Acceptance Devices | Tap to Pay on Android Acceptance Devices App



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A Visa Solution

Integration Guide

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Acceptance Devices | Tap to Pay on Android Acceptance Devices App

This section describes how to use this guide and where to find further information.

Audience and Purpose

This guide is written for partner developers, system architects, and independent software vendors (ISVs) who wish to integrate their point-of-sale system with compatible Android devices in a semi-integrated manner.

Implementing the Tap to Pay on Android Acceptance Devices App solution requires software development skills. You must write code that uses the API request and response fields to integrate the solution into your point-of-sale system.

Conventions

These statements appear in this document:



Important

An Important statement contains information essential to successfully completing a task or learning a concept.



Warning

A Warning contains information or instructions, which, if not heeded, can result in a security risk, irreversible loss of data, or significant cost in time or revenue or both.

Support

For support information about any service, visit the Support Center:
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Recent Revisions to This Document

25.05.01

Renamed the product from Acceptance Devices | Tap to Phone Android Semi-Integrated Solution to Acceptance Devices | Tap to Pay on Android Acceptance Devices App.

Removed telephony enablement requirement from *Compatibility Requirements for an Android Device* on page 12.

Renamed "Semi-Integrated Mode" to "Local Mode" See *Local Mode Payment Services* on page 33.

Updated Acceptance Devices app to version 1.12.0. See *Acceptance Devices App Version 1.12.0 Release Notes* on page 175.

25.04.01

Updated Acceptance Devices app to version 1.11.0. See *Acceptance Devices App Version 1.11.0 Release Notes* on page 176.

25.02

Updated instructions for switching environments on the device in step 1 of *Getting Started with the Acceptance Devices App* on page 15.

Add instructions about switching to test environment or demo mode in step 1 of *Setting Up an Android Device* on page 15.

Updated steps for using the app with Mutual Transport Layer Security (mTLS), Transport Layer Security (TLS), or in Cloud mode. See *Entering an Activation Code in the Acceptance Devices App* on page 21.

Added formatting guidelines for creating the merchantReferenceCode field in the

	"Required Fields" section of applicable payment transaction types. **Updated instructions for enabling Standalone mode and added instructions for processing transaction. See *Standalone Mode Payment Services* on page 170.** **Updated Acceptance Devices app to version 1.10.0. See *Acceptance Devices App Version 1.10.0 Release Notes* on page 176.**
25.01	
	Renamed "Getting Started with the Tap to Phone Android Semi-Integrated Solution" section to "Getting Started with the Acceptance Devices App" and updated introduction. See *Getting Started with the Acceptance Devices App* on page 15. **Updated code example in all mid-transaction status updates examples. See REST Example sections in *Local Mode Payment Services* on page 33.** **Removed "Generating a Customer or Merchant Receipt" from "Processing Payment Transactions in Semi-Integrated Mode" section. The feature does not apply to this product.** **Removed "Obtaining a Merchant ID and Secret Key" instructions from "Processing Payment Transactions in Cloud Mode" section. This task is now done in combination with generating a bearer token.** **Updated instructions for generating a bearer token when the app is in Cloud mode. See *Generating a Bearer Token for Authentication* on page 105.** **Removed "Generating a Customer or Merchant Receipt" from "Processing Payment Transactions in Cloud Mode" section. The feature does not apply to this product.** **Updated Acceptance Devices app to version 1.9.0. See *Acceptance Devices App Version 1.9.0 Release Notes* on page 177.**

24.01	**Initial release.**

VISA Platform Connect: Specifications and Conditions for Resellers/Partners

The following are specifications and conditions that apply to a Reseller/Partner enabling its merchants through Visa Acceptance platform. Failure to meet any of the specifications and conditions below is subject to the liability provisions and indemnification obligations under Reseller/Partner's contract with Visa/Cybersource.

1. Before boarding merchants for payment processing on a VPC acquirer's connection, Reseller/Partner and the VPC acquirer must have a contract or other legal agreement that permits Reseller/Partner to enable its merchants to process payments with the acquirer through the dedicated VPC connection and/or traditional connection with such VPC acquirer.
2. Reseller/Partner is responsible for boarding and enabling its merchants in accordance with the terms of the contract or other legal agreement with the relevant VPC acquirer.
3. Reseller/Partner acknowledges and agrees that all considerations and fees associated with chargebacks, interchange downgrades, settlement issues, funding delays, and other processing related activities are strictly between Reseller and the relevant VPC acquirer.
4. Reseller/Partner acknowledges and agrees that the relevant VPC acquirer is responsible for payment processing issues, including but not limited to, transaction declines by network/issuer, decline rates, and interchange qualification, as may be agreed to or outlined in the contract or other legal agreement between Reseller/Partner and such VPC acquirer.

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Introduction to Acceptance Devices | Tap to Pay on Android Acceptance Devices App

The Tap to Pay on Android Acceptance Devices App enables partners to easily integrate their point-of-sale (POS) systems with supported PAX terminals in a semi-integrated manner using Local and Cloud modes. Leveraging the Acceptance Devices Android app and using API requests, your POS system can accept payments by communicating with the PAX terminal over a local Wi-Fi network or the cloud.
The solution can also be operated in Standalone mode. This mode does not require integration with a POS system and enables you to start transactions directly from the PAX terminal.
For more information about the modes available in the Acceptance Devices app, see:

- *Local Mode Payment Services* on page 33
- *Cloud Mode Payment Services* on page 104
- *Standalone Mode Payment Services* on page 170

For information about the current version of the Acceptance Devices Android app, see the *Release Notes for Tap to Pay on Android Acceptance Devices App* on page 175.

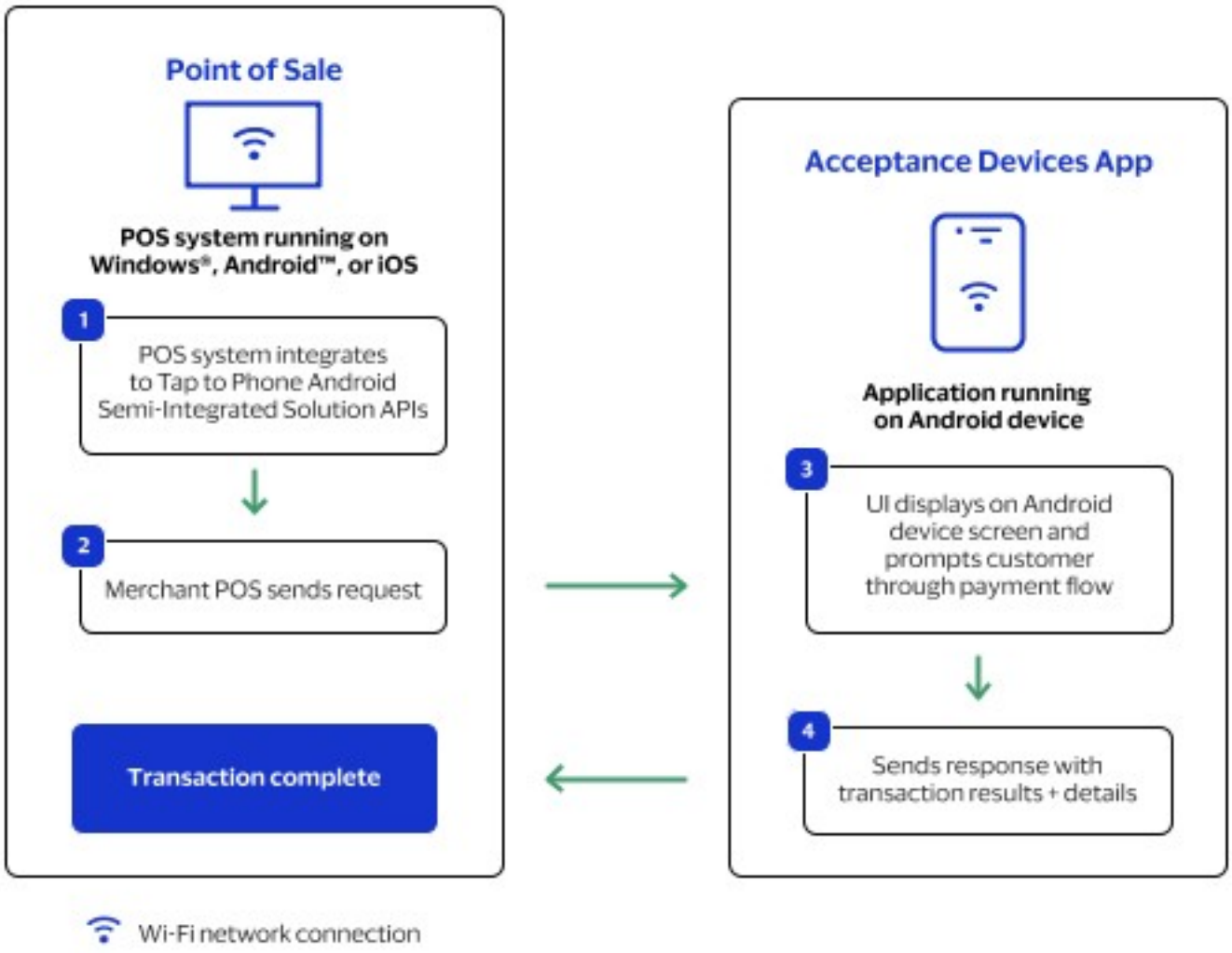
Compatibility Requirements for an Android Device

Your Android device must be compatible with the Tap to Pay on Android Acceptance Devices App solution in order to accept contactless payments.
These are the requirements for a compatible Android device:

- Android 12 or later operating system. Android versions that do not receive security patches are not supported.
- Developer options are disabled.
- Device is not rooted. This setting prevents you from changing system-level files or settings.
- Hardware-backed keystore.
- Near-field communication (NFC) enabled chip.
- Supports Google Mobile Services (GMS) and Google Play Store.

Transaction Workflow for the Tap to Pay on Android Acceptance Devices App

This is the transaction workflow for the Tap to Pay on Android Acceptance Devices App.



Tap to Pay on Android Acceptance Devices App Transaction Workflow

The Tap to Pay on Android Acceptance Devices App workflow typically includes this sequence of events:

1. The point-of-sale (POS) system, running on Windows, Android, or iOS, integrates to the Tap to Pay on Android Acceptance Devices App APIs.
2. The merchant's POS system sends an API request, using the local Wi-Fi network or the cloud, to the Acceptance Devices app that is running on the Android device.
3. The Acceptance Devices app user interface opens on the Android device and displays prompts that guide the customer through the payment flow.
4. The Acceptance Devices app sends an API response to the POS system with the transaction result and details, which completes the transaction.

Getting Started with the Acceptance Devices App

This section describes how to get started with using the Acceptance Devices app. After completing device set up and app configuration, you can process payments in these modes:

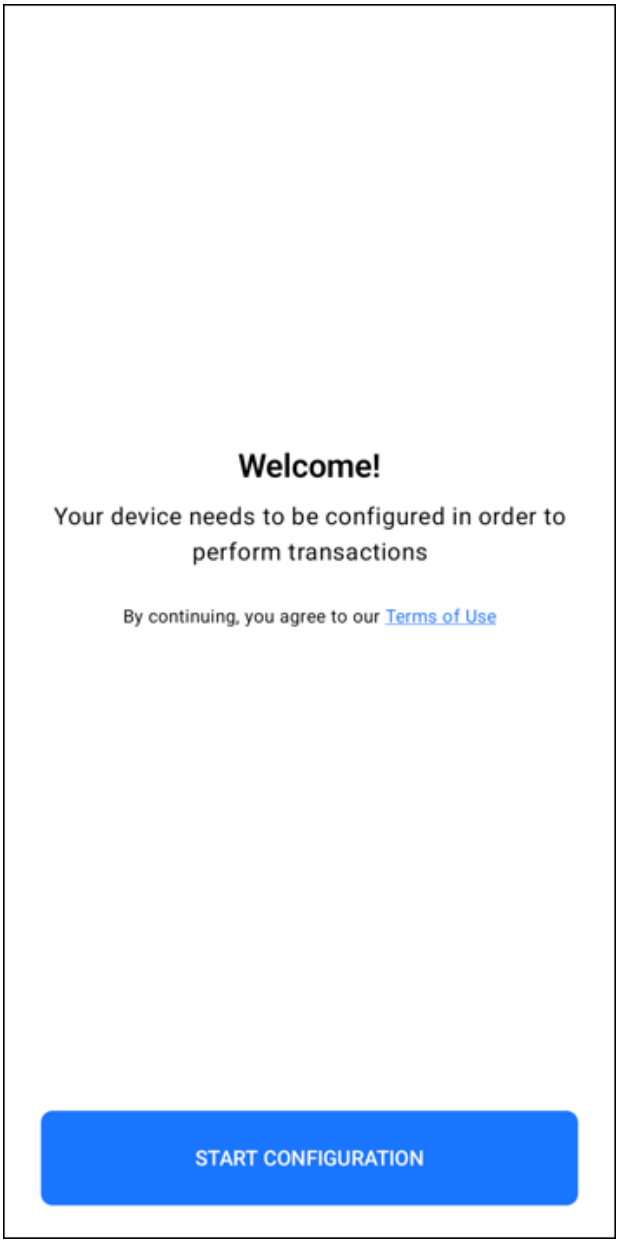
- *Local Mode Payment Services* on page 33
- *Cloud Mode Payment Services* on page 104
- *Standalone Mode Payment Services* on page 170

Setting Up an Android Device

Setting up the Android device is completed by using the Acceptance Devices app, so the app must be open on the Android device. The app can be installed from the Google Play Store using this *link*. For current version information about the Acceptance Devices app, see the *Release Notes for Tap to Pay on Android Acceptance Devices App* on page 175.

Follow these steps to set up the Android device using the Acceptance Devices app:

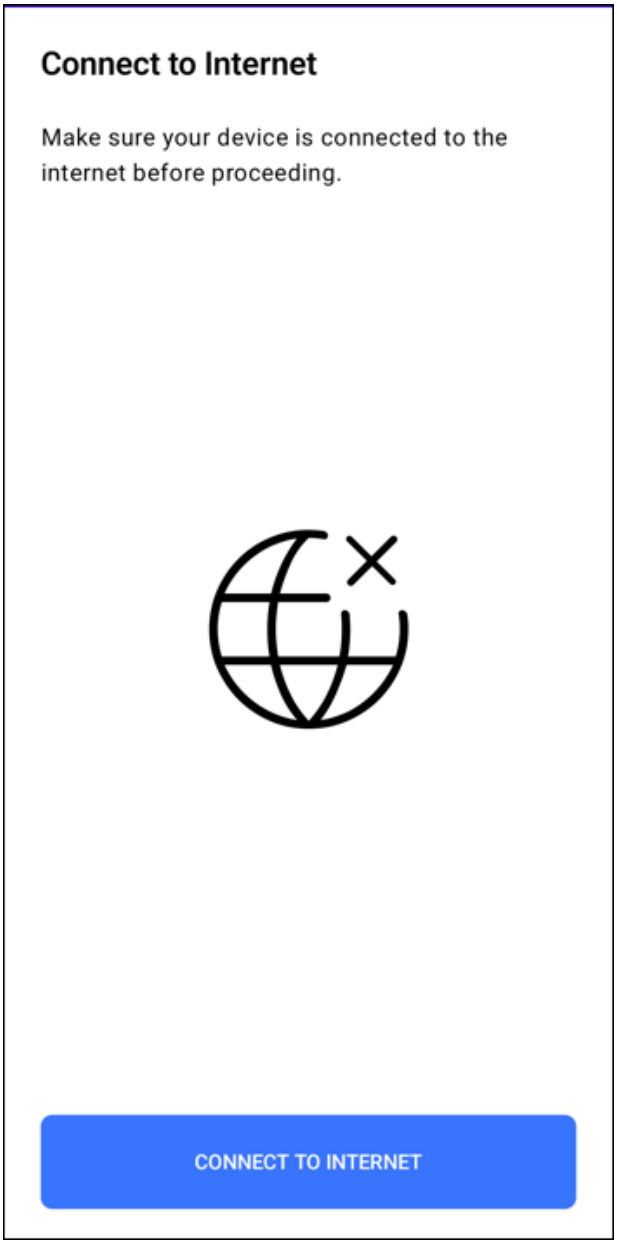
1. On the Welcome screen, tap **Start Configuration**. The app is configured to use the production environment. To switch to the test environment or demo mode, press and hold on the Welcome screen for 5 seconds. The Select Environment screen appears. Choose an environment for configuration.



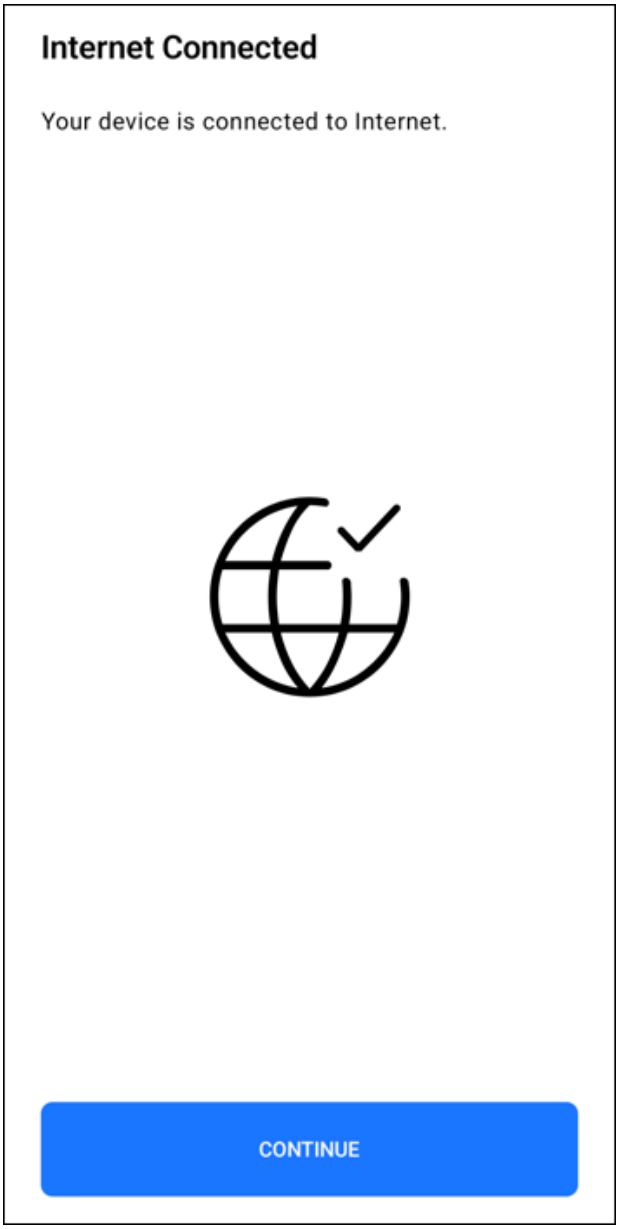
2. On the Create a Passcode screen, enter a unique passcode. The passcode must consist of six digits. Confirm the passcode by entering it a second time. Then, tap **Save Passcode**. You will use this passcode to access the app, so choose a code that you will remember. The app does not include an option to reset the passcode. If you forget the code, you must reinstall the Acceptance Devices app and complete the setup process again.



3. Check the internet connection status of your Android device:
   - When your device is not connected to the internet, the Connect to Internet screen appears. Tap **Connect to Internet**, and choose an internet connection option.



- When your device is connected to the internet, the Internet Connected screen appears. Tap **Continue**. You are prompted to activate your device in the Acceptance Devices app. For more information, see *Activating an Android Device in the Acceptance Devices App* on page 19.



Activating an Android Device in the Acceptance Devices App

In order to process payments on your Android device using the Acceptance Devices app and your point-of-sale (POS) system, you must use an activation code to activate the Android device in the Acceptance Devices app. You can generate the code in the Business Center or by using an API request. After generating the activation code, you must enter it in the Acceptance Devices app.

Generating an Android Device Activation Code in the Business Center

Before activating the Android device in the Acceptance Devices app, you must generate a device activation code.
You can generate an activation code in the Business Center. The code is valid for 24 hours.
Follow these steps to generate an Android device activation code:

1. In the Business Center, go to the left navigation panel and choose **Acceptance Devices** > **Activation Codes**. The Activation Codes page appears.
2. Click the **Select Transacting MID** drop-down menu.
3. Choose a transacting MID from the list.
4. Click the **Select number of Activation Codes** drop-down menu.
5. Choose the number of activation codes that you want to generate. The maximum number of codes is 15.
6. Click **Generate**. The activation codes display on the page. To copy the codes to your clipboard, click the icon next to the code.
7. To download a text file containing the activation codes, click the **Download codes as a .txt file** button.
8. Navigate to the Download folder on your computer to access the text file.

Generating an Android Device Activation Code Using a REST API Request

Before activating an Android device in the Acceptance Devices app, you must generate a device activation code.
You can use a REST API request to generate a device activation code, which is valid for 24 hours.
You must authenticate each request that you send to a Visa Acceptance Solutions API. In order to authenticate an API request, you can use a REST shared secret key or a REST certificate. For more information about authentication requirements, see *Getting Started with REST*.

Endpoints

The POST request must include the transacting merchant ID (MID) that is sending the request and the quantity of activation codes to be generated. You can request up to 15 activation codes in a single request.
Test: `POST https://apitest.visaacceptance.com/dms/v2/merchants/{transacting mid}/activation-codes?size={number of activation codes}`
Production: `POST https://api.visaacceptance.com/dms/v2/merchants/{transacting mid}/activation-codes?size={number of activation codes}`

Required Fields for Generating an Android Device Activation Code

The body of the API request is empty. The POST request must include the information required to return the response.

REST Example: Generating an Android Device Activation Code

Request

The body of the request is empty. The POST request includes the information required to return the response.

```
{
}
```

Response to a Successful Request

The response includes the activation code (**token** field) and the amount of time (**ttl** field) that the activation code is valid. The **ttl** field value is shown in milliseconds. The activation code is valid for 24 hours.

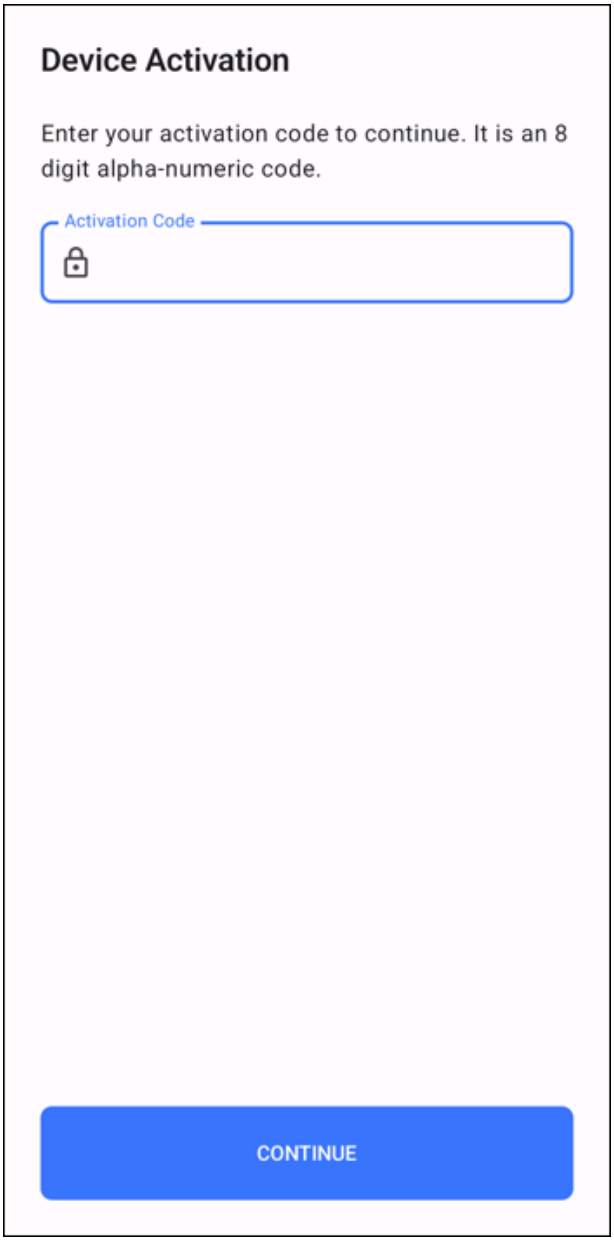
```
{
  "tokens": [
    {
      "token": "%N5wU2jH",
      "ttl": 86399805
    }
  ]
}
```

Entering an Activation Code in the Acceptance Devices App

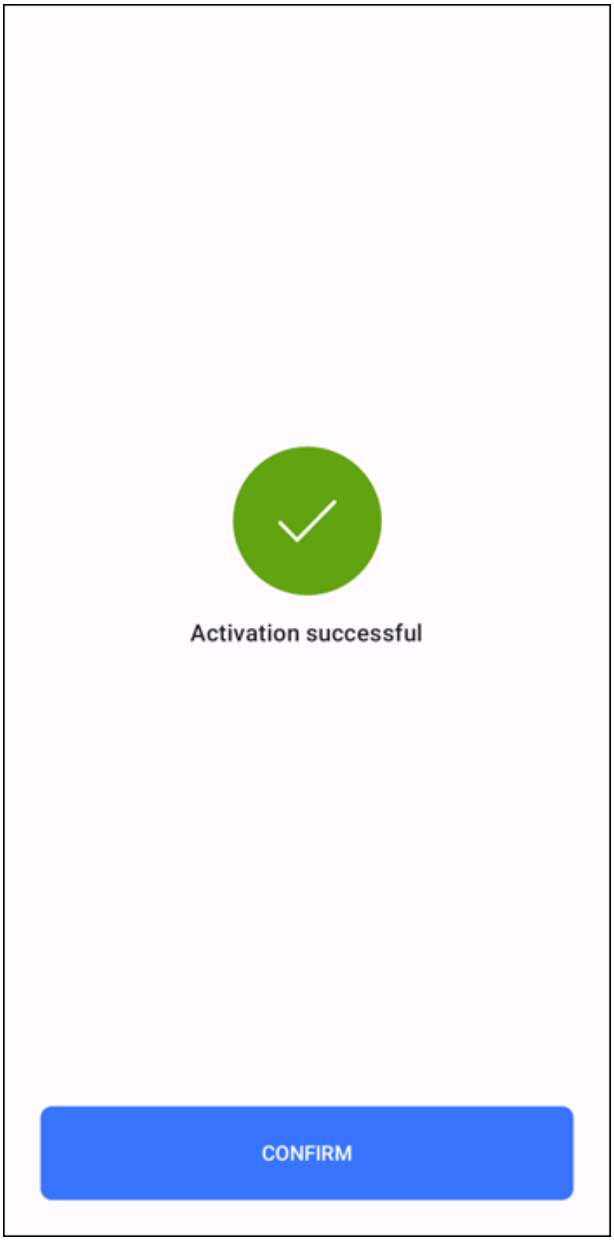
Before activating the Android device, you must generate an activation code for the device.

To activate an Android device in the Acceptance Devices app, you must enter the activation code that you generated. The code is valid for 24 hours.
Follow these steps to activate an Android device in the Acceptance Devices app:

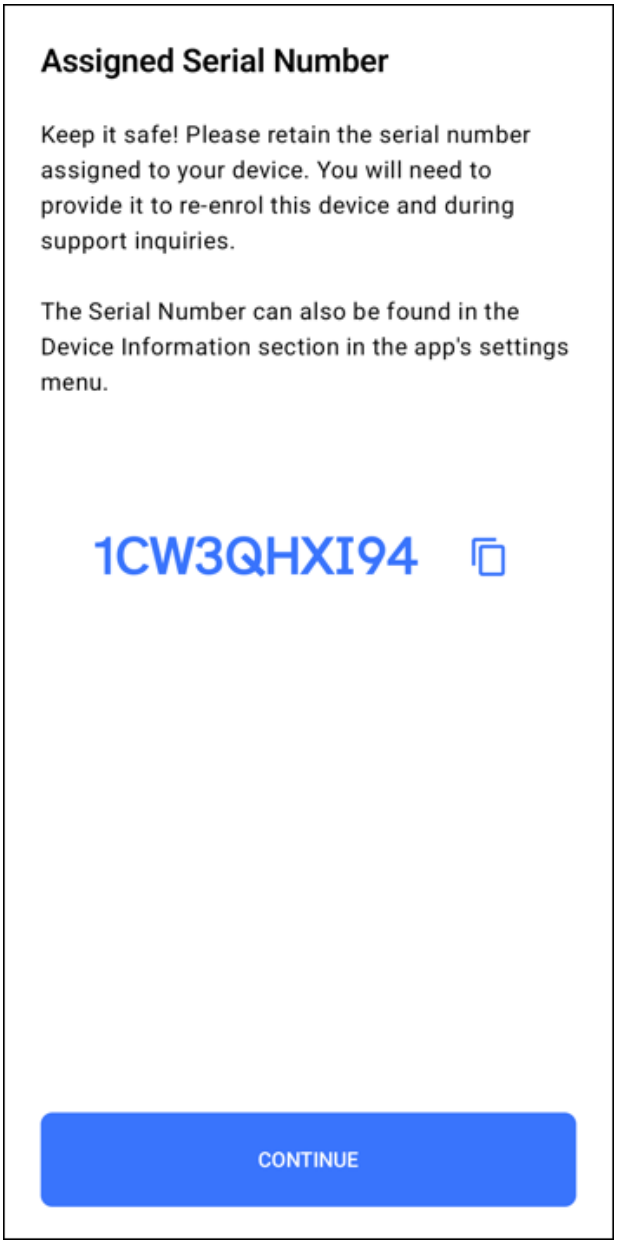
1. On the Device Activation screen, enter the activation code that you generated. Tap **Continue**.



2. The Activation Successful screen appears. Tap **Confirm**.



3. The Assigned Serial Number screen appears. Record the serial number assigned to your device for future reference. You can use this information to re-enroll the device or when communicating with customer support. Tap **Continue**.



If you are using the app in Local mode with Mutual Transport Layer Security (mTLS) enabled, you must activate a secure mTLS connection between your point-of-sale (POS) system and the Android device in the Acceptance Devices app. For more information, see *Activating a Secure mTLS Connection* on page 35.

If you are using the app in Local mode with Transport Layer Security (TLS) enabled or in Cloud mode, you must start the Acceptance Devices app server. For more information, see *Getting Started with the Acceptance Devices App Server* on page 25.

Getting Started with the Acceptance Devices App Server

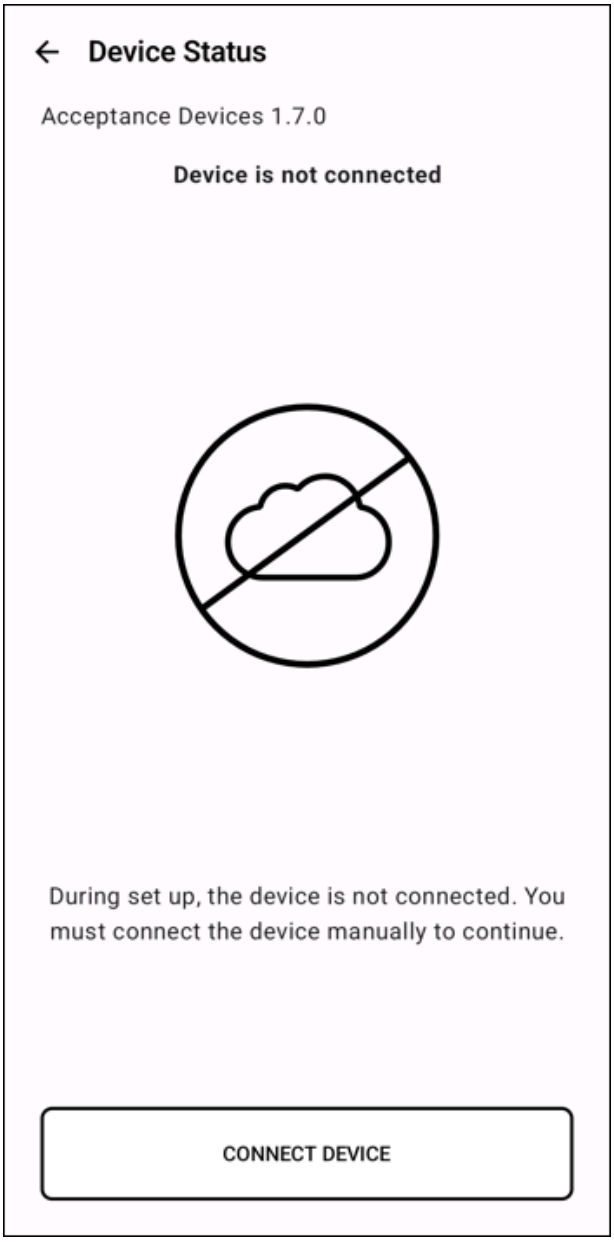
In order to process payments on your Android device using the Acceptance Devices app and your point-of-sale (POS) system, you must start the Acceptance Devices app server on the Android device.

Starting the Acceptance Devices App Server

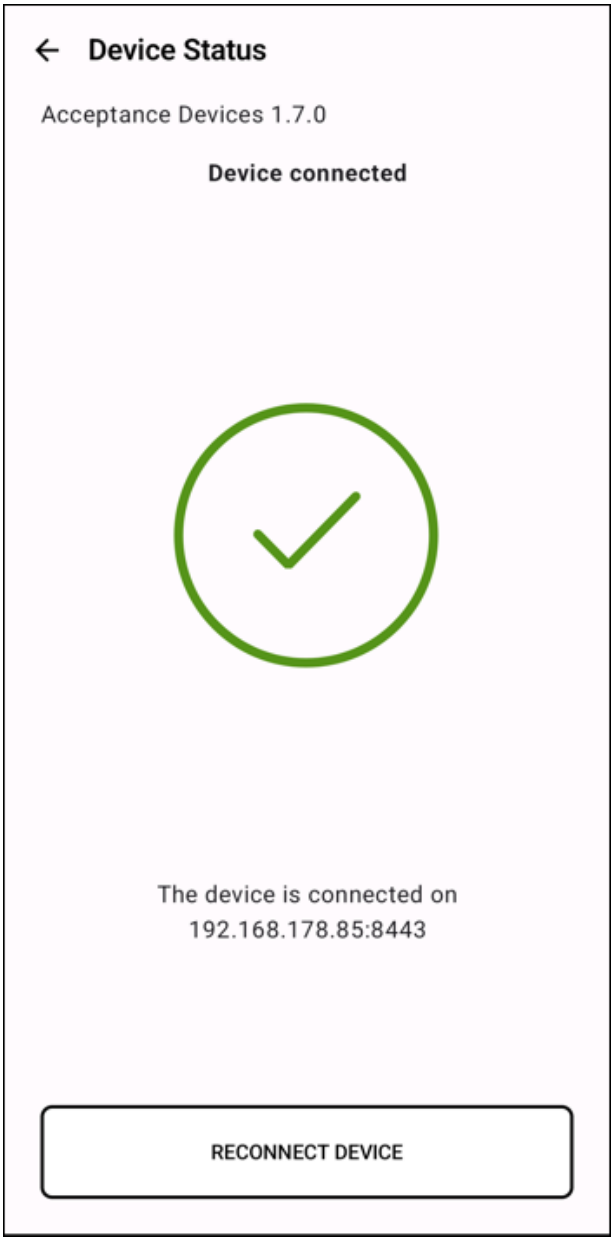
Before you can start the Acceptance Devices app server, you must activate an Android device in the Acceptance Devices app. For more information, see *Activating an Android Device in the Acceptance Devices App* **on page 19.**

Follow these steps to start the Acceptance Devices app server:

1. The Device Status screen shows the Device is not connected message. Tap **Connect Device**.



2. After successfully connecting, the Device Status screen shows the Device connected message. The Android device is now activated and ready to accept payment. If you are using the app in Local mode, record the IP address and port number shown on the screen for future reference. You will include this information when making API requests. In this example, the IP address is 192.168.178.85. The port number is 8443. If you are using the app in Cloud mode, no IP address or port number is shown on the Device Status screen with the Device connected message. In this mode, the Android device is now activated and ready to accept payments.



3. Tap the back navigation arrow to finish the setup.

Customizing the Acceptance Devices App

You can customize the Acceptance Devices app to suit your needs in the Business Center or by using a REST API request.
Using the Customizations feature in the Business Center, you can customize common, Local mode, and Standalone mode parameters for a portfolio, merchant, or transacting merchant ID (MID).
Using a REST API request, you can do these tasks:

- Retrieve and review your current parameter customization settings.

- Update customization settings for common, Local mode, and Standalone mode parameters.

Customizable Common Parameters

You can customize these common parameters in the Acceptance Devices app when it is in Local, Cloud, or Standalone mode:

Logo	Defines the logo that is shown on the home screen of the app. The default setting is `No logo`.
Operating mode – Choose one of these operating modes:	`Semi-Integrated with Standalone:` Acceptance Devices app operates in Local and Standalone modes. This is the default setting. `Semi-Integrated:` Acceptance Devices app operates only in Local mode. `Standalone:` Acceptance Devices app operates only in Standalone mode. `Cloud with Standalone:` Acceptance Devices app operates in Cloud and Standalone modes. `Cloud:` Acceptance Devices app operates only in Cloud mode.
Automatic receipt printing	Enables the automatic printing of the merchant or customer receipt after each transaction. The default setting is `Disabled`. This feature is available only on terminals with integrated printers.
Enable accessibility options	Enables the use of accessibility features during transaction processing. This feature supports visually impaired customers by using voice-over capabilities. The default setting is `True`.
Tipping type – Choose one of these tipping types:	`Percentage choice:` Customer selects between three pre-defined tip percentages or enters a custom tip amount. The tipping values are set in the Tipping values parameter. This is the default setting. `Tip amount:` Customer enters a custom tip amount. `Total amount:` Customer enters the full amount, including the tip amount.

Tipping values	Defines the three tipping percentage choices that appear on the screen for the customer to choose. This parameter only applies if the Tipping Type parameter is set to Percentage choice. The default setting is `10, 15, 20`.
Tipping confirmation screen	Enables the display of an additional screen during a Sale with On-Reader Tipping transaction. The customer reviews and confirms that the tip amount before the payment is processed. The default setting is `False`.
MOTO CVV required	Enables Card Verification Value (CVV) as a required data input for mail order or telephone order (MOTO) transactions. The default setting is `True`.
MOTO address required	Enables the customer's address as a required data input for MOTO transactions. The default setting is `True`.
MOTO confirmation screen	Enables the display of an additional screen during MOTO transactions. The merchant reviews and confirms the MOTO address data shown on the screen before the payment is processed. The default setting is `False`.
Enable offline mode	Enables the option to toggle Offline mode ON/OFF to process transactions without internet connectivity. The default setting is `False`.

Customizable Local Mode Parameters

These are the Local mode parameters that you can customize in the Acceptance Devices app:

Port	Defines the port number used by the server on the terminal or device. The default setting is `8443`.
Security	Defines whether the server on the terminal or device uses two-way verification (mTLS) or one-way verification (TLS). The default setting is `mTLS`.

Protocol	Defines the protocol that is used to process transactions. The default setting is `ADP`.
Signature capture type	Defines whether the signature is captured on the terminal or device screen or paper receipt, or is skipped. The default setting is `On screen`.
Skip summary screen	Disables the Summary screen from displaying after each transaction. The default setting is `True`.

Customizable Standalone Mode Parameters

You can customize these Standalone mode parameters in the Acceptance Devices app.

Additional transaction types	Defines the list of transaction types, in addition to sale and refund transactions that are supported when the app is in Standalone mode. The default setting is `None`.
Enable LAC installments	Enables the option to toggle Latin America and Caribbean (LAC) installments ON/OFF in order to process transactions with installment details. The default setting is `False`.
Enable tax details	Enables the option to toggle Tax details ON/OFF in order to process transactions with tax details. The default setting is `False`.

Customizing Parameters in the Business Center

You can customize common, Local mode, and Standalone mode parameters for the Acceptance Devices app in the Business Center.

1. In the Business Center, go to the left navigation panel and choose **Acceptance Devices** > **Customizations**. The Customizations screen appears.
2. Click the **Load customization parameter for** drop-down menu.
3. Choose a user level from the list. Click **Load**.
4. Scroll down to see the various parameter sections and which elements are available to customize for the chosen user level.
5. Choose parameters to customize. To see a description of a parameter, hover your mouse over the Information icon.
6. Click **Apply Changes**.

Retrieving Parameters Using a REST API Request

Using a REST API request, you can retrieve and view customizable parameters and their current values. Depending on your account settings, you can view values for a portfolio, merchant, or transacting merchant ID (MID).
You must authenticate each request that you send to a Visa Acceptance Solutions API. In order to authenticate an API request, you can use a REST shared secret key or a REST certificate. For more information about authentication requirements, see *Getting Started with REST*.

Endpoints

The GET request must include the organization ID for the portfolio, merchant, or transacting merchant ID that is sending the request.
Test: `GET https://apitest.visaacceptance.com/dms/v2/customization?type=organization&id={{organization id}}`
Production: `GET https://api.visaacceptance.com/dms/v2/customization?type=organization&id={{organization id}}`

Required Fields for Retrieving Parameters Using a REST API Request

The body of the API request is empty. The GET request must include the information required to return the response.

REST Example: Retrieving Parameters Using a REST API Request

Request

The body of the request is empty. The GET request includes the information required to return the response.

```
{
}
```

Response to a Successful Request

```
{
   "id": "{{organization id}}",
   "customizations": {
      Your configured parameters response data appears here.
   },
   "customizationMetadata": {
      Your possible values for parameters response data appears here.
   }
}
```

Customizing Parameters Using a REST API Request

You can update customizable parameters for a portfolio, merchant, or transacting merchant ID (MID) by using a REST API request.
You must authenticate each request that you send to a Visa Acceptance Solutions API. In order to authenticate an API request, you can use a REST shared secret key or a REST

certificate. For more information about authentication requirements, see *Getting Started with REST*.

Endpoints

Test: `PUT https://apitest.visaacceptance.com/dms/v2/customization`
Production: `PUT https://api.visaacceptance.com/dms/v2/customization`

Required Fields for Customizing Parameters Using a REST API Request

type	**Set this field to `organization`.**
id	**Set this field to `organization id` for the portfolio, merchant, or transacting MID.**
customizations	**Set this field to the parameters to be updated.**

REST Example: Customizing Parameters Using a REST API Request

Request

```
{
  "type": "organization",
  "id": "{{organization id}}",
  "customizations":
  {
    "OPERATING_MODE": "SEMI_INTEGRATED",
    "TIPPING_TYPE": "TIP_AMOUNT",
    "SIGNATURE_TYPE": "ON_RECEIPT"
  }
}
```

Response to a Successful Request

The body of the response is empty. A successful response is indicated with a `200 OK` status.

```
{
}
```

Local Mode Payment Services

This section describes how to process payment services featured in the Acceptance Devices app when operated in Local mode.
These are some Local mode features:

- The point-of-sale (POS) system communicates with the Acceptance Devices app on the Android device over a local Wi-Fi network.
- You can retrieve the Root CA certificate to validate the Acceptance Devices app server's certificate.
- You have the option to activate an mTLS connection in the Acceptance Devices app.

For information about other modes available in the Acceptance Devices app, see:

- *Cloud Mode Payment Services* on page 104
- *Standalone Mode Payment Services* on page 170

Communication Protocol Used in Local Mode

When using the solution in Local mode, the communication protocol used between the Acceptance Devices app and the point-of-sale (POS) system is a single WebSocket channel. Through this channel, simultaneous, two-way communication occurs between the Acceptance Devices app and the POS system.

Retrieving the Root CA Certificate

When the app is operating in Local mode, you can validate the Acceptance Devices app server's certificate by adding the Root CA certificate to your trust store. This action is required if you want to use an mTLS connection. For more information, see *Activating a Secure mTLS Connection* on page 35.
You can retrieve the Root CA certificate in the Business Center or by using an API request.

Retrieving the Root CA Certificate in the Business Center

Follow these steps to retrieve the Root CA certificate in the Business Center:

1. In the Business Center, go to the left navigation panel and choose **Acceptance Devices > Activation Codes**. The Activation Codes page appears.
2. Click **Download Root CA Certificate**. When the download is complete, the browser window shows a download completion message.
3. In the local folder directory of your computer, navigate to the Download folder to access the Root CA certificate file.

Retrieving the Root CA Certificate Using a REST API Request

You can use a REST API request to retrieve the Acceptance Devices app server's Root CA certificate when the app is operating in Local mode. You would then add the certificate to your trust store.
You must authenticate each API request you send to a Visa Acceptance Solutions API by using a REST shared secret key or a REST certificate. For more information about authentication requirements, see *Getting Started with REST*.

Endpoints

Test: `GET https://apitest.visaacceptance.com/dms/v2/devices/certificates/rootca`
Production: `GET https://api.visaacceptance.com/dms/v2/devices/certificates/rootca`

Required Fields for Retrieving the Root CA Certificate Using a REST API Request

The body of the API request is empty.

REST Example: Retrieving the Root CA Certificate Using a REST API Request

Request

The body of the request is empty.

```
{
}
```

Response to a Successful Request

The response includes a PEM–encoded certificate chain.

```
{
  "certificateChain": "-----BEGIN CERTIFICATE-----Your certificate response data appears here.-----END
 CERTIFICATE-----"
}
```

Activating a Secure mTLS Connection

When the app is operating in Local mode, using a Mutual Transport Layer Security (mTLS) connection creates an additional layer of security for communication between the Acceptance Devices app running on your Android device and point-of-sale (POS) system. Using the mTLS protocol is recommended because it employs two-way verification. The minimum requirement for providing end-to-end data security is using the Transport Layer Security (TLS) protocol.
Before activating an mTLS connection, you must retrieve the Root CA certificate. For more information, see *Retrieving the Root CA Certificate* on page 33.

Endpoints

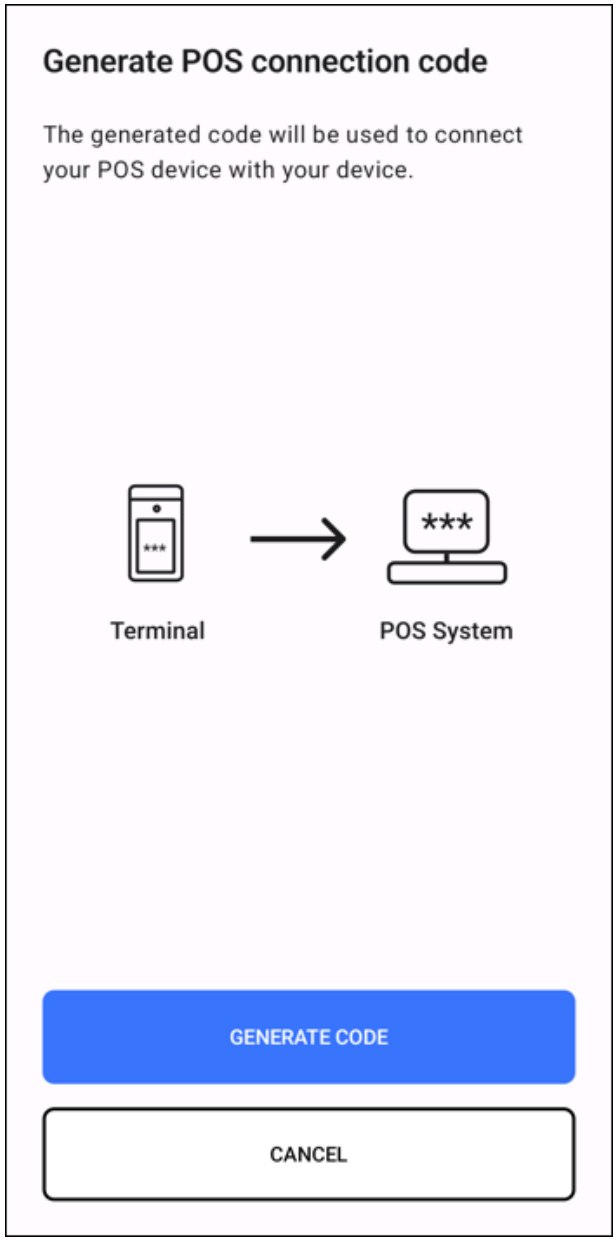
The endpoint is the same for the test and production environments.
Test: `POST https://{device IP address:port number}/ or wss://{device IP address:port number}/`
Production: `POST https://{device IP address:port number}/ or wss://{device IP address:port number}/`

Generating a POS Connection Code for the Point-of-Sale System

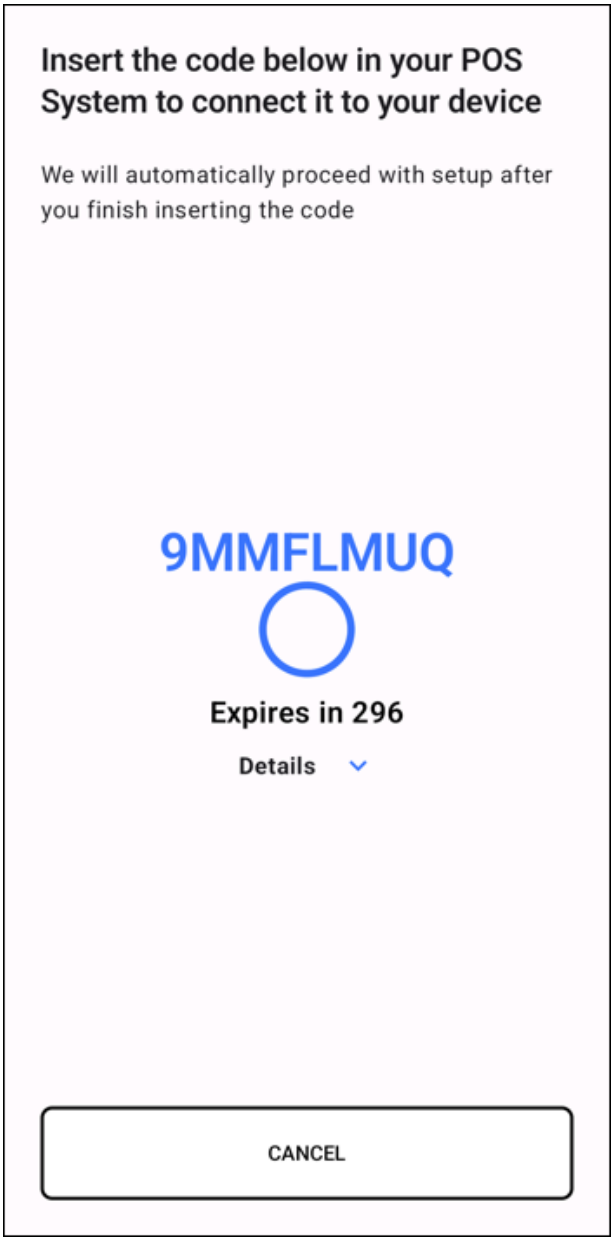
Before you can sync your Android device with the point-of-sale (POS) system to establish a secure connection, you must activate the device. For more information, see *Activating an Android Device in the Acceptance Devices App* **on page 19.**

To ensure the security of the data sent over the internet between your POS system and Android device, you must establish a secure connection (sync) between your system and the device.
If Mutual Transport Layer Security (mTLS) is enabled and the device activation is complete, the Generate POS Connection Code screen appears in the Acceptance Devices app.
You must complete this procedure one time for each POS system you are using.
Follow these steps to generate a POS connection code for the POS system in the Acceptance Devices app:

1. On the Generate POS Connection Code screen, Tap **Generate Code**.



2. Record the eight-character POS connection code that appears on the screen. In this example, the code is 9MMFLMUQ. You will use this information to request a certificate from the POS system. The screen shows an expiration timer for the code. The code refreshes every 300 seconds.

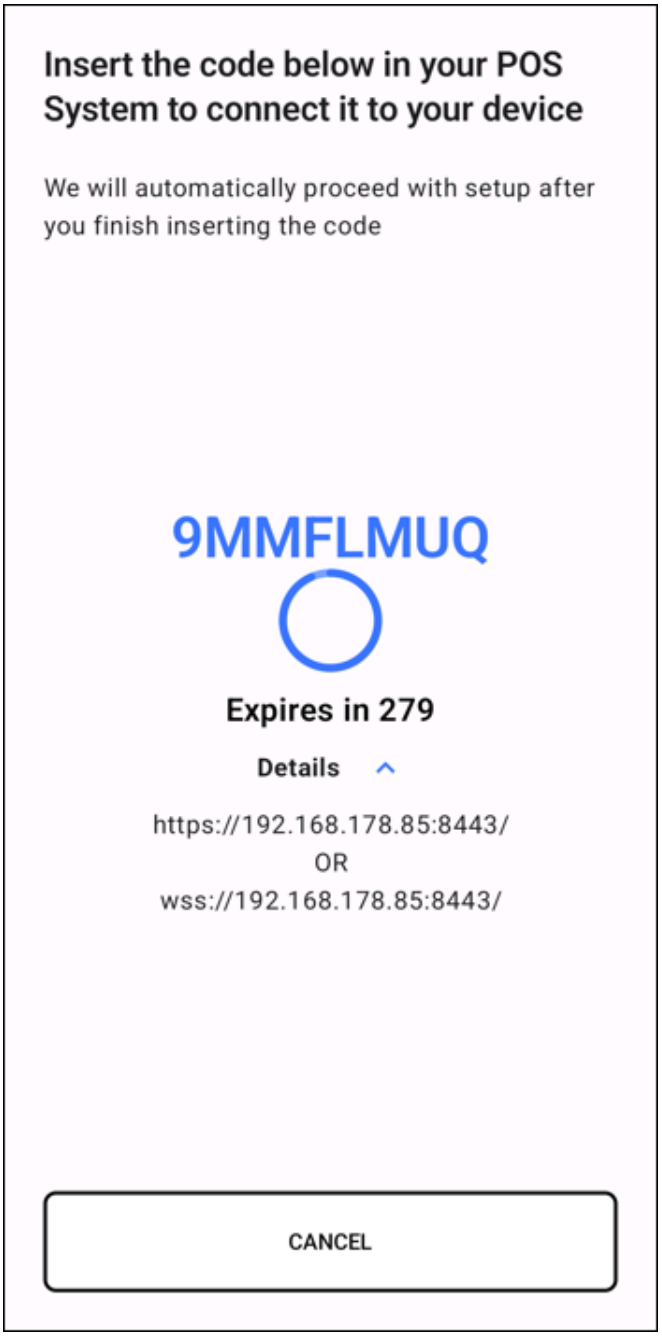


Requesting Certificates for the Point-of-Sale System

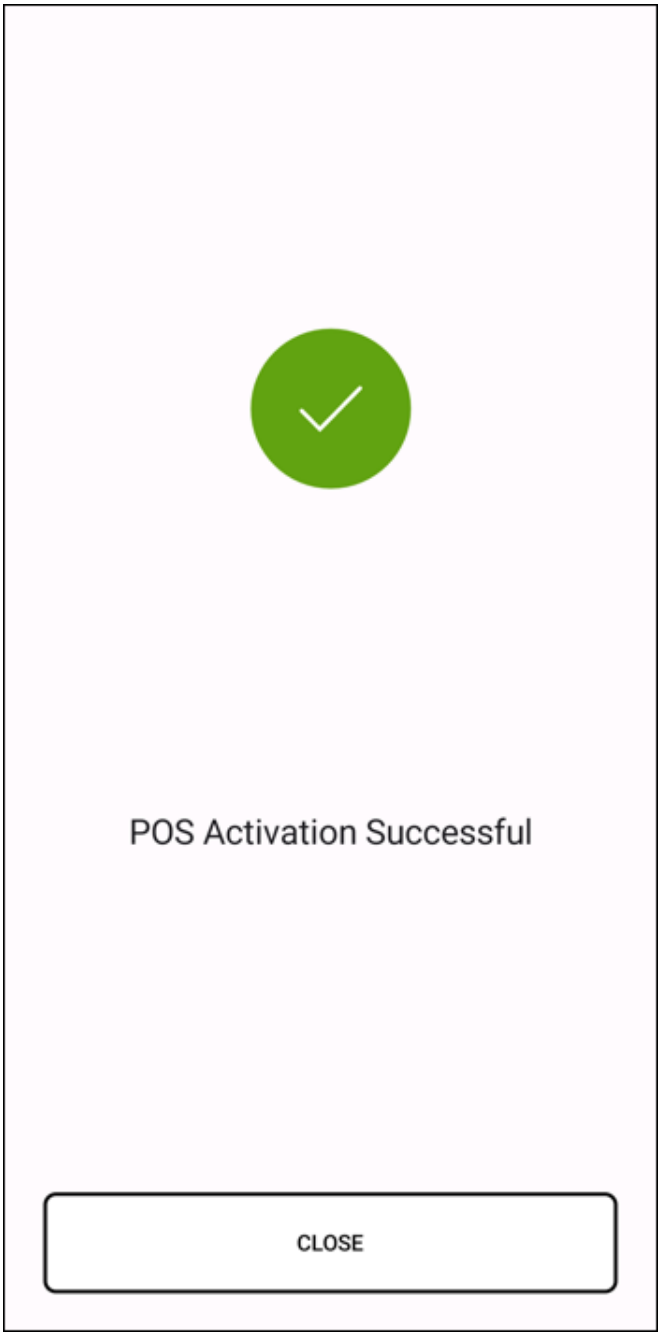
Before you can request certificates, you must generate a set-up code for the point-of-sale (POS) system.

To finish activating the secure mTLS connection, you must request certificates by sending a request to the Android device through the POS system.

1. On the POS Sync Connection Code screen, tap the **Details** arrow shown mid-screen. The Details section expands to show the IP address and port number. In this example, the IP address is 192.168.178.85, and the port number is 8443.



2. Record the information shown in the Details section. In this example, the information shown is: https://192.168.178.85:8443 OR wss://192.168.178.85:8443. You will use this information to request a certificate through the POS system, using either HTTPS or WSS (WebSocket) details.
3. To generate the certificates, send an API request through the POS system to the IP address and port number, along with the POS connection code shown on the Android device and a unique POS ID.
4. After the certificates are retrieved by the POS system, and the sync between your POS system and Android device is complete, the POS Activation Successful message appears. Tap **Close**. The next set-up screen appears.



Required Fields for Requesting Certificates for the Point-of-Sale System

posId	**Set this field to a unique, user-defined ID for the POS system.**
setupCode	Set this field to the POS connection code shown on the Generate POS Connection Code screen in the Acceptance Devices app.

REST Example: Requesting Certificates for the Point-of-Sale System

Request

```
{
  "posId" : "123",
  "setupCode" : "8QW1YS1D"
}
```

Response to a Successful Request

The response includes the private key and certificates required in order to establish the secure Mutual Transport Layer Security (mTLS) connection between the Android device and POS system. For security reasons, this example does not show actual private key and certificate response data.

```
-----BEGIN RSA PRIVATE KEY-----
Your RSA private key response data appears here.
-----END RSA PRIVATE KEY-----
-----BEGIN CERTIFICATE-----
Your certificate response data appears here.
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
Your certificate response data appears here.
-----END CERTIFICATE-----
-----BEGIN CERTIFICATE-----
Your certificate response data appears here.
-----END CERTIFICATE-----
```

Implementing Hostname Validation

When operating in Local mode, you have the option to include hostname validation in your client. When the Android device is activated, a certificate is generated on the device and a Subject Alternative Name (SAN) is added. On the Android device, the SAN can be viewed as the Domain Name System (DNS) name for the Acceptance Devices app server.
The SAN is generated in this format: {IMEI}.cybs.seclib.io.
To perform hostname validation or to connect to the Android device by using a SAN instead of an IP address, you can add the device IP address and SAN to your hosts file.

Processing a Sale

This section describes how to process a sale transaction when the app is in Local mode. This type of transaction combines an authorization and a capture into a single transaction.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`

Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Sale

type	**Set this field to `PaymentRequest`.**
merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-). Avoid using formatting that resembles a telephone number (XXX-XXX-XXXX) or a Social Security number (XXX-XX-XXXX).**
amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing a Sale

Request

```
{
    "type" : "PaymentRequest",
    "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails" : {
     "amount" : "1.00",
     "currency" : "GBP"
    }
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
    "type" : "PaymentResponse",
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "1541387b383d456aabb81cdf558b4e8e",
     "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
     "submitTimeUtc" : "2023-12-01T20:24:47+0000",
     "captured" : true,
     "amountDetails" : {
```

```
      "currency" : "GBP",
      "amount" : "1.00",
      "capturedAmount" : "1.00",
      "refundableAmount" : "1.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119",
      "countryCode" : "840"
     }
    },
    "additionalInformation" : {
     "instrumentId" : "7030000000022690119",
     "requestId" : "7014622903166318504010"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****0063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
```

```
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
          "label" : "Additional Information",
          "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
          "label" : "Card",
          "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
          "label" : "Account",
          "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
          "label" : "AID",
          "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
          "label" : "Verification",
          "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "938238"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
        },
        "SUBJECT" : {
          "label" : "Description",
          "value" : ""
        },
        "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "1541387b383d456aabb81cdf558b4e8e"
        },
        "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
        },
```

```
          "DATE" : {
            "label" : "Date",
            "value" : "01/12/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "21:24:51"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****0063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
           "label" : "Name",
           "value" : "CP Test"
         },
         "MERCHANT_DETAILS_ADDRESS" : {
           "label" : "Address",
           "value" : "Sample Street"
         },
         "MERCHANT_DETAILS_ZIP" : {
           "label" : "Zip",
           "value" : "UB3 2EA"
         },
         "MERCHANT_DETAILS_CITY" : {
           "label" : "City",
           "value" : "London"
         },
         "MERCHANT_DETAILS_COUNTRY" : {
           "label" : "Country",
           "value" : "United Kingdom"
         },
         "MERCHANT_DETAILS_CONTACT" : {
           "label" : "Contact",
           "value" : "1234567"
         },
         "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
           "label" : "Additional Information",
           "value" : ""
         },
         "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
           "label" : "Card",
           "value" : "Payworks VISA"
         },
```

```
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938238"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Cardholder Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "1541387b383d456aabb81cdf558b4e8e"
        },
        "AMOUNT_AND_CURRENCY" : {
         "label" : "Amount",
         "value" : "£1.00"
        },
        "DATE" : {
         "label" : "Date",
         "value" : "01/12/2023"
        },
        "TIME" : {
         "label" : "Time",
         "value" : "21:24:51"
        },
```

```
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
      }
    }
  }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Refund

This section describes how to process a refund when the app is in Local mode. This type of refund includes a reference to the original transaction for a full or partial transaction amount. Stand-alone credits are also supported in this Acceptance Devices solution. For more information, see *Processing a Stand-Alone Credit* on page 46.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Processing a Stand-Alone Credit

This section describes how to process a stand-alone credit when the app is in Local mode. This type of transaction is used to process a credit without reference to the original transaction. The customer is required to present their card for this type of transaction.

> **Warning**
>
> When processing a stand-alone credit, there is no limit on the credit amount because there is no reference to the original transaction amount. The recommendation is to use a refund transaction whenever possible. For more information, see *Processing a Refund* on page 46.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Stand-Alone Credit

type	**Set this field to** `StandaloneRefundRequest`**.**
merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-). Avoid using formatting that resembles a telephone number (XXX-XXX-XXXX) or a Social Security number (XXX-XX-XXXX).**
amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing a Stand-Alone Credit

Request

```
{
    "type": "StandaloneRefundRequest",
    "merchantReferenceCode": "2490c8ec0e2f4b509526815714313e33",
    "amountDetails": {
      "amount": "1.00",
      "currency": "GBP"
    }
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
    "type" : "StandaloneRefundResponse",
    "message" : "Refund approved",
    "transactionDetails" : {
      "id" : "3043e0b61fad4c5483db3d498309460f",
```

```
    "merchantReferenceCode" : "2490c8ec0e2f4b5095268157143l3e33",
    "submitTimeUtc" : "2023-12-01T21:04:19+0000",
    "amountDetails" : {
     "amount" : "1.00",
     "currency" : "GBP"
    }
   },
   "processingDetails" : {
    "status" : "APPROVED",
    "verificationMethod" : "NONE",
    "entryMode" : "ICC",
    "card" : {
     "expirationMonth" : "12",
     "expirationYear" : "2025",
     "type" : "AMERICAN_EXPRESS",
     "maskedPan" : "374245XXXXX0001"
    }
   },
   "additionalInformation" : {
    "requestId" : "7014646720206287504012"
   },
   "receipts" : {
    "merchantReceipt" : {
     "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nRefund\n-£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks AMEX\nAccount: ***
**** **** 0001\nEntry Mode: Chip\nAID: A0000000250100\n\nTransaction: -\nAuthorization: -\nMerchant
ID: *****67890\nTerminal ID: ****0026\n\n3043e0b61fad4c5483db3d498309460f\n10:04:19 PM: 12/1/2023\n
\n\n",
     "receiptData" : {
      "lines" : {
       "MERCHANT_DETAILS_PUBLIC_NAME" : {
        "label" : "Name",
        "value" : "CP Test"
       },
       "MERCHANT_DETAILS_ADDRESS" : {
        "label" : "Address",
        "value" : "Sample Street"
       },
       "MERCHANT_DETAILS_ZIP" : {
        "label" : "Zip",
        "value" : "UB3 2EA"
       },
       "MERCHANT_DETAILS_CITY" : {
        "label" : "City",
        "value" : "London"
       },
       "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
       },
       "MERCHANT_DETAILS_CONTACT" : {
        "label" : "Contact",
        "value" : "1234567"
       },
       "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
```

```
        "value" : ""
      },
      "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks AMEX"
      },
      "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "*** **** **** 0001"
      },
      "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000250100"
      },
      "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Chip"
      },
      "CLEARING_DETAILS_TRANSACTION_IDENTIFIER" : {
        "label" : "Transaction",
        "value" : "-"
      },
      "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "-"
      },
      "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "*****67890"
      },
      "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
        "value" : "****0026"
      },
      "RECEIPT_TYPE" : {
        "label" : "Receipt Type",
        "value" : "Merchant Receipt"
      },
      "TRANSACTION_TYPE" : {
        "label" : "Type",
        "value" : "Refund"
      },
      "SUBJECT" : {
        "label" : "Description",
        "value" : ""
      },
      "IDENTIFIER" : {
        "label" : "PWID",
        "value" : "3043e0b61fad4c5483db3d498309460f"
      },
      "AMOUNT_AND_CURRENCY" : {
        "label" : "Amount",
        "value" : "-£1.00"
      },
      "DATE" : {
        "label" : "Date",
```

```
          "value" : "12/1/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "10:04:19 PM"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
 Kingdom\n1234567\n\nRefund\n-£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks AMEX\nAccount: ***
 **** **** 0001\nEntry Mode: Chip\nAID: A0000000250100\n\nTransaction: -\nAuthorization: -\nMerchant
 ID: *****67890\nTerminal ID: ****0026\n\n3043e0b61fad4c5483db3d498309460f\n10:04:19 PM: 12/1/2023\n
\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
          "label" : "Name",
          "value" : "CP Test"
         },
         "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
         },
         "MERCHANT_DETAILS_ZIP" : {
          "label" : "Zip",
          "value" : "UB3 2EA"
         },
         "MERCHANT_DETAILS_CITY" : {
          "label" : "City",
          "value" : "London"
         },
         "MERCHANT_DETAILS_COUNTRY" : {
          "label" : "Country",
          "value" : "United Kingdom"
         },
         "MERCHANT_DETAILS_CONTACT" : {
          "label" : "Contact",
          "value" : "1234567"
         },
         "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
          "label" : "Additional Information",
          "value" : ""
         },
         "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
          "label" : "Card",
          "value" : "Payworks AMEX"
         },
         "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
          "label" : "Account",
```

```
        "value" : "*** **** **** 0001"
       },
       "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000250100"
       },
       "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Chip"
       },
       "CLEARING_DETAILS_TRANSACTION_IDENTIFIER" : {
        "label" : "Transaction",
        "value" : "-"
       },
       "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "-"
       },
       "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "*****67890"
       },
       "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
        "value" : "****0026"
       },
       "RECEIPT_TYPE" : {
        "label" : "Receipt Type",
        "value" : "Cardholder Receipt"
       },
       "TRANSACTION_TYPE" : {
        "label" : "Type",
        "value" : "Refund"
       },
       "SUBJECT" : {
        "label" : "Description",
        "value" : ""
       },
       "IDENTIFIER" : {
        "label" : "PWID",
        "value" : "3043e0b61fad4c5483db3d498309460f"
       },
       "AMOUNT_AND_CURRENCY" : {
        "label" : "Amount",
        "value" : "-£1.00"
       },
       "DATE" : {
        "label" : "Date",
        "value" : "12/1/2023"
       },
       "TIME" : {
        "label" : "Time",
        "value" : "10:04:19 PM"
       },
       "STATUS_TEXT" : {
        "label" : "Information",
```

```
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      }
     }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Requesting a Check Transaction Status

This section describes how to request a check transaction status when the app is in Local mode. This transaction is used to obtain response data for a transaction that was lost or timed out.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Requesting a Check Transaction Status

type	**Set this field to `TransactionLookupRequest`.**
idType	**Set this field to `TRANSACTION_ID` or `MERCHANT_REFERENCE_CODE`.**
id	**Set this field to the `id` or `merchantReferenceCode` field value from the original transaction.**

REST Example: Requesting a Check Transaction Status

Request

```
{
    "type": "TransactionLookupRequest",
    "idType": "TRANSACTION_ID",
    "id": "1541387b383d456aabb81cdf558b4e8e"
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
    "type" : "TransactionLookupResponse",
    "transactionDetails" : {
     "id" : "1541387b383d456aabb81cdf558b4e8e",
     "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
     "submitTimeUtc" : "2023-12-01T20:24:47+0000",
     "captured" : true,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "1.00",
      "capturedAmount" : "1.00",
      "refundableAmount" : "1.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119",
      "countryCode" : "840"
     }
    },
    "additionalInformation" : {
     "instrumentId" : "7030000000022690119",
     "requestId" : "7014622903166318504010"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****0063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
```

```
        "value" : "CP Test"
      },
      "MERCHANT_DETAILS_ADDRESS" : {
        "label" : "Address",
        "value" : "Sample Street"
      },
      "MERCHANT_DETAILS_ZIP" : {
        "label" : "Zip",
        "value" : "UB3 2EA"
      },
      "MERCHANT_DETAILS_CITY" : {
        "label" : "City",
        "value" : "London"
      },
      "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
      },
      "MERCHANT_DETAILS_CONTACT" : {
        "label" : "Contact",
        "value" : "1234567"
      },
      "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
        "value" : ""
      },
      "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks VISA"
      },
      "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "**** **** **** 0119"
      },
      "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000031010"
      },
      "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Contactless"
      },
      "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
        "label" : "Verification",
        "value" : "None"
      },
      "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "938238"
      },
      "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "**37599"
      },
      "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
```

```
          "value" : "****0063"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "1541387b383d456aabb81cdf558b4e8e"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:24:51"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****0063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
          "label" : "Name",
          "value" : "CP Test"
         },
         "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
         },
         "MERCHANT_DETAILS_ZIP" : {
          "label" : "Zip",
```

```
        "value" : "UB3 2EA"
       },
       "MERCHANT_DETAILS_CITY" : {
        "label" : "City",
        "value" : "London"
       },
       "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
       },
       "MERCHANT_DETAILS_CONTACT" : {
        "label" : "Contact",
        "value" : "1234567"
       },
       "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
        "value" : ""
       },
       "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks VISA"
       },
       "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "**** **** **** 0119"
       },
       "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000031010"
       },
       "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Contactless"
       },
       "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
        "label" : "Verification",
        "value" : "None"
       },
       "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "938238"
       },
       "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "**37599"
       },
       "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
        "value" : "****0063"
       },
       "RECEIPT_TYPE" : {
        "label" : "Receipt Type",
        "value" : "Cardholder Receipt"
       },
       "TRANSACTION_TYPE" : {
        "label" : "Type",
```

```
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "1541387b383d456aabb81cdf558b4e8e"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:24:51"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      }
     }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Cancel Transaction

This section describes how to process a cancel transaction request in Local mode. This request is sent to interrupt an in-process transaction.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Cancel Transaction

type	**Set this field to** `CancelRequest`**.**

REST Example: Processing a Cancel Transaction

Request

```
{
    "type": "CancelRequest"
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
    "type" : "PaymentResponse",
    "message" : "Payment aborted",
    "transactionDetails" : {
     "id" : "b6522aeb9d8d49b386f7c67852581145",
     "merchantReferenceCode" : "50c86aaa02ed4c0bb4b4b596379713f7",
     "submitTimeUtc" : "2023-12-01T20:30:05+0000",
     "captured" : false,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "1.00",
      "capturedAmount" : "0.00",
      "refundableAmount" : "0.00"
     }
    },
    "processingDetails" : {
     "status" : "ABORTED",
     "verificationMethod" : "UNKNOWN",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "00",
      "expirationYear" : "00",
      "type" : "UNKNOWN",
      "maskedPan" : ""
     }
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
```

```
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
 Kingdom\n1234567\n\nSale\n£1.00\n\n\nCanceled transaction.\n\n\nEntry Mode: Contactless\nAID: NULL
\n\n\nb6522aeb9d8d49b386f7c67852581145\n21:30:05: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "NULL"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "b6522aeb9d8d49b386f7c67852581145"
```

```
          },
          "AMOUNT_AND_CURRENCY" : {
            "label" : "Amount",
            "value" : "£1.00"
          },
          "DATE" : {
            "label" : "Date",
            "value" : "01/12/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "21:30:05"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Canceled transaction."
          }
        },
        "signatureLineRequired" : false
      }
    },
    "customerReceipt" : {
      "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
 Kingdom\n1234567\n\nSale\n£1.00\n\n\nCanceled transaction.\n\n\nEntry Mode: Contactless\nAID: NULL
\n\n\nb6522aeb9d8d49b386f7c67852581145\n21:30:05: 01/12/2023\n\n\n",
      "receiptData" : {
        "lines" : {
          "MERCHANT_DETAILS_PUBLIC_NAME" : {
            "label" : "Name",
            "value" : "CP Test"
          },
          "MERCHANT_DETAILS_ADDRESS" : {
            "label" : "Address",
            "value" : "Sample Street"
          },
          "MERCHANT_DETAILS_ZIP" : {
            "label" : "Zip",
            "value" : "UB3 2EA"
          },
          "MERCHANT_DETAILS_CITY" : {
            "label" : "City",
            "value" : "London"
          },
          "MERCHANT_DETAILS_COUNTRY" : {
            "label" : "Country",
            "value" : "United Kingdom"
          },
          "MERCHANT_DETAILS_CONTACT" : {
            "label" : "Contact",
            "value" : "1234567"
          },
          "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
            "label" : "Additional Information",
            "value" : ""
          },
          "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
```

```
          "label" : "AID",
          "value" : "NULL"
         },
         "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Contactless"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "b6522aeb9d8d49b386f7c67852581145"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:30:05"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Canceled transaction."
         }
        },
        "signatureLineRequired" : false
       }
      }
    }
}
```


Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.


```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
  }
```

Processing a Sale with On-Reader Tipping

This section describes how to process a sale with on-reader tipping in Local mode. At the start of each transaction, the Android device prompts the customer to add a tip by showing suggested tip amounts. The customer selects or enters a tip amount on the device before presenting their payment card.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Sale with On-Reader Tipping

type	**Set this field to `PaymentRequest`.**
merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-). Avoid using formatting that resembles a telephone number (XXX-XXX-XXXX) or a Social Security number (XXX-XX-XXXX).**
amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**
askForTip	**Set this field to `ON_DEVICE`.**

REST Example: Processing a Sale with On-Reader Tipping

Request

```
{
    "type" : "PaymentRequest",
    "merchantReferenceCode" : "adf0fa5ca70d462ba5fc0249436b656c",
    "amountDetails" : {
      "amount" : "5.00",
      "currency" : "GBP"
    },
    "askForTip" : "ON_DEVICE"
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
    "type" : "PaymentResponse",
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "55678c8b152046f7b1d77fd2286ce392",
     "merchantReferenceCode" : "adf0fa5ca70d462ba5fc0249436b656c",
     "submitTimeUtc" : "2023-12-01T21:01:23+0000",
     "captured" : true,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "6.00",
      "capturedAmount" : "6.00",
      "refundableAmount" : "6.00",
      "includedTipAmount" : "1.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119",
      "countryCode" : "840"
     }
    },
    "additionalInformation" : {
     "instrumentId" : "703000000000022690119",
     "requestId" : "701464486303620830 4012"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited Kingdom\n1234567\n\nSale\nPurchase Amount: £5.00\nTip Amount: £1.00\nTotal Amount: £6.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization: 938252\nMerchant ID: **37599\nTerminal ID: ****0063\n\n55678c8b152046f7b1d77fd2286ce392\n22:01:27: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
```

```
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938252"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
```

```
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "55678c8b152046f7b1d77fd2286ce392"
        },
        "AMOUNT_AND_CURRENCY" : {
         "label" : "Amount",
         "value" : "£6.00"
        },
        "DATE" : {
         "label" : "Date",
         "value" : "01/12/2023"
        },
        "TIME" : {
         "label" : "Time",
         "value" : "22:01:27"
        },
        "STATUS_TEXT" : {
         "label" : "Information",
         "value" : "Please retain receipt!"
        }
       },
       "signatureLineRequired" : false
      }
     },
     "customerReceipt" : {
      "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\nPurchase Amount: £5.00\nTip Amount: £1.00\nTotal Amount: £6.00\n\n\nPlease
retain receipt!\n\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID:
A0000000031010\nVerification: None\n\nAuthorization: 938252\nMerchant ID: **37599\nTerminal ID:
****0063\n\n55678c8b152046f7b1d77fd2286ce392\n22:01:27: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
```

```
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938252"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Cardholder Receipt"
        },
```

```
          "TRANSACTION_TYPE" : {
            "label" : "Type",
            "value" : "Sale"
          },
          "SUBJECT" : {
            "label" : "Description",
            "value" : ""
          },
          "IDENTIFIER" : {
            "label" : "PWID",
            "value" : "55678c8b152046f7b1d77fd2286ce392"
          },
          "AMOUNT_AND_CURRENCY" : {
            "label" : "Amount",
            "value" : "£6.00"
          },
          "DATE" : {
            "label" : "Date",
            "value" : "01/12/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "22:01:27"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
      }
    }
  }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Pre-Authorization

This section describes how to process a pre-authorization for an initial amount in Local mode. A pre-authorization transaction places a temporary hold on the customer's payment card, which can be captured at a later time.
Most authorizations expire in 5 to 7 days. The issuing bank sets the length of time before expiration. When an authorization expires with the issuing bank, your bank or processor

might require you to re-submit an authorization request and include a request for capture in the same message. For more information, see *Processing a Capture* on page 78.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Pre-Authorization

type	**Set this field to `PaymentRequest`.**
merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-). Avoid using formatting that resembles a telephone number (XXX-XXX-XXXX) or a Social Security number (XXX-XX-XXXX).**
amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**
capture	**Set this field to `false`.**

REST Example: Processing a Pre-Authorization

Request

```
{
    "type" : "PaymentRequest",
    "merchantReferenceCode" : "47bd9ed54f3f4bfabb9d3ee94cfa3008",
    "amountDetails" : {
      "amount" : "1.00",
      "currency" : "GBP"
    },
    "capture" : false
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request


```
{
    "type" : "PaymentResponse",
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "e43069fbf85543659e478edd8d50f244",
     "merchantReferenceCode" : "47bd9ed54f3f4bfabb9d3ee94cfa3008",
     "submitTimeUtc" : "2023-12-01T20:38:14+0000",
     "captured" : false,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "1.00",
      "capturedAmount" : "0.00",
      "refundableAmount" : "1.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119",
      "countryCode" : "840"
     }
    },
    "additionalInformation" : {
     "instrumentId" : "7030000000022690119",
     "requestId" : "7014630972006630604008"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA
 London\nUnited Kingdom\n1234567\n\nAuth only\n£1.00\n\n\nPlease retain receipt!\n
\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID:
 A0000000031010\nVerification: None\n\nAuthorization: 938242\nMerchant ID: **37599\nTerminal ID:
 ****0063\n\ne43069fbf85543659e478edd8d50f244\n21:38:18: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
```

```
        "label" : "City",
        "value" : "London"
      },
      "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
      },
      "MERCHANT_DETAILS_CONTACT" : {
        "label" : "Contact",
        "value" : "1234567"
      },
      "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
        "value" : ""
      },
      "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks VISA"
      },
      "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "**** **** **** 0119"
      },
      "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000031010"
      },
      "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Contactless"
      },
      "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
        "label" : "Verification",
        "value" : "None"
      },
      "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "938242"
      },
      "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "**37599"
      },
      "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
        "value" : "****0063"
      },
      "RECEIPT_TYPE" : {
        "label" : "Receipt Type",
        "value" : "Merchant Receipt"
      },
      "TRANSACTION_TYPE" : {
        "label" : "Type",
        "value" : "Auth only"
      },
      "SUBJECT" : {
```

```
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "e43069fbf85543659e478edd8d50f244"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:38:18"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA
 London\nUnited Kingdom\n1234567\n\nAuth only\n£1.00\n\n\nPlease retain receipt!\n
\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID:
 A0000000031010\nVerification: None\n\nAuthorization: 938242\nMerchant ID: **37599\nTerminal ID:
 ****0063\n\ne43069fbf85543659e478edd8d50f244\n21:38:18: 01/12/2023\n\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
          "label" : "Name",
          "value" : "CP Test"
         },
         "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
         },
         "MERCHANT_DETAILS_ZIP" : {
          "label" : "Zip",
          "value" : "UB3 2EA"
         },
         "MERCHANT_DETAILS_CITY" : {
          "label" : "City",
          "value" : "London"
         },
         "MERCHANT_DETAILS_COUNTRY" : {
          "label" : "Country",
          "value" : "United Kingdom"
         },
         "MERCHANT_DETAILS_CONTACT" : {
```

```
        "label" : "Contact",
        "value" : "1234567"
      },
      "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
        "value" : ""
      },
      "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks VISA"
      },
      "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "**** **** **** 0119"
      },
      "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000031010"
      },
      "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Contactless"
      },
      "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
        "label" : "Verification",
        "value" : "None"
      },
      "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "938242"
      },
      "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "**37599"
      },
      "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
        "value" : "****0063"
      },
      "RECEIPT_TYPE" : {
        "label" : "Receipt Type",
        "value" : "Cardholder Receipt"
      },
      "TRANSACTION_TYPE" : {
        "label" : "Type",
        "value" : "Auth only"
      },
      "SUBJECT" : {
        "label" : "Description",
        "value" : ""
      },
      "IDENTIFIER" : {
        "label" : "PWID",
        "value" : "e43069fbf85543659e478edd8d50f244"
      },
      "AMOUNT_AND_CURRENCY" : {
```

```
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:38:18"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      }
     }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing an Incremental Authorization

This section describes how to process an incremental authorization in Local mode. This type of request can be made on a pre-authorization transaction to increase the authorized amount before it is captured.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing an Incremental Authorization

type	**Set this field to `IncrementalAuthorizationRequest`.**
transactionId	Set this field to the `id` field value from the original transaction.

amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing an Incremental Authorization

Request

```
{
    "type": "IncrementalAuthorizationRequest",
    "transactionId": "e43069fbf85543659e478edd8d50f244",
    "amountDetails": {
     "amount": "2.00",
     "currency": "GBP"
    }
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
    "type" : "IncrementalAuthorizationResponse",
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "6da4aff381e8483ebc65ebf4fbb27ec8",
     "merchantReferenceCode" : "47bd9ed54f3f4bfabb9d3ee94cfa3008",
     "submitTimeUtc" : "2023-12-01T20:39:43+0000",
     "captured" : false,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "2.00",
      "capturedAmount" : "0.00",
      "refundableAmount" : "0.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "MANUAL",
     "card" : {
      "expirationMonth" : "00",
      "expirationYear" : "00",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119"
     }
```

```
    },
    "additionalInformation" : {
     "requestId" : "701463184380664960400 9"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nTop-up\n£2.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount:
**** **** **** 0119\nEntry Mode: Keyed\nVerification: None\n\nAuthorization: 938243\nMerchant ID:
**37599\nTerminal ID: ****0063\n\n6da4aff381e8483ebc65ebf4fbb27ec8\n21:39:45: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Keyed"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
```

```
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "938243"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Top-up"
        },
        "SUBJECT" : {
          "label" : "Description",
          "value" : ""
        },
        "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "6da4aff381e8483ebc65ebf4fbb27ec8"
        },
        "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£2.00"
        },
        "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
        },
        "TIME" : {
          "label" : "Time",
          "value" : "21:39:45"
        },
        "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
        }
       },
       "signatureLineRequired" : false
      }
     },
     "customerReceipt" : {
      "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nTop-up\n£2.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount:
**** **** **** 0119\nEntry Mode: Keyed\nVerification: None\n\nAuthorization: 938243\nMerchant ID:
**37599\nTerminal ID: ****0063\n\n6da4aff381e8483ebc65ebf4fbb27ec8\n21:39:45: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
```

```
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
          "label" : "Name",
          "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
          "label" : "Zip",
          "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
          "label" : "City",
          "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
          "label" : "Country",
          "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
          "label" : "Contact",
          "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
          "label" : "Additional Information",
          "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
          "label" : "Card",
          "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
          "label" : "Account",
          "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Keyed"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
          "label" : "Verification",
          "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "938243"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0063"
        },
```

```
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
        },
        "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Top-up"
        },
        "SUBJECT" : {
          "label" : "Description",
          "value" : ""
        },
        "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "6da4aff381e8483ebc65ebf4fbb27ec8"
        },
        "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£2.00"
        },
        "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
        },
        "TIME" : {
          "label" : "Time",
          "value" : "21:39:45"
        },
        "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
        }
       },
       "signatureLineRequired" : false
      }
     }
    }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Capture

This section describes how to capture a pre-authorized transaction in Local mode. The capture request references the approved pre-authorization request.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Capture

type	**Set this field to `CaptureRequest`.**
transactionId	**Set this field to the `id` field value from the original transaction.**

Optional Fields for Processing a Capture

Use the optional amount and currency fields to process a partial capture. Otherwise, the full amount will be captured.

amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing a Capture

Request

```
{
    "type": "CaptureRequest",
    "transactionId": "cb6475bafbb94d03b0f984629c63c294",
    "amountDetails": {
      "amount": "3.00",
      "currency": "GBP"
    }
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
    "type" : "CaptureResponse",
    "message" : "Payment approved",
    "transactionDetails" : {
      "id" : "cb6475bafbb94d03b0f984629c63c294",
```

```
    "merchantReferenceCode" : "dd02499055544be18ba7fa0397909d65",
    "submitTimeUtc" : "2023-12-01T20:43:03+0000",
    "captured" : true,
    "amountDetails" : {
     "currency" : "GBP",
     "amount" : "3.00",
     "capturedAmount" : "3.00",
     "refundableAmount" : "3.00"
    }
   },
   "processingDetails" : {
    "status" : "APPROVED",
    "verificationMethod" : "NONE",
    "entryMode" : "NFC_ICC",
    "card" : {
     "expirationMonth" : "12",
     "expirationYear" : "2025",
     "type" : "VISA",
     "maskedPan" : "476173XXXXXX0119",
     "countryCode" : "840"
    }
   },
   "additionalInformation" : {
    "instrumentId" : "7030000000022690119",
    "requestId" : "701463386019673450 4012"
   },
   "linkedOperations" : [ ],
   "receipts" : {
    "merchantReceipt" : {
     "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£3.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938244\nMerchant ID: **37599\nTerminal ID: ****0063\n\ncb6475bafbb94d03b0f984629c63c294\n21:43:07:
01/12/2023\n\n\n",
     "receiptData" : {
      "lines" : {
       "MERCHANT_DETAILS_PUBLIC_NAME" : {
        "label" : "Name",
        "value" : "CP Test"
       },
       "MERCHANT_DETAILS_ADDRESS" : {
        "label" : "Address",
        "value" : "Sample Street"
       },
       "MERCHANT_DETAILS_ZIP" : {
        "label" : "Zip",
        "value" : "UB3 2EA"
       },
       "MERCHANT_DETAILS_CITY" : {
        "label" : "City",
        "value" : "London"
       },
       "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
       },
```

```
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938244"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "cb6475bafbb94d03b0f984629c63c294"
        },
```

```
          "AMOUNT_AND_CURRENCY" : {
            "label" : "Amount",
            "value" : "£3.00"
          },
          "DATE" : {
            "label" : "Date",
            "value" : "01/12/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "21:43:07"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
      }
    },
    "customerReceipt" : {
      "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£3.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938244\nMerchant ID: **37599\nTerminal ID: ****0063\n\ncb6475bafbb94d03b0f984629c63c294\n21:43:07:
01/12/2023\n\n\n",
      "receiptData" : {
        "lines" : {
          "MERCHANT_DETAILS_PUBLIC_NAME" : {
            "label" : "Name",
            "value" : "CP Test"
          },
          "MERCHANT_DETAILS_ADDRESS" : {
            "label" : "Address",
            "value" : "Sample Street"
          },
          "MERCHANT_DETAILS_ZIP" : {
            "label" : "Zip",
            "value" : "UB3 2EA"
          },
          "MERCHANT_DETAILS_CITY" : {
            "label" : "City",
            "value" : "London"
          },
          "MERCHANT_DETAILS_COUNTRY" : {
            "label" : "Country",
            "value" : "United Kingdom"
          },
          "MERCHANT_DETAILS_CONTACT" : {
            "label" : "Contact",
            "value" : "1234567"
          },
          "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
            "label" : "Additional Information",
            "value" : ""
          },
```

```
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938244"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Cardholder Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "cb6475bafbb94d03b0f984629c63c294"
        },
        "AMOUNT_AND_CURRENCY" : {
         "label" : "Amount",
         "value" : "£3.00"
        },
        "DATE" : {
         "label" : "Date",
         "value" : "01/12/2023"
        },
```

```
          "TIME" : {
            "label" : "Time",
            "value" : "21:43:07"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
      }
    }
  }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Sale with Installment Details

This section describes how to process a sale transaction with installment details when the app is in Local mode. This type of transaction can be used to include the required installment details as part of the sale transaction.
This transaction is available only in the Latin American & Caribbean (LAC) region.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Sale with Installment Details

type	**Set this field to `PaymentRequest`.**
merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-). Avoid using formatting that resembles a telephone number (XXX-XXX-XXXX) or a Social Security number (XXX-XX-XXXX).**
amountDetails.amount	**Set this field to the transaction amount.**

amountDetails.currency	**Set this field to the currency code.**

Optional Fields for Processing a Sale with Installment Details

Use one or more of the optional **installmentDetails** fields to provide additional installment details.

installmentDetails.numberOfInstallments	**Set this field to the number of installments.**
installmentDetails.planType	**Set this field to** `MERCHANT_FUNDED` **or** `ISSUER_FUNDED`**.**
installmentDetails.interestPlan	**Set this field to** `true` **or** `false`**.**
installmentDetails.governmentPlan	**Set this field to** `true` **or** `false`**.**

REST Example: Processing a Sale with Installment Details

Request

```
{
    "type" : "PaymentRequest",
    "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails" : {
     "amount" : "20.00",
     "currency" : "USD"
    },
    "installmentDetails": {
     "numberOfInstallments": 5,
     "planType": "MERCHANT_FUNDED",
     "interestPlan": true,
     "governmentPlan": true
    }
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
   "type": "PaymentResponse",
   "message": "Payment approved",
   "transactionDetails": {
      "id": "8ccb150a88bd4c6f9a00a687f39ca97d",
      "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
```

```
      "submitTimeUtc": "2024-09-20T08:15:12+0000",
      "captured": true,
      "amountDetails": {
        "amount": "20.00",
        "currency": "USD",
        "capturedAmount": "20.00",
        "refundableAmount": "20.00"
      }
    },
    "processingDetails": {
      "status": "APPROVED",
      "verificationMethod": "NONE",
      "entryMode": "NFC_ICC",
      "card": {
        "expirationMonth": "12",
        "expirationYear": "2025",
        "type": "VISA",
        "maskedPan": "476173XXXXXX0119",
        "countryCode": "840"
      }
    },
    "additionalInformation": {
      "requestId": "726820114633606950401l"
    },
    "linkedOperations": [],
    "receipts": {
      "merchantReceipt": {
        "preformattedReceipt": "Merchant Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 546712\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n8ccb150a88bd4c6f9a00a687f39ca97d\n\n4:15:12 AM: 9/20/2024\n\n\n",
        "receiptData": {
          "signatureLineRequired": false,
          "lines": {
            "MERCHANT_DETAILS_PUBLIC_NAME": {
              "label": "Name",
              "value": "Test"
            },
            "MERCHANT_DETAILS_ADDRESS": {
              "label": "Address",
              "value": "Sample Street 123"
            },
            "MERCHANT_DETAILS_ZIP": {
              "label": "Zip",
              "value": "34351"
            },
            "MERCHANT_DETAILS_CITY": {
              "label": "City",
              "value": "New York"
            },
            "MERCHANT_DETAILS_COUNTRY": {
              "label": "Country",
              "value": "United States"
            },
            "MERCHANT_DETAILS_CONTACT": {
```

```
      "label": "Contact",
      "value": "12345678"
    },
    "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
      "label": "Additional Information",
      "value": ""
    },
    "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
      "label": "Card",
      "value": "Payworks VISA"
    },
    "PAYMENT_DETAILS_MASKED_ACCOUNT": {
      "label": "Account",
      "value": "**** **** **** 0119"
    },
    "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
      "label": "AID",
      "value": "A0000000031010"
    },
    "PAYMENT_DETAILS_SOURCE": {
      "label": "Entry Mode",
      "value": "Contactless"
    },
    "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
      "label": "Verification",
      "value": "No Verification"
    },
    "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
      "label": "Transaction",
      "value": "546712"
    },
    "CLEARING_DETAILS_AUTHORIZATION_CODE": {
      "label": "Authorization",
      "value": "831000"
    },
    "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
      "label": "Merchant ID",
      "value": "***********st051"
    },
    "CLEARING_DETAILS_TERMINAL_ID": {
      "label": "Terminal ID",
      "value": "****7069"
    },
    "RECEIPT_TYPE": {
      "label": "Receipt Type",
      "value": "Merchant Receipt"
    },
    "TRANSACTION_TYPE": {
      "label": "Type",
      "value": "Payment"
    },
    "SUBJECT": {
      "label": "Description",
      "value": ""
    },
    "IDENTIFIER": {
```

```
              "label": "PWID",
              "value": "8ccb150a88bd4c6f9a00a687f39ca97d"
            },
            "AMOUNT_AND_CURRENCY": {
              "label": "Amount",
              "value": "USD$20.00"
            },
            "DATE": {
              "label": "Date",
              "value": "9/20/2024"
            },
            "TIME": {
              "label": "Time",
              "value": "4:15:12 AM"
            },
            "STATUS_TEXT": {
              "label": "Information",
              "value": "Please retain receipt!"
            }
          },
          "tipLineRequired": false,
          "totalLineRequired": false
        }
      },
      "customerReceipt": {
        "preformattedReceipt": "Cardholder Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 546712\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n8ccb150a88bd4c6f9a00a687f39ca97d\n\n4:15:12 AM: 9/20/2024\n\n\n",
        "receiptData": {
          "signatureLineRequired": false,
          "lines": {
            "MERCHANT_DETAILS_PUBLIC_NAME": {
              "label": "Name",
              "value": "Test"
            },
            "MERCHANT_DETAILS_ADDRESS": {
              "label": "Address",
              "value": "Sample Street 123"
            },
            "MERCHANT_DETAILS_ZIP": {
              "label": "Zip",
              "value": "34351"
            },
            "MERCHANT_DETAILS_CITY": {
              "label": "City",
              "value": "New York"
            },
            "MERCHANT_DETAILS_COUNTRY": {
              "label": "Country",
              "value": "United States"
            },
            "MERCHANT_DETAILS_CONTACT": {
              "label": "Contact",
              "value": "12345678"
```

```
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
          "label": "Additional Information",
          "value": ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
          "label": "Card",
          "value": "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT": {
          "label": "Account",
          "value": "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
          "label": "AID",
          "value": "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE": {
          "label": "Entry Mode",
          "value": "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
          "label": "Verification",
          "value": "No Verification"
        },
        "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
          "label": "Transaction",
          "value": "546712"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE": {
          "label": "Authorization",
          "value": "831000"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
          "label": "Merchant ID",
          "value": "***********st051"
        },
        "CLEARING_DETAILS_TERMINAL_ID": {
          "label": "Terminal ID",
          "value": "****7069"
        },
        "RECEIPT_TYPE": {
          "label": "Receipt Type",
          "value": "Cardholder Receipt"
        },
        "TRANSACTION_TYPE": {
          "label": "Type",
          "value": "Payment"
        },
        "SUBJECT": {
          "label": "Description",
          "value": ""
        },
        "IDENTIFIER": {
          "label": "PWID",
          "value": "8ccb150a88bd4c6f9a00a687f39ca97d"
```

```
            },
            "AMOUNT_AND_CURRENCY": {
               "label": "Amount",
               "value": "USD$20.00"
            },
            "DATE": {
               "label": "Date",
               "value": "9/20/2024"
            },
            "TIME": {
               "label": "Time",
               "value": "4:15:12 AM"
            },
            "STATUS_TEXT": {
               "label": "Information",
               "value": "Please retain receipt!"
            }
         },
         "tipLineRequired": false,
         "totalLineRequired": false
      }
    }
  },
  "installmentDetails": {
     "numberOfInstallments": 5,
     "planType": "MERCHANT_FUNDED",
     "interestPlan": true,
     "governmentPlan": true
  }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Sale with Payment Facilitator Details

This section describes how to process a sale transaction with payment facilitator details when the app is in Local mode. This type of transaction can be used to include the required payment facilitator details as part of the sale transaction.

Endpoints

The endpoint is the same for the test and production environments.

Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Sale with Payment Facilitator Details

type	**Set this field to `PaymentRequest`.**
merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-). Avoid using formatting that resembles a telephone number (XXX-XXX-XXXX) or a Social Security number (XXX-XX-XXXX).**
amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**

Optional Fields for Processing a Sale with Payment Facilitator Details

Use one or more of the optional **merchantDetails** fields to provide the required payment facilitator details.

merchantDetails.salesOrganizationId	**Set this field to the sales organization identifier.**
merchantDetails.subMerchantId	**Set this field to the sub-merchant identifier.**
merchantDetails.descriptorName	**Set this field to the descriptor name.**

REST Example: Processing a Sale with Payment Facilitator Details

Request

```
{
    "type" : "PaymentRequest",
    "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails" : {
      "amount" : "1.00",
      "currency" : "USD"
    },
    "merchantDetails": {
      "salesOrganizationId": "12345",
      "subMerchantId": "SM67890",
      "descriptorName": "ExampleMerchant"
    }
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
  "type": "PaymentResponse",
  "message": "Payment approved",
  "transactionDetails": {
    "id": "940d49ee94444764acb1c898e2254954",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "submitTimeUtc": "2024-09-20T07:53:36+0000",
    "captured": true,
    "amountDetails": {
      "amount": "1.00",
      "currency": "USD",
      "capturedAmount": "1.00",
      "refundableAmount": "1.00"
    }
  },
  "processingDetails": {
    "status": "APPROVED",
    "verificationMethod": "NONE",
    "entryMode": "NFC_ICC",
    "card": {
      "expirationMonth": "12",
      "expirationYear": "2025",
      "type": "VISA",
      "maskedPan": "476173XXXXXX0119",
      "countryCode": "840"
    }
  },
  "additionalInformation": {
    "requestId": "7268188188226629104009"
  },
  "linkedOperations": [],
  "receipts": {
    "merchantReceipt": {
      "preformattedReceipt": "Merchant Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$1.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 545814\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n940d49ee94444764acb1c898e2254954\n\n3:53:36 AM: 9/20/2024\n\n\n",
      "receiptData": {
        "signatureLineRequired": false,
        "lines": {
          "MERCHANT_DETAILS_PUBLIC_NAME": {
```

```
            "label": "Name",
            "value": "Test"
        },
        "MERCHANT_DETAILS_ADDRESS": {
            "label": "Address",
            "value": "Sample Street 123"
        },
        "MERCHANT_DETAILS_ZIP": {
            "label": "Zip",
            "value": "34351"
        },
        "MERCHANT_DETAILS_CITY": {
            "label": "City",
            "value": "New York"
        },
        "MERCHANT_DETAILS_COUNTRY": {
            "label": "Country",
            "value": "United States"
        },
        "MERCHANT_DETAILS_CONTACT": {
            "label": "Contact",
            "value": "12345678"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
            "label": "Additional Information",
            "value": ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
            "label": "Card",
            "value": "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT": {
            "label": "Account",
            "value": "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
            "label": "AID",
            "value": "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE": {
            "label": "Entry Mode",
            "value": "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
            "label": "Verification",
            "value": "No Verification"
        },
        "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
            "label": "Transaction",
            "value": "545814"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE": {
            "label": "Authorization",
            "value": "831000"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
```

```
              "label": "Merchant ID",
              "value": "***********st051"
            },
            "CLEARING_DETAILS_TERMINAL_ID": {
              "label": "Terminal ID",
              "value": "****7069"
            },
            "RECEIPT_TYPE": {
              "label": "Receipt Type",
              "value": "Merchant Receipt"
            },
            "TRANSACTION_TYPE": {
              "label": "Type",
              "value": "Payment"
            },
            "SUBJECT": {
              "label": "Description",
              "value": ""
            },
            "IDENTIFIER": {
              "label": "PWID",
              "value": "940d49ee94444764acb1c898e2254954"
            },
            "AMOUNT_AND_CURRENCY": {
              "label": "Amount",
              "value": "USD$1.00"
            },
            "DATE": {
              "label": "Date",
              "value": "9/20/2024"
            },
            "TIME": {
              "label": "Time",
              "value": "3:53:36 AM"
            },
            "STATUS_TEXT": {
              "label": "Information",
              "value": "Please retain receipt!"
            }
          },
          "tipLineRequired": false,
          "totalLineRequired": false
        }
      },
      "customerReceipt": {
        "preformattedReceipt": "Cardholder Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$1.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 545814\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n940d49ee94444764acb1c898e2254954\n\n3:53:36 AM: 9/20/2024\n\n\n",
        "receiptData": {
          "signatureLineRequired": false,
          "lines": {
            "MERCHANT_DETAILS_PUBLIC_NAME": {
              "label": "Name",
              "value": "Test"
```

```
        },
        "MERCHANT_DETAILS_ADDRESS": {
          "label": "Address",
          "value": "Sample Street 123"
        },
        "MERCHANT_DETAILS_ZIP": {
          "label": "Zip",
          "value": "34351"
        },
        "MERCHANT_DETAILS_CITY": {
          "label": "City",
          "value": "New York"
        },
        "MERCHANT_DETAILS_COUNTRY": {
          "label": "Country",
          "value": "United States"
        },
        "MERCHANT_DETAILS_CONTACT": {
          "label": "Contact",
          "value": "12345678"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
          "label": "Additional Information",
          "value": ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
          "label": "Card",
          "value": "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT": {
          "label": "Account",
          "value": "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
          "label": "AID",
          "value": "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE": {
          "label": "Entry Mode",
          "value": "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
          "label": "Verification",
          "value": "No Verification"
        },
        "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
          "label": "Transaction",
          "value": "545814"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE": {
          "label": "Authorization",
          "value": "831000"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
          "label": "Merchant ID",
          "value": "**********st051"
```

```
            },
            "CLEARING_DETAILS_TERMINAL_ID": {
              "label": "Terminal ID",
              "value": "****7069"
            },
            "RECEIPT_TYPE": {
              "label": "Receipt Type",
              "value": "Cardholder Receipt"
            },
            "TRANSACTION_TYPE": {
              "label": "Type",
              "value": "Payment"
            },
            "SUBJECT": {
              "label": "Description",
              "value": ""
            },
            "IDENTIFIER": {
              "label": "PWID",
              "value": "940d49ee94444764acb1c898e2254954"
            },
            "AMOUNT_AND_CURRENCY": {
              "label": "Amount",
              "value": "USD$1.00"
            },
            "DATE": {
              "label": "Date",
              "value": "9/20/2024"
            },
            "TIME": {
              "label": "Time",
              "value": "3:53:36 AM"
            },
            "STATUS_TEXT": {
              "label": "Information",
              "value": "Please retain receipt!"
            }
          },
          "tipLineRequired": false,
          "totalLineRequired": false
        }
      }
    },
    "merchantDetails": {
      "salesOrganizationId": "12345",
      "subMerchantId": "SM67890",
      "descriptorName": "ExampleMerchant"
    }
}
```


Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.


```
{
    "type": "ErrorResponse",
```

```
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Sale with Tax Details

This section describes how to process a sale transaction with tax details when the app is in Local mode. This type of transaction can be used to include the required tax details as part of the sale transaction.

Endpoints

The endpoint is the same for the test and production environments.
Test: `wss://{device IP address:port number}/`
Production: `wss://{device IP address:port number}/`

Required Fields for Processing a Sale with Tax Details

type	**Set this field to `PaymentRequest`.**
merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-). Avoid using formatting that resembles a telephone number (XXX-XXX-XXXX) or a Social Security number (XXX-XX-XXXX).**
amountDetails.amount	**Set this field to the transaction amount.**
amountDetails.currency	**Set this field to the currency code.**

Optional Fields for Processing a Sale with Tax Details

Use one or more of the optional **taxDetails** fields to provide the required tax details.

taxDetails.taxId	**Set this field to the merchant tax identifier.**
taxDetails.salesSlipNumber	**Set this field to the sales slip number.**
taxDetails.includedTaxAmount	**Set this field to the tax amount.**
taxDetails.includedLocalTaxAmount	**Set this field to the local tax amount.**
taxDetails.includedNationalTaxAmount	**Set this field to the national tax amount.**

REST Example: Processing a Sale with Tax Details

Request

```
{
```

```
    "type" : "PaymentRequest",
    "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails" : {
     "amount" : "20.00",
     "currency" : "USD"
    },
    "taxDetails": {
     "taxId": "TaxID1234",
     "salesSlipNumber": 12345678,
     "includedTaxAmount": "5.00",
     "includedLocalTaxAmount": "1.00",
     "includedNationalTaxAmount": "2.00"
    }
}
```

Mid-Transaction Status Updates

During the transaction, you might receive one or more update responses indicating the current status of the transaction. You can choose to display these updates on your point-of-sale (POS) system.

```
{
    "type": "TransactionStatusResponse",
    "message": "Status update to display.",
    "canBeAborted": true/false
}
```

Response to a Successful Request

```
{
   "type": "PaymentResponse",
   "message": "Payment approved",
   "transactionDetails": {
      "id": "4bebd72cf0ff4a9ea212baca0c6d9faf",
      "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
      "submitTimeUtc": "2024-09-20T07:15:25+0000",
      "captured": true,
      "amountDetails": {
         "amount": "20.00",
         "currency": "USD",
         "capturedAmount": "20.00",
         "refundableAmount": "20.00"
      }
   },
   "processingDetails": {
      "status": "APPROVED",
      "verificationMethod": "NONE",
      "entryMode": "NFC_ICC",
      "card": {
         "expirationMonth": "12",
         "expirationYear": "2025",
         "type": "VISA",
         "maskedPan": "476173XXXXXX0119",
         "countryCode": "840"
      }
   },
```

```
  "additionalInformation": {
    "requestId": "726816528357624840400 7"
  },
  "linkedOperations": [],
  "receipts": {
    "merchantReceipt": {
      "preformattedReceipt": "Merchant Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 129702\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n4bebd72cf0ff4a9ea212baca0c6d9faf\n\n3:15:25 AM: 9/20/2024\n\n\n",
      "receiptData": {
        "signatureLineRequired": false,
        "lines": {
          "MERCHANT_DETAILS_PUBLIC_NAME": {
            "label": "Name",
            "value": "Test"
          },
          "MERCHANT_DETAILS_ADDRESS": {
            "label": "Address",
            "value": "Sample Street 123"
          },
          "MERCHANT_DETAILS_ZIP": {
            "label": "Zip",
            "value": "34351"
          },
          "MERCHANT_DETAILS_CITY": {
            "label": "City",
            "value": "New York"
          },
          "MERCHANT_DETAILS_COUNTRY": {
            "label": "Country",
            "value": "United States"
          },
          "MERCHANT_DETAILS_CONTACT": {
            "label": "Contact",
            "value": "12345678"
          },
          "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
            "label": "Additional Information",
            "value": ""
          },
          "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
            "label": "Card",
            "value": "Payworks VISA"
          },
          "PAYMENT_DETAILS_MASKED_ACCOUNT": {
            "label": "Account",
            "value": "**** **** **** 0119"
          },
          "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
            "label": "AID",
            "value": "A0000000031010"
          },
          "PAYMENT_DETAILS_SOURCE": {
            "label": "Entry Mode",
```

```
            "value": "Contactless"
          },
          "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
            "label": "Verification",
            "value": "No Verification"
          },
          "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
            "label": "Transaction",
            "value": "129702"
          },
          "CLEARING_DETAILS_AUTHORIZATION_CODE": {
            "label": "Authorization",
            "value": "831000"
          },
          "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
            "label": "Merchant ID",
            "value": "**********st051"
          },
          "CLEARING_DETAILS_TERMINAL_ID": {
            "label": "Terminal ID",
            "value": "****7069"
          },
          "RECEIPT_TYPE": {
            "label": "Receipt Type",
            "value": "Merchant Receipt"
          },
          "TRANSACTION_TYPE": {
            "label": "Type",
            "value": "Payment"
          },
          "SUBJECT": {
            "label": "Description",
            "value": ""
          },
          "IDENTIFIER": {
            "label": "PWID",
            "value": "4bebd72cf0ff4a9ea212baca0c6d9faf"
          },
          "AMOUNT_AND_CURRENCY": {
            "label": "Amount",
            "value": "USD$20.00"
          },
          "DATE": {
            "label": "Date",
            "value": "9/20/2024"
          },
          "TIME": {
            "label": "Time",
            "value": "3:15:25 AM"
          },
          "STATUS_TEXT": {
            "label": "Information",
            "value": "Please retain receipt!"
          }
        },
        "tipLineRequired": false,
```

```
          "totalLineRequired": false
        }
      },
      "customerReceipt": {
        "preformattedReceipt": "Cardholder Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 12970 2\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n4bebd72cf0ff4a9ea212baca0c6d9faf\n\n3:15:25 AM: 9/20/2024\n\n\n",
        "receiptData": {
          "signatureLineRequired": false,
          "lines": {
            "MERCHANT_DETAILS_PUBLIC_NAME": {
              "label": "Name",
              "value": "Test"
            },
            "MERCHANT_DETAILS_ADDRESS": {
              "label": "Address",
              "value": "Sample Street 123"
            },
            "MERCHANT_DETAILS_ZIP": {
              "label": "Zip",
              "value": "34351"
            },
            "MERCHANT_DETAILS_CITY": {
              "label": "City",
              "value": "New York"
            },
            "MERCHANT_DETAILS_COUNTRY": {
              "label": "Country",
              "value": "United States"
            },
            "MERCHANT_DETAILS_CONTACT": {
              "label": "Contact",
              "value": "12345678"
            },
            "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
              "label": "Additional Information",
              "value": ""
            },
            "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
              "label": "Card",
              "value": "Payworks VISA"
            },
            "PAYMENT_DETAILS_MASKED_ACCOUNT": {
              "label": "Account",
              "value": "**** **** **** 0119"
            },
            "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
              "label": "AID",
              "value": "A0000000031010"
            },
            "PAYMENT_DETAILS_SOURCE": {
              "label": "Entry Mode",
              "value": "Contactless"
            },
```

```
            "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
              "label": "Verification",
              "value": "No Verification"
            },
            "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
              "label": "Transaction",
              "value": "129702"
            },
            "CLEARING_DETAILS_AUTHORIZATION_CODE": {
              "label": "Authorization",
              "value": "831000"
            },
            "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
              "label": "Merchant ID",
              "value": "***********st051"
            },
            "CLEARING_DETAILS_TERMINAL_ID": {
              "label": "Terminal ID",
              "value": "****7069"
            },
            "RECEIPT_TYPE": {
              "label": "Receipt Type",
              "value": "Cardholder Receipt"
            },
            "TRANSACTION_TYPE": {
              "label": "Type",
              "value": "Payment"
            },
            "SUBJECT": {
              "label": "Description",
              "value": ""
            },
            "IDENTIFIER": {
              "label": "PWID",
              "value": "4bebd72cf0ff4a9ea212baca0c6d9faf"
            },
            "AMOUNT_AND_CURRENCY": {
              "label": "Amount",
              "value": "USD$20.00"
            },
            "DATE": {
              "label": "Date",
              "value": "9/20/2024"
            },
            "TIME": {
              "label": "Time",
              "value": "3:15:25 AM"
            },
            "STATUS_TEXT": {
              "label": "Information",
              "value": "Please retain receipt!"
            }
          },
          "tipLineRequired": false,
          "totalLineRequired": false
        }
```

```
      }
    },
    "taxDetails": {
       "taxId": "TaxID1234",
       "salesSlipNumber": 12345678,
       "includedTaxAmount": "5.00",
       "includedLocalTaxAmount": "1.00",
       "includedNationalTaxAmount": "2.00"
    }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Cloud Mode Payment Services

This section describes how to process payment services featured in the Acceptance Devices app when operated in Cloud mode. In this mode, the point-of-sale (POS) system communicates over the cloud with the Acceptance Devices app on the Android device. For information about other modes available in the Acceptance Devices app, see:

- *Local Mode Payment Services* on page 33
- *Standalone Mode Payment Services* on page 170

Communication Protocol Used in Cloud Mode

When operating the solution in Cloud mode, the communication protocol used between the Acceptance Devices app and the point-of-sale (POS) system is a single HTTPS request to the backend.
The transaction response can be sent either synchronously or asynchronously:

Synchronously	The POS system keeps the connection open until the transaction is completed and the response is provided with the full transaction details. The backend timeout setting is 180 seconds.
Asynchronously	The POS system receives a response with an interaction identifier after the transaction is started. The interaction identifier can then be used to check the transaction events. After the transaction is completed, the interaction identifier can be used to get the transaction identifier. The transaction identifier can then be used to get the full transaction and receipt details. For more information, see *Receiving*

Transaction Responses Asynchronously on page 166.

Generating a Bearer Token for Authentication

This section describes how to generate a bearer token for authentication. A unique bearer token is required to authenticate each payment transaction request when the app is in Cloud mode.

Generating a Bearer Token for Authentication

You must generate a new bearer token before sending each transaction request. Follow these steps to generate a bearer token:

1. Create a P12 certificate for the transacting merchant ID (MID).
2. Construct a message using a JSON web Token (JWT) by following the steps shown in *Getting Started with REST*.
3. Set the **digest** field (message body) in the JWT as blank.
4. Use the JWT as the bearer token to authenticate the payment transaction request.

Processing a Sale

This section describes how to process a sale transaction when the app is in Cloud mode. This transaction combines an authorization and a capture into a single transaction. Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Sale

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to `PaymentRequest`.**
request.merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-).**
request.amountDetails.amount	**Set this field to the transaction amount.**

request.amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing a Sale

Request

```
{
  "serialNumber": "1850000000",
  "request": {
    "type": "PaymentRequest",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails": {
      "amount": "1.00",
      "currency": "GBP"
    }
  }
}
```

Response to a Successful Request

```
{
   "type" : "PaymentResponse",
   "message" : "Payment approved",
   "transactionDetails" : {
    "id" : "1541387b383d456aabb81cdf558b4e8e",
    "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
    "submitTimeUtc" : "2023-12-01T20:24:47+0000",
    "captured" : true,
    "amountDetails" : {
     "currency" : "GBP",
     "amount" : "1.00",
     "capturedAmount" : "1.00",
     "refundableAmount" : "1.00"
    }
   },
   "processingDetails" : {
    "status" : "APPROVED",
    "verificationMethod" : "NONE",
    "entryMode" : "NFC_ICC",
    "card" : {
     "expirationMonth" : "12",
     "expirationYear" : "2025",
     "type" : "VISA",
     "maskedPan" : "476173XXXXXX0119",
     "countryCode" : "840"
    }
   },
   "additionalInformation" : {
    "instrumentId" : "7030000000022690119",
    "requestId" : "7014622903166318504010"
   },
   "linkedOperations" : [ ],
   "receipts" : {
    "merchantReceipt" : {
```

```
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****0063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
```

```
          "label" : "Authorization",
          "value" : "938238"
         },
         "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
         },
         "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****00063"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "1541387b383d456aabb81cdf558b4e8e"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:24:51"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****00063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
```

```
        "label" : "Name",
        "value" : "CP Test"
      },
      "MERCHANT_DETAILS_ADDRESS" : {
        "label" : "Address",
        "value" : "Sample Street"
      },
      "MERCHANT_DETAILS_ZIP" : {
        "label" : "Zip",
        "value" : "UB3 2EA"
      },
      "MERCHANT_DETAILS_CITY" : {
        "label" : "City",
        "value" : "London"
      },
      "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
      },
      "MERCHANT_DETAILS_CONTACT" : {
        "label" : "Contact",
        "value" : "1234567"
      },
      "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
        "value" : ""
      },
      "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks VISA"
      },
      "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "**** **** **** 0119"
      },
      "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000031010"
      },
      "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Contactless"
      },
      "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
        "label" : "Verification",
        "value" : "None"
      },
      "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "938238"
      },
      "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "**37599"
      },
      "CLEARING_DETAILS_TERMINAL_ID" : {
```

```
          "label" : "Terminal ID",
          "value" : "****0063"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "1541387b383d456aabb81cdf558b4e8e"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:24:51"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      }
     }
}
```


Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.


```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Stand-Alone Credit

This section describes how to process a stand-alone credit in Cloud mode. This type of transaction is used to process a credit without reference to the original transaction. The customer is required to present their card for this type of transaction. When processing a stand-alone credit, the credit amount is not limited because there is no reference to the original transaction amount. The recommendation is to use a linked refund whenever possible. For more information, see *Processing a Linked Refund*.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Stand-Alone Credit

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to** `StandaloneRefundRequest`**.**
request.merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-).**
request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing a Stand-Alone Credit

Request

```
{
  "serialNumber": "1850000000",
  "request": {
    "type": "StandaloneRefundRequest",
    "merchantReferenceCode": "2490c8ec0e2f4b509526815714313e33",
    "amountDetails": {
      "amount": "1.00",
      "currency": "GBP"
    }
  }
}
```

Response to a Successful Request

```
{
   "type" : "StandaloneRefundResponse",
```

```
    "message" : "Refund approved",
    "transactionDetails" : {
     "id" : "3043e0b61fad4c5483db3d498309460f",
     "merchantReferenceCode" : "2490c8ec0e2f4b509526815714313e33",
     "submitTimeUtc" : "2023-12-01T21:04:19+0000",
     "amountDetails" : {
      "amount" : "1.00",
      "currency" : "GBP"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "AMERICAN_EXPRESS",
      "maskedPan" : "374245XXXXX0001"
     }
    },
    "additionalInformation" : {
     "requestId" : "7014646720206287504012"
    },
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nRefund\n-£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks AMEX\nAccount: ***
**** **** 0001\nEntry Mode: Chip\nAID: A0000000250100\n\nTransaction: -\nAuthorization: -\nMerchant
ID: *****67890\nTerminal ID: ****0026\n\n3043e0b61fad4c5483db3d498309460f\n10:04:19 PM: 12/1/2023\n
\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
```

```
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
          "label" : "Additional Information",
          "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
          "label" : "Card",
          "value" : "Payworks AMEX"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
          "label" : "Account",
          "value" : "*** **** **** 0001"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
          "label" : "AID",
          "value" : "A0000000250100"
        },
        "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Chip"
        },
        "CLEARING_DETAILS_TRANSACTION_IDENTIFIER" : {
          "label" : "Transaction",
          "value" : "-"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "-"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "*****67890"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0026"
        },
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Refund"
        },
        "SUBJECT" : {
          "label" : "Description",
          "value" : ""
        },
        "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "3043e0b61fad4c5483db3d498309460f"
        },
        "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "-£1.00"
```

```
          },
          "DATE" : {
            "label" : "Date",
            "value" : "12/1/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "10:04:19 PM"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
 Kingdom\n1234567\n\nRefund\n-£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks AMEX\nAccount: ***
 **** **** 0001\nEntry Mode: Chip\nAID: A0000000250100\n\nTransaction: -\nAuthorization: -\nMerchant
 ID: *****67890\nTerminal ID: ****0026\n\n3043e0b61fad4c5483db3d498309460f\n10:04:19 PM: 12/1/2023\n
\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
           "label" : "Name",
           "value" : "CP Test"
         },
         "MERCHANT_DETAILS_ADDRESS" : {
           "label" : "Address",
           "value" : "Sample Street"
         },
         "MERCHANT_DETAILS_ZIP" : {
           "label" : "Zip",
           "value" : "UB3 2EA"
         },
         "MERCHANT_DETAILS_CITY" : {
           "label" : "City",
           "value" : "London"
         },
         "MERCHANT_DETAILS_COUNTRY" : {
           "label" : "Country",
           "value" : "United Kingdom"
         },
         "MERCHANT_DETAILS_CONTACT" : {
           "label" : "Contact",
           "value" : "1234567"
         },
         "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
           "label" : "Additional Information",
           "value" : ""
         },
         "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
           "label" : "Card",
           "value" : "Payworks AMEX"
```

```
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
          "label" : "Account",
          "value" : "*** **** **** 0001"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
          "label" : "AID",
          "value" : "A0000000250100"
        },
        "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Chip"
        },
        "CLEARING_DETAILS_TRANSACTION_IDENTIFIER" : {
          "label" : "Transaction",
          "value" : "-"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "-"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "*****67890"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0026"
        },
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
        },
        "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Refund"
        },
        "SUBJECT" : {
          "label" : "Description",
          "value" : ""
        },
        "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "3043e0b61fad4c5483db3d498309460f"
        },
        "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "-£1.00"
        },
        "DATE" : {
          "label" : "Date",
          "value" : "12/1/2023"
        },
        "TIME" : {
          "label" : "Time",
          "value" : "10:04:19 PM"
```

```
        },
        "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
        }
       },
       "signatureLineRequired" : false
      }
     }
    }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Requesting a Check Transaction Status

This section describes how to request a check transaction status in Cloud mode. This transaction is used to obtain response data for a transaction that was lost or timed out. Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Requesting a Check Transaction Status

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to `TransactionLookupRequest`.**
request.idType	**Set this field to `TRANSACTION_ID` or `MERCHANT_REFERENCE_CODE`.**
request.id	**Set this field to the `id` or `merchantReferenceCode` field value from the original transaction.**

REST Example: Requesting a Check Transaction Status

Request

```
{
  "serialNumber": "1850000000",
  "request": {
    "type": "TransactionLookupRequest",
    "idType": "TRANSACTION_ID",
    "id": "1541387b383d456aabb81cdf558b4e8e"
  }
}
```

Response to a Successful Request

```
{
   "type" : "TransactionLookupResponse",
   "transactionDetails" : {
    "id" : "1541387b383d456aabb81cdf558b4e8e",
    "merchantReferenceCode" : "058ed6c3430e436dab91b782f4113fd2",
    "submitTimeUtc" : "2023-12-01T20:24:47+0000",
    "captured" : true,
    "amountDetails" : {
     "currency" : "GBP",
     "amount" : "1.00",
     "capturedAmount" : "1.00",
     "refundableAmount" : "1.00"
    }
   },
   "processingDetails" : {
    "status" : "APPROVED",
    "verificationMethod" : "NONE",
    "entryMode" : "NFC_ICC",
    "card" : {
     "expirationMonth" : "12",
     "expirationYear" : "2025",
     "type" : "VISA",
     "maskedPan" : "476173XXXXXX0119",
     "countryCode" : "840"
    }
   },
   "additionalInformation" : {
    "instrumentId" : "703000000000022690119",
    "requestId" : "7014622903166318504010"
   },
   "linkedOperations" : [ ],
   "receipts" : {
    "merchantReceipt" : {
     "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****0063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
     "receiptData" : {
      "lines" : {
       "MERCHANT_DETAILS_PUBLIC_NAME" : {
```

```
          "label" : "Name",
          "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
          "label" : "Zip",
          "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
          "label" : "City",
          "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
          "label" : "Country",
          "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
          "label" : "Contact",
          "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
          "label" : "Additional Information",
          "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
          "label" : "Card",
          "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
          "label" : "Account",
          "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
          "label" : "AID",
          "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
          "label" : "Verification",
          "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "938238"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
```

```
          "label" : "Terminal ID",
          "value" : "****0063"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "1541387b383d456aabb81cdf558b4e8e"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:24:51"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£1.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938238\nMerchant ID: **37599\nTerminal ID: ****0063\n\n1541387b383d456aabb81cdf558b4e8e\n21:24:51:
01/12/2023\n\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
          "label" : "Name",
          "value" : "CP Test"
         },
         "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
         },
         "MERCHANT_DETAILS_ZIP" : {
```

```
          "label" : "Zip",
          "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
          "label" : "City",
          "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
          "label" : "Country",
          "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
          "label" : "Contact",
          "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
          "label" : "Additional Information",
          "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
          "label" : "Card",
          "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
          "label" : "Account",
          "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
          "label" : "AID",
          "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
          "label" : "Verification",
          "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "938238"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
        },
        "TRANSACTION_TYPE" : {
```

```
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "1541387b383d456aabb81cdf558b4e8e"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:24:51"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      }
     }
}
```


Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.


```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```


Processing a Cancel Transaction

This section describes how to process a cancel transaction request in Cloud mode. This request is sent to interrupt an in-process transaction.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: POST https://terminalstest.visaacceptance.com/v1/cloud/transactions
Production: POST https://terminals.visaacceptance.com/v1/cloud/transactions

Required Fields for Processing a Cancel Transaction

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to** CancelRequest**.**

REST Example: Processing a Cancel Transaction

Request

```
{
  "serialNumber": "1850000000",
  "request": {
    "type": "CancelRequest"
  }
}
```

Response to a Successful Request

```
{
   "type" : "PaymentResponse",
   "message" : "Payment aborted",
   "transactionDetails" : {
    "id" : "b6522aeb9d8d49b386f7c67852581145",
    "merchantReferenceCode" : "50c86aaa02ed4c0bb4b4b596379713f7",
    "submitTimeUtc" : "2023-12-01T20:30:05+0000",
    "captured" : false,
    "amountDetails" : {
     "currency" : "GBP",
     "amount" : "1.00",
     "capturedAmount" : "0.00",
     "refundableAmount" : "0.00"
    }
   },
   "processingDetails" : {
    "status" : "ABORTED",
    "verificationMethod" : "UNKNOWN",
    "entryMode" : "NFC_ICC",
    "card" : {
     "expirationMonth" : "00",
     "expirationYear" : "00",
     "type" : "UNKNOWN",
     "maskedPan" : ""
    }
   },
   "linkedOperations" : [ ],
   "receipts" : {
    "merchantReceipt" : {
```

```
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
 Kingdom\n1234567\n\nSale\n£1.00\n\n\nCanceled transaction.\n\n\nEntry Mode: Contactless\nAID: NULL
\n\n\nb6522aeb9d8d49b386f7c67852581145\n21:30:05: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "NULL"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "b6522aeb9d8d49b386f7c67852581145"
```

```
          },
          "AMOUNT_AND_CURRENCY" : {
            "label" : "Amount",
            "value" : "£1.00"
          },
          "DATE" : {
            "label" : "Date",
            "value" : "01/12/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "21:30:05"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Canceled transaction."
          }
        },
        "signatureLineRequired" : false
      }
    },
    "customerReceipt" : {
      "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
 Kingdom\n1234567\n\nSale\n£1.00\n\n\nCanceled transaction.\n\n\nEntry Mode: Contactless\nAID: NULL
\n\n\nb6522aeb9d8d49b386f7c67852581145\n21:30:05: 01/12/2023\n\n\n",
      "receiptData" : {
        "lines" : {
          "MERCHANT_DETAILS_PUBLIC_NAME" : {
            "label" : "Name",
            "value" : "CP Test"
          },
          "MERCHANT_DETAILS_ADDRESS" : {
            "label" : "Address",
            "value" : "Sample Street"
          },
          "MERCHANT_DETAILS_ZIP" : {
            "label" : "Zip",
            "value" : "UB3 2EA"
          },
          "MERCHANT_DETAILS_CITY" : {
            "label" : "City",
            "value" : "London"
          },
          "MERCHANT_DETAILS_COUNTRY" : {
            "label" : "Country",
            "value" : "United Kingdom"
          },
          "MERCHANT_DETAILS_CONTACT" : {
            "label" : "Contact",
            "value" : "1234567"
          },
          "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
            "label" : "Additional Information",
            "value" : ""
          },
          "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
```

```
          "label" : "AID",
          "value" : "NULL"
         },
         "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Contactless"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "b6522aeb9d8d49b386f7c67852581145"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:30:05"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Canceled transaction."
         }
        },
        "signatureLineRequired" : false
       }
      }
    }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
  }
```

Processing a Sale with On-Reader Tipping

This section describes how to process a sale with on-reader tipping in Cloud mode. At the start of each transaction, the Android device prompts the customer to add a tip by showing suggested tip amounts. The customer selects or enters a tip amount on the Android device before presenting their payment card.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Sale with On-Reader Tipping

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to `PaymentRequest`.**
request.merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-).**
request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**
request.askForTip	**Set this field to `ON_DEVICE`.**

REST Example: Processing a Sale with On-Reader Tipping

Request

```
{
  "serialNumber": "1850000000",
  "request": {
   "type" : "PaymentRequest",
   "merchantReferenceCode" : "adf0fa5ca70d462ba5fc0249436b656c",
   "amountDetails" : {
    "amount" : "5.00",
    "currency" : "GBP"
    },
   "askForTip" : "ON_DEVICE"
  }
}
```

Response to a Successful Request

```
{
   "type" : "PaymentResponse",
```

```
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "55678c8b152046f7b1d77fd2286ce392",
     "merchantReferenceCode" : "adf0fa5ca70d462ba5fc0249436b656c",
     "submitTimeUtc" : "2023-12-01T21:01:23+0000",
     "captured" : true,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "6.00",
      "capturedAmount" : "6.00",
      "refundableAmount" : "6.00",
      "includedTipAmount" : "1.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119",
      "countryCode" : "840"
     }
    },
    "additionalInformation" : {
     "instrumentId" : "7030000000022690119",
     "requestId" : "7014644863036208304012"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\nPurchase Amount: £5.00\nTip Amount: £1.00\nTotal Amount: £6.00\n\n\nPlease
retain receipt!\n\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID:
A0000000031010\nVerification: None\n\nAuthorization: 938252\nMerchant ID: **37599\nTerminal ID:
****0063\n\n55678c8b152046f7b1d77fd2286ce392\n22:01:27: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
```

```
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938252"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
```

```
          "IDENTIFIER" : {
            "label" : "PWID",
            "value" : "55678c8b152046f7b1d77fd2286ce392"
          },
          "AMOUNT_AND_CURRENCY" : {
            "label" : "Amount",
            "value" : "£6.00"
          },
          "DATE" : {
            "label" : "Date",
            "value" : "01/12/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "22:01:27"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\nPurchase Amount: £5.00\nTip Amount: £1.00\nTotal Amount: £6.00\n\n\nPlease
retain receipt!\n\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID:
A0000000031010\nVerification: None\n\nAuthorization: 938252\nMerchant ID: **37599\nTerminal ID:
****0063\n\n55678c8b152046f7b1d77fd2286ce392\n22:01:27: 01/12/2023\n\n\n",
       "receiptData" : {
        "lines" : {
          "MERCHANT_DETAILS_PUBLIC_NAME" : {
            "label" : "Name",
            "value" : "CP Test"
          },
          "MERCHANT_DETAILS_ADDRESS" : {
            "label" : "Address",
            "value" : "Sample Street"
          },
          "MERCHANT_DETAILS_ZIP" : {
            "label" : "Zip",
            "value" : "UB3 2EA"
          },
          "MERCHANT_DETAILS_CITY" : {
            "label" : "City",
            "value" : "London"
          },
          "MERCHANT_DETAILS_COUNTRY" : {
            "label" : "Country",
            "value" : "United Kingdom"
          },
          "MERCHANT_DETAILS_CONTACT" : {
            "label" : "Contact",
            "value" : "1234567"
          },
```

```
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938252"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Cardholder Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Sale"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "55678c8b152046f7b1d77fd2286ce392"
        },
        "AMOUNT_AND_CURRENCY" : {
         "label" : "Amount",
         "value" : "£6.00"
        },
```

```
          "DATE" : {
            "label" : "Date",
            "value" : "01/12/2023"
          },
          "TIME" : {
            "label" : "Time",
            "value" : "22:01:27"
          },
          "STATUS_TEXT" : {
            "label" : "Information",
            "value" : "Please retain receipt!"
          }
        },
        "signatureLineRequired" : false
      }
    }
  }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Pre-Authorization

This section describes how to process a pre-authorization for an initial amount in Cloud mode. A pre-authorization transaction places a temporary hold on the customer's payment card, which can be captured at a later time.

Most authorizations expire in 5 to 7 days. The issuing bank sets the length of time before expiration. When an authorization expires with the issuing bank, your bank or processor might require you to re-submit an authorization request and include a request for capture in the same message.

Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`

Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Pre-Authorization

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to** `PaymentRequest`**.**

request.merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-).**
request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**
request.capture	**Set this field to `false`.**

REST Example: Processing a Pre-Authorization

Request

```
{
   "serialNumber": "1850000000",
   "request": {
    "type" : "PaymentRequest",
    "merchantReferenceCode" : "47bd9ed54f3f4bfabb9d3ee94cfa3008",
    "amountDetails" : {
     "amount" : "1.00",
     "currency" : "GBP"
    },
    "capture" : false
   }
}ß
```

Response to a Successful Request

```
{
    "type" : "PaymentResponse",
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "e43069fbf85543659e478edd8d50f244",
     "merchantReferenceCode" : "47bd9ed54f3f4bfabb9d3ee94cfa3008",
     "submitTimeUtc" : "2023-12-01T20:38:14+0000",
     "captured" : false,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "1.00",
      "capturedAmount" : "0.00",
      "refundableAmount" : "1.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119",
      "countryCode" : "840"
     }
```

```
    },
    "additionalInformation" : {
     "instrumentId" : "7030000000022690119",
     "requestId" : "7014630972006630604008"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA
 London\nUnited Kingdom\n1234567\n\nAuth only\n£1.00\n\n\nPlease retain receipt!\n
\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID:
 A0000000031010\nVerification: None\n\nAuthorization: 938242\nMerchant ID: **37599\nTerminal ID:
 ****0063\n\ne43069fbf85543659e478edd8d50f244\n21:38:18: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
```

```
          "label" : "Entry Mode",
          "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
          "label" : "Verification",
          "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "938242"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Auth only"
        },
        "SUBJECT" : {
          "label" : "Description",
          "value" : ""
        },
        "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "e43069fbf85543659e478edd8d50f244"
        },
        "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
        },
        "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
        },
        "TIME" : {
          "label" : "Time",
          "value" : "21:38:18"
        },
        "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
        }
      },
      "signatureLineRequired" : false
    }
  },
  "customerReceipt" : {
```

```
      "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA
 London\nUnited Kingdom\n1234567\n\nAuth only\n£1.00\n\n\nPlease retain receipt!\n
\n\nCard: Payworks VISA\nAccount: **** **** **** 0119\nEntry Mode: Contactless\nAID:
 A0000000031010\nVerification: None\n\nAuthorization: 938242\nMerchant ID: **37599\nTerminal ID:
 ****0063\n\ne43069fbf85543659e478edd8d50f244\n21:38:18: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
         "label" : "AID",
         "value" : "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
```

```
          "label" : "Authorization",
          "value" : "938242"
         },
         "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
         },
         "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0063"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Auth only"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "e43069fbf85543659e478edd8d50f244"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£1.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:38:18"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      }
     }
}
```


Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.


```
{
    "type": "ErrorResponse",
```

```
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing an Incremental Authorization

This section describes how to process an incremental authorization in Cloud mode. This type of request can be made on a pre-authorization transaction to increase the authorized amount before it is captured.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing an Incremental Authorization

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to `IncrementalAuthorizationRequest`.**
request.transactionId	Set this field to the `id` field value from the original transaction.
request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing an Incremental Authorization

Request

```
{
  "serialNumber": "1850000000",
  "request": {
   "type": "IncrementalAuthorizationRequest",
   "transactionId": "e43069fbf85543659e478edd8d50f244",
   "amountDetails": {
    "amount": "2.00",
    "currency": "GBP"
   }
  }
}
```

Response to a Successful Request

```
{
    "type" : "IncrementalAuthorizationResponse",
```

```
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "6da4aff381e8483ebc65ebf4fbb27ec8",
     "merchantReferenceCode" : "47bd9ed54f3f4bfabb9d3ee94cfa3008",
     "submitTimeUtc" : "2023-12-01T20:39:43+0000",
     "captured" : false,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "2.00",
      "capturedAmount" : "0.00",
      "refundableAmount" : "0.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "MANUAL",
     "card" : {
      "expirationMonth" : "00",
      "expirationYear" : "00",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119"
     }
    },
    "additionalInformation" : {
     "requestId" : "7014631843806649604009"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nTop-up\n£2.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount:
**** **** **** 0119\nEntry Mode: Keyed\nVerification: None\n\nAuthorization: 938243\nMerchant ID:
**37599\nTerminal ID: ****0063\n\n6da4aff381e8483ebc65ebf4fbb27ec8\n21:39:45: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
         "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
         "label" : "Address",
         "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
         "label" : "Zip",
         "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
         "label" : "City",
         "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
         "label" : "Country",
         "value" : "United Kingdom"
        },
```

```
        "MERCHANT_DETAILS_CONTACT" : {
         "label" : "Contact",
         "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
         "label" : "Additional Information",
         "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
         "label" : "Card",
         "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
         "label" : "Account",
         "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_SOURCE" : {
         "label" : "Entry Mode",
         "value" : "Keyed"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
         "label" : "Verification",
         "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
         "label" : "Authorization",
         "value" : "938243"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
         "label" : "Merchant ID",
         "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
         "label" : "Terminal ID",
         "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
         "label" : "Receipt Type",
         "value" : "Merchant Receipt"
        },
        "TRANSACTION_TYPE" : {
         "label" : "Type",
         "value" : "Top-up"
        },
        "SUBJECT" : {
         "label" : "Description",
         "value" : ""
        },
        "IDENTIFIER" : {
         "label" : "PWID",
         "value" : "6da4aff381e8483ebc65ebf4fbb27ec8"
        },
        "AMOUNT_AND_CURRENCY" : {
         "label" : "Amount",
         "value" : "£2.00"
        },
```

```
        "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
        },
        "TIME" : {
          "label" : "Time",
          "value" : "21:39:45"
        },
        "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
        }
       },
       "signatureLineRequired" : false
      }
     },
     "customerReceipt" : {
      "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nTop-up\n£2.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount:
**** **** **** 0119\nEntry Mode: Keyed\nVerification: None\n\nAuthorization: 938243\nMerchant ID:
**37599\nTerminal ID: ****0063\n\n6da4aff381e8483ebc65ebf4fbb27ec8\n21:39:45: 01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
          "label" : "Name",
          "value" : "CP Test"
        },
        "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
        },
        "MERCHANT_DETAILS_ZIP" : {
          "label" : "Zip",
          "value" : "UB3 2EA"
        },
        "MERCHANT_DETAILS_CITY" : {
          "label" : "City",
          "value" : "London"
        },
        "MERCHANT_DETAILS_COUNTRY" : {
          "label" : "Country",
          "value" : "United Kingdom"
        },
        "MERCHANT_DETAILS_CONTACT" : {
          "label" : "Contact",
          "value" : "1234567"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
          "label" : "Additional Information",
          "value" : ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
          "label" : "Card",
          "value" : "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
```

```
          "label" : "Account",
          "value" : "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_SOURCE" : {
          "label" : "Entry Mode",
          "value" : "Keyed"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
          "label" : "Verification",
          "value" : "None"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
          "label" : "Authorization",
          "value" : "938243"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
          "label" : "Merchant ID",
          "value" : "**37599"
        },
        "CLEARING_DETAILS_TERMINAL_ID" : {
          "label" : "Terminal ID",
          "value" : "****0063"
        },
        "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Cardholder Receipt"
        },
        "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Top-up"
        },
        "SUBJECT" : {
          "label" : "Description",
          "value" : ""
        },
        "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "6da4aff381e8483ebc65ebf4fbb27ec8"
        },
        "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£2.00"
        },
        "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
        },
        "TIME" : {
          "label" : "Time",
          "value" : "21:39:45"
        },
        "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
        }
      },
```

```
        "signatureLineRequired" : false
      }
     }
    }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Capture

This section describes how to capture a pre-authorized transaction in Cloud mode. The capture request references the approved pre-authorization request.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Capture

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to `CaptureRequest`.**
request.transactionId	**Set this field to the `id` field value from the original transaction.**

Optional Fields for Processing a Capture

Use the optional amount and currency fields to process a partial capture. Otherwise, the full amount will be captured.

request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**

REST Example: Processing a Capture

Request

```
{
```

```
   "serialNumber": "1850000000",
   "request": {
    "type": "CaptureRequest",
    "transactionId": "cb6475bafbb94d03b0f984629c63c294",
    "amountDetails": {
     "amount": "3.00",
     "currency": "GBP"
    }
   }
}
```

Response to a Successful Request

```
{
    "type" : "CaptureResponse",
    "message" : "Payment approved",
    "transactionDetails" : {
     "id" : "cb6475bafbb94d03b0f984629c63c294",
     "merchantReferenceCode" : "dd02499055544be18ba7fa0397909d65",
     "submitTimeUtc" : "2023-12-01T20:43:03+0000",
     "captured" : true,
     "amountDetails" : {
      "currency" : "GBP",
      "amount" : "3.00",
      "capturedAmount" : "3.00",
      "refundableAmount" : "3.00"
     }
    },
    "processingDetails" : {
     "status" : "APPROVED",
     "verificationMethod" : "NONE",
     "entryMode" : "NFC_ICC",
     "card" : {
      "expirationMonth" : "12",
      "expirationYear" : "2025",
      "type" : "VISA",
      "maskedPan" : "476173XXXXXX0119",
      "countryCode" : "840"
     }
    },
    "additionalInformation" : {
     "instrumentId" : "7030000000022690119",
     "requestId" : "7014633860196734504012"
    },
    "linkedOperations" : [ ],
    "receipts" : {
     "merchantReceipt" : {
      "preformattedReceipt" : "Merchant Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£3.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938244\nMerchant ID: **37599\nTerminal ID: ****0063\n\ncb6475bafbb94d03b0f984629c63c294\n21:43:07:
01/12/2023\n\n\n",
      "receiptData" : {
       "lines" : {
        "MERCHANT_DETAILS_PUBLIC_NAME" : {
         "label" : "Name",
```

```
        "value" : "CP Test"
      },
      "MERCHANT_DETAILS_ADDRESS" : {
        "label" : "Address",
        "value" : "Sample Street"
      },
      "MERCHANT_DETAILS_ZIP" : {
        "label" : "Zip",
        "value" : "UB3 2EA"
      },
      "MERCHANT_DETAILS_CITY" : {
        "label" : "City",
        "value" : "London"
      },
      "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
      },
      "MERCHANT_DETAILS_CONTACT" : {
        "label" : "Contact",
        "value" : "1234567"
      },
      "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
        "value" : ""
      },
      "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks VISA"
      },
      "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "**** **** **** 0119"
      },
      "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000031010"
      },
      "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Contactless"
      },
      "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
        "label" : "Verification",
        "value" : "None"
      },
      "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "938244"
      },
      "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "**37599"
      },
      "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
```

```
          "value" : "****0063"
         },
         "RECEIPT_TYPE" : {
          "label" : "Receipt Type",
          "value" : "Merchant Receipt"
         },
         "TRANSACTION_TYPE" : {
          "label" : "Type",
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "cb6475bafbb94d03b0f984629c63c294"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£3.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:43:07"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      },
      "customerReceipt" : {
       "preformattedReceipt" : "Cardholder Receipt\nCP Test\nSample Street\nUB3 2EA London\nUnited
Kingdom\n1234567\n\nSale\n£3.00\n\n\nPlease retain receipt!\n\n\nCard: Payworks VISA\nAccount: ****
**** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: None\n\nAuthorization:
938244\nMerchant ID: **37599\nTerminal ID: ****0063\n\ncb6475bafbb94d03b0f984629c63c294\n21:43:07:
01/12/2023\n\n\n",
       "receiptData" : {
        "lines" : {
         "MERCHANT_DETAILS_PUBLIC_NAME" : {
          "label" : "Name",
          "value" : "CP Test"
         },
         "MERCHANT_DETAILS_ADDRESS" : {
          "label" : "Address",
          "value" : "Sample Street"
         },
         "MERCHANT_DETAILS_ZIP" : {
          "label" : "Zip",
```

```
        "value" : "UB3 2EA"
       },
       "MERCHANT_DETAILS_CITY" : {
        "label" : "City",
        "value" : "London"
       },
       "MERCHANT_DETAILS_COUNTRY" : {
        "label" : "Country",
        "value" : "United Kingdom"
       },
       "MERCHANT_DETAILS_CONTACT" : {
        "label" : "Contact",
        "value" : "1234567"
       },
       "MERCHANT_DETAILS_ADDITIONAL_INFORMATION" : {
        "label" : "Additional Information",
        "value" : ""
       },
       "PAYMENT_DETAILS_SCHEME_OR_LABEL" : {
        "label" : "Card",
        "value" : "Payworks VISA"
       },
       "PAYMENT_DETAILS_MASKED_ACCOUNT" : {
        "label" : "Account",
        "value" : "**** **** **** 0119"
       },
       "PAYMENT_DETAILS_EMV_APPLICATION_ID" : {
        "label" : "AID",
        "value" : "A0000000031010"
       },
       "PAYMENT_DETAILS_SOURCE" : {
        "label" : "Entry Mode",
        "value" : "Contactless"
       },
       "PAYMENT_DETAILS_CUSTOMER_VERIFICATION" : {
        "label" : "Verification",
        "value" : "None"
       },
       "CLEARING_DETAILS_AUTHORIZATION_CODE" : {
        "label" : "Authorization",
        "value" : "938244"
       },
       "CLEARING_DETAILS_MERCHANT_IDENTIFIER" : {
        "label" : "Merchant ID",
        "value" : "**37599"
       },
       "CLEARING_DETAILS_TERMINAL_ID" : {
        "label" : "Terminal ID",
        "value" : "****0063"
       },
       "RECEIPT_TYPE" : {
        "label" : "Receipt Type",
        "value" : "Cardholder Receipt"
       },
       "TRANSACTION_TYPE" : {
        "label" : "Type",
```

```
          "value" : "Sale"
         },
         "SUBJECT" : {
          "label" : "Description",
          "value" : ""
         },
         "IDENTIFIER" : {
          "label" : "PWID",
          "value" : "cb6475bafbb94d03b0f984629c63c294"
         },
         "AMOUNT_AND_CURRENCY" : {
          "label" : "Amount",
          "value" : "£3.00"
         },
         "DATE" : {
          "label" : "Date",
          "value" : "01/12/2023"
         },
         "TIME" : {
          "label" : "Time",
          "value" : "21:43:07"
         },
         "STATUS_TEXT" : {
          "label" : "Information",
          "value" : "Please retain receipt!"
         }
        },
        "signatureLineRequired" : false
       }
      }
     }
}
```


Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.


```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```


Processing a Sale with Installment Details

This section describes how to process a sale transaction with installment details when the app is in Cloud mode. This type of transaction can be used to include the required installment details as part of the sale transaction.

Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

This transaction is available only in the Latin America and Caribbean (LAC) region.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Sale with Installment Details

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to `PaymentRequest`.**
request.merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-).**
request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**

Optional Fields for Processing a Sale with Installment Details

Use one or more of the optional **installmentDetails** fields to provide additional installment details.

request.installmentDetails.numberOfInstallments	**Set this field to the number of installments.**
request.installmentDetails.planType	**Set this field to `MERCHANT_FUNDED` or `ISSUER_FUNDED`.**
request.installmentDetails.interestPlan	**Set this field to `true` or `false`.**
request.installmentDetails.governmentPlan	**Set this field to `true` or `false`.**

REST Example: Processing a Sale with Installment Details

Request

```
{
  "serialNumber": "1850000000",
  "request": {
    "type": "PaymentRequest",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails": {
      "amount": "20.00",
      "currency": "USD"
    },
    "installmentDetails": {
     "numberOfInstallments": 5,
     "planType": "MERCHANT_FUNDED",
     "interestPlan": true,
     "governmentPlan": true
   }
  }
}
```

Response to a Successful Request


```
{
  "type": "PaymentResponse",
  "message": "Payment approved",
  "transactionDetails": {
    "id": "8ccb150a88bd4c6f9a00a687f39ca97d",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "submitTimeUtc": "2024-09-20T08:15:12+0000",
    "captured": true,
    "amountDetails": {
      "amount": "20.00",
      "currency": "USD",
      "capturedAmount": "20.00",
      "refundableAmount": "20.00"
    }
  },
  "processingDetails": {
    "status": "APPROVED",
    "verificationMethod": "NONE",
    "entryMode": "NFC_ICC",
    "card": {
      "expirationMonth": "12",
      "expirationYear": "2025",
      "type": "VISA",
      "maskedPan": "476173XXXXXX0119",
      "countryCode": "840"
    }
  },
  "additionalInformation": {
    "requestId": "726820114633606950 4011"
  },
  "linkedOperations": [],
  "receipts": {
    "merchantReceipt": {
      "preformattedReceipt": "Merchant Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 546712\nAuthorization: 831000\nMerchant ID: **********st051\nTerminal ID: ****7069\n\n
\n8ccb150a88bd4c6f9a00a687f39ca97d\n\n4:15:12 AM: 9/20/2024\n\n\n",
      "receiptData": {
        "signatureLineRequired": false,
        "lines": {
          "MERCHANT_DETAILS_PUBLIC_NAME": {
            "label": "Name",
            "value": "Test"
          },
          "MERCHANT_DETAILS_ADDRESS": {
            "label": "Address",
            "value": "Sample Street 123"
          },
          "MERCHANT_DETAILS_ZIP": {
            "label": "Zip",
            "value": "34351"
          },
          "MERCHANT_DETAILS_CITY": {
```

```
      "label": "City",
      "value": "New York"
    },
    "MERCHANT_DETAILS_COUNTRY": {
      "label": "Country",
      "value": "United States"
    },
    "MERCHANT_DETAILS_CONTACT": {
      "label": "Contact",
      "value": "12345678"
    },
    "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
      "label": "Additional Information",
      "value": ""
    },
    "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
      "label": "Card",
      "value": "Payworks VISA"
    },
    "PAYMENT_DETAILS_MASKED_ACCOUNT": {
      "label": "Account",
      "value": "**** **** **** 0119"
    },
    "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
      "label": "AID",
      "value": "A0000000031010"
    },
    "PAYMENT_DETAILS_SOURCE": {
      "label": "Entry Mode",
      "value": "Contactless"
    },
    "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
      "label": "Verification",
      "value": "No Verification"
    },
    "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
      "label": "Transaction",
      "value": "546712"
    },
    "CLEARING_DETAILS_AUTHORIZATION_CODE": {
      "label": "Authorization",
      "value": "831000"
    },
    "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
      "label": "Merchant ID",
      "value": "**********st051"
    },
    "CLEARING_DETAILS_TERMINAL_ID": {
      "label": "Terminal ID",
      "value": "****7069"
    },
    "RECEIPT_TYPE": {
      "label": "Receipt Type",
      "value": "Merchant Receipt"
    },
    "TRANSACTION_TYPE": {
```

```
                "label": "Type",
                "value": "Payment"
              },
              "SUBJECT": {
                "label": "Description",
                "value": ""
              },
              "IDENTIFIER": {
                "label": "PWID",
                "value": "8ccb150a88bd4c6f9a00a687f39ca97d"
              },
              "AMOUNT_AND_CURRENCY": {
                "label": "Amount",
                "value": "USD$20.00"
              },
              "DATE": {
                "label": "Date",
                "value": "9/20/2024"
              },
              "TIME": {
                "label": "Time",
                "value": "4:15:12 AM"
              },
              "STATUS_TEXT": {
                "label": "Information",
                "value": "Please retain receipt!"
              }
            },
            "tipLineRequired": false,
            "totalLineRequired": false
          }
        },
        "customerReceipt": {
          "preformattedReceipt": "Cardholder Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 546712\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n8ccb150a88bd4c6f9a00a687f39ca97d\n\n4:15:12 AM: 9/20/2024\n\n\n",
          "receiptData": {
            "signatureLineRequired": false,
            "lines": {
              "MERCHANT_DETAILS_PUBLIC_NAME": {
                "label": "Name",
                "value": "Test"
              },
              "MERCHANT_DETAILS_ADDRESS": {
                "label": "Address",
                "value": "Sample Street 123"
              },
              "MERCHANT_DETAILS_ZIP": {
                "label": "Zip",
                "value": "34351"
              },
              "MERCHANT_DETAILS_CITY": {
                "label": "City",
                "value": "New York"
```

```
        },
        "MERCHANT_DETAILS_COUNTRY": {
          "label": "Country",
          "value": "United States"
        },
        "MERCHANT_DETAILS_CONTACT": {
          "label": "Contact",
          "value": "12345678"
        },
        "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
          "label": "Additional Information",
          "value": ""
        },
        "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
          "label": "Card",
          "value": "Payworks VISA"
        },
        "PAYMENT_DETAILS_MASKED_ACCOUNT": {
          "label": "Account",
          "value": "**** **** **** 0119"
        },
        "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
          "label": "AID",
          "value": "A0000000031010"
        },
        "PAYMENT_DETAILS_SOURCE": {
          "label": "Entry Mode",
          "value": "Contactless"
        },
        "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
          "label": "Verification",
          "value": "No Verification"
        },
        "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
          "label": "Transaction",
          "value": "546712"
        },
        "CLEARING_DETAILS_AUTHORIZATION_CODE": {
          "label": "Authorization",
          "value": "831000"
        },
        "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
          "label": "Merchant ID",
          "value": "**********st051"
        },
        "CLEARING_DETAILS_TERMINAL_ID": {
          "label": "Terminal ID",
          "value": "****7069"
        },
        "RECEIPT_TYPE": {
          "label": "Receipt Type",
          "value": "Cardholder Receipt"
        },
        "TRANSACTION_TYPE": {
          "label": "Type",
          "value": "Payment"
```

```
            },
            "SUBJECT": {
              "label": "Description",
              "value": ""
            },
            "IDENTIFIER": {
              "label": "PWID",
              "value": "8ccb150a88bd4c6f9a00a687f39ca97d"
            },
            "AMOUNT_AND_CURRENCY": {
              "label": "Amount",
              "value": "USD$20.00"
            },
            "DATE": {
              "label": "Date",
              "value": "9/20/2024"
            },
            "TIME": {
              "label": "Time",
              "value": "4:15:12 AM"
            },
            "STATUS_TEXT": {
              "label": "Information",
              "value": "Please retain receipt!"
            }
          },
          "tipLineRequired": false,
          "totalLineRequired": false
        }
      }
    },
    "installmentDetails": {
      "numberOfInstallments": 5,
      "planType": "MERCHANT_FUNDED",
      "interestPlan": true,
      "governmentPlan": true
    }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Sale with Payment Facilitator Details

This section describes how to process a sale transaction with payment facilitator details when the app is in Cloud mode. This type of transaction can be used to include the required payment facilitator details as part of the sale transaction.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Sale with Payment Facilitator Details

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to** `PaymentRequest`**.**
request.merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-).**
request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**

Optional Fields for Processing a Sale with Payment Facilitator Details

Use one or more of the optional **merchantDetails** fields to provide additional payment facilitator details.

request.merchantDetails.salesOrganizationId	**Set this field to the sales organization identifier.**
request.merchantDetails.subMerchantId	**Set this field to the sub-merchant identifier.**
request.merchantDetails.descriptorName	**Set this field to the descriptor name.**

REST Example: Processing a Sale with Payment Facilitator Details

Request

```
{
```

```
  "serialNumber": "1850000000",
  "request": {
    "type": "PaymentRequest",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails": {
      "amount": "1.00",
      "currency": "USD"
    },
    "merchantDetails": {
     "salesOrganizationId": "12345",
     "subMerchantId": "SM67890",
     "descriptorName": "ExampleMerchant"
    }
  }
}
```


Response to a Successful Request


```
{
  "type": "PaymentResponse",
  "message": "Payment approved",
  "transactionDetails": {
    "id": "940d49ee94444764acb1c898e2254954",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "submitTimeUtc": "2024-09-20T07:53:36+0000",
    "captured": true,
    "amountDetails": {
      "amount": "1.00",
      "currency": "USD",
      "capturedAmount": "1.00",
      "refundableAmount": "1.00"
    }
  },
  "processingDetails": {
    "status": "APPROVED",
    "verificationMethod": "NONE",
    "entryMode": "NFC_ICC",
    "card": {
      "expirationMonth": "12",
      "expirationYear": "2025",
      "type": "VISA",
      "maskedPan": "476173XXXXXX0119",
      "countryCode": "840"
    }
  },
  "additionalInformation": {
    "requestId": "7268188188226629104009"
  },
  "linkedOperations": [],
  "receipts": {
    "merchantReceipt": {
      "preformattedReceipt": "Merchant Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$1.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 545814\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n940d49ee94444764acb1c898e2254954\n\n3:53:36 AM: 9/20/2024\n\n\n",
```

```
      "receiptData": {
        "signatureLineRequired": false,
        "lines": {
          "MERCHANT_DETAILS_PUBLIC_NAME": {
            "label": "Name",
            "value": "Test"
          },
          "MERCHANT_DETAILS_ADDRESS": {
            "label": "Address",
            "value": "Sample Street 123"
          },
          "MERCHANT_DETAILS_ZIP": {
            "label": "Zip",
            "value": "34351"
          },
          "MERCHANT_DETAILS_CITY": {
            "label": "City",
            "value": "New York"
          },
          "MERCHANT_DETAILS_COUNTRY": {
            "label": "Country",
            "value": "United States"
          },
          "MERCHANT_DETAILS_CONTACT": {
            "label": "Contact",
            "value": "12345678"
          },
          "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
            "label": "Additional Information",
            "value": ""
          },
          "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
            "label": "Card",
            "value": "Payworks VISA"
          },
          "PAYMENT_DETAILS_MASKED_ACCOUNT": {
            "label": "Account",
            "value": "**** **** **** 0119"
          },
          "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
            "label": "AID",
            "value": "A0000000031010"
          },
          "PAYMENT_DETAILS_SOURCE": {
            "label": "Entry Mode",
            "value": "Contactless"
          },
          "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
            "label": "Verification",
            "value": "No Verification"
          },
          "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
            "label": "Transaction",
            "value": "545814"
          },
          "CLEARING_DETAILS_AUTHORIZATION_CODE": {
```

```
            "label": "Authorization",
            "value": "831000"
          },
          "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
            "label": "Merchant ID",
            "value": "***********st051"
          },
          "CLEARING_DETAILS_TERMINAL_ID": {
            "label": "Terminal ID",
            "value": "****7069"
          },
          "RECEIPT_TYPE": {
            "label": "Receipt Type",
            "value": "Merchant Receipt"
          },
          "TRANSACTION_TYPE": {
            "label": "Type",
            "value": "Payment"
          },
          "SUBJECT": {
            "label": "Description",
            "value": ""
          },
          "IDENTIFIER": {
            "label": "PWID",
            "value": "940d49ee94444764acb1c898e2254954"
          },
          "AMOUNT_AND_CURRENCY": {
            "label": "Amount",
            "value": "USD$1.00"
          },
          "DATE": {
            "label": "Date",
            "value": "9/20/2024"
          },
          "TIME": {
            "label": "Time",
            "value": "3:53:36 AM"
          },
          "STATUS_TEXT": {
            "label": "Information",
            "value": "Please retain receipt!"
          }
        },
        "tipLineRequired": false,
        "totalLineRequired": false
      }
    },
    "customerReceipt": {
      "preformattedReceipt": "Cardholder Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$1.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 545814\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n940d49ee94444764acb1c898e2254954\n\n3:53:36 AM: 9/20/2024\n\n\n",
      "receiptData": {
        "signatureLineRequired": false,
```

```
        "lines": {
          "MERCHANT_DETAILS_PUBLIC_NAME": {
            "label": "Name",
            "value": "Test"
          },
          "MERCHANT_DETAILS_ADDRESS": {
            "label": "Address",
            "value": "Sample Street 123"
          },
          "MERCHANT_DETAILS_ZIP": {
            "label": "Zip",
            "value": "34351"
          },
          "MERCHANT_DETAILS_CITY": {
            "label": "City",
            "value": "New York"
          },
          "MERCHANT_DETAILS_COUNTRY": {
            "label": "Country",
            "value": "United States"
          },
          "MERCHANT_DETAILS_CONTACT": {
            "label": "Contact",
            "value": "12345678"
          },
          "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
            "label": "Additional Information",
            "value": ""
          },
          "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
            "label": "Card",
            "value": "Payworks VISA"
          },
          "PAYMENT_DETAILS_MASKED_ACCOUNT": {
            "label": "Account",
            "value": "**** **** **** 0119"
          },
          "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
            "label": "AID",
            "value": "A0000000031010"
          },
          "PAYMENT_DETAILS_SOURCE": {
            "label": "Entry Mode",
            "value": "Contactless"
          },
          "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
            "label": "Verification",
            "value": "No Verification"
          },
          "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
            "label": "Transaction",
            "value": "545814"
          },
          "CLEARING_DETAILS_AUTHORIZATION_CODE": {
            "label": "Authorization",
            "value": "831000"
```

```
            },
            "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
              "label": "Merchant ID",
              "value": "***********st051"
            },
            "CLEARING_DETAILS_TERMINAL_ID": {
              "label": "Terminal ID",
              "value": "****7069"
            },
            "RECEIPT_TYPE": {
              "label": "Receipt Type",
              "value": "Cardholder Receipt"
            },
            "TRANSACTION_TYPE": {
              "label": "Type",
              "value": "Payment"
            },
            "SUBJECT": {
              "label": "Description",
              "value": ""
            },
            "IDENTIFIER": {
              "label": "PWID",
              "value": "940d49ee94444764acb1c898e2254954"
            },
            "AMOUNT_AND_CURRENCY": {
              "label": "Amount",
              "value": "USD$1.00"
            },
            "DATE": {
              "label": "Date",
              "value": "9/20/2024"
            },
            "TIME": {
              "label": "Time",
              "value": "3:53:36 AM"
            },
            "STATUS_TEXT": {
              "label": "Information",
              "value": "Please retain receipt!"
            }
          },
          "tipLineRequired": false,
          "totalLineRequired": false
        }
      }
    },
    "merchantDetails": {
      "salesOrganizationId": "12345",
      "subMerchantId": "SM67890",
      "descriptorName": "ExampleMerchant"
    }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Sale with Tax Details

This section describes how to process a sale transaction with tax details when the app is in Cloud mode. This type of transaction can be used to include the required tax details as part of the sale transaction.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: `POST https://terminalstest.visaacceptance.com/v1/cloud/transactions`
Production: `POST https://terminals.visaacceptance.com/v1/cloud/transactions`

Required Fields for Processing a Sale with Tax Details

serialNumber	**Set this field to the IMEI of the device.**
request.type	**Set this field to** `PaymentRequest`**.**
request.merchantReferenceCode	**Set this field to a unique, user-defined reference code. The code can consist of up to 50 alphanumeric characters, underscores (_), and dashes (-).**
request.amountDetails.amount	**Set this field to the transaction amount.**
request.amountDetails.currency	**Set this field to the currency code.**

Optional Fields for Processing a Sale with Tax Details

Use one or more of the optional **taxDetails** fields to provide additional tax details.

request.taxDetails.taxId	**Set this field to the merchant tax identifier.**
request.taxDetails.salesSlipNumber	**Set this field to the sales slip number.**
request.taxDetails.includedTaxAmount	**Set this field to the tax amount.**
request.taxDetails.includedLocalTaxAmount	**Set this field to the local tax amount.**
request.taxDetails.includedNationalTaxAmount	**Set this field to the national tax amount.**

REST Example: Processing a Sale with Tax Details

Request


```
{
  "serialNumber": "1850000000",
  "request": {
    "type": "PaymentRequest",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails": {
      "amount": "20.00",
      "currency": "USD"
    },
    "taxDetails": {
     "taxId": "TaxID1234",
     "salesSlipNumber": 12345678,
     "includedTaxAmount": "5.00",
     "includedLocalTaxAmount": "1.00",
     "includedNationalTaxAmount": "2.00"
    }
  }
}
```


Response to a Successful Request


```
{
  "type": "PaymentResponse",
  "message": "Payment approved",
  "transactionDetails": {
    "id": "4bebd72cf0ff4a9ea212baca0c6d9faf",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "submitTimeUtc": "2024-09-20T07:15:25+0000",
    "captured": true,
    "amountDetails": {
      "amount": "20.00",
      "currency": "USD",
      "capturedAmount": "20.00",
      "refundableAmount": "20.00"
    }
  },
  "processingDetails": {
    "status": "APPROVED",
    "verificationMethod": "NONE",
    "entryMode": "NFC_ICC",
    "card": {
      "expirationMonth": "12",
      "expirationYear": "2025",
      "type": "VISA",
      "maskedPan": "476173XXXXXX0119",
      "countryCode": "840"
    }
  },
  "additionalInformation": {
    "requestId": "726816528357624840400 7"
  },
  "linkedOperations": [],
```

```
  "receipts": {
    "merchantReceipt": {
      "preformattedReceipt": "Merchant Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 12970 2\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n4bebd72cf0ff4a9ea212baca0c6d9faf\n\n3:15:25 AM: 9/20/2024\n\n\n",
      "receiptData": {
        "signatureLineRequired": false,
        "lines": {
          "MERCHANT_DETAILS_PUBLIC_NAME": {
            "label": "Name",
            "value": "Test"
          },
          "MERCHANT_DETAILS_ADDRESS": {
            "label": "Address",
            "value": "Sample Street 123"
          },
          "MERCHANT_DETAILS_ZIP": {
            "label": "Zip",
            "value": "34351"
          },
          "MERCHANT_DETAILS_CITY": {
            "label": "City",
            "value": "New York"
          },
          "MERCHANT_DETAILS_COUNTRY": {
            "label": "Country",
            "value": "United States"
          },
          "MERCHANT_DETAILS_CONTACT": {
            "label": "Contact",
            "value": "12345678"
          },
          "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
            "label": "Additional Information",
            "value": ""
          },
          "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
            "label": "Card",
            "value": "Payworks VISA"
          },
          "PAYMENT_DETAILS_MASKED_ACCOUNT": {
            "label": "Account",
            "value": "**** **** **** 0119"
          },
          "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
            "label": "AID",
            "value": "A0000000031010"
          },
          "PAYMENT_DETAILS_SOURCE": {
            "label": "Entry Mode",
            "value": "Contactless"
          },
          "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
            "label": "Verification",
```

```
            "value": "No Verification"
          },
          "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
            "label": "Transaction",
            "value": "129702"
          },
          "CLEARING_DETAILS_AUTHORIZATION_CODE": {
            "label": "Authorization",
            "value": "831000"
          },
          "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
            "label": "Merchant ID",
            "value": "***********st051"
          },
          "CLEARING_DETAILS_TERMINAL_ID": {
            "label": "Terminal ID",
            "value": "****7069"
          },
          "RECEIPT_TYPE": {
            "label": "Receipt Type",
            "value": "Merchant Receipt"
          },
          "TRANSACTION_TYPE": {
            "label": "Type",
            "value": "Payment"
          },
          "SUBJECT": {
            "label": "Description",
            "value": ""
          },
          "IDENTIFIER": {
            "label": "PWID",
            "value": "4bebd72cf0ff4a9ea212baca0c6d9faf"
          },
          "AMOUNT_AND_CURRENCY": {
            "label": "Amount",
            "value": "USD$20.00"
          },
          "DATE": {
            "label": "Date",
            "value": "9/20/2024"
          },
          "TIME": {
            "label": "Time",
            "value": "3:15:25 AM"
          },
          "STATUS_TEXT": {
            "label": "Information",
            "value": "Please retain receipt!"
          }
        },
        "tipLineRequired": false,
        "totalLineRequired": false
      }
    },
    "customerReceipt": {
```

```
        "preformattedReceipt": "Cardholder Receipt\nTest\nSample Street 123\n34351 New York\nUnited
 States\n12345678\n\nPayment\nUSD$20.00\n\nPlease retain receipt!\n\nCard: Payworks VISA\nAccount:
 **** **** **** 0119\nEntry Mode: Contactless\nAID: A0000000031010\nVerification: No Verification\n
\nTransaction: 12970 2\nAuthorization: 831000\nMerchant ID: ***********st051\nTerminal ID: ****7069\n\n
\n4bebd72cf0ff4a9ea212baca0c6d9faf\n\n3:15:25 AM: 9/20/2024\n\n\n",
        "receiptData": {
          "signatureLineRequired": false,
          "lines": {
            "MERCHANT_DETAILS_PUBLIC_NAME": {
              "label": "Name",
              "value": "Test"
            },
            "MERCHANT_DETAILS_ADDRESS": {
              "label": "Address",
              "value": "Sample Street 123"
            },
            "MERCHANT_DETAILS_ZIP": {
              "label": "Zip",
              "value": "34351"
            },
            "MERCHANT_DETAILS_CITY": {
              "label": "City",
              "value": "New York"
            },
            "MERCHANT_DETAILS_COUNTRY": {
              "label": "Country",
              "value": "United States"
            },
            "MERCHANT_DETAILS_CONTACT": {
              "label": "Contact",
              "value": "12345678"
            },
            "MERCHANT_DETAILS_ADDITIONAL_INFORMATION": {
              "label": "Additional Information",
              "value": ""
            },
            "PAYMENT_DETAILS_SCHEME_OR_LABEL": {
              "label": "Card",
              "value": "Payworks VISA"
            },
            "PAYMENT_DETAILS_MASKED_ACCOUNT": {
              "label": "Account",
              "value": "**** **** **** 0119"
            },
            "PAYMENT_DETAILS_EMV_APPLICATION_ID": {
              "label": "AID",
              "value": "A0000000031010"
            },
            "PAYMENT_DETAILS_SOURCE": {
              "label": "Entry Mode",
              "value": "Contactless"
            },
            "PAYMENT_DETAILS_CUSTOMER_VERIFICATION": {
              "label": "Verification",
              "value": "No Verification"
            },
```

```
            "CLEARING_DETAILS_TRANSACTION_IDENTIFIER": {
              "label": "Transaction",
              "value": "129702"
            },
            "CLEARING_DETAILS_AUTHORIZATION_CODE": {
              "label": "Authorization",
              "value": "831000"
            },
            "CLEARING_DETAILS_MERCHANT_IDENTIFIER": {
              "label": "Merchant ID",
              "value": "***********st051"
            },
            "CLEARING_DETAILS_TERMINAL_ID": {
              "label": "Terminal ID",
              "value": "****7069"
            },
            "RECEIPT_TYPE": {
              "label": "Receipt Type",
              "value": "Cardholder Receipt"
            },
            "TRANSACTION_TYPE": {
              "label": "Type",
              "value": "Payment"
            },
            "SUBJECT": {
              "label": "Description",
              "value": ""
            },
            "IDENTIFIER": {
              "label": "PWID",
              "value": "4bebd72cf0ff4a9ea212baca0c6d9faf"
            },
            "AMOUNT_AND_CURRENCY": {
              "label": "Amount",
              "value": "USD$20.00"
            },
            "DATE": {
              "label": "Date",
              "value": "9/20/2024"
            },
            "TIME": {
              "label": "Time",
              "value": "3:15:25 AM"
            },
            "STATUS_TEXT": {
              "label": "Information",
              "value": "Please retain receipt!"
            }
          },
          "tipLineRequired": false,
          "totalLineRequired": false
        }
      }
    },
    "taxDetails": {
      "taxId": "TaxID1234",
```

```
      "salesSlipNumber": 12345678,
      "includedTaxAmount": "5.00",
      "includedLocalTaxAmount": "1.00",
      "includedNationalTaxAmount": "2.00"
   }
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Receiving Transaction Responses Asynchronously

This section describes how to receive transaction responses asynchronously when the app is in Cloud mode.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

Test: POST https://terminalstest.visaacceptance.com/v1/cloud/transactions/async
Production: POST https://terminals.visaacceptance.com/v1/cloud/transactions/async

Receiving Transaction Responses Asynchronously

Asynchronous endpoints can be used to receive transaction responses for most types of transaction requests when the app is in Cloud mode.
Follow these steps to receive transaction responses asynchronously:

1. Use the asynchronous endpoints shown in the example to process a transaction and receive an interaction identifier. The example shows how to process a sale asynchronously.
2. After the transaction is completed, use the interaction identifier returned in the response to check the transaction events and to get a transaction identifier.
3. Use the transaction identifier to process a Check Transaction Status request. The response will contain full transaction and receipt details. For more information, see *Requesting a Check Transaction Status* on page 116.

REST Example: Processing a Sale Asynchronously

Request

```
{
  "serialNumber": "1850000000",
  "request": {
    "type": "PaymentRequest",
    "merchantReferenceCode": "058ed6c3430e436dab91b782f4113fd2",
    "amountDetails": {
      "amount": "1.00",
      "currency": "GBP"
    }
  }
}
```

Response to a Successful Request

```
{
  "interactionId": "0c292d7f-6bf9-460c-afc3-d75c189f2f99"
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Processing a Check Transaction Events

This section describes how to process a Check Transaction Events request when the app is in Cloud mode.
Generate a bearer token before sending each request. For more information, see *Generating a Bearer Token for Authentication* on page 105.

Endpoints

The GET request must include the interaction identifier (`interactionId`).
Test: `GET https://terminalstest.visaacceptance.com/v1/cloud/interactions/{interactionId}/events`
Production: `GET https://terminals.visaacceptance.com/v1/cloud/interactions/{interactionId}/events`

Required Fields for Processing a Check Transaction Events

The body of the API request is empty. The GET request must include the information required to return the response. If you want to receive only the latest transaction event, set a query parameter of `limit=1`.

REST Example: Processing a Check Transaction Events

Request

The body of the request is empty. The GET request includes the information required to return the response.

```
{
}
```

Response to a Successful Request


```
{
  "interactionId": "0c292d7f-6bf9-460c-afc3-d75c189f2f99",
  "transactionEvents": [
    {
      "type": "PaymentResponse",
      "message": "Payment approved",
      "transactionId": "c9f966ef0e0e4a9186c0cfb75c90841a",
      "createdAt": "2024-05-28 13:11:30:939"
    },
    {
      "type": "TransactionStatusResponse",
      "message": "Payment approved",
      "createdAt": "2024-05-28 13:11:30:556"
    },
    {
      "type": "TransactionStatusResponse",
      "message": "Processing payment...",
      "createdAt": "2024-05-28 13:11:28:928"
    },
    {
      "type": "TransactionStatusResponse",
      "message": "1.00 GBP - Present card",
      "createdAt": "2024-05-28 13:11:28:093"
    },
    {
      "type": "TransactionStatusResponse",
      "message": "1.00 GBP - Present card",
      "createdAt": "2024-05-28 13:11:27:439"
    },
    {
      "type": "TransactionStatusResponse",
      "message": "1.00 GBP - Present card",
      "createdAt": "2024-05-28 13:11:27:217"
    },
    {
      "type": "TransactionStatusResponse",
      "message": "Registering transaction",
      "createdAt": "2024-05-28 13:11:27:022"
    },
    {
      "type": "TransactionStatusResponse",
      "message": "Registering transaction",
      "createdAt": "2024-05-28 13:11:26:485"
    },
    {
```

```
        "type": "TransactionStatusResponse",
        "message": "Connecting to card reader",
        "createdAt": "2024-05-28 13:11:24:649"
      },
      {
        "type": "AcknowledgementResponse",
        "createdAt": "2024-05-28 13:11:23:823"
      }
   ]
}
```

Response to an Unsuccessful Request

If the request is unsuccessful, you will receive an error response with details.

```
{
    "type": "ErrorResponse",
    "message": "Error message to display.",
    "developerDescription": "Detailed description of error."
}
```

Standalone Mode Payment Services

This section describes how to process payment services featured in the Acceptance Devices app when operated in Standalone mode.
These are some benefits of using Standalone mode:

- Start transactions directly from the Android device.
- Quickest way to start accepting transactions.
- Does not require integration with a point-of-sale (POS) system.
- Can be used as a back-up option for accepting payments when your POS system is unavailable to operate in Local or Cloud semi-integrated modes.



Important

When the Acceptance Devices app is operating in Standalone mode, the Android device does not communicate with your POS system to share transaction details. You are responsible for managing transaction reconciliation with your systems and records.

For information about other modes available in the Acceptance Devices app, see:

- *Local Mode Payment Services* on page 33
- *Cloud Mode Payment Services* on page 104

Enabling Standalone Mode in the Acceptance Devices App

Follow these steps to enable Standalone mode in the Acceptance Devices app:

1. In the Acceptance Devices app, tap **Settings**.

2. Enter your Acceptance Devices app passcode.
3. Tap **Standalone Mode**.
4. Toggle Enable Standalone Mode to **ON**.
5. Choose the currency in which you want to process transactions. Tap **Save**.
6. If you want to enable custom merchant reference codes, toggle Custom Transaction Reference to **ON**.
7. Tap the back navigation arrow to return to the home screen. You can now process transactions in Standalone mode.

Processing a Sale

This section describes how to process a sale transaction when the app is in Standalone mode. This type of transaction combines an authorization and a capture into a single transaction.
Follow these steps to process a sale transaction:

1. In the Acceptance Devices app, tap **Sale**.
2. Enter the transaction amount.
3. Tap **Submit** to start the transaction.

Processing a Stand-Alone Credit

This section describes how to process a stand-alone credit when the app is in Standalone mode. This type of transaction is used to process a credit without reference to the original transaction. The customer is required to present their card for this type of transaction.
When processing a stand-alone credit, the credit amount is not limited because there is no reference to the original transaction amount. The recommendation is to use a linked refund whenever possible. For more information, see *Processing a Linked Refund*.
Follow these steps to process a stand-alone credit:

1. In the Acceptance Devices app, tap **Other Transactions**.
2. Tap **Refund**.
3. Enter your Acceptance Devices app passcode.
4. Enter the transaction amount.
5. Tap **Submit** to start the transaction.

Processing a Sale with On-Reader Tipping

This section describes how to process a sale with on-reader tipping in Standalone mode. At the start of each transaction, the terminal prompts the customer to add a tip by showing suggested tip amounts. The customer selects or enters a tip amount on the terminal before presenting their payment card.
Follow these steps to process a sale with on-reader tipping:

1. In the Acceptance Devices app, tap **Settings**.
2. Enter your Acceptance Devices app passcode.
3. Tap **Standalone Mode**.
4. Toggle Ask for Tip to **ON**.
5. Tap the back navigation arrow to return to the home screen.
6. Tap **Sale**.
7. Enter the transaction amount.
8. Tap **Submit** to start the transaction.

Processing a Pre-Authorization

This section describes how to process a pre-authorization for an initial amount in Standalone mode. A pre-authorization transaction places a temporary hold on the customer's payment card, which can be captured at a later time.
Most authorizations expire in 5 to 7 days. The issuing bank sets the length of time before expiration. When an authorization expires with the issuing bank, your bank or processor might require you to re-submit an authorization request and include a request for capture in the same message. For more information, see *Processing a Capture* on page 172.
Follow these steps to process a pre-authorization:

1. In the Acceptance Devices app, tap **Other Transactions**.
2. Tap **Pre-Authorization**.
3. Enter the transaction amount.
4. Tap **Submit** to start the transaction.

Processing a Capture

This section describes how to capture a pre-authorized transaction in Standalone mode. The capture request references the approved pre-authorization request.
Follow these steps to process a capture:

1. In the Acceptance Devices app, tap **Settings**.

2. Enter your Acceptance Devices app passcode.
3. Tap **Transaction History**.
4. Tap the transaction you want to capture.
5. Tap **Capture**.
6. Enter the transaction amount.
7. Tap **Capture** to start the transaction.

Processing a Sale with Installment Details

This section describes how to process a sale transaction with installment details when the app is in Standalone mode. This type of transaction can be used to include the required installment details as part of the sale transaction.
This transaction is available only in the Latin American and Caribbean (LAC) region.
Follow these steps to process a sale transaction with installment details:

1. In the Acceptance Devices app, tap **Settings**.
2. Enter your Acceptance Devices app passcode.
3. Tap **Standalone Mode**.
4. Tap **Installment Details**.
5. Toggle Enable Installment Details to **ON**.
6. Configure the installment details.
7. Tap the back navigation arrow to return to the home screen.
8. Tap **Sale**.
9. Enter the transaction amount.
10. Tap **Submit** to start the transaction.

Processing a Sale with Tax Details

This section describes how to process a sale transaction with tax details when the app is in Standalone mode. This type of transaction can be used to include the required tax details as part of the sale transaction.
Follow these steps to process a sale transaction with tax details:

1. In the Acceptance Devices app, tap **Settings**.
2. Enter your Acceptance Devices app passcode.
3. Tap **Standalone Mode**.
4. Tap **Tax Details**.
5. Toggle Enable Tax Details to **ON**.
6. Configure the tax details.
7. Tap the back navigation arrow to return to the home screen.

8. Tap **Sale**
9. Enter the transaction amount.
10. Tap **Submit** to start the transaction.

Emailing a Customer Receipt

This section describes how to email a customer receipt from a previous transaction when the app is in Standalone mode.
Follow these steps to email a customer receipt:

1. In the Acceptance Devices app, tap **Settings**.
2. Enter your Acceptance Devices app passcode.
3. Tap **Transaction History**.
4. Tap the transaction for which you want to email the receipt.
5. Tap **Send Receipt**.

Release Notes for Tap to Pay on Android Acceptance Devices App

These release notes are organized by release name and version, from newest to oldest. Each release note includes these details:

- Name of release
- Type of release: app or SDK
- Version number
- Operating system: Android or iOS
- Release date: DD-MM-YYYY format

These are the types of release notes published:

- General information
- Improvements
- New features
- Fixed issues
- Updated requirements
- Security updates
- Hot fixes

Acceptance Devices App Version 1.12.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.12.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 05-13-2025.

Improvements

- Updated the UI to use Google Material Design 3.
- Updated the SDK version to 2.100.0.

Acceptance Devices App Version 1.11.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.11.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 04-14-2025.

Improvements

- Improved the experience when using the app with the Arabic language.
- Tap To Pay: Improved the error messages that can appear during enrollment.
- Updated the SDK version to 2.99.0.

Fixed Issues

Fixed the issue that caused the language not to change correctly when switching to Arabic.

Acceptance Devices App Version 1.10.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.10.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 03-05-2025.

New Features

Added Arabic as a supported language.

Improvements

- Tap To Pay: Improved the device enrollment experience by removing the need to provide an International Mobile Equipment Identity (IMEI) number. After upgrading to Acceptance Devices app version 1.10.0, devices must be re-enrolled.
- Updated the SDK version to 2.98.0.

Acceptance Devices App Version 1.9.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.9.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 02-03-2025.

New Features

Added the ability to print a customer or merchant receipt when using a terminal with an integrated printer.

Improvements

- Tap to Pay: Added a device requirements screen during the setup process.
- Improved the validation process when entering an activation code so that it accepts only 8 characters.
- Improved the app behavior when attempting to access transaction history when the internet connection is not available.
- Improved the reconnect mechanism when using the app in Cloud mode.
- The mid-transaction status updates now indicate if the current transaction can be cancelled.
- Updated the SDK version to 2.97.0.

Archive of Release Notes

This archive of release notes for the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App is organized by release name and version, from newest to oldest. For more information, see the current release notes.
Each release note includes these details:

- Name of release
- Type of release: app or SDK
- Version number
- Operating system: Android or iOS
- Release date: MM-DD-YYYY format

These are the types of release notes published:

- General information
- Improvements
- New features
- Fixed issues

- Updated requirements
- Security updates
- Hot fixes

Acceptance Devices App Version 1.8.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.8.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 10-31-2024.

Improvements

Updated the SDK version to 2.95.0.

Fixed Issues

Fixed the issue that caused today's transactions to not appear in the transaction history if the end date was manually set to `Today`.

Acceptance Devices App Version 1.7.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.7.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 09-30-2024.

New Features

- Added the ability to provide these details when performing a transaction:
  - Payment facilitator details.
  - Tax details.
  - Installment details for the Latin America and Caribbean (LAC) region.
- Added support for additional languages in the Acceptance Devices app.
- Acceptance Devices app can now be used with Tap to Pay.

Improvements

Updated the SDK version to 2.94.0.

Fixed Issues

- Fixed the issue that caused the Acceptance Devices app to crash when an unsupported character was entered during activation code entry.
- Fixed the issue that caused the Print Receipt button to appear on the Summary screen of devices without a printer.

Acceptance Devices App Version 1.6.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.6.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 07-22-2024.

Improvements

- Acceptance Devices app server now provides the full certificate chain for TLS.
- Transaction summary reports can now show multiple currencies.
- Improved the UI on several screens.
- Improved the WebSocket connection handling.
- Updated the SDK version to 2.92.0.

Acceptance Devices App Version 1.5.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.5.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 06-25-2024.

New Features

- Added the option to set a custom merchant reference code for transactions when the Acceptance Devices app is in Standalone mode.
- Signature capture type can now be set to `NONE` to skip signature capture.
- Added support for the Oracle Payment Interface.

Improvements

- PAX IM30: Settings button is now hidden.
- Settings menu now has an idle timeout of 2 minutes for the PAX IM30 and 5 minutes for all other supported PAX devices.
- Status notification now indicates when a device is operating in Standalone mode.
- Updated the SDK version to 2.91.0.

Fixed Issues

- Fixed the issue that caused POS Setup to fail when attempting set up again after canceling.
- Fixed the issue that caused Offline mode not to be shown when the Acceptance Devices app is in Cloud with Standalone mode.
- PAX A35: Fixed the issue that caused some text in the transaction summary report to not display correctly.

Acceptance Devices App Version 1.4.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.4.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 05-29-2024.

New Features

- Added support for PAX IM30 and PAX A920 MAX devices.
- Added support for asynchronous responses for transactions when the Acceptance Devices app is in Cloud mode.

Improvements

Updated the SDK version to 2.90.0.

Fixed Issues

- Fixed the issue that rarely caused the app to crash when an invalid request was attempted.
- Fixed the issue that caused null receipt fields to be shown in the response when processing an offline transaction.

Acceptance Devices App Version 1.3.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.3.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 04-23-2024.

New Features

Acceptance Devices App now supports:

- Offline transactions (also known as deferred authorization or store and forward) in Local and Standalone modes
- On-receipt tipping in Local mode
- Cloud mode
- Transaction summary reports

Improvements

- Added support for TLS v1.3.
- Removed support for TLS v1.0 and TLS v1.1.
- Updated the SDK version to 2.88.0.

Fixed Issues

- Fixed the issue that caused the transaction history not to display transactions when the PAX terminal was set to certain time zones.
- PAX A35 terminal: Fixed the issue that caused the Acceptance Devices app not to auto-start.

Acceptance Devices App Version 1.2.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.2.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 01-31-2024.

Improvements

- Capture API requests now return `CaptureResponse` in the **Type** field.
- If there is no internet access, the Start Server button is not available in the Acceptance Devices app.

- Improved the responsiveness of the Settings menu.
- Updated the SDK version to 2.86.

Fixed Issues

- Fixed the issue that caused the Acceptance Devices app to crash occasionally when starting a transaction from the background.
- On the Enter Amount screen, fixed the issue that caused the Backspace key to not work properly for some keyboard settings.
- On the PAX A35 terminal, fixed the issue that caused the green and red physical buttons to be ignored on the Passcode screen.
- Fixed the issue that caused authentication to fail after reactivation when operating in Standalone mode.

Acceptance Devices App Version 1.1.0 Release Notes

These release notes are for the Acceptance Devices app, version 1.1.0 for Android, which is used in the PAX Acceptance Devices App and Tap to Pay on Android Acceptance Devices App. The release date is 12-22-2023.

New Features

- Acceptance Devices protocol: The Acceptance Devices app features the new, streamlined Acceptance Devices protocol. This protocol replaces the ATICA (ISO20022) protocol and is the default integration method for the PAX Acceptance Devices App.
- WebSockets support: The Acceptance Devices app now supports WebSockets, enabling a two-way connection between the point-of-sale (POS) system and the terminal.
- Standalone mode: A new standalone operating mode was added to the Acceptance Devices app. This mode enables merchants to enter transaction amounts directly on the terminal.
- Transaction history: Merchant transaction history is now accessible from the Settings menu in the Acceptance Devices app. This feature includes quick filtering options and linked operations.