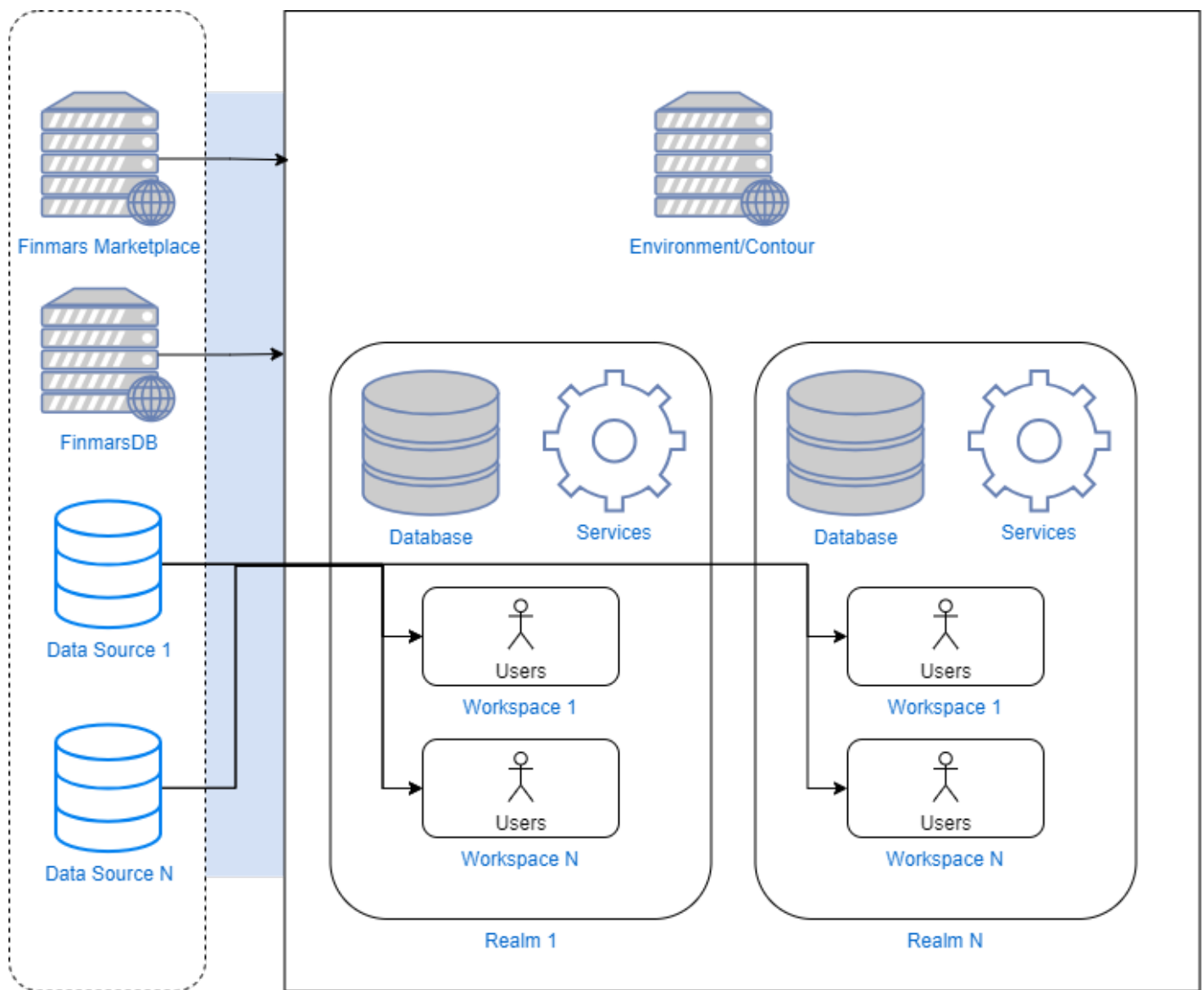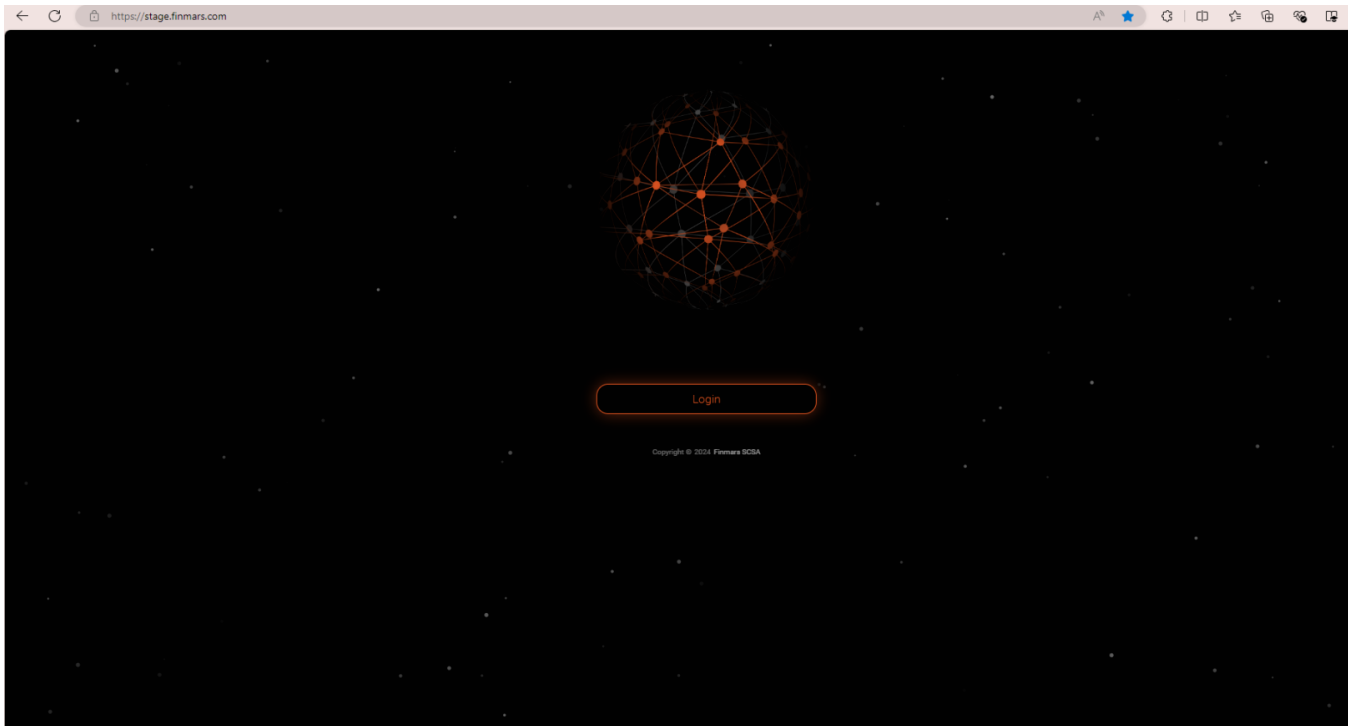# Quick Overview of Finmars Platform

What is Finmars

- **Wealth Aggregation Platform**: aggregate financial information from different sources (incl. manual input).
- **Report Engine**: online reports, performance, dashboards, PDF reports etc.
- **Extensible Multipurpose Accounting Tool**: different modules and packages are distributed through its own marketplace.
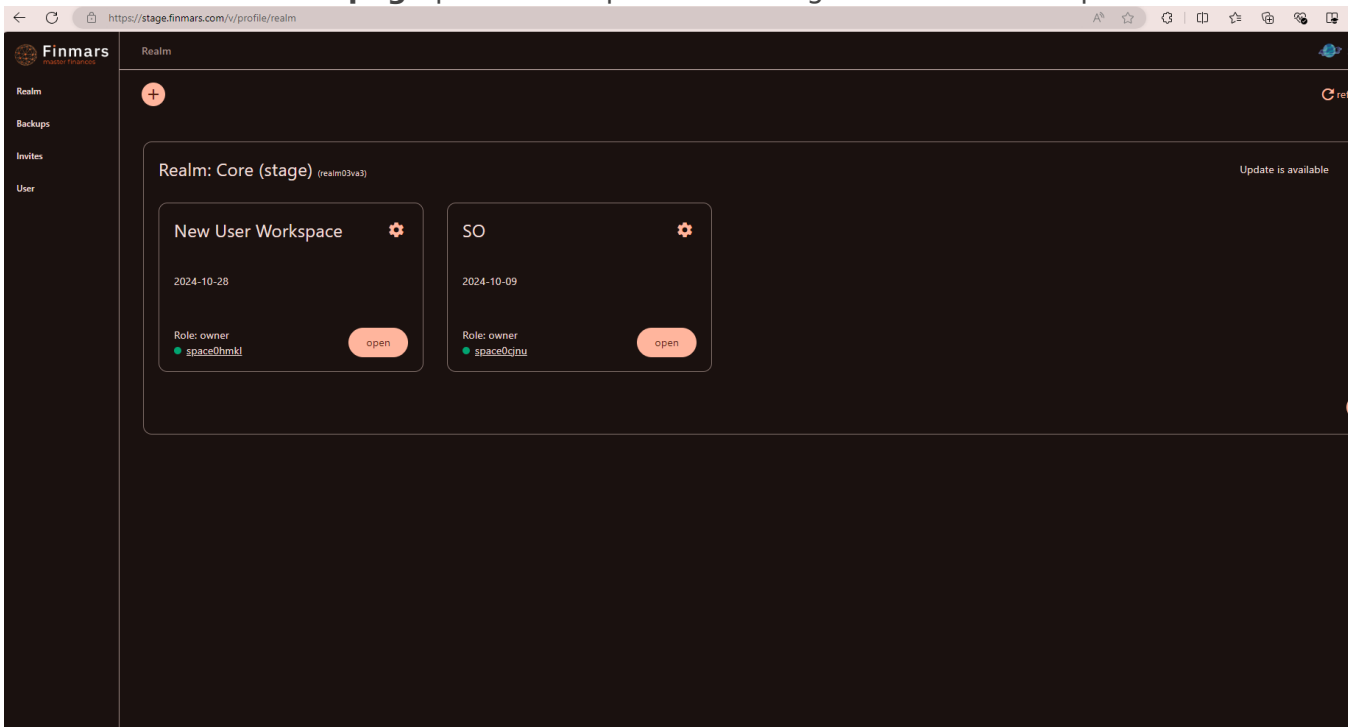
What is in Finmars Environment

Environment/Contour

- Characterized by **URL address**: **https://stage.finmars.com/**realm03va3/space0cjnu
- As in its name - it's **execution environment** for different instances of Finmars
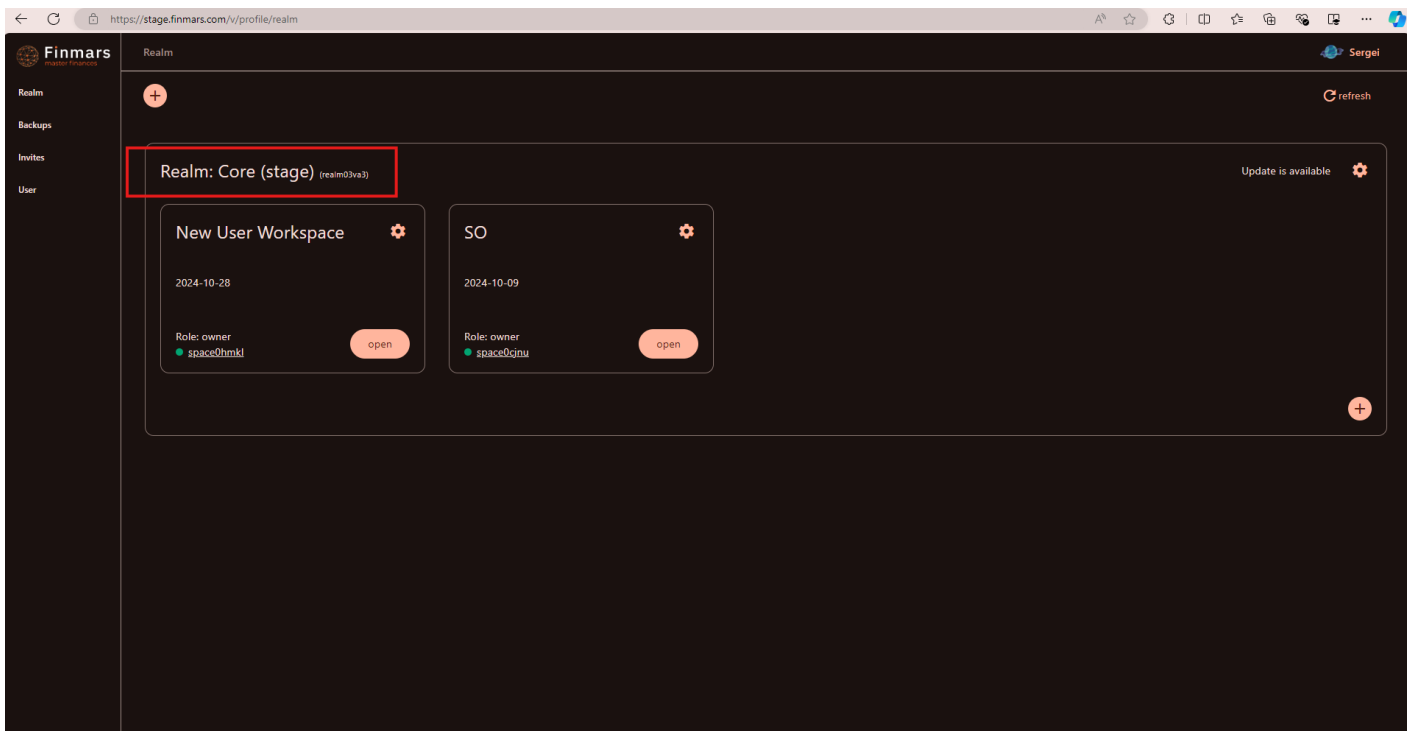- It has **common Authorization Service**

- It has **common Profile page** per user - a place to manage Realms & Workspaces
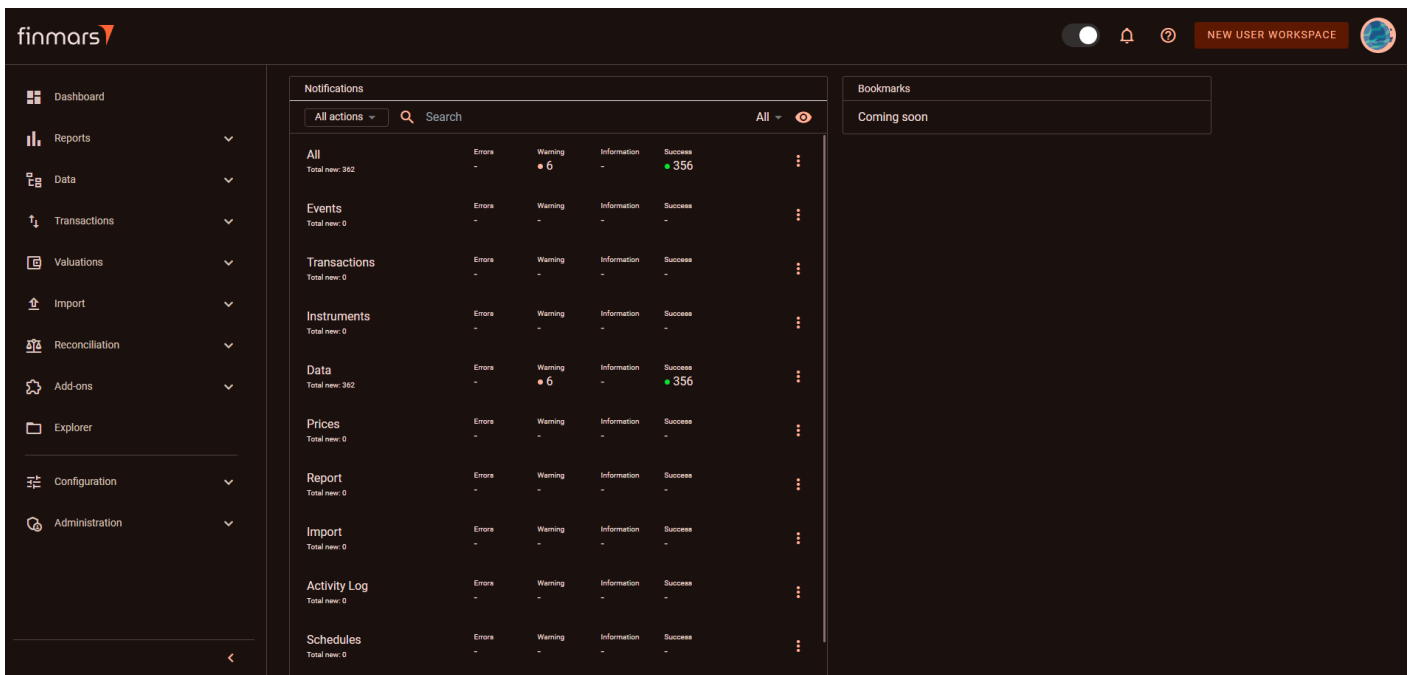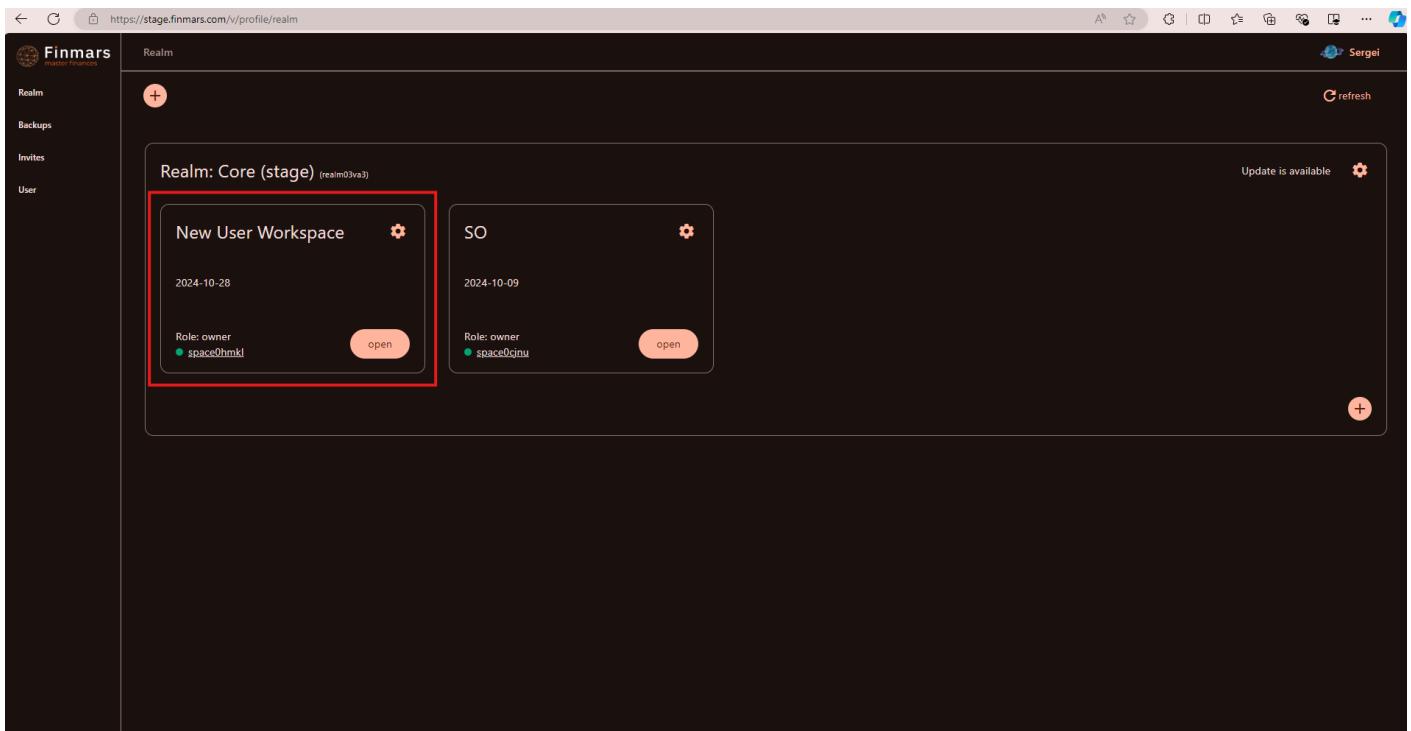

- It can be interpret as a **container for Realms**

Realm

- Characterized by **Realm Code**: https://stage.finmars.com/**realm03va3**/space0cjnu
- There **may be more than one** Realm inside the environment/contour
- User **must have an access to the Realm to see it** in the Profile page
- One Realm has **shared execution resources** across Finmars instances inside of it:
  - **backend workers** to do import and build reports
  - **workflow workers** to execute modules' scripts
- One Realm always has **one version of Finmars instances** across all Workspaces
- Realm is another **abstraction container for Workspaces** - Finmars instances

Workspace

- Characterized by **Space Code**: https://stage.finmars.com/realm03va3/**space0cjnu**
- There **may be more than one** Workspace inside the Realm
- User **must have an access to the Workspace to see it** in the Profile page inside the Realm
- Workspace is the **Main working unit for users** which consists of:
  - **Dashboards**: custom layouts with different components based on the aggregated financial information
  - **Reports**: Balance, P&L (Profit and Losses), Transaction, Performance - standard reports available in the platform which are built with the aggregated financial information

- **Data**: Instruments, Registers, Portfolios, Accounts, Strategies, Responsibles, Currencies, (Events, Stats and Calendar are deprecated), - relation entities which are connected together in Transactions (will be covered in a separate document in details)
- **Transactions**: Transactions (Complex Transactions), Base Transactions, Register Records, - let's give a little more details here because it has essential basic concepts (as well will be covered in a separate document in details):
  - **Transactions (Complex)** - are the main information about operations related to the accounted assets. It has configuration-based types which is a **composition of base class transactions**
    - Check the video with simplified explanation based on the diagram below:
      2024.11.06 Complex Transaction structure.mp4
    -

  - **Base Transactions** - are **decomposition of the complex transaction** into the basic actions.
    - The most vivid example would be **Transaction Type** (asset's complex action) **"Position Initial Instrument"**.
    - In its nature "Position Initial Instrument" is just **initial placement of the instrument to the position account** - an account where the instrument is held.

- So in its nature there is only **one event**: placement of the instrument - which should result in increase of the instrument's position (quantity).
- **In Finmars** we are tracking not only the **balance (quantity & valuation)** but the **P&L (profit and losses)** as well, and for these we need to go a little bit further and **decompose an event into base actions**.
- In Finmars for **"Position Initial Instrument"** we have **2 different base transactions**:
  - The first **Base Transaction** - **Cash Injection** (it's like a simple cash inflow but without impact on performance) on the **virtual provisional cash account**:
    - we use **virtual provisional cash account** because there were **no actual turnover of cash**
    - we need **cash to Buy the instrument** (again virtually) **to track its P&L**
    - without initial cash we will have a negative amount of cash (in case we want to track P&L and Buy the instrument for non-zero cash amount)
  - The second **Base Transaction** - **Buy** the **instrument on a position account** with **money** from **virtual provisional cash account**:
    - Now we have set **the amount of the instrument** on a position account
    - While there should be **NO cash left** on the **virtual provisional cash account** (because it's virtual cash movement)
  - **Register Records** - is the records created based on Base Transactions of base classes Cash-Inflow and Cash-Outflow and based on Registers of Portfolios (let's leave the details and explanations out of scope for now)
- **Valuations**: Prices and FX Rates, - everything that helps to evaluate the instruments on specific dates.
- **Import**: section to manually import Data Entities and Complex Transactions
- **Reconciliation**: an engine to make cross-check between transaction-based accounting and positions (in sense of assets' state snapshot: quantity and valuation)
- **Add-ons**: additional functionality that comes from the Finmars platform's marketplace
- **Explorer**: an interface to the workspace's internal storage, includes report files, configurations imported and exported and any other custom data (data of transactions and entities is stored in a different storage)
- **Configuration**: consists of additional entities and settings that regulate the correct work of the Workspace (will be covered in a separate document in details)
- **Administration**: section dedicated to maintainers of the Workspace (will be covered in a separate document in details)