



# TRANSACTION MONITORING API

Developers Guide

[Content description](#)

This is a reference manual and configuration guide for the NeoCheck Transaction Monitoring (TM) API product. It shows how to interact with the JSON Web API from an external client to monitor the customer transactions to prevent fraudulent and money laundering attempts.

Madrid, November 2<sup>nd</sup> 2021

## *Disclaimer*

---

The information contained within this document is and shall remain the property of NeoCheck. It must not be produced in whole or in part, or given or communicated to any third party without the prior consent of NeoCheck.

Whilst careful attention has been paid to ensure the appropriate referencing of information and sources, it is possible that a document of this nature might contain some errors. In such cases, upon notification NeoCheck will immediately analyze and make any required corrections or amendments.

©NeoCheck 2021

## Release Notes

Version	Date	Description
<b>1.0</b>	02/08/2021	Initial Version
<b>1.1</b>	16/08/2021	Transactions controller added
<b>1.2</b>	06/09/2021	API models changes
<b>1.3</b>	17/09/2021	Accounts and customers controllers added
<b>1.4</b>	01/10/2021	API endpoints changes
<b>1.5</b>	15/10/2021	Alerts controller added
<b>1.6</b>	04/11/2021	API models changes
<b>1.7</b>	01/12/2021	API models changes

## Index

Release Notes.....	3
1. NeoCheck Transaction Monitoring API Endpoint .....	5
2. Authentication .....	6
2.1. Obtain JWT Authentication Token .....	6
3. Transactions management .....	7
3.1. Create transaction .....	7
3.2. Get transaction by Id .....	7
3.3. Get transaction alerts .....	8
4. Accounts management .....	9
4.1. Create account .....	9
4.2. Get account by Id .....	9
5. Customers management .....	10
5.1. Create customer .....	10
5.2. Get customer by Id .....	10
5.3. Validate customer login .....	11
6. Models.....	12
7. Enum datatypes .....	15

## 1. NeoCheck Transaction Monitoring API Endpoint

NeoCheck provides a JSON API to monitor the customer transactions to prevent fraudulent and money laundering.

API Endpoint	Environment
<a href="https://transactionmonitoring.azurewebsites.net/">https://transactionmonitoring.azurewebsites.net/</a>	PRE
<a href="https://transactionmonitoring.azurewebsites.net/">https://transactionmonitoring.azurewebsites.net/</a>	PRO

API Swagger documentation	Environment
<a href="https://transactionmonitoringapi.azurewebsites.net/swagger">https://transactionmonitoringapi.azurewebsites.net/swagger</a>	PRE
<a href="https://transactionmonitoringapi.azurewebsites.net/swagger">https://transactionmonitoringapi.azurewebsites.net/swagger</a>	PRO

## 2. Authentication

The NeoCheck Transaction Monitoring API access is protected by using OAuth 2.0 authorization tokens.

### 2.1. Obtain JWT Authentication Token

HTTPS POST method to authenticate. In order to request access to Transaction Monitoring API, you must call the authentication method with your API `client_id` and `client_secret`. Once validated, you will receive an authorization token, which must be used to call API methods.

Endpoint	HTTP Method
<b>v1/authorization</b>	POST

Request Parameters:

Name	Type	Description
<b>apiKey</b>	string	your client Id
<b>apiSecret</b>	string	Your client secret

Response:

If request is correct, you will receive a Success response with the access token generated. This token is valid for 1 hour, although we encourage to request a new token for each call to the API if they are not in a loop, so to avoid Unauthorized errors.

HTTP Code	Body	Description
<b>200</b>	String	Valid OAuth token for request authorization
<b>400</b>	String	Invalid token request
<b>500</b>	String	Internal Server Error

## 3. Transactions management

### 3.1. Create transaction

HTTPS POST method to create a new transaction.

Endpoint	HTTP Method
<b>/v1/transactions</b>	POST

Request Parameters:

Name	Type	Description
<b>CreateTransactionRequest</b>	Body parameter	JSON object with the transaction type, counterpart and beneficiary information and the rest of the transaction data.

Response:

Returns the new created transaction data including the status and the list of the alerts raised.

HTTP Code	Body	Description
<b>200</b>	CreateTransactionResponse JSON object	The transaction data in JSON format
<b>400</b>		Invalid parameters
<b>401</b>		Unauthorized
<b>500</b>		Internal Server Error

### 3.2. Get transaction by Id

HTTPS GET method to get a transaction by Id.

Endpoint	HTTP Method
<b>/v1/transactions/{id}</b>	GET

Request Parameters:

Name	Type	Description
<b>id</b>	Query parameter	The transaction identifier

Response:

Returns the transaction corresponding to the identifier passed as parameter.

HTTP Code	Body	Description
<b>200</b>	TransactionResponse JSON object	The transaction data in JSON format
<b>400</b>		Invalid parameters
<b>401</b>		Unauthorized
<b>500</b>		Internal Server Error

### 3.3. Get transaction alerts

HTTPS GET method to get the transaction alerts list.

Endpoint	HTTP Method
<code>/v1/transactions/{id}/alerts</code>	GET

Request Parameters:

Name	Type	Description
<code>transactionId</code>	Query parameter	The transaction identifier

Response:

Returns the alerts list generated for the transaction identifier passed as parameter.

HTTP Code	Body	Description
<b>200</b>	TransactionAlertResponse[] JSON object	The list of transaction alerts in JSON format
<b>400</b>		Invalid query parameters
<b>401</b>		Unauthorized
<b>500</b>		Internal Server Error



## 4. Accounts management

### 4.1. Create account

HTTPS POST method to create a new account for a customer.

Endpoint	HTTP Method
<code>/v1/accounts</code>	POST

Request Parameters:

Name	Type	Description
<b>AccountRequest</b>	Body parameter	JSON object with the account codes (swift, iban, bank code, office, control digit and account number) and the customer identifier

Response:

Returns the identifier of the new account created.

HTTP Code	Body	Description
<b>200</b>	Guid object	The identifier of the new account
<b>400</b>		Invalid parameters
<b>401</b>		Unauthorized
<b>500</b>		Internal Server Error

### 4.2. Get account by Id

HTTPS GET method to get an account by Id.

Endpoint	HTTP Method
<code>/v1/accounts/{id}</code>	GET

Request Parameters:

Name	Type	Description
<b>id</b>	Query parameter	The account identifier

Response:

Returns the account corresponding to the identifier passed as parameter.

HTTP Code	Body	Description
<b>200</b>	AccountResponse JSON object	The account data in JSON format
<b>400</b>		Invalid parameters
<b>401</b>		Unauthorized
<b>500</b>		Internal Server Error

## 5. Customers management

### 5.1. Create customer

HTTPS POST method to create a new customer.

Endpoint	HTTP Method
<code>/v1/customers</code>	POST

Request Parameters:

Name	Type	Description
<code>CustomerRequest</code>	Body parameter	JSON object with customer data

Response:

Returns the identifier of the new customer created.

HTTP Code	Body	Description
<b>200</b>	Guid object	The identifier of the new customer
<b>400</b>		Invalid request
<b>401</b>		Unauthorized
<b>500</b>		Internal Server Error

### 5.2. Get customer by Id

HTTPS GET method to get an customer by Id.

Endpoint	HTTP Method
<code>/v1/customers/{id}</code>	GET

Request Parameters:

Name	Type	Description
<code>id</code>	Query parameter	The customer identifier

Response:

Returns the customer corresponding to the identifier passed as parameter.

HTTP Code	Body	Description
<b>200</b>	CustomerResponse JSON object	The customer data in JSON format
<b>400</b>		Invalid query parameters
<b>401</b>		Unauthorized
<b>500</b>		Internal Server Error

### 5.3. Validate customer login

HTTPS POST method to validate a customer login.

Endpoint	HTTP Method
<code>/v1/customers/{id}/ValidateLogin</code>	POST

Request Parameters:

Name	Type	Description
<code>id</code>	Query parameter	The customer identifier
<code>CustomerLoginRequest</code>	Body parameter	JSON object with customer login data

Response:

Returns the risk level of the customer login.

HTTP Code	Body	Description
<code>200</code>	CustomerLoginResultModel JSON object	The login validation result with risk level in JSON format
<code>400</code>		Invalid request
<code>401</code>		Unauthorized
<code>500</code>		Internal Server Error

## 6. Models

### AccountRequest

Name	Type	Required/Optional	Nullable
swift	String	Optional	True
iban	String	Required	True
bankCode	String	Required	True
office	String	Required	True
controlDigit	String	Required	True
accountNumber	String	Required	True
enabled	Boolean	Required	False
customerId	Guid	Required	False

### AccountResponse

Name	Type	Required/Optional	Nullable
id	Guid	Required	True
swift	String	Optional	True
iban	String	Required	True
bankCode	String	Required	True
office	String	Required	True
controlDigit	String	Required	True
accountNumber	String	Required	True
enabled	Boolean	Required	False
customerId	Guid	Required	False

### AuthorizationModel

Name	Type	Required/Optional	Nullable
apiKey	String	Required	False
apiSecret	String	Required	False

### CreateTransactionRequest

Name	Type	Required/Optional	Nullable
transactionType	TransactionTypes	Required	False
counterpartName	String	Optional	True
accountNumber	String	Required	False
country	String	Required	False
currency	String	Required	False
exchangeRate	String	Optional	True
payerAccountId	Guid	Optional	True
beneficiary	Guid	Optional	True

### CreateTransactionAlertResponse

Name	Type	Required/Optional	Nullable
id	Guid	Required	False
status	AlertStatuses	Required	False
alertId	Guid	Required	False

## CreateTransactionResponse

Name	Type	Required/Optional	Nullable
<b>id</b>	Guid	Required	False
<b>status</b>	TransactionStatuses	Required	False
<b>matchStatus</b>	MatchStatuses	Required	False
<b>transactionAlerts</b>	CreateTransactionAlertResponse[]	Optional	True

## CustomerLoginAlertModel

Name	Type	Required/Optional	Nullable
<b>alertType</b>	CustomerLoginAlertType	Required	False
<b>alertRisk</b>	CustomerLoginAlertRisks	Required	False
<b>Description</b>	String	Optional	True

## CustomerLoginRequest

Name	Type	Required/Optional	Nullable
<b>ipAddress</b>	String	Required	True
<b>location</b>	String	Optional	True
<b>device</b>	String	Required	True
<b>date</b>	DateTime	Required	True

## CustomerLoginResultModel

Name	Type	Required/Optional	Nullable
<b>customerId</b>	Guid	Required	True
<b>Alerts</b>	CustomerLoginAlertModel[]	Required	True

## CustomerRequest

Name	Type	Required/Optional	Nullable
<b>customerProfile</b>	CustomerProfiles	Required	False
<b>customerType</b>	CustomerTypes	Required	False
<b>firstName</b>	String	Required	True
<b>lastName</b>	String	Optional	True
<b>documentNumber</b>	String	Required	True
<b>nationality</b>	String	Required	True
<b>birthdate</b>	DateTime	Optional	True
<b>email</b>	String	Optional	True
<b>phone</b>	String	Optional	True

## TransactionAlertResponse

Name	Type	Required/Optional	Nullable
<b>id</b>	Guid	Required	False
<b>status</b>	AlertStatuses	Required	False
<b>reviewDate</b>	DateTime	Optional	True
<b>reviewerComments</b>	String	Optional	True
<b>transactionId</b>	Guid	Required	False
<b>alertId</b>	Guid	Required	False

## TransactionResponse

Name	Type	Required/Optional	Nullable
<b>id</b>	Guid	Required	False
<b>date</b>	DateTime	Required	False
<b>status</b>	TransactionStatuses	Required	False
<b>transactionType</b>	TransactionTypes	Required	False
<b>matchStatus</b>	MatchStatuses	Required	True
<b>counterpartName</b>	String	Optional	True
<b>accountNumber</b>	String	Optional	True
<b>country</b>	String	Optional	True
<b>amount</b>	Decimal	Required	False
<b>standardAmount</b>	Decimal	Optional	True
<b>currency</b>	String	Optional	True
<b>exchangeRate</b>	Decimal	Required	False
<b>reviewDate</b>	DateTime	Optional	True
<b>reviewerComments</b>	String	Optional	True
<b>payerAccountId</b>	Guid	Optional	True
<b>beneficiaryAccountId</b>	Guid	Optional	True
<b>userId</b>	Guid	Required	False
<b>reviewerId</b>	Guid	Optional	True
<b>transactionAlerts</b>	TransactionAlertResponse[]	Optional	True

## 7. Enum datatypes

### AlertStatuses

Value	Name
0	PendingReview
1	Confirmed
2	Rejected

### CustomerLoginAlertRisks

Value	Name
0	NoRisk
1	LowRisk
2	ModerateRisk
3	HighRisk

### CustomerLoginAlertTypes

Value	Name
0	Location
1	Device
2	Date

### CustomerProfiles

Value	Name
0	All
1	Individual
2	Retail
3	SoleTrader
4	Corporate

### CustomerTypes

Value	Name
0	Individual
1	Company

### MatchStatuses

Value	Name
0	Potential
1	Matched

## TransactionStatuses

Value	Name
0	Approved
1	Denied
2	PendingReview
3	ReviewerApproved
4	ReviewerDenied
5	StandBy

## TransactionTypes

Value	Name
0	Income
1	Outcome