Doc2.0 Merchant Manual

Jan 05, 2026

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ONE

INTRODUCTION

This guide is intended for employees of companies which sell goods and (or) services, or perform certain work and plan to receive or make payments by bank cards or other payment methods to their Customers (referred to as Payers or Receivers). Such companies hereinafter are referred to as Merchants (or Connecting Party which represents Merchants). The documentation describes how Merchants can use the functionality of the Doc2.0 software and hardware complex, as well as tracking financial flows through the Doc2.0 payment business management system. Each Merchant receives a created Merchant account in Doc2.0 Payment Gateway for API and UI access.

Payment facilitators which represent Merchants can receive Merchant account for represented Merchant, or Reseller account connected to Merchant accounts of each represented Merchant. Discuss the most suitable Payment Gateway accounts model with Doc2.0 support manager. Reseller accounts have similar view access rights in Payment Gateway as Merchants, with the following differences:

- They can browse multiple linked Merchants,

- They can manage Reseller rate plans,

- They cannot process any transactions,

- They cannot manage Black, White and Loyalty lists,

- They cannot create new entities and notifications.

The guide is arranged according to the structure of the Payment Gateway user interface and contains detailed information about each commonly used function.

QUICK LINKS

Most used functionality is gathered for a quick reference:

- See all terms definitions in Glossary,
- Discover login and user profile options on General Account Information page,
- Speed up the integration to Payment Gateway with full request and response logs in Integration panel,
- Create and manage dedicated accounts for each member of the team on Employees screen,
- Sort and find transactions on Order search screen, see complete information about each transaction on Order details screen,
- Mitigate risks with Black, White and Loyalty list management,
- Get advanced analytics with Dashboard and KPIs or download detailed reports with required data in one click using templates,
- Gather data to external systems for further analysis or alerts with additional callbacks for every transaction,
- Resolve ongoing payment issues with Online monitor and Transaction marker notifications,
- Resend multiple callbacks in case of temporary handling issues of transaction results on Merchant server,
- Learn more about supported transaction types and statuses.

Additional features might become available by request:

- Initiate transactions on UI using Virtual terminal,
- Capture and Cancel preauthorized transactions and make Refunds on authorized ones,
- Get up-to-date information about current balances and expected payout,
- Follow-up on customers with E-mail or SMS messages after transactions sent from Merchant message server.

GENERAL ACCOUNT INFORMATION

- First Login
- Login With OTP
- Header Menu
- User Profile
  - Common
  - Orders Full View Settings

Merchant employees can browse transactions and download various reports via Doc2.0 UI. It is available at and at .

3.1 First Login

Upon initial access to Doc2.0 UI, after logging in, the Merchant employee will be asked to create and enter a new password.

You must change your temporary password

| Password | * | |
| Confirmation | * | |

Change

The minimum password length must be 8 characters
Use of lowercase and uppercase letters
Using at least one special character
Using at least one digit

The minimum password length must be 8 characters. The password must contain at least one digit, one lowercase and uppercase letters and at least one special character.

> **Warning:** It is very important that the password does not consist of meaningful linguistic structures. For security reasons it is strongly recommended to use random alphanumeric values and regularly change the password.

3.2 Login With OTP

IF OTP (One Time Password) is enabled, an email will be sent to all users with a one-time link to create a second authentication factor.

An example of this letter:

Dear manageruser10

The account manageruser10 with two-factor authentication support has been created for you.

Below you can find the **one-time link** where you can obtain your temporary password and secret key required in two-factor authentication code calculation.

Enter the secret key or scan the QR code utilizing one of freely available applications which support HOTP (Google Authenticator, Protectimus Smart OTP, Free OTP Authenticator and others). Then use the generated one-time code while you access your account.

Temporary password and secret key there

Inside there is a link, by clicking on which the QR code and the secret key will be available:

Two-factor authentication one time link

**EMWRY7Z7YCP5WJZKN4WIU43CY7AMUFEJ**

To calculate the second factor, scan the QR code or enter the secret key in any available application that supports HOTP (Google Authenticator, Protectimus Smart OTP, Free OTP Authenticator and others):

If one-time password authentication is enabled for login, enter this password when logging in. Detailed information on working with OTP is available on the link. When logging into the system, specify a username, password and generated code from the application (each time logging in, new password from application will be required):
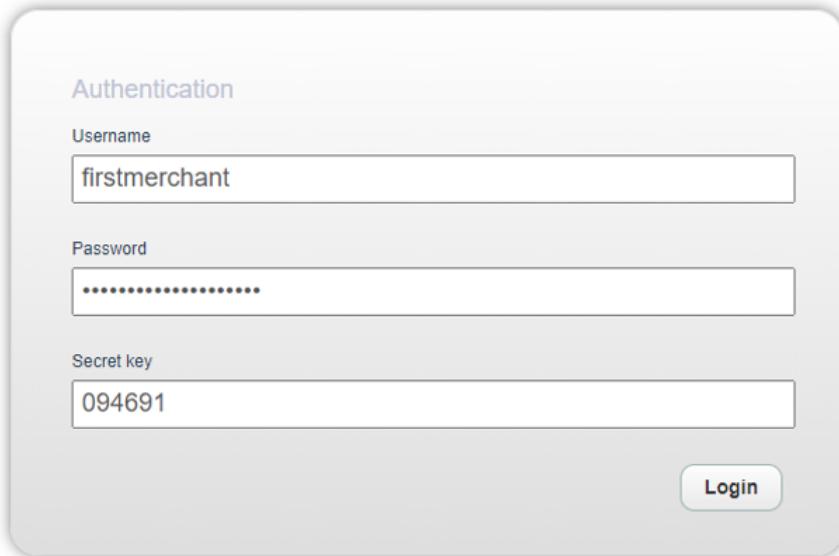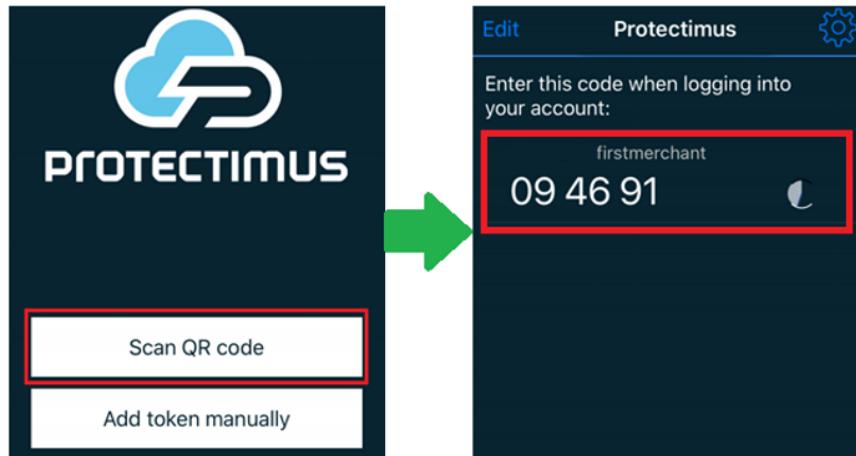
3.3 Header Menu

The menu is always located at the top of the screen. From left to right, here are located: the account name in Doc2.0 UI and its role in the system, the current date and time in the system time zone, link to the documentation https://doc2.codetime.net with detailed information about Doc2.0 UI and API, menu language and currency calculations:

To change language from header menu use the drop-down menu:
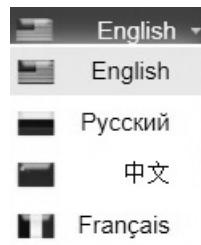
To change the currency for calculations in transaction monitor and dashboard, use the drop-down menu from header menu. Exchange rate is updated daily.

3.4 User Profile

By clicking on Merchant name on the top left side of header menu you will be redirected to user profile with two profile configuration tabs on the right side of the page: "Common" and "Orders full view settings":

3.4.1 Common

Here you can change:

- Name
- Language on which system will be automatically displayed in (can be changed from the drop-down list in header menu any time)
- E-mail address on which all configured notifications will be sent
- Phone
- Default currency (can be changed from the drop-down list in header menu any time)
- Statement preview limit
- PGP key
- CSV delimiter - for import/export of reports and batch operations
- Telegram Bot - register in bot on which all configured notifications will be sent
- Mobile application - link application for notifications

3.4.2 Orders Full View Settings

In this section it is possible to configure visible fields for detailed view on Order search page:

Orders full view settings Vica_loyalty_test_merchant (merchant)

Display seconds in date	No
Display transaction dates	No
Display merchant	No
Display project	No
Display gate	No
Display processor	No
Transaction amount visibility	Never
Transaction information	Decline reason
Order description view	Only description

Optional fields

sale	No optional field
account_verification	No optional field
transfer	No optional field
preauth	No optional field
create_card_mapping	No optional field
update_card_mapping	No optional field
inquire_card_mapping	No optional field
delete_card_mapping	No optional field
payout	No optional field
mfo_scoring	No optional field
pan_eligibility	No optional field

DASHBOARD

4.1 Transaction Monitor

Transaction monitor is available at the top of the page for general statistics:
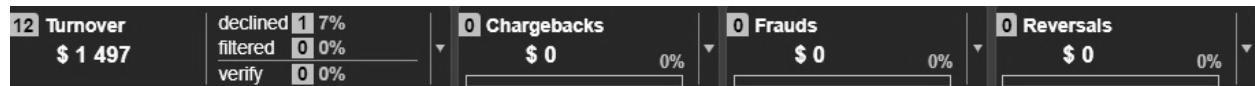
This monitor contains the following blocks:

Turnover	The sum of all successful sale, capture, reversal (refund) and transfer operations
Declined, filtered and verify	The number of operations of the aforementioned types with the corresponding status
Chargebacks	The number and amount of successful chargeback and prearbitration operations
Frauds	The number and amount of successful fraud operations

Table 1 – continued from previous page

Reversals	The number and amount of successful reversal and void operations

To view the analytics detailed by each payment method, click the pointer on the right side of the relevant block:
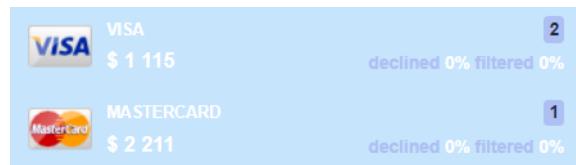
4.2 Analytics

4.2.1 Data Scope

To change the range of statistics, use the switches:

Set the desired date range in the pop-up calendar:
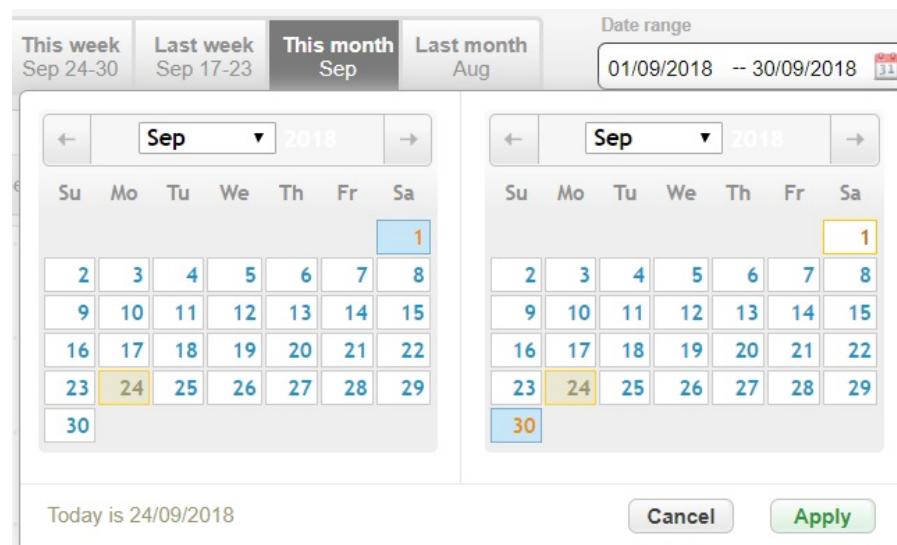
Data for graphs can be sorted using the Criteria button:
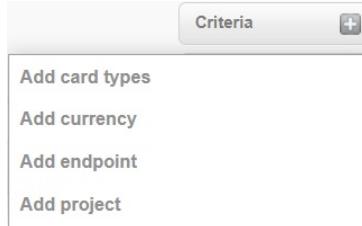
Currencies, payment methods, as well as endpoints, projects and other data can be specified for analysis. Here is the example of the payment method selection to construct the chart:

4.2.2 Turnover

Ratio of successful, rejected and filtered by the system transactions are displayed in the following graph:
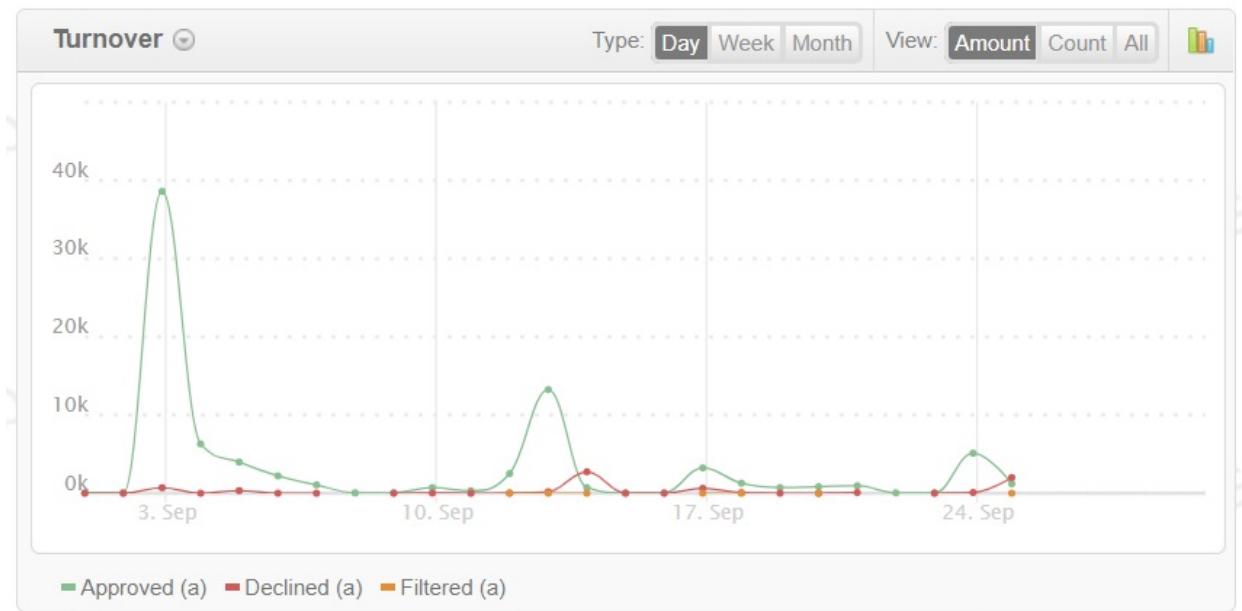
The following graphs can be also selected by pressing the ⊙ button: the ratio by volume of transactions or by amount of payments, as well as by type of transactions (sale, capture, transfer, etc). Doc2.0 Payment Gateway also displays statistics on negative activity and earnings.

Required time period is set by schedule switch (day, week, month):

Type of chart (amount, count, all) can be changed using the button:

4.2.3 Approval Ratio

The graph shows the proportions between successful, declined and filtered transactions for a selected period of time.

Doc2.0 Payment Gateway also displays statistics per card payment system, per currency, as well as per payment method.

Successful Transaction Analytics for the specified period are displayed as follows:
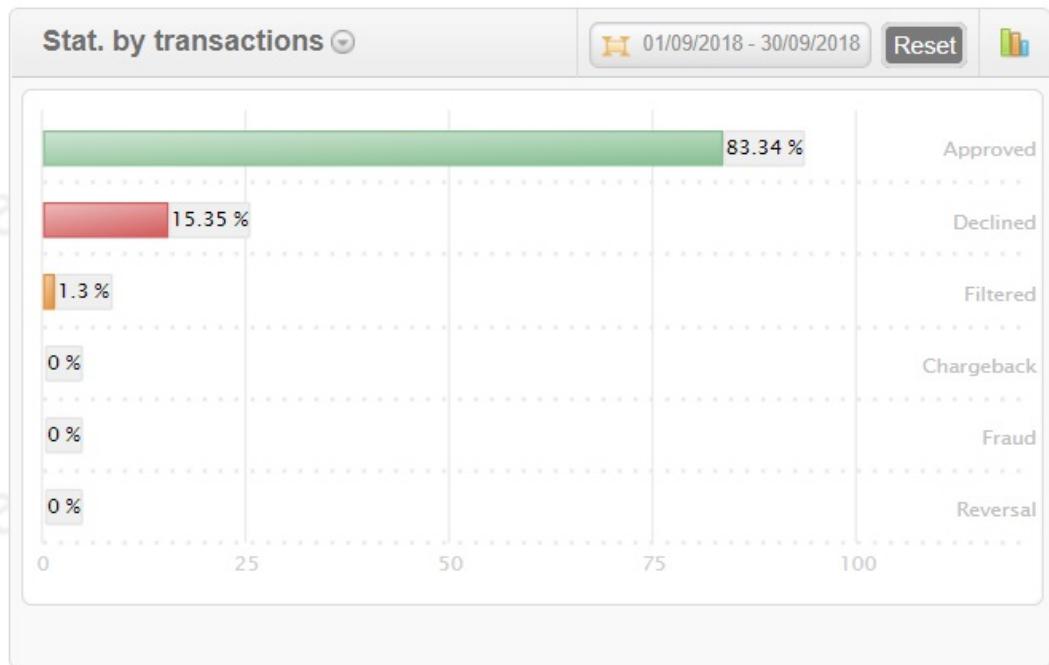
4.2.4 Transactions By Country

Overview of analytics by country displays two types of regional statistics: based on customer IP addresses and on card BINs.
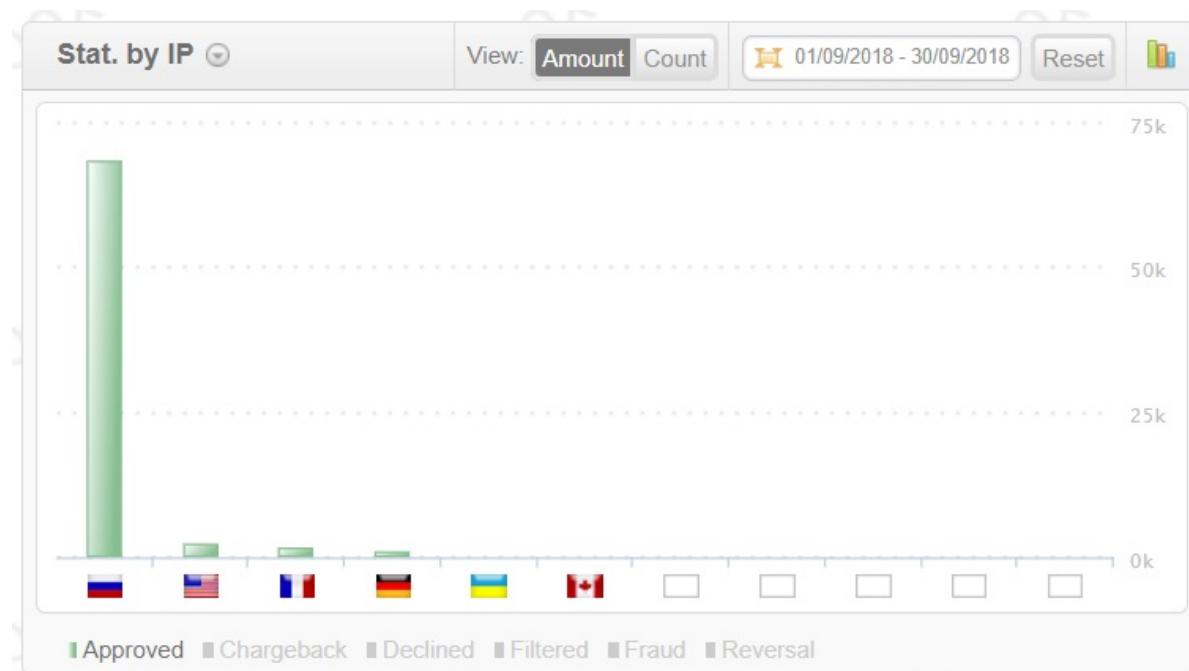
4.2.5 Transaction Decline Reasons

This statistics screen can be used for a visual assessment of the most frequent decline reasons, as well as chargeback and fraud reasons.

4.3 Quick Actions

Frequently used functions can be accessed at the bottom of this page:

This block also displays current statistics on the status of transactions:

To browse transactions with the selected status, click on the Show button:

ORDERS

5.1 Orders Search

The "Orders search" screen displays information on all transactions processed by Doc2.0. This screen is located in the "Orders" – "Orders search" section. Related transactions are grouped in Orders. Each Order has ID assigned by Doc2.0, ID assigned by Merchant or Connecting Party which represents Merchant and ID assigned by external processor (if transaction was processed in it). For example, sale transaction and subsequent refund on this sale transaction will have the same Order ID in Payment Gateway and will be searchable by both transaction types. Orders can also be accessed from Dashboard via Quick actions.

5.1.1 Find Orders

Basic search is performed by date and exact criteria:

| Date range: | Order status changed ▾ | This month ▾ | Criteria ⊞ |
| Exact Criteria: | by 6+4 src. | ▸ Search... | ⟳ Search |

Exact criteria can be used to assist in locating a specific transaction:

Main	• merchant invoice id • order id in Doc2.0 • processor order id • purpose • amount • session token
Customer	• phone • email • IP address • IP address country • billing country
Source Card	• bank name • country • card from order id • BIN • BIN range from order • last 4 • 6+4 • approval code • ARN • RRN • card holder • card ref id

continues on next page

Table 1 – continued from previous page

Destination Card	
	• bank name • country • card from order id • BIN • BIN range from order • last 4 • 6+4 • approval code • ARN • RRN • card ref id
Wire	• account number • routing number.
Card Present API	• reader ID • reader key serial number • reader device serial number
Mobile API	• device serial number • phone serial number • phone IMEI

The most convenient criteria to find an exact transaction are:

- 6+4 digits, which allows to most accurately search for a specific card;

- approval code and RRN (can be obtained from a bank statement or from a transfer receipt);

- transaction ID.

Additional search criteria are used to help with the selection of relevant orders list.
The following criteria are available:

Card types	allows to view transactions with a specific type of cards and payment methods;
Currency	allows to select one or more currencies;
Transaction types	allows to view only the specified transaction types;
Transaction statuses	allows to view transactions with the specified status;
Order status	when the transaction can't be found, this criterion allows to track the order on all stages of its processing;
Endpoint	allows to view all transactions on selected endpoints;

Table 2 – continued from previous page

Project	allows to view all transactions for a specific project or several projects;
Merchant	allows you to display all transactions for a specific merchant or multiple merchants;
Error code	allows to view all transactions with a specific error.

After selecting one or more search criteria, click Search.

5.1.2 Orders View

By default, orders in Payment Gateway are displayed as follows:

Orders can be presented in a brief Brief or Detailed view. This can be switched with the following button:

In detailed form, the orders will be displayed as follows:

The number of orders displayed on one page can be changed with the buttons in the "Rows" column:

The Date button performs sorting by date. By default the latest transactions will be displayed on top.

5.1.3 Download Of Selected Transactions Report

To download the sorted transactions, click one of the following buttons:

- download to Excel format

- download to CSV format.

An additional menu can be used to manage export fields:
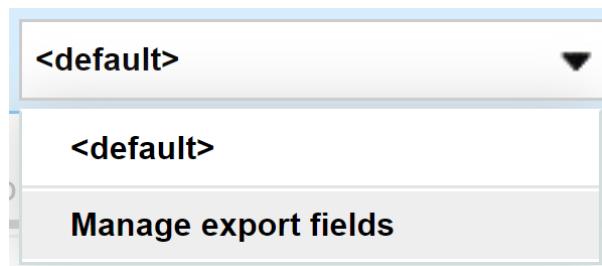
In the pop-up window, select necessary data and save the list:
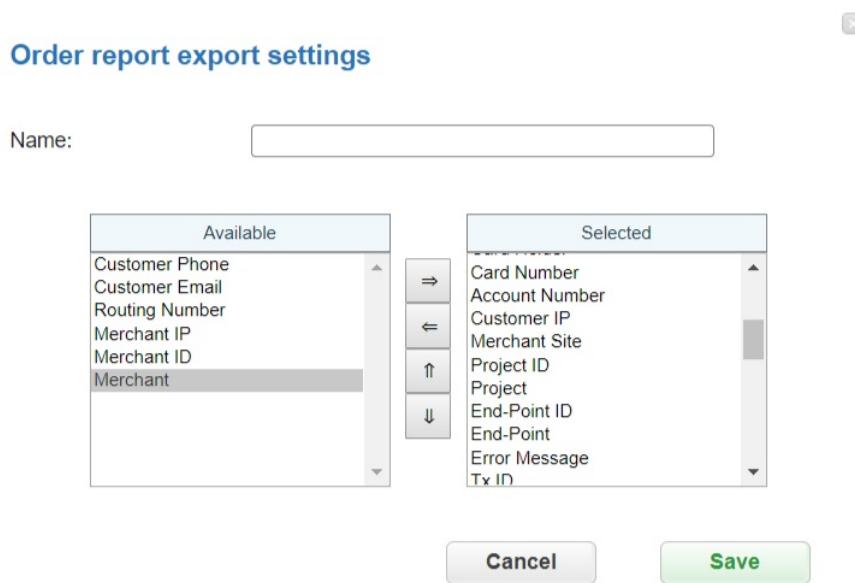
5.1.4 Order Details Screen

Order details screen is opened by clicking on the order ID from the search screen.
Order details, such as IDs and order creartion time, are displayed on the left side of this screen:

Creation time:	18-11-2022 16:42:45.000
Merchant order ID:	34T43R77N
Order ID:	6863381
External Order ID:	PNTEST-6863381
Order description:	Test Order Description
Request source:	www.google.com
Fraud Score:	
Merchant URL:	

End Point:	TestEndpoint
Project:	TestProject

First six and the last four digits of the card number, card expiration date and cardholder name are displayed on the card. There is also information about country, bank, card type and the payment system of the card.

BANK OF AMERICA ...

5500 29·· ···· 5661

12/99
CARD HOLDER
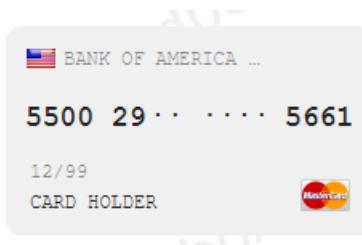
Next to the sender and receiver cards are buttons to add card details to black, white and loyalty lists.
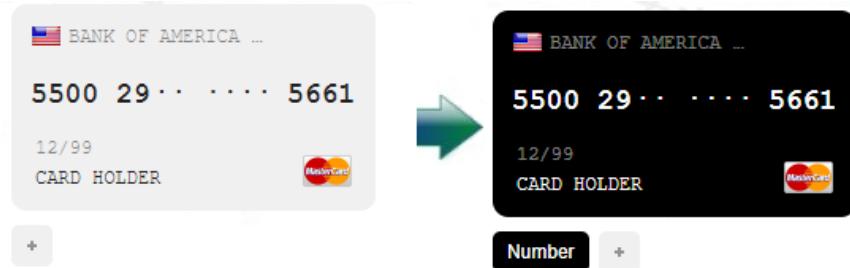
Additional customer data sent by the merchant or submitted by customer on the form is displayed under the card or other payment method indicator. Clicking on cardholder or customer data parameter (for example, e-mail address) initiates a search for all transactions with a selected parameter.

Click on one of the plus signs near the customer data parameter (highlighted in red on the picture) adds this parameter to black, white or loyalty list. Additional click on this sign removes the parameter from respective list:
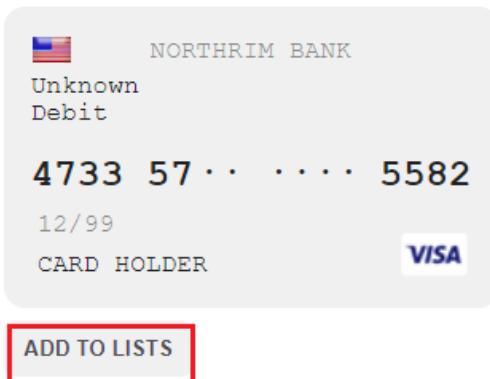
All transactions within the order are grouped and the commission for each operation is calculated:

This screen has the functionality to leave notes. For example, notes for transaction documents, customer contacts, or any other information related to this order.

Current transaction status can be seen in the upper right part of order screen:
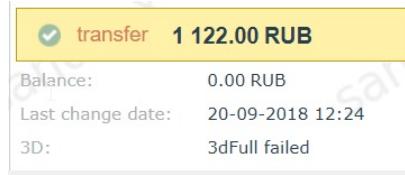
General information on all transactions associated with provided customer data is displayed in the top panel.

The total amount of all transactions made by the specified cardholder and the number of approved/declined/filtered/etc transactions:

The total amount of transactions and the number of approved/declined/filtered/etc transactions with the specified E-mail:

The total amount of transactions and the number of approved/declined/filtered/etc transactions with the specified IP address:

The total amount of transactions and the number of approved/declined/filtered/etc transactions with the specified card number (PAN):

5.1.5 Captures And Cancels From Back Office

If Preauth has final successful status, the Merchant can initiate cancel which cancels the deduction and returns locked amount back to customer's card or the Merchant can initiate capture which deducts the locked amount from customer's card. To start a cancellation or capturing (deduction) of the transaction, go to the details of the relevant order. On the order details page, click the Cancel order button for cancellation of deducting and Capture order for deducting the locked amount.

5.1.6 Refunds From Back Office

If the order has final successful status, the Merchant can return the money to the customer, on their request, for instance. To start a refund (reversal) transaction to the customer card, go to the details of the relevant order. On the order details page, click the Reverse order button.

The dialog box will open like presented below:
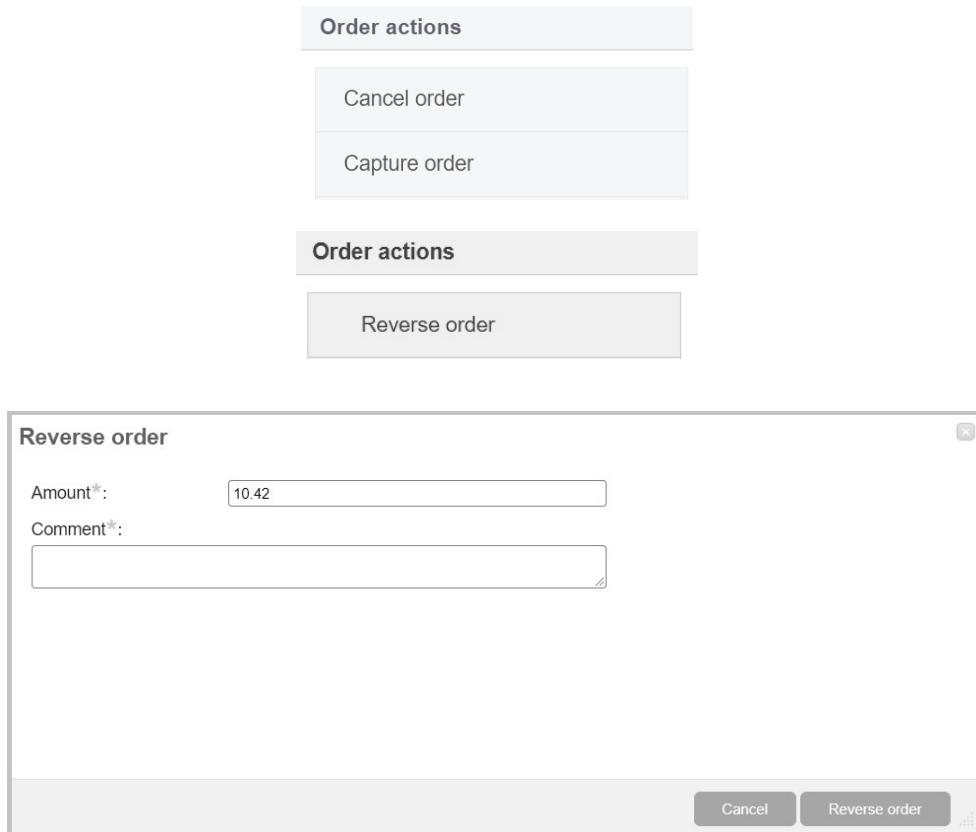
In this dialog box specify the amount of reversal. It can be the entire amount of the order, or only a part of it for cases where the merchant refunds payment for certain goods that are part of one order. In the Comment field a description of this refund can be added.

> **Warning:** Merchants must be extremely careful when making a refund on the order! Refund requests are immediately sent to the bank and it will not be possible to cancel this transaction from the Doc2.0 system afterwards.

5.1.7 Callbacks From Back Office

If the order has final status and had server_callback_url in the initial request, the Merchant can re-send the final callback. To send a callback to the Connecting Party, go to the details of the relevant order. On the order details page, click the Callbacks button.

The dialog box will open like presented below:

Callbacks								
Jevt id	Callback url	Transaction type	Transaction status	Last fire date	Next fire date	Retry count current	Job processed	
23471496	https://doc2.codetime.net/doc/dummy.htm	SALE	APPROVED	10/21/25, 1:19 PM	10/21/25, 1:20 PM	29	Y	Send
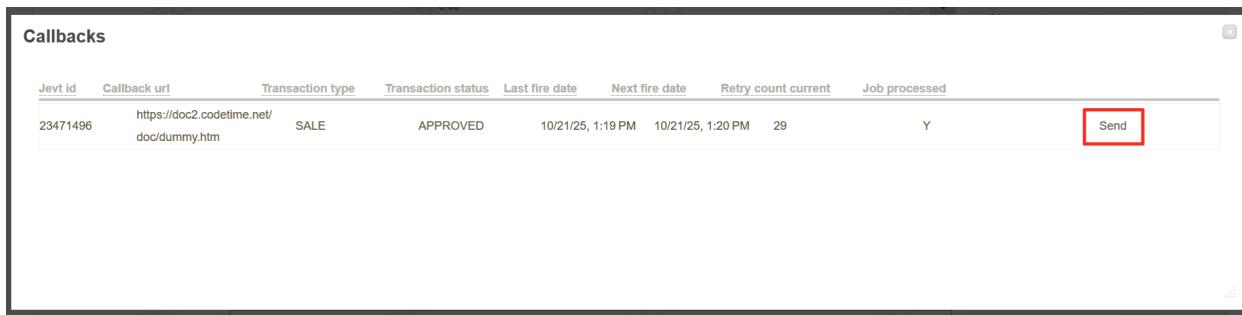
In this dialog box click Send to sent callback to the Connecting Party.

5.2 Recurring Payments

The screen is located in the "Orders" section.
This screen displays recurring payments (for example, subscriptions).
Basic search is performed by date and exact criteria:

	Exact Criteria:	by invoice ▸	Search...	Criteria ⊞
	Date range:	Today ▾		↻ Search
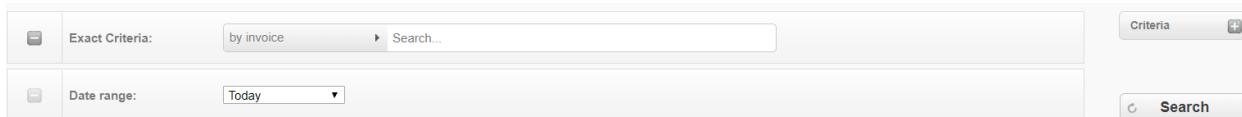
The Criteria button contains additional search parameters:

Recurrence status	Allows to select the specified repetition status of the recurring transaction: Failed – unsuccessful attempt; Scheduled – planned attempt; Stopped – currently paused or finished attempt.
Recurrence type	Allows to select the specified repetition type of the recurring transaction: Manual – recurring payments are initiated manually; Auto – recurring payments are initiated automatically in accordance with the set schedule; Native- recurring payments use special integration with the acquiring bank.

continues on next page

Table 3 – continued from previous page

Endpoint	Allows to select the specific endpoint if there are several endpoints available.
Project	Allows to select the specified project if there are several projects available.
	Select one or more search criteria and click Search to find the needed transactions.

5.3 Ethoca Alerts

This section allows to see alerts from Ethoca which helps in preventing chargebacks:

5.4 ChargebackHelp

This section allows to see alerts from Verifi which helps in preventing chargebacks:

REPORTS

Doc2.0 has several reporting formats for cashflow and performance view, reconciliation and usage in external systems, as well as the ability to flexibly configure data that is displayed in reports. This section covers in detail the functionality of the system for display and download of reports in Excel and CSV format.

6.1 Transaction Report

This report contains the list of transactions for the specified time period. To download the necessary data, the following criteria are used: dates, date type, transaction types, change status, card types, transaction id, recurrent filter, time zone, CSV encoding. This report can also be downloaded by API for automated reconciliation or analysis: Remote transactions report[1]. Additional criteria can be added by pressing the Criteria button: order status, currency, endpoints, projects.

The maximum download period for report is 93 days, if data download for six months or more required, divide the required period into parts.

To change the template, use the template management tool:
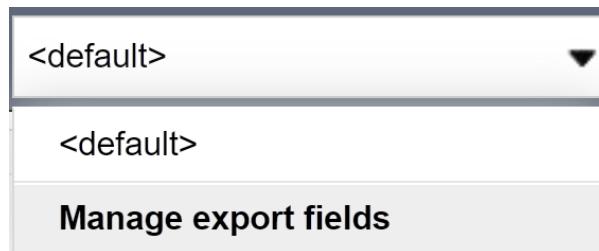
Select criteria for this report in the following pop-up window:

---

[1] https://doc2.codetime.net/integration/common_utilities/reports.html#remote-transactions-report

After selecting the necessary parameters, enter name for the template and click on Save button. To download the report, click on the CSV button.

Example of the resulting table is shown below:

Note: The returned report has wellformed CSV format. In accordance with , fields containing line breaks (CRLF, CR, LF), double quotes, and commas are enclosed in double-quotes.

6.2 Merchant Cashflow Report

This report calculates transaction turnovers: sale, chargeback, and reversed funds. It shows the distribution of turnover with commissions and the approximate profit for the selected period, as well as day-by-day earnings. To download the necessary data, the following criteria are used: dates, project, currencies.

If needed, additional criteria can be added by clicking on Criteria button: endpoints, projects.

Data can be downloaded by pressing the Generate button.

An example of the resulting report is shown below:

	Date	Currency	Transaction amount	Transfer amount	Reversal	Cancel	Refund	Fraud	Chargeback	Dispute	Held by reseller
7	12-may-2022	USD	1,00	0,00	0,00	-1,00	0,00	0,00	0,00	0,00	0,00
8	13-may-2022	USD	24,00	0,00	0,00	-2,00	0,00	0,00	0,00	0,00	0,00
9	14-may-2022	USD	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
10	15-may-2022	USD	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
11	16-may-2022	USD	905,20	31,26	0,00	0,00	0,00	0,00	-10,00	0,00	0,00
12	17-may-2022	USD	30,42	0,00	-5,00	0,00	0,00	0,00	0,00	0,00	0,00
13	18-may-2022	USD	210,42	100,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
14	19-may-2022	USD	1210,42	0,00	-100,00	0,00	0,00	0,00	0,00	0,00	-12,10
15	20-may-2022	USD	1000000010,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	-10000000,10
16	21-may-2022	USD	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
17	22-may-2022	USD	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
18	23-may-2022	USD	500,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	-5,00
19	24-may-2022	USD	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
20	25-may-2022	USD	15550,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	-4,00

Row 1: Sandbox; Date range: 2000-01-01 00:00:00/2999-12-30 23:59:59; Project currency: USD

Row 3: Merchants: TestMerchant

Row 4: from 01-Jan-2000 to 31-Dec-2999

6.3 Performance Report

This report displays the financial flow for the specified period. It also allows to view the number of successful and unsuccessful transactions. Flexible criteria setting allows to get the needed data: date range and type, currencies, card types, grouping of data. If needed, additional criteria can be added by clicking on Criteria button: specified endpoints and projects.

Preview of the report can be viewed by clicking on the Preview button.

The Report can be generated by clicking on the the Generate button.

An example of the resulting report is shown below:

	Merchant ID	Merchant	Project ID	Project	Day Number	Day	Sale Amt	Sale Approved Cnt	Sale Declined Cnt	Decline Ratio	Reversal Amt
4	1456	ICE					100 108,84	12	1	0,00%	0,00
5			1532	Test project Ice			100 108,84	12	1	0,00%	0,00
6					260	2018-09-17	98 986,84	11	1	0,00%	0,00
7					263	2018-09-20	1 122,00	1	0	0,00%	0,00
8	TOTAL						100108,84	12	1	0,00%	0,00

Row 1: ASTROPAY, ASTROPAY CARD, BANK_WIRE, BITCOIN, CABAL, CASH, CASHU, COMPROCARD, DISCOVER, ELOCARD, ENTEROPAY CARD, JCB, LOAN, LOCAL CARD, MAESTRO, MASTERCA

Row 2: Performance report for 01-Sep-2018 - 01-Oct-2018

6.4 Merchant Daily Performance Report

This report displays the day-by-day financial flow for a given period.

To upload the necessary data, the following criteria are used: dates, projects, currencies, card types. If needed, additional criteria can be added by clicking on Criteria button: specified endpoints and projects.

The report can be downloaded by pressing the Generate button.

An example of the resulting report is shown below:

	Merchant ID	Merchant	Day Number	Day	Sale Amt	Sale Approved Cnt	Sale Declined Cnt	Decline Ratio	Reversal Amt	Reversal Cnt	Reversal Ratio	Chb Amt	Chargeback Cnt	Chb Ratio	Fraud Amt	Fraud Cnt	Fraud Ratio	Dispute Amt	Dispute Cnt	Dispute Ratio
7			246	2018-09-03	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
8			247	2018-09-04	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
9			248	2018-09-05	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
10			249	2018-09-06	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
11			250	2018-09-07	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
12			251	2018-09-08	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
13			252	2018-09-09	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
14			253	2018-09-10	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
15			254	2018-09-11	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
16			255	2018-09-12	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
17			256	2018-09-13	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
18			257	2018-09-14	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
19			258	2018-09-15	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
20			259	2018-09-16	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
21			260	2018-09-17	98 986,84	11	1	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
22			261	2018-09-18	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
23			262	2018-09-19	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
24			263	2018-09-20	1 122,00	1	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
25			264	2018-09-21	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
26			265	2018-09-22	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
27			266	2018-09-23	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
28			267	2018-09-24	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
29			268	2018-09-25	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
30			269	2018-09-26	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
31			270	2018-09-27	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
32			271	2018-09-28	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
33			272	2018-09-29	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
34			273	2018-09-30	0,00	0	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%
35	TOTAL				100108,84	12	1	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%	0,00	0	0,00%

6.5 Decline Statistics

This report allows to get statistics on rejected transactions, which are divided into the following groups: rejected by the acquiring bank, rejected by internal fraud system and rejected due to an internal error.

To download the necessary data, the following criteria are used: date range and card types. If needed, additional criteria can be added by clicking on the Criteria button: specified endpoints and projects.

Preview of this report can be viewed by clicking on the Preview button.

The Report can be generated by clicking on the the Generate button.

An example of the resulting report is shown below:

Sandbox; Date range: 2023-08-01 00:00:00/2023-08-31 23:59:59; Card types: [ALIPAY, AMEX, ANY_CREDIT_CARD, ASTROPAY, ASTROPAY CARD, BITCOIN, CABAL, CASH, CASHU, COMPROCARD,			
Decline Statistics for 01-Aug-2023 - 01-Sep-2023			
System errors			
()			
Filter declines			
[10165] Manager loyal destination card number check failed (62)	9		
[10166] Manager loyal source card number check failed (58)	8		
[10159] Customer purpose blacklisted for manager (49)	7		
[10160] Destination card number blacklisted for manager (48)	7		
[10162] Source card number blacklisted for manager (46)	7		
[10161] E-mail domain blacklisted for manager (46)	7		
[10158] Customer ip-address blacklisted for manager (46)	7		
[10156] Customer e-mail blacklisted for manager (40)	6		

Doc2.0 UI allows to generate the following types of reports:

Transaction Report	List of transactions for a specific period of time. This type of report is most suitable in cases where it is necessary to reconcile transactions with the bank.
Merchant Cashflow Report	Calculates the turnovers and profits of the merchant date-by-date.
Performance report	Calculates the quantity and total volume of approved and declined transactions, reversals, chargebacks, transactions with fraud marker, and the percentage of all unsuccessful financial transactions (declined, reversal, chargeback, fraud) in relation to approved transactions.
Merchant Daily Performance Report	This report allows to generate a summary date-by-date list of transactions with the following types: sale, reversal and chargeback.
Decline Statistics	Displays statistics on rejected transactions, divided into the following groups: rejected by the acquiring banks, rejected by Doc2.0 internal fraud system and rejected due to various errors in processing, should this occur.

TOOLS

7.1 Integration Panel

The screen is located in Tools – Integration Panel section. The Integration Panel displays requests sent to the system and system responses to these requests, as well as information about possible errors in the requests. This allows to quickly eliminate errors during integration. The panel also helps to view initiating requests for which, as a result of the error, orders were not created.

Request Date	**21.10.2025 13:19:06**
Request URL	**/paynet/api/v2/sale/13453**
Order Id	3459897
Endpoint	**[E] Vica loyalty test endpoint**

Request Data

```
Log time: ***-10-21 13:19:06.***
POST https://sandbox.payneteasy.eu/paynet/api/v2/sale/13453
Remote address: 79.***.***.***
Parameters: 29
  address1: *** Main st
  amount: 10.42
  birthday: 19820115
  card_printed_name: CARD HOLDER
```

Response Data

21.10.2025 13:19:06

```
type=async-response
&serial-number=00000000-0000-0000-0000-00000524d726
&merchant-order-id=inv2734828
&paynet-order-id=3459897
&end-point-id=13453
```

The following search criteria are available in Integration Panel:

- by Endpoint ID or Endpoint Group ID, to which the request was sent,
- by Order ID, assigned to transaction by Doc2.0 system,
- by serial number of request and response.

Date range can also be specified for the search.

⌃ **Filters**					Template ⌄
Exact	Search	in	Endpoint id ⌄		⬥
Date range	Today ⌄				⬥

7.2 Batch Operations

- Resend callbacks
- Ethoca alerts update

Batch operations is the set of tools that allows to process multiple operations through the user interface of the system. Below is the list of available batch operations.

Note: Additional batch operations might be provided by request

7.2.1 Resend callbacks

This batch operation can be useful if information on the final status of transactions is available in Doc2.0 system and for some reason is not available in the Connecting Party system. Collect the order IDs, assigned by Doc2.0 system to the CSV file and upload it to send new callback notifications. An example of CSV file for upload is available on the same screen.

Resend callbacks
Resend callbacks for transactions

Batch settings

Select batch file (*.CSV):   Interpret IDs as: Sample CSV file for this batch:

Choose File   No file chosen   internal order IDs ⌄   Download example

Process
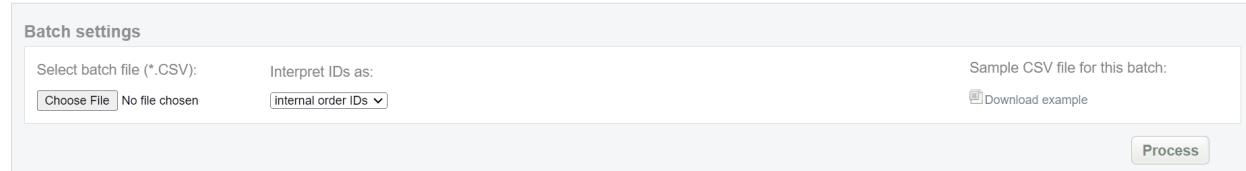
7.2.2 Ethoca alerts update

This batch operation can be useful for updating Ethoca statuses. Collect the order IDs, assigned by Doc2.0 system to the CSV file and upload it to send statuses to Ethoca system. An example of CSV file for upload is available on the same screen.

Ethoca alerts update
Update Ethoca alerts

Batch settings

Select batch file (*.CSV):   Sample CSV file for this batch:
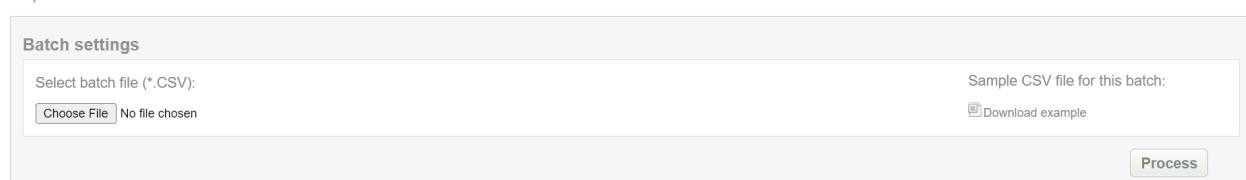
Choose File   No file chosen   Download example

Process

7.3 Black, White And Loyalty Lists

7.3.1 Overview

There are 3 types of access control lists, which work as filter checks in Payment Gateway. Lists are being checked while processing the transaction when the respective filter gets applied. BWL screen is designed to manage white, black and loyalty customer lists. This screen is located in "Tools" -> "Black & White lists". It makes the process of putting the transactions' attributes to respective lists faster and easier. It also has quick search which helps to find the exact transaction attribute added previously.

In order to select entries from list, specify project for corresponding lists from dropdown menu.

BWL
Merchant lists

Project

Vica Loyalty test Project

Vica Loyalty test Project 2

	Category	Title	○ ○ ○	Merchant	Project	Orders ↑	Last used

It is possible to show any specific category from a certain list by clicking it in Category list to the right.

Note: If it is required to migrate from old merchant account to new account, ask Doc2.0 support manager to migrate existing BWL entries.

Black Lists

The first filter checking transaction attributes (email, IP, address, etc) is "Merchant black list". It is possible to manage these attributes (excluding BIN) from the Order details screen. The attributes can have the following statuses:

- attribute is in black list
- attribute is not in black list
- attribute is in Doc2.0 black list
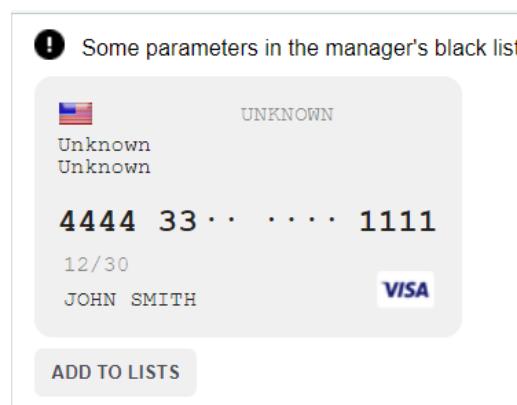
If any transaction attribute matches attribute in the lists and respective filter is enabled at the Project's level, the transaction status is set to Filtered and the reason for filtering is saved in the transaction data (see Error Codes in Transaction Filters[2] section in integration documentation).

For blacklisting IP addresses, it is important to note that most customers have dynamic IP which can be possessed by different customers of the same Internet provider. Mobile Internet users change IP address each time a session is created. It is also known that customers using traffic compression services (e.g. Opera Mobile) come via IP address of the proxy server provided by the service, most of which are located in Europe. According to statistics, if IP address is denied for more than 10 hours, the filtering will be in 80% cases false positive. This is why it is not recommended to filter transactions by IP without proper control. It is highly recommended prior to adding IP address into the black list to check with the Internet provider what maximal period of IP address denial can be applied. It is also important to check if the given IP address is in any third-party anti-spam systems.

White Lists

White list allows to skip additional filter checks for transactions with attributes in this list. The only attributes for whitelisting are: a card number and a customer DNA.

Note: If the attribute is found in any white list the third-party fraud control systems' checks are excluded either.

Loyalty Lists

Loyalty list is designed for merchants who work with the predefined set of customers. Database with customers can be managed on merchant side with PCI DSS certification, or on Doc2.0 side. The system allows to manage the following several types of predefined clients lists such as names, emails, phones and etc.

If any transaction attribute does not match attribute in the lists and respective filter is enabled at the Project's level, the transaction status is set to Filtered and the reason for filtering is saved in the transaction data (see Error Codes in Transaction Filters[3] section in integration documentation).

One-time box can be checked for automatic removal of customer from loyalty list after their first payment.

---

[2] https://doc2.codetime.net/integration/reference/transaction_filters.html
[3] https://doc2.codetime.net/integration/reference/transaction_filters.html
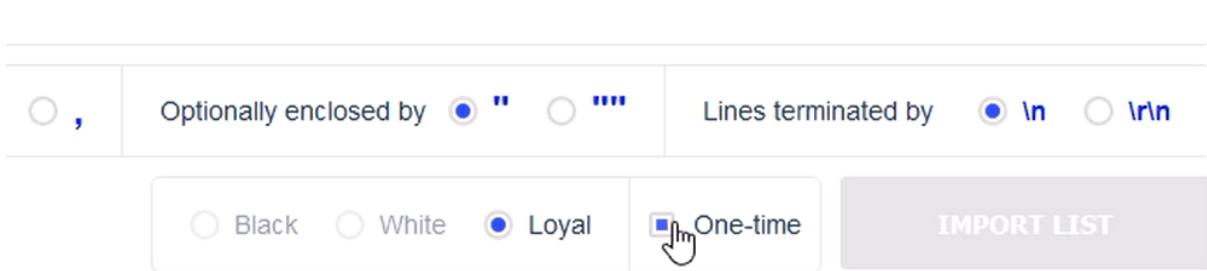
7.3.2 Adding New Elements To BWL

To add new elements, click on the ADD button. The type of the added criteria will be automatically identified. Ambiguous criteria type can be manually changed, as presented below. It is also possible to use 🔄 button to switch between source and destination.

7.3.3 Importing Lists

In order to add many attributes to one of the lists at once, use IMPORT import list feature.

For example, in order to add card number to list, the following order should be used for every line: (5555514066237247,12,2019) with ',' delimiter between lines.

Some lists require a country code. Full list of country and state codes for lists upload is provided in integration documentation: country codes[4].

Note: In case of disconnect or other technical problems during the process, contact technical support.

7.3.4 Exporting To File

In order to export your data into CSV file, use EXPORT export to file feature.

The data will be parsed according to set parameters.

---

[4] https://doc2.codetime.net/integration/reference/country_codes.html

Source card number and Destination card number export will be in 6+4 format. For complete data, please contact the support service.

Please, note

The card numbers will be exported in the format of the first 6 and last 4 digits. For complete data, contact the support service.

Ok   Cancel

7.3.5 Available Lists For Every Role

7.3.6 Comments

When adding new records to the BWL lists, optionally, comments can be attached.
When adding records from order page, automatically comment will be added with transaction id.
In order to display comment, point a cursor on «...» next to record in the list.

TYPE

| | Country billing | Morocco | ● | Vica Loyalty t... | Vica Loyalty... | 0 | | ••• | COUNTRY |

Reason - Fraud

«   ←   1 - 5   10   25   5u

7.3.7 Order Details: Configuring BWL Lists

The attributes can also be added and removed from BWL on order details screen, as presented below:

- Press ADD TO LIST and select one of the shown lists:

- After selecting any list, select the criterion by which the card will be listed:

Blacklisted card will be shown in black colour:
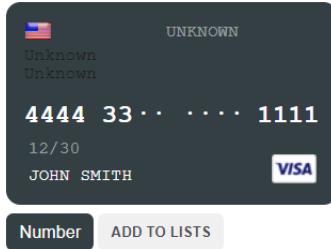
Whitelisted card will be shown in green colour:

Card in loyalty list will be shown in Doc2.0 colour:
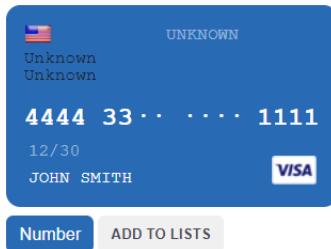
- Several criteria can be chosen at the same time:
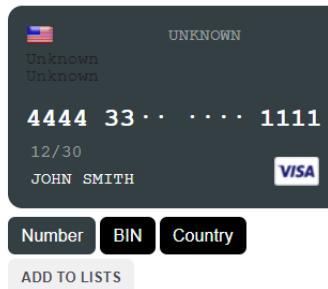
- Additional criteria can be added via section as shown below:

After adding criteria via section described above, parameters will have colours depending on the selected list:

7.4 Online Monitor

- [Overview](#)
- [Balance Running Out](#)
- [Important Filters](#)

7.4.1 Overview

The screen is located in "Tools" – "Monitoring" section. This screen displays information about various errors that usually require quick response, as well as the options to subscribe for notifications about any errors via Telegram, Email or Push notification. Phone number and e-mail address are taken from the personal account (Merchant or its employee account).

NAME	VALUE	COMMENTS	DATE			
⭐ Merchant balance reconciliation	1	Merchant balance reconciliation records with diff > 1000$ - 1	23.10.2025 17:52	ⓘ	☐	☐ ☐
⭐ Balance running out	18	Current number of merchant account balances with amount ≤ 1000$ - 18	23.10.2025 18:02	ⓘ	☐	☐ ☐
⭐ Failed payin session initiators	0	Number of "Failed payin session initiators" for the last 5 minutes - 0	23.10.2025 17:58	ⓘ	☐	☐ ☐
⭐ Failed PAN eligibility	0	Number of "Failed PAN eligibility" transactions for the last 5 minutes - 0	23.10.2025 17:58	ⓘ	☐	☐ ☐
⭐ Failed captures	0	Number of "Failed captures" transactions for the last 5 minutes - 0	23.10.2025 18:03	ⓘ	☐	☐ ☐
⭐ Failed reversals/refunds	0	Number of "Failed reversals/refunds" for the last 5 minutes - 0	23.10.2025 17:58	ⓘ	☐	☐ ☐
⭐ Perilous declines	0	Number of perilous declines for the last 10 minutes - 0	23.10.2025 17:58	ⓘ	☐	☐ ☐

Tasks — Auto update every 15 sec — Search alerts — Collapse all

7.4.2 Balance Running Out

This alert is used if necessary to receive notification when the Live balance is equal or under 1000$.

☆ Balance running out	18	Current number of merchant account balances with amount ≤ 1000$ - 18	23.10.2025 18:08	ⓘ ☐ ☐ ☐

ID	NAME	ONLINE BALANCE	CURRENCY ID	CURRENCY NAME	BALANCE
193	New test 2	0	1	United States dollar	0

7.4.3 Important Filters

Notifications can be created for cases in which transactions were filtered due to the one of the following filters:

1. Source Credit Card Number usage frequency for Email or IP address
2. Source Credit Card Number approved transaction interval
3. Total Credit Card Number usage frequency for last 24 hours (daily limit)

Field name	Description
Date	The date when alert has been created.
ID	Alert identification number.
Name	Name of the Merchant.
MerchantID	Merchant identification number.
Error Description	Triggered project filter error description with error code. Example: [1033] Too many approved transactions for the same credit card number.

☆ Important filters	0	Current number of errors, coused by important filters - 0	23.10.2025 18:13	ⓘ ☐ ☐ ☐

7.5 Virtual Terminal

7.5.1 Overview

Virtual terminal (VT) is a technological solution that allows to process transactions from Merchant's personal account on User Interface. This feature doesn't require Merchant's API integration to Doc2.0. VT immediately provides a full-featured payment manager's workplace. VT is used for remote processing of transactions without the presence of a customer, for example, if the customer places an order or pays for services while being in another city or country. VT workflow is fully customizable in order to meet the business needs. Flexible templates will help to minimize time of filling all the customer details. The Virtual terminal supports recurring payments (by recurring ID). If the customer provided cardholder data to Payneteasy processing system before, and the Merchant registered such payment to get recurring ID, future payments can be made with recurring ID instead of cardholder data. VT also allows to generate a link for the customer to submit cardholder data in the secure environment, and, if needed, pass 3-D Secure validation.

VT provides a secure way of processing MOTO transactions with support of asymmetric cryptography. In order to do so please, Generate A Pair Of Public And Private Keys and then pass public key to Doc2.0 support and upload the private key in Browser Console (Import Private Key To Browser Console) or User Interface (Import Private Key To User Interface).

The available operations for VT are:

- accepting payments from both new and previously registered customers (Sale);

• hold funds from both new and previously registered customers (Preauth);

• transfer of funds from card to card, both for new and previously registered customers (C2C (Card To Card) Transfer);

• issuance of funds to the cards of both new and previously registered customers (D2C (Deposit To Card) Transfer);

• transfer of funds from one bank account to another (Payout).

The screen is located in Tools – Virtual terminal (VT).
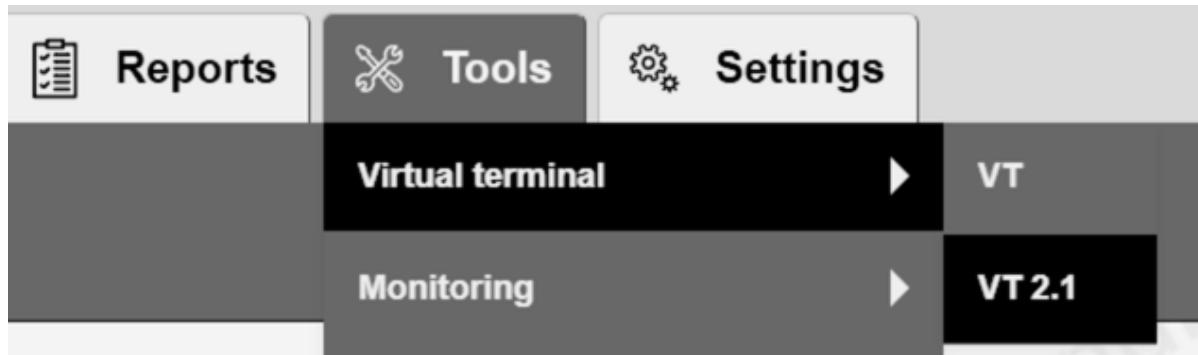
7.5.2 Asymmetric Cryptography

The big advantage of the new Virtual terminal is the use of an asymmetric cryptography system. Asymmetric cryptography, or public-key cryptography, is a cryptographic system that uses pairs of keys: public keys which may be disseminated widely, and private keys which are known only to the owner. The generation of such keys depends on cryptographic algorithms based on mathematical problems to produce one-way functions. Effective security only requires keeping the private key private; the public key can be openly distributed without compromising security.

The Virtual terminal becomes personalized. The user signs transaction request with his private key and the system uses the public key to verify that request is made by the owner of the corresponding private key.

Generate A Pair Of Public And Private Keys

Virtual terminal requires a pair of public and private keys from user to authorize requests. To generate it, go to https://www.openssl.org/ (https://slproweb.com/products/Win32OpenSSL.html), download the latest openssl version and run the following commands:

openssl genpkey -algorithm RSA -out private_key_pkcs_8.pem -pkeyopt rsa_keygen_bits:4096

openssl rsa -pubout -in private_key_pkcs_8.pem -out public_key.pem

Please, do not share private key with anyone, it is confidential information for private use only. In contrast, public key must be passed to Doc2.0 for endpoint configuration. Please use different keys for production and testing environments to avoid compromise.

PKCS #8 RSA unencrypted private key in PEM format starts with —- BEGIN PRIVATE KEY —- text. This key must be imported to Browser Console or User Interface. See details below.

Import Private Key To Browser Console

Private key is imported into browser's IndexedDB using a script associated with the currently opened page. This script only uses plain browser APIs (WebCrypt API, IndexedDB API) and does not use any external scripts to avoid the private key being compromised. Import sequence is:

1. Open https://gate.doc2.com/paynet-ui/login-step1 page in a browser(Do not login to the system).
2. Open the browser console. In Chrome, it is done with Ctrl+Shift+J. In Safari, it is done with Ctrl+Shift+I, Ctrl+Alt+C. For Mac - Cmd instead of Ctrl.
3. Replace the demo key below with real private key in PEM format (it must have **—-BEGIN PRIVATE KEY—-** prefix in the beginning).

```
var privateKeyPem = `-----BEGIN PRIVATE KEY-----\
    MIIEvQIBADANBgkqhkiG9w0BAQEFAASCBKcwggSjAgEAAoIBAQDJzUVnqQhDWF2H
    pxAMcyo7f+ucIEJS3AQHG0ET/dxJ0qssGymIjdzelJ3XI+oTq2y9TTimQjtujoeh
    6zl44WrXCbJLCUDWsNjlh7hmBorpU6tJVhw1466CAxkktPJHkMqJYF0efegIfOwU
    otTzwY4tGlN6iWK0aMJ5ZWhWpZDbgap72vrRXKfCN6/JeTUdsOI7PAeZw0me04jZ
    8Lova9FVIbVzOJaFGwSUroMvXevIB8rOD57c3VCLTxE3aGNMz+9DLl6GCm8WZ1US
    HmiHybqgvGLyQswBPFcVzFgd7BpgZs+JAzYDh8ZGANvjA5F9u0b6Ynb3Mpm3+9Rl
    CtvSxKwpAgMBAAECggEAZ6+hro5KIZggjleHRm5Rz7p9S33DtiE3rJMTT/tKmV+1
    9XaLU49YYcDIjMb2OV8GAwnPRpWXRcnT5J0grXxc0do4kpdRij3ZY63lT/6ilxoX
    Uxn8aq/udPy0iYizR5QcjJNHpSgZ9WqCPmQfuJLFw2TYaYh3f6yn54n0Hzj4gd9l
    tsol4xeTKQ47c/vUF7kHfD8IYzL8jv3a3++IqzCwJ3jIpTENsBYAgrkbYN9f9GHD
    BvX3sz6tgFaYU2R8YbDvA0Yq9tVPwYrPvbhwoht6PsjE/R0UK6yqnKPEADdzWvP8
    frXmmtJ35rAymqUWfpqx9RdZ0NMR7J8ut8C5365PJQKBgQD+UidVWut7d9qvhZKq
    +T5qtasH5qkD34idFl4Ay8xsSntqTrXr7q1Ff+FQY6R+f/8IzB4ZqgnV58+8AEMc
    gJzNmkf9L1I9SCQDxRV/TgW2eHrUrI9XS2AI5tmyzaGY1xL4fCQQMvqNAGERT6sS
    XJRt8WjuGmE4zeqxNB0XY7u1OwKBgQDLIlnksOrPw00lWUbXHSHwdfBzjYU97KVu
    GnOl5fsCmlKanqHUfd/4StnRXpl3l56hig8mYsHV5EcfUEX98PaSbTAy8Lk5y5E9
    ye2ENOgl/IyMgHPtT6spFKm7jRmpulqG4FVCGxQl3n6/nSmztA3S1zLZzi0guI0E
    oxXCbG796wKBgC8NSgOrr5eHRClnIAyL0nVxqPPsQ+bYi3Dsu3WQPwDmAtFXQKcm
    4F3UW/5AgSV6Ttf007jR0cIGglN5BPGYBeqwGZOJGNXd6/PambCU4c+xmKASUO7I
    njrnYu2Gx9f8KqFYbl+k3uAJauwF/lOGV1vD5zLuJICa8Enap2s1Y3wTAoGBAKrx
    QnLISyIB+XbXtVyrYHdJ2Mp1Ks6cye5pBi9y5RQgqCkEG62FLCh3XOvrTvysNEs+
    slccPoBv9UYtuGjmEanRhwEnQMiZPaWgu2dJWp8081X9dxEavS/5+oghSpphf3MH
    b9gMj5z6qvE3IfPfLs7iWCGgdquVgt6HG3Wc6J53AoGAc+ZYE8kMj2p9rtu1uJgX
    +VMbbdLEUqz3BPC9Tzq+eglUlYmwUK1xynKZfkEMcu5PncaBaNLU+GmYKKgw6wZS
    soEF1KvbBB4o6nZdlGo0BirOQ0ijHDWUvtuiaaWAQoQAhQwgqqV2IOC4UfkZ6ORf
    A/UW43A9wZq9kaEgb0YWOes=\
    -----END PRIVATE KEY-----`;

// Algorithm Object
```

```
var algorithmKeyGen = {
  name: "RSASSA-PKCS1-v1_5",
  // RsaHashedKeyGenParams
  modulusLength: 2048,
  publicExponent: new Uint8Array([0x01, 0x00, 0x01]),  // Equivalent to 65537
  hash: {
    name: "SHA-256"
  }
};

function parsePem(pemString, type) {
    const expectedPrefix = "-----BEGIN " + type + "-----";
    const expectedPosftix = "-----END " + type + "-----";

    pemString = pemString.trim();
    if (!pemString.startsWith(expectedPrefix)) {
        throw "Expected PEM to start with " + expectedPrefix;
    }
    if (!pemString.endsWith(expectedPosftix)) {
        throw "Expected PEM to end with " + expectedPosftix;
    }
    const base64 = pemString.substring(expectedPrefix.length, pemString.length -␣
↪expectedPosftix.length).trim();
    return Uint8Array.from(atob(base64), c => c.charCodeAt(0))
}

function parsePrivateKeyPem(pem) {
    return parsePem(pem, 'PRIVATE KEY')
}

function storePrivateKey(privateKey) {
    var request = indexedDB.open("keys");

    request.onupgradeneeded = function() {
      // The database did not previously exist, so create object stores and indexes.
      var db = request.result;
      var store = db.createObjectStore("privateKeys", {keyPath: "name"});

      // Populate with initial data.
      store.put({name: "first", key: privateKey});
    };

    request.onsuccess = function() {
      db = request.result;
    };
}

var privateKeyArray = parsePrivateKeyPem(privateKeyPem);
var NON_EXTRACTABLE = false;
window.crypto.subtle.importKey("pkcs8", privateKeyArray, algorithmKeyGen, NON_
↪EXTRACTABLE, ['sign'])
.then(function(privateKey) {
        storePrivateKey(privateKey);
        privateKeyPem = null;
        privateKeyArray = null;
    }
);
```

4. Copy this script content and paste it into browser console.

5. The key has been imported in a non-extractable manner.

Warning: If private key have been integrated into the browser, but it is impossible to make a transactions, please, clear browser's cache and try again to integrate the private key.

Note: If the proposed code is not suitable or if more information is required about the **Web Crypto API**, please visit the official site https://developer.mozilla.org/en-US/docs/Web/API/Web_Crypto_API.

Import Private Key To User Interface

The Virtual terminal has the function of using a private key through the user interface

In order to faster conduct a large number of test transactions, please check the "Save key in the browser" box, and the private key will be automatically saved in the browser.

Add private key   ✕

You can add an RSA private key yourself via the console
Documentation describing how to create a key pair and add a private key to the Browser

Go to documentation ⧉

If for some reason you can't add a private key to your browser yourself, you can use our Web interface.
By using our Web interface, you confirm that you are aware that your private key will not be retrieved or saved by
the system. If you have any doubts about the safety of your private key, please add the key to your browser yourself

RSA private key

☐ Save the key to the browser

Cancel   Ok

7.5.3 VT Interface Details

The VT has control buttons, which are described in more details below.

7.5.4 Template Management

1) To simplify the work of the Virtual terminal operator, data fields can be saved as a
template. Using templates allows to work only with the individual attributes of the client.

Templates

Draft
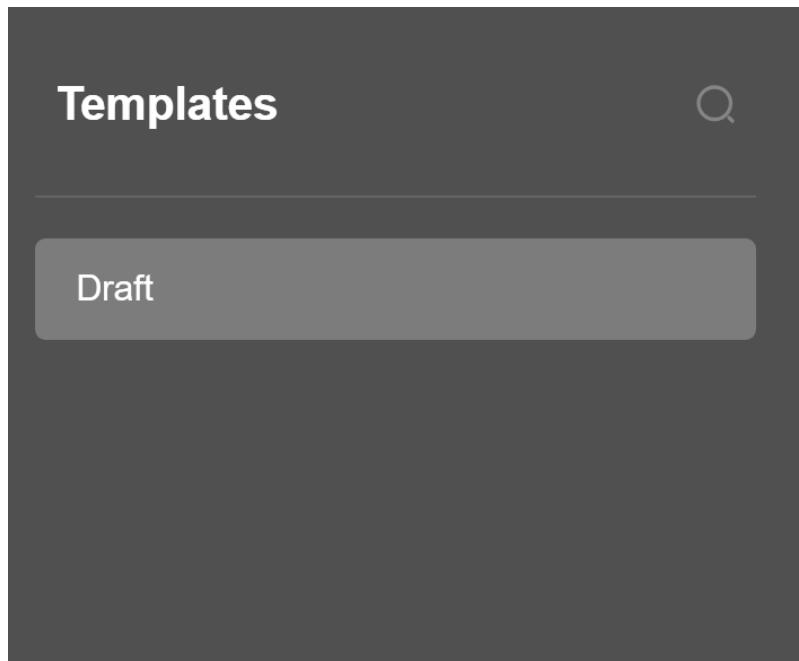
2) After entering data on the right side of the page, it is possible to save this data as a template by clicking 'save as a template' and naming the new template.

New template name ×

Test Template

Save
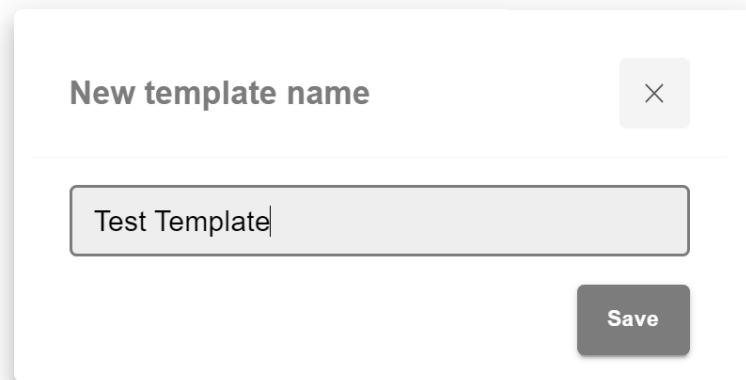
3) To edit, clone, delete or share, click three dots near the template name and select the desired parameter. The template can be shared with users at lower levels. This way, a merchant can share the template with their employees.
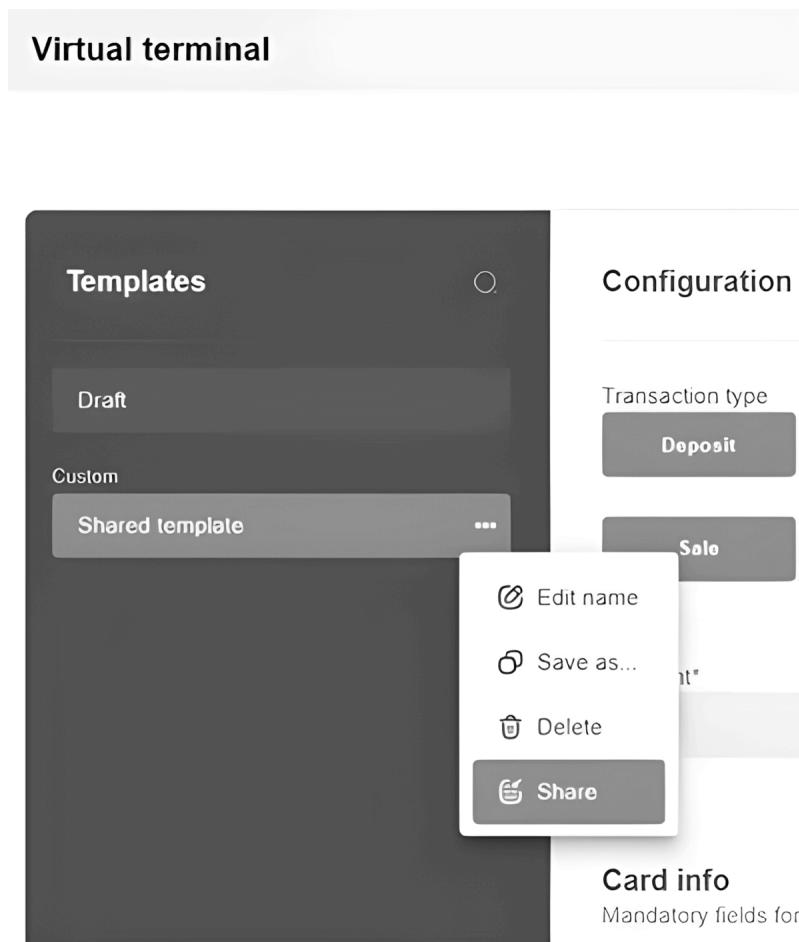
Virtual terminal

For all selected users, the created template will become the default upon loading the virtual terminal.

Changes can still be made before conducting a transaction, but only the creator of the template has the authority to modify the template itself. Users with whom the template has been shared are only allowed to make copies.

The number of created templates available for sharing is unlimited. They will all be displayed to users in alphabetical order.
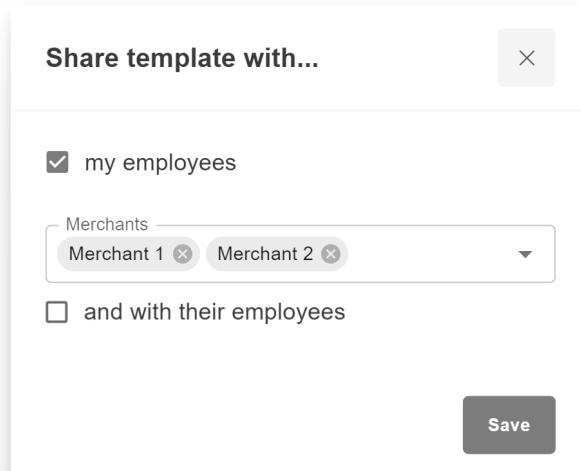
7.5.5 Transaction Specification

Deposit

In the deposit section, it is possible to make a Sale and a Preauth transaction, which are described below.

Sale

Sale is a type of transaction, in which customer receives goods or services from Merchant in exchange for money or other assets.

To initiate transaction, submit the following 3 types of information:
    1) Transaction data - Endpoint, amount, currency, description, invoice number must be filled directly on VT.
    2) Card info - Cardholder, Card number, Valid thru:
        - can be filled directly on VT;
        - can be filled automatically together with Personal info, if Recurring ID is provided. If Recurring ID is provided and CVV field is empty, use "Copy link" to provide form to customer for additional confirmation. In case if it will be filled in VT form directly then transaction will be processed directly.
        - can be filled by customer on the form.
    3) Personal info - First name, Last name, City, Address, Zip code, Phone, E-mail, Customer IP-address ,Country, etc:
        - can be filled directly on VT;

        - can be filled automatically together with Card info, if Recurring ID is provided;

        - can be filled automatically, if Customer ID is provided.

Process transaction:

- Use "Copy link" button to generate the payment link and send it to the customer. This flow is relevant for transactions which require additional information submitted by customer on the form (cardholder data, 3DS check, etc).

- Use "Process" button if transaction doesn't require any additional information submitted by customer (e.g. noCVV non3D recurring transactions).

The image shows the options available for filling.

Transaction type

| Deposit | C2C | Withdrawal |

| Sale | Preauth |

Endpoint*
1122334

Amount*
100

Currency*
United States dollar

Card info
Mandatory fields for Process

Cardholder*
Test User

Card number*
444455******7777

Valid thru*
10/30

CVV*
123

Last used

| 1234567 | 2345678 | 3456789 | 6783451 | 1122334 |

Recurring ID
1123456

Order data

Invoice number*
1122334

Order description*
Test

Additionally ∧

Purpose
Test

Personal info

First name*
Test

Last name*
User

City*
NY

Address*
Test Address

Zip code*
112233

Phone*
99999999999

E-mail*
test@mail.test

Customer ip-address*
11.22.33.44

Country*
United States

Additionally ∧

Customer user agent
Mozilla/5.0 (Windows NT 10.0; W

Birthday
1 January 2020

Customer last 4 SSN
1234

Customer deposit level
GOLD

Customer ID
1122334

Merchant customer ID
12345

State
New York

Language
English

Site URL
test.test

Customer redirect URL
https://test.test/redirect

Copy link   Process

Preauth

Pre authorization is a transaction type in which bank blocks the specified amount in the customer's card account and does not allow the cardholder to use this blocked money.

It is important to know that the block remains for a definite period of time depending on whether this is a debit or a credit card (usually the maximum block period is 7 days for debit cards and 28 days for credit cards).

To initiate transaction, submit the following 3 types of information:

1) Transaction data - Endpoint, amount, currency, description, invoice number must be filled directly on VT.

2) Card info - Cardholder, Card number, Valid thru:
- can be filled directly on VT;
- can be filled automatically together with Personal info, if Recurring ID is provided. If Recurring ID is provided and CVV field is empty, use "Copy link" to provide form to customer for additional confirmation. In case if it will be filled in VT form directly then transaction will be processed directly.
- can be filled by customer on the form.

3) Personal info - First name, Last name, City, Address, Zip code, Phone, E-mail, Customer IP-address ,Country, etc:
- can be filled directly on VT;
- can be filled automatically together with Card info, if Recurring ID is provided;
- can be filled automatically, if Customer ID is provided.

Process transaction:

- Use "Copy link" button to generate the payment link and send it to the customer. This flow is relevant for transactions which require additional information submitted by customer on the form (cardholder data, 3DS check, etc).

- Use "Process" button if transaction doesn't require any additional information submitted by customer (e.g. noCVV non3D recurring transactions).

The image shows the options available for filling.

Transaction type

| Deposit | C2C | Withdrawal |

| Sale | Preauth |

Endpoint*
1122334

Amount*
100

Currency*
United States dollar

Card info
Mandatory fields for Process

Cardholder*
Test User

Card number*
444455******7777

Valid thru*
10/30

CVV*
123

Last used

| 1234567 | 2345678 | 3456789 | 6783451 | 1122334 |

Recurring ID
1123456

Order data

Invoice number*
1122334

Order description*
Test

Additionally ∧

Purpose
Test

Personal info

First name*
Test

Last name*
User

City*
NY

Address*
Test Address

Zip code*
112233

Phone*
99999999999

E-mail*
test@mail.test

Customer ip-address*
11.22.33.44

Country*
United States

Additionally ∧

Customer user agent
Mozilla/5.0 (Windows NT 10.0; W

Birthday
1 January 2020

Customer last 4 SSN
1234

Customer deposit level
GOLD

Customer ID
1122334

Merchant customer ID
12345

State
New York

Language
English

Site URL
test.test

Customer redirect URL
https://test.test/redirect

⊖ Copy link Process

C2C (Card To Card) Transfer

Card-to-card transaction is a direct transfer of funds from card to card (C2C).

Several scenarios are possible:

1) Transfer money from unknown card to registered card.

Receiver data is retrieved using Destination Recurring ID. The receiver Card info (Cardholder, Card number, Valid thru) and Personal info (First name, Last name, City, Address, Zip code, Phone, E-mail, Country and other optional customer data) sections will be filled in automatically. To speed up the filling of recipient fields, use the Last used section next to "Destination recurring ID" field, which contains previously used Recurring IDs. The Merchant creates a special link for the sender with "Copy link" button. The sender receives the link to a form in which he fills his card number, expiration date, holder name and CVV, then passes the 3DS check if needed.

2) Transfer money from registered card to unknown card.

Sender data is retrieved using Recurring ID. The sender Card info (Cardholder, Card number, Valid thru) and Personal info (First name, Last name, City, Address, Zip code, Phone, E-mail, Customer IP-address, Country and other optional customer data) sections will be filled in automatically. CVV is not stored and must be requested from sender. To speed up the filling of sender fields, use the Last used section new to "Recurring ID" field, which contains previously used Recurring IDs. The Merchant creates a special link for the sender with "Copy link". The sender receives the link to a form in which he fills the destination card number, then passes the 3DS check if needed.

3) Transfer money between known or registered cards.

The Merchant fills the cardholder data or use recurring IDs for both sender and receiver of funds directly on VT and initiates transfer processing with "Process" button. In this case the transaction must be processed through the non3D channel, which is not common for C2C transfers.

Note: When filling in the Customer ID field, Personal info (First name, Last name, City, Address, Zip code, Phone, E-mail, Country) sections will be filled in automatically.

The image shows the options available for filling.

Transaction type

| Deposit | C2C | Withdrawal |

Endpoint*
1122334

Amount*
100

Currency*
United States dollar

Card info
Mandatory fields for Process

Cardholder*
Test User

Card number*
444455******7777

Valid thru*
10/30

CVV*
123

Last used

| 1234567 | 2345678 | 3456789 | 6783451 | 1122334 |

Recurring ID
1123456

Destination cardholder*
Test User

Destination card number*
4444 55****77 77

Dest. valid thru
10/30

Destination recurring ID
123456

Order data

Invoice number*
1122334

Order description*
Test

Personal info

Customer ip-address*
11.22.33.44

Customer redirect URL*
https://test.test/redirect

Additionally ∧

Sender first name
Test

Sender last name
User

Sender middle name
Tester

Sender SSN
1122334

Sender birthplace
1 January 2020

Sender birthday
1 January 2020

Sender address
Test Address

Sender city
NY

Sender state
New York

Sender zip code
112233

Sender citizenship
United States

Sender country
United States

Sender phone
99999999999

Sender cell phone
99999999999

Sender e-mail
test@mail.test

Sender resident
YES | NO

Sender identity document ID
1122334

Sender identity document series
99999999999

Sender identity document number
1122334

Sender identity document issuer name
Test

Sender identity document issuer depart…
1122334

Sender identity document issuer date
1 January 2020

Receiver first name
Test

Receiver last name
User

Receiver middle name
Tester

Receiver birthplace
1 January 2020

Receiver birthday
1 January 2020

Receiver address
Test Address

Receiver city
NY

Receiver zip code
112233

Receiver region
Genesee

Receiver area
Test Address

Receiver citizenship
United States

Receiver country
United States

Receiver phone
99999999999

Receiver e-mail
test@mail.test

Receiver resident
YES | NO

Receiver identity document ID
1122334

Receiver identity document series
99999999999

Receiver identity document number
1122334

Receiver identity document issuer name
Test

Receiver identity document issuer depa…
Test

Receiver identity document issuer date
1 January 2020

Customer user agent
Mozilla/5.0 (Windows NT 10.0; W

Customer local time
Sun Jan 01 2020 15:00:0 GMT+(

Customer screen size
2560x1440

Customer accept language
en

Customer accept
1122334

Withdrawal

In the withdrawal section, it is possible to make a D2C (Deposit to card) transfer and a Payout, which are described below.

D2C (Deposit To Card) Transfer

A Deposit-to-Card transaction is a transfer of funds from a bank account to a payment card.

Several scenarios are possible:

1) Transfer money to known card.

The Merchant fills the cardholder data for receiver of funds directly on VT with "Process" button.

2) Transfer money to registered card.

Receiver data is retrieved using Destination Recurring ID. The receiver Card info (Cardholder, Card number, Valid thru) and Personal info (First name, Last name, City, Address, Zip code, Phone, E-mail, Country and other optional customer data) sections will be filled in automatically. To speed up the filling of recipient fields, use the Last used section next to "Destination recurring ID" field, which contains previously used Recurring IDs.

3) Transfer money to unknown card.

The Merchant creates a special link for the recipient of funds with "Copy link" button. The recipient receives the link to a form in which he fills the destination card number.

Note: When filling in the Customer ID cell, Personal info (First name, Last name,City, Address, Zip code, Phone, E-mail, Country) sections will be filled in automatically.

The image shows the options available for filling.

Transaction type

| Deposit | C2C | Withdrawal |

| D2C | Payout |

Endpoint*
1122334

Amount*
100

Currency*
United States dollar

Card info
Mandatory fields for Process

Destination cardholder
Test User

Destination card number*
444455******7777

Dest. valid thru
10/30

Destination recurring ID
1123456

Order data

Invoice number*
1122334

Order description*
Test

Personal info

Customer ip-address*
11.22.33.44

Customer redirect URL
https://test.test/redirect

Additionally ⌃

Receiver first name
Test

Receiver last name
User

Receiver middle name
Tester

Receiver birthplace
1 January 2020

Receiver birthday
1 January 2020

Receiver city
NY

Receiver address
Test Address

Receiver zip code
112233

Receiver region
Genesee

Receiver area
Test Address

Receiver citizenship
United States

Receiver country
United States

Receiver phone
99999999999

Receiver e-mail
test@mail.test

Receiver resident
| YES | NO |

Receiver identity document ID
1122334

Receiver identity document series
99999999999

Receiver identity document number
1122334

Receiver identity document issuer name
Test

Receiver identity document issuer depa...
Test

Receiver identity document issuer date
1 January 2020

Customer user agent
Mozilla/5.0 (Windows NT 10.0; W

Customer local time
Sun Jan 01 2020 15:00:0 GMT+(

Customer screen size
2560x1440

Customer accept language
en

Customer accept
1122334

Customer withdrawal level

Customer ID
1122334

Merchant customer ID

🔗 Copy link   Process

Payout

A Payout transaction is the disbursement of funds to a recipient account number, digital wallet or other type of account. The Merchant fills the payment data for receiver of funds directly on VT and initiates payout with "Process" button.

Note: When filling in the Customer ID field, Personal info (First name, Last name,City, Address, Zip code, Phone, E-mail, Country) sections will be filled in automatically.

The image shows the options available for filling.

Transaction type

Deposit   C2C   **Withdrawal**

D2C   **Payout**

Endpoint*
1122334

Amount*
100

Currency*
United States dollar

Order data

Invoice number*
1122334

Additionally ⌃

Order description*
Test

Merchant data
1122334

Bank code
1122334

Bank name
Test

Bank branch
Test

Bank province
Test

Bank area
Test Address

Bank city
NY

Bank address
Test Address

Bank zip code
1122334

Bank card number
4444 55****77 77

Account name
Test

Account number
1122334

Routing number
1122334

E-wallet type
Test

E-wallet
1122334

Crypto wallet address
1122334

Personal info

Customer ip-address*
11.22.33.44

Additionally ⌃

Customer user agent
Mozilla/5.0 (Windows NT 10.0; W

Legal person name
Test

Legal person document number
1122334

Customer redirect URL
https://test.test/redirect

Customer withdrawal level

Customer ID
1122334

Merchant customer ID

Receiver first name
Test

Receiver last name
User

Receiver birthday
1 January 2020

Receiver city
NY

Receiver address
Test Address

Receiver zip code
112233

Receiver country
United States

Receiver state
United States

Receiver phone
99999999999

Receiver e-mail
test@mail.test

Receiver identity document ID
1122334

Receiver identity document number
1122334

Process

7.6 Transaction Marker Notification

- Overview
- Configuration

7.6.1 Overview

The Transaction marker notification tool is used to notify users about specific issues that might happen to transactions and usually require quick response. Each time the specified transaction marker is triggered, it will send email notification to user's email address. For example, if notifications for chargebacks are enabled, user will get a new email notification for each chargeback applied to a processed transaction. Email content can be customized.

The main screen displays a list of all notifications, their status, ID, subject, language, merchant name, message type and marker type.

Transaction marker notification								CREATE

STATUS	ID	LAST UPDATED BY	SUBJECT	LANGUAGE	MERCHANT	MESSAGE TYPE	MARKER TYPE	
⬤	73	TestMerchant	Chargeback	English	TestMerchant	Email (HTML)	chargeback · Failed PAN eligibility	✎

7.6.2 Configuration

To add a new marker, press the Create button in the upper right corner. Notification configuration box will appear with the following parameters:

New transaction marker notification

    ✕

⬤ Disabled

| Marker type ▾ |

| Language ▾ |

Message type

◯ Email

◯ Email (HTML)

| Subject |

| Message |

CANCEL   SAVE

Parameter	Description
Status	Enabled/Disabled

Table 2 – continued from previous page

Parameter	Description
Marker type:	- Chargeback - Chargeback after ethoca reversal - Chargeback after reversal - Duplicated chargeback - Failed cancels - Failed captures - Failed PAN eligibility - Failed payin session initiators - Failed payout session initiators - Failed reversals/refunds - Failed scorings - Fraud - Inconsistent order status - Incorrect decline code - Multiple master approvals - Phone verification - Processor callback notification - Refused payouts - Refused refunds - Retrieval - User defined
Merchant	To select a merchant, enter the name or ID of the merchant
Subject	All emails for this marker will have this subject
Message type	- Email - Email with plain text. - Email (HTML) - Email with HTML support.
Message	All emails for this marker will have this text message. Transaction Marker Notification supports Message Templates[5]. Additionally $!{MARKER_TYPE_NAME} was added.

7.7 Transaction Markers

Transaction markers are created to notify users about specific issues that might happen to transactions and usually require quick response or additional business process (for example, manual review or communication with the customer). This screen allows to view all created transaction markers and work with them, by adding comments to markers and set them as "processed" if the issue has been resolved. Notifications about new markers can be sent by e-mail, this functionality is configured on "Transaction Marker Notification" screen. Transaction markers can be sorted with search criteria by marker type and status. The list of markers contains information about each marker type, status and linked order ID:

---

[5] https://doc2.codetime.net/integration/common_utilities/receipt_message.html

Transaction markers

▲ **Filters**   Template ⌄   Add filter ⌄

Date	ID ↑	Marker type	Status	User name	Processing date	User decision	Order ID	Merchant name
2025-08-20 18:51:59	82655	chargeback	Unprocessed	Vica_loyalty_test_merchant:merchant	-	-	3413887	Vica Loyalty test merchant
2025-08-20 18:53:29	82656	fraud	Unprocessed	Vica_loyalty_test_merchant:merchant	-	-	3407422	Vica Loyalty test merchant
2025-08-20 18:54:05	82657	chargeback	Unprocessed	Vica_loyalty_test_merchant:merchant	-	-	3405078	Vica Loyalty test merchant

SETTINGS

8.1 Settings Search

The screen is designed to find projects and endpoints by their name or ID and is located in "Settings" – "Settings Search" section.
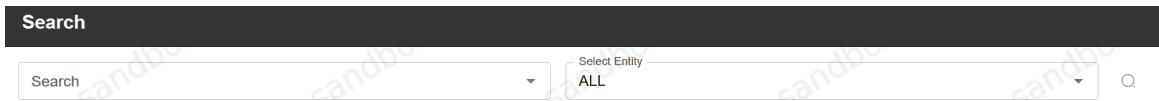
The search range can be specified to endpoints or projects.

8.2 Employees

- Create Employee Account
- Edit Employee Account
- User Privileges
  - Merchant
  - Reseller

8.2.1 Create Employee Account

Creating new accounts to access the system is available for merchants in "Settings" – "Employees".
The Employees tab contains a list of all employees accounts, established in the system for the merchant.
New employee account can be created with the Add User button. The following form must be filled:

Next, select one of available employee roles in the system:

After the personal account is created, an employee can immediately log in. Login and password are generated at the stage of creating a personal account (do not forget to save the

MERCHANT-CLIENT-SUPPORT
MERCHANT-DESC
MERCHANT-FINANCE
MERCHANT-FINANCE-READONLY
MERCHANT-PHONE
MERCHANT-RISK
MERCHANT-SALES
MERCHANT-SUPPORT
MERCHANT-SUPPORT-READONLY
MERCHANT-TRANSACTION
MERCHANT-VT-ONLY
MERCHANT-VT-TRANSACTION

password beforehand). If the password was not saved, it can be reset on employee details screen.

Password   reset
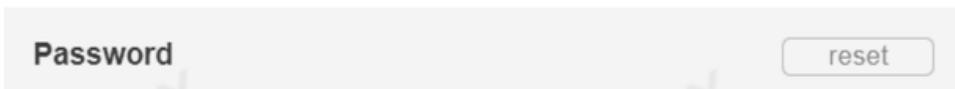
When employee logs in to the account for the first time, the system asks to change the temporary password to a permanent one:

You must change your temporary password

Password   *   [   ]

Confirmation   *   [   ]

                          Change

                          The minimum password length must be 8 characters
                          Use of lowercase and uppercase letters
                          Using at least one special character
                          Using at least one digit

8.2.2 Edit Employee Account

All created accounts are visible on the Employees page:

The employee account is enabled.

The employee account is disabled.

Click on the employee's name to open the account details, which can be changed by clicking on the Edit button. All employee account parameters, besides scope user name and login, can be changed.
The reset button under the user's login is used to reset the user's password. The system will generate a new one-time password, which should be provided to the employee. The employee then will have to change the temporary password to the permanent one on the next login to the system.
The search string allows to quickly find the necessary employee by ID, name, login or email:
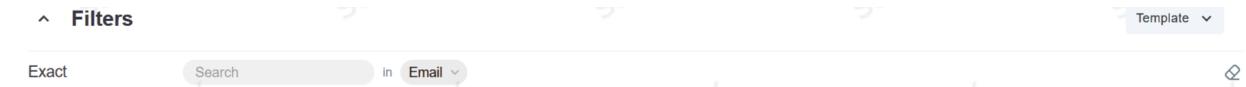
8.2.3 User Privileges

Here are all available roles for Merchant and Reseller. Ask the Doc2.0 support manager to find the most suitable roles for specific cases or get a complete list of the roles functionality.

Merchant

Main Merchant account has access only to his traffic and not able to see other Merchants.

Employee type	Description
merchant-support	This employee is the same as Merchant account, but not able to create Merchant employees. Can reverse orders from orders page
merchant-support-readonly	This employee is limited version of merchant-support, no access to the configuration change. Can reverse orders from orders page
merchant-risk	This employee has access to transaction details and actions with them, view and operate with BWL lists and BWL options from order details page, Reports and Batch operations. Can reverse orders from orders page
merchant-risk-readonly	This employee has access to transaction details, view and operate with BWL lists and BWL options from order details page, has no access to Reports and Batch operations
merchant-finance	This employee has access to view some entities in the system, Dashboard and transaction details
merchant-finance-readonly	This employee can see only transaction details, Batch operations and Reports
merchant-vt-only	This employee has access only to Virtual terminal
merchant-vt-transaction	This employee has access only to Virtual terminal and transaction details
merchant-desc	This employee can see only Dashboard and transaction details
merchant-loyalty	This employee can see only BWL lists and transaction details
merchant-client-support	This employee can see only transaction details
merchant-transaction	This employee is almost identical to merchant-client-support
merchant-analyst	This employee is almost identical to merchant-transaction with access to Dashboard, can't view Projects

Reseller

Main Reseller account has only access to see the traffic for the Projects linked to this Reseller.

Employee type	Description
reseller-support	This employee is the same as Reseller account, but not able to create Reseller employees
reseller-finance	This employee is the same as reseller-support, but not able to deal with rate plans
reseller-no-finance	This employee is the same as reseller-support, can create employees, but no access to banking information at all
reseller-desc	This employee is the same as reseller-support, has access to some actions with transactions and transaction markers, but no access to Integration panel
reseller-client-support	This employee is the same as reseller-support, can see uploaded documents on Order details page, but no access to the Dashboard and Adjustments

8.3 Projects

- Project search and KPI
- Message Templates

Project is a Payment Gateway entity which determines the conditions for receiving a payment message and its further routing to the connected Processor.

8.3.1 Project search and KPI

This screen allows to view all Projects created in the system. In case of a large number of Projects, it may be helpful to use the search:
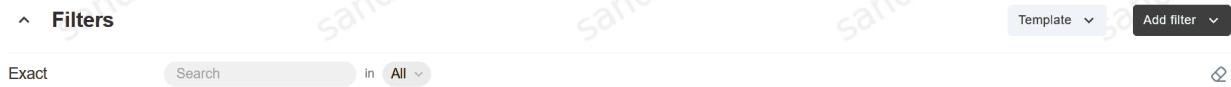
To monitor the Project activity, Key Performance Indicators (KPI) are used, such as: Merchant earnings, Average order value, and others. The KPI submenu opens by pressing the Detailed button on the Project search screen. See details in KPIs Detailed View. Click on the Project name to open detailed information about this project. "Common" tab allows to see the Project characteristics and Endpoints associated with it.

8.3.2 Message Templates

Message templates can be used to send SMS or E-mail messages to customer after each successful transaction. Merchant must provide their message server credentials to Doc2.0 support manager in order to send such messages from merchant address. Templates are created using the Template button. After pressing it, a window with new template details will open:

The created template will appear in the list:

 Message sending is enabled.

 Message sending is disabled.

8.4 Endpoints

- Endpoint search and KPI
- Endpoint details
- Message Templates
- Payment Form
- Callbacks
- Buy Now Button

- – Buy Now Button Setup
- – Buy Now Button Required Fields
- – Buy Now Button Payment Form Fields
- Account Balance

Endpoint is uniquely identified terminal in Payment Gateway, which is assigned to the Merchant and has to be provided in the commands within Payment Gateway API.

8.4.1 Endpoint search and KPI

This screen contains all Endpoints created for the Merchant in the system:

⏻ The Endpoint is enabled.

⏻ The Endpoint is disabled.

In case of a large amount of Endpoints, search can be used:

In order to monitor Endpoint activity, Key Performance Indicators (KPI) are used, such as Merchant earnings and others.

The KPI submenu opens by pressing the Detailed button on the Endpoint search screen. See details in KPIs Detailed View.

Click on the Endpoint name to open the detailed information about this Endpoint.

8.4.2 Endpoint details

Endpoint details screen contains information about configured options on this Endpoint, its ID, limits and linked Project. The Endpoint inherits its currency from the Project it's linked to.

It is important to note that the Endpoint settings (such as limits, payment forms, client definition, etc) override the Project settings.

To view the filters configured on the Endpoint, use the "Fraud protection filters" tab.

To view the necessity of additional fields on payment form, use the "API Fields" tab.

To work with other configuration options, see the information below.

8.4.3 Message Templates

Message templates can be used to send SMS or E-mail messages to customer after each successful transaction. Merchant must provide their message server credentials to Doc2.0 support manager in order to send such messages from Merchant address. Templates are created using the Template button. Example of filling the form:

Example of a message template in the form:

	ID	Language	Merchant	Message type		
⏻	76	English	Vica Loyalty test merchant	Email	👁	✎

⏻ Message sending is enabled.

⏻ Message sending is disabled.

8.4.4 Payment Form

It is possible to configure custom payment forms on Endpoint or Master Endpoint. For configuration please see Forms Customization[6] in integration documentation. Provide the customized forms to Doc2.0 support manager for installation. Installed form names will be visible on Endpoint details screen.

8.4.5 Callbacks

Callback can be configured at the Endpoint level by using Create Callback utility. To set up new callback, go to the bottom of Endpoint details screen and click the "Add Callback" button. There are several parameters, which can be defined in the configuration window:

- Transaction type.
- URL address - is the fully defined URL with all the parameters Merchant's target page or script would require. Example: https://www.merchant.com/sale_completed.
- Comment if it is required.

---

[6] https://doc2.codetime.net/integration/reference/forms_customization.html

8.4.6 Buy Now Button

Buy Now Button integration is relevant for Merchants who has limited portfolio of products to sell. It is the easiest way to integrate with Doc2.0. This way of integration doesn't require much technical effort. Buy Now Button integration also allows Merchant (or Connecting Party which represents Merchant) to exclude itself from storing, processing, or transmitting Payer's cardholder data or other sensitive payment details. Such data is submitted by Payer on Doc2.0 hosted customer details form and payment form in PCI DSS certified environment.

Buy Now Button Setup

To configure Buy Now Button for Merchant's website follow these instructions:

- Find the relevant Endpoint
- Go to Buy Now Items tab
- Click Add item
- Fill in the required fields.

Buy Now Button Required Fields

Parameter Name	Description	Value
Amount	Amount to be charged. The amount has to be specified in the highest units with . delimiter. For instance, 10.5 for USD means 10 US Dollars and 50 Cents.	`Necessity: Required` `Type: Numeric` `Length: 10`
Description	The item's description.	`Necessity: Required` `Type: String` `Length: 64k`
redirect_url	The URL to the page where the Payer will be redirected after transaction is completed.	`Necessity: Required` `Type: String` `Length: 1024`
Destination	Destination to where the payment goes. It is useful for Merchants who let their payers to top up their accounts with bank card (Mobile phone accounts, game accounts etc.). Sample values are: +9999999999; mail@example.com etc. This value can be used by the fraud monitoring system.	`Necessity: Optional` `Type: String` `Length: 128`
Payment tool	Payment methods.	`Necessity: Optional` `Type: String` `Length: 128`

Buy Now Button Payment Form Fields

To configure the fields to be shown on payment form, ask Doc2.0 support manager to: 1. Go to API fields on the proper Endpoint. 2. Mark each needed API field as Visible and/or Required. 3. Save API fields and preview the payment form.

> **Warning:**
>
> It is strictly advised to create separated Endpoints for Buy Now Button because activating this option might lead to errors with other types of integration. Also:
>
> 1. Buttons cannot be removed, only entire Endpoint can be disabled to stop transactions via Buy Now Button.
>
> 2. Transaction amount change on payment form will not be supported if any Buy Now Button is configured on this Endpoint.

8.4.7 Account Balance

Each Connecting Party has a merchant user account created in Payment Gateway. Merchant accounts can check current balances via Common tab on Endpoints. Balances also can be requested via API by Endpoint[7] or by Merchant[8].

Note: Please contact Doc2.0 support to enable this feature.

See example of endpoint window with current balances below:

Balances	
4 test:	102 097.80 USD
57 test EUR:	6 462.64 EUR
82 Test1:	0.00 AZN
84 check:	0.00 KZT

8.5 Master Endpoints

- Master Endpoint Details
- Master Endpoint Configuration
- Payment Cashier Forms

8.5.1 Master Endpoint Details

Master Endpoint is an entity which allows to set up Parallel form, also known as Payment Cashier. Payment Cashier hosted on Payment Gateway side can display multiple payment methods for the Payer to choose from. Master Endpoint screen allows Merchants to configure such form and select which payment methods in which order will be available to each Payer according to Payer's country.

Each specific payment method is configured on a separate Endpoint, and these specifically configured Endpoints are connected to Master Endpoint. Such Endpoints, connected to Master Endpoint, are called Auxiliary Endpoints. The Master Endpoint currency is inherited from the Project it's linked to, but Auxiliary Endpoints don't have to be in the same currency as Master Endpoint.

---

[7] https://doc2.codetime.net/integration/API_commands/api_v2_get_balance.html

[8] https://doc2.codetime.net/integration/API_commands/api_v2_get_balance_merchant.html

8.5.2 Master Endpoint Configuration

In order to create Master Endpoint, go to "Settings" -> "Configuration" -> "Master endpoints" and click the "+Master Endpoint" button.

After selecting Master Endpoint this screen will appear:

Click on the To details button to view Master Endpoint itself (filters, payment form, name and etc).

Click on the Edit button to configure:

• available payment methods and their order on the form (delete, move and etc.),

• initiated transaction type for each payment method (sale or preauth with capture),

• the list of countries for each payment method to be displayed.

To hide or show payment method use on/off button. Turning off payment method will turn it off only for current master endpoint.

8.5.3 Payment Cashier Forms

It is possible to configure custom payment forms for Master Endpoint and each connected Auxiliary Endpoint. For configuration please see Forms Customization[9] in integration documentation. Provide the customized forms to Doc2.0 support manager for installation.

8.6 Endpoint Group

Endpoint group is an entity that combines several Endpoints or Master Endpoints with different currencies. The Endpoint Group simplifies the integration of a Merchant business to Doc2.0 Payment Gateway when working with multiple currencies. This screen allows to view configured Endpoint Groups and their IDs.

Status	Id	Name	Manager	Merchant	Endpoints	Currency
	3016	Vica test endpoint group	Vica Loyalty test menager	Vica Loyalty test merchant	Vica test master endpoint	EUR

To better understand the difference in integration to multiple Endpoints and Endpoint Group, see the picture below:

Options for multi-currency processing integration

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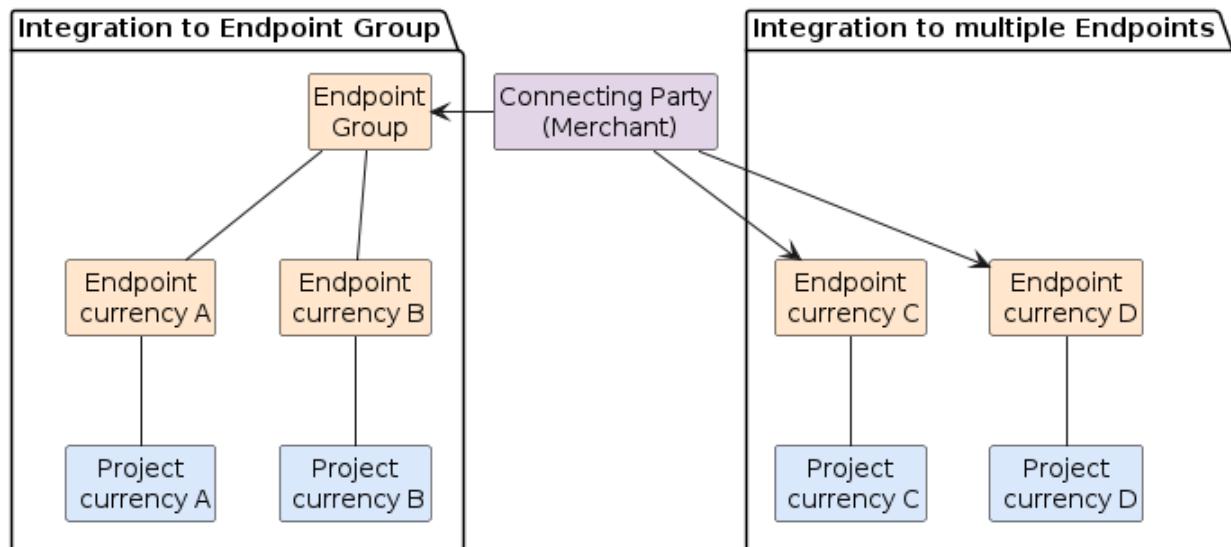
[9] https://doc2.codetime.net/integration/reference/forms_customization.html

NINE

REFERENCE

9.1 Glossary

For the purposes of this guide, the following terms and their definitions are used:

Doc2.0 Hardware and Software System (Doc2.0 Payment Gateway)	An information system designed for automated and secure processing of payment transactions and their storage.
Doc2.0 Payment Management System (Doc2.0 UI)	Payment management user interface and analytical platform of Doc2.0 Payment Gateway.
Merchant	The company that provides services, works or sales of goods through the E-commerce, mobile commerce or mPOS channels.
Manager	An organization that provides services for processing transactions of Processor Merchants using the Doc2.0 Payment Gateway and accounting for transactions in the Doc2.0 UI.
Processor	The entity of the system, which is a technical integration with a specific acquiring bank or other payment service provider for processing transactions.
Account	Identification data in the Doc2.0 UI, which allows the user to interact with the system on their own behalf.
Transaction	An agreement to carry out a financial operation between a customer and the merchant to pay for services, work or goods, to return funds for previously paid services, works or goods, to transfer money from card to card, or to hold funds for future payment.
Antifraud filter	Technical transaction analysis algorithm for identifying suspicious and fraudulent transactions, based on the experience of Doc2.0 employees and international fraud monitoring practices.
BIN	Bank identification number, first 6 digits of card number.

9.2 KPIs Detailed View

9.2.1 Overview

Key Performance Indicators, or KPI, is an analysis module which helps the user to quickly visualize the detailed business related information for each main system entity - Endpoint, User, Project.

To view the details of the relevant element, open the respective element common screen and pick the KPIs in the dropdown Details menu. The order of KPI shown on the details view corresponds to the order in which KPIs are picked in the dropdown. The first chosen KPI is placed on the left, then goes the second etc. The user can pick up to 5 KPIs.

The search criteria (point 1 on the screenshot) only affect the list of elements shown and not the calculated value of the KPI.

The KPI value could be calculated within a time period (the control elements 2` on the picture above). The time period is ignored when the meaning of the KPI contradicts the selected date range or in case the KPI is beside the purpose.

Each KPI could be used for sorting to provide the most valuable data. The user can apply the sorting by clicking the name of KPI(the control element 3 on the picture above). Please keep in mind that if KPI is selected for sorting and then removed, the sorting will still be applied.

9.2.2 KPIs

Gross Traffic

Shows: The total sum of the approved transactions of the types: sale, capture, dispute, transfer approved.
Update frequency: virtually real-time (no more than 10 seconds delay).
Graph: the total sum per hour if selected date range is Today or Yesterday; the total sum per day if selected date range is This Month or previous Month.

Gross traffic per hour for December 7th.

Gross traffic per day for November.
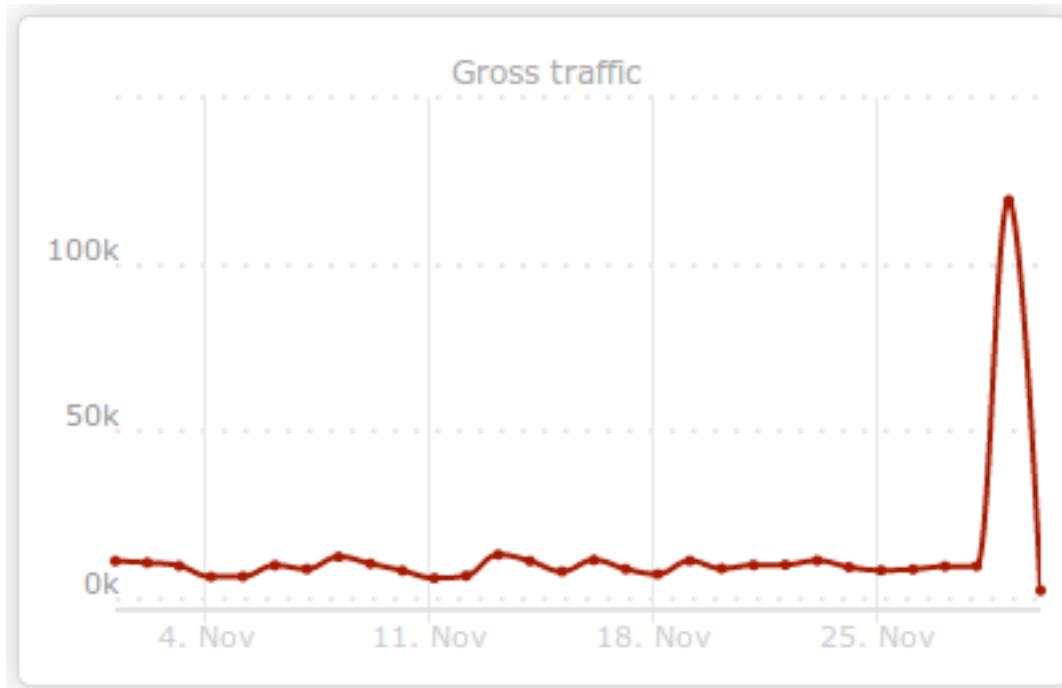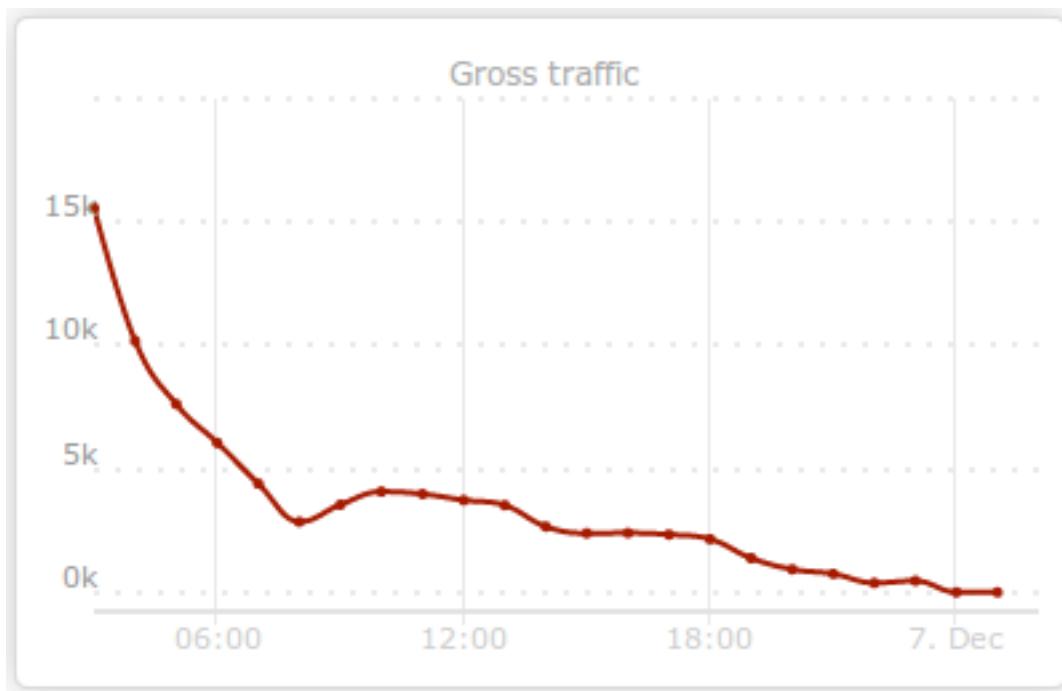
Earnings

Shows: earnings for the Reseller or Merchant without holds for any type of transaction in any status.

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: the earnings per hour if selected date range is Today or Yesterday; the earnings per day if selected date range is This Month or previous Month.
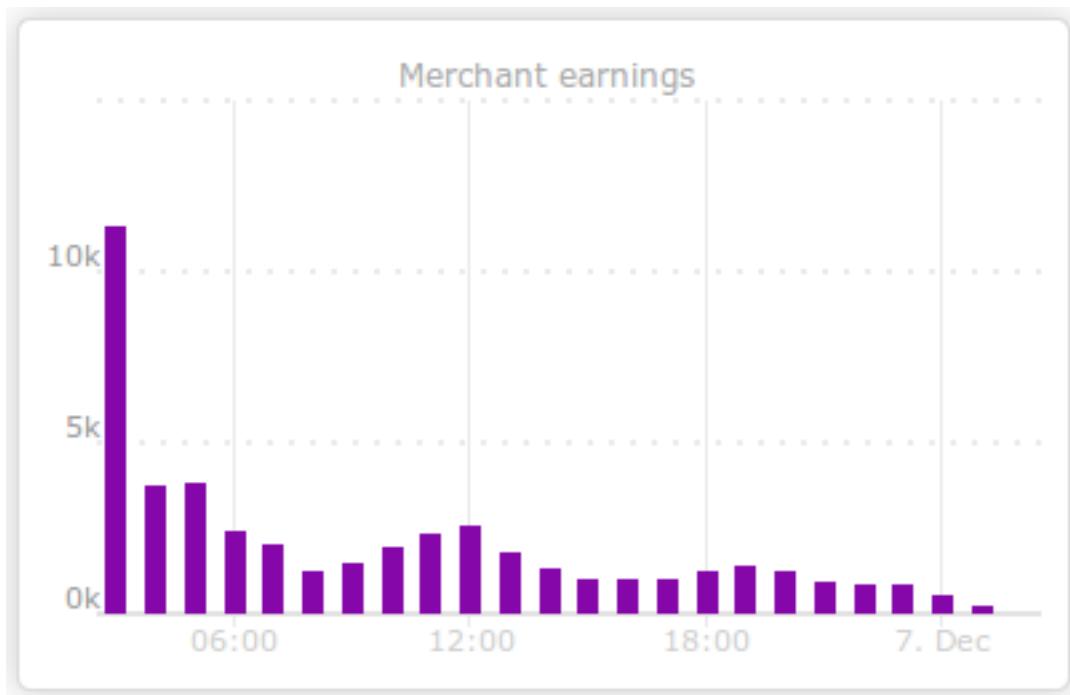

Merchant's earnings per hour for December 7th.

Carryover

Shows: The value of the Carryover for the current date disregarding the selected date range. Each type of user can see respective value of the Carryover.

Update frequency: daily at 00:00.

Graph: shows the carryover value staring from the selected date plus 2 months; it shows both total carryover due by the user (positive) and the carryover due to the user (negative). It also shows the carryover balance which is a sum of the two above values.
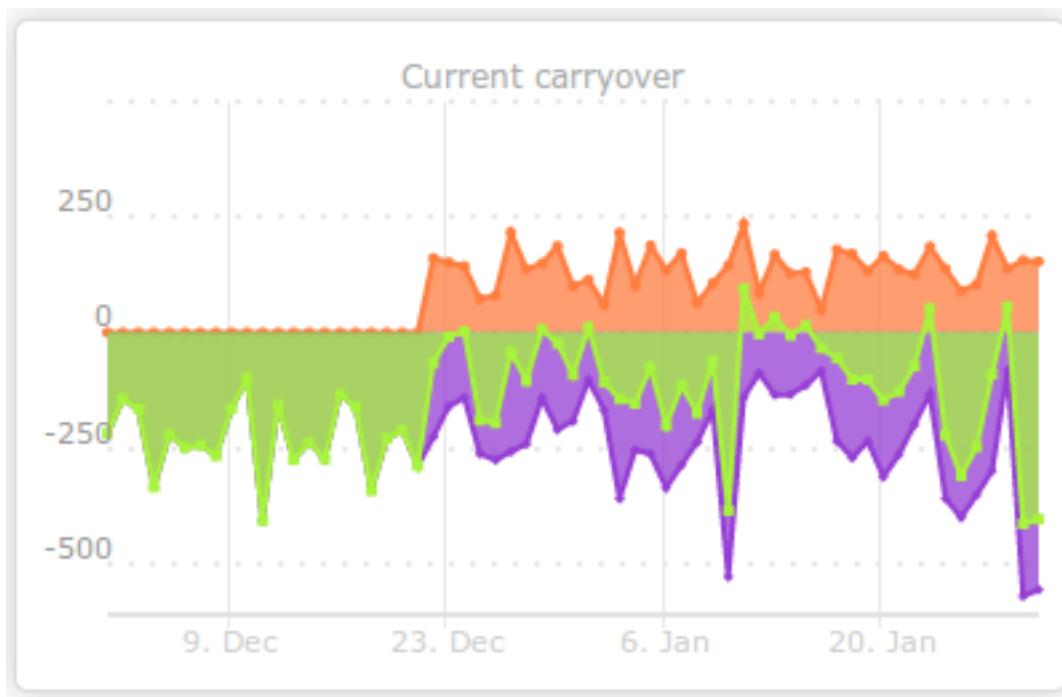
The Dates Of The First And Last Transactions

Shows: The date of the first and last processed transaction regardless of the date range chosen. It allows quickly finding inactive instances of the infologic model elements (Endpoints, Projects).

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: N/A

Average Transaction Amount

Shows: The average transaction amount: sale, capture, dispute, transfer in approved status. It allows to detect abnormalities when merchant changes the source of incoming payment traffic or the products sold.

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: Minimal, maximal and average transaction amount per hour if selected date range is Today or Yesterday; the Minimal, maximal and average transaction amount per day if selected date range is This Month or previous Month.
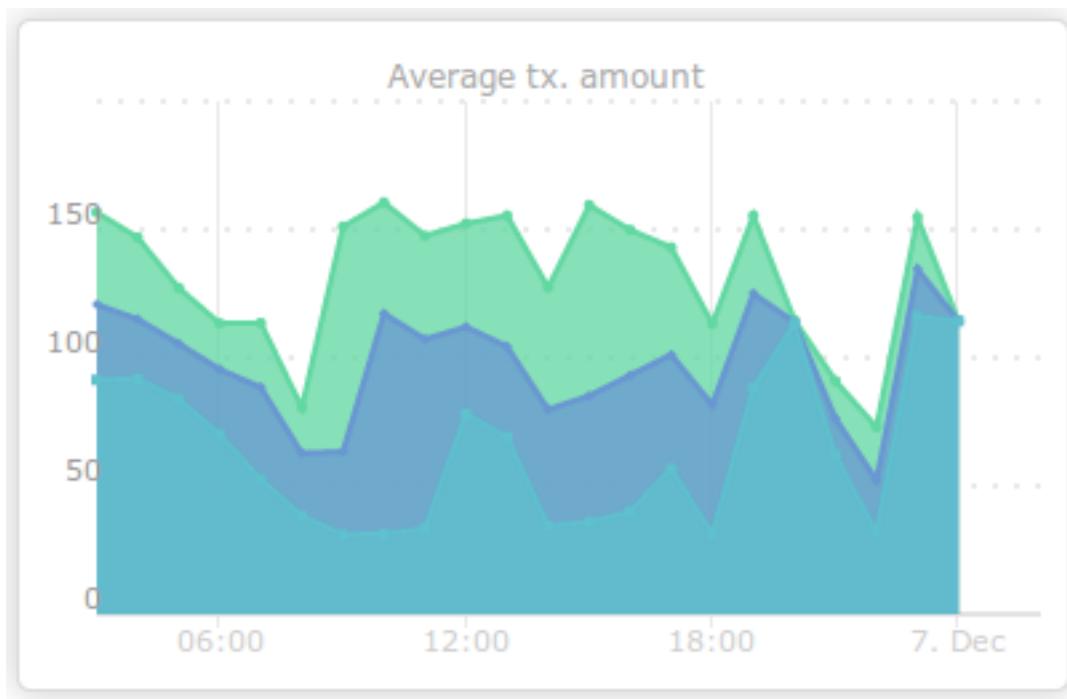
Minimal, maximal and average transaction amount per hour for December 7th.
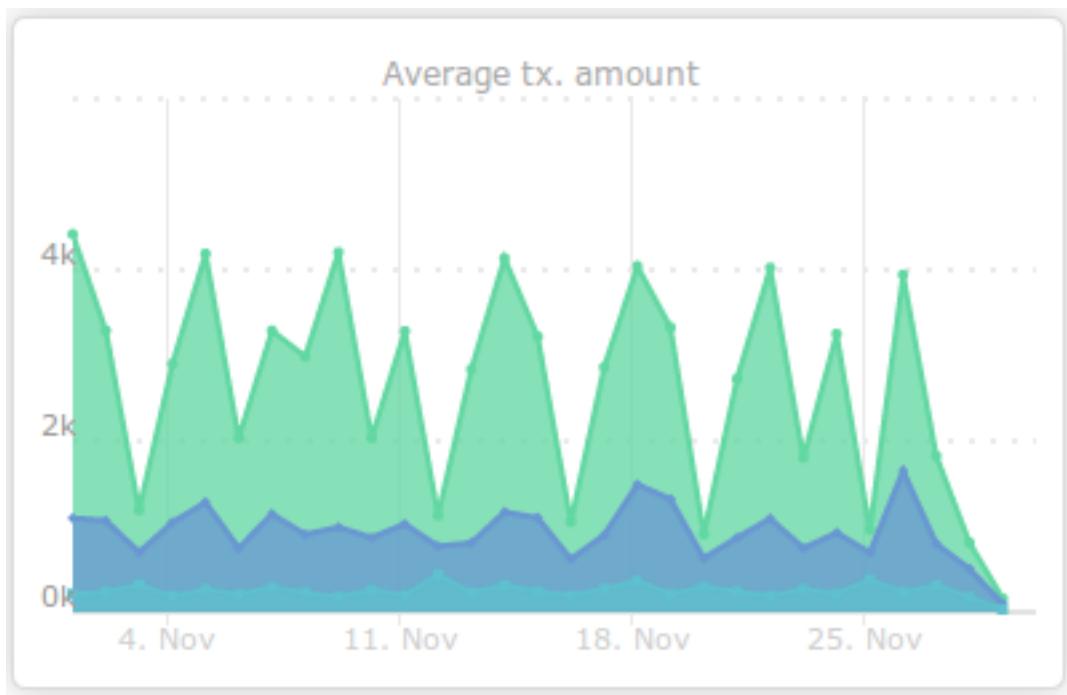
Minimal, maximal and average transaction amount per day for November.

Order Number Per Client Per Month

Shows: The average number of the transaction of any type and in any status for the month which falls into the selected date range. The KPI is only calculated for Endpoints and Projects. The definition of the customer is set up at the Project level, one card means one customer by default. The customer at the Endpoint differs from the customer at the Project to have an option to examine various sources of the payment traffic

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: the number of orders made by a customer per month ending by the chosen date and starting from the date of 12 months earlier.
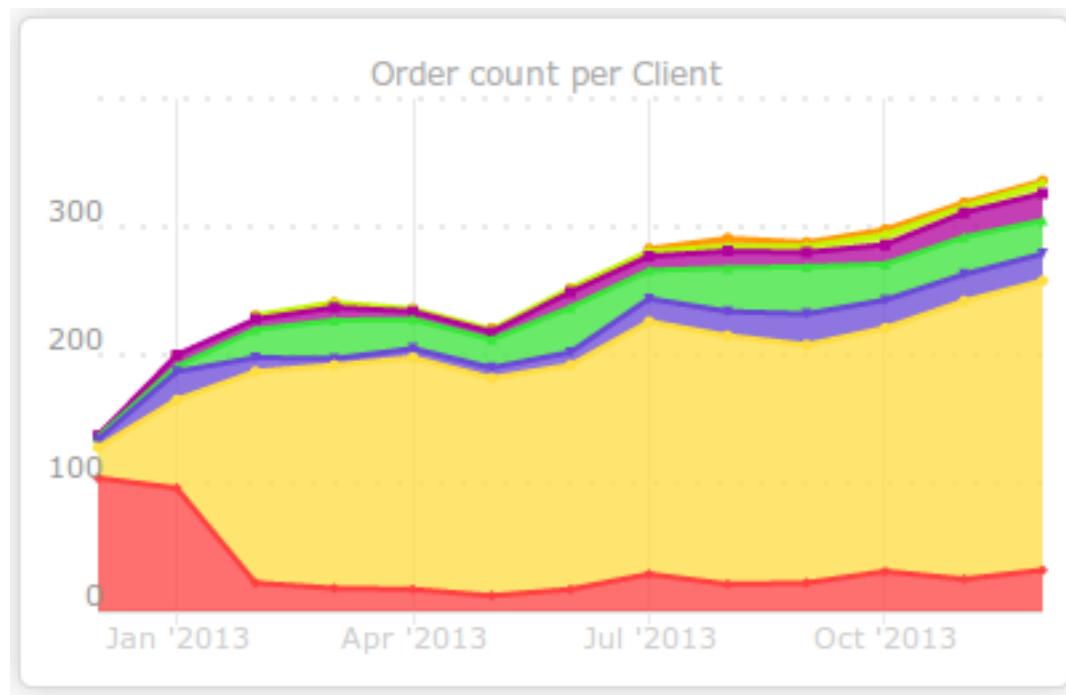
The number of orders made by a customer per month. Various numbers of orders are marked by different colors . The customers who made 5-6, 7-10 and more than 10 orders are united into one group.

The Returning Clients Conversion

Shows: The ratio of the repeated transactions made by a particular customer to the total number of transactions made by the customer for the month that fall into selected date range. The transaction is considered repeated for the chosen month if the customer has made a transaction at any time before. The KPI is only calculated for Endpoints and Projects. The definition of the customer is set up at the Project level, one card means one customer by default. The customer at the Endpoint differs from the customer at the Project to have an option to examine various sources of the payment traffic.

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: The ratio of the repeated transactions made by a particular customer to the total

number of transactions made by the customer per month ending by the chosen date and starting from the date of 12 months earlier.


The ratio of the repeated transactions made by a particular customer to the total number of transactions made by the customer per month for the past year.

Transactions By Country By Client's IP Address

Shows: The country is determined by the IP address of the customer. The transactions of any type in any status are taken into consideration. The parameter does not depend on the date range and is calculated for the lifetime.

Update frequency: daily at 00:45.

Graph: The number of transactions of any type in any status per country which is derived from the customer's IP address for the given date range, refreshed every 10 seconds.
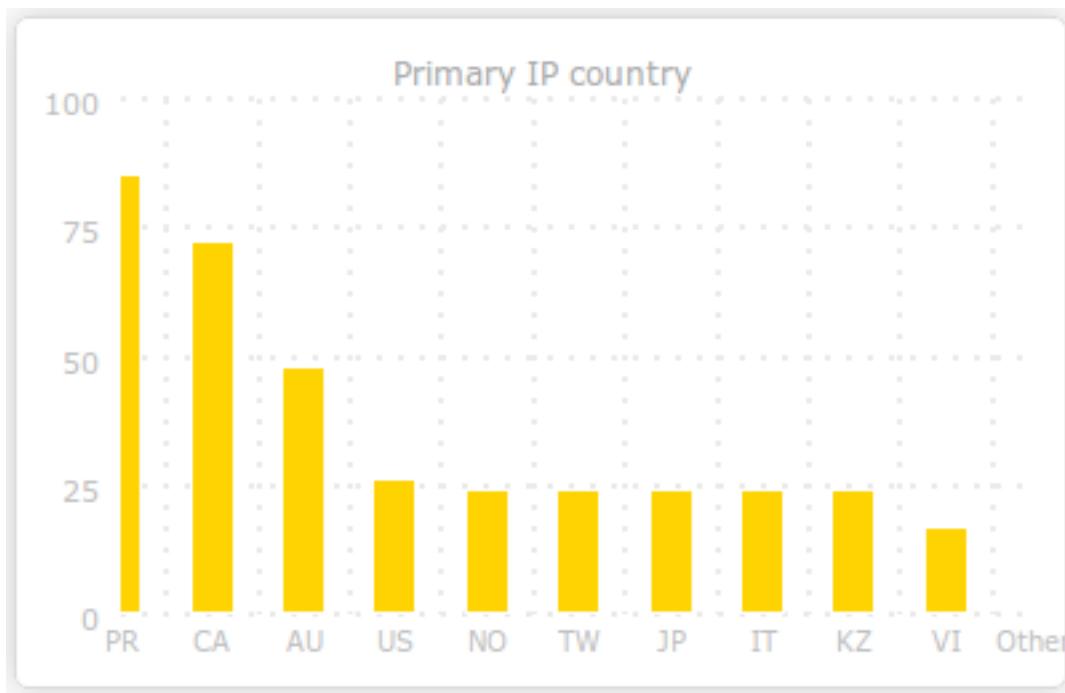
The number of transactions for top 10 countries which are derived from the customer's IP address

Transactions By Country By BIN

Shows: The country is derived from the customer's card BIN. The transactions of any type in any status are taken into consideration. The parameter does not depend on the date range and is calculated for the lifetime.

Update frequency: daily at 00:45.

Graph: The number of transactions of any type in any status per country which is derived from the customer's card BIN for the given date range, refreshed every 10 seconds.
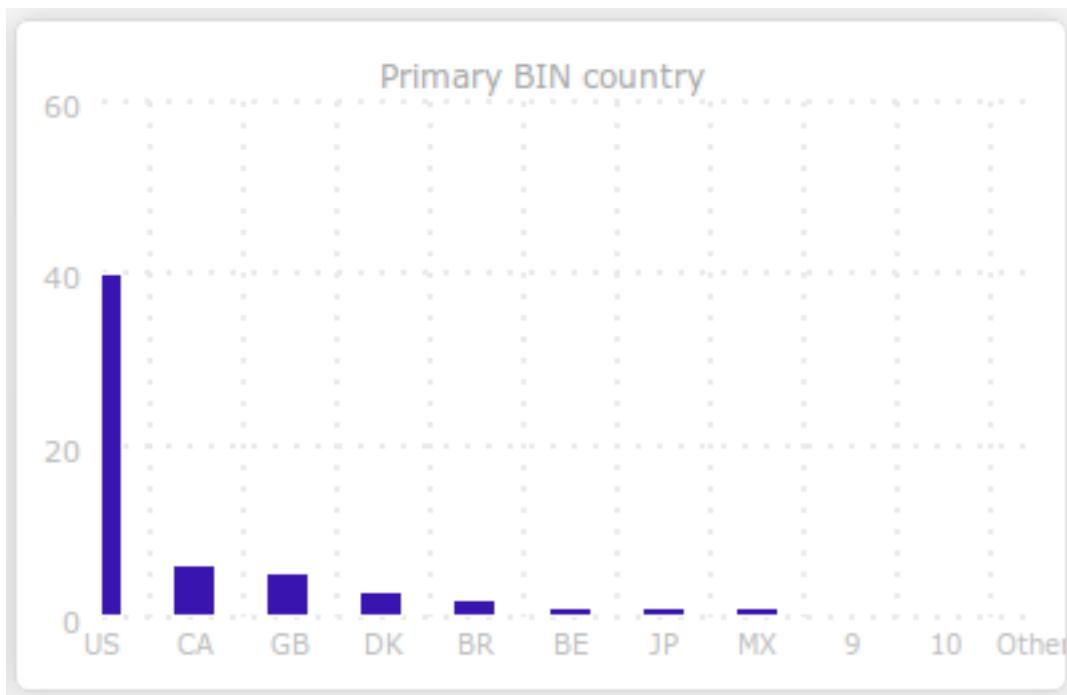
The number of transactions for top 10 countries which are derived from the customer's card BIN.

Average Earnings Per Transaction

Shows: Average earnings per transaction for Reseller or Merchant without holds for any type of transaction in any status.

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: Average earnings per transaction per hour if selected date range is Today or Yesterday; the Average earnings per transaction per day if selected date range is This Month or Previous Month.
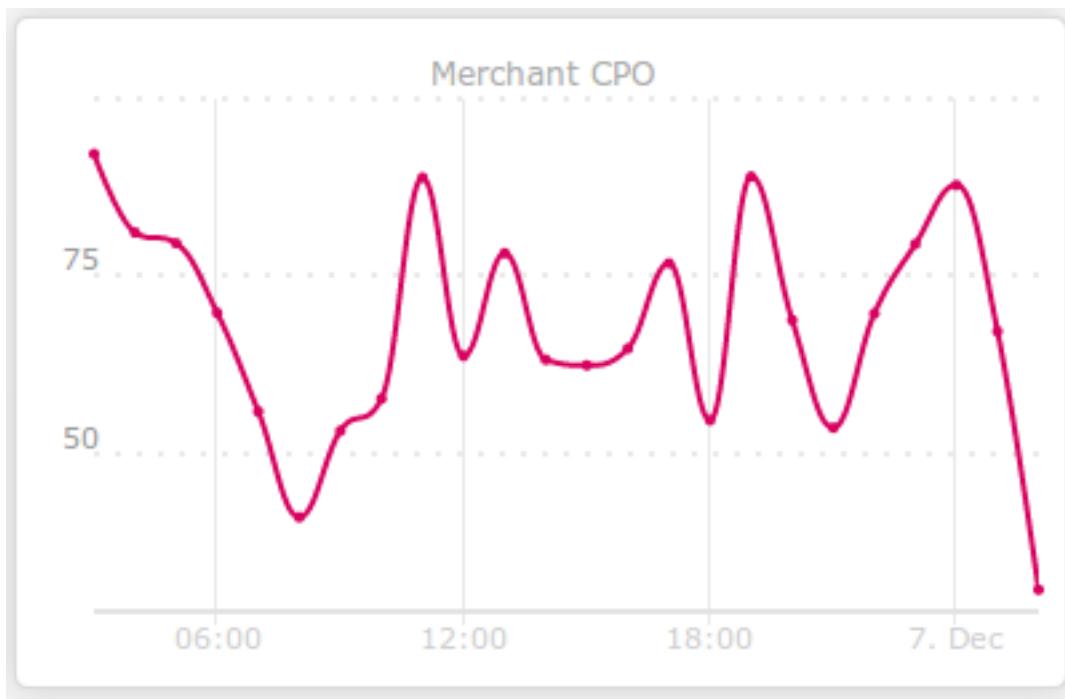
The Merchant's average earnings per transaction per hour for December 7th.

3DS/non-3DS Ratio

Shows: The ratio of the number of 3DS/non-3DS sale, preauth, transfer transactions in approved, filtered and declined statuses to the total number of such transactions for the given date range.

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: The ratio of the number of 3DS/non-3DS sale, preauth, transfer transactions in approved, filtered and declined statuses to the total number of such transactions for the given date range per day starting from the month's first date to the end date of the given date range.

Legend:

- 3D Gate filtered
- non3D Gate filtered
- 3D Gate declined
- non3D Gate declined
- 3D Gate approved
- non3D Gate approved
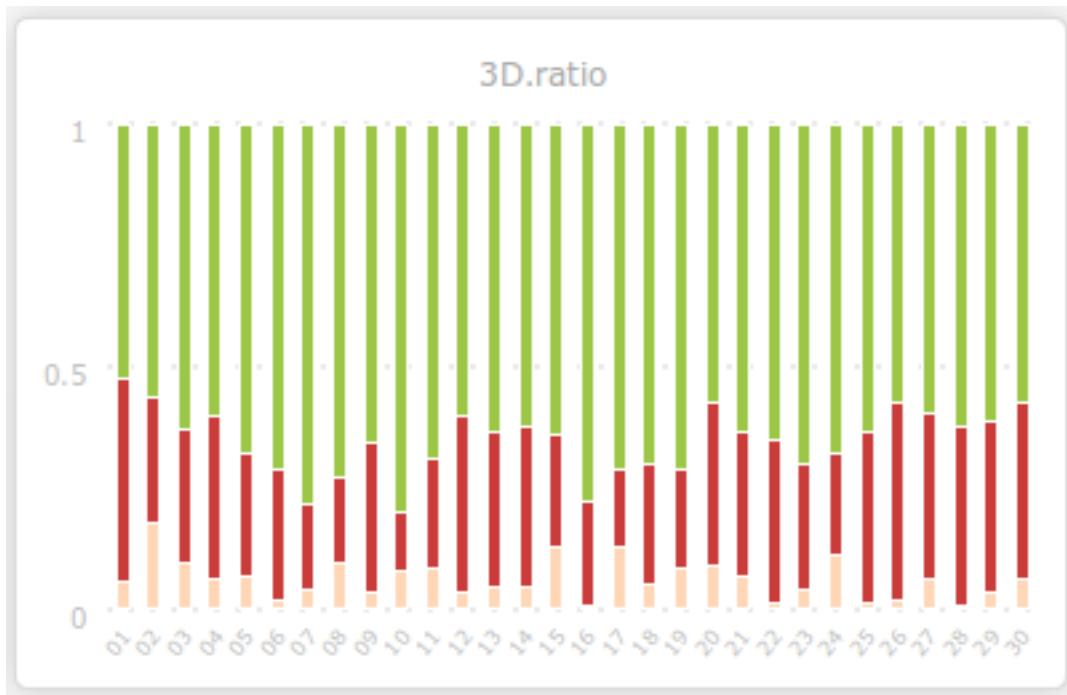
The ratio of the number of transactions in different statuses for 3DS Gate for November.
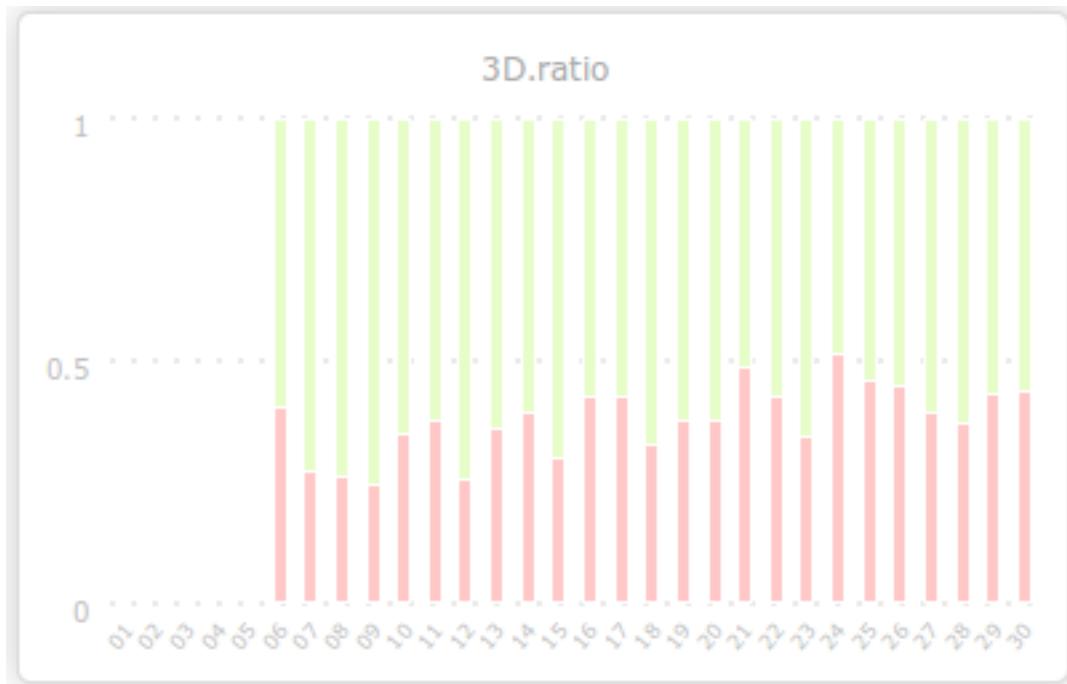
The ratio of the number of transactions in different statuses for non-3DS Gate for November.
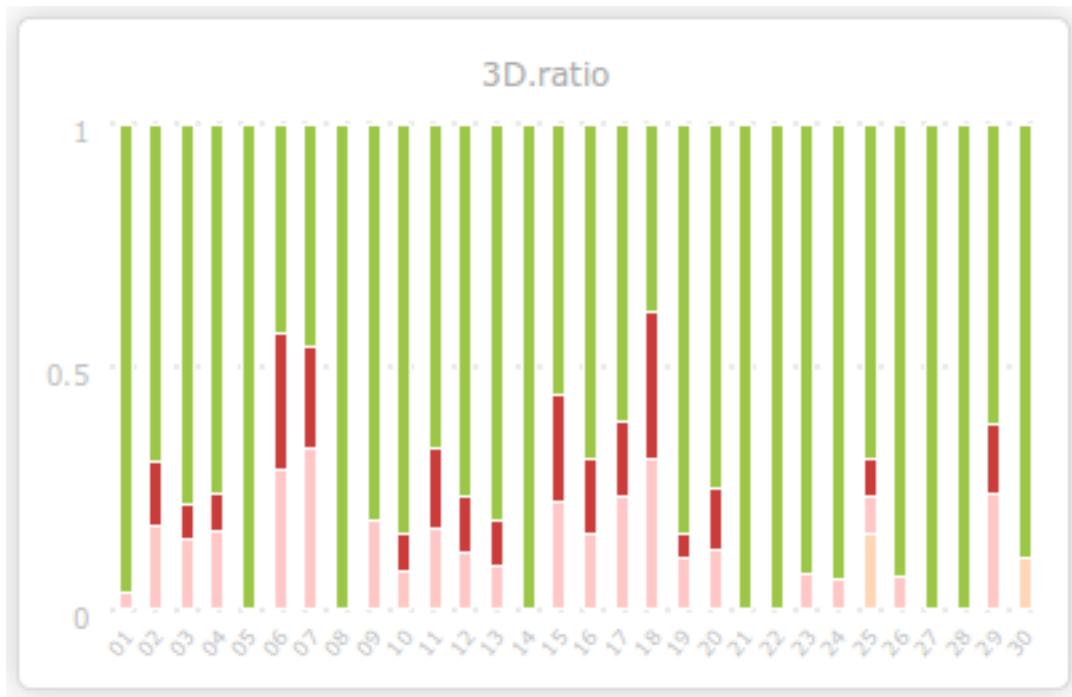
The ratio of the number of transactions in different statuses for November.

3DS/non-3DS Ratio For Declined Transactions

Shows: The ratio of the number of 3DS transactions in declined status processed with 3DS, for Enrolled cards which have MPI status Y or A to the total number of transactions of the types sale, preauth or transfer for the given period.
Update frequency: virtually real-time (no more than 10 seconds delay).
Graph: The ratio of the number of 3DS/non-3DS transactions in declined status per day for the given date range starting from the month's first date to the end date of the given date range.

Legend:

- 3D Gate, enrolled cards, MPI status "Y"
- 3D Gate, enrolled cards, MPI status "A"
- 3D Gate, enrolled cards, MPI status "U"
- 3D Gate, enrolled cards, MPI status ""
- 3D Gate, enrolled cards, MPI status "N"
- 3D Gate, cards not enrolled
- non3D Gate
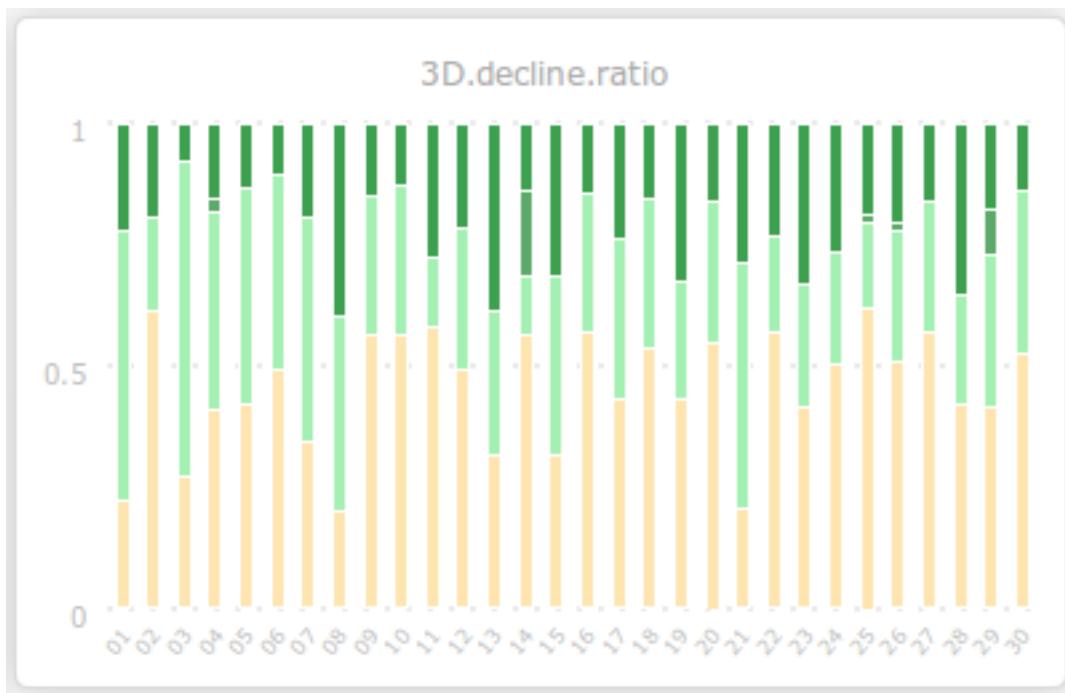
The ratio of the number of transactions in declined status with 3DS for November.
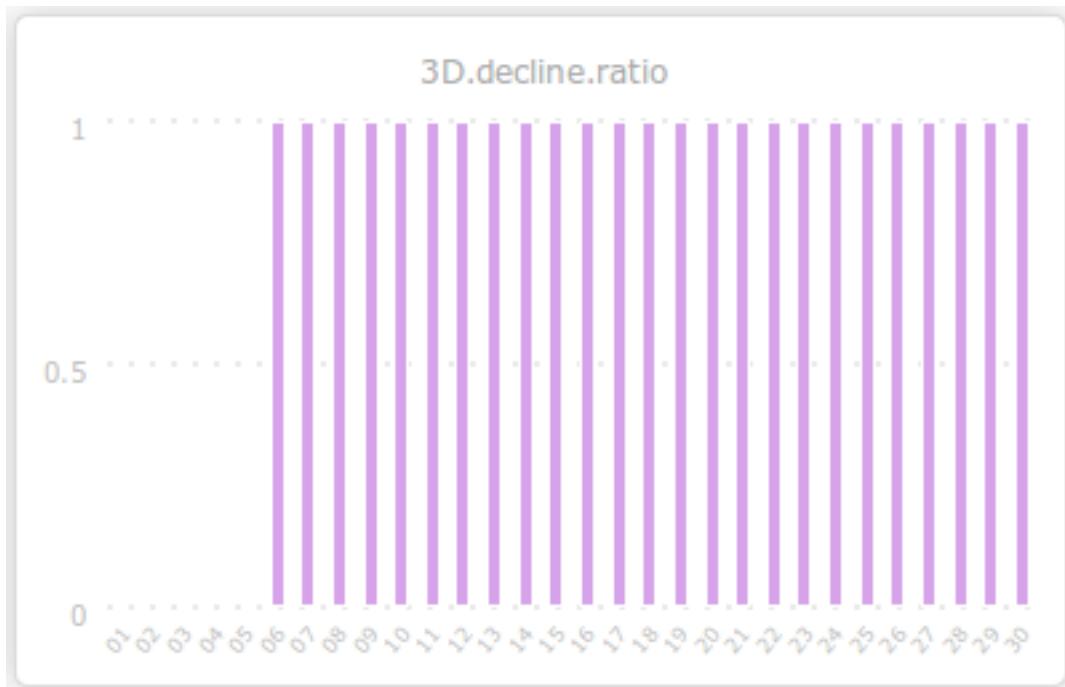
The ratio of the number of transactions in declined status with non-3DS for November.
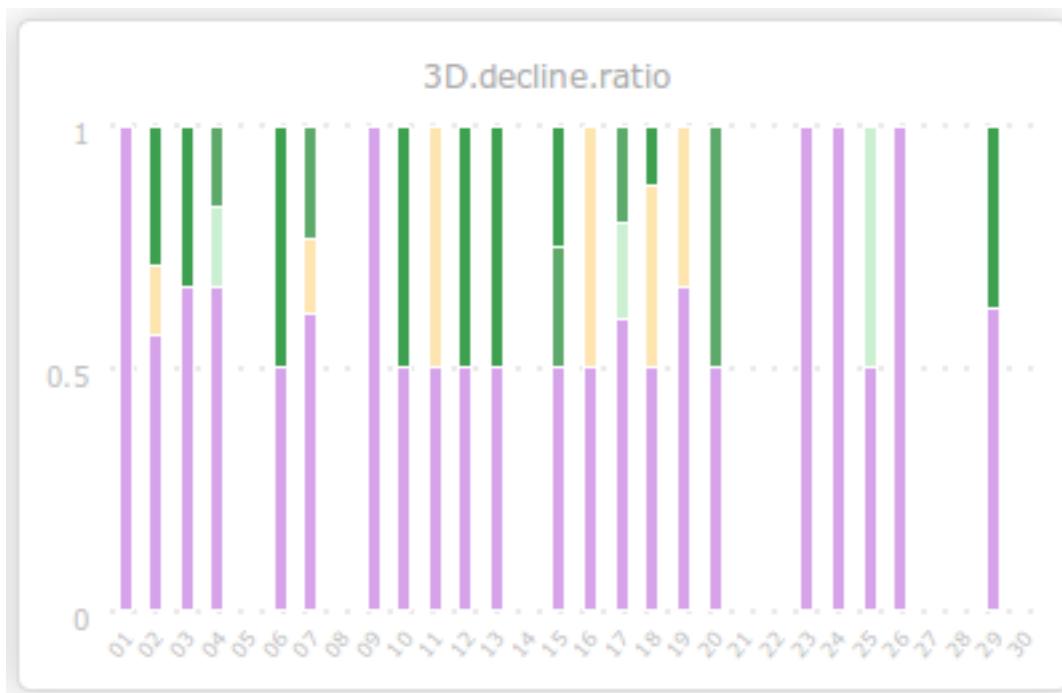
The ratio of the number of transactions in declined status for mixed traffic for November

3DS/non-3DS Ratio For Approved Transactions

Shows: The ratio of the number of 3DS transactions in approved status processed with 3DS, for Enrolled cards which have MPI status Y or A to the total number of transactions of the types sale, preauth or transfer for the given period.

Update frequency: virtually real-time (no more than 10 seconds delay).

Graph: The ratio of the number of 3DS/non-3DS transactions in approved status per day for the given date range starting from the month's first date to the end date of the given date range.


- – 3D Gate, enrolled cards, MPI status "Y"
- – 3D Gate, enrolled cards, MPI status "A"
- – 3D Gate, enrolled cards, MPI status "U"
- – 3D Gate, enrolled cards, MPI status ""
- – 3D Gate, enrolled cards, MPI status "N"
- – 3D Gate, cards not enrolled
- – non3D Gate
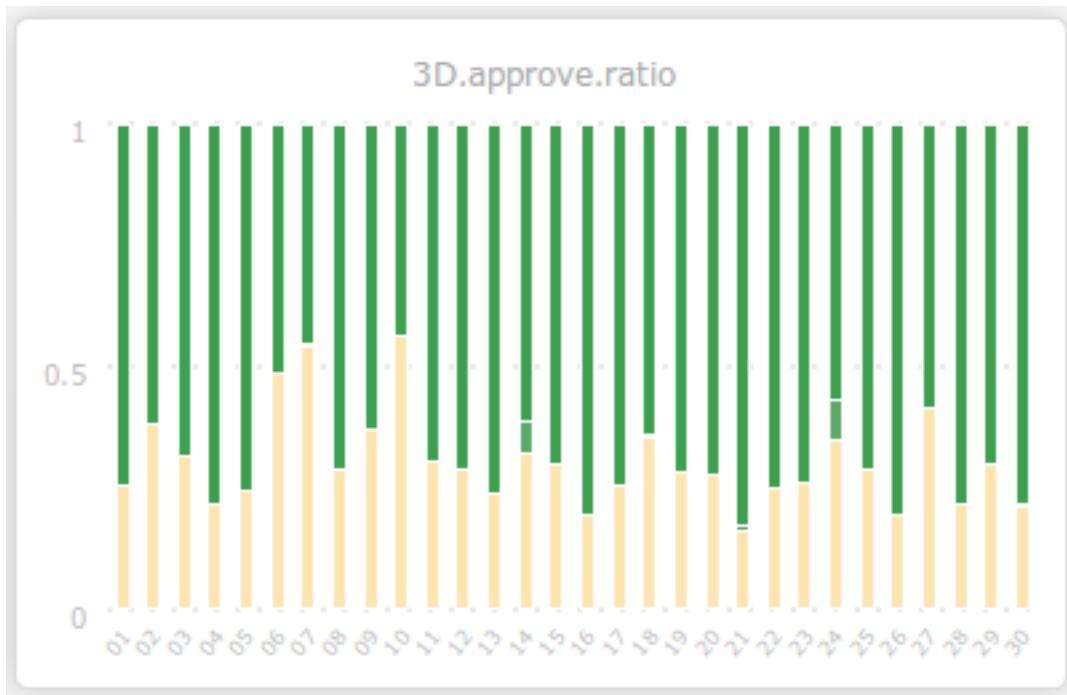
The ratio of the number of transactions in approved status with 3DS for November.
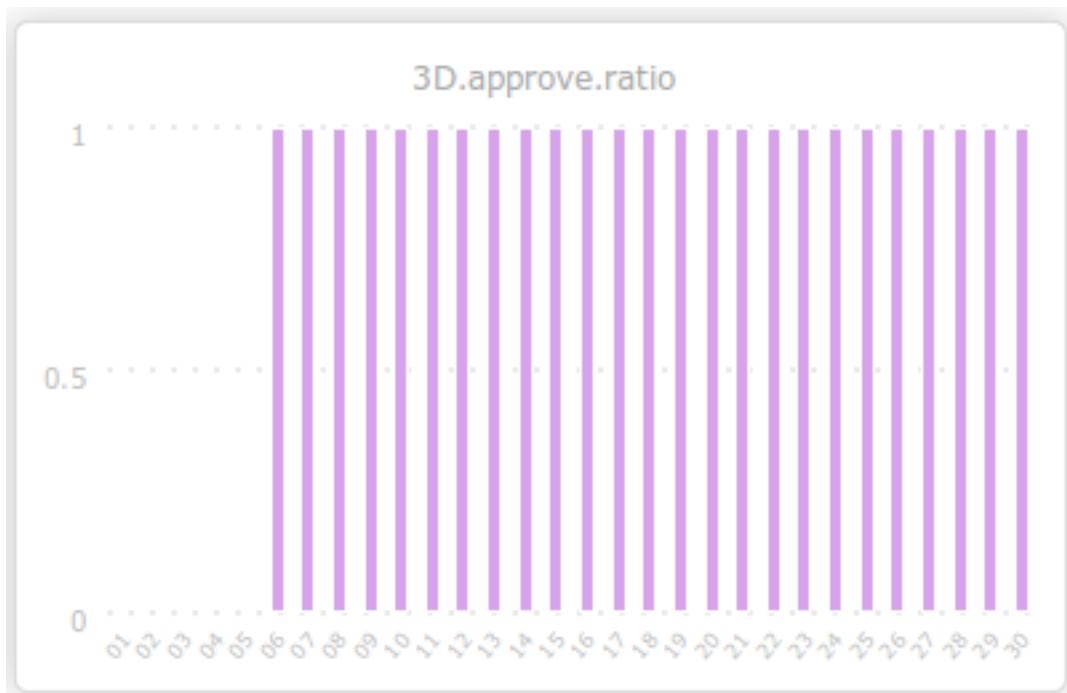
The ratio of the number of transactions in approved status with non-3DS for November.
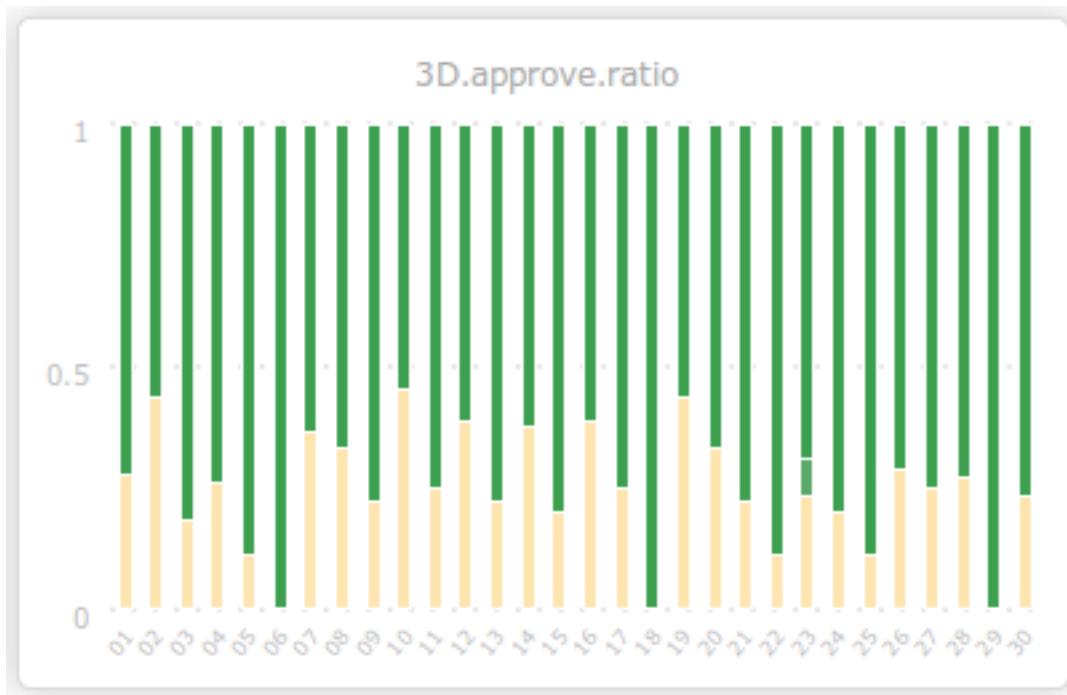
The ratio of the number of transactions in approved status for mixed traffic for November.

> **Warning:** The MPI status and Enrollment status could be only determined if Doc2.0 MPI plugin is being used or the Processor properly returns the data after 3DS verification.

9.3 Transaction Statuses And Types

- Transaction Types
- Transaction Statuses

9.3.1 Transaction Types

Doc2.0 Payment Gateway divides all transactions into several types, depending on the purpose of each transaction. Each transaction has a specific status.

sale	Acceptance of payment for provided goods or services in a single operation.

<div align="center">Table 2 – continued from previous page</div>

preauth	Blocking of a fixed amount of money on the card for the subsequent withdrawal (financial pledge). The cardholder will not be able to use the held funds, however, this money will not be withdrawn from the bank account until a subsequent request (capture) is received from the merchant. After a certain period of time, if a follow-up request is not received from the merchant, the holding of this funds amount is cancelled and it will become available for use again.
capture	Withdrawal of the previously held by "preauth" transaction funds from the cardholder bank account.
cancel	Cancellation of fund holding by "preauth" transaction.
reversal	A refund operation for previously approved transaction ("sale" or "preauth" followed by "capture"). For example, a cancellation of an order by the customer, or a partial return of goods to the store.
transfer	Peer-to-peer (p2p) transfer transaction between 2 cards. This transaction can be split into 2 separate steps in some cases - card2account and deposit2card.
chargeback	Forced refund operation initiated by the cardholder, or the issuing bank, in case of fraud.
fraud	Special marker for fraudulent transactions.
retrieval	Request of additional documents for disputed or suspicious payment. Documents can be requested from the merchant or from their agent (service provider).
account verification	Validation of Payer's card account information.
payout	Transfer of funds from merchant account to customer (receiver) banking account or digital wallet.

9.3.2 Transaction Statuses

All transactions are marked according to their statuses:

✅	Approved transaction	The transaction was processed by the acquirer successfully (payment was made as part of the transaction). Final status.
⛔	Declined transaction	For any technical reason the acquirer cannot process the transaction. For example, this may be caused by insufficient funds on the customer card or account. Final status.
🔽	Filtered transaction	The transaction was filtered by Doc2.0 Payment Gateway and was not processed. Final status.
❗	Error	Processing of transaction failed. A second attempt can be made to process the transaction. If the error occurs again, contact the Doc2.0 support service. Final status.
❓	Unknown	Payment Gateway failed to get final transaction status. Contact the Doc2.0 support service to clarify the transaction status. Non final status.
❌	Failed	System's internal status. It means there are no available settings to route transaction in the system due to filters or other restrictions. Final status.
▶	Processing	Transaction is being processed. If transaction status haven't been changed for one hour - something went wrong, please inform Payment Gateway support service. Non final status.

Note: After reconciliation transaction status could be changed even if transaction is in final status.