Integration recommendation

This documentation provides best practices for using some fields, to ensure the uniqueness and consistency of identifiers throughout the payment process. It also offers technical implementation advice.

This section of the online documentation explains how to identify and manage payments within the Axepta BNP Paribas Online platform. It details the various fields used to identify a payment, both from the merchant's perspective and from the payment platform's perspective.

Definitions:

- **Payment**: A payment is a payment process consisting of several actions. Each action corresponds to a step in the payment process (e.g., authentication, authorization, capture, credit).
- **Action**: An action is a specific step in the payment process, identified by an **xId**.

Payment Identification

Merchant Side

There are 2 fields on the merchant side used to identify the payment:

- **transId**: Transaction Identifier
- **refNr**: Reference Number

The **transId** (transaction identifier) is specific to the merchant's information system. It must be unique and comply with the 'ans64' format: 64 alphanumeric and special characters. It is only exchanged between the merchant and the payment platform.

The **refNr** (Reference Number) is used to identify the payment throughout its entire payment cycle, up to the acquirer.

The format of this field depends on the payment method used, and to ensure its processing throughout the chain, it must comply with the 'an12' format: 12 alphanumeric characters, no special characters.

Axepta BNP Paribas Online will ensure the uniqueness of this data.

Best Practice:

- The **transId** should be used to link the payment with your information system.
  - If you don't have specific constraints on this data, it is recommended to use a uuid-v4 to ensure its uniqueness.
- The **refNr** is provided by Axepta BNP Paribas Online to ensure a guaranteed unique value.
  - If you wish, you can send this data but you must respect the format and ensure its uniqueness.

Axepta BNP Paribas Online Side

There are 2 parameters:

- **payId**: Payment identifier generated by Axepta BNP Paribas Online
- **xId**: Action identifier

The **payId** (Payment Id) is used to identify the payment on Axepta BNP Paribas Online:

- This data is generated by Axepta BNP Paribas Online and is guaranteed to be unique.

- It remains constant throughout the transaction lifecycle (authorization, capture, credit, cancellation...)
- It is returned via feedback URLs (return, cancel, and webhook).
- The PayId is required for any additional operation on the transaction, such as manual capture or cancellation.
- It is also highly recommended to use this data to retrieve the transaction status. (see requests: GET /payments/getByPayId/ or GET /payments/getByTransId/)

The **xId** identifies the action or operation performed on the payment, which will result in a change of state.

- A single payment can have multiple actions/operations, and therefore multiple xIds.
- This data is generated by Axepta BNP Paribas Online and is guaranteed to be unique.

Merchant Business Data

Order and Invoice Identifier

Payment identification is carried by the 'order' object, with two key fields for transaction processing:

- ***order.merchantReference***: This data should be used to identify the order, as defined by the merchant.
- ***order.invoiceId***: The invoice identifier associated with this payment, it is defined by the merchant.

```
"order": {
      "merchantReference": "112-445-34567",
      "numberOfArticles": 1,
      "creationDate": "2025-03-31T11:58:37Z",
      "invoiceId": "555-333-2222",
      "items": [
        {
          "id": "1",
          "sku": "19-402-DEU",
          "name": "BatteryPowerPack",
          "quantity": 1,
          "quantityUnit": "pcs",
          "taxRate": 0,
          "netPrice": 1000,
          "grossPrice": 1000,
          "taxAmount": 0,
          "discountAmount": 0,
          "description": "BatteryPowerPack",
          "type": "physical",
          "productInfo": {
            "brand": "Intel",
            "categories": [
              "Electronics Store",
              "Computers",
              "Desktops"
            ],
            "globalTradeItemNumber": "EAN",
            "manufacturerPartNumber": "BOXNUC5CPYA",
            "imageUrl": "https://www.exampleobjects.com/logo.png",
            "productUrl": "https://www.estore.com/products/f2a8d7e34"
          }
        }
      ]
    },
```

- These 2 data points are displayed on the payment page.
- At least one of these data points is required if you want to enable duplication check.
- Both must comply with the ANS30 format: 30 alphanumeric or special characters.

Customer Identifier

Customer-related data is carried in the 'customerInfo' object and the following two fields are particularly important:

- **email**: Essential for transaction processing (sending payment confirmation email, Visa regulations, transaction searches)

```
"customerInfo": {
      "merchantCustomerId": "cus_1234567890abcdef",
      "customerType": "individual",
      "firstName": "Max",
      "lastName": "Mustermann",
      "email": "customer@example.com",
      "phone": {
        "countryCode": "+49",
        "number": "1236547890"
      },
      "salutation": "Ms",
      "title": "Dr",
      "gender": "female",
      "maidenName": "Mustermann",
      "middleName": "sam",
      "birthDate": "2001-01-01",
      "birthPlace": "Bamberg",
      "socialSecurityNumber": "123443534"
    },
```

Velocity checks related to the email address
If you want the email address-related velocity checks rules to apply, you must enter the customer's email address in the customerInfo.email field.

In general, velocity checks can only be created and viewed by Axepta BNP Paribas Helpdesk.
To create, modify, or delete these controls, please contact Axepta Helpdesk.

Merchant-Specific Data

It is possible to transmit non-payment business data during payment initiation requests (POST /payments/sessions or GET /payments requests).

These data will be returned in the payment request response and in transaction information requests (GET /payments/getByPayId/ or GET /payments /getByTransId/).

These data are carried in the 'metadata' object and must comply with the following constraints:

- Must be in JSON format. The metadata field must be a valid JSON object, otherwise the entire payment request will be rejected.
- Must contain only "key":"value" pairs of string type No integers, no sub-objects...
- Must not contain payment-specific data.

  This field is not protected under PCI/RGDP regulations.

  It is the merchant's responsibility to avoid including sensitive data in this field, such as customer identification data (names, addresses...), or data related to the payment method used.

  (Payment-required data must be carried in the dedicated fields of the request).

Exemple d'objet 'metadata'

```
"metadata": {
    "userData": "my user data",
    "plain": "some plain text",
    "key1": "value1",
    "key2": "value2"
  }
```

Implementation Recommendations

Idempotency

The Axepta BNP Paribas Online REST API v2 is idempotent: it processes each request only once.

If multiple identical requests are received, the same response will be returned without generating a new server-side operation.

This feature prevents duplicates in case of repeated payment messages.

For POST and PATCH messages, idempotence is ensured by using the HTTP header 'Idempotency-Key'

Its value must be unique for each HTTP request sent to the server, and it is the client's responsibility to generate it.

It is recommended to use a uuid-v4 for this HTTP header.

Authentication

All requests to the Axepta BNP Paribas Online server must be authenticated.

Authentication must be performed using the OAuth-V2 protocol.

The access token returned by the Axepta BNP Paribas platform is valid for 1 hour.

After this period, you must re-authenticate to obtain a valid token.

The connection to the Axepta BNP Paribas REST API must use TLS 1.2 or higher.