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UAF Training Lab: Insurance Enterprise

Introduction

Unified Architecture Framework (UAF) is a relatively new and rapidly emerging standard that enables describing and analyzing the enterprise architecture, and provides tools for enterprise analysis and easier decision-making.

UAF standard is not a new standard in the market. It's predecessor, UPDM (Unified Profile for DoDAF/MODAF) was well established standard in the military market. The new UAF standard is demilitarized, and now is used by for both military and industry organizations.

UAF standard is organized as a grid. Rows of the grid represent enterprise architecture domains (views), and the columns – model kinds (aspects) that help to represent the selected domain. Each model kind for a particular domain may be described by one or more views – diagrams, tables, matrices or Gantt charts.

Here, we will illustrate how to UAF is applied to define **Enterprise Architecture of the Insurance Enterprise**. This lab covers the following UAF domains/Views.

Strategic Domain

When we start analyzing how enterprise operates, it is essential to understand what capabilities the enterprise is able to provide during selected timeframe, and how the processes and resources in the organization support these capabilities. Strategic domain is the place where we can start this definition. This domain provides tools to describe the taxonomy, composition, dependencies and evolution of the capabilities of the enterprise. Strategic domain may describe both existing enterprise architecture as well as to-be enterprise architecture.

Operational Domain

Operational domain in UAF is a powerful tool that helps to understand and describe context of the business. It provides means allowing to understand how business works, what are main

participants in the business, and how they interact to each other. Operational domain describes the operational performers, operational structure, exchanges and processes (operational activities) required to support (exhibit) capabilities.

All elements in operational domain are defined in an implementation/solution independent manner. The purpose of the operational domain is to understand how business has to operate in order to be able to provide one or another capability, previously defined in the strategic domain.

Resources Viewpoint

UAF Framework Resources viewpoint allows to describe an enterprise solution architecture that implements the operational requirements and realize capabilities. It describes the material solution that is/will be implemented in the organization, and consists of different types of resources: organizational, software, various artifacts, resources configurations, systems and natural resources. Note, that even if the capture organizational resources in separate Personnel viewpoint, the organizational resources may be included into solution architecture.

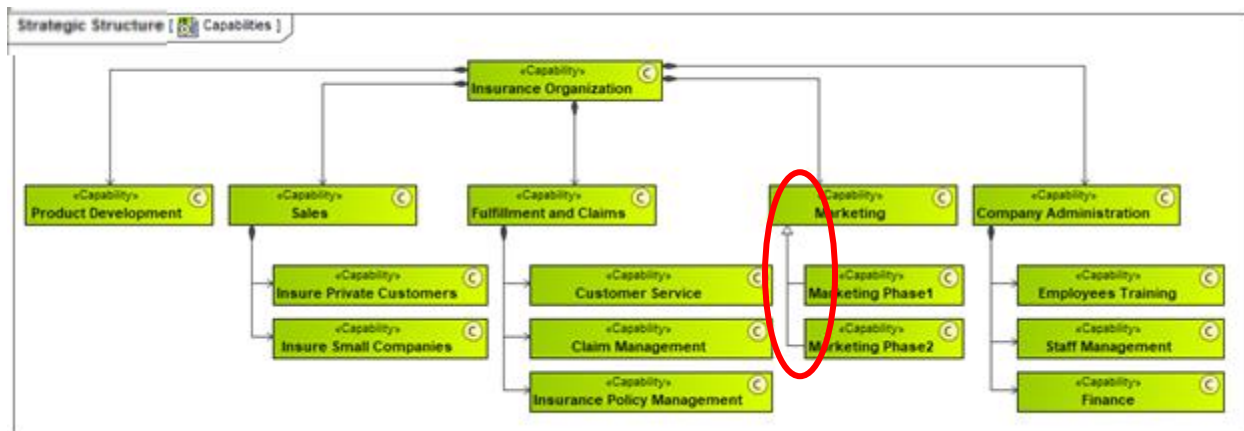
As enterprise architecture activities are very often related to organization transformation and evolution, it is quite common to define more than one solution architecture. We can define as-is and to-be architectures, and also may define several alternative architectures. After alternative solution architectures are captured, and trade-offs may be performed to identify which solution architecture satisfies operational requirements the best, and which architecture will be implemented to enable capabilities.

In this lab, we have captured as-is enterprise architecture of the Insurance Enterprise.

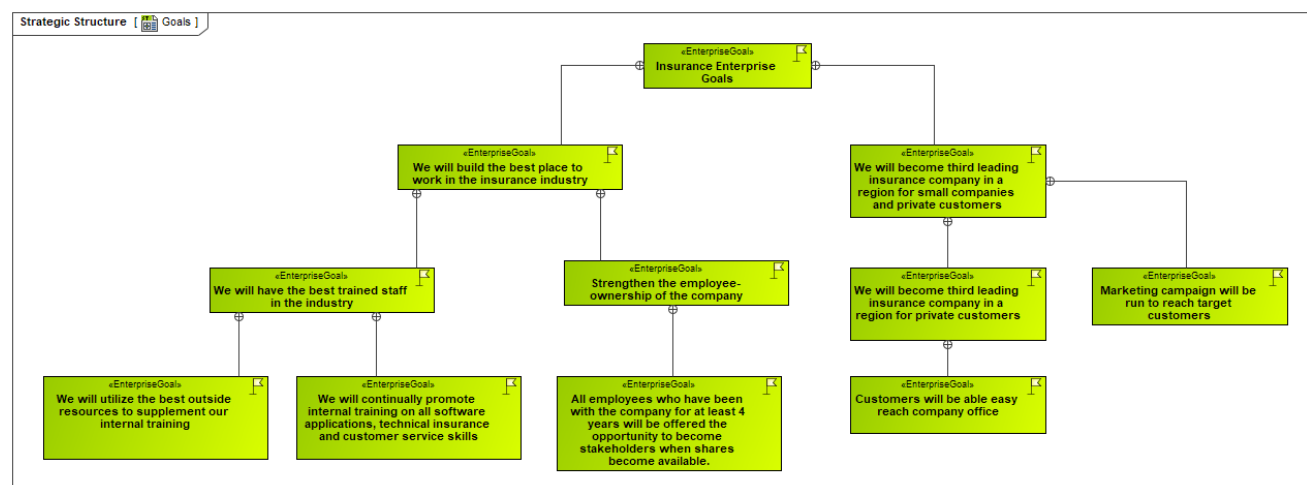
Applying UAF: Strategic Domain for an Insurance Enterprise

Strategic Taxonomy: Defining Capabilities

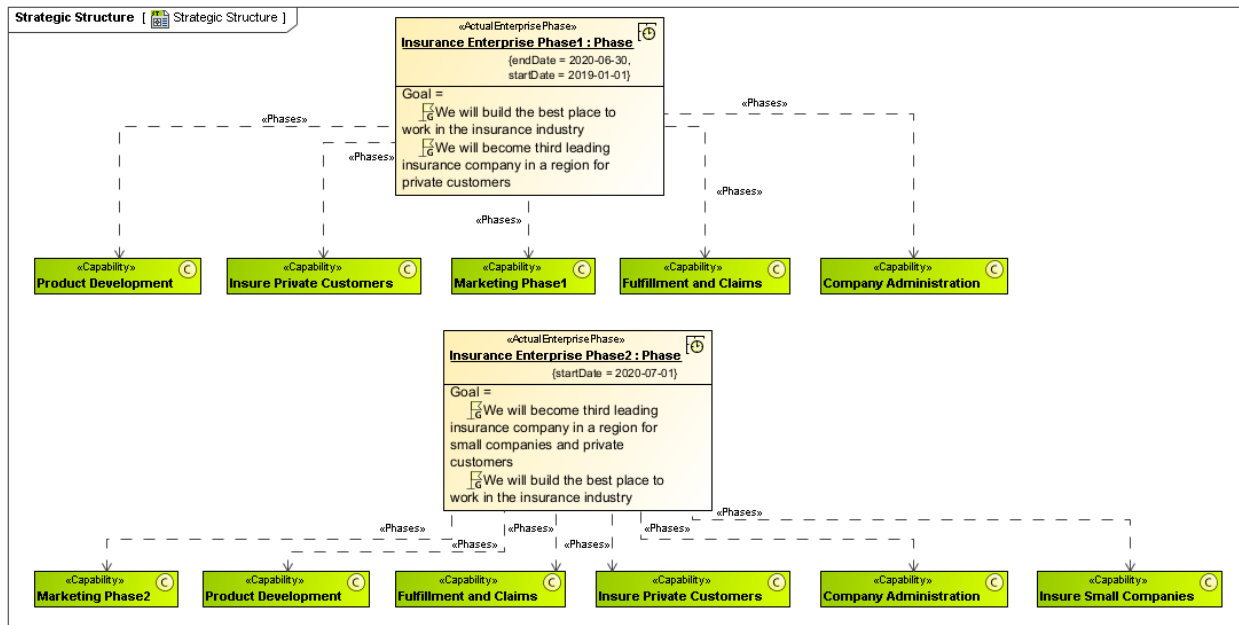
Create Insurance Enterprise capabilities as *Insurance Product Development, Insure Customers, Customer Service, Claim Management, Marketing, Finance*, and others as shown below.



Create a new **Strategic Structure Diagram** for enterprise goal as follows. Use attached excel sheet to copy/paste the goals.



In a new **Strategic Structure Diagram**, identify two phases of the Insurance Enterprise. During the Phase1, company may sell insurance to private customers. During the Phase2, insurance may be provided for small companies and private customers. The capabilities and goals of the enterprise in each of the phases are different and exhibiting the defined capabilities as follows:

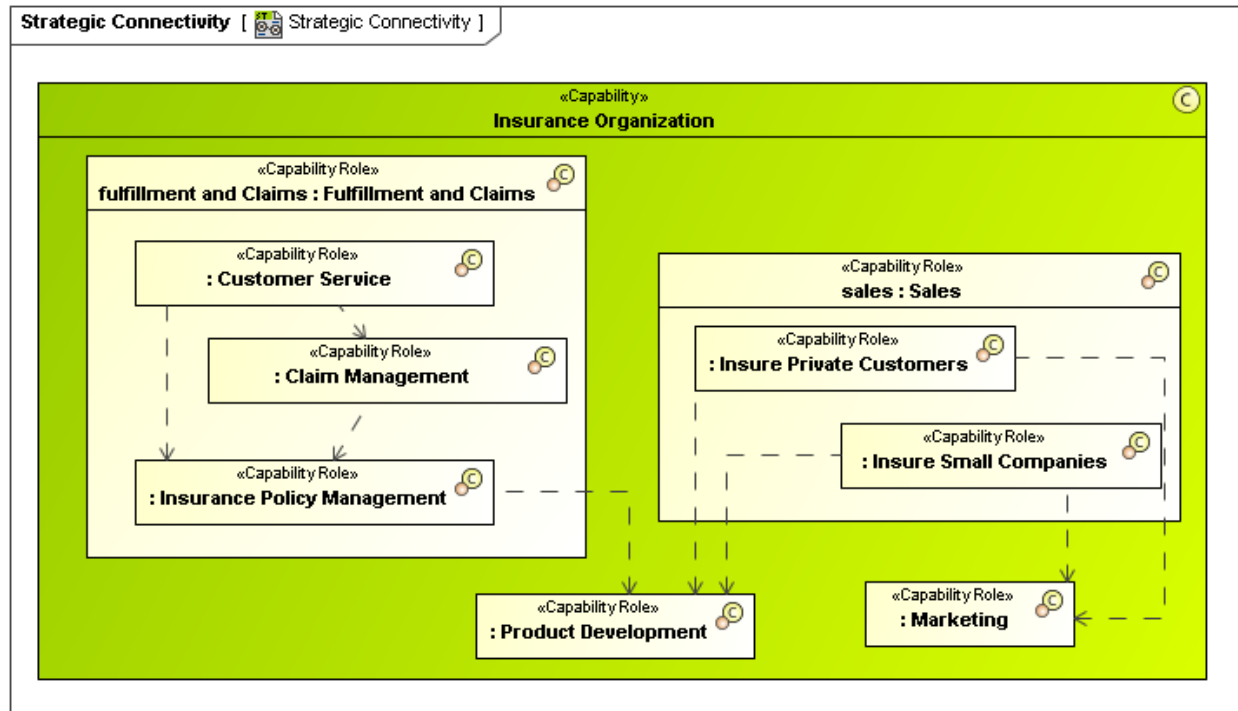


Add two visions in the containment tree as shown in table below, then create Strategic **Actual Enterprise Phase Taxonomy Table** as follows to provide a summary about Actual Enterprise Phases – use **Generic Table**:

#	Name	Start Date	End Date	Vision	Goal	Phases Capability
1	 Insurance Enterprise Phase1	2019-01-01	2020-06-30	 Become leading the insurance provider for private customers.	 We will build the best place to work in the insurance industry  EG1 We will become third leading insurance company in a region for private customers	 Product Development  Insure Private Customers  Fulfillment and Claims  Marketing Phase1  Company Administration
2	 Insurance Enterprise Phase2	2020-07-01		 Become leading the insurance provider for small companies and private customers.	 EG2 We will become third leading insurance company in a region for small companies and private customers  We will build the best place to work in the insurance industry	 Product Development  Insure Private Customers  Insure Small Companies  Fulfillment and Claims  Marketing Phase2  Company Administration

Strategic Connectivity: Capability Dependencies

When talking about capabilities, for more effective deployment and analysis of enterprise operations, there is essential to understand dependencies between capabilities. **Strategic Connectivity** diagram is a right tool for that. Create the following strategic connectivity diagram and create these dependency relationships.



Other Strategic Views

Create two important measurements for Marketing Capability: Sales Growth and Website Traffic (visits per day). View them in a **Typical Measurements**:

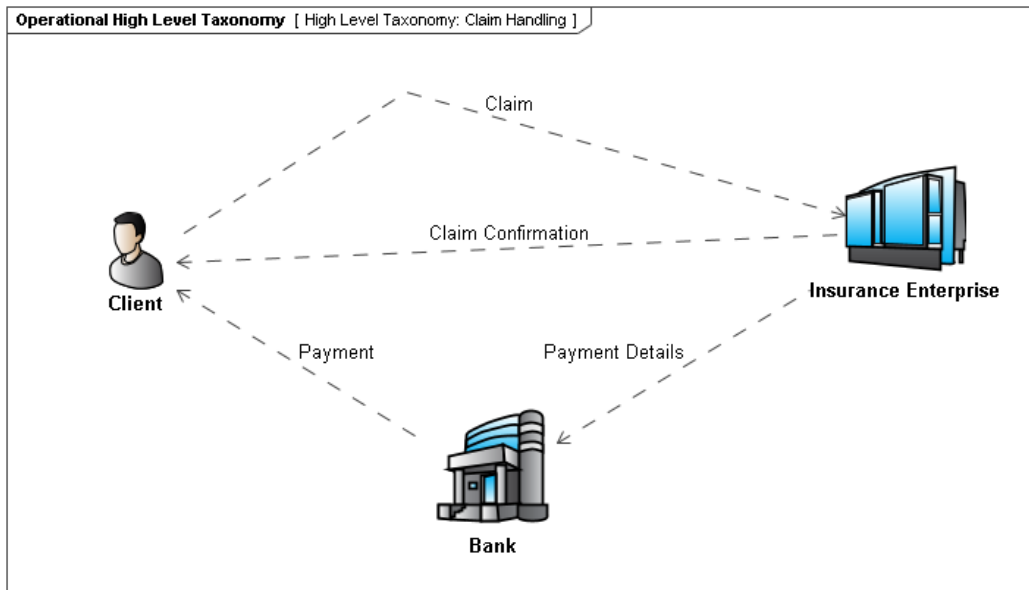
#	Property Set	Measurements
1	Marketing	Sales Growth : Real Website Traffic, per day : Integer

Create **Actual Measurements** and two new Actual Property Sets of Type Marketing Capability; fill out the information as shown below:

#	Property Set	Performance Requirement	Measure	Metric	Start Date	End Date
1	Marketing	Sales Growth	1.2	Real	2019-01-01T17:42:49+02:00	2019-06-30T17:43:46+02:00
2	Marketing	Website Traffic, per day	50	Integer	2019-01-01T17:42:49+02:00	2019-06-30T17:43:46+02:00
3	Marketing	Sales Growth	1.25	Real	2019-07-01T17:42:49+02:00	2019-12-31T17:43:46+02:00
4	Marketing	Website Traffic, per day	70	Integer	2019-07-01T17:42:49+02:00	2019-12-31T17:43:46+02:00

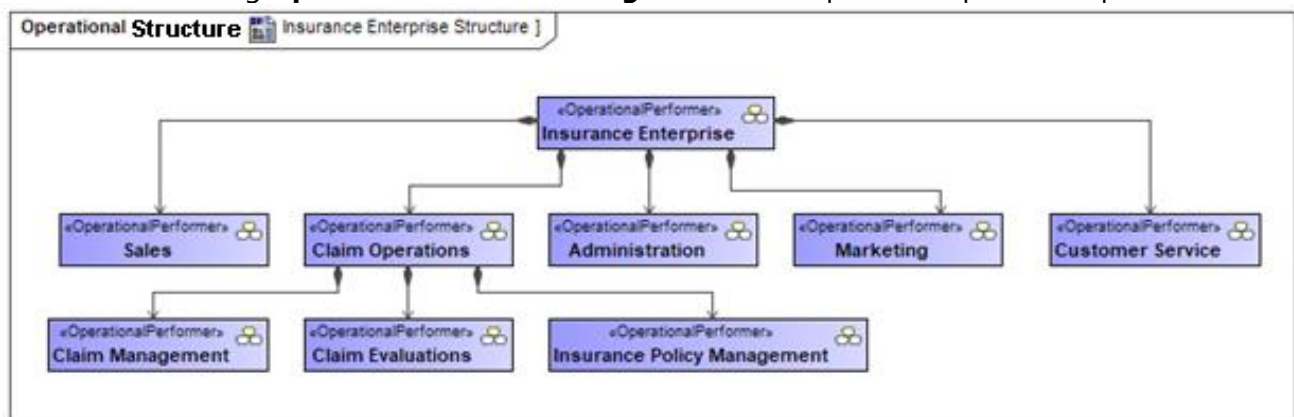
Applying UAF: Operational Domain for an Insurance Enterprise

Create Claim Handling High Level Operational concept that is composed of 3 operational performers Client, Insurance Enterprise, and Bank. Create **Operational High-Level Taxonomy** as follows to capture the idea of the players and operations involved. Images can be changed from image option.



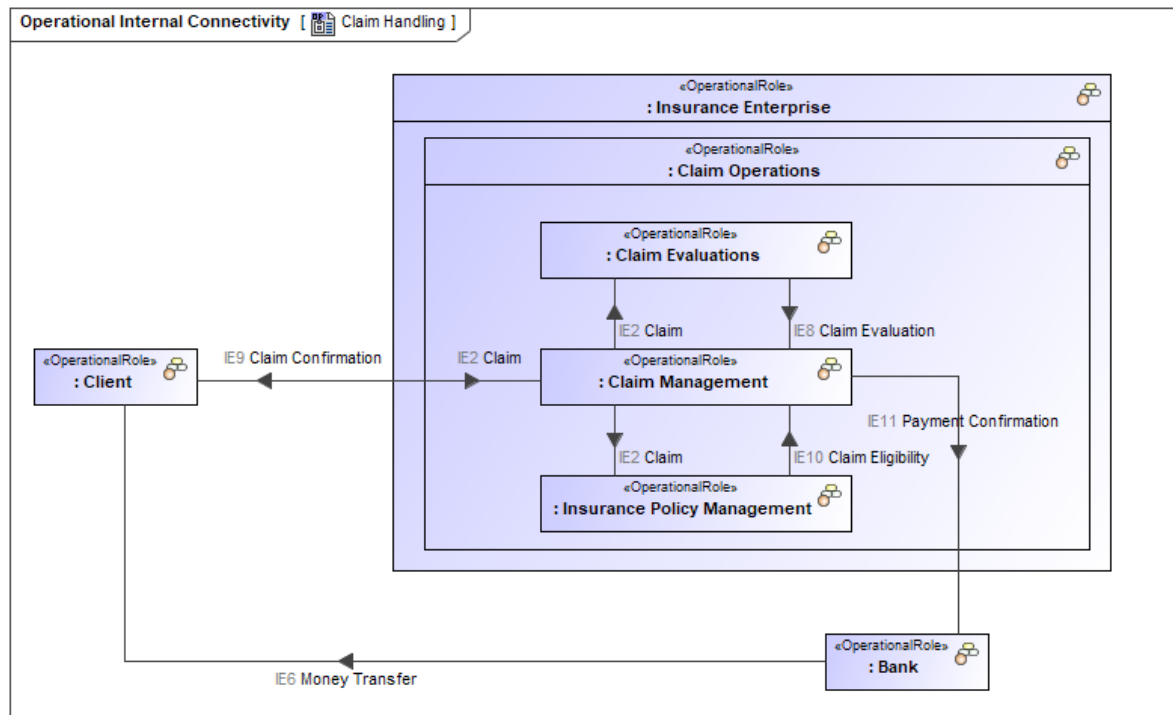
Operational Structure: decomposing operational performers

Create the following **Operational Structure Diagram** to decompose the operational performers.



Operational Connectivity: scenarios and operational exchanges

Create an **Operational Internal Connectivity** diagram from the Claim Handling Operational Architecture as follows. Make sure you to create first Claim Handling Operational Architecture with operational role of type Insurance Enterprise.

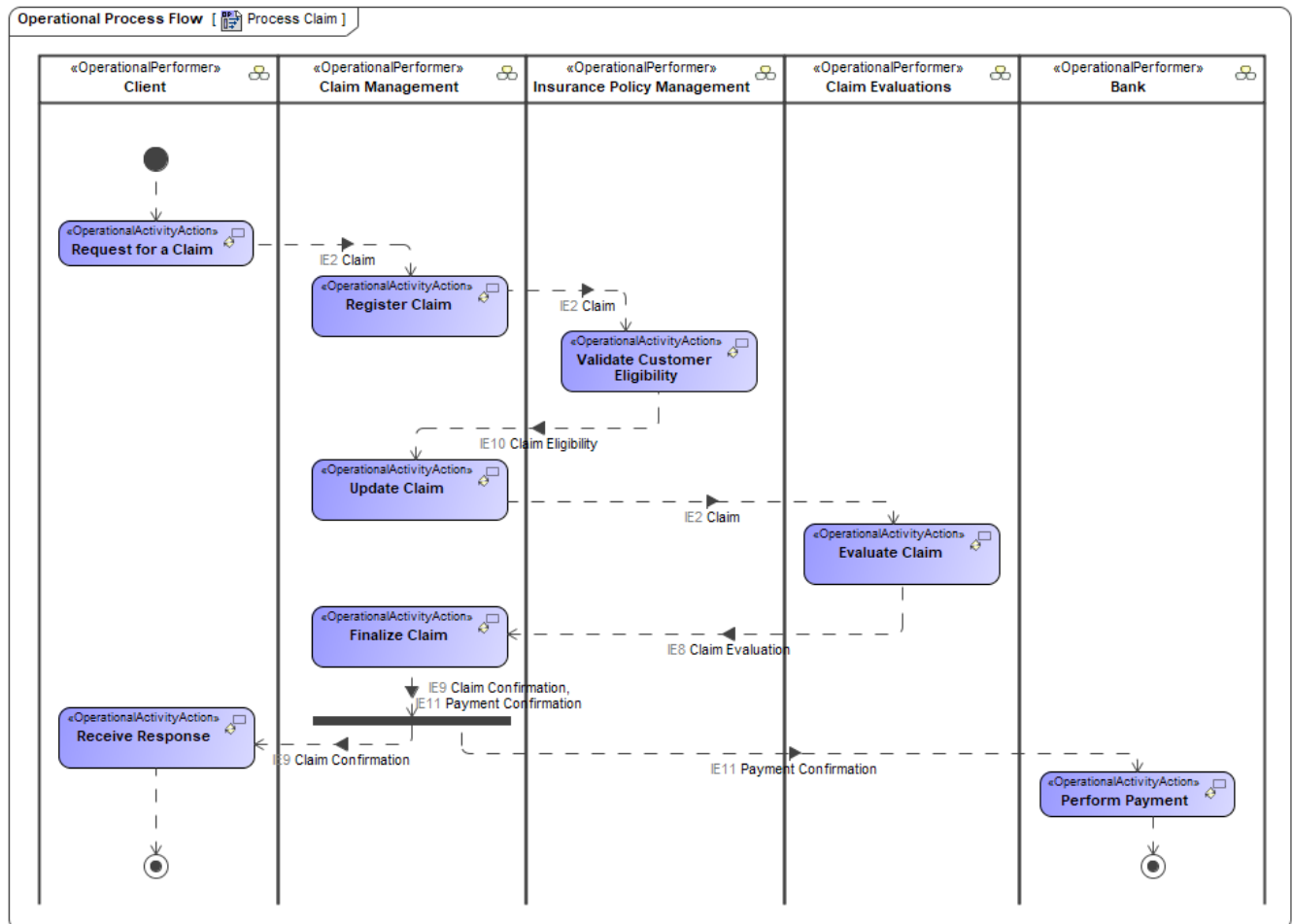


Create **Operational Connectivity Table** to collect operational exchanges from selected scope into a single table, and summarizes essential information.

#	△ Exchange ID	Operational Exchange Item	Sending Operational Performer	Receiving Operational Performer
1	OE1	i IE2 Claim	 Client	 Claim Management
2	OE2	i IE2 Claim	 Claim Management	 Insurance Policy Management
3	OE3	i IE10 Claim Eligibility	 Insurance Policy Management	 Claim Management
4	OE4	i IE2 Claim	 Claim Management	 Claim Evaluations
5	OE5	i IE8 Claim Evaluation	 Claim Evaluations	 Claim Management
6	OE6	i IE11 Payment Confirmation	 Claim Management	 Bank
7	OE7	i IE9 Claim Confirmation	 Claim Management	 Client
8	OE8	i IE6 Money Transfer	 Bank	 Client

Operational Processes: defining operational activities

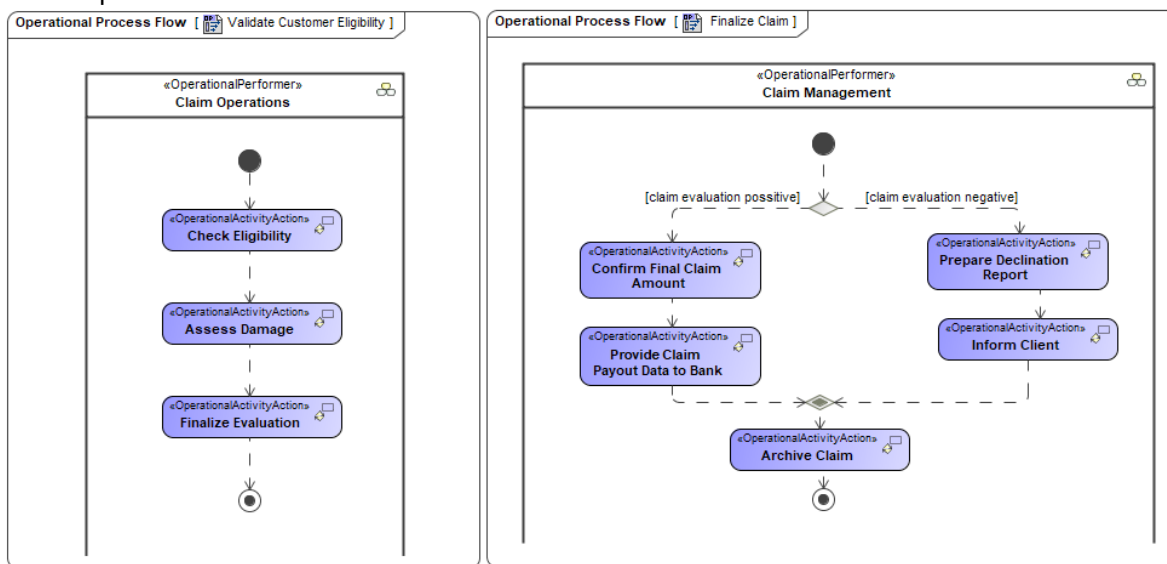
Create an **Operational Process Flow** diagram as follows. This diagram shows the flow of operational activity, and which operational performer is responsible for performing operational activity action:



As you can see in the diagram above, operational exchanges defined in operational connectivity may be reused in operational process flow diagram, by specifying what operational activities are producing and consuming exchanges. After realizing exchanges in process flow diagram, operational connectivity table is automatically updated:

#	△ Exchange ID	Operational Exchange Item	Sending Operational Performer	Receiving Operational Performer	Producing Operational Activity	Consuming Operational Activity
1	OE1	IE2 Claim	Client	Claim Management	Request for a Claim	Register Claim
2	OE2	IE2 Claim	Claim Management	Insurance Policy Management	Register Claim	Validate Customer Eligibility
3	OE3	IE10 Claim Eligibility	Insurance Policy Management	Claim Management	Validate Customer Eligibility	Update Claim
4	OE4	IE2 Claim	Claim Management	Claim Evaluations	Update Claim	Evaluate Claim
5	OE5	IE8 Claim Evaluation	Claim Evaluations	Claim Management	Evaluate Claim	Finalize Claim
6	OE6	IE11 Payment Confirmation	Claim Management	Bank	Finalize Claim	Perform Payment
7	OE7	IE9 Claim Confirmation	Claim Management	Client	Finalize Claim	Receive Response
8	OE8	IE6 Money Transfer	Bank	Client		

Each of the operational activity (that is represented by operational activity action) can be described in more detail by its own operational process flow diagram. It is common to have multiple level of details in process flow diagrams. This helps us to keep diagrams simple and understandable. In the sample below, diagrams for operational activities Validate Customer Eligibility and Finalize Claim are provided:



Operational Constraints: capturing business constraints

Guidance, policies, constraints related to operational domain may be captured in **Operational Constraints table**:

#	Applies To	Rule Specification	Rule Kind
1	IE2 Claim	Client may provide claim in 30 days after accident	Constraint
2	IE3 Claim Payment	Claim payment must be performed in 3 business days after decision.	Constraint
3	IE2 Claim	Each claim must be registered in database.	Constraint

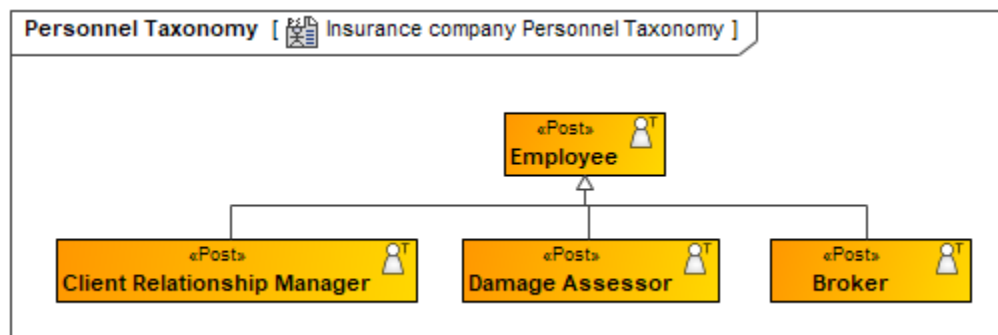
Applying UAF: Resources/Personnel Domain for an Insurance Enterprise

Personnel Taxonomy: Capturing Organizations and Posts

We can capture the following types of organizations and posts as follows. Create **Personnel Taxonomy Table** as below (use excel sheet to copy documentation text in model):

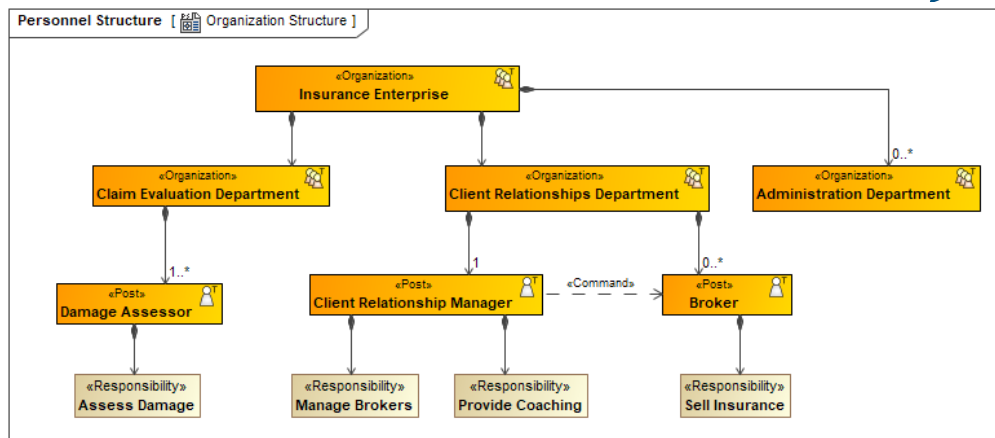
#	Name	Documentation
1	 Client Relationships Department	Client Relationships Department maintains long-term relationships with the clients, and forms clients attitude. Department also monitors and analyzes competitor activities to assess threats to important clients.
2	 Insurance Enterprise	Enterprise that provides insurance services.
3	 Claim Evaluation Department	Department is responsible for defining fixing or replacement costs and risks related to claims.
4	 Broker	A broker job is to provide people with insurance.
5	 Client Relationship Manager	Client Relationship Manager maintain and develop company relationships with the clients.
6	 Damage Assessor	Damage Assessor evaluates claim, analyzes claim situation (what happened, where, when, how) and determines whether it fits within the scope of cover and what the repair (or replacement) will cost.

Create **Personnel Taxonomy diagram** to specify what kinds of employees we have in an Insurance Enterprise.



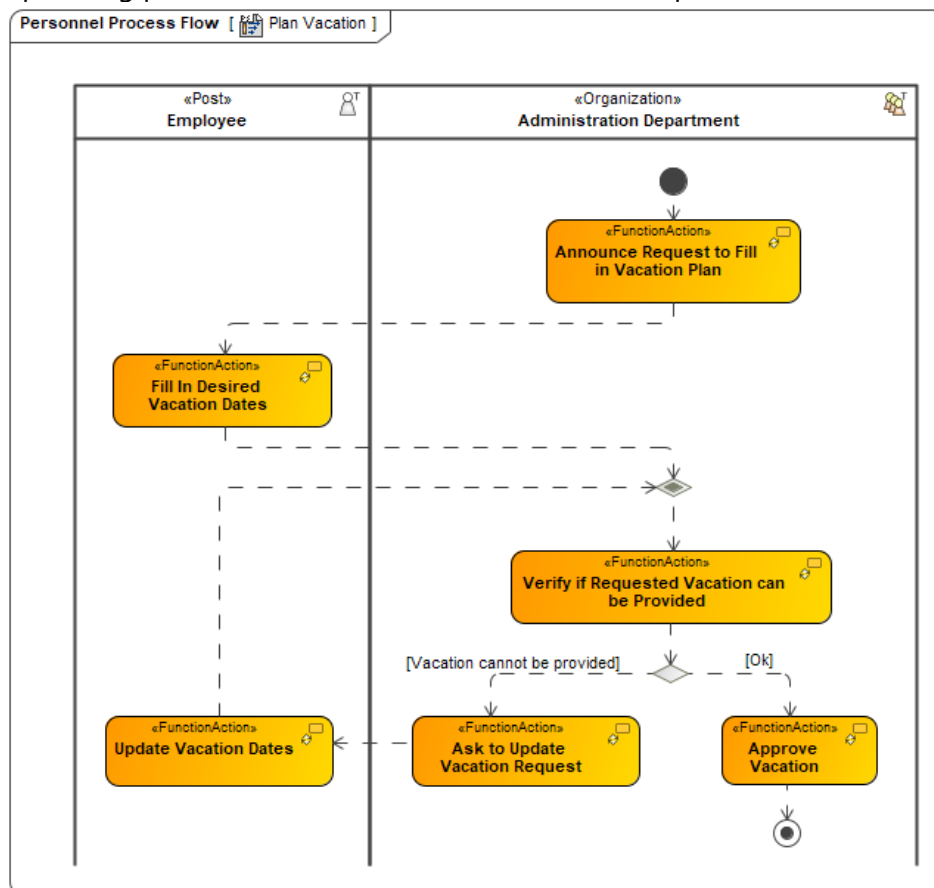
Personnel Structure: Defining Organizational Structure and Responsibilities

Create **Personnel Structure Diagram** as below. Here we show organizations and roles that we identified in taxonomy view, and use **Composition** relationship to define the organizational structure, and responsibilities that are defined for posts. We can also create **Command** relationship, to capture organizational relations between posts:



Personnel Processes

Create the following **Personnel Processes Diagram** that describes the processes and functions that are related to the human factor management in the enterprise. In the diagram below we can see vacation planning process that is defined in Insurance Enterprise.

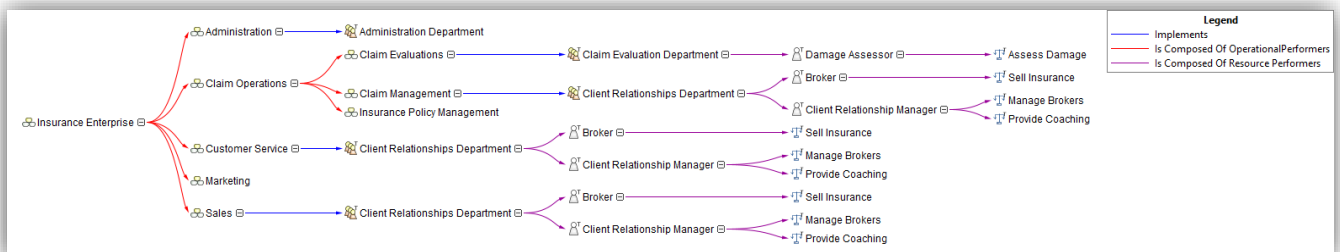


Personnel Traceability

Create **Implementation Matrix** where we can analyze coverage of operational performers by organizational resources as below. We can clearly see that some of operational performers, such as Insurance Policy Management and Marketing are not addressed by the organizational structure yet:

Legend		Performers [Operations]									
 Implements											
 Implements (Implied)											
Personnel Taxonomy [Personnel]											
Departments											
 Administration Department		2									
 Claim Evaluation Department		4									
 Client Relationships Department		6									
 Insurance Enterprise		7									
Posts											
Broker		3									
Damage Assessor		3									

In addition, we can use **Implementation Map** to be able to trace from operational performers to organizational resources and their responsibilities:



Reference: this example is provided by Dassault Industry Business Senior Consultant – Edita Mileviciene