

REGISTRATOR'S ANALYTICAL DASHBOARD. INSTRUCTIONS



This document is an instruction created to make it easier to understand the main principles of using the analytical dashboard to ensure the effective management of the Registrator pool.

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General Information About Registrator's Analytical Dashboard

Purpose of the Dashboard

The analytical dashboard is the main tool of a Registrator that makes it easier to understand mechanisms of crediting remuneration and structure of a Registrator pool. The data available in the analytical dashboard provides detailed information on all Assetboxes in all the lines of the Registrator pool to ensure its optimal management. Using the tools of the analytical dashboard, you can easily find any Assetbox connected to the Registrator pool and receive key information on all Assetboxes in all the lines of this pool: with base balance, total power, Assetbox level and other data.

The analytical dashboard is not only the main helper for **Bit**bon System Registrators, but a sort of a "guide" that shows completely transparent and detailed statistics of distributing remuneration for activity as a **Bit**bon System Registrator.

Accessing the Analytical Dashboard

You can access the analytical dashboard from the "Providing" page (https://www.bitbon.space/en/providing) on the **Bit**bon Space website. The User searches for the Assetbox by entering its address or alias in the field. Using the analytical dashboard, you will be able to find and view information on any Assetbox involved in providing (Fig. 1).

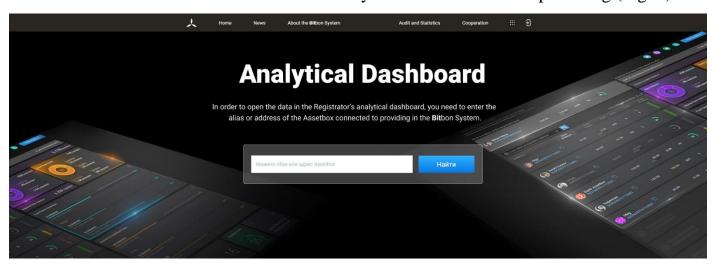


Figure 1. Page with the Assetbox search



The page with the analytical dashboard will open if the Assetbox, parameters of which were entered in the search field, is found. If this Assetbox is not found by the system, you will see the corresponding notification.

Data in the analytical dashboard updates once a minute.

Operation Elements and Workspace of the Dashboard

Fig. 2 shows the main elements of working with the dashboard.







Figure 2. Main elements of working with the dashboard



Server Time

We would like to point out that the Registrator's dashboard shows the current **server** time (UTC) (Fig. 3).

Server Time: 08:27:00 (UTC)

Figure 3. Current server time

Current Providing Period

For ease-of-use of the Registrator's dashboard, it displays the progress bar of the current **providing period with the exact dates when it begins and ends** (Fig. 4).

Current Providing Period: 29.01.2020 - 31.01.2020

Figure 4. Current providing period

Panel with Buttons of Registrator's Tools

Fig. 5 shows a panel with buttons that open the Registrator's tools.



Figure 5. Panel with buttons of the Registrator's tools

- Clicking (Adviser Bot) opens a page that contains information describing the main functionality of the adviser bot.
- Clicking (Registrator's Calculator) opens a temporary page describing the main abilities that will be provided by the Registrator's calculator.
- Clicking (Providing Indicators) opens the "Audit and Statistics" page of the Bitbon Space website that contains the main providing indicators.
- Clicking (Registrator Pool Virtual Modeling Application) will open a temporary page describing the main functionality of the Registrator's pool virtual modeling application.



Assetbox Search

If you want to find the statistics for any Assetbox, you need to use the search function (Fig. 6).



Figure 6. Assetbox search button

After you click the "Find Assetbox" button, you are automatically redirected to the "Providing" page on the <u>bitbon.space</u> website, which handles the search (you can learn more in the "Accessing the Analytical Dashboard" section).

Provider's Help Desk

You can find information on the main concepts and principles of providing in the **Bit**bon System along with the links to the main instructions on the "Provider's Help Desk" page, which can be accessed by clicking the corresponding button (Fig. 7).



Figure 7. Button for accessing the "Provider's Help Desk"



Navigating Through Assetboxes in the Registrator Pool

Fig. 8 and 9 show the interface of the Registrator pool navigation block.

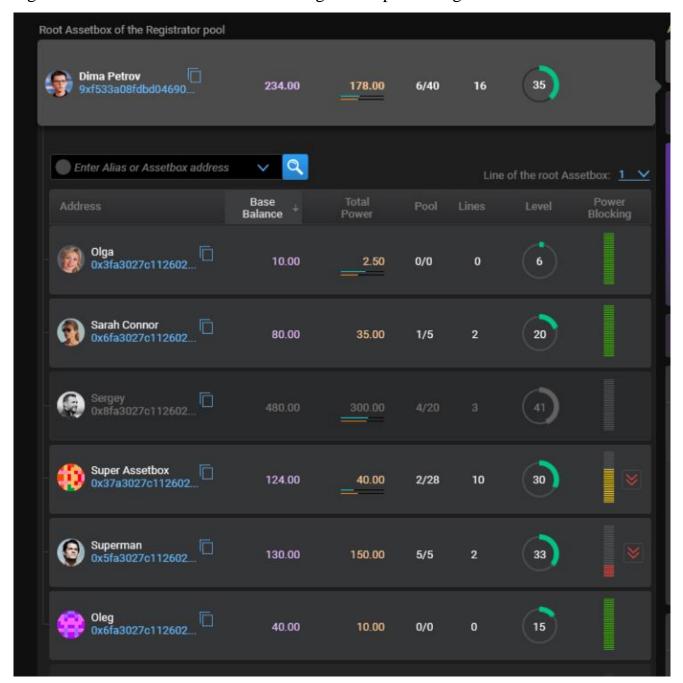


Figure 8. Navigating through Assetboxes in the Registrator pool
(this picture shows an option when a User chose to view information for the root Assetbox and its first line)



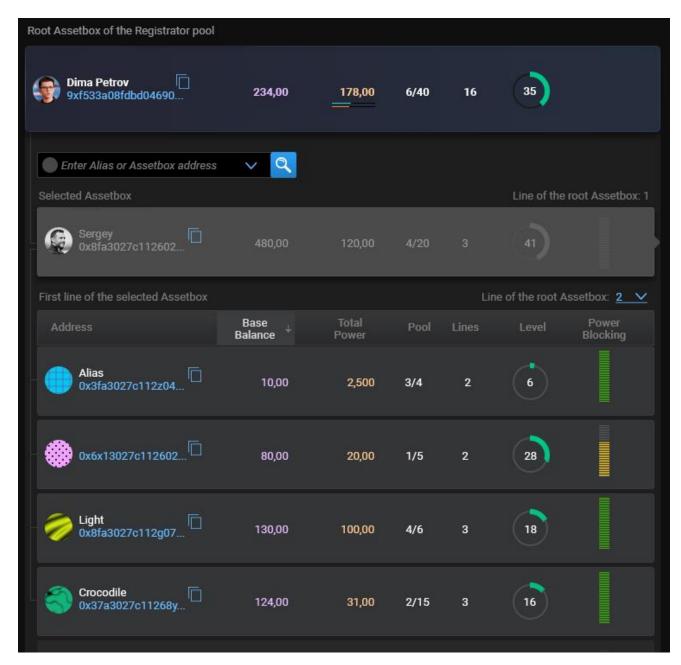


Figure 9. Navigating through Assetboxes in the Registrator pool

(this picture shows an option when a User selected one of the Assetboxes in the Registrator pool)



General Information About the Block

The pool navigation block consists of 4 horizontal fields (Fig. 10):

- root Assetbox of the Registrator pool;
- selected Assetbox;
- first line of the selected Assetbox (or of the root Assetbox, if there is no selected one);
- search field for Assetboxes in the pool.

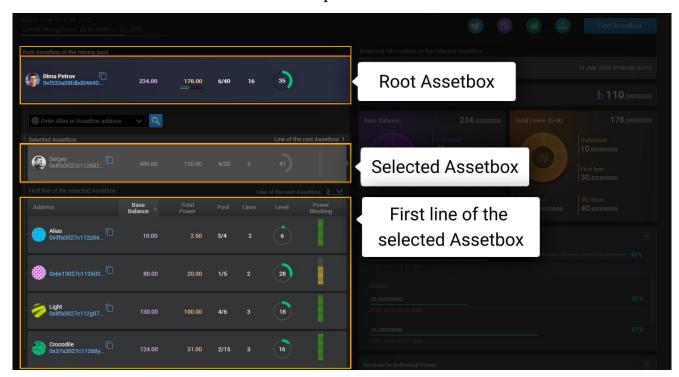


Figure 10. Structure of the Registrator pool navigation block

Root Assetbox of the Registrator pool is an Assetbox that was found during the search on the "Providing" page and that is at the top of a specific Registrator pool. All connections in the pool's structure lead to this Assetbox.

We would like to note that the element "Root Assetbox of the Registrator pool" has a number of features:

- After the Assetbox is found, and the analytical dashboard is opened, the root Assetbox does not change (it will change only if you conduct a new search).
- All Assetboxes that are in the Registrator pool of the root Assetbox are available for navigation and analysis.



- You cannot go to the Assetbox that is above this one in the structure of social connections. In order to do that, you need to conduct another search for the relevant Assetbox.
- When clicking the root Assetbox, it becomes "selected" (Registrator's dashboard displays data for this specific Assetbox).

Selected Assetbox is any Assetbox in the Registrator pool selected by the User to view data. The block "Information on the selected Assetbox" and the tables below it show the information on the selected Assetbox. Immediately following the search, the Registrator's dashboard displays information on the root Assetbox. After selecting another Assetbox, the other blocks of the dashboard are updated to display information on the selected Assetbox of the pool.

First line of the selected Assetbox is represented by all the Assetboxes included in the first line of the Assetbox you selected. If the Assetboxes in the first line of the selected Assetbox do not fit on one page, they will be displayed on several pages that can be accessed by clicking the corresponding numbers (Fig. 11).

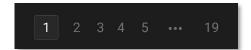


Figure 11. Element for accessing the pages with the Assetboxes of the first line of the Registrator pool

Search field for Assetboxes in the pool will help you find statistics on any of the Assetboxes involved in the pool of the selected Assetbox (Fig. 12).

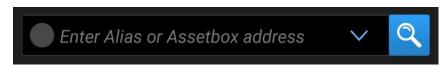
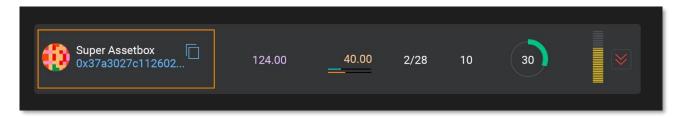


Figure 12. Search field for Assetboxes in the pool of the root Assetbox



Assetbox Parameters in the Pool

Address



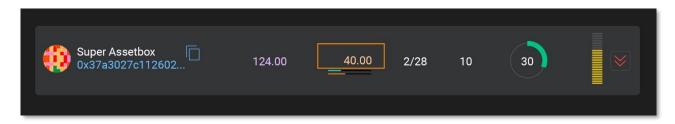
This column displays three parameters: Assetbox address, Assetbox alias and Assetbox icon. You can copy the Assetbox address to the clipboard by clicking .

Base Balance



Base balance is calculated and updated at the end of each providing period. Base balance is a parameter that is defined by the total number of **Bit**bon units in the root Assetbox of a Registrator and the sum of all Assetbox balances of the first line of the Registrator pool.

• Total Power



Total power is a parameter of a Registrator's Assetbox that defines the legal weight of a specific Registrator in the **Bit**bon System Social Network when confirming deals in the **Bit**bon System. Assetbox power is calculated as a sum of base and social powers of the Registrator's Assetbox and directly influences the remuneration of the Registrator.



Pool



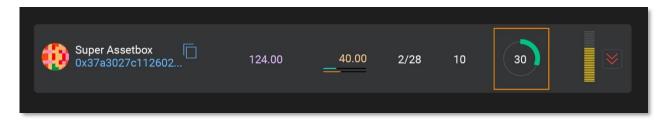
This parameter contains two digits: the first one is the number of Assetboxes in the first line, the second one is the total number of Assetboxes in this pool. This parameter is updated every time the structure of the pool changes, i.e. when new Assetboxes are added to the pool.

Lines



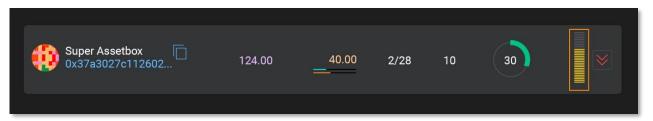
This parameter displays the total number of lines in the Registrator pool and updates every time the structure of the pool changes (when new Assetboxes are added to the pool).

Level



This parameter displays the current level of the Assetbox. The Assetbox level is calculated and updated at the end of each providing period.

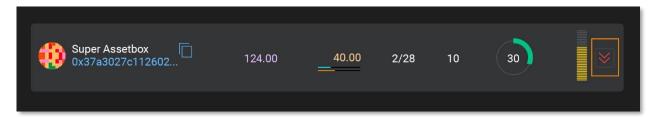
Power Blocking





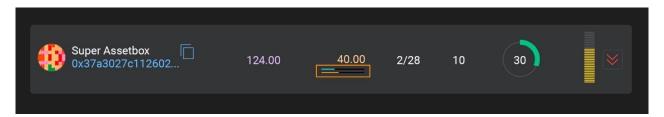
This indicator displays which part of the pool relative to the root Assetbox brings profit, and which does not. More detailed information on the indicator can be found in the "Power Blocking Indicator" section.

• Button for opening the Assetbox that blocks a part of the Registrator pool's graph (social power blocking)



When you click this button, you will open the data for the nearest Assetbox in the structure of the Registrator pool, which causes the blocking of social power.

• Progress bars of the power increase and/or protection for the Assetboxes of the first line



Progress bars below the "Total Power" parameter display the processes of power increase and/or protection provided that these processes are active for this Assetbox.

Sorting

The analytical dashboard allows sorting Assetboxes in the descending/ascending order using the following parameters:

- "Base Balance";
- "Total Power";
- "Level".

By default, Assetboxes of the first line are sorted by base balance in descending order. In order to sort the data in the column, you need to click on its title.





The arrow that appears next to the title of the column will show the direction for sorting Assetboxes. If you click on the column's title again, the contents will be sorted in reverse and the direction of the arrow will change.



Line of the Registrator Pool



When navigating the Registrator pool, the element "Line of the root Assetbox" shows which line relative to the root Assetbox is displayed in the analytical dashboard. In order to quickly access another line, you can select it from the drop-down list (Fig. 13).

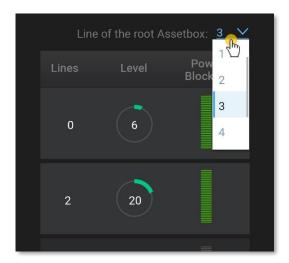


Figure 13. Accessing the lines of the Registrator pool

We would like to point out that if the Assetboxes in the selected line belong to different branches of the pool, the analytical dashboard will only display the root Assetbox and the list of Assetboxes of the selected line.

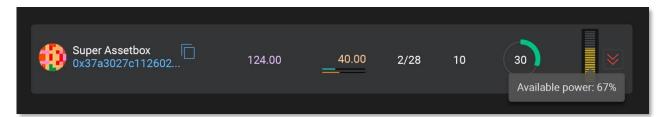


Power Blocking Indicator

The level of filling and the color of the indicator show what part of the Assetboxes of the Registrator pool (relative to the total number of Assetboxes in the pool) participates in generating the social power of the root Assetbox. The more the indicator is filled, the more Assetboxes in the pool participate in generating the social power of the root Assetbox and, therefore, affect the size of the received remuneration. Possible options for color coding and filling of the indicator are shown in Fig. 14.



Figure 14. Indicators of social power blocking



The Assetbox, which starts the power blocking, and all Assetboxes below it in the structure are shown as inactive elements (in grey), and the power blocking indicator turns completely grey as well (Fig. 15), which means that even though this Assetbox is part of the Registrator pool, it does not contribute to the social power of the root Assetbox.

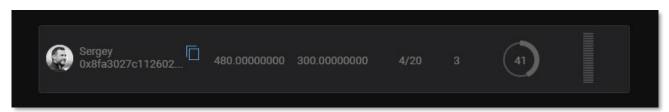


Figure 15. Assetbox, the power of which is cut off from the root Assetbox



Analytical Data for the Selected Assetbox

Date of Connecting to the Registrator Pool

This block shows the date when the Assetbox connected to the Registrator pool, i.e. the moment when 0.0001 **bit**bons were transferred to connect this Assetbox to the Registrator pool (Fig. 16).



Figure 16. Date of connecting to the Registrator pool

Current Assetbox Balance

This block displays the current balance of the selected Assetbox (Fig. 17). This parameter updates after every transfer of **bit**bons to/from the Assetbox.

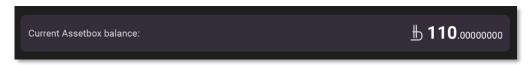


Figure 17. Current balance of the selected Assetbox

Base Balance

All parameters displayed in the "Base Balance" block (Fig. 18) are calculated and updated at the end of each providing period.

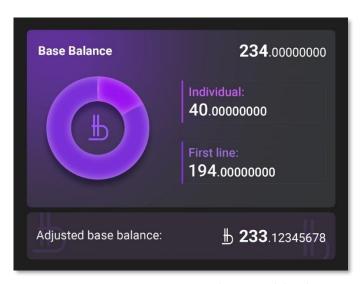


Figure 18. "Base Balance" block



The block contains the following parameters:

• Individual

Individual balance is the minimum balance of the Assetbox over the relevant providing period. Individual balance and data on its changes are the source indicators used to calculate the main parameters of the Registrator pool, as well as power increase and protection processes.

• First line

The sum of individual balances of all Assetboxes in the first line of the Registrator pool of the selected Assetbox.

• Base balance

The sum of "Individual" and "First line" parameters.

• Balance diagram

The diagram displays the shares of individual balance and the balance of the first line in the base balance.

• Adjusted base balance

The value that determines the level of the Assetbox in the Registrator pool.

Power

All parameters displayed in the "Power" block (Fig. 19) are calculated and updated at the end of each providing period.



Figure 19. "Power" block



Block parameters:

• Individual

Individual power of the Assetbox equals ¼ of the individual balance taking into account active power increase processes.

• First line

This parameter is calculated using the difference between base and social powers.

Base

It is calculated in accordance with the base power formula described in the Mathematical Description of Consensus Building in the Distributed Ledger Token Accounting System of the Bitbon System.

Social

It is calculated in accordance with the social power formula described in the Mathematical Description of Consensus Building in the Distributed Ledger Token Accounting System of the **Bit**bon System.

• Total power

The sum of base and social powers.

• Balance diagram

The diagram displays the shares of base and social powers in the total power of the selected Assetbox.

Power Increase Process

The data on power increase processes (Fig. 20) is calculated and updated at the end of each providing period.





Figure 20. Display of Assetbox power increase processes

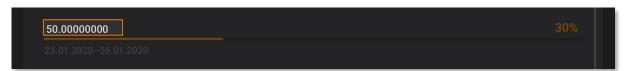
This block provides information on the processes for increasing the power of the selected Assetbox (if this Assetbox has at least one active power increase process).

The mobile version of the analytical dashboard displays one progress bar by default, which shows the total value of all power increase processes. When you click , the block displays all power increase processes as separate progress bars.

We would like to point out that after the power increase process is completed (i.e. the power is at 100%), this block no longer shows in the analytical dashboard.

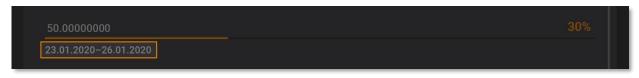
Parameters of the block:

Element above the progress bar



It displays the change in the minimum balance of the Assetbox, according to which the power increase process is performed. If the power increase process is modified following the decrease in the balance during one of the providing periods, this value will be recalculated in accordance with the changes and will show the up-to-date information.

• Element below the progress bar





It displays the starting and ending dates of the providing period, when the power increase process was launched.

The progress bar that displays the total power increase also shows the period where the first date is the starting period for the very first active power increase process, and the second one is the date when the last one of the active power increase processes ends.

Percentages display the level of completion of the power increase process



Pool Power Protection

The data on power protection processes (Fig. 21) is calculated and updated at the end of each providing period.

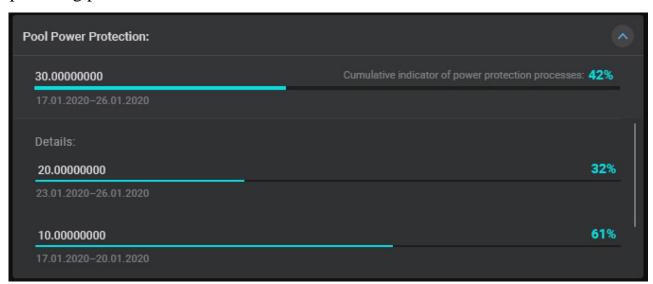


Figure 21. Display of pool power protection processes

This block provides information on the power protection processes of the selected Assetbox (if this Assetbox has at least one active power protection process).

The mobile version of the analytical dashboard displays one progress bar by default, which shows the total value of all power protection processes. When you click the block will display all power protection processes as separate progress bars.

We would like to point out that after the power protection process is completed (i.e. the power is restored to 100%), this block no longer shows in the analytical dashboard.



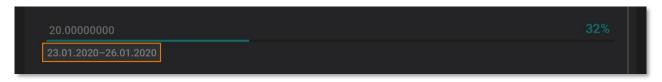
Parameters of the block:

• Element above the progress bar



It displays the changes to the minimum balance of the Assetbox, in accordance with which the pool power protection process was launched.

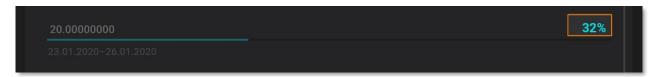
• Element below the progress bar



It displays the starting and ending dates of the providing period, when the power protection process was launched.

The progress bar that displays the total information on pool power protection processes also shows the period where the first date is the starting period for the very first active power protection process, and the second one is the date when the last one of the active power protection processes ends.

• Percentages display the level of completion of the pool power protection process



Information on Pool Structure

Information on the changes in the Registrator pool structure (Fig. 22) updates immediately after a new Assetbox connects.



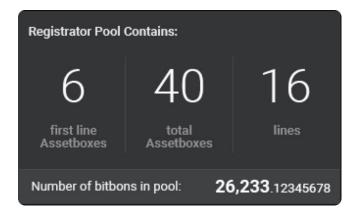


Figure 22. Information on the Registrator pool structure

Parameters of the block:

- The first parameter "first line Assetboxes" displays the number of Assetboxes in the first line of the selected Assetbox.
- The second parameter "total Assetboxes" displays the total number of Assetboxes in the entire Registrator pool of the selected Assetbox.
- The third parameter "lines" displays the number of lines in the Registrator pool of the selected Assetbox.
- The fourth parameter "Number of bitbons in pool" displays the sum of individual balances of all Assetboxes in the pool.

Assetbox Level

Assetbox level (Fig. 23) is calculated and updated at the end of each providing period.



Figure 23. Level of the selected Assetbox



Pool Comparison Indicator

This indicator (Fig. 24) is calculated and updated at the end of each providing period.



Figure 24. Pool comparison indicator

This indicator shows how much better this pool is than the other Registrator pools that participate in providing (in percentages).

Remuneration Chart

The information on the chart updates at the end of each providing period (Fig. 25).

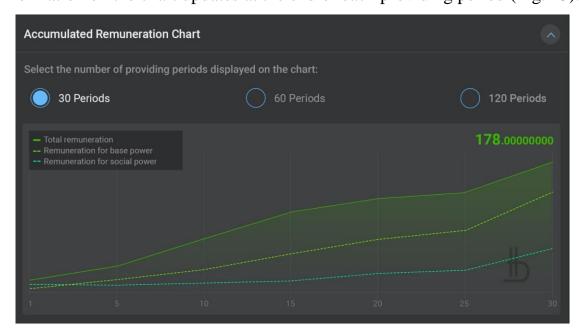


Figure 25. Remuneration chart



The cumulative chart based on the transfers with remuneration in **Bit**bon units accepted by the Registrator. The point on the chart is plotted on the providing period when remuneration was calculated and accepted. The chart displays three separate lines:

- total remuneration;
- remuneration for base power;
- remuneration for social power.

If you hover your mouse over the chart, you see a tooltip with information on the date when remuneration was accepted and the sum of remuneration (in **Bit**bon units) for base and social powers as well as the total amount of remuneration.

In the upper right corner, you can see a numerical value 178.0000000, which is calculated as the difference between the values of the "Total" parameter (in the tooltip) at the last and the very first points on the chart. You can hide or show the chart by clicking .

Power Chart

Information on the chart updates at the end of each providing period after the Assetbox power is calculated (Fig. 26).



Figure 26. Power chart



The chart displays three separate lines:

- total power;
- base power;
- social power.

Information is displayed in power units (W), and the points are plotted for each providing period. When you hover your mouse over the chart, you see a tooltip with information on the date when power was calculated and value of each type of power.

You can hide or show the chart by clicking



Social Activity Chart

Information on the chart updates right after a new Assetbox connects to the Registrator pool of the selected Assetbox (Fig. 27).



Figure 27. Social activity chart

On this chart, each bar displays the number of new Assetbox connections to the Registrator pool of the selected Assetbox for a specific date. If the Assetbox is connected to the node that is in the blocked branch for the selected Assetbox, this connection will show in grey. If you hover your mouse over the bar on the chart, you will see a tooltip with information on the date and number of Assetboxes connected on that day, as well as the number of Assetboxes connected to the blocked branch (if there is such information).



You can hide or show the chart by clicking



Remuneration

Information in this table (Fig. 28) updates after the following events:

- remuneration is calculated;
- transfer with remuneration is sent to the Registrator;
- the Registrator accepts the transfer with remuneration.

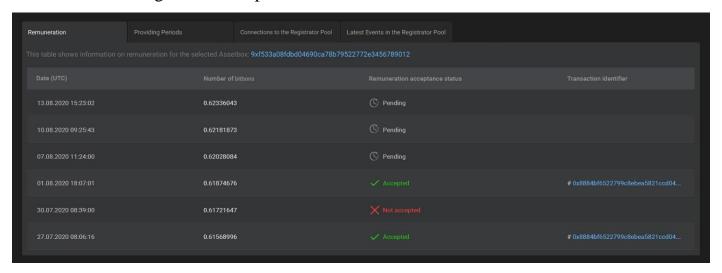


Figure 28. Information on remuneration for the selected Assetbox

This table displays the date and time of the event, number of Bitbon units in remuneration, status of remuneration and, if the transaction with remuneration was accepted by the Registrator, the identifier of this transaction in the blockchain. The transaction identifier in the blockchain is a hyperlink, which opens the blockchain statistics with information on this transaction in a new tab of your browser.

Possible statuses for transactions with remuneration:

- "Pending" means that the transaction with remuneration was sent to the Registrator, but the Registrator has not accepted the transaction in his/her account.
- "Accepted" means that the transaction with remuneration was sent to the Registrator, and the Registrator has accepted it in his/her account.
- "Not accepted" means that the transaction with remuneration was sent to the Registrator and the Registrator has declined this transaction in his/her account. It can



also mean that the time given to accept the transaction ran out, and the remuneration was returned to the Providing Fund.

Providing Periods

Information in the table updates after the status of the providing period changes (Fig. 29).

	Device Port I						
Remuneration	Providing Periods						
This table shows information on the providing periods (72 hours) as well as statuses of calculating and crediting remuneration.							
Providing period	Expected date of crediting remuneration	Actual date of crediting remuneration (UTC)		Status of calculating remuneration	Status of crediting remuneration		
17.08.2020 - 20.08.2020	23.08.2020 - 25.08.2020		Current	Not calculated	Not credited	Calculating	
14.08.2020 - 17.08.2020	20.08.2020 - 22.08.2020		Complete	Calculated	Not credited		
11.08.2020 - 14.08.2020	17.08.2020 - 19.08.2020		Complete	Calculated	Not credited	0.12444940	
08.08.2020 - 11.08.2020	14.08.2020 - 16.08.2020	17.08.2020 07:17:54	Complete	Calculated	Credited	0.09345103	
05.08.2020 - 08.08.2020	11.08.2020 - 13.08.2020	13.08.2020 15:23:02	Complete	Calculated	Credited	0.02666389	
02.08.2020 - 05.08.2020	08.08.2020 - 10.08.2020	10.08.2020 09:25:43	Complete	Calculated	Credited		

Figure 29. Information on providing periods

This table shows information on providing periods, as well as statuses of calculating and crediting remuneration.

Parameters of the table:

Providing period shows the dates of the beginning and end of the providing period.

Expected date of crediting remuneration shows the expected date of crediting remuneration for the corresponding providing period.

Actual date of crediting remuneration shows the actual date of crediting remuneration for the corresponding providing period.

Status of the period shows the current status of the providing period:

- o "Current" means that this period is the current providing period.
- o "Complete" means that this period is already over.

Status of calculating remuneration shows the status of calculating remuneration for the corresponding providing period.

o "Not calculated" means that remuneration for the corresponding providing period has not been calculated because the providing cycle is not over yet.



o "Calculated" means that remuneration for the corresponding providing period has been calculated, and the parameter "Remuneration (**Bit**bon)" shows the value of remuneration in **Bit**bon units.

Status of crediting remuneration shows the status of crediting remuneration for the corresponding providing period.

- o "Not credited" means that remuneration for the corresponding providing period has been calculated but has not been credited because the providing cycle is not over yet.
- o "Credited" means the transaction with remuneration for the corresponding providing period was sent to the Registrator.

Remuneration (Bitbon) shows the size of remuneration in Bitbon units.

Connections to the Registrator Pool

Information in the table updates after a new Assetbox connects to the Registrator pool of the selected Assetbox (Fig. 30).

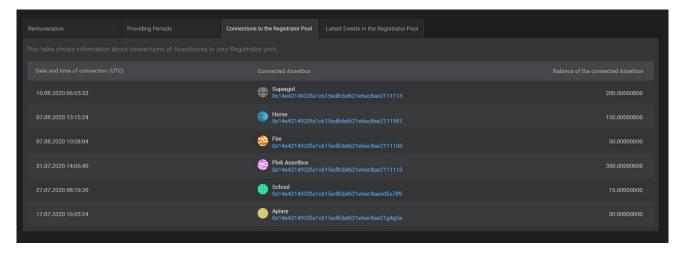


Figure 30. Information on connections to the Registrator pool of the selected Assetbox

This table shows the date and time of connection, alias, address and the current balance of the connected Assetbox. The Assetbox address is a hyperlink that opens information on this Assetbox in the analytical dashboard.



Latest Events in the Registrator Pool

Information in the table updates after the relevant event in the Registrator pool of the selected Assetbox takes place (Fig. 31).

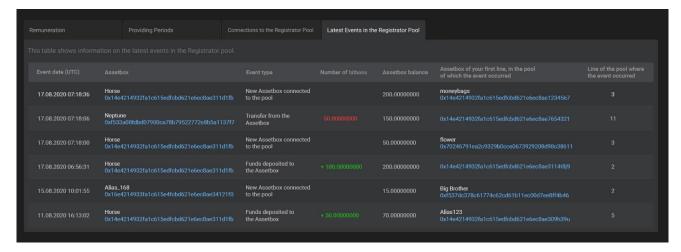


Figure 31. Information on the latest events in the Registrator pool of the selected

Assetbox

This table displays the information only on the latest event for each Assetbox in the Registrator pool of the selected Assetbox.

Parameters of the table:

Event date shows the date and time of the event in the Registrator pool of the selected Assetbox.

Assetbox shows the address and alias of the Assetbox that initiated the event.

Event type shows the type of the event.

- "Assetbox connected to the Registrator pool".
- o "Funds deposited to the Assetbox".
- "Transfer from the Assetbox".

Number of bitbons shows the number of **bit**bons involved in the operation (*only for the event types "Funds deposited to the Assetbox" and "Transfer from the Assetbox"*).

Assetbox balance shows the balance of the Assetbox that initiated the event at the moment of said event.

Assetbox of your first line, in the pool of which the event occurred shows the Assetbox of the first line of the selected Assetbox, in the pool of which the event occurred.



Line of the pool where the event occurred shows the line relative to the selected Assetbox where the event occurred.

The Assetbox address is a hyperlink that opens the information on this Assetbox in the analytical dashboard.



