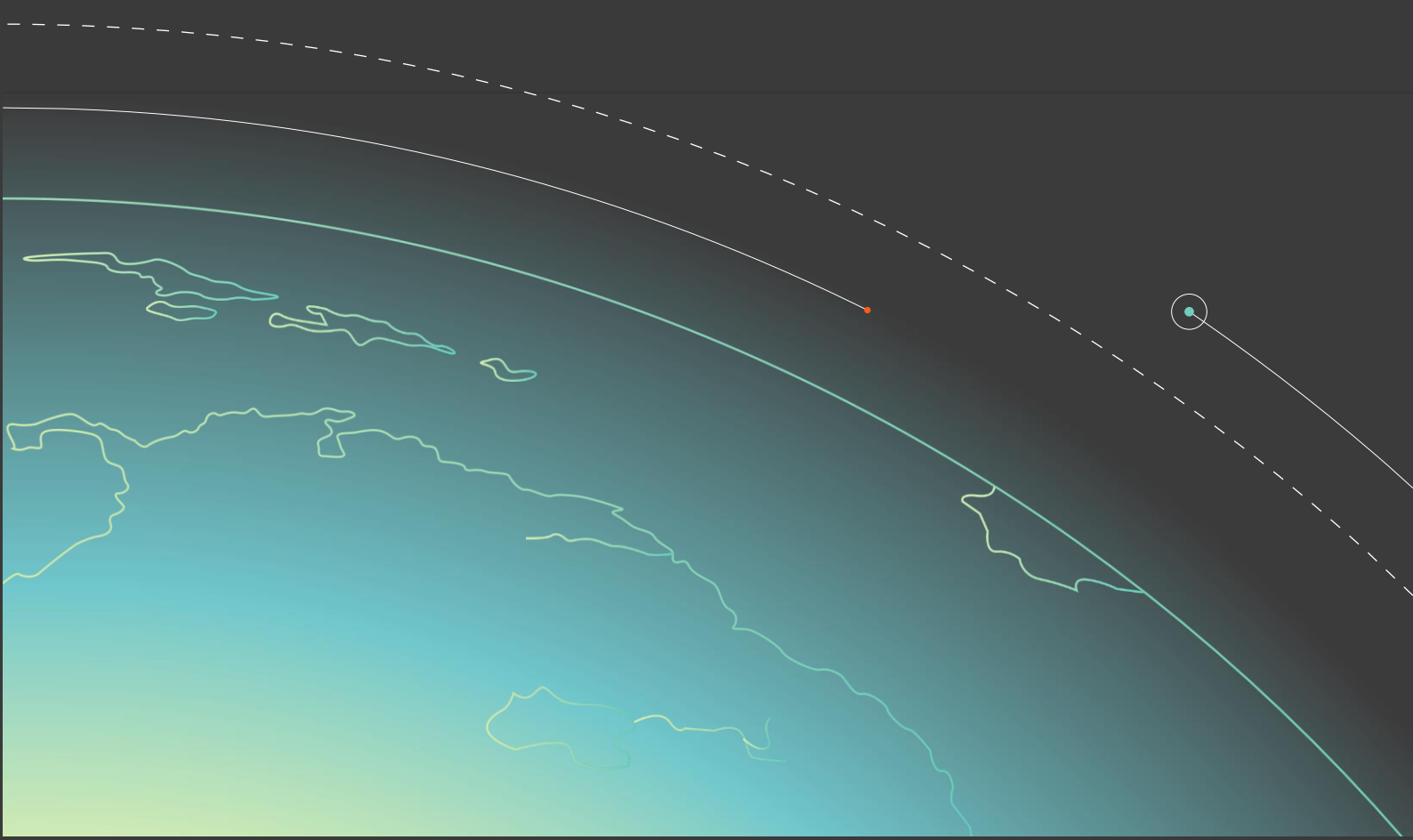




SRG Comunity
Play&Earn

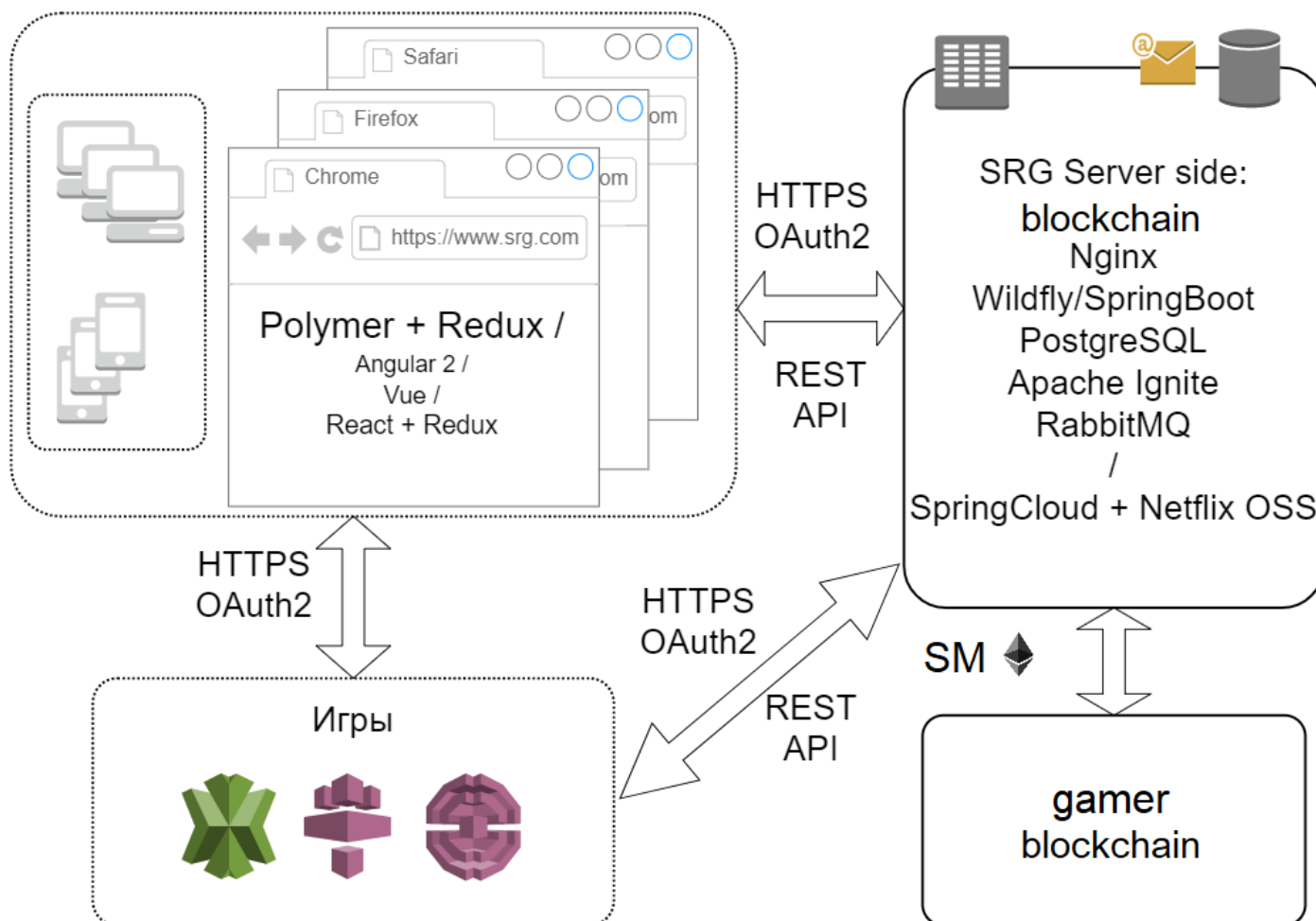
Technical Description

Platform SRG community



SRG Application

The SRG platform consists of two architectural paradigms: the client server of centralized architecture that is used in most online applications, as well as a decentralized version of the client server architecture that uses blockchain technology. Interaction between components is performed exclusively using secure HTTPS protocol. Authentication and authorization is proposed to be performed through the OAuth2 protocol. The server part of the system provides a REST API



The most popular Framework* for client-based modular applications (consisting of individual components, and therefore easy to maintain, develop, test and reuse) is used for the development of the browser to date: Angular.js, React.js and Vue.js. In fact, we use the Framework mentioned above to build our meta platform on top of the browser tool - rendering technology, template language, routing model, and data storage.

We use Polymer: because the Framework aims to allow developers to use the latest native Feature* web platforms and help create reusable components. In the long term, Polymer will become increasingly thinner due to the development of browsers and more complete support for Web standards on their part.

The refore, we have chosen Polymer as a tool for creating application components + to manage the state of one well-established and widely used Flux template implementation - Redux.

The SRG server part

Monolithic solution using the following docking technologies:

- NGINX - as a Web server for caching statics, load balancing, implementing HTTPS connections to the outside world (users / games).
- WildFly - as the container of the application server, inside of which the Java application is implemented, implemented with elements of the Spring-framework. This layer implements the REST API of the system, OAuth2 Server, data access logic etc.
- PostgreSQL - as a relational data store.
- Apache Ignite (GridGain) as an In Memory data store.
- Rabbit MQ - as an asynchronous transport for increasing the fault tolerance of the solution during the communication with the outside world.
- Zabbix - as a solution for monitoring the system as a whole.
- Blockchain - for transparency and security inside the system. Using Smart Contract, SRG can quickly use the functions from a centralized system to verify the actual data using the API system. In this case, the smart contract will be used to calculate the rewards for referrals in our client network. Advantage of the referral in round-the-clock reporting on the client network and the movement of earned assets.
- In building a system in a micro-service architecture, our team uses the implementation of Spring Cloud + Netflix OSS.

Platform functions

Check in

The user can register in the platform in several ways:

- from an external game (saw the banner, clicked on it, opened the registration form)
- directly - through the platform site
- referral link-invitation sent by another platform user

When registering is confirmed

- e-mail (this is the user ID in the Platform)
- Username
- offer contract
- creating a wallet

After registration in the Platform and in the Game, of the invited user is assigned the level "Referral X + 1", where X is the level of involvement of the invited user of this Game.

After registration in the Platform and in the Game, Referral X receives notification of the registration of a new user by reference and GMP for attracting a user to the Game. GMP is a gaming token (ERC20), which can be spent in any game connected to the SRG system, also the token can be converted and paid to a personal purse in the Ethereum tokens. More about GMP you can find in White paper*

Personal Area:

- User registration data with the possibility of changing them
- The number of earned GMP (total for all games)
- History of accrual and expenditure of GMP
- Output of GMP from the Platform
- List of connected games
- Chat with support
- News feed and user activity

Management of connected Games is performed in the list of Games available in the LC For each active game, the following actions are available in the list:

- See information on participation: the level, experience in the platform (how long the user is connected to the Game via the Platform), the number of players involved, the number of GMPs earned
- See the history of charging GMP for this game
- Invite new users (referral link and code)
- Use GMP (at the first stage - only exchange for game currency)

Connecting a new game

Connection of a new game to an active profile can be performed in three ways:

- from the Partner Game (saw the banner in the Game, clicked on the link, on the registration form in the Platform chose the option "I already registered", after the authorization the Game should connect automatically)
- from the LC ("Connect Game" button, then select a game from the list, authorize in Game or enter the invitation code from the Game)
- referral link (go to the link, log in to the platform, login / register in the Game or enter an invitation code from another user of the Platform)

Notify users

Ability to alert users of the Platform on:

- Registration / connection of a new user on their referral link / code;
- Accrual of GMP
- Project news

Accrual of GMP to Users

- Registration of a new user in the Platform from the Game (GPM Referral X)
- Registration of a new user in the Game by invitation (GPM only to Referral X-1 / the whole chain)
- Mapping Games to the Platform by yourself (GPM Referral X)
- Binding Games to the Platform by invitation from another user (GPM Referral X-1)
- Purchase in the Game (distribution of GPM Referrals from X-1 to 1)

Accrual algorithm

At the current time, the following charging algorithm is assumed

1. For registration of the user in the Platform - a fixed amount of GPM
2. For the invitation of a new user to the Platform and to the Game - a fixed amount of GPM
3. When buying in the game Referral X accrual of reward

- Referral X-1 (to the person who invited X) - 15% of the purchase price
- Referral X-2 (who invited X-1) - 10% of the purchase price
- Referral X-3 - 5% of the purchase price

This algorithm can be changed during the operation of the Platform

Output of GMP

- Since the ERC20 token, it can be sold on the exchange, where GMP is located
- Transfer to the user
- Exchange to Ethereum

Exchange of GMP for real currency with an intermediary withdrawal of assets to a credit card. You can learn more about the cooperation agreement (**QUINTA MANAGEMENT**)

At the moment, the technical implementation and back-end are available on public access at our Github <https://github.com/SRG-community/SRG>

Now the platform is in alpha testing and in the near future you will be able to familiarize yourself with MVP.