

# Exploring Camunda

Journey to learning Camunda

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# 1 Introduction

In this article, I will share my journey of learning Camunda, an open-source platform for workflow and decision automation. As businesses strive for efficiency and agility, understanding tools like Camunda becomes crucial for streamlining processes and optimizing operations. I am very motivated to explore this powerful platform, and I embarked on a learning adventure to uncover the possibilities it offers.

Throughout this article, I will provide insights into the fundamentals of BPMN (Business Process Model and Notation) and its role in visualizing and modeling business processes. I will then dive into my experience with Camunda after using it in a small project, I'll also give a brief step by step learning journey from the initial installation and setup to exploring the Camunda Modeler, which allowed me to create clear and concise process diagrams.

I will also share valuable lessons learned,

## 1.1 Motivation and Goals

I am motivated to learn camunda as it is a necessary tool for infrastructure automation and to also enhance productivity. Here are some goals that I want to accomplish:

- Gain a solid understanding of BPMN.
- Understand camunda's workflow engine.
- Effectively model and automate complex business processes.
- Camunda integration with other systems.
- Collaboration with co-workers.

## 2 What is BPMN ?

### 2.1 Introduction

Business Process Model and Notation was developed as a graphical notation to represent complex processes and address these challenges. It is maintained by the non-profit The Object Management Group (OMG) and employed by numerous organizations globally. The visual nature of BPMN enables greater collaboration between different teams.

### 2.2 Basics of BPMN

Here are the foundational elements of BPMN:

- Process.
- Activities (Tasks, Sub-Processes, and Call activities).
- Events (Start Events, Intermediate Events, and End Events).
- Gateways (Exclusive, Parallel, and Inclusive Gateways)
- Sequence Flow.
- Data Objects.

Here is a figure representing BPMN components:

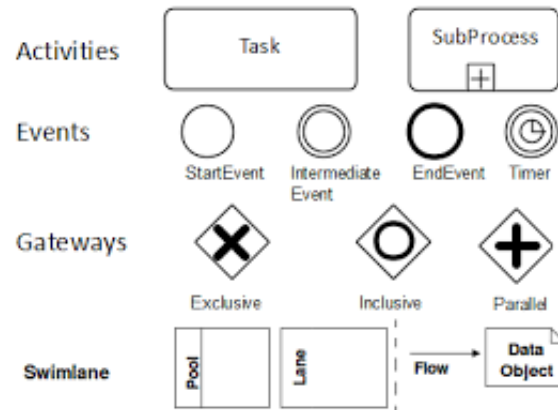


Figure 1: BPMN components

## 2.3 Learning Process and Resources

I started by learning the concepts of each elements used in BPMNs (tasks, symbols, activities...), and then since I had previous knowledge of modeling languages and UML diagrams, so it all seemed similiar. Then, I created some simple examples : One of them was automating a Car Starting System (Each car executes some checks before starting). I also read some best practices on using BPMNs.

## 3 What is Camunda ?

### 3.1 Introduction

Camunda is an open-source platform for workflow and decision automation. It provides a powerful workflow engine, BPMN modeling capabilities, and tools for managing and executing business processes. With Camunda, organizations can automate and optimize their business processes, improve efficiency, and enhance visibility into process execution.

## 3.2 Installation and Setup

Camunda is fairly simple to install (for me I installed it in linux):

- Downloading Camunda Platform 7 Community edition from (<https://camunda.com/download/>) the linux version comes in Zip and Tar formats.
- Extract the zip / tar.
- Run the script './start.sh' to launch camunda platform.
- Now we can navigate to 'http://localhost:8080/camunda-welcome/index.html' and explore camunda features.

## 4 Creating a Simple Process

### 4.1 Designing a Process

### 4.2 Executing the Process

## **5 Advanced Topics**

### **5.1 User Task Management**

### **5.2 Automation using DMN**

### **5.3 Process Optimization**



## 6 What I Learned

## **7 Conclusion**