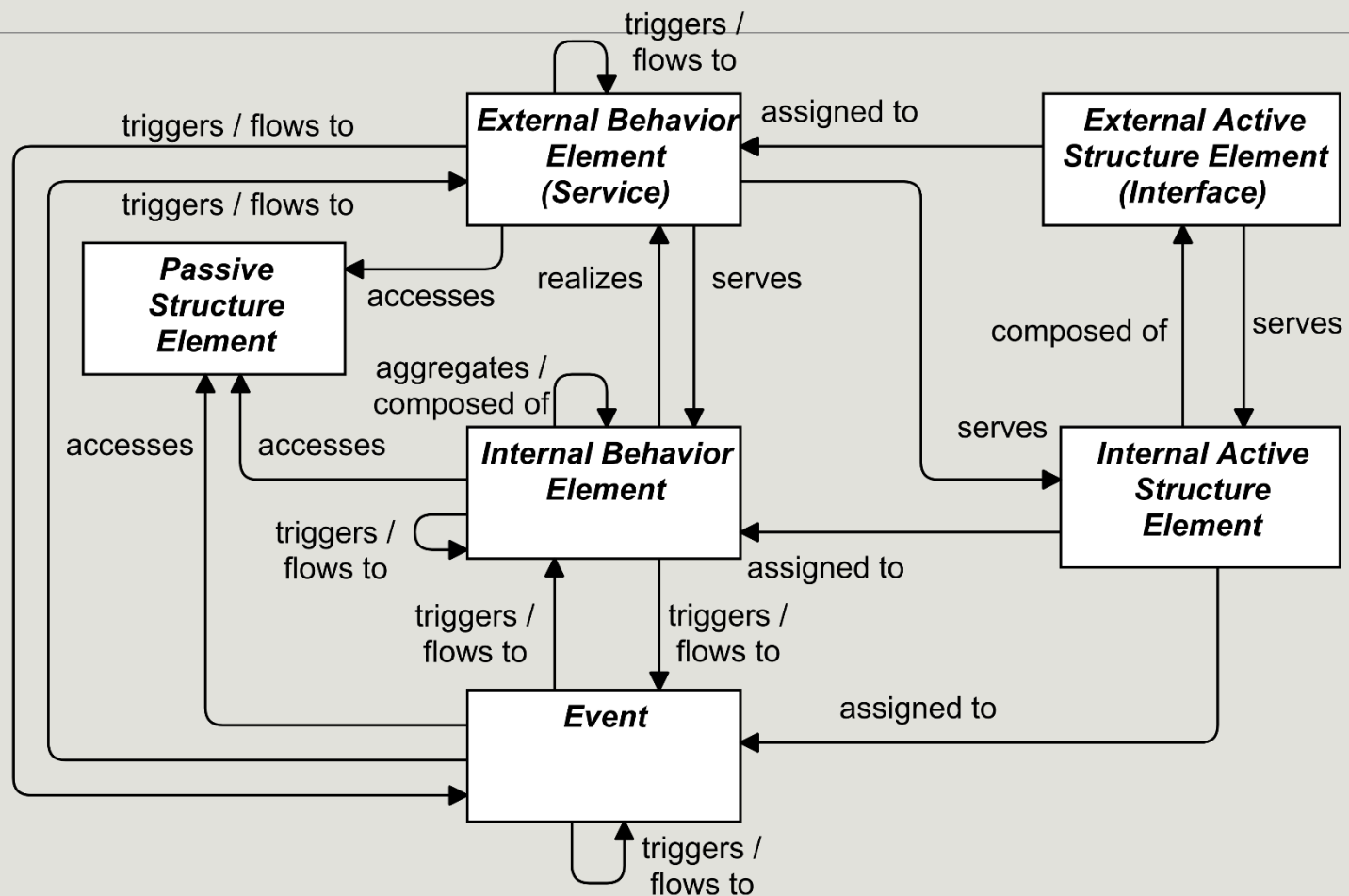
Kompozícia - Composition



Vztáhy sumár



Štruktúra na každej vrstve



Farby metamodelu

Biela

- abstraktné koncepty

Svetlo sivá

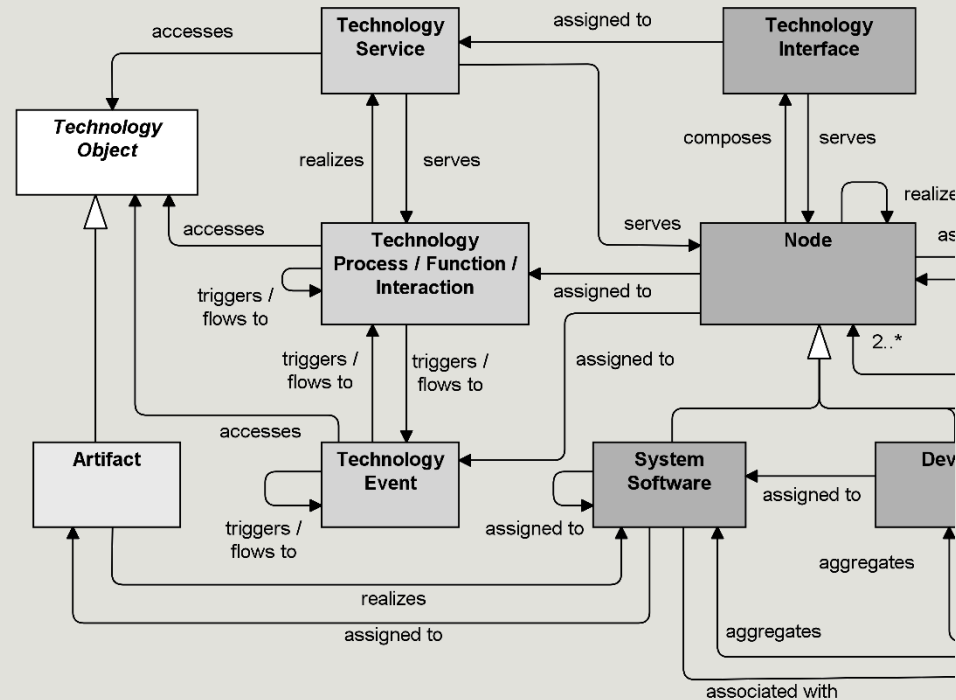
- pasívne štrukturálne

Stredne sivá

- behaviorálne

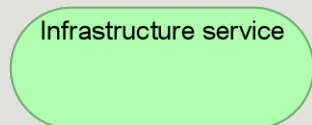
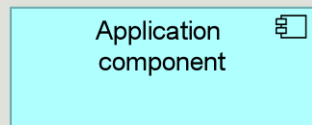
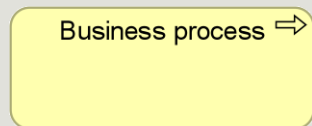
Tmavo sivá

- aktívne štrukturálne



Farby jazyku

Jazyk striktne nepredpisuje, ale je nevyhnutné dodržiavať zavedené konvencie (pozri AR VS SR).



Vrstva / koncept	Farba	RGB kód (červená, zelená, modrá)
Motivačný aspekt	fialová	217, 207, 255
Strategická vrstva	oranžová	255, 198, 133
Biznis vrstva	žltá	250, 240, 135
Aplikačná vrstva	modrá	184, 231, 252
Technologická vrstva	zelená	214, 248, 184
Bezpečnostná vrstva	šedá	v aktuálnej verzii architektonického rámca nie je súčasťou modelovania
Implementačná a migračná vrstva	ružová	255, 189, 220
	svetlo zelená	224, 255, 224
Umiestnenie	oranžová	255, 179, 114

Definuje komponent **Modelovací rámec a prispôbený metamodel** v AR VS SR.

Cvičenie

Cvičenie 1.4

Abstrakcie jazyka – 1

Externé a interné

Externé – ukazujú čo robí „systém“ pre prostredie

Interné - ukazujú ako to „systém“ robí

Abstrakcie jazyka – 2

Aktívne a behaviorálne

Čo musí „systém“ robiť (behaviorálne) a ako to „systém“ robí (aktívne).

Abstrakcie jazyka – 3

Konceptuálna, logický a fyzická

Konceptuálna

- informácia relevantná pre biznis

Logická

- Štruktúra informácie vhodná pre manipuláciu v rámci informačného systému

Fyzická

- Úložisko informácie

Abstrakcie jazyka – 4

Typ a inštancia

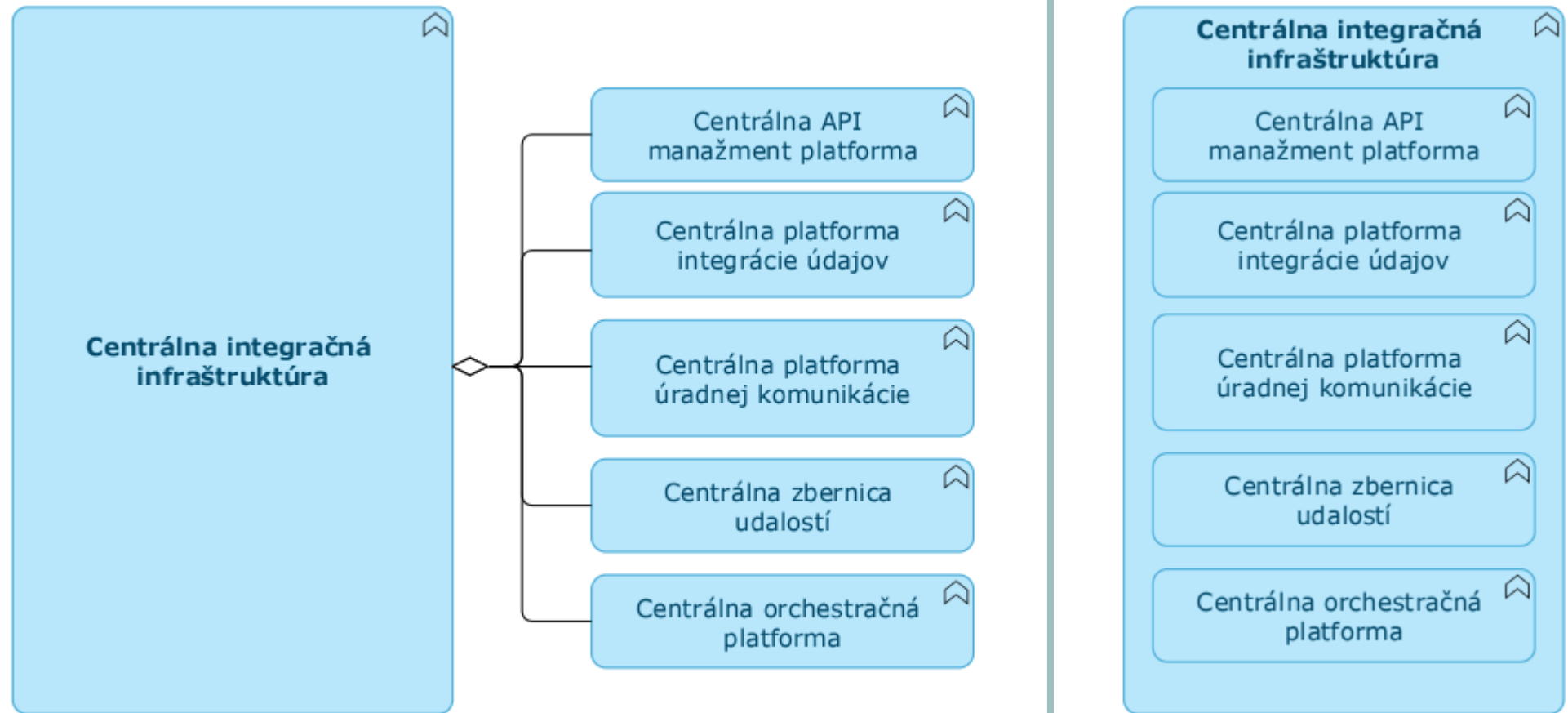
- MS Windows Server 2019
- MS Windows Server 2019 inštancia XU7430FSEHT

Vnáranie

Vnáranie objektov do vnútra iných objektov je alternatívna grafická reprezentácia pre štrukturálne vzťahy.



Grafická kompozícia a agregácia



Derivované vztahy

