Logo

Description automatically generated

User Documentation for

Audit Chain

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Introduction

The current user manual concerns the Audit Chain project and aims to provide the end user with the possibility to use the existing tools more easily, as well as to understand how they work. The project is developed following a dependency structure, typical of the audit chain module.

The main idea is that events of any kind, like IoT, file systems and measurement loggers should be transmitted securely via the network. There is a central event queue, which records these events and uses them for further steps that would involve third parties, so consumers. Consumers can approach the queue, in order to get the events and work with them accordingly. Events are recorded serially and the central event queue is transmitted via the network queue. In order to define terms, we could define three main characters:

* the producer: who is the creator and sender of the events
* the queue: the middle ground where events are stored, and safety shared
* the consumer: who takes events from the queue to perform further actions with them

Requirements

Before talking about the setup of the program, we must mention some important requirements that help the user to be faster.

* Windows or Linux
* JavaScript (we used IntelliJ IDEA CE)
* Git/GitHub
* RabbitMQ
* Docker Engine
* Docker CLI

Getting Started

1. First step is to create a **new folder** on your computer, for example on your desktop and name it, of course ☺
2. Then, open your **terminal** and **click** the following commands:

* cd e.g. Desktop/ Your\_folder
* ls
* **Clone the repository from GitHub:**
  + git clone [https://github.com/amosproj/amos2022ss02- audit-chain.git](https://github.com/amosproj/amos2022ss02-%20audit-chain.git) **or**
  + git clone [git@github.com:amosproj/amos2022ss02-audit-chain.gr](mailto:git@github.com:amosproj/amos2022ss02-audit-chain.gr)
  + or download the latest release and unzip the package from git.

1. Now you are ready to start the project ☺

Set Up

Open the project in your favorite IDE. We use IntellJ for demos

* Get the middleware i.e. RabbitMQ running:
  + - **docker compose up**
* To run the producer-dummy module
  + - **mvn clean compile exec:java@ProducerDummy**
* To run the consumer-dummy module
  + - **mvn clean compile exec:java@ConsumerDummy**
* To run the blockchain module
  + - mvn clean compile exec:java@BlockChain
* Generate JAVADOC
  + - mvn javadoc:Javadoc

Recommendations

* We have already created a Branching strategy for Git documentation with useful tips, so you can look there for more help 😉
* Also, we have a documentation about the installation of RabbitMQ
* Of course, do not forget to visit our **GitHub repository**: <https://github.com/amosproj/amos2022ss02-audit-chain>