Bitbon System

PROVIDING
COMMUNITY PoS

REGISTRATOR POOL
VIRTUAL MODELING APPLICATION.
INSTRUCTIONS

This document is instructions created to familiarize users

with the functionality of the Registrator pool virtual modeling application.

CONTENTS

In order for you to get familiar with the main parameters of the Registrator's analytical dashboard, consensus algorithms and calculations, as well as principles of building an effective Registrator pool, we recommend reading the following documents:

Main Principles of Building Registrator Pools and Distributing Remuneration for Providing

Consensus Building Using the Community PoS Algorithm in the Distributed Ledger Token

Accounting System of the **Bit**bon System

Registrator's Analytical Dashboard. Instructions

Purpose of the Registrator Pool Virtual Modeling Application

This application was developed in order to provide **Bit**bon System Users with the ability to model Registrator pools to receive data on potential remuneration for providing in case of practical implementation of this pool model. The functionality also allows them to:

- easily create various models of organizing social connections of the Registrator pool;

- analyze the experience of other Registrators using active pools as an example;

- receive visual representation of the principles of forming remuneration based on the unique features of the structure of social connections of the Registrator pool;

- select the most profitable strategy of building a Registrator pool based on calculation and prediction of remuneration.

The calculations of the Registrator pool virtual modeling application use real values of the main providing parameters, such as total power and size of remuneration that is transferred to Registrators from the providing fund each providing period.

All calculations are made in accordance with the mathematical model of the Community PoS algorithm taking into account the parameters set by a user. The predicted result may differ from the actual result you will get in the future. That is due to the fact that the size of remuneration depends on the total number of **Bit**bon System Providers in the role of Registrators as well as on the number of **Bit**bon units involved in providing.

Please note that the visual representation of this application consists of a number of complex components, which can be displayed only on big screens. Therefore, this application can run only on desktop browsers and tablets (the minimum allowable screen resolution is 860 × 640 pixels).

Opening the Application

You can open the Registrator pool virtual modeling application from the Registrator's analytical dashboard on the website of the **Bit**bon System at https://www.bitbon.space/en/providing.

Application Controls and Workspace
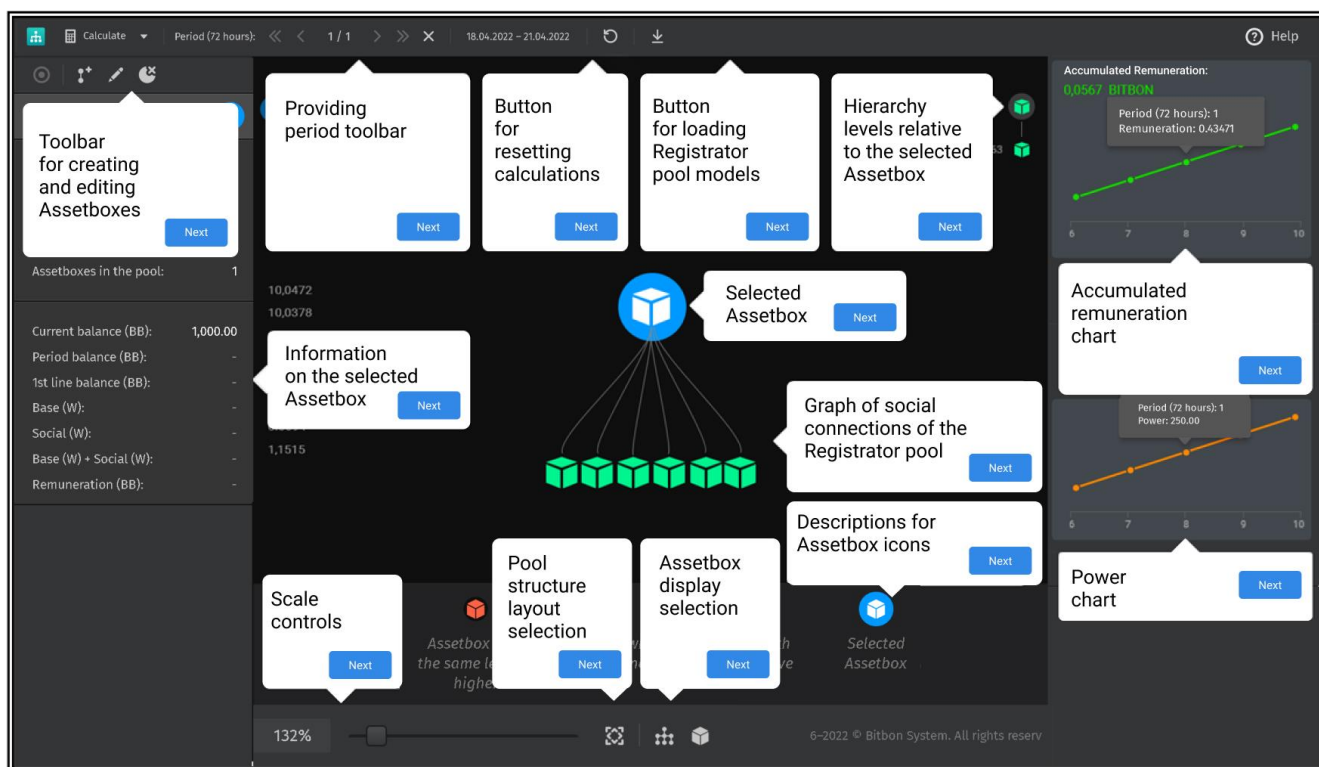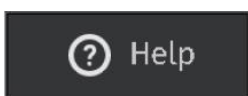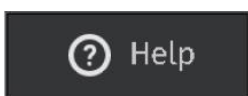
Figure 1 shows the main controls of the application.

Figure 1. Main controls

Interactive Tutorial for the Main Elements of the Registrator Pool Virtual Modeling Application

When you click [⁇ Help] at the top-right corner of your screen, you launch an interactive tutorial that will show you the main controls of the application in real time.

Toolbar for Creating and Editing Assetboxes

This toolbar allows users to create and edit Assetboxes thereby modeling the Registrator pool to their liking.

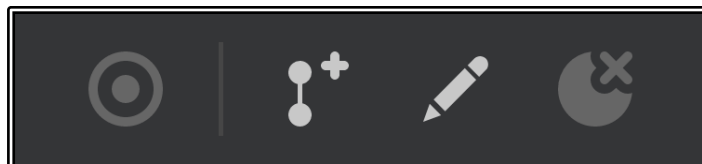Figure 2 shows the toolbar for creating and editing Assetboxes.

Figure 2. Toolbar for creating and editing Assetboxes

Creating Assetboxes

In order to create one or several Assetboxes, you need to select an Assetbox, for which you would like to create a structure of social connections (Fig. 3).
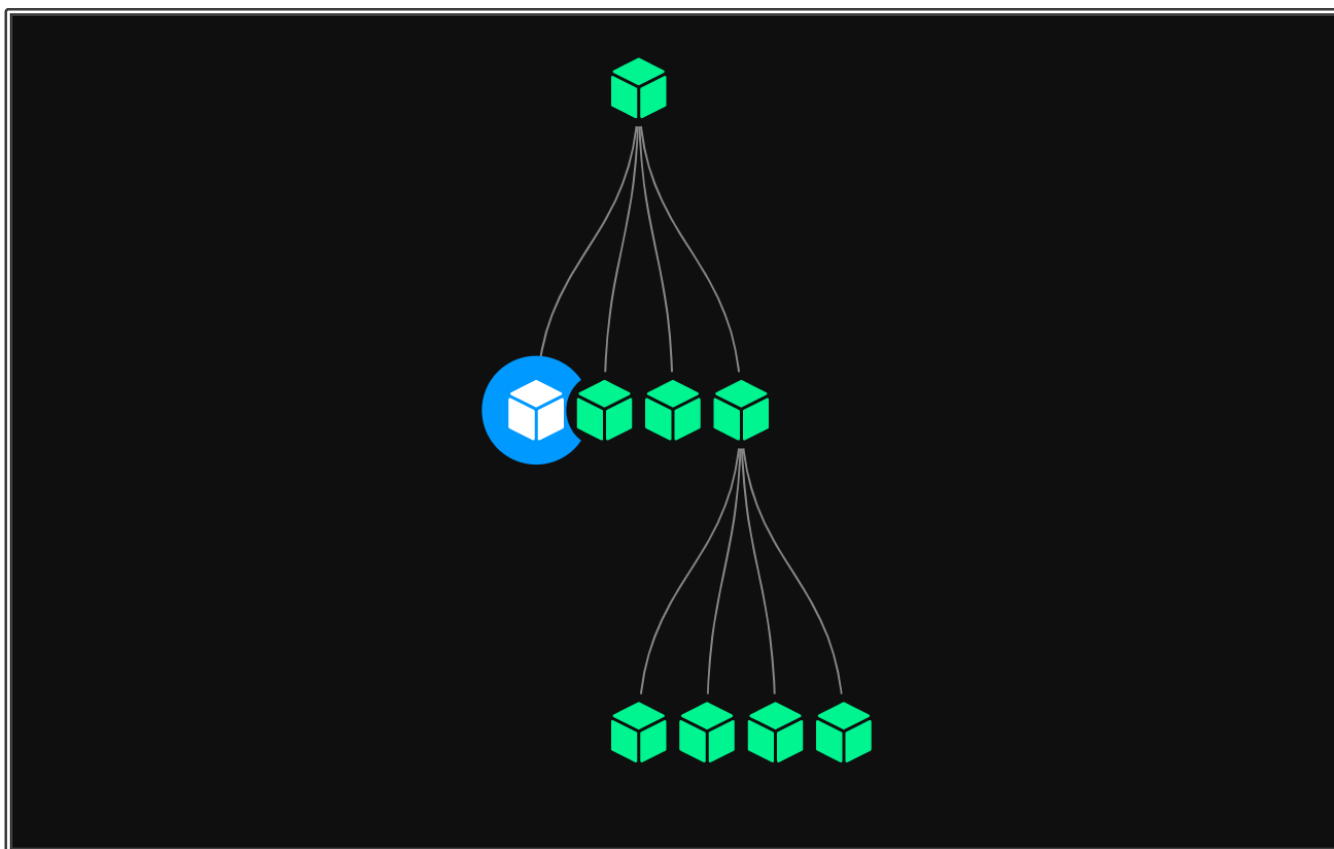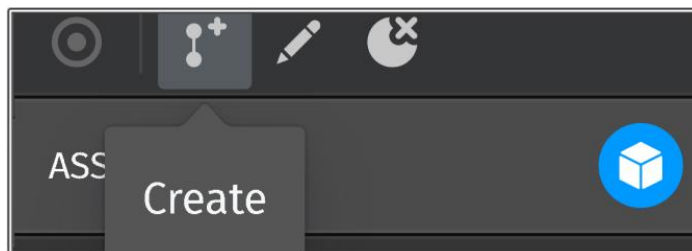

Figure 3. Selecting an Assetbox to create a structure of social connections

Then you need to click the toolbar button at the top-left corner of the page:

For additional convenience, users can create Assetboxes in the desktop version of the application through the context menu that appears when they right-click the selected Assetbox (Fig. 4). This feature is not available for tablets.
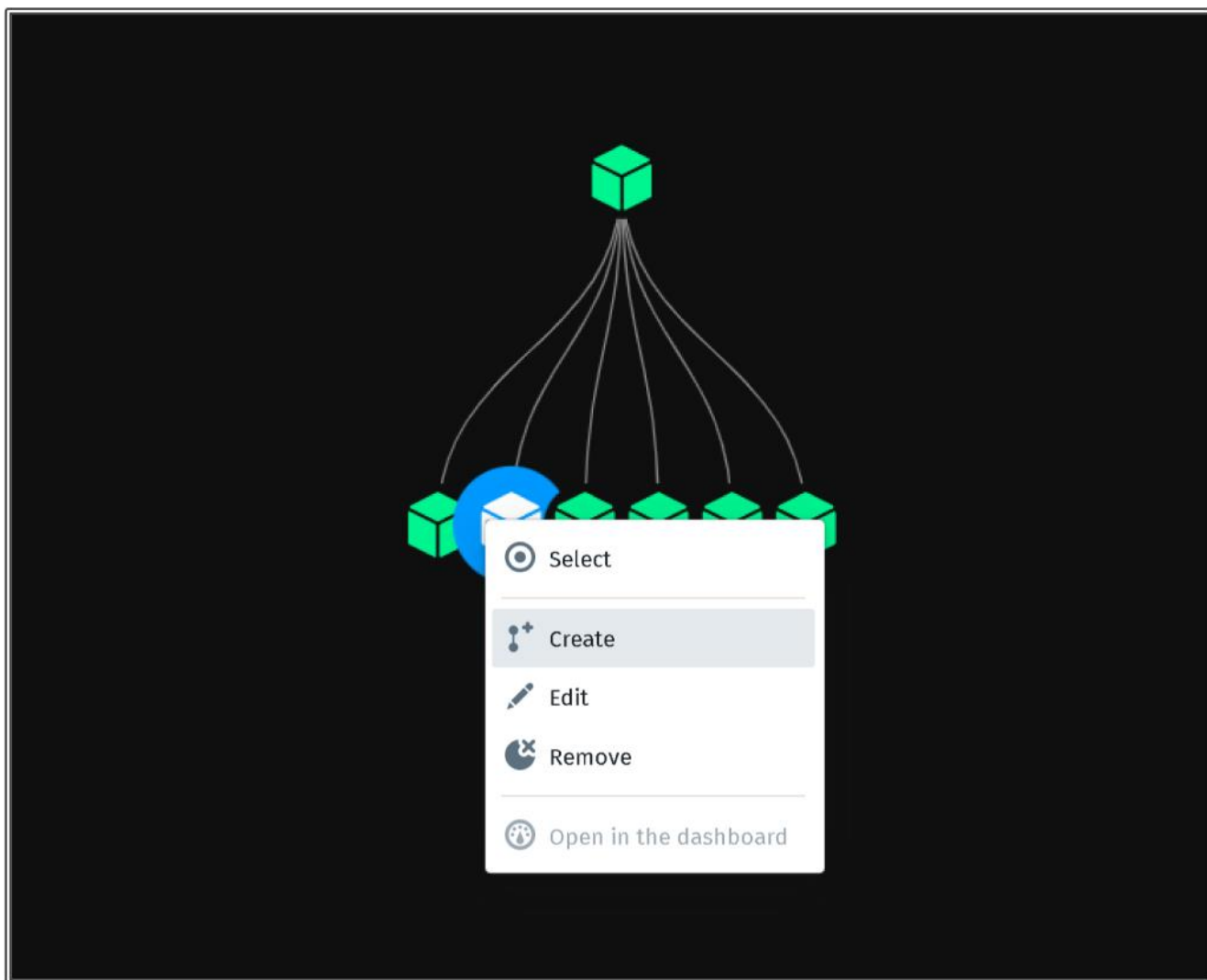
Figure 4. Context menu for the selected Assetbox

After clicking "Create", you will need to enter the following information in the dialog box (Fig. 5):

- number of Assetboxes that will be created;

- balance of new Assetboxes;

- name of new Assetboxes (if the name isn't entered, the application will generate the value of this parameter automatically).

Figure 5. Assetbox creation dialog box

For example, let us create 4 new Assetboxes with initial balance of 100 **bit**bons. After creating Assetboxes, the following graph of social connections of the Registrator pool is formed (Fig. 6):
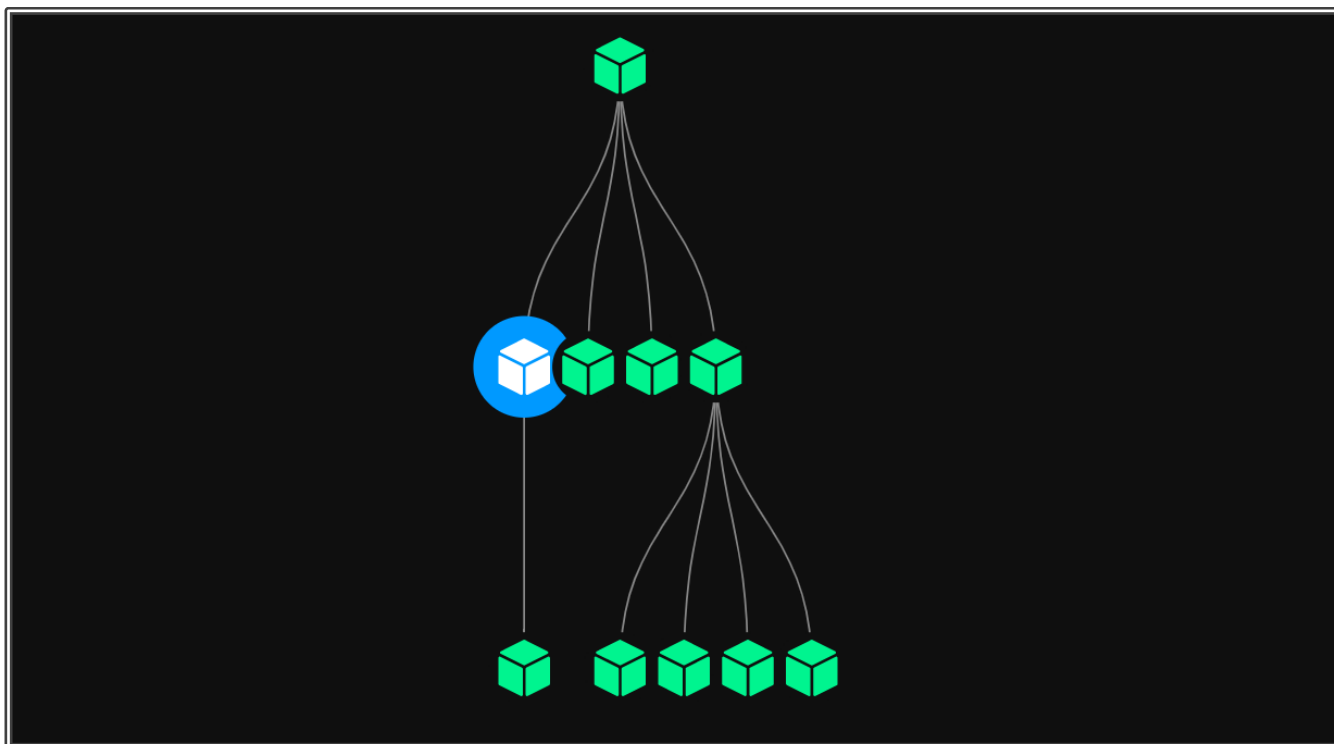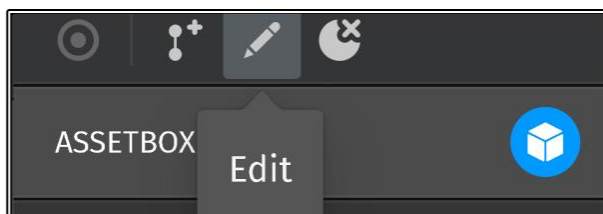

Figure 6. Example of a graph of social connections of the Registrator pool

Editing Assetbox Parameters

In order to edit parameters, you need to select an Assetbox from the graph of social connections of the Registrator pool and click "Edit" in the toolbar at the top-left corner of the page:

For additional convenience, users can edit Assetboxes in the desktop version of the application through the context menu that appears when they right-click the selected Assetbox (Fig. 7). This feature is not available for tablets.

Figure 7. Context menu for the selected Assetbox

When you click "Edit", the dialog box (Fig. 8) will allow you to:

- change the current balance of the Assetbox;

- change the name of the Assetbox.

Figure 8. Editing dialog box

<u>Additional features:</u>

1. "Remove" button . When you click this button, the selected Assetbox will be removed from the structure of social connections of the Registrator pool. Please note that this button is active only for the Assetboxes that were created and have not been part of any calculations yet.

For additional convenience, users can remove Assetboxes in the desktop version of the application through the context menu that appears when you right-click the selected Assetbox (Fig. 9). This feature is not available for tablets.
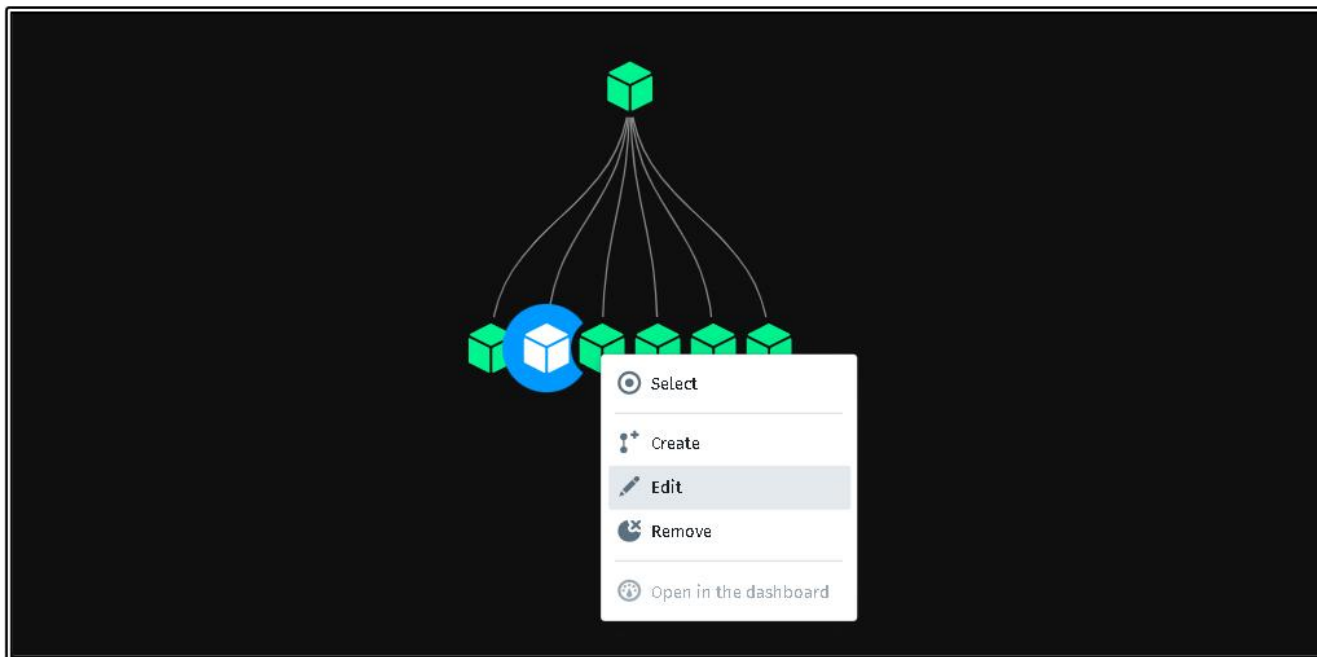
2. "Select" button . When you click this button, the structure of social connections of the selected Assetbox will be displayed, and in this case, this Assetbox will be considered as the root Assetbox, and the rest of the structure of social connections will build with relation to it. The same action will take place if you double-click the Assetbox.

For additional convenience, users can select Assetboxes in the desktop version of the application through the context menu that appears when you right-click the selected Assetbox (Fig. 9). You can do this in the tablet version by double-tapping the selected Assetbox.
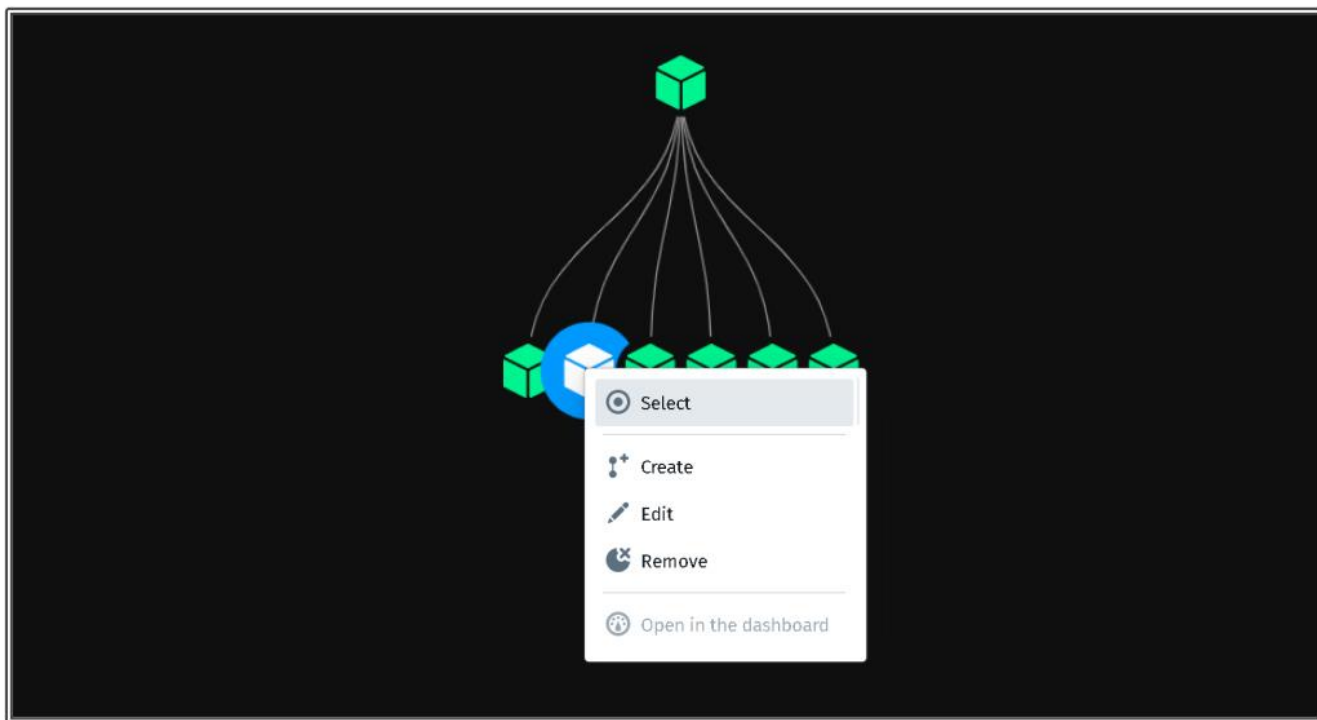
Figure 9. Context menu for the selected Assetbox

For example, we have a graph of Assetbox connections of the Registrator pool, and we would like to view detailed information only on the subgraph related to the highlighted Assetbox.

For that, we click ⊙ and get a graph of social connections only of the selected Assetbox (Fig. 10).
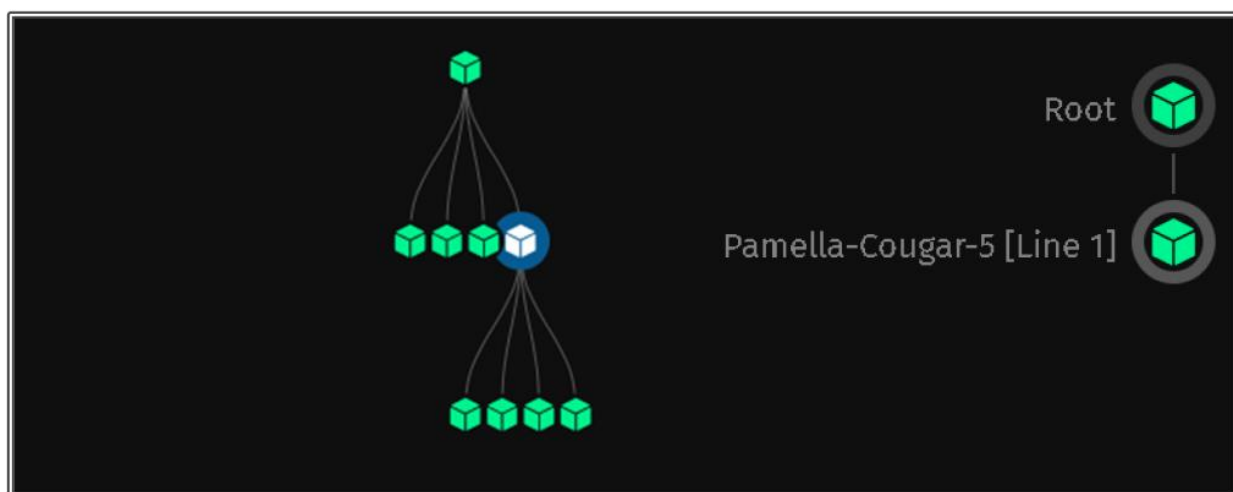

Figure 10. Graph of social connections of the selected Assetbox

Please note that when you go down the hierarchy of Assetboxes, there will be two Assetbox icons at the top-right part of the screen with their names and numbers of lines relative to the initial structure of social connections of the root Assetbox (Fig. 11).
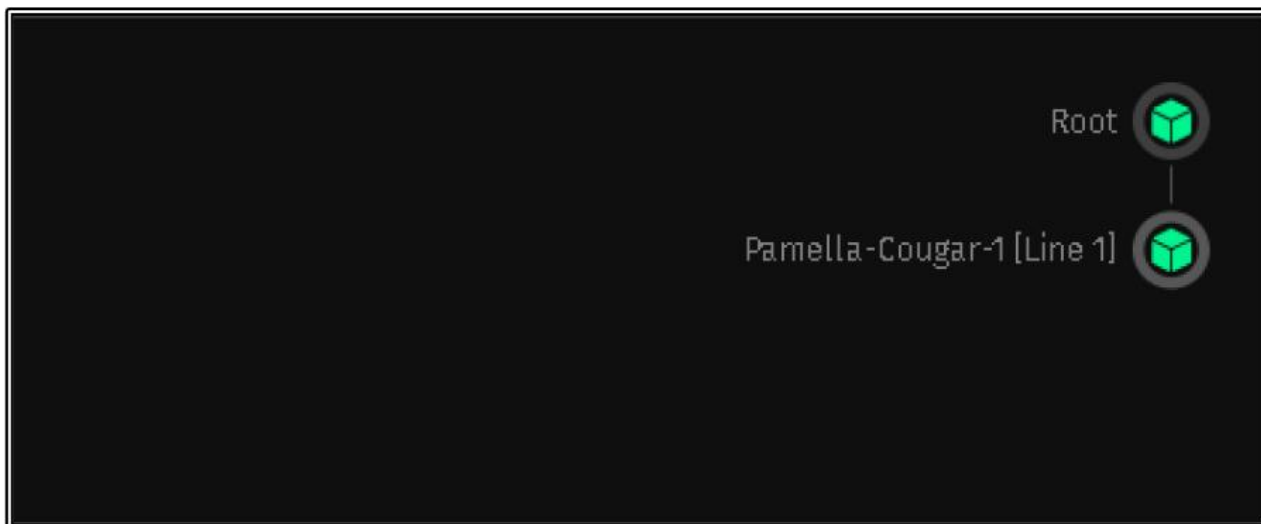

Figure 11. Registrator pool hierarchy

These icons show the hierarchy in the Registrator pool starting from the root Assetbox and including all the lines below it (all the way through the 5th line). If the structure of social connections of the Registrator pool exceeds the number of lines specified in settings, you need to select an Assetbox that is below the line specified in settings in order to display the rest of the lines in the pool.

This feature will allow you to go to a specific line of the Registrator pool at any point during modeling. In order to do that, in the desktop version of the application, you need to select an Assetbox in the hierarchy of social connections of the pool and go to this Assetbox by clicking it. You can do this in the tablet version by tapping the Assetbox in the structure of the Registrator pool.

Loading Registrator Pool Model

Users can not only create new, but also model existing pools by loading Registrator pool models:

1. You need to click "Load Registrator pool model" (Fig. 12) at the top of the application.
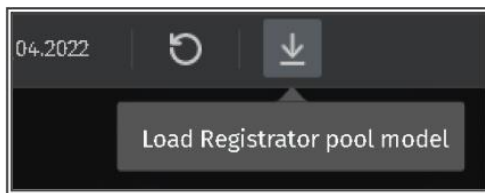

Figure 12. Button for loading Registrator pool models

2. In the dialog box (Fig. 13), you need to enter the alias or address of the Assetbox, the social connections structure model of which you would like to load.
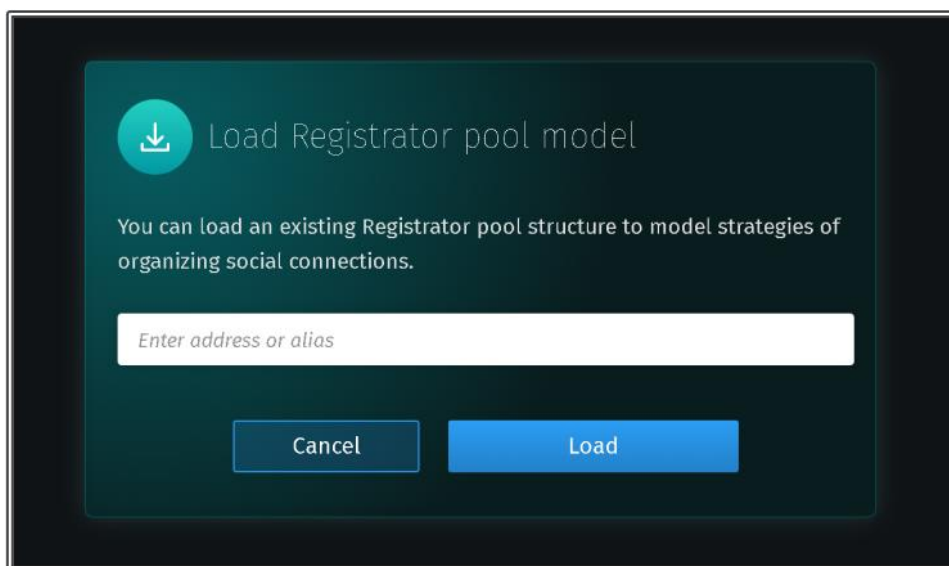

Figure 13. Dialog box for loading Registrator pool models

3. Then, the application will visualize the structure of the selected pool.

4. When loading a model of the existing Registrator pool, the application automatically calculates one special (zero) providing period in order to display calculation parameters of each Assetbox of the loaded pool.

Please note that you can add new Assetboxes to the loaded pool structure and perform additional modeling. Also, when loading a Registrator pool model, the application uses a system file, which stores all structures of social connections in providing. This file is updated in the system once every hour, after which the updated data can be loaded to the application.

In order to make it easier for users to work with the loaded Registrator pool that has multiple lines, there is a slider, which allows setting the number of displayed lines on the right side of the application (Fig. 14).

Figure 14. Managing the number of displayed pool lines

Opening Registrator's Analytical Dashboard

If you load a model of an existing pool, a block with information on the selected Assetbox of the loaded Registrator pool (alias and address) appears at the bottom-left corner of the screen. This block is a hyperlink to the Registrator's analytical dashboard that contains statistical data on the selected Assetbox (Fig. 15).
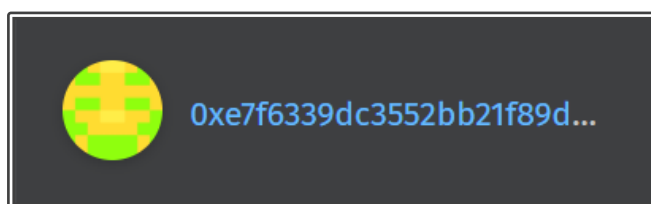

Figure 15. Block for opening the Registrator's analytical dashboard

Providing Period Toolbar

The toolbar consists of buttons for calculating and navigating through periods, as well as dates of the displayed period (Fig. 16).

Figure 16. Providing period toolbar

Controls:

1.   Period calculations:

when you click , you launch the calculation of all Assetbox indicators in the Registrator pool. You can select the number of periods for calculation in the drop-down list (Fig. 17).
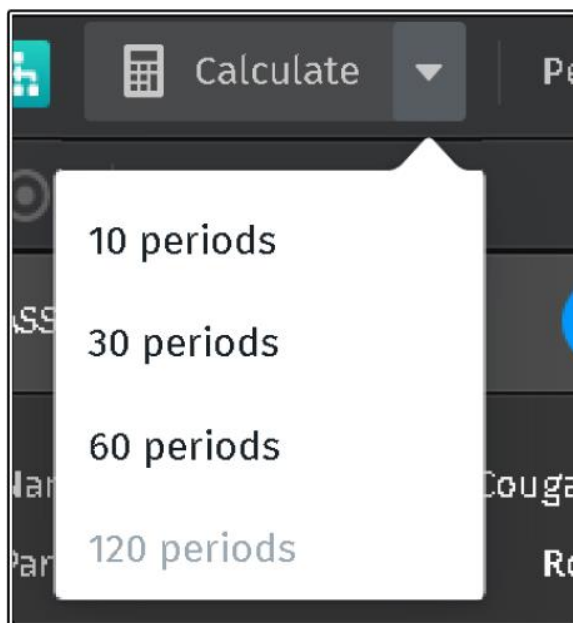

Figure 17. Drop-down list for selecting the calculation period

Once the calculation is complete, the data displayed on the page will automatically update.

2.   Navigating through periods:

- in this element for navigating through periods, you can switch between providing periods one at a time using these two buttons: [<] and [>];

- [«] and [»] will allow you to instantly go to either the first or the last providing period;

- [X] allows you to delete calculations for the last period.

These features are intended for analyzing your Registrator pool and its Assetboxes at any calculation stage.

3. Dates of the displayed period:

09.05.2021 – 12.05.2021 is the period, for which the data on the screen is displayed at that moment.

Resetting All Calculations

When you click the "Reset" button [⟲], the drop-down list (Fig. 18) will allow you to select the parameters you would like to reset.

Figure 18. Parameter reset list

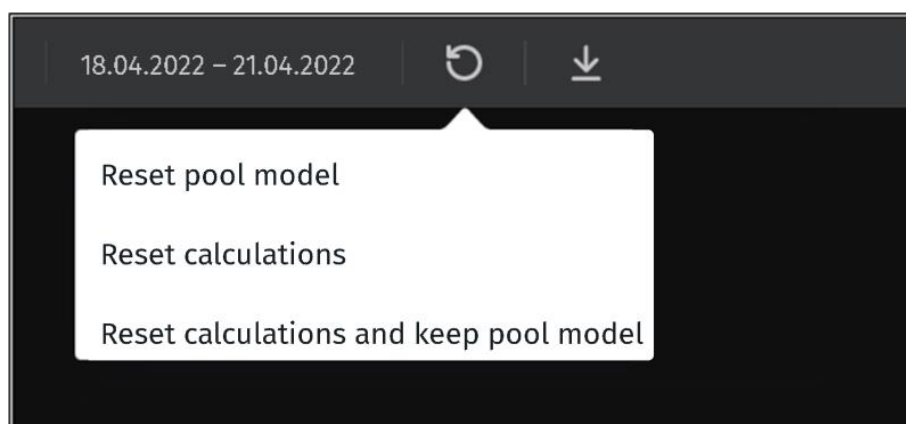If you select "Reset pool model", you will remove the model of created or loaded Registrator pool.

If you select "Reset calculations", you will reset all performed calculations for this structure of social connections of the Registrator pool.

If you select "Reset calculations and keep pool model", you will reset all performed calculations for this structure of social connections, but maintain the model of created or loaded Registrator pool.

Chart Panel

In order to provide the most detailed display of the results of modeling and calculations, the right side of the application has a panel with two charts: accumulated remuneration for the selected Assetbox (in **bit**bons) and power for the selected Assetbox (W). These charts display the statistics for the selected Assetbox depending on the number of periods selected for calculation (Fig. 19). In order to make it more convenient for you to analyze information on the charts, when you hover over each of them, you get a tooltip that contains data on the period and size of remuneration for that period. If you double-click any point on the chart, the list of calculation parameters on the left side of the application will display the data for the corresponding period.

Figure 19. Chart panel

Please note that in order to see the calculation results for your Registrator pool, you must click "Calculate" and launch the corresponding process, after which the data in the application will update, and you will be able to see the analytical information in the form of calculated indicators for each Assetbox of the modeled pool.

Scale and Layout Toolbar

The bottom part of the Registrator pool virtual modeling application has a toolbar with controls for adjusting the scale, as well as selecting the layout of the structure of social connections of the pool (Fig. 20).
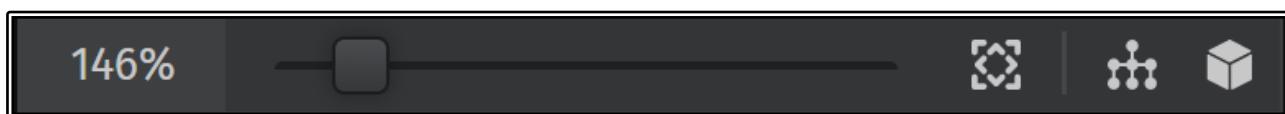
Figure 20. Pool scale and layout toolbar

Controls:
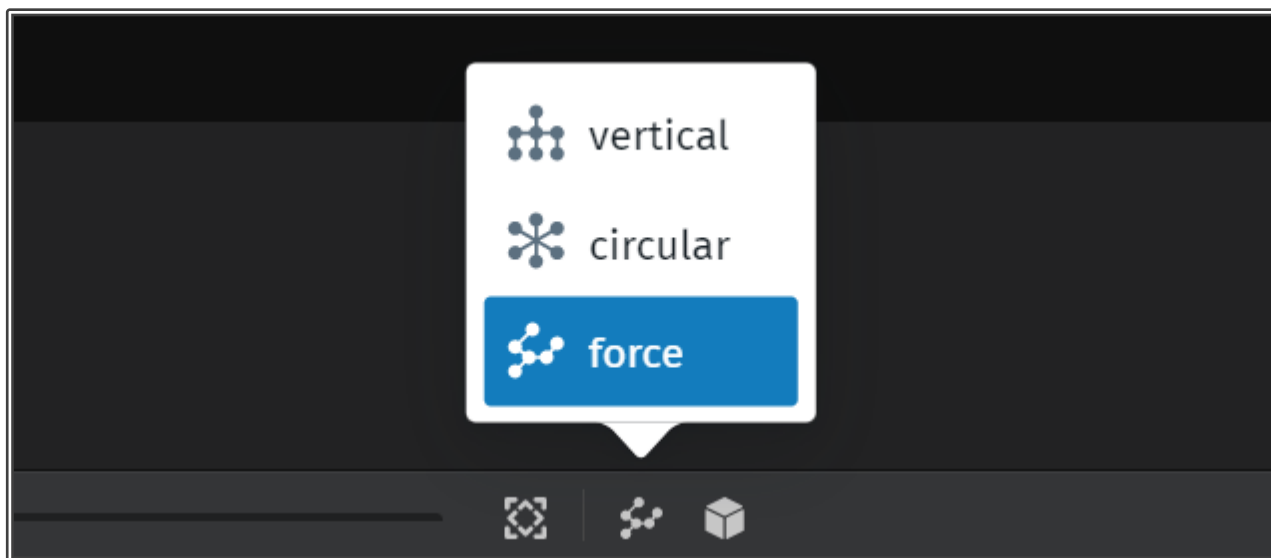
 scales the main screen to its standard size (100%);
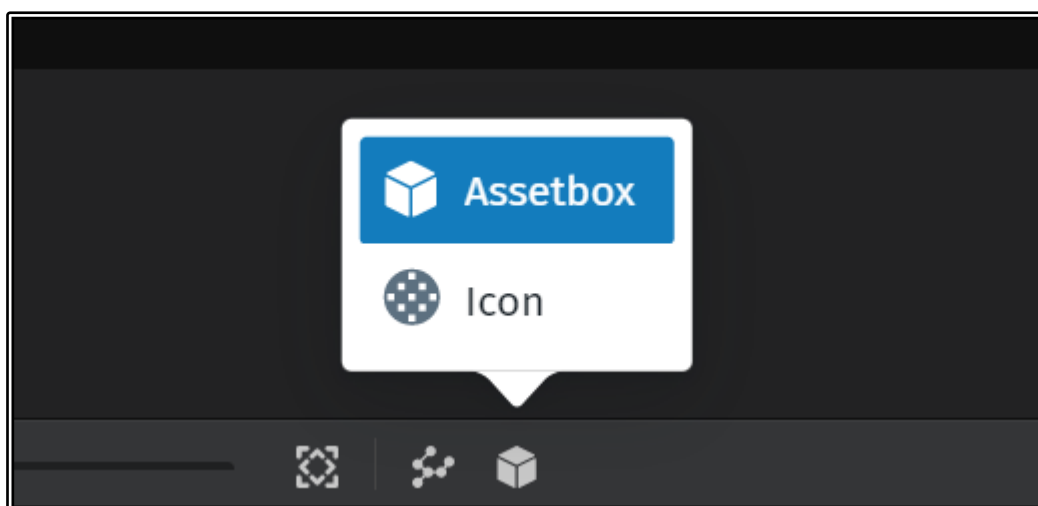
 allows you to select the layout of the structure of social connections of the pool. You can select one of three options:

 selection of the display mode for icons:

If you select "Assetbox", the Registrator pool virtual modeling application will display standard Assetbox icons (cubes). Here are the descriptions of the standard icons:

 — selected Assetbox;

 — means that the level of this Assetbox equals or is higher than the level of the selected Assetbox;

 — means that the balance of this Assetbox is 0;

 — means that the balance of this Assetbox is higher than 0;

 — means that this Assetbox has its own structure of social connections (one or more Assetboxes), but at the moment, it is not being displayed because the application shows the maximum possible number of lines according to the specified parameters;

 — means that this Assetbox has its own structure of social connections (one or more Assetboxes), but at the moment, it is not being displayed because the application shows the maximum possible number of lines according to the specified parameters. The red color of the icon indicates that the level of this Assetbox is higher than that of the selected one;

 — means that this Assetbox has its own structure of social connections (one or more Assetboxes), but at the moment, it is not being displayed because the application shows the maximum possible number of lines according to the specified parameters. The gray color of the icon indicates that the balance of this Assetbox is 0.

Please note that the display option "Icon" is available only for the loaded existing pools on condition that the Assetboxes in the structure of social connections of this pool have the relevant parameter set up.

Viewing Assetbox Information

The left side of the Registrator pool virtual modeling application displays the list of calculation parameters for the selected Assetbox (Fig. 21).
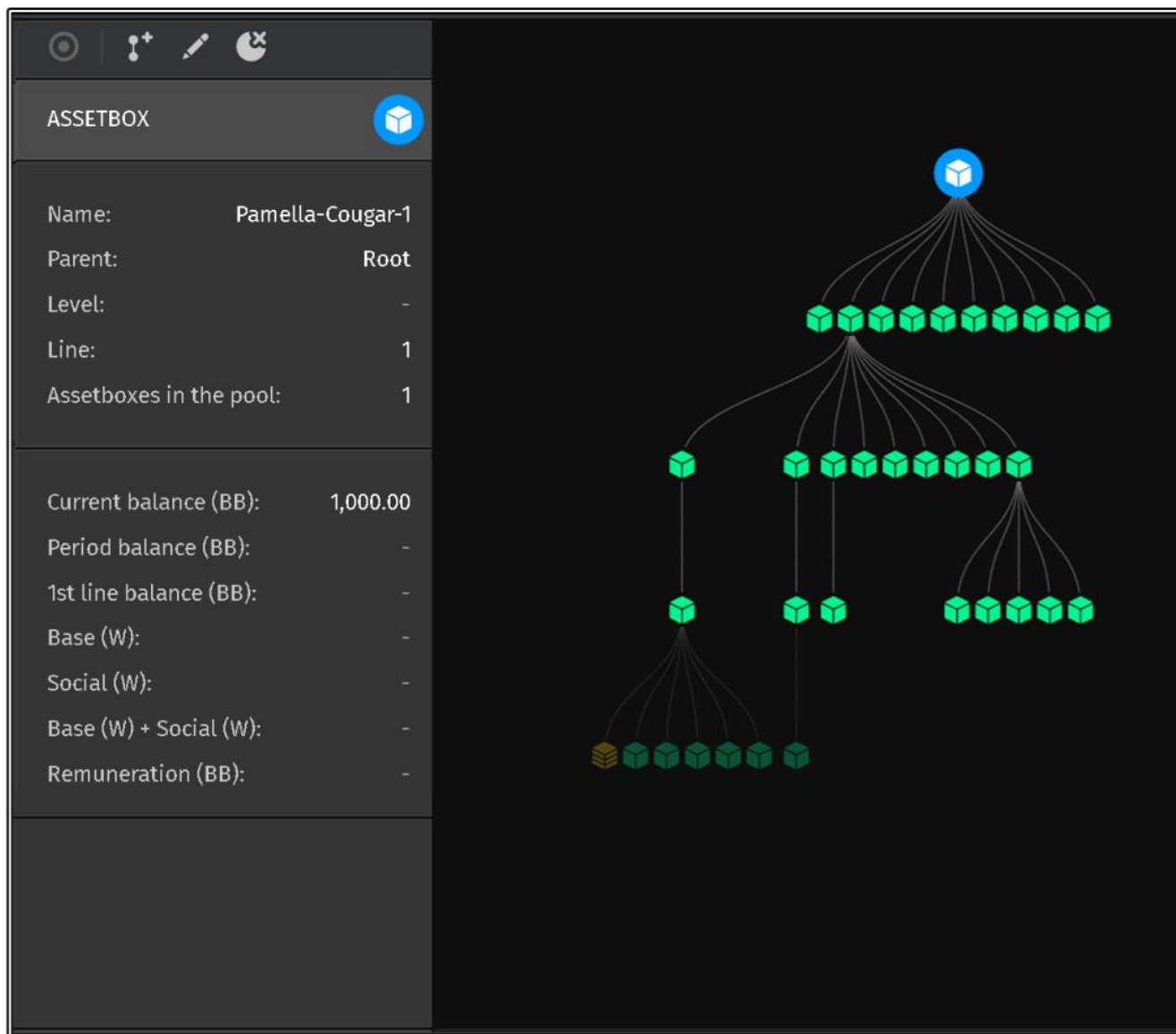

Figure 21. Parameters for the selected Assetbox

In order to see the parameters for any other Assetbox in the pool, in the desktop version of the application you only need to hover over it with your mouse cursor, and you will see the second list of parameters next to the main one (Fig. 22). On tablets, you can do this by tapping any Assetbox in the structure of the pool.

Figure 22. Parameters when comparing Assetboxes
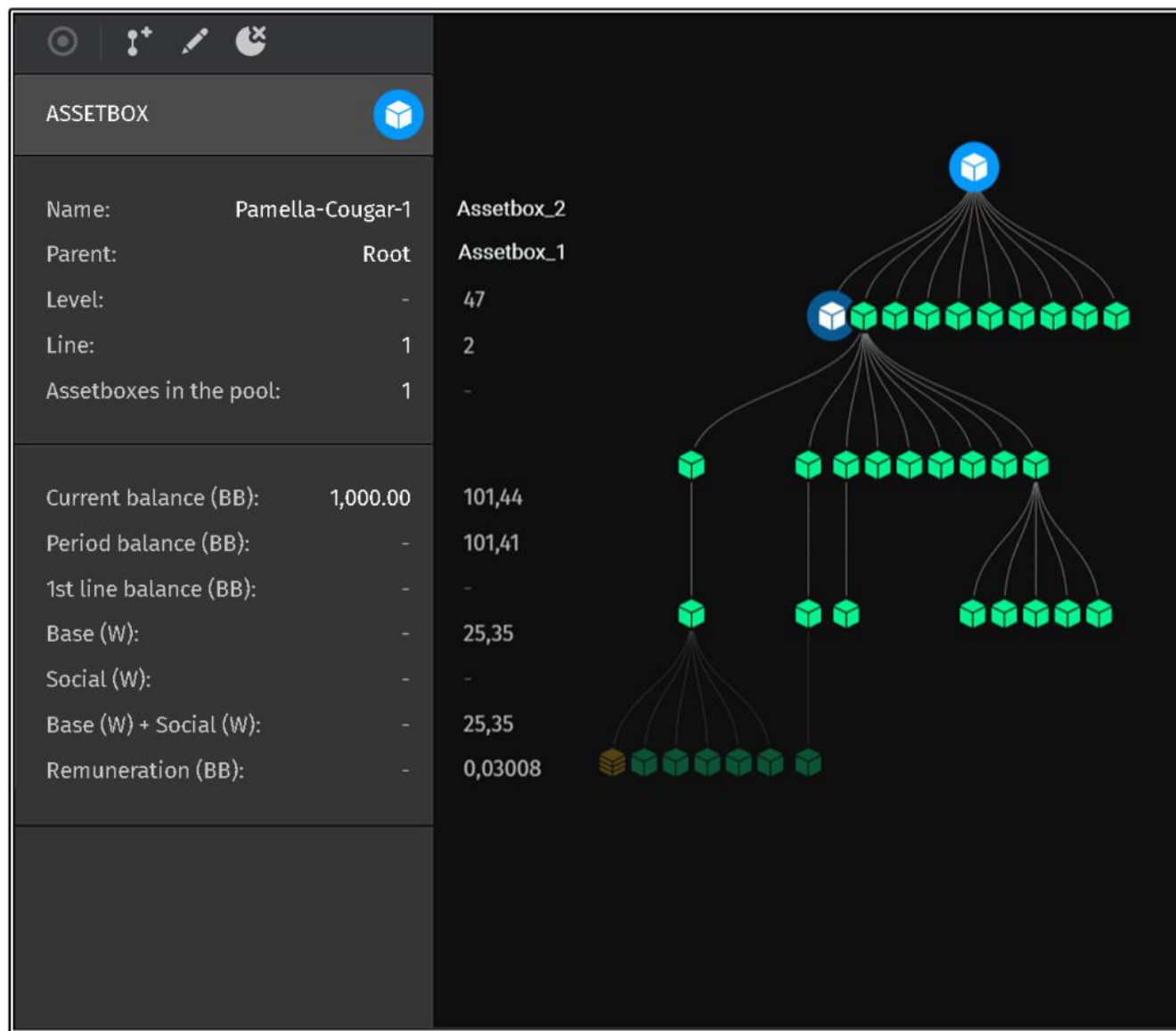
The table contains a short description of Assetbox parameters.

Table. Short description of Assetbox parameters

No.	Parameter	Description
1	Name	Name of the Assetbox entered by a user when creating it or automatically generated by the application
2	Parent	Name of the Assetbox that the selected Assetbox is connected to

3	Level of the Registrator pool	Assetbox level is a parameter automatically calculated by the system that depends on the total number of **Bit**bon units in the Assetbox of a Registrator and Assetbox of his/her first line: the more **Bit**bon units, the higher the level. Providing in the **Bit**bon System envisions 100 levels. Assetbox level determines its position in the overall Registrator pool of the entire providing system. Levels are used by the system when calculating social power of an Assetbox
4	Line	Position of the Assetbox in the hierarchy of the structure of social connections of the Registrator pool relative to the root Assetbox
5	Assetboxes in the pool	Number of Assetboxes below the selected Assetbox in the hierarchy
6	Current balance (BB)	Current balance of the Assetbox. It does not change depending on the selected providing period because it displays the real balance at that moment
7	Period balance (BB)	Assetbox balance for the selected providing period
8	1st line balance (BB)	Sum of balances of Assetboxes in the first line of the selected Assetbox. The data is displayed for the selected providing period
9	Base (W)	Base power of the selected Assetbox during the selected providing period. Base power depends on the balance of the root Assetbox and balances of Assetboxes of its first connection line
10	Social (W)	Social power of the selected Assetbox during the selected providing period. Social power depends on the interlevel difference of base

		balances.
		It should be noted that social power and remuneration for it are calculated only if your base balance is higher than the balance of the Assetbox in your Registrator pool
11	Base (W) + Social (W)	Sum of base and social powers for the selected providing period
12	Remuneration (BB)	Remuneration in **bit**bons calculated based on base and social powers of the selected Assetbox