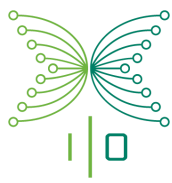
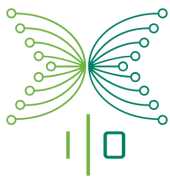


# Overview





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## Stakeholders

The application is considered to have three stakeholders, the host, distributors and buyers. All of them are needed to carry out a sale.

### Host

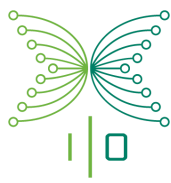
The sales have a host responsible for launching sales, inviting partners and audit members. The host is setting the frames for the sale by selecting trusted partners and gate keep any invited buyer.

### Distributor

The distributors are responsible for expanding the network by recruiting more distributors or inviting buyers to purchase. Commissions are earned based on purchases in their downline. The top distributors are recruited directly by the host and are called partners.

### Buyer

The buyers are the ones that actually make purchases in the system. By getting invited by a distributor and later approved by the host the buyers will be enabled to make their purchases.



## System modules

This section explains the different kinds of systems used in the application.

### Frontend

This module represents the visible face of the Sales App, and its main purpose is to provide an user interface for the actors, and manage all their actions. It also manages the business rules for distributing and ordering ADA.

### Backend

Backend supplies a layer of abstraction to the sales app from the Bitcoin Payment network and processing. It's structured as a service API that Sales app can use to create payment address, make transactions, pay commission, etc.

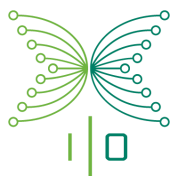
### Json Generator

The JSON Generator module consists of an API that allows the Sales Frontend application to communicate with the AVVM, and is responsible for the interaction between the application and the exposed AVVM methods.

### AVVM

The AVVM (Ada Voucher Vending Machine) is one of the most important and secure modules. It is a service that exchanges the paid invoices for ADAs.

In order for the Frontend application to interact with the AVVM, it must use the JSON Generator interface.



# Volumes

## Overview

This current document provides a quick summary of the Sales App documentation files. You will find a brief summary of their contents and its main highlights, explaining its most important sections.

## Frontend - Business Logic

The business logic documentation shows how a user of the system would navigate through the application. It explains the different types of users and how they interact with the system. The different email types are explained as well.

- **Actors**

This part explains which users (actors) are in the system and what their role is.

- **Supported Languages and Regions**

All the languages and regions supported by the application are listed here.

- **Account Creation**

The account creation section explains the different ways on how to create the necessary accounts needed to use the application. It also explains how an admin and an external actor can create an account.

- **Enrollment**

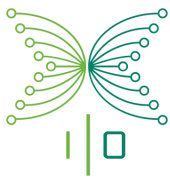
The enrollment section explains how partners and distributors can create urls to enroll buyers. The enrollment process itself is explained in detail by the use of images.

- **Approval**

This section explains how a compliance officer can approve a distributor or buyer. The whole process is shown step by step. It also shows how a CO can find users and filter them by different search criterias.

- **Invoice Tickets**

Describes the most important aspects of an Invoice ticket; how a user can reorder ADA, when the receipt is sent, and how the commissions are distributed.



- **Monitor the Sale**

This section explains when the sale starts and how the admin can check the current status.

- **User Support**

Describes the actions that a customer service officer can take in order to do client support. Also describes the investigation process when a distributor has a **suspicious** activity.

- **System Operation**

This section is about how the sysop user can monitor the sales and application workers.

- **Self Administration by External Actors**

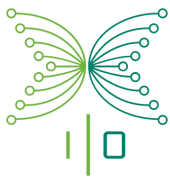
Describes the actions that buyers and distributors can perform in order to manage their account and personal data.

- **Misc**

This part contains miscellaneous topics like; The bitcoin rate used by the App, how users log in, etc.

- **Emails**

Describes all types of emails that the application can send.



## Frontend - System Setup

The System Setup document explains what is necessary to configure your environment correctly to work with this app. Here you will find four main sections, which are the following:

- **System Requirements**

List of the requirements or standards that the system must meet in order to run the app. For example you must have installed a specific Node version.

- **System Configuration**

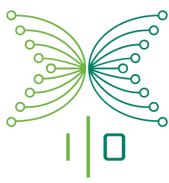
Specifies how to properly configure settings that are critical for the correct system behaviour.

- **Deployment**

This part of the document specifies what software is needed to deploy, why it's needed and how to deploy.

- **Known Quick Fixes**

This part describes the fixes that are used when the application runs into some unforeseen problems, these mostly originate from scaling up the application.



## Frontend - Technical Documentation

The technical documentation is oriented to future developers or any person with a technical profile that wants to understand the development process taken, which frameworks and tools were used, and what the current status of the development is. In order to do so, the document is divided into the following sections:

- **Development System Requirements**

Describes the hardware and software that is required to develop the app.

- **Code Structure**

Explains the naming convention for files and the folder structure. It also introduces the most important files for guiding a developer through the project.

- **Code Base Metrics**

This section contains metrics about the code and provides stats about the developing process.

- **Development Process**

Describes the workflow throughout the development cycle and the different methodologies used.

- **API**

This section explains the Sales application API and which systems use it.

- **Advanced Features**

This section explains the most important aspects of the technical challenges and solutions used to develop the Sales application.

- **Languages, Standards and Frameworks**

Describes the programming languages, standards and frameworks adopted to develop the system.

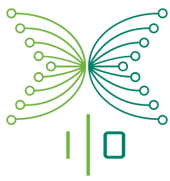
- **Improvement Suggestions**

Lists the improvements to the system suggested by developers.

- **Known Bugs**

Lists the known bugs that currently exist and provides links to detailed information about them.





## Frontend - 3rd party Software and Services

- **Services**

Summary of 3rd party services which the sales application is relying on.

- **Packages**

For the application we use many 3rd party modules for either Meteor or Node. Any pieces of software used from sources other than our own will be listed here.

- **Software**

Summarizes the tools and plugins that the developers of the app used in order to improve the development process.

## Backend - System Setup

- **System Requirements**

List of the requirements or standards that the system must meet in order to run the app. For example you must have installed a specific Node version.

- **System Configuration**

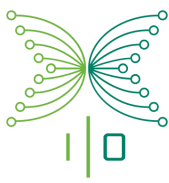
Specifies how to properly configure settings that are critical for the correct system behaviour.

- **Deployment**

This part of the document specifies what software is needed to deploy, why it's needed and how to deploy.

- **Recommendations**

Tips to ease up deployment and avoid problems.



## Backend - Transaction Fees Structure

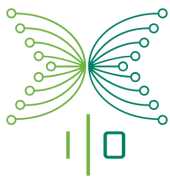
Although Bitcoin Transaction fee represent a small amount of the transaction, from an accounting perspective it's very important to have a clear understanding by who and how are they taken off.

- **Backend Transactions Types**  
Summary of the types of transactions.
- **Fees Calculation**  
Formula for calculating fees per kilobyte.
- **Fees Application**  
Summary about fees for each transaction type.

## Backend - Authentication

The authentication is a key security feature of the process, this document explains in detail how it's managed for every endpoint, the protocol, the use of tokens and payload signature.

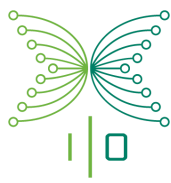
- **Authentication**  
Describes what kind of endpoint there are and how the authentication process is done between sales application and backend.
- **Revoke Access**  
Describes how to revoke access of certain token.
- **Security Concerns**  
Describes what kind of concerns should you be aware of when the backend gets compromised.
- **Access Token Generation**  
Describes how to generate access token for the backend.



## Backend - Api Doc

Here you'll find a detailed explanation of every endpoint from a technical perspective, the method names, parameters it receives or requires and possible workflow interactions.

- **Distributor Named Invoice Wallet**  
Describes the process of creating a new distributor wallet.
- **Get New Invoice Addresses**  
Describes the process of generating a new invoice address.
- **Holding Wallet Funds Received**  
Describes the process when holding wallet receives funds.
- **Bitcoin Received on Invoice Address**  
Describes the process when invoice ticket receives a payment in bitcoins.
- **Commission Wallet Funds Received**  
Describes the process when commission wallet receives funds.
- **Fix Wrong Amount and Invoice Refunds**  
Describes the process when buyer sends in too small or too big amount.



## Backend - Api Troubleshooting

None regular workflow and troubleshooting are explained in this separate document, they usually involved side endpoints, setting edition or manual processing via the Bitgo console client. For example, the process of updating the exodus address can be found in this section.

- **General Considerations**

Describes things that need to be aware of when facing some problems in the backend.

- **Funds are Stucked in an Address**

How funds can be stuck in an address and what can be done to solve them.

- **Bitgo API Token Max Spend Exhausted**

Bitgo allows a certain amount of total BTC to be sent. This sections explains how to solve this issue.

- **Exodus Address Needs to be Changed**

How to change the exodus address when needed.