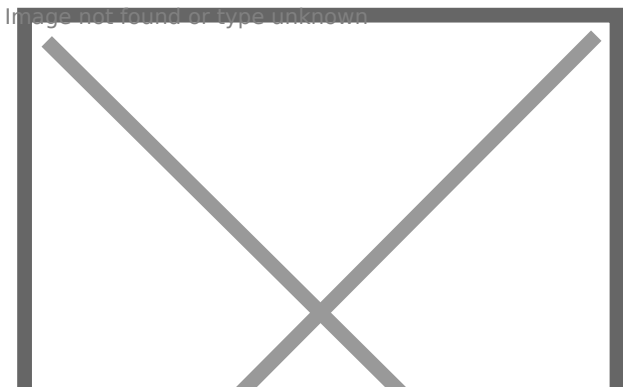


# Transactions Flow

A transaction in the processing flow can be in different states:



Status	Description
AUTHORIZED	transaction was successfully authorized. Resources on Cardholder's account are blocked, and the amount is "promised" to the merchant. At this moment none of the resources transfer was performed.
CLEARED	transaction is settled successfully. Resources on Cardholder's account gets unblocked and transferred to Merchant's account. Block on Cardholder account becomes charge, and "promised" amount becomes income on Merchant's account.
REVERSED	transaction was withdrawn, for example as error reported by Merchant. Block is removed and resources on the Cardholder account stay unmoved. None of the transfers is performed.

Transaction processing status in Antaca system:

Status	Description	Example - Legacy Transaction Notifier
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SUCCESS	<p>indicates that the transaction ( <b>AUTHORIZED, CLEARED OR REVERSED</b>) has been successfully processed in Antaca.</p>	<pre>{   "status": "SUCCESS",   "date": "2023-01-01T06:01:39+00:00",   "description": "Description",   "transaction": {     "id": "79c353a-1421-46ca-8d74-c5dca67942fe",     "balanceId": "79c353a-1421-46ca-8d74-c5dca67942fe",     "resourceId": "79c353a-1421-46ca-8d74-c5dca67942fe",     "resource": "card",     "cardId": "100",     "externalTransactionId": "478927492",     "referenceExternalTransactionId": null,     "type": "POS",     "category": "DEBIT",     "amount": 300,     "currency": "EUR",     "originalAmount": 1000,     "originalCurrency": "POL",     "status": "AUTHORIZED",     "description": "Description",     "date": "2023-01-01T06:01:39+00:00",     "referenceExternalTransactionDate": null,     "transactionData": {       "mcc": "5816",       "merchantIdentifier": "7498274892",       "captureMode": "ECOM",       "lastFourDigits": "1000",       "acquirerCountry": "POL"     }   } }</pre>
DECLINED	<p>indicates that the transaction has been declined. None of the funds are transferred from Cardholder's account.</p> <p>The reason for the transaction rejection (description parameter) is listed in the documentation in the table below:  <a href="https://developer.verestro.com/books/card-management-system/page/your-apis-for-us#bkmrk-external-transaction">https://developer.verestro.com/books/card-management-system/page/your-apis-for-us#bkmrk-external-transaction</a></p> <p>An example of a rejected transaction could be insufficient funds in the account (INSUFFICIENT_FUNDS).</p>	<pre>{   "status": "DECLINED",   "date": "2023-01-01T06:01:39+00:00",   "description": "Description",   "transaction": {     "id": "79c353a-1421-46ca-8d74-c5dca67942fe",     "balanceId": "79c353a-1421-46ca-8d74-c5dca67942fe",     "resourceId": "79c353a-1421-46ca-8d74-c5dca67942fe",     "resource": "card",     "cardId": "100",     "externalTransactionId": "74892729",     "referenceExternalTransactionId": null,     "type": "POS",     "category": "DEBIT",     "amount": 70000,     "currency": "EUR",     "originalAmount": 70000,     "originalCurrency": "EUR",     "status": "AUTHORIZED",     "description": "Description",     "date": "2023-01-01T06:01:39+00:00",     "referenceExternalTransactionDate": null,     "transactionData": {       "mcc": "2312",       "merchantIdentifier": "000000136",       "captureMode": "ECOM",       "lastFourDigits": "1000",       "acquirerCountry": "POL"     }   } }</pre>

INVALID	indicates that the transaction can't be processed. None of the funds are transferred from Cardholder's account.	{ "status": "INVALID", "date": "2023-01-01T06:01:39+00:00", "description": "Description", "transaction": { "id": "79c353a-1421-46ca-8d74-c5dca67942fe", "balanceId": "79c353a-1421-46ca-8d74-c5dca67942fe", "resourceId": "79c353a-1421-46ca-8d74-c5dca67942fe", "resource": "card", "cardId": "100", "externalTransactionId": "78391719", "referenceExternalTransactionId": "783197893", "type": "Adjustment", "category": "CREDIT", "amount": 800, "currency": "EUR", "originalAmount": null, "originalCurrency": null, "status": "REVERSED", "description": "Description", "date": "2023-01-01T06:01:39+00:00", "referenceExternalTransactionDate": "2023-01-01T06:01:39+00:00", "transactionData": [] } }
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# Transaction Processing Cases

## REVERSAL

Transaction reversal may occur in several cases:

- The merchant did not receive a timely response regarding the authorization status from the payment schema or there were connection problems on the payment schema which generated a timeout on the merchant's side.
- A timeout occurred on the merchant's side and the transaction could not be completed.

Below are examples of payloads from individual services: for (1.) Debit transaction and (2.) Reversal that follows:

	Legacy Transaction Notifier	Transaction History Core	External Balance
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1. Debit transaction	<pre>{   "status": "SUCCESS",   "date": "2023-01-01T10:10:57+00:00",   "description": "APPROVED",   "transaction": {     "id": "24cbc777-de3f-42e2-b772-7d5427dc616e",     "balanceId": "16b53ddb-877c-4d6c-80c7-2d3750f24b65",     "resourceId": "59664b2b-8403-4205-a400-92283fa95ffe",     "resource": "card",     "cardId": "222",     "externalTransactionId": "177482",     "referenceExternalTransactionId": null,     "type": "POS",     "category": "DEBIT",     "amount": 2233,     "currency": "EUR",     "originalAmount": 76000,     "originalCurrency": "THB",     "status": "AUTHORIZED",     "description": "Description",     "date": "2023-01-01T10:10:54+00:00",     "referenceExternalTransactionDate": null,     "transactionData": {       "mcc": "4121",       "merchantIdentifier": "12345678",       "captureMode": "ECOM",       "lastFourDigits": "1234",       "acquirerCountry": "THA"     }   } }</pre>	<pre>{   "id": "81111111",   "clientTransactionId": "24cbc777-de3f-42e2-b772-7d5427dc616e",   "amountMinor": 2233,   "currency": "EUR",   "type": "PURCHASE",   "status": "AUTHORIZE",   "timestamp": "2023-01-01T10:10:54Z",   "description": "Description",   "comment": null,   "userId": 111,   "userExternalId": null,   "cardId": 222,   "externalCardId": null,   "deviceId": null,   "externalDeviceId": null,   "paymentTokenId": null,   "cardLastFourDigits": "1234",   "paymentTokenLastFourDigits": null,   "cardBin": "555770",   "userPhone": "4811222333",   "userEmail": "example@example.com",   "merchantName": "Description",   "merchantPostalCode": null,   "merchantTransactionId": "177482",   "transactionCountryCode": "THA",   "comboCardAccountType": null,   "issuerResponseInformation": null,   "transactionChannel": "E-COMMERCE",   "area": "PREPAID",   "ibanId": null,   "deviceInstallationId": null,   "employeeGroupId": null,   "issuerId": null,   "corporationId": null,   "mcc": "4121",   "mccCategory": null,   "balanceId": "16b53ddb-877c-4d6c-80c7-2d3750f24b65",   "originalAmountMinor": 76000,   "originalCurrency": "THB",   "exchangeRate": 34.053252272342,   "balanceMinorValueAfterTransaction": 20000,   "commissionMinorValue": 22,   "clearingTimestamp": null,   "parentId": null,   "ica": null,   "contrahent": {     "iban": null,     "bic": null,     "name": "Description"   },   "attachmentStatus": "EMPTY",   "incorrectAttachmentStatusReason": null,   "labels": [],   "categoriesInfo": null,   "walletReference": null,   "balanceMinorValueBeforeTransaction": null,   "interchangeMinorAmount": null,   "interchangeCurrency": null }</pre>	<p><b>endpoint:</b></p> <p><b>transactions/debit</b></p> <pre>{   "id": "24cbc777-de3f-42e2-b772-7d5427dc616e",   "balanceId": "16b53ddb-877c-4d6c-80c7-2d3750f24b65",   "resourceId": "59664b2b-8403-4205-a400-92283fa95ffe",   "resource": "card",   "transactionId": "177482",   "referenceTransactionId": null,   "type": "pos",   "amount": 2233,   "currency": "EUR",   "originalAmount": 76000,   "originalCurrency": "THB",   "status": "AUTHORIZED",   "description": "Description",   "date": "2023-01-01T10:10:54+00:00",   "transactionData": {     "mcc": "4121",     "merchantIdentifier": "12345678",     "merchantName": null,     "captureMode": "ECOM",     "cardId": "222",     "lastFourDigits": "1234",     "acquirerCountry": "THA",     "mdesDigitizedWalletId": null,     "cashbackPosCurrencyCode": null,     "cashbackPosAmount": "0",     "lastFourDpan": null,     "adjustmentReasonDescription": null,     "retrievalReferenceNumber": "443322110088"   } }</pre>
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2. Reverse transaction	<pre>{ "status": "SUCCESS", "date": "2023-01-01T11:50:10+00:00", "description": "APPROVED", "transaction": { "id": "24cbc777-de3f-42e2-b772-7d5427dc616e", "balanceId": "16b53ddb-877c-4d6c-80c7-2d3750f24b65", "resourceId": "59664b2b-8403-4205-a400-92283fa95ffe", "resource": "card", "cardId": "222", "externalTransactionId": "2678823", "referenceExternalTransactionId": "177482", "type": "Adjustment", "category": "CREDIT", "amount": 2233, "currency": "EUR", "originalAmount": null, "originalCurrency": null, "status": "REVERSED", "description": "Description", "date": "2023-01-01T13:43:30+00:00", "referenceExternalTransactionDate": "2023-01-01T10:10:54+00:00", "transactionData": [] } }</pre>	<pre>{ "id": "81111111", "clientTransactionId": "24cbc777-de3f-42e2-b772-7d5427dc616e", "amountMinor": 0, "currency": "EUR", "type": "PURCHASE", "status": "REVERSED", "timestamp": "2023-01-01T10:10:54Z", "description": "Description", "comment": null, "userId": 111, "userExternalId": null, "cardId": 222, "externalCardId": null, "deviceId": null, "externalDeviceId": null, "paymentTokenId": null, "cardLastFourDigits": "1234", "paymentTokenLastFourDigits": null, "cardBin": "555770", "userPhone": "48111222333", "userEmail": "example@example.com", "merchantName": "Description", "merchantPostalCode": null, "merchantTransactionId": "2678823", "transactionCountryCode": "THA", "comboCardAccountType": null, "issuerResponseInformation": null, "transactionChannel": "E-COMMERCE", "area": "PREPAID", "ibanId": null, "deviceInstallationId": null, "employeeGroupId": null, "issuerId": null, "corporationId": null, "mcc": "4121", "mccCategory": null, "balanceId": "16b53ddb-877c-4d6c-80c7-2d3750f24b65", "originalAmountMinor": 76000, "originalCurrency": "THB", "exchangeRate": 34.053252272342, "balanceMinorValueAfterTransaction": 20000, "commissionMinorValue": 22, "clearingTimestamp": null, "parentId": null, "ica": null, "contrahent": { "iban": null, "bic": null, "name": "Description" }, "attachmentStatus": "EMPTY", "incorrectAttachmentStatusReason": null, "labels": [], "categoriesInfo": null, "walletReference": null, "balanceMinorValueBeforeTransaction": null, "interchangeMinorAmount": null, "interchangeCurrency": null }</pre>	<p><b>endpoint:</b></p> <p><b>transactions/force-credit</b></p> <pre>{ "id": "24cbc777-de3f-42e2-b772-7d5427dc616e", "balanceId": "16b53ddb-877c-4d6c-80c7-2d3750f24b65", "resourceId": "59664b2b-8403-4205-a400-92283fa95ffe", "resource": "card", "transactionId": "2678823", "referenceTransactionId": "177482", "type": "adjustment", "amount": 2233, "currency": "EUR", "originalAmount": null, "originalCurrency": null, "status": "REVERSED", "description": "Description", "date": "2023-01-01T13:43:30+00:00", "transactionData": { "mcc": null, "merchantIdentifier": null, "merchantName": null, "captureMode": null, "cardId": "222", "lastFourDigits": null, "acquirerCountry": null, "mdesDigitizedWalletId": null, "cashbackPosCurrencyCode": null, "cashbackPosAmount": null, "lastFourDpan": null, "adjustmentReasonDescription": null, "retrievalReferenceNumber": null } }</pre>
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Adjustments

Some transactions add funds instead of debiting accounts. Antaca reports such transactions with type: **Adjustment**.

Transactions of this type can be:

adjustment transactions related to the debit transaction but reducing or increasing the final debit amount before clearing
adjustment transactions related (or not) to the another already cleared transaction, fe refund or offline transaction.
adjustment for transactions with currency conversion - when the acquirer let know to clear transaction to the card network, the previously determined FX added to the transaction amount is deposited into the company balance

Example of adjustment - External Transaction Notifier:

```
{
  "status": "SUCCESS",
  "date": "2023-01-01T06:01:39+00:00",
  "description": "Description",
  "transaction": {
    "id": "e79c353a-1421-46ca-8d74-c5dca67942fe",
    "balanceId": "e79c353a-1421-46ca-8d74-c5dca67942fe",
    "resourceId": "e79c353a-1421-46ca-8d74-c5dca67942fe",
    "resource": "card",
    "cardId": "22",
    "externalTransactionId": "928562957345",
    "referenceExternalTransactionId": "7489279234",
    "type": "Adjustment",
    "category": "CREDIT",
    "amount": 100,
    "currency": "EUR",
    "originalAmount": 25000,
    "originalCurrency": "PLN",
    "status": "AUTHORIZED",
    "description": "*****",
    "date": "2023-01-01T06:01:39+00:00",
    "referenceExternalTransactionDate": "2023-01-01T06:01:39+00:00",
    "transactionData": {
      "mcc": "9311",
      "merchantIdentifier": "7489274",
      "captureMode": "ADJ",
      "lastFourDigits": "1000"
    }
  }
}
```