Innovative Technology

POWERING TRANSACTIONS AND INTERACTIONS

ITL SDK Package Manual

Document Revision - v.9

Exported on 23/09/2025

Change History

SDK Version	Document Version	Date	Comment
3.2.6	9	20 Aug 2025	• Removed Global Variables and replaced with Collections Variables in Postman • Added “DispenseToBezel” example to NV4000 OpenConnection request on Postman • Documented serverconfig.json
3.2.5	8	19 Aug 2025	Updated to CashDevice-REST-API-V1.5.2 Updated to Android-REST-API-V1.5.2.apk • Added ability to pay via bezel on N4000 • DispenseToBezel added to OpenConnection

3.2.4	7	06 Aug 2025	Updated to Android-REST-API-V1.5.1.apk based on below.
			Updated to CashDevice-RestAPI-V1.5.1
			• .NET4.8 and .NET8 supported (Windows)
			• Added Multi Escrow
			• Added Smart Currency
			• Note Cashbox Levels functions added
			• serverconfig.json added allowing configuration of
			  • Server Port
			  • Allowed CORS Origins
			  • Auto cashbox level clearing
			• Auto rotation of log files (excluding Android)
			• /SendCustomCommand now supports raw SSP responses

3.2.3	6	16 Jul 2025	Documented new Multi-Escrow endpoints Documented new Smart Currency endpoints Documented new NoteCashboxLevels endpoints
3.2.3	5	02 Jun 2025	REST_API_Android updated to 1.4.3, based on REST_API 1.4.4 • Support for launching the REST Server externally from another app added. Removed C# .NET8 / .NET4.8 - ITLDeviceTestApp
3.2.2	4	13 May 2025	REST_API updated to 1.4.4 ITLDeviceTestApp updated to 1.7.0 pre-release Improve logging Import latest ITLCashDevice.dll and ITLComms.dll (V1.1.2) Auto disconnect to device after resetting Fix Smart Empty and Float bugs if response is not OK
3.2.1	3	03 May 2025	SDK documentation added
3.2.0	2	02 Feb 2025	Updated REST to 1.4.1 (.Net8 & Android) Updated CSharp.Net4.8 to 1.6.9
3.1.0	1	27 Jan 2025	.NET8 Initial Release

Welcome to the ITL SDK Package documentation!

The below contents links allow you to browse through the ITL SDK Package documentation. We recommend and encourage you to start with the ITL SDK Package Introduction to get an initial feel and understanding of what the ITL SDK Package offers and provides.

For any questions, issues or concerns please feel free to get in touch with us at any time. Our Customer Service Team is always happy to assist wherever possible. You can use our Helpdesk, send an email to support@innovative-technology.com or call one of our offices.

Contents

ITL SDK Package Introduction

Contents

Purpose of this document

This manual is intended for those who would like to implement an ITL cash handling device into a host machine application utilizing the high-level APIs from Innovative Technology Ltd. This manual provides a software engineer with the ITL REST endpoint to control a cash handling device from a host machine application via high-level API. The high-level APIs were developed by ITL to ease and speed up integrations and to reduce the time to market for our customers and partners.

It is recommended that you study this manual carefully and use it throughout the entire host software development. If you have any question or do not understand any part of this manual please contact support@innovative-technology.com.

Low level SSP source code examples are available upon request. However, implementing low level SSP makes the integration much more complex, increases the likelihood of incorrect or missing error handling and extends the development time. The available SSP source code examples are more than 10 years old and not maintained. It is up to the developer to debug and edit to their needs.

General Description

The ITL SDK Package consist of a high-level REST API that provides all the tools to develop an application on various platforms using ITL products, e.g NV4000, Spectral Payout, SMART Coin System, Banknote Validators.

Library Versions

.NET8.0 is recommended when running the REST API, and is required for Linux. The reason being is the available long-term support (LTS) and life-cycle policy from Microsoft for this version. Please refer to the links below for further information.

https://learn.microsoft.com/en-us/lifecycle/faq/dotnet-framework

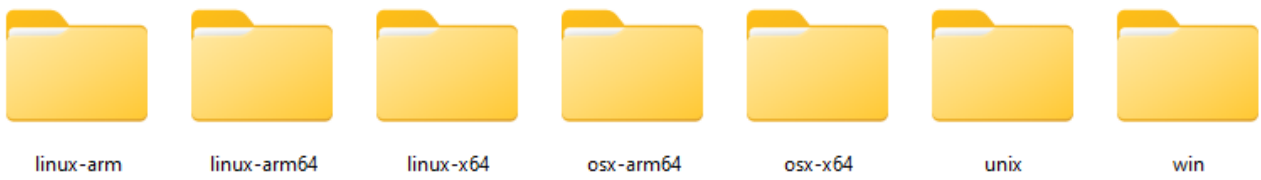
https://dotnet.microsoft.com/en-us/platform/support/policy

.NET Framework 4.8 is also available for Windows.

Supported Runtimes

The high-level .NET8.0 REST API currently supports the following runtimes.

…ITL_SDK_Package_v3.2.6\REST_API\CashDevice-REST-API-V1.5.2\.NET_8.0\runtimes



ITL SDK Package Folder Structure

…\ITL_SDK_Package_vX.y.z

Main SDK package folder.

…\ITL_SDK_Package_vX.y.z\REST_API

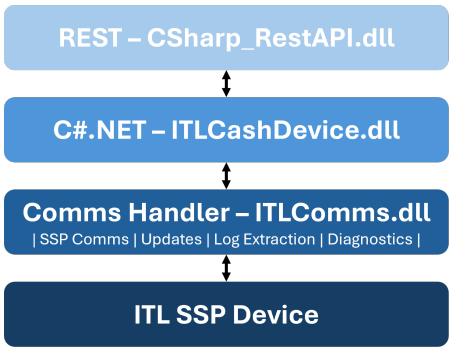
Contains the ITL REST server application and library that handles the available REST endpoints sent by a host application and returns the response data to the application. It also includes a Collection of available API endpoints with the Collections variables that can be imported into Postman.

…\ITL_SDK_Package_vX.y.z\REST_API_Android

Contains a REST server application for Android (.apk) that handles the available REST endpoints sent by a host application and returns the response data to the application. It also includes a Collection of available API endpoints that can be imported into the API Tester app.

API Structure

The API structure consists of three layers as show below.



This library handles all available REST endpoints sent by a host application and returns the response data to the application.

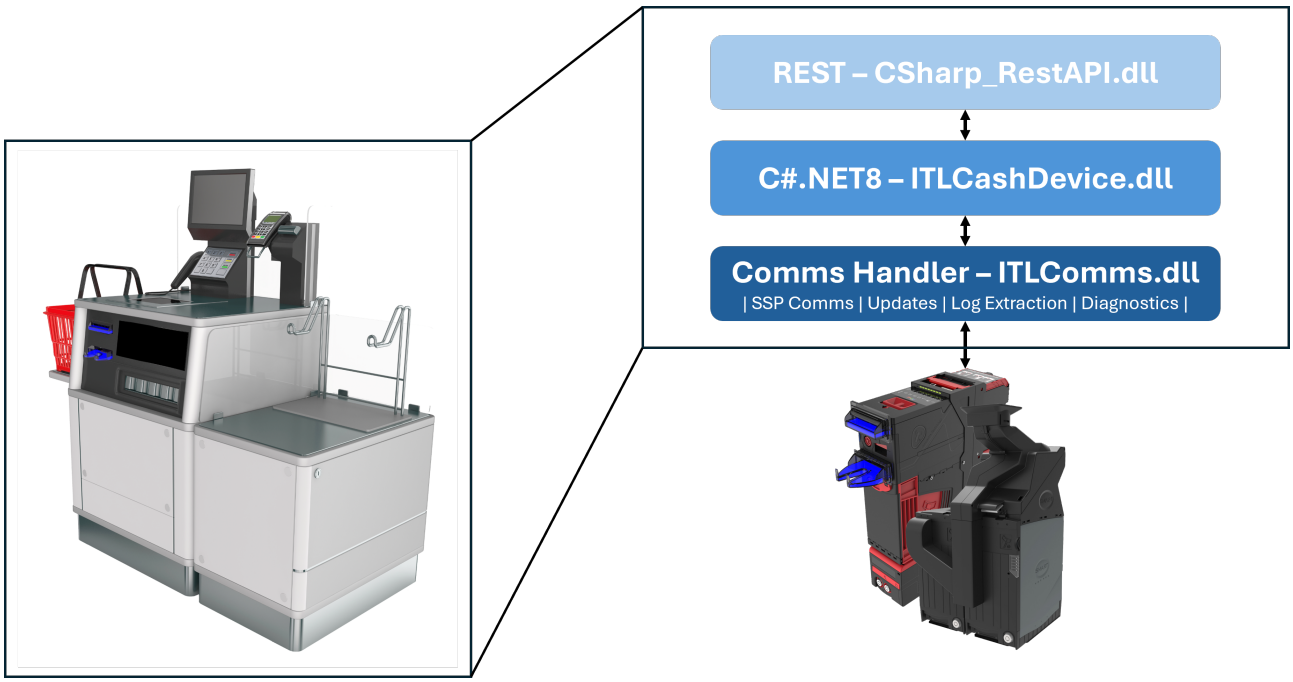
This library handles all available high-level C# methods sent by a host application and returns the response data to the application.

This library handles the low level SSP comms with the connected ITL SSP devices, e.g. NV4000 or SMART Coin System.

Connected ITL SSP devices, e.g. NV4000 or SMART Coin System.

The REST library is linked to the C#.NET library that includes classes for the comms handler that does the low level SSP communication with the connected ITL SSP devices.

Application Example using the REST Interface



Product Support

Product specific information such as FAQs, user manuals, test scripts or currency datasets can be found in the Support Hub on the ITL website. A registered website account is required to access the information and files within the support hub.

Test Scripts

ITL have developed generic tests scripts for various products. The test scripts are like a check list that cover basic machine design requirements in environmental conditions, power requirements, mechanical integration and software integration. The test scripts are also available in the Support Hub on the ITL website.

Even for routine engineering companies ITL highly recommends to apply the test scripts to new machine developments before field trial to minimise the risk of potential field issues.

ITL SDK Package Version Convention

ITL_SDK_Package_vX.y.z

v = version

X = conceptional release

(1 = initial SSP source code examples, 2 = SSP source code examples grouped by product category, e.g. Banknote Validator or Banknote Recyclers, 3 = introduction of high-level APIs)

y = major software release

(0 = initial C#.NET6, 1 = C#.NET8, 2 = .NET8.0 & .NET Framework 4.8 for REST Only)

z = minor API feature updates or improvements

(0 = initial release)

Windows Installation & Getting Started

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Description

This document will advise how to run the CashDevice-RestAPI.exe on your local Microsoft Windows PC.

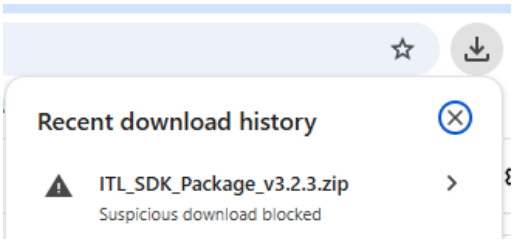
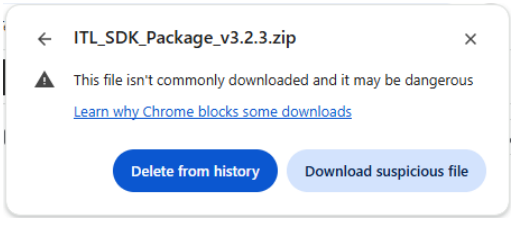
Installing .NET 8 if required

.NET Core 8 is recommended to run this API, due to Microsoft's LTS. To download, please navigate to the following link.

https://dotnet.microsoft.com/en-us/download/dotnet/8.0

.NET Framework 4.8 is also included.

Download the latest SDK

Download the latest SDK from the following link:	
If you receive a download warning, please select the item to accept the download / keep the file.	
Select 'Download suspicious file' or similar depending on default web browser.	

Instructions on setting up the local server

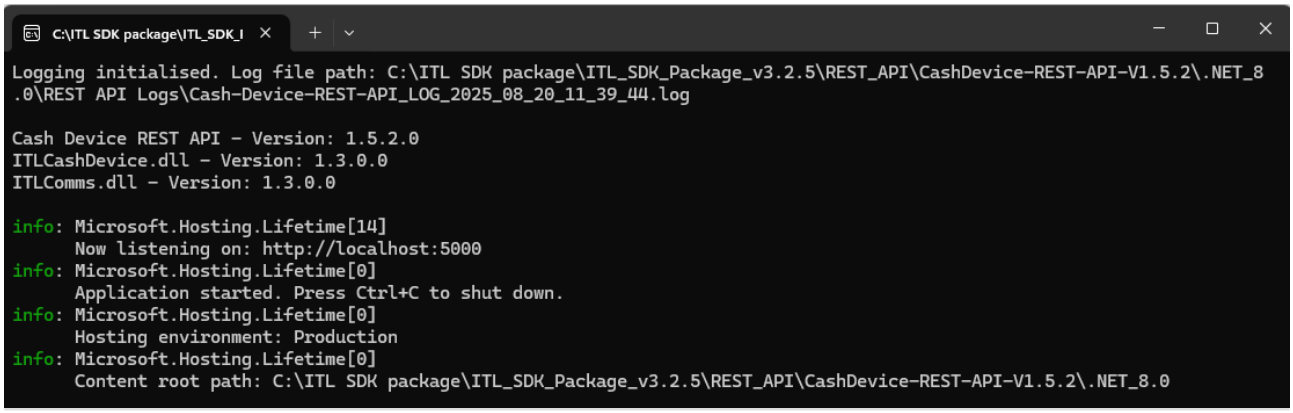
Configuring the Server

- Navigate to the **CashDevice-REST-API-Vx.x.x** directory.

- Navigate into the **.NET_8.0** or **.NET_Framework_4.8** directory.
- Using a text editor, edit the **serverconfig.json** to meet your needs and save the file.
    - Port
    - AllowedOrigins (CORS)
    - AutoClearingCashboxLevels (Automatically 0 cashbox levels when the cashbox is removed and replaced)

Running the Server

- Navigate to the **CashDevice-REST-API-Vx.x.x** directory.
- Navigate into the **.NET_8.0** or **.NET_Framework_4.8** directories.
- Launch the **CashDevice-RestAPI.exe**
- The local server will boot up showing you the URL and port.

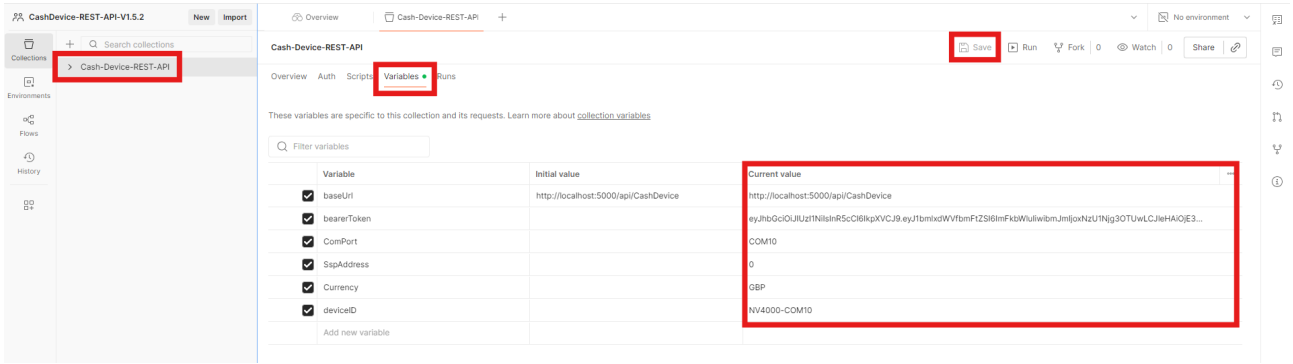


Postman Collection

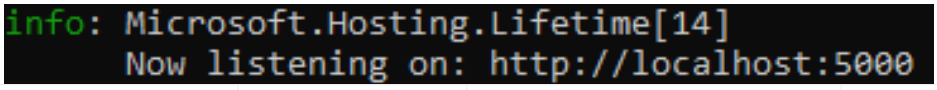
- Navigate to the **Postman** folder and import the **Cash-Device-REST-API.postman_collection.json** into the software.

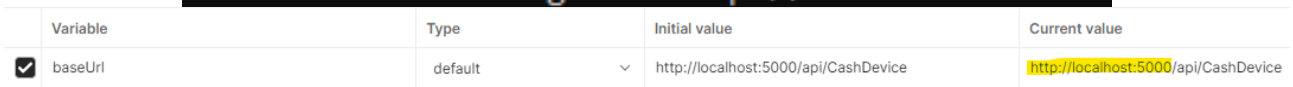
Collection Variables

Navigate to the Collections Variables table and complete the Current value column. Save the changes.



- **baseURL -** Ensure the baseUrl uses the correct URL shown in the Terminal, in the below example http://localhost:5000





- **bearerToken** - Created and saved to the variables table **automatically** upon sending the Authenticate request.
- **ComPort -** Set the correct COM port for the connected validator. COM Port can be obtained from Windows Device Manager.
- **SspAddress -** Set the correct SSP Address for the connected device.
- **Currency -** Set the 3 character currency code for the connected validator.

- **deviceID -** Received and saved to the variables table **automatically** as part of the OpenConnection request.

> The `deviceID` provided in the response should be used as a request parameter in subsequent requests. This `deviceID` targets the specific device to receive SSP commands. For example, if your computer is connected to an NV4000 via port COM17 and a Smart Coin System on COM4, the device IDs would be `NV4000-COM17` and `SMART_COIN_SYSTEM-COM4` , respectively. To disable the acceptor on NV4000, send a request to `{{server_url}}/DisableAcceptor?deviceID=NV4000-COM17`

Authenticate Request Body

```
{
    "Username": "admin",
    "Password": "password"
}
```

Order of requests for initial setup

1. Authenticate
2. OpenConnection

> This endpoint includes: **InitialiseDevice -> OpenDevice -> ConnectDevice -> StartDevice**.

Linux Installation & Getting Started

Contents

Introduction

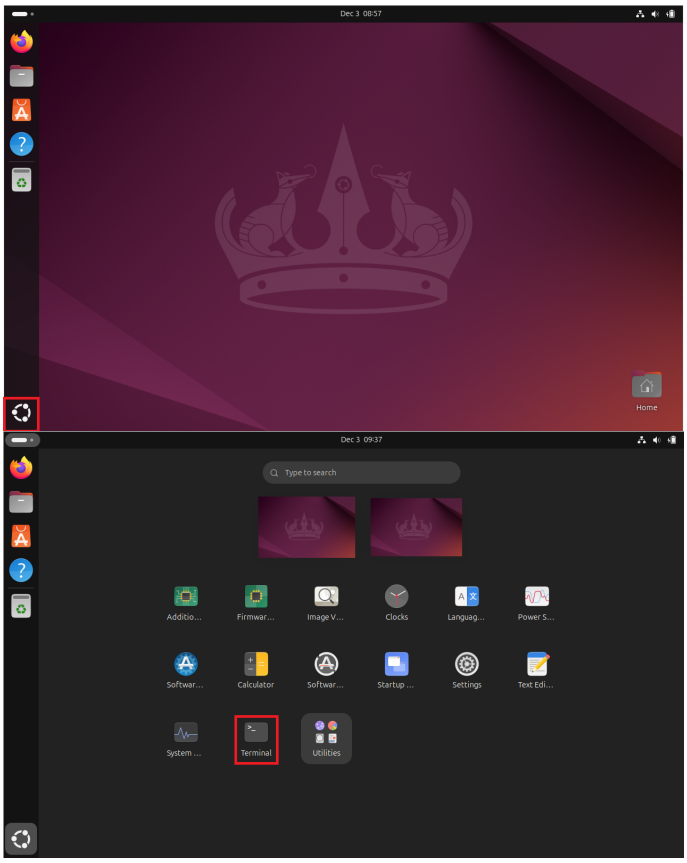
The following describes how to run the ITL REST server using the CashDevice_RestAPI.dll under Linux, make endpoint calls to it and receive response data. There are many different Linux distributions available such as Ubuntu or Debian. Hence, there are many different ways to make REST calls in Linux respectively how to get there. This documentation has been compiled using an Oracle VirtualBox running Ubuntu 24.04.1 LTS.

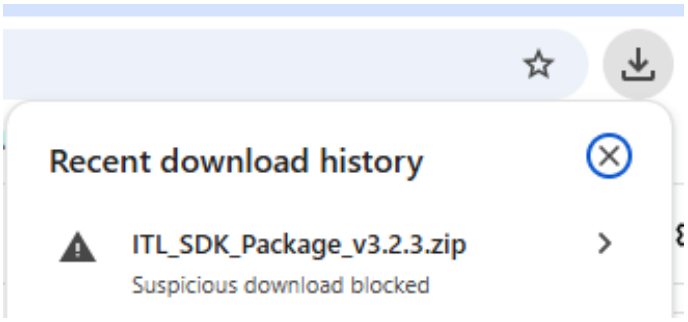
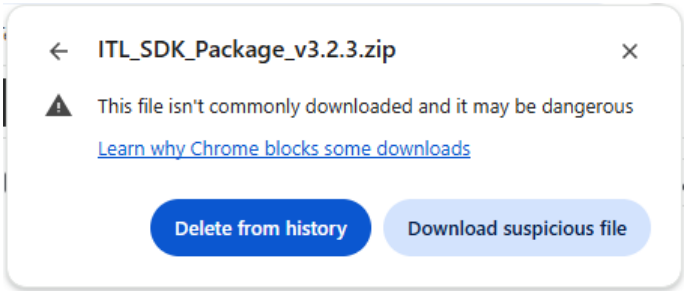
Pre-Requisites

- Linux distribution installed or running on a virtual machine
- User account with sudo privileges
- ITL cash handling device

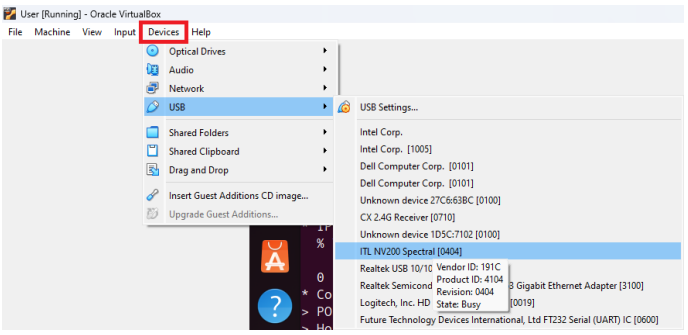
Download and install required resources

Click on “Show Apps” on the bottom left and open the “Terminal”



Download and install latest distribution packages	`sudo apt-get install -y upgrade`
Download and install the .NET8 SDK	`sudo apt-get install -y dotnet-sdk-8.0`
Download and install the .NET8 runtime	`sudo apt-get install -y dotnet-runtime-8.0`
Download the latest SDK from the following link:	
If you receive a download warning, please select the item to accept the download / keep the file.	
Select 'Download suspicious file' or similar depending on default web browser.	

COM Port Configurations

Connect an ITL cash handling device and add the USB connection to the virtual machine	
Give user permission to use tty COM port (a restart of the Terminal may be required)	`sudo usermod -a -G dialout $USER`

Find out which COM port this has been assigned to. Direct USB usually generates a COM port at /dev/ttyACM0 and the IF17 generates COM port at /dev/ttyUSB0. The command on the right hand side will output the COM port. This will be needed later for the OpenConnection REST endpoint	`sudo dmesg | grep tty`

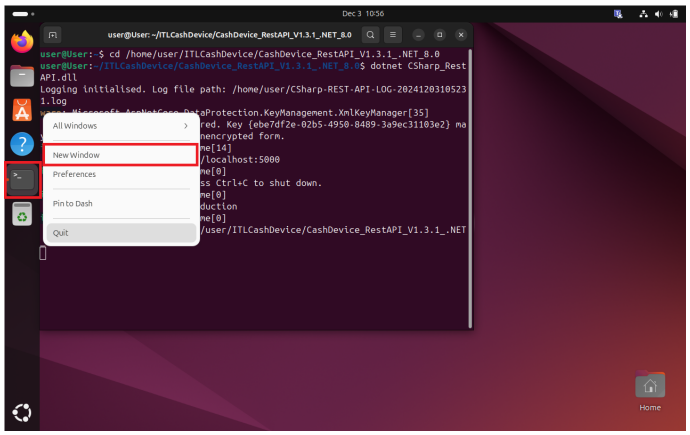
Configuring the Server

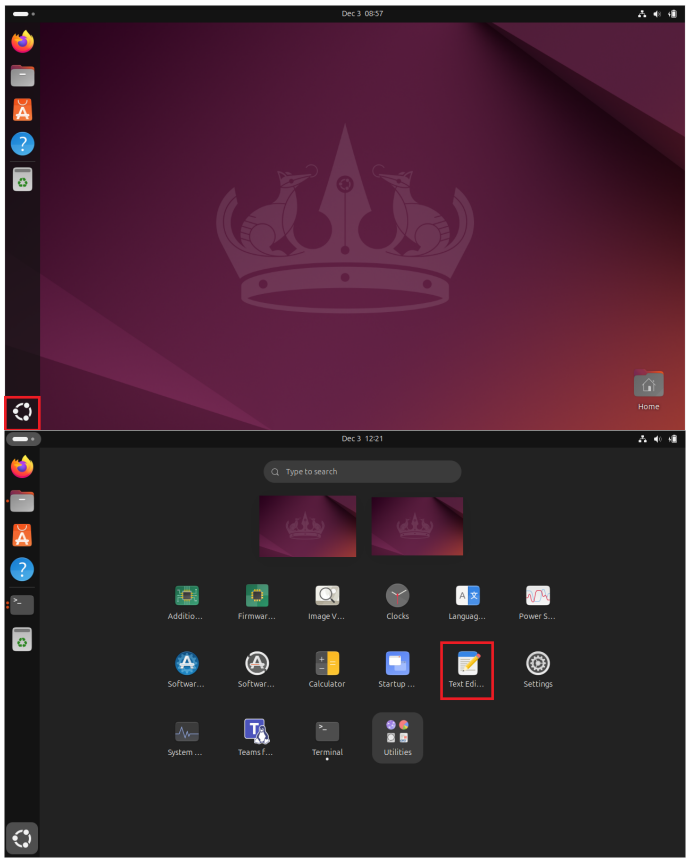
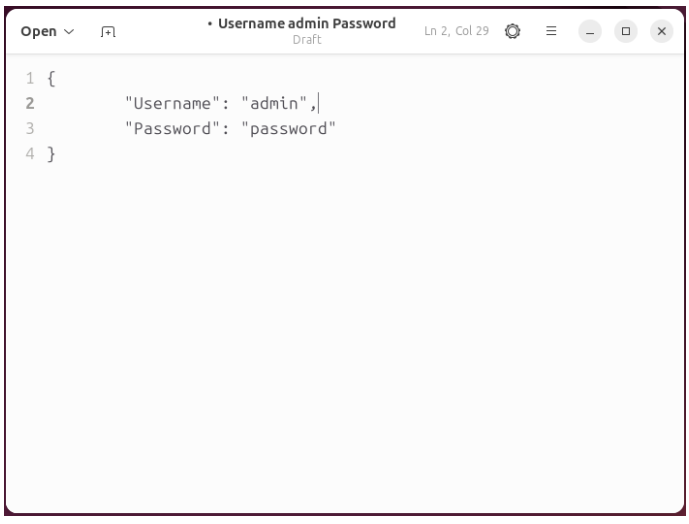
- Navigate to the **CashDevice-REST-API-Vx.x.x** directory.
- Navigate into the **.NET_8.0** directory.
- Using a text editor, edit the **serverconfig.json** to meet your needs and save the file.
  - Port
  - AllowedOrigins (CORS)
  - AutoClearingCashboxLevels (Automatically 0 cashbox levels when the cashbox is removed and replaced)

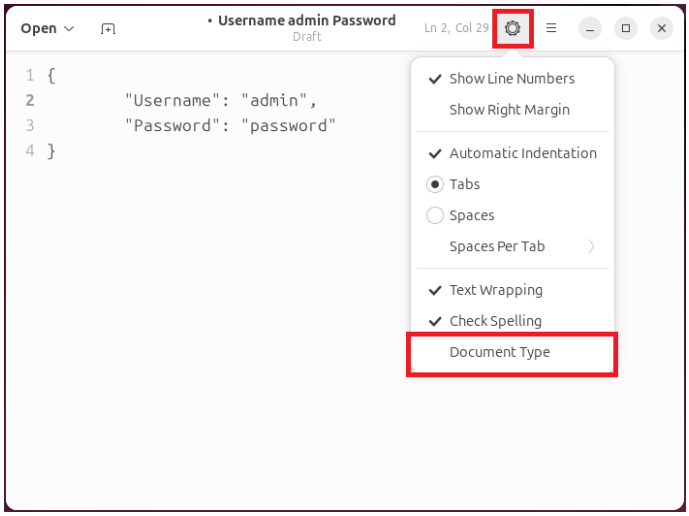
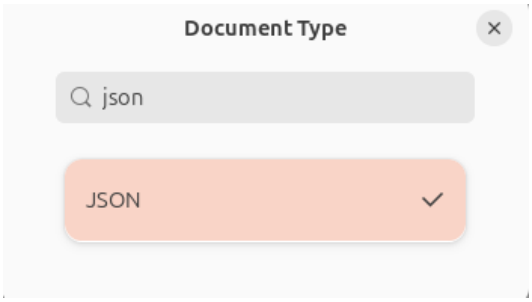
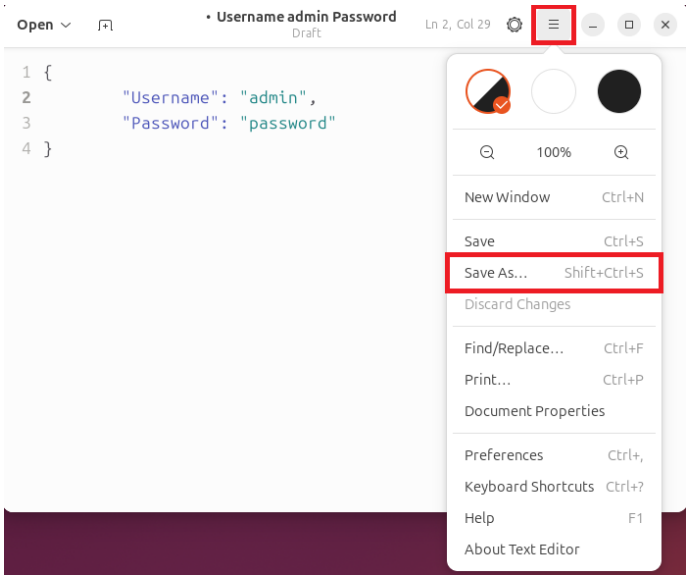
Running the ITL Rest Server

Go into the CashDevice-REST-API-Vx.x.x/.NET_8.0 directory/	`cd /[PATH]/CashDevice-REST-API-Vx.x.x/.NET_8.0/`
Run the CashDevice_RestAPI.dll. This will then start the ITL REST server listening on http://localhost:5000	`dotnet CashDevice_RestAPI.dll`

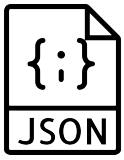
Making REST request using curl

Open a new Terminal window	
Establish a connection to the localhost on port 5000	`curl -v localhost:5000` See also https://curl.se/docs/manpage.html

Request a Bearer Token for authorisation of upcoming REST requests and output in the Terminal window	`curl -v --json '{"Username": "admin", "Password": "password"}' localhost:5000/api/Users/Authenticate |jq` See also REST API - Authenticate
To output the Bearer Token into a .json file. This can then be referenced to in upcoming curl requests instead of copying and pasting the bearer token into upcoming requests	`curl -v --json '{"Username": "admin", "Password": "password"}' localhost:5000/api/Users/Authenticate |jq .> /[PATH]/BearerToken.json`
Instead of writing the json body into the curl request you can also reference to a .json file within the curl request. Click on “Show Apps” on the bottom left and open the Text Editor	
Add the json body text into the text editor	

Click on the settings gear, select “Document Type”	
Type json into the search bar and select “JSON”, close the Document Type	
Click on the button with the 3 lines, select “Save As”, give the file a name, chose a path where to save the file and click on “Save”	
Request a Bearer Token using a .json file	`curl -v --json @/[PATH]/Authenticate.json localhost:5000/api/Users/Authenticate | jq`

Generate a .json file for the OpenConnection request in the same way as for the Bearer Token above or download the example below. This is an example for a Spectral Payout connected to COM port ttyACM0, SSP address 0, default encryption key (decimal), EUR5-500, all notes enabled and routed to payout, enabled acceptor and payout module with escrow mode disabled as shown on the right.




```
{
  "ComPort": "/dev/ttyACM0",
  "SspAddress": 0,
  "LogFilePath": "/[PATH]/CashDevice.log",
  "EncKey": 81985526925837671,
  "SetInhibits": [
    { "Denomination": "500 EUR", "Inhibit":
false },
    { "Denomination": "1000 EUR",
"Inhibit": false },
    { "Denomination": "2000 EUR",
"Inhibit": false },
    { "Denomination": "5000 EUR",
"Inhibit": false },
    { "Denomination": "10000 EUR",
"Inhibit": false },
    { "Denomination": "20000 EUR",
"Inhibit": false },
    { "Denomination": "50000 EUR",
"Inhibit": false }
  ],
  "SetRoutes": [
    { "Denomination": "500 EUR", "Route":
7 },
    { "Denomination": "1000 EUR", "Route":
7 },
    { "Denomination": "2000 EUR", "Route":
7 },
    { "Denomination": "5000 EUR", "Route":
7 },
    { "Denomination": "10000 EUR", "Route":
7 },
    { "Denomination": "20000 EUR", "Route":
7 },
    { "Denomination": "5000 EUR", "Route":
7 }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": true,
  "EnablePayout": true
}
```

See also REST API - OpenConnection

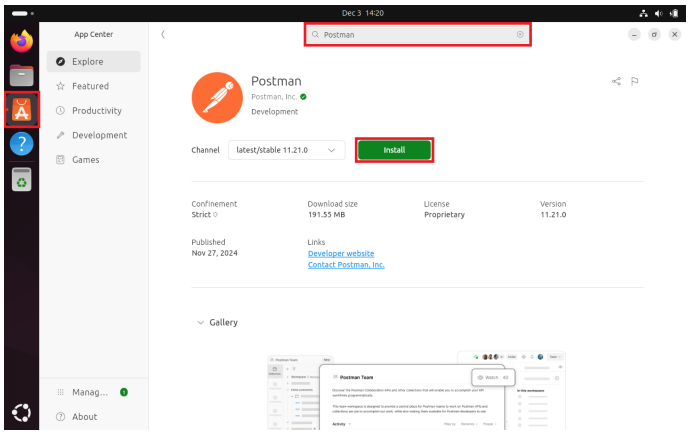
Send the OpenConnection request

```
curl -v -H "Authorization: Bearer [Bearer
Token]" --json @/[PATH]/
OpenConnectionSpectralPayout.json
localhost:5000/api/CashDevice/
OpenConnection | jq
```

Part of the response data is the “deviceID” that is required as a parameter for further REST API requests

Send GetDeviceStatus with “deviceID” parameter	`curl -v -H "Authorization: Bearer [Bearer Token]" localhost:5000/api/CashDevice/GetDeviceStatus?deviceID=SEPCTRAL_PAYOUT-/dev/ttyACM0 | jq` See also REST API - GetDeviceStatus

Making REST request using Postman

Postman is available in Linux Ubuntu. Click on the “App Center” icon on the left hand side, search for “Postman” and install it. You will be prompted to create an account or login to an existing account online before the app can be used	

The only difference making REST request using Postman in Linux compared to Windows is the COM port reference in the OpenConnection request json body. Instead of referencing the COM port number Linux requires the path where the USB driver file is stored	Example for Windows:
	`“ComPort”: “COM3”`
	Example for Linux connected via direct USB:
	`"ComPort": "/dev/ttyACM0"`
	Example for Linux connected via IF17:
	`"ComPort": "/dev/ttyUSB0"`

Android Installation & Getting Started

Contents

Introduction

The following describes how to run the ITL REST server using the Android_REST_API_Vx.x.x.apk and make endpoint calls to it and receive response data. There are many different Android versions available. This documentation has been compiled using Android Version 12 and version 1.3.2 of the Android REST API.

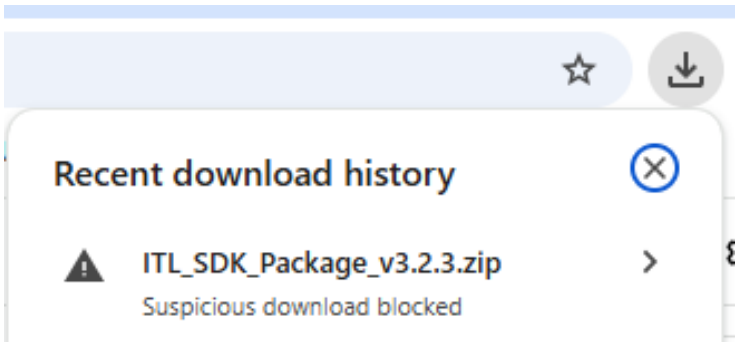
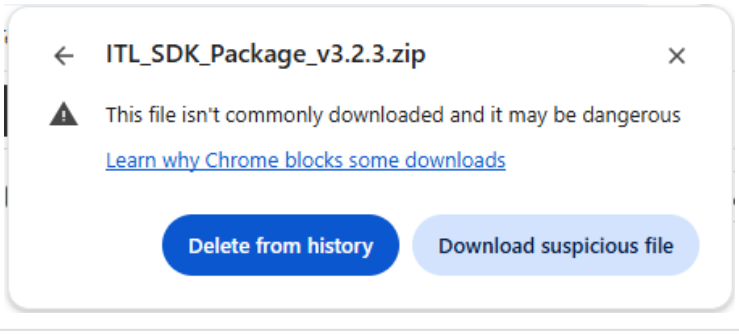
Pre-requisites

- Android Device, Android instance on a Virtual Machine or Emulator

Minimum Android Version 10 (API 29)

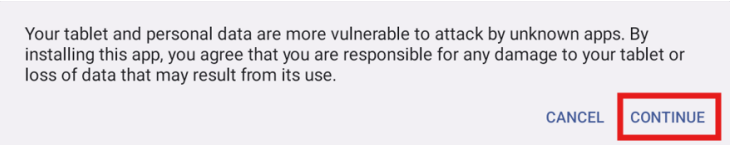
- ITL cash handling device

Download and install the required resources

Download the latest SDK from the following link:	
If you receive a download warning, please select the item to accept the download / keep the file.	
Select 'Download suspicious file' or similar depending on default web browser.	

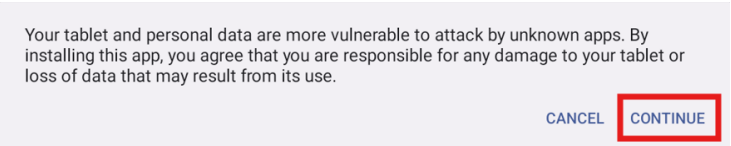
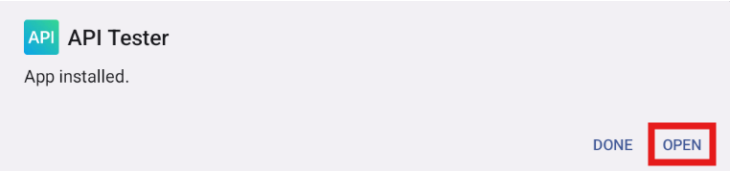
Installing the Android_REST_API_Vx.x.x.apk

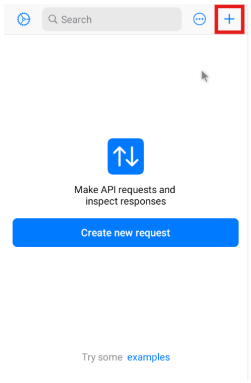
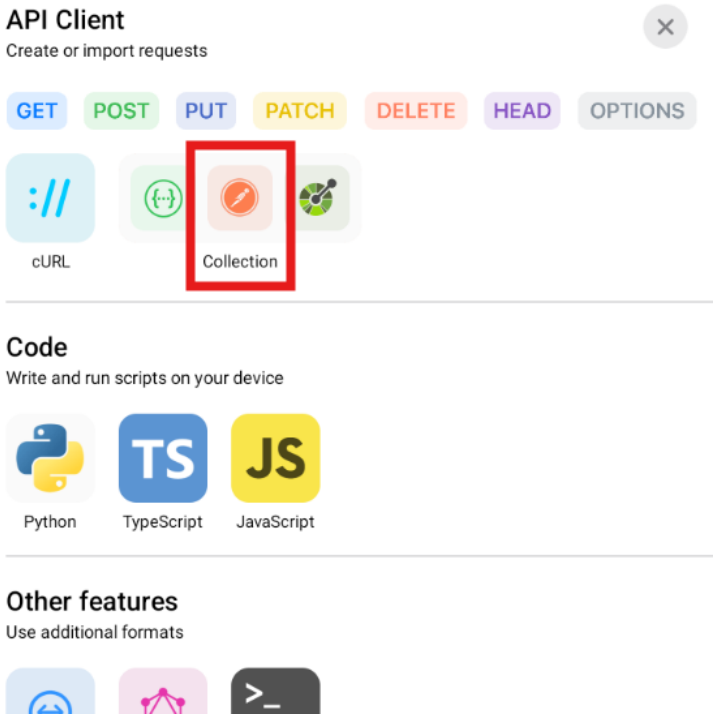
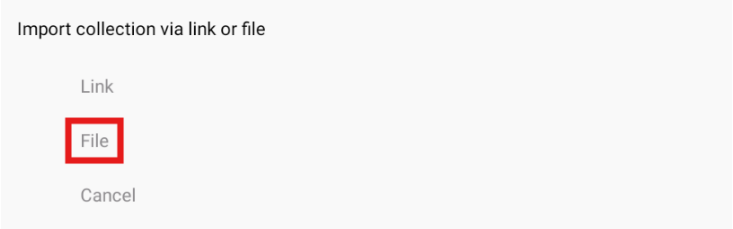
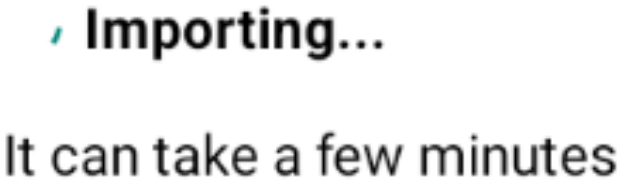
Navigate to the APK download and launch the file.

Select to CONTINUE on any warning messages.	
Select INSTALL to begin the process.	
Select DONE once the install completes.	
Download and install an API Tester like the following example:	

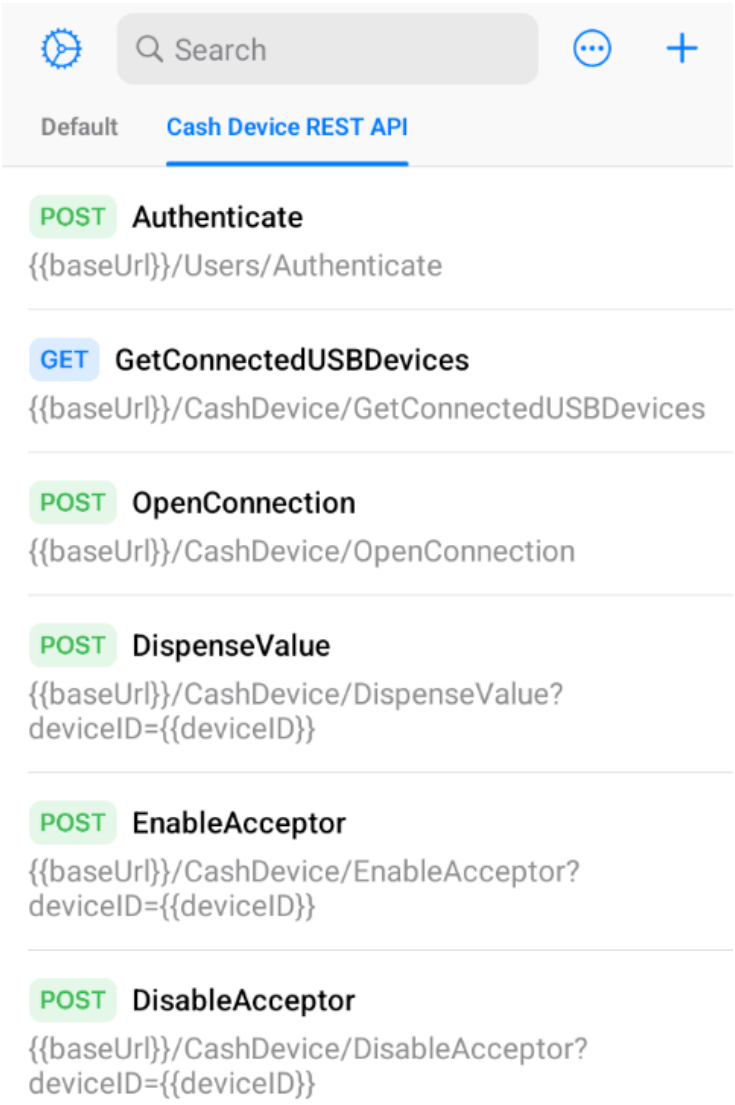
Installing the API Tester.

Navigate to the APK download and launch the file.

If sideloading the APK, select to CONTINUE on any warning messages.	
Select INSTALL to begin the process.	
Select OPEN to launch the application.	

Import the Collection to the API Tester. Select the + icon.	
Select Collection.	
Select File.	
Navigate to the saved collection file Android-API-Collection.json and select the file.	
Wait until the import completes.	

Once the import has completed you will find the collection list on the left of the API Tester app.



Running the ITL REST Server

Launch the Android REST API application

The server will launch and begin listening on http://127.0.0.1:5000/api/CashDevice

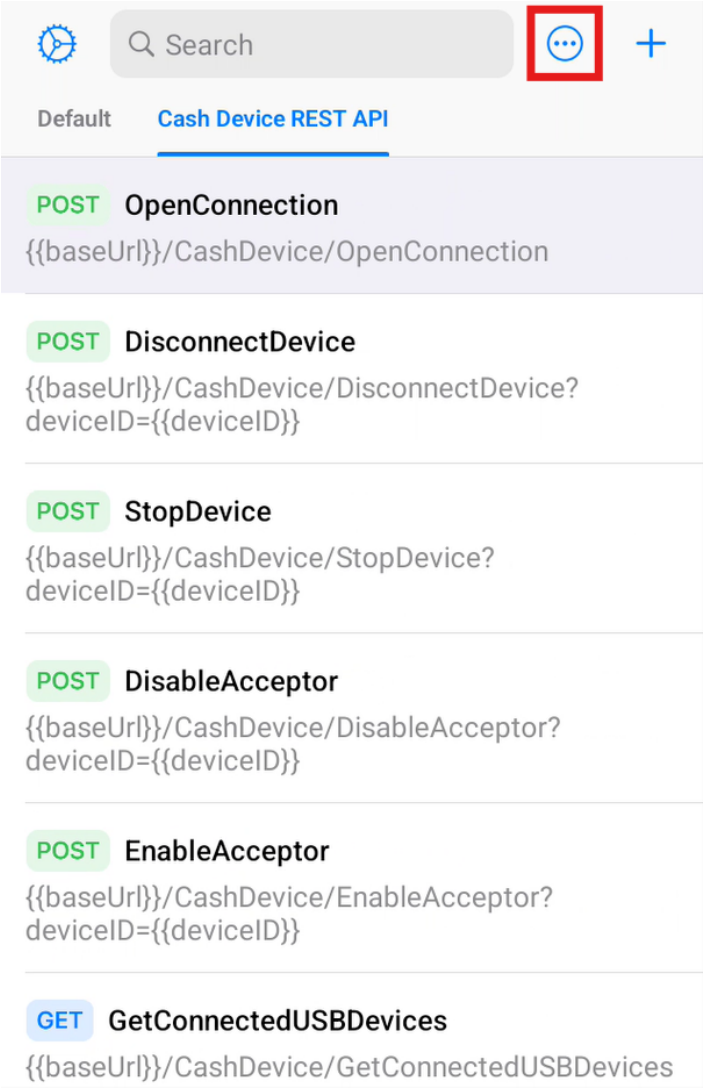
REST requests are case sensitive. Ensure upper case letters are used where advised.

The Android REST API application must remain active at all times. Closing the application will stop the API from communicating between your software and the cash device. A fix has been implemented from version 1.3.2 to ensure the server remains active until explicitly closed, however some Android versions can pause or stop apps running in the background e.g. switching between the server app and the API Testing app. Ensure your Android version can allow apps to remain active in the background.

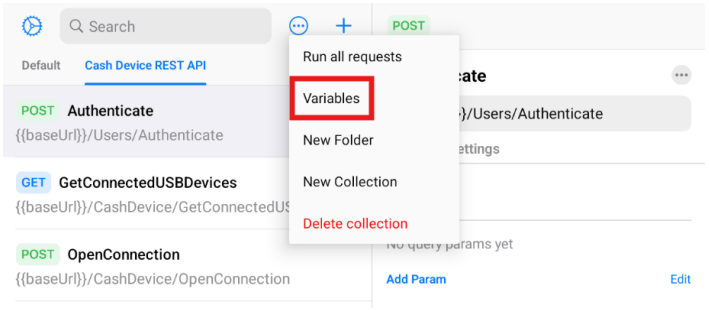
Sending REST Requests using API Tester

Set the baseURL in the Variables table.

To access the Variables table, select the 3 dots contained in the circle to the right of the search bar.

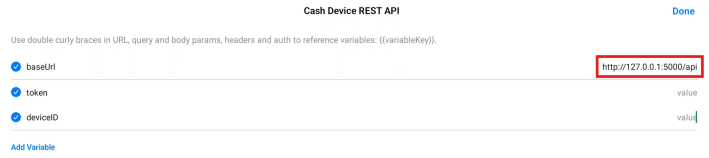


Select Variables.

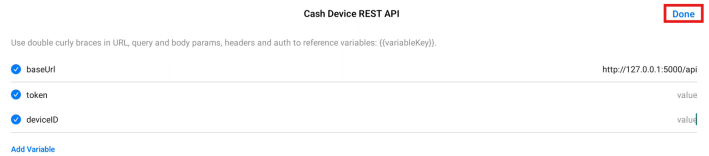


Ensure the correct baseUrl is set in the variables table.

```
http://127.0.0.1:5000/api
```

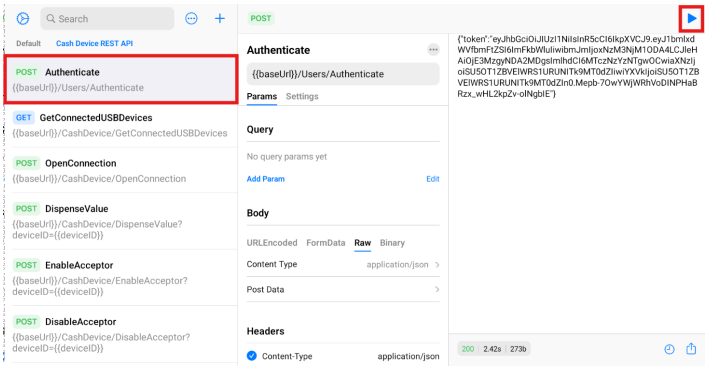


Select Done to update the table and return to the request list.



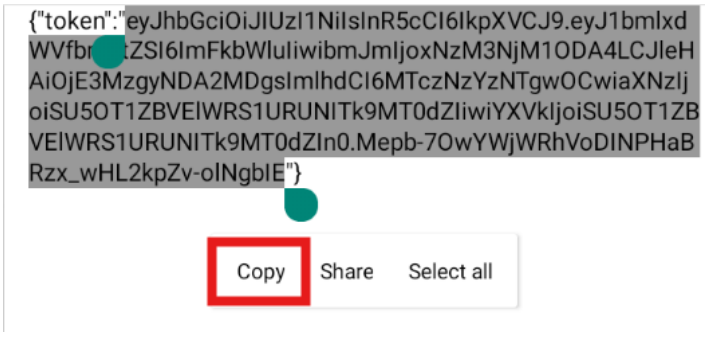
Request a Bearer Token for authorisation of upcoming REST requests using the Authenticate request.

Select the Authenticate request and select the play button from the top right to send the request.

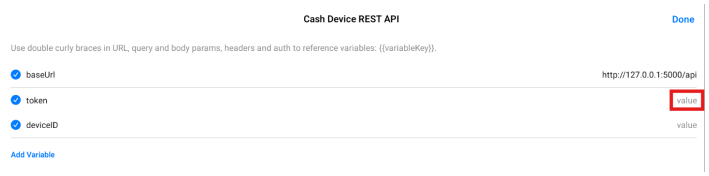


Copy the Bearer Token to the Variables table for future requests.

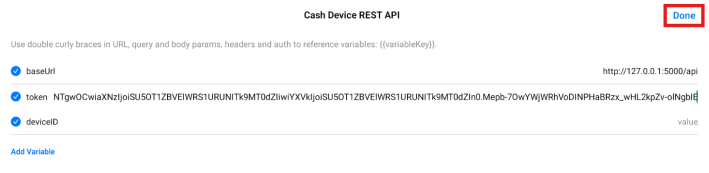
Highlight the Bearer Token and select Copy.



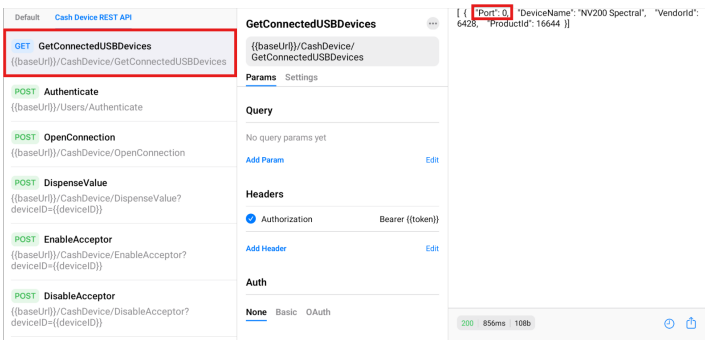
Paste the Bearer Token into the token value field of the variables table.



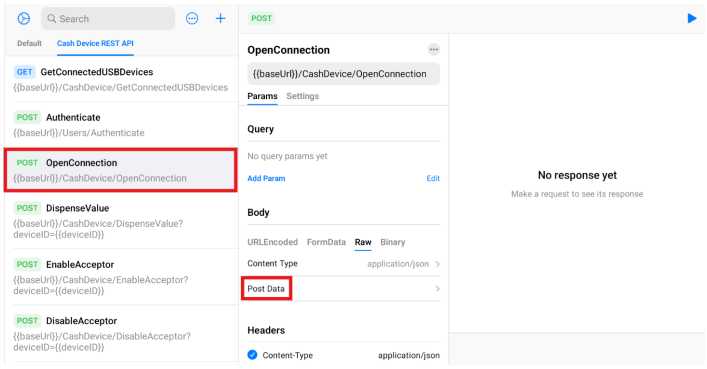
Select Done to update the table and return to the request list.



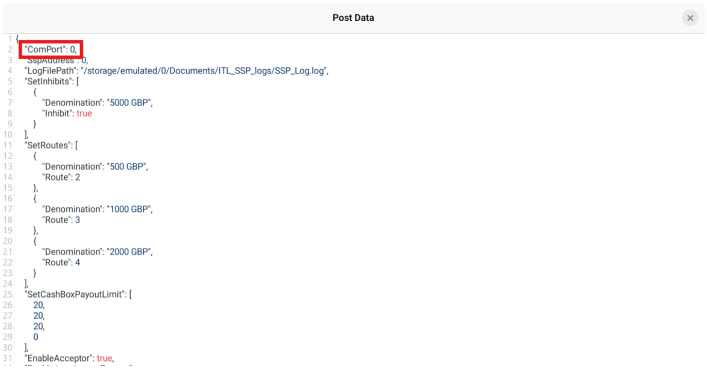
Send the GetConnectedUSBDevices request to obtain the correct Port.



Navigate to the Post Data for the OpenConnection request.



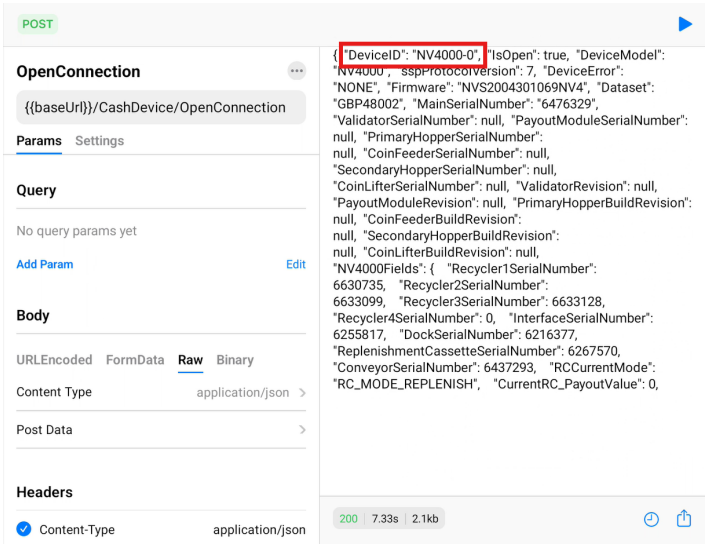
Update the Post Data to the correct Port returned for the GetConnectedUSBDevices request.

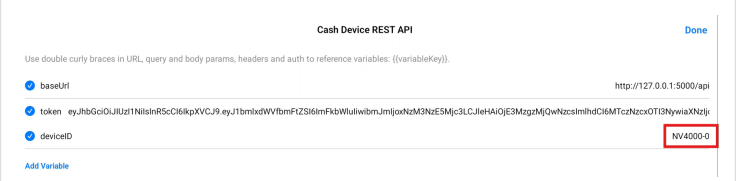


Send the OpenConnection request once the Post Data has been updated. Please refer to the OpenConnection details for further information on the full Post Data body.

Update the deviceID in the variables table.

The OpenConnection request will return the correct deviceID to use on subsequent requests.



Save the deviceID to the variables table.	

Your validator will be enabled and ready to accept currency if the below parameters of the OpenConnection request are set to true.

```
"EnableAcceptor": true,
"EnablePayout": true
```

SSP Lower-Level Logging

Available from version 1.3.2

Android will store the Lower level SSP logs from version 1.3.2.

By default, logs are stored at the following path:
`/storage/emulated/0/Documents/ITL_SSP_logs/{default_log_name}.log`

If you wish to use a custom log location, simply specify it in the JSON request using the following format:
`"LogFilePath": "{directory}/{log_file_name}.log"`

To access the default logs on your Android device, navigate to:
Files -> Internal Storage -> Documents

Cash Device REST API

Overview

This documentation explains how to use the REST API server to establish communication between the ITL cash devices and software applications. These applications can run on various operating systems, such as Linux, and use different programming languages, such as C++, Java, etc.

API Endpoints

- REST API - SetServiceInformationMaintenanceReset
- REST API - SetNoPayinCount
- REST API - GetCoinAcceptance
- REST API - SetCashboxLevels
- REST API - ClearCashboxLevels
- REST API - GetCashboxLevels
- REST API - GetNoteCashboxLevels
- REST API - ClearNoteCashboxLevels
- REST API - SetSorterRoute
- REST API - GetSorterRouteAssignment
- REST API - SetPayoutLimit
- REST API - GetPayoutCount
- REST API - SetTwInMode
- REST API - comPortReadError
- REST API - GetLifterStatus
- REST API - GetLastRejectCode
- REST API - GetSmartCurrencyData
- REST API - UpdateSmartCurrencyDataset
- REST API - StartDownload
- REST API - GetDownloadStatus

REST API - Authenticate

Description

Creates a Bearer Token to be used as Authorisation on all subsequent Requests for security.

> This must be sent first to create the Bearer Token between the software and the REST Server. Only subsequent requests using this Bearer Token in the Authorisation Header will be accepted.

Default Credentials

Username: admin
Password: password

Request

Endpoint	**Authenticate**
Method	POST
URL	http://localhost:5000/api/Users/Authenticate
Authorisation	N/A
Headers	Content-Type - application/json
Query Parameter	N/A
Tags	ALL_PRODUCTS NV4000_SPECTRAL SPECTRAL_PAYOUT NV22_SPECTRAL BANKNOTE_VALIDATOR SMART_COIN_SYSTEM TWIN_SMART_COIN_SYSTM SMART_HOPPER AUTHENTICATION SECURITY SESSION_INITIALISATION

Body Parameter

All Products

```
{
    "Username": "admin",
    "Password": "password"
}
```

Responses

All Products

Status	Body	Notes
200	`{ "token": "eyJhb....." }`	OK: Provides the Bearer Token to be used for the Authorisation of subsequent requests.

Status	Body	Notes

400	{
	"message": "Username or password is incorrect"
	}
		Bad Request: Incorrect Credentials.

Code Examples

cURL

```
curl --location --request POST '/Authenticate' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}'
```

C#

```
var client = new RestClient("/Authenticate");
client.Timeout = -1;
var request = new RestRequest(Method.POST);
request.AddHeader("Content-Type", "application/json");
var body = @"{" + "\n" +
@"    ""Username"": ""{{Username}}""," + "\n" +
@"    ""Password"": ""{{Password}}""" + "\n" +
@"}";
request.AddParameter("application/json", body,  ParameterType.RequestBody);
IRestResponse response = client.Execute(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/Users/Authenticate',
  'headers': {
    'Content-Type': 'application/json'
  },
  body: JSON.stringify({
    "Username": "admin",
    "Password": "password"
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import http.client
import json

conn = http.client.HTTPSConnection("")
payload = json.dumps({
   "Username": "{{Username}}",
   "Password": "{{Password}}"
})
headers = {
   'Content-Type': 'application/json'
}
conn.request("POST", "/Authenticate", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
Unirest.setTimeouts(0, 0);
HttpResponse<String> response = Unirest.post("/Authenticate")
   .header("Content-Type", "application/json")
   .body("{\n    \"Username\": \"{{Username}}\",\n    \"Password\": \"{{Password}}
\"\n}")
   .asString();
```

JavaScript

```
const myHeaders = new Headers();
myHeaders.append("Content-Type", "application/json");

const raw = JSON.stringify({
  "Username": "admin",
  "Password": "password"
});

const requestOptions = {
  method: "POST",
  headers: myHeaders,
  body: raw,
  redirect: "follow"
};

fetch("http://localhost:5000/api/Users/Authenticate", requestOptions)
  .then((response) => response.text())
  .then((result) => console.log(result))
  .catch((error) => console.error(error));
```

PHP

```
<?php

$curl = curl_init();

curl_setopt_array($curl, array(
   CURLOPT_URL => '/Authenticate',
   CURLOPT_RETURNTRANSFER => true,
   CURLOPT_ENCODING => '',
   CURLOPT_MAXREDIRS => 10,
```

```
   CURLOPT_TIMEOUT => 0,
   CURLOPT_FOLLOWLOCATION => true,
   CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
   CURLOPT_CUSTOMREQUEST => 'POST',
   CURLOPT_POSTFIELDS =>'{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}',
   CURLOPT_HTTPHEADER => array(
      'Content-Type: application/json'
   ),
));

$response = curl_exec($curl);

curl_close($curl);
echo $response;
```

Android REST API - GetConnectedUSBDevices

Description

Returns the port address for the connected device.

> This request is used for Android only.

Request

Endpoint	**GetConnectedUSBDevices**
Method	POST
URL	http://localhost:5000/api/CashDevice/GetConnectedUSBDevices
Authorisation	Bearer Token
Headers	Content-Type - application/json
Query Parameter	N/A
Tags	ALL_PRODUCTS NV4000_SPECTRAL SPECTRAL_PAYOUT NV22_SPECTRAL BANKNOTE_VALIDATOR SMART_COIN_SYSTEM TWIN_SMART_COIN_SYSTM SMART_HOPPER WORKFLOW_NAME AUTHENTICATION SECURITY SESSION_INITIALISATION

Body Parameter

All Products

None

Responses

NV4000 Spectral

Status	Body	Notes

200	[
	{
	"Port": 0,
	"DeviceName": "NV200 Spectral",
	"VendorId": 6428,
	"ProductId": 16644
	}
	]
		OK: Provides the port details

Spectral Payout

Status	Body	Notes

200	[
	  {
	  "Port": 0,
	  "DeviceName": "NV200 Spectral",
	  "VendorId": 6428,
	  "ProductId": 16644
	  }
	]
		OK: Provides the port details

NV22 Spectral

Status	Body	Notes

200	[
	  {
	  "Port": 0,
	  "DeviceName": "NV9 Spectral",
	  "VendorId": 6428,
	  "ProductId": 16644
	  }
	]
		OK: Provides the port details

Banknote Validator

Status	Body	Notes

200	[
	  {
	  "Port": 0,
	  "DeviceName": "NV200 Spectral",
	  "VendorId": 6428,
	  "ProductId": 16644
	  }
	]
		OK: Provides the port details
		  NV200 Spectral example.

SMART Coin System

Status	Body	Notes

200	[
	  {
	  "Port": 0,
	  "DeviceName": "ITL SMART System DEVICE",
	  "VendorId": 6428,
	  "ProductId": 16644
	  }
	]
		OK: Provides the port details

Twin SMART Coin System

Status	Body	Notes

200	[
	  {
	  "Port": 0,
	  "DeviceName": "ITL SMART System DEVICE",
	  "VendorId": 6428,
	  "ProductId": 16644
	  }
	]
		OK: Provides the port details

SMART Hopper

Status	Body	Notes

200	[
	  {
	  "Port": 0,
	  "DeviceName": "ITL SMART System DEVICE",
	  "VendorId": 6428,
	  "ProductId": 16644
	  }
	]
		OK: Provides the port details

Code Examples

cURL

```
curl --location --request POST 'http://localhost:5000/api/CashDevice/
GetConnectedUSBDevices' \
--header 'Authorization: Bearer eyJhb.....'
```

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetConnectedUSBDevices", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var unirest = require('unirest');
var req = unirest('POST', 'http://localhost:5000/api/CashDevice/
GetConnectedUSBDevices')
  .headers({
    'Authorization': 'Bearer eyJhb.....'
  })
  .end(function (res) {
    if (res.error) throw new Error(res.error);
    console.log(res.raw_body);
  });
```

Python

```
import http.client

conn = http.client.HTTPConnection("localhost", 5000)
payload = ''
headers = {
  'Authorization': 'Bearer eyJhb.....'
}
conn.request("POST", "/api/CashDevice/GetConnectedUSBDevices", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
Unirest.setTimeouts(0, 0);
HttpResponse<String> response = Unirest.post("http://localhost:5000/api/CashDevice/
GetConnectedUSBDevices")
  .header("Authorization", "Bearer eyJhb.....")
  .asString();
```

JavaScript

```
const myHeaders = new Headers();
myHeaders.append("Authorization", "Bearer eyJhb.....");

const requestOptions = {
  method: "POST",
  headers: myHeaders,
  redirect: "follow"
};

fetch("http://localhost:5000/api/CashDevice/GetConnectedUSBDevices", requestOptions)
  .then((response) => response.text())
```

```
  .then((result) => console.log(result))
  .catch((error) => console.error(error));
```

PHP

```php
<?php

$curl = curl_init();

curl_setopt_array($curl, array(
  CURLOPT_URL => 'http://localhost:5000/api/CashDevice/GetConnectedUSBDevices',
  CURLOPT_RETURNTRANSFER => true,
  CURLOPT_ENCODING => '',
  CURLOPT_MAXREDIRS => 10,
  CURLOPT_TIMEOUT => 0,
  CURLOPT_FOLLOWLOCATION => true,
  CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
  CURLOPT_CUSTOMREQUEST => 'POST',
  CURLOPT_HTTPHEADER => array(
    'Authorization: Bearer eyJhb.....'
  ),
));

$response = curl_exec($curl);

curl_close($curl);
echo $response;
```

REST API - UpdateCredentials

Description

Used to change the Username and Password for the Authenticate request.

> You must have Authenticated using the current credentials before updating to the new credentials.

Default Credentials

Username: admin
Password: password

Request

Endpoint	**UpdateCredentials**
Method	POST
URL	http://localhost:5000/api/Users/UpdateCredentials
Authorisation	Bearer Token
Headers	Content-Type - application/json
Query Parameter	N/A
Tags	ALL_PRODUCTS NV4000_SPECTRAL SPECTRAL_PAYOUT NV22_SPECTRAL BANKNOTE_VALIDATOR SMART_COIN_SYSTEM TWIN_SMART_COIN_SYSTM SMART_HOPPER AUTHENTICATION SECURITY SESSION_INITIALISATION

Body Parameter

All Products

```
{
  "CurrentUsername": "admin",
  "CurrentPassword": "password",
  "NewUsername": "new username",
  "NewPassword": "new password"
}
```

Responses

All Products

Status	Body	Notes

200	<pre>{
	"message": "Credentials updated successfully!"
	}</pre>
		OK: Confirms the credentials have been updated.

400	<pre>Incorrect current username or password!</pre>	Unauthorised: Incorrect Credentials.

Code Examples

cURL

```
curl --location 'http://localhost:5000/api/Users/UpdateCredentials' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer eyJhb.....' \
--data '{
  "CurrentUsername": "admin",
  "CurrentPassword": "password",
  "NewUsername": "new username",
  "NewPassword": "new password"
}'
```

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/Users/UpdateCredentials", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{
" + "\n" +
@"  ""CurrentUsername"": ""admin"",
" + "\n" +
@"  ""CurrentPassword"": ""password"",
" + "\n" +
@"  ""NewUsername"": ""new username"",
" + "\n" +
@"  ""NewPassword"": ""new password""
" + "\n" +
@"}";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var unirest = require('unirest');
```

```
var req = unirest('POST', 'http://localhost:5000/api/Users/UpdateCredentials')
  .headers({
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  })
  .send(JSON.stringify({
    "CurrentUsername": "admin",
    "CurrentPassword": "password",
    "NewUsername": "new username",
    "NewPassword": "new password"
  }))
  .end(function (res) {
    if (res.error) throw new Error(res.error);
    console.log(res.raw_body);
  });
```

Python

```
import http.client
import json

conn = http.client.HTTPConnection("localhost", 5000)
payload = json.dumps({
  "CurrentUsername": "admin",
  "CurrentPassword": "password",
  "NewUsername": "new username",
  "NewPassword": "new password"
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}
conn.request("POST", "/api/Users/UpdateCredentials", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
Unirest.setTimeouts(0, 0);
HttpResponse<String> response = Unirest.post("http://localhost:5000/api/Users/
UpdateCredentials")
  .header("Content-Type", "application/json")
  .header("Authorization", "Bearer eyJhb.....")
  .body("{\r\n  \"CurrentUsername\": \"admin1\",\r\n  \"CurrentPassword\":
\"password\",\r\n  \"NewUsername\": \"new username\",\r\n  \"NewPassword\": \"new
password\"\r\n}")
  .asString();
```

JavaScript

```
const myHeaders = new Headers();
myHeaders.append("Content-Type", "application/json");
myHeaders.append("Authorization", "Bearer eyJhb.....");

const raw = JSON.stringify({
  "CurrentUsername": "admin1",
  "CurrentPassword": "password",
  "NewUsername": "new username",
```

```
  "NewPassword": "new password"
});

const requestOptions = {
  method: "POST",
  headers: myHeaders,
  body: raw,
  redirect: "follow"
};

fetch("http://localhost:5000/api/Users/UpdateCredentials", requestOptions)
  .then((response) => response.text())
  .then((result) => console.log(result))
  .catch((error) => console.error(error));
```

PHP

```
<?php

$curl = curl_init();

curl_setopt_array($curl, array(
  CURLOPT_URL => 'http://localhost:5000/api/Users/UpdateCredentials',
  CURLOPT_RETURNTRANSFER => true,
  CURLOPT_ENCODING => '',
  CURLOPT_MAXREDIRS => 10,
  CURLOPT_TIMEOUT => 0,
  CURLOPT_FOLLOWLOCATION => true,
  CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
  CURLOPT_CUSTOMREQUEST => 'POST',
  CURLOPT_POSTFIELDS =>'{
  "CurrentUsername": "admin1",
  "CurrentPassword": "password",
  "NewUsername": "new username",
  "NewPassword": "new password"
}',
  CURLOPT_HTTPHEADER => array(
    'Content-Type: application/json',
    'Authorization: Bearer eyJhb.....'
  ),
));

$response = curl_exec($curl);

curl_close($curl);
echo $response;
```

REST API - OpenConnection

Description

- The **/OpenConnection** endpoint streamlines the process of initiating communication with cash-handling devices by configuring essential connection and device-specific settings. This endpoint simplifies the previous multi-step process for establishing a connection to an SSP device. Previously, the steps included: **InitialiseDevice -> OpenDevice -> ConnectDevice -> StartDevice**. With **/OpenConnection**, these operations are automated, enabling the device to be ready for cash operations such as payout and note acceptance.
- The structure of the request body and the JSON response varies based on the device model in use. For example, NV4000 requires a distinct request format and includes a different set of fields in its JSON response compared to Smart Coin System.
- To run two devices, different COM ports are required with an /OpenConnection for each. The /GetDeviceStatus must be interleaved between the two.

The `deviceID` provided in the response should be used as a request parameter in subsequent requests. This `deviceID` targets the specific device to receive SSP commands. For example, if your computer is connected to an NV4000 via port COM17 and a Smart Coin System on COM4, the device IDs would be `NV4000-COM17` and `SMART_COIN_SYSTEM-COM4` , respectively. To disable the acceptor on NV4000, send a request to `{{server_url}}/DisableAcceptor?deviceID=NV4000-COM17`

Request

Endpoint	**OpenConnection**
Method	POST
URL	http://localhost:5000/api/CashDevice/OpenConnection
Authorisation	Bearer Token
Headers	Content-Type - application/json
Query Parameter	None
Tags	`ALL_PRODUCTS` `NV4000_SPECTRAL` `SPECTRAL_PAYOUT` `NV22_SPECTRAL` `BANKNOTE_VALIDATOR` `SMART_COIN_SYSTEM` `TWIN_SMART_COIN_SYSTM` `SMART_HOPPER` `SESSION_INITIALISATION`

Request Body Structure

Field	Device Type	Example	Comments
ComPort	Any	“ComPort”: “COM5”	
SspAddress	Any	“SspAddress”: 0	

Field	Device Type	Example	Comments
EncKey	Any	“EncKey”: 81985526925837671	Custom eSSP Key
LogFilePath	Any	"LogFilePath": "C:\\Temp\ \Cash_Device_Log.log"	
SetInhibits	Any	"SetInhibits": [{ "Denomination": "2000 GBP", "Inhibit": true }, { "Denomination": "5000 GBP", "Inhibit": false }]	
SetRoutes	Any	"SetRoutes": [{ "Denomination": "500 GBP", "Route": 7 }, { "Denomination": "1000 GBP", "Route": 0 }]	• Cashbox = 0 • Recycler (NV11) = 1 • Recycler 1 (NV4000) = 2 • Recycler 2 (NV4000) = 3 • Recycler 3 (NV4000) = 4 • Recycler 4 (NV4000) = 5 • Replenishment Cassette (NV4000) = 6 • Payout = 7

SetCoinMechInhibits	Coin Validator	"SetCoinMechInhibits":
		{
		"ValueCountryCodes": ["1 USD","5 USD"],
		"Inhibit": **true**
		}
			See Command 0x40 - Set Coin Mech Inhibits

SetHopperOptions	Coin Hopper	"SetHopperOptions":
		{
		"Reg0": 4,
		"Reg1": 0
		}
			See Command 0x50 - Set Options (Coin)

SetCashBoxPayoutLimit Not Available on NV4000	Any	"SetCashBoxPayoutLimit": [100,0,50,30,20,5,0]	See Command 0x4E - Set Cashbox Payout Limit (Coin) or Command 0x4E - Set Cashbox Payout Limit (Note)
SetTwinMode	TSCS	"SetTwinMode":0	See Sub Command 0x05 0x87 - Set Twin Mode

Field	Device Type	Example	Comments
SetFeederRoutes	TSCS	"SetFeederRoutes": [{ "Denomination": "1 USD", "Route": 0 }, { "Denomination": "25 USD", "Route": 0 }, { "Denomination": "100 USD", "Route": 0 }]	See Sub Command 0x05 0x85 - Sorter Channel Set Route
EnableAcceptor	Any	"EnableAcceptor": **true**	
EnableAutoAcceptEscrow	Note Validator	"EnableAutoAcceptEscrow": **true**	Automatically accept a note held in Escrow.
EnablePayout	Note Validator	"EnablePayout": **true**	
DispenseToBezel	NV4000	“DispenseToBezel”: **true**	Dispense notes from the payin Bezel. Defaults to False if not set (Pay from tray)

Body Parameter

NV4000 Spectral

```
{
  "ComPort": "{{ComPort}}",
  "SspAddress": {{SspAddress}},
  "LogFilePath": "C:\\Temp\\",
   "SetInhibits": [
    { "Denomination": "500 {{Currency}}", "Inhibit": false },
    { "Denomination": "1000 {{Currency}}", "Inhibit": false },
    { "Denomination": "2000 {{Currency}}", "Inhibit": false },
    { "Denomination": "5000 {{Currency}}", "Inhibit": false }
  ],
  "SetRoutes": [
    { "Denomination": "500 {{Currency}}", "Route": 2 },
    { "Denomination": "1000 {{Currency}}", "Route": 3 },
    { "Denomination": "2000 {{Currency}}", "Route": 4 },
    { "Denomination": "5000 {{Currency}}", "Route": 5 }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": true,
  "EnablePayout": true,
  "DispenseToBezel": false
}
```

Spectral Payout

```
{
```

```
  "ComPort": "{{ComPort}}",
  "SspAddress": {{SspAddress}},
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits": [
    { "Denomination": "500 {{Currency}}", "Inhibit": false },
    { "Denomination": "1000 {{Currency}}", "Inhibit": false },
    { "Denomination": "2000 {{Currency}}", "Inhibit": false },
    { "Denomination": "5000 {{Currency}}", "Inhibit": false },
    { "Denomination": "10000 {{Currency}}", "Inhibit": false }
  ],
  "SetRoutes": [
    { "Denomination": "500 {{Currency}}", "Route": 7 },
    { "Denomination": "1000 {{Currency}}", "Route": 7 },
    { "Denomination": "2000 {{Currency}}", "Route": 7 },
    { "Denomination": "5000 {{Currency}}", "Route": 7 },
    { "Denomination": "10000 {{Currency}}", "Route": 0 }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": false,
  "EnablePayout": true
}
```

NV22 Spectral

```
{
  "ComPort": "{{ComPort}}",
  "SspAddress": {{SspAddress}},
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits": [
    { "Denomination": "500 {{Currency}}", "Inhibit": false },
    { "Denomination": "1000 {{Currency}}", "Inhibit": false },
    { "Denomination": "2000 {{Currency}}", "Inhibit": false },
    { "Denomination": "5000 {{Currency}}", "Inhibit": false }
  ],
  "SetRoutes": [
    { "Denomination": "500 {{Currency}}", "Route": 7 },
    { "Denomination": "1000 {{Currency}}", "Route": 7 },
    { "Denomination": "2000 {{Currency}}", "Route": 7 },
    { "Denomination": "5000 {{Currency}}", "Route": 0 }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": false,
  "EnablePayout": true
}
```

Banknote Validator

```
{
  "ComPort": "{{ComPort}}",
  "SspAddress": {{SspAddress}},
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits": [
    { "Denomination": "500 {{Currency}}", "Inhibit": false },
    { "Denomination": "1000 {{Currency}}", "Inhibit": false },
    { "Denomination": "2000 {{Currency}}", "Inhibit": false },
    { "Denomination": "5000 {{Currency}}", "Inhibit": false },
    { "Denomination": "10000 {{Currency}}", "Inhibit": true }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": true
```

```
}
```

SMART Coin System

```
{
  "ComPort": "{{ComPort}}",
  "SspAddress": {{SspAddress}},
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits":
  [
    { "Denomination": "10 {{Currency}}", "Inhibit": false },
    { "Denomination": "50 {{Currency}}", "Inhibit": false }
  ],
  "SetRoutes":
  [
    { "Denomination": "10 {{Currency}}", "Route": 7 },
    { "Denomination": "50 {{Currency}}", "Route":7 }
  ],
  "SetCoinMechInhibits":
  {
    "ValueCountryCodes": ["10 {{Currency}}","50 {{Currency}}"],
    "Inhibit": false
  },
  "EnableAcceptor": true
}
```

Twin SMART Coin System

```
{
  "ComPort": "{{ComPort}}",
  "SspAddress": {{SspAddress}},
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits":
  [
    { "Denomination": "25 {{Currency}}", "Inhibit": true }
  ],
  "SetCoinMechInhibits": {
    "ValueCountryCodes": ["5 {{Currency}}"],
    "Inhibit": true
  },
  "SetCashBoxLevels": [
    { "Denomination": "1 {{Currency}}", "NumCoins": 3 },
    { "Denomination": "25 {{Currency}}", "NumCoins": 3 },
    { "Denomination": "100 {{Currency}}", "NumCoins":3 }
  ],
  "SetFeederRoutes": [
    { "Denomination": "1 {{Currency}}", "Route": 0 },
    { "Denomination": "25 {{Currency}}", "Route": 0 },
    { "Denomination": "100 {{Currency}}", "Route": 0 }
  ],
  "SetRoutes": [
    { "Denomination": "100 {{Currency}}", "Route": 0 }
  ],
  "EnableAcceptor": true
}
```

SMART Hopper

```
{
```

```
  "ComPort": "{{ComPort}}",
  "SspAddress": {{SspAddress}},
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits":
  [
    { "Denomination": "50 {{Currency}}", "Inhibit": false }
  ],
  "SetCoinMechInhibits": {
    "ValueCountryCodes": ["50 {{Currency}}"],
    "Inhibit": false
  },
  "SetCashBoxLevels": [
    { "Denomination": "10 {{Currency}}", "NumCoins": 3 },
    { "Denomination": "50 {{Currency}}", "NumCoins":3 }
  ],
  "EnableAcceptor": true
}
```

Responses

NV4000 Spectral


```
{
    "deviceID": "NV4000-COM18",
    "isOpen": true,
    "deviceModel": "NV4000",
    "sspProtocolVersion": 7,
    "deviceError": "NONE",
    "firmware": "NVS2004281039NV4",
    "dataset": "USD41007",
    "mainSerialNumber": 6215663,
    "buildRevision": "9.10",
    "nV4000Fields": {
        "recycler1SerialNumber": 6206346,
        "recycler2SerialNumber": 6206347,
        "recycler3SerialNumber": 6206348,
        "recycler4SerialNumber": 6206349,
        "interfaceSerialNumber": 6206350,
        "dockSerialNumber": 6215209,
        "replenishmentCassetteSerialNumber": 6202225,
        "conveyorSerialNumber": 6206345,
        "currentRC_PayoutValue": 0,
        "rcNoteCount": 0
    },
    "realTimeClock": "Successfully set real time clock to 28/10/2024 09:17:04.",
    "allLevels": [
        {
            "countryCode": "USD",
            "value": 100,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 200,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 500,
```

```
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 1000,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 2000,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 5000,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 10000,
            "stored": 0
        }
    ],
    "counters": "Number of counters in set: 5\nStacked: 158\nStored: 2360\nDispensed:
2728\nTransferred to stack: 47\nRejected: 63\n",
    "inhibits": "SUCCESS: 5000 USD INHIBITED.\nSUCCESS: 10000 USD INHIBITED.\n",
    "routes": "SUCCESS: Set route for 100 USD to RECYCLER_1.\nSUCCESS: Set route for
500 USD to RECYCLER_2.\nSUCCESS: Set route for 1000 USD to RECYCLER_3.\n",
    "acceptorEnabled": true,
    "autoAcceptEscrowEnabled": true,
    "payoutEnabled": true
}
```


Spectral Payout


```
{
    "deviceID": "SPECTRAL_PAYOUT-COM15",
    "isOpen": true,
    "deviceModel": "SPECTRAL_PAYOUT",
    "sspProtocolVersion": 7,
    "deviceError": "NONE",
    "firmware": "NVS2004321016000",
    "dataset": "ITL01003",
    "validatorSerialNumber": "5196775",
    "payoutModuleSerialNumber": "5314003",
    "validatorRevision": "7.10",
    "payoutModuleRevision": "1.01",
    "realTimeClock": "Successfully set real time clock to 22/09/2025 14:29:10.",
    "allLevels": [
        {
            "countryCode": "ITL",
            "value": 500,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 1000,
            "stored": 0
        },
        {
```

```
            "countryCode": "ITL",
            "value": 2000,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 5000,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 10000,
            "stored": 0
        }
    ],
    "counters": "Number of counters in set: 5\nStacked: 162\nStored: 510\nDispensed:
292\nTransferred to stack: 181\nRejected: 123\n",
    "inhibits": "SUCCESS: 500 ITL ENABLED.\nSUCCESS: 1000 ITL ENABLED.\nSUCCESS: 2000
ITL ENABLED.\nSUCCESS: 5000 ITL ENABLED.\nSUCCESS: 10000 ITL ENABLED.",
    "routes": "SUCCESS: Set route for 500 ITL to PAYOUT.\r\nSUCCESS: Set route for
1000 ITL to PAYOUT.\r\nSUCCESS: Set route for 2000 ITL to PAYOUT.\r\nSUCCESS: Set
route for 5000 ITL to PAYOUT.\r\nSUCCESS: Set route for 10000 ITL to CASHBOX.\r\n",
    "acceptorEnabled": true,
    "autoAcceptEscrowEnabled": false,
    "payoutEnabled": true
}
```


NV22 Spectral


```
{
    "deviceID": "SPECTRAL_PAYOUT-COM12",
    "isOpen": true,
    "deviceModel": "SPECTRAL_PAYOUT",
    "sspProtocolVersion": 7,
    "deviceError": "NONE",
    "firmware": "NVS0091221007000",
    "dataset": "ITL01003",
    "validatorSerialNumber": "6594527",
    "payoutModuleSerialNumber": "6459349",
    "validatorRevision": "8.00",
    "payoutModuleRevision": "1.20",
    "realTimeClock": "Successfully set real time clock to 22/09/2025 14:40:30.",
    "allLevels": [
        {
            "countryCode": "ITL",
            "value": 500,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 1000,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 2000,
            "stored": 0
        },
        {
            "countryCode": "ITL",
```

```
            "value": 5000,
            "stored": 0
        }
    ],
    "counters": "Number of counters in set: 5\nStacked: 114\nStored: 11\nDispensed:
4\nTransferred to stack: 7\nRejected: 123\n",
    "inhibits": "SUCCESS: 500 ITL ENABLED.\nSUCCESS: 1000 ITL ENABLED.\nSUCCESS: 2000
ITL ENABLED.\nSUCCESS: 5000 ITL ENABLED.",
    "routes": "SUCCESS: Set route for 500 ITL to PAYOUT.\r\nSUCCESS: Set route for
1000 ITL to PAYOUT.\r\nSUCCESS: Set route for 2000 ITL to PAYOUT.\r\nSUCCESS: Set
route for 5000 ITL to CASHBOX.\r\n",
    "acceptorEnabled": true,
    "autoAcceptEscrowEnabled": false,
    "payoutEnabled": true
}
```


Banknote Validator


```
{
    "deviceID": "NOTE_VALIDATOR-COM15",
    "isOpen": true,
    "deviceModel": "NOTE_VALIDATOR",
    "sspProtocolVersion": 7,
    "deviceError": "NONE",
    "firmware": "NVS2004321016000",
    "dataset": "ITL01003",
    "realTimeClock": "Successfully set real time clock to 22/09/2025 14:34:23.",
    "allLevels": [
        {
            "countryCode": "ITL",
            "value": 500,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 1000,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 2000,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 5000,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 10000,
            "stored": 0
        }
    ],
    "counters": "Number of counters in set: 5\nStacked: 162\nStored: 510\nDispensed:
292\nTransferred to stack: 181\nRejected: 123\n",
    "inhibits": "SUCCESS: 500 ITL ENABLED.\nSUCCESS: 1000 ITL ENABLED.\nSUCCESS: 2000
ITL ENABLED.\nSUCCESS: 5000 ITL ENABLED.\nSUCCESS: 10000 ITL INHIBITED.",
    "acceptorEnabled": true,
    "autoAcceptEscrowEnabled": true,
```

```
    "payoutEnabled": false
}
```


SMART Coin System


```
{
    "deviceID": "SMART_COIN_SYSTEM-COM9",
    "isOpen": true,
    "deviceModel": "SMART_COIN_SYSTEM",
    "sspProtocolVersion": 7,
    "deviceError": "NONE",
    "firmware": "SH00041401008C01",
    "dataset": "ITL15041",
    "primaryHopperSerialNumber": "6334858",
    "coinFeederSerialNumber": "4592666",
    "primaryHopperBuildRevision": "14.30",
    "coinFeederBuildRevision": "14.00",
    "realTimeClock": "Successfully set real time clock to 22/09/2025 13:16:48.",
    "allLevels": [
        {
            "countryCode": "ITL",
            "value": 10,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 50,
            "stored": 0
        }
    ],
    "counters": "Number of counters in set: 9\nCoins paid out, including to cashbox:
58\nCoins paid in: 126\nFeeder rejects: 26\nHopper jams: 0\nFeeder jams: 0\nFraud
attempts: 0\nCalibration Fails: 6\nResets: 67\nCoins sent to cashbox: 41\n",
    "inhibits": "SUCCESS: 10 ITL ENABLED.\nSUCCESS: 50 ITL ENABLED.",
    "routes": "SUCCESS: Set route for 10 ITL to PAYOUT.\r\nSUCCESS: Set route for 50
ITL to PAYOUT.\r\n",
    "coinMechInhibits": "Successfully set coin mech inhibits.",
    "acceptorEnabled": true
}
```


Twin SMART Coin System


```
{
    "deviceID": "TWIN_SMART_COIN_SYSTEM-COM4",
    "isOpen": true,
    "deviceModel": "TWIN_SMART_COIN_SYSTEM",
    "sspProtocolVersion": 7,
    "deviceError": "NONE",
    "firmware": "SH00041391021C01",
    "dataset": "USD01056",
    "primaryHopperSerialNumber": "5686630",
    "coinFeederSerialNumber": "5793235",
    "secondaryHopperSerialNumber": "5455268",
    "primaryHopperBuildRevision": "14.00",
    "coinFeederBuildRevision": "14.40",
    "secondaryHopperBuildRevision": "14.40",
    "realTimeClock": "Successfully set real time clock to 31/10/2024 16:16:59.",
    "allLevels": [
        {
            "countryCode": "USD",
```

```
            "value": 1,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 5,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 10,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 25,
            "stored": 0
        },
        {
            "countryCode": "USD",
            "value": 100,
            "stored": 0
        }
    ],
    "counters": "Number of counters in set: 9\nCoins paid out, including to cashbox:
76226\nCoins paid in: 65456\nFeeder rejects: 1206\nHopper jams: 1\nFeeder jams:
2\nFraud attempts: 29\nCalibration Fails: 187\nResets: 613\nCoins sent to cashbox:
5182\n",
    "inhibits": "SUCCESS: 25 USD INHIBITED.",
    "routes": "SUCCESS: Set route for 100 USD to CASHBOX.\r\n",
    "coinMechInhibits": "Successfully set coin mech inhibits.",
    "feederRoutes": "SUCCESS: Set feeder route for 1 USD to MASTER ROUTE.\r\nSUCCESS:
Set feeder route for 25 USD to MASTER ROUTE.\r\nSUCCESS: Set feeder route for 100 USD
to MASTER ROUTE.\r\n",
    "cashBoxLevels": "SUCCESS: Set cashbox level for 1 USD to 3.\r\nSUCCESS: Set
cashbox level for 25 USD to 3.\r\nSUCCESS: Set cashbox level for 100 USD to 3.\r\n",
    "acceptorEnabled": true
}
```


SMART Hopper


```
{
    "deviceID": "SMART_HOPPER_4-COM9",
    "isOpen": true,
    "deviceModel": "SMART_HOPPER_4",
    "sspProtocolVersion": 7,
    "deviceError": "NONE",
    "firmware": "SH00041401008C01",
    "dataset": "ITL15041",
    "realTimeClock": "Successfully set real time clock to 22/09/2025 14:11:39.",
    "allLevels": [
        {
            "countryCode": "ITL",
            "value": 10,
            "stored": 0
        },
        {
            "countryCode": "ITL",
            "value": 50,
            "stored": 0
```

```
        }
    ],
    "counters": "Number of counters in set: 9\nCoins paid out, including to cashbox:
58\nCoins paid in: 126\nFeeder rejects: 26\nHopper jams: 0\nFeeder jams: 0\nFraud
attempts: 0\nCalibration Fails: 6\nResets: 68\nCoins sent to cashbox: 41\n",
    "inhibits": "SUCCESS: 50 ITL ENABLED.",
    "coinMechInhibits": "Successfully set coin mech inhibits.",
    "acceptorEnabled": true
}
```

Code Examples

The below code examples are based on the NV22 Spectral.

cURL

```
curl --location 'http://localhost:5000/api/CashDevice/OpenConnection' \
--header 'Content-Type: application/json' \
--header 'Authorization: Bearer eyJhb.....' \
--data '{
  "ComPort": "COM12",
  "SspAddress": 0,
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits": [
    { "Denomination": "500 ITL", "Inhibit": false },
    { "Denomination": "1000 ITL", "Inhibit": false },
    { "Denomination": "2000 ITL", "Inhibit": false },
    { "Denomination": "5000 ITL", "Inhibit": false }
  ],
  "SetRoutes": [
    { "Denomination": "500 ITL", "Route": 7 },
    { "Denomination": "1000 ITL", "Route": 7 },
    { "Denomination": "2000 ITL", "Route": 7 },
    { "Denomination": "5000 ITL", "Route": 0 }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": false,
  "EnablePayout": true
}'
```

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/OpenConnection", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{
" + "\n" +
@"  ""ComPort"": ""COM12"",
" + "\n" +
@"  ""SspAddress"": 0,
" + "\n" +
@"  ""LogFilePath"": ""C:\\Temp\\"",
" + "\n" +
```

```
@"  ""SetInhibits"": [
" + "\n" +
@"    { ""Denomination"": ""500 ITL"", ""Inhibit"": false },
" + "\n" +
@"    { ""Denomination"": ""1000 ITL"", ""Inhibit"": false },
" + "\n" +
@"    { ""Denomination"": ""2000 ITL"", ""Inhibit"": false },
" + "\n" +
@"    { ""Denomination"": ""5000 ITL"", ""Inhibit"": false }
" + "\n" +
@"  ],
" + "\n" +
@"  ""SetRoutes"": [
" + "\n" +
@"    { ""Denomination"": ""500 ITL"", ""Route"": 7 },
" + "\n" +
@"    { ""Denomination"": ""1000 ITL"", ""Route"": 7 },
" + "\n" +
@"    { ""Denomination"": ""2000 ITL"", ""Route"": 7 },
" + "\n" +
@"    { ""Denomination"": ""5000 ITL"", ""Route"": 0 }
" + "\n" +
@"  ],
" + "\n" +
@"  ""EnableAcceptor"": true,
" + "\n" +
@"  ""EnableAutoAcceptEscrow"": false,
" + "\n" +
@"  ""EnablePayout"": true
" + "\n" +
@"}";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var unirest = require('unirest');
var req = unirest('POST', 'http://localhost:5000/api/CashDevice/OpenConnection')
  .headers({
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  })
  .send(JSON.stringify({
    "ComPort": "COM12",
    "SspAddress": 0,
    "LogFilePath": "C:\\Temp\\",
    "SetInhibits": [
      {
        "Denomination": "500 ITL",
        "Inhibit": false
      },
      {
        "Denomination": "1000 ITL",
        "Inhibit": false
      },
      {
        "Denomination": "2000 ITL",
        "Inhibit": false
      },
```

```
      {
        "Denomination": "5000 ITL",
        "Inhibit": false
      }
    ],
    "SetRoutes": [
      {
        "Denomination": "500 ITL",
        "Route": 7
      },
      {
        "Denomination": "1000 ITL",
        "Route": 7
      },
      {
        "Denomination": "2000 ITL",
        "Route": 7
      },
      {
        "Denomination": "5000 ITL",
        "Route": 0
      }
    ],
    "EnableAcceptor": true,
    "EnableAutoAcceptEscrow": false,
    "EnablePayout": true
  }))
  .end(function (res) {
    if (res.error) throw new Error(res.error);
    console.log(res.raw_body);
  });
```

Python

```
import http.client
import json

conn = http.client.HTTPConnection("localhost", 5000)
payload = json.dumps({
  "ComPort": "COM12",
  "SspAddress": 0,
  "LogFilePath": "C:\\Temp\\",
  "SetInhibits": [
    {
      "Denomination": "500 ITL",
      "Inhibit": False
    },
    {
      "Denomination": "1000 ITL",
      "Inhibit": False
    },
    {
      "Denomination": "2000 ITL",
      "Inhibit": False
    },
    {
      "Denomination": "5000 ITL",
      "Inhibit": False
    }
  ],
```

```
  "SetRoutes": [
    {
      "Denomination": "500 ITL",
      "Route": 7
    },
    {
      "Denomination": "1000 ITL",
      "Route": 7
    },
    {
      "Denomination": "2000 ITL",
      "Route": 7
    },
    {
      "Denomination": "5000 ITL",
      "Route": 0
    }
  ],
  "EnableAcceptor": True,
  "EnableAutoAcceptEscrow": False,
  "EnablePayout": True
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}
conn.request("POST", "/api/CashDevice/OpenConnection", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
Unirest.setTimeouts(0, 0);
HttpResponse<String> response = Unirest.post("http://localhost:5000/api/CashDevice/
OpenConnection")
  .header("Content-Type", "application/json")
  .header("Authorization", "Bearer eyJhb.....")
  .body("{\r\n  \"ComPort\": \"COM12\",\r\n  \"SspAddress\": 0,\r\n  \"LogFilePath\":
\"C:\\\\Temp\\\\\",\r\n  \"SetInhibits\": [\r\n    { \"Denomination\": \"500 ITL\",
\"Inhibit\": false },\r\n    { \"Denomination\": \"1000 ITL\", \"Inhibit\": false },
\r\n    { \"Denomination\": \"2000 ITL\", \"Inhibit\": false },\r\n
{ \"Denomination\": \"5000 ITL\", \"Inhibit\": false }\r\n  ],\r\n  \"SetRoutes\":
[\r\n    { \"Denomination\": \"500 ITL\", \"Route\": 7 },\r\n    { \"Denomination\":
\"1000 ITL\", \"Route\": 7 },\r\n    { \"Denomination\": \"2000 ITL\", \"Route\":
7 },\r\n    { \"Denomination\": \"5000 ITL\", \"Route\": 0 }\r\n  ],\r\n
\"EnableAcceptor\": true,\r\n  \"EnableAutoAcceptEscrow\": false,\r\n
\"EnablePayout\": true\r\n}")
  .asString();
```

JavaScript

```
const myHeaders = new Headers();
myHeaders.append("Content-Type", "application/json");
myHeaders.append("Authorization", "Bearer eyJhb.....");

const raw = JSON.stringify({
  "ComPort": "COM12",
  "SspAddress": 0,
  "LogFilePath": "C:\\Temp\\",
```

```
  "SetInhibits": [
    {
      "Denomination": "500 ITL",
      "Inhibit": false
    },
    {
      "Denomination": "1000 ITL",
      "Inhibit": false
    },
    {
      "Denomination": "2000 ITL",
      "Inhibit": false
    },
    {
      "Denomination": "5000 ITL",
      "Inhibit": false
    }
  ],
  "SetRoutes": [
    {
      "Denomination": "500 ITL",
      "Route": 7
    },
    {
      "Denomination": "1000 ITL",
      "Route": 7
    },
    {
      "Denomination": "2000 ITL",
      "Route": 7
    },
    {
      "Denomination": "5000 ITL",
      "Route": 0
    }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": false,
  "EnablePayout": true
});

const requestOptions = {
  method: "POST",
  headers: myHeaders,
  body: raw,
  redirect: "follow"
};

fetch("http://localhost:5000/api/CashDevice/OpenConnection", requestOptions)
  .then((response) => response.text())
  .then((result) => console.log(result))
  .catch((error) => console.error(error));
```

PHP

```
<?php

$curl = curl_init();

curl_setopt_array($curl, array(
```

```
  CURLOPT_URL => 'http://localhost:5000/api/CashDevice/OpenConnection',
  CURLOPT_RETURNTRANSFER => true,
  CURLOPT_ENCODING => '',
  CURLOPT_MAXREDIRS => 10,
  CURLOPT_TIMEOUT => 0,
  CURLOPT_FOLLOWLOCATION => true,
  CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
  CURLOPT_CUSTOMREQUEST => 'POST',
  CURLOPT_POSTFIELDS =>'{
  "ComPort": "COM12",
  "SspAddress": 0,
  "LogFilePath": "C:\\\\Temp\\\\",
  "SetInhibits": [
    { "Denomination": "500 ITL", "Inhibit": false },
    { "Denomination": "1000 ITL", "Inhibit": false },
    { "Denomination": "2000 ITL", "Inhibit": false },
    { "Denomination": "5000 ITL", "Inhibit": false }
  ],
  "SetRoutes": [
    { "Denomination": "500 ITL", "Route": 7 },
    { "Denomination": "1000 ITL", "Route": 7 },
    { "Denomination": "2000 ITL", "Route": 7 },
    { "Denomination": "5000 ITL", "Route": 0 }
  ],
  "EnableAcceptor": true,
  "EnableAutoAcceptEscrow": false,
  "EnablePayout": true
}',
  CURLOPT_HTTPHEADER => array(
    'Content-Type: application/json',
    'Authorization: Bearer eyJhb.....'
  ),
));

$response = curl_exec($curl);

curl_close($curl);
echo $response;
```

REST API - DisconnectDevice

Description

Sets the device state to not connected and closes the communication port and threads.

Request

Endpoint	**DisconnectDevice**
Method	POST
URL	http://localhost:5000/api/CashDevice/DisconnectDevice
Authorisation	Bearer Token
Headers	Content-Type - application/json
Query Parameter	deviceID (The string value of the field "deviceID" obtained from the response to the OpenConnection request)
Tags	ALL_PRODUCTS NV4000_SPECTRAL SPECTRAL_PAYOUT NV22_SPECTRAL BANKNOTE_VALIDATOR SMART_COIN_SYSTEM TWIN_SMART_COIN_SYSTM SMART_HOPPER

Body Parameter

All Products

None

Responses

NV4000 Spectral

```
NV4000-COM15: Device disconnected and cleaned up successfully.
```

Spectral Payout

```
SPECTRAL_PAYOUT-COM15: Device disconnected and cleaned up successfully.
```

NV22 Spectral

```
SPECTRAL_PAYOUT-COM15: Device disconnected and cleaned up successfully.
```

Banknote Validator

```
NOTE_VALIDATOR-COM15: Device disconnected and cleaned up successfully.
```

SMART Coin System

```
SMART_COIN_SYSTEM-COM15: Device disconnected and cleaned up successfully.
```

Twin SMART Coin System

```
TWIN_SMART_COIN_SYSTEM-COM15: Device disconnected and cleaned up successfully.
```

SMART Hopper

```
SMART_HOPPER_4-COM15: Device disconnected and cleaned up successfully.
```

Code Examples

cURL

```
curl --location --request POST 'http://localhost:5000/api/CashDevice/
DisconnectDevice?deviceID=SPECTRAL_PAYOUT-COM15' \
--header 'Authorization: Bearer eyJhb.....'
```

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/DisconnectDevice?
deviceID=SPECTRAL_PAYOUT-COM15", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var unirest = require('unirest');
var req = unirest('POST', 'http://localhost:5000/api/CashDevice/DisconnectDevice?
deviceID=SPECTRAL_PAYOUT-COM15')
  .headers({
    'Authorization': 'Bearer eyJhb.....'
  })
  .end(function (res) {
    if (res.error) throw new Error(res.error);
    console.log(res.raw_body);
  });
```

Python

```
import http.client

conn = http.client.HTTPConnection("localhost", 5000)
payload = ''
headers = {
  'Authorization': 'Bearer eyJhb.....'
}
conn.request("POST", "/api/CashDevice/DisconnectDevice?deviceID=SPECTRAL_PAYOUT-
COM15", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
Unirest.setTimeouts(0, 0);
HttpResponse<String> response = Unirest.post("http://localhost:5000/api/CashDevice/
DisconnectDevice?deviceID=SPECTRAL_PAYOUT-COM15")
  .header("Authorization", "Bearer eyJhb.....")
  .asString();
```

JavaScript

```
const myHeaders = new Headers();
myHeaders.append("Authorization", "Bearer eyJhb.....");

const requestOptions = {
  method: "POST",
  headers: myHeaders,
  redirect: "follow"
};

fetch("http://localhost:5000/api/CashDevice/DisconnectDevice?
deviceID=SPECTRAL_PAYOUT-COM15", requestOptions)
  .then((response) => response.text())
  .then((result) => console.log(result))
  .catch((error) => console.error(error));
```

PHP

```
<?php

$curl = curl_init();

curl_setopt_array($curl, array(
  CURLOPT_URL => 'http://localhost:5000/api/CashDevice/DisconnectDevice?
deviceID=SPECTRAL_PAYOUT-COM15',
  CURLOPT_RETURNTRANSFER => true,
  CURLOPT_ENCODING => '',
  CURLOPT_MAXREDIRS => 10,
  CURLOPT_TIMEOUT => 0,
  CURLOPT_FOLLOWLOCATION => true,
  CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
  CURLOPT_CUSTOMREQUEST => 'POST',
  CURLOPT_HTTPHEADER => array(
    'Authorization: Bearer eyJhb.....'
  ),
));

$response = curl_exec($curl);

curl_close($curl);
echo $response;
```

REST API - StartDevice

Description

Creates a new thread to ‘run’ with an SSP device. The thread is essentially a state machine which runs through the some initial setup of the device and retrieving information from it and then enters a normal ‘run’ routine, polling the device for any new events.

Need to send “ConnectDevice” request before sending “StartDevice”.

Request

Endpoint	**StartDevice**
Method	POST
URL	http://localhost:5000/api/CashDevice/StartDevice
Authorisation	Bearer Token
Headers	Content-Type - application/json
Query Parameter	deviceID (The string value of the field "deviceID" obtained from the response to the OpenConnection request)
Tags	ALL_PRODUCTS NV4000_SPECTRAL SPECTRAL_PAYOUT NV22_SPECTRAL BANKNOTE_VALIDATOR SMART_COIN_SYSTEM TWIN_SMART_COIN_SYSTM SMART_HOPPER SESSION_INITIALISATION

Body Parameter

All Products

None

Responses

NV4000 Spectral

Status	Body	Notes
200	`NV4000-COM12: Device started successfully.`	OK: If the device started successfully.
500		Internal Server Error: If there is an error starting the device.

Spectral Payout

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM12: Device started successfully.`	OK: If the device started successfully.
500		Internal Server Error: If there is an error starting the device.

NV22 Spectral

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM12: Device started successfully.`	OK: If the device started successfully.
500		Internal Server Error: If there is an error starting the device.

Banknote Validator

Status	Body	Notes
200	`NOTE_VALIDATOR-COM12: Device started successfully.`	OK: If the device started successfully.
500		Internal Server Error: If there is an error starting the device.

SMART Coin System

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM12: Device started successfully.`	OK: If the device started successfully.
500		Internal Server Error: If there is an error starting the device.

Twin SMART Coin System

Status	Body	Notes
200	`TWIN_SMART_COIN_SYSTEM-COM12: Device started successfully.`	OK: If the device started successfully.

Status	Body	Notes
500		Internal Server Error: If there is an error starting the device.

SMART Hopper

Status	Body	Notes
200	`SMART_HOPPER_4-COM12: Device started successfully.`	OK: If the device started successfully.
500		Internal Server Error: If there is an error starting the device.

Code Examples

cURL

C#

NodeJS

Python

Java

JavaScript

PHP

Description

Creates a new thread to 'run' with an SSP device. The thread is essentially a state machine which runs through the some initial setup of the device and retrieving information from it and then enters a normal 'run' routine, polling the device for any new events.

Endpoint	StartDevice
Method	POST
URL	{server_url}/api/CashDevice/StartDevice
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request

Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`NV200S: Device started successfully.`	OK: If the device started successfully.
500		Internal Server Error: If there is an error starting the device.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/StartDevice?deviceID=NV200S",
Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/StartDevice?deviceID=NV200S',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import http.client
```

```
conn = http.client.HTTPSConnection("localhost", 5000)
payload = ''
headers = {
  'Authorization': 'Bearer eyJhb.....'
}
conn.request("POST", "/api/CashDevice/StartDevice?deviceID=NV200S", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/StartDevice?deviceID=NV200S")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - StopDevice

Description

Stops any running cash device threads, but does not close the COM port

Endpoint	StopDevice
Method	POST
URL	{server_url}/api/CashDevice/StopDevice
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`NV200S: Device stopped successfully.`	OK: If the device stopped successfully.
500		Internal Server Error: If there is an error stopping the device.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/StopDevice?deviceID=NV200S",
Method.Post);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/StopDevice?deviceID=NV200S',
```

```
  'headers': {
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import http.client

conn = http.client.HTTPSConnection("localhost", 5000)
payload = ''
headers = {}
conn.request("POST", "/api/CashDevice/StopDevice?deviceID=NV200S", payload, headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/StopDevice?deviceID=NV200S")
  .method("POST", body)
  .build();
Response response = client.newCall(request).execute();
```

REST API - LogRawPackets

Description

Takes rawPacketsOptionSelected by default as true and flags the SSP to log the raw packet data.

Endpoint	LogRawPackets
Method	POST
URL	{server_url}/api/CashDevice/LogRawPackets
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	bool rawPacketsOptionSelected `true`

Responses

Status	Body	Notes
200	`NV200S: Raw packet logging has been enabled.`	OK: If the raw packet logging was set successfully.
400		Bad Request: If there is an error setting raw packet logging.
404	`NV200S: Cash device not found.`	Not Found: The cashDevice has not been created.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/LogRawPackets?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
```

```
var body = @"true";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/LogRawPackets?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(true)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/LogRawPackets?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = json.dumps(True)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "true");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/LogRawPackets?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
```

```
Response response = client.newCall(request).execute();
```

REST API - GetCompleteCashDevice

Description

- Returns all public read-only variables of the CashDevice object with their corresponding values.
- Refer to the following table for all available Public Read-Only Variables of CashDevice class

Endpoint	GetCompleteCashDevice
Method	GET
URL	{server_url}/api/CashDevice/GetCompleteCashDevice
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Public Read-Only Variables of CashDevice class Table

Variable Name	Description
comPort	The communication port name used by the device.
deviceModel	The model of the device.
deviceError	The current error status of the device.
isOpen	Indicates whether the device is open.
isDownloading	Indicates whether a download operation is in progress.
firmware	The firmware version of the device.
extendedFirmware	The extended firmware version of the device.
dataset	The dataset version of the device.
extendedDataset	The extended dataset version of the device.
mainSerialNumber	The main serial number of the device.
recycler1SerialNumber	The serial number of the first recycler.
recycler2SerialNumber	The serial number of the second recycler.

Variable Name	Description
recycler3SerialNumber	The serial number of the third recycler.
recycler4SerialNumber	The serial number of the fourth recycler.
interfaceSerialNumber	The serial number of the interface module.
dockSerialNumber	The serial number of the docking station.
replenishmentCassetteSerialNumber	The serial number of the replenishment cassette.
conveyorSerialNumber	The serial number of the conveyor module.
coinFeederSerialNumber	The serial number of the coin feeder module.
secondaryHopperSerialNumber	The serial number of the secondary hopper.
payoutModuleSerialNumber	The serial number of the payout module.
coinLifterSerialNumber	The serial number of the coin lifter module.
mainSerialNumberValid	Indicates whether the main serial number is valid.
recycler1SerialNumberValid	Indicates whether the serial number of the first recycler is valid.
recycler2SerialNumberValid	Indicates whether the serial number of the second recycler is valid.
recycler3SerialNumberValid	Indicates whether the serial number of the third recycler is valid.
recycler4SerialNumberValid	Indicates whether the serial number of the fourth recycler is valid.
interfaceSerialNumberValid	Indicates whether the serial number of the interface module is valid.
dockSerialNumberValid	Indicates whether the serial number of the docking station is valid.
replenishmentCassetteSerialNumberValid	Indicates whether the serial number of the replenishment cassette is valid.
conveyorSerialNumberValid	Indicates whether the serial number of the conveyor module is valid.
coinFeederSerialNumberValid	Indicates whether the serial number of the coin feeder module is valid.
secondaryHopperSerialNumberValid	Indicates whether the serial number of the secondary hopper is valid.
payoutModuleSerialNumberValid	Indicates whether the serial number of the payout module is valid.

Variable Name	Description
coinLifterSerialNumberValid	Indicates whether the serial number of the coin lifter module is valid.
buildRevisionString	The build revision string of the device.
initialMainBuildRevision	The initial main build revision of the device.
mainBuildRevisionString	The main build revision string of the device.
coinFeederBuildRevisionString	The build revision string of the coin feeder.
seondaryHopperBuildRevisionString	The build revision string of the secondary hopper.
coinLifterBuildRevisionString	The build revision string of the coin lifter.
payoutModuleRevisionString	The build revision string of the payout module.
primaryHopperAsciiTypeString	The ASCII type string of the primary hopper.
coinFeederAsciiTypeString	The ASCII type string of the coin feeder.
majorBuildRevision	The major build revision number.
minorBuildRevision	The minor build revision number.
reg_0	The value of register 0.
reg_1	The value of register 1.
reg_0_hex_string	The hexadecimal string representation of register 0.
reg_1_hex_string	The hexadecimal string representation of register 1.
globalErrorCode_0	The global error code 0.
globalErrorCode_1	The global error code 1.
unit_info_retrieved	Indicates whether the unit information was retrieved.
lifterConnected	Indicates whether the lifter is connected.
lifterOptoClear	Indicates whether the lifter opto is clear.
lifterJammed	Indicates whether the lifter is jammed.
lastGetLevelsSuccessful	Indicates whether the last get levels operation was successful.

Variable Name	Description
service_information_string	The service information string.
noPayinCount	The number of no payin counts.
coinAcceptance_string	The coin acceptance string.
counters_string	The counters string.
coins_payout_request	The number of coins requested for payout.
coins_seen_at_exit_sensor	The number of coins seen at the exit sensor.
real_time_clock_string	The real-time clock string.
cashbox_levels_string	The cashbox levels string.
payout_count	The payout count.
commandFailedDetailsString	The details string for command failures.
maintenanceRequiredDetailsString	The details string for maintenance required.
lifterEventString	The lifter event string.
rejectCategory	The reject category.
error_during_payout_details_string	The details string for errors during payout.
ticketStatus	The status of the barcode ticket.
barcode_ascii_data	The ASCII data of the barcode.
barCodeHardwareStatus	The hardware status of the barcode reader.
readersEnabled	The enabled status of the barcode readers.
barCodeFormat	The format of the barcode.
numberOfCharacters	The number of characters in the barcode.
barCodeInhibit	The inhibit status of the barcode reader.
RC_CurrentMode	The current mode of the replenishment cassette.
currentRC_PayoutValue	The current payout value of the replenishment cassette.

Variable Name	Description
RC_DenominationForPayout	The denomination for payout in the replenishment cassette.
unknown_stored_in_cashbox	The number of unknown items stored in the cashbox.
sspProtocolVersion	The SSP protocol version.
downloadStatus	The download status.
cashDeviceModules	An array of cash device modules.
dispenseState	The dispense transaction state.
noteInEscrow	Indicates whether there is a note in escrow.
isMultiCurrency	Indicates whether the device supports multiple currencies.

Responses

Status		Body	Notes
200		SPECTRAL_PAYOUT-COM5: { "comPort": "COM5", "deviceModel": "SPECTRAL_DEVICE", "deviceError": "NONE", "isOpen": true, "isDownloading": false, "firmware": "NVS2004301038000", "extendedFirmware": null, "dataset": "GBP07056", "extendedDataset": null, "mainSerialNumber": 6331574, "recycler1SerialNumber": 0, "recycler2SerialNumber": 0, "recycler3SerialNumber": 0, "recycler4SerialNumber": 0, "interfaceSerialNumber": 0, "dockSerialNumber": 0, "replenishmentCassetteSerialNumb er": 0, "conveyorSerialNumber": 0, "coinFeederSerialNumber": 0, "secondaryHopperSerialNumber": 0, "payoutModuleSerialNumber": 5785286, "coinLifterSerialNumber": 0, "mainSerialNumberValid": false, "recycler1SerialNumberValid": false, "recycler2SerialNumberValid": false, "recycler3SerialNumberValid": false, "recycler4SerialNumberValid": false, "interfaceSerialNumberValid": false, "dockSerialNumberValid": false, "replenishmentCassetteSerialNumb erValid": false, "conveyorSerialNumberValid": false, "coinFeederSerialNumberValid": false, "secondaryHopperSerialNumberVali d": false,	OK: Returns the complete information of the cash device.

Status		Body	Notes
		"payoutModuleSerialNumberValid": true, "coinLifterSerialNumberValid": false, "buildRevisionString": "1.01", "initialMainBuildRevision": 0, "mainBuildRevisionString": "9.10", "coinFeederBuildRevisionString": null, "seondaryHopperBuildRevisionString": null, "coinLifterBuildRevisionString": null, "payoutModuleRevisionString": "1.01", "primaryHopperAsciiTypeString": null, "coinFeederAsciiTypeString": null, "majorBuildRevision": 1, "minorBuildRevision": 1, "reg_0": 0, "reg_1": 0, "reg_0_hex_string": null, "reg_1_hex_string": null, "globalErrorCode_0": 0, "globalErrorCode_1": 0, "unit_info_retrieved": true, "lifterConnected": false, "lifterOptoClear": false, "lifterJammed": false, "lastGetLevelsSuccessful": true, "service_information_string": null, "noPayinCount": 0, "coinAcceptance_string": null, "counters_string": "Number of counters in set: 5\nStacked: 261\nStored: 42\nDispensed: 30\nTransferred to stack: 11\nRejected: 26\n", "coins_payout_request": 0, "coins_seen_at_exit_sensor": 0, "real_time_clock_string": null, "cashbox_levels_string": null, "payout_count": 0, "commandFailedDetailsString": null,	

Status		Body	Notes


```
"maintenanceRequiredDetailsStrin
g": null,
  "lifterEventString": null,
  "rejectCategory": null,

"error_during_payout_details_str
ing": null,
  "ticketStatus": null,
  "barcode_ascii_data": null,
  "barCodeHardwareStatus": null,
  "readersEnabled": null,
  "barCodeFormat": null,
  "numberOfCharacters": null,
  "barCodeInhibit": null,
  "nv22SpectralDevice": false,
  "enablePayoutDeviceError":
null,
  "recyclerCountersString":
null,
  "RC_CurrentMode":
"RC_MODE_REPLENISH",
  "currentRC_PayoutValue": null,
  "RC_DenominationForPayout":
null,
  "unknown_stored_in_cashbox":
0,
  "sspProtocolVersion": 7,
  "downloadStatus": {
    "State": "IDLE",
    "CurrentRamBlock": 0,
    "TotalRamBlocks": 0,
    "CurrentDownloadBlock": 0,
    "TotalDownloadBlocks": 0
  },
  "cashDeviceModules": null,
  "dispenseState": "COMPLETED",
  "isMultiCurrency": false,
  "noteInEscrow": false,
  "currencyAssignment": [
    {
      "Type": "BANKNOTE",
      "ValueCountryCode": {
        "Value": 500,
        "CountryCode": "GBP",
        "Fraud_Attempt_Value":
-1,

"Calibration_Failed_Value": -1
      },
      "Value": 500,
      "CountryCode": "GBP",
      "IsInhibited": false,
      "IsRecyclable": true,
      "AcceptRoute": "PAYOUT",
      "Stored": 0,
      "StoredInCashbox": 0,
      "Channel": 1
```

Status		Body	Notes


```
    },
    {
      "Type": "BANKNOTE",
      "ValueCountryCode": {
        "Value": 1000,
        "CountryCode": "GBP",
        "Fraud_Attempt_Value":
-1,

"Calibration_Failed_Value": -1
      },
      "Value": 1000,
      "CountryCode": "GBP",
      "IsInhibited": false,
      "IsRecyclable": true,
      "AcceptRoute": "PAYOUT",
      "Stored": 0,
      "StoredInCashbox": 0,
      "Channel": 2
    },
    {
      "Type": "BANKNOTE",
      "ValueCountryCode": {
        "Value": 2000,
        "CountryCode": "GBP",
        "Fraud_Attempt_Value":
-1,

"Calibration_Failed_Value": -1
      },
      "Value": 2000,
      "CountryCode": "GBP",
      "IsInhibited": true,
      "IsRecyclable": true,
      "AcceptRoute": "CASHBOX",
      "Stored": 0,
      "StoredInCashbox": 0,
      "Channel": 3
    },
    {
      "Type": "BANKNOTE",
      "ValueCountryCode": {
        "Value": 5000,
        "CountryCode": "GBP",
        "Fraud_Attempt_Value":
-1,

"Calibration_Failed_Value": -1
      },
      "Value": 5000,
      "CountryCode": "GBP",
      "IsInhibited": true,
      "IsRecyclable": true,
      "AcceptRoute": "CASHBOX",
      "Stored": 0,
      "StoredInCashbox": 0,
      "Channel": 4
    }
```

Status		Body	Notes

		<pre>],
		"sorterRouteAssignment": [],
		"deviceState": "IDLE"
		}</pre>	

404			Not Found: If the device is not found.
500			Internal Server Error: If there is an error retrieving the device details.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetCompleteCashDevice?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetCompleteCashDevice?
deviceID=NV200S',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import http.client

conn = http.client.HTTPSConnection("localhost", 5000)
payload = ''
headers = {
  'Authorization': 'Bearer eyJhb.....'
}
```

```
conn.request("GET", "/api/CashDevice/GetCompleteCashDevice?deviceID=NV200S", payload,
headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetCompleteCashDevice?deviceID=NV200S")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetDeviceStatus

Description

Retrieve the state changes of the device when different types of events are triggered.

> The client should implement a mechanism to continuously poll the device status from the server at a specified interval. E.g. 200 milliseconds.

Endpoint	GetDeviceStatus
Method	GET
URL	{server_url}/api/CashDevice/GetDeviceStatus
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Response Types and Strings

type	Strings
DeviceStatusResponse (stateAsString)	NOT_CONNECTED, CONNECTING, STARTING, STARTED, DISABLED, IDLE, ACCEPTING, DISPENSING, FLOATING, EMPTYING, REPLENISHING, JAM_RECOVERY, ERROR, DEVICE_FULL (Once reported on the SCS Range, a FLOAT or SMART EMPTY request is required), RESET, CONNECTED, STOPPED, PURGING, PURGED, INITIALISING, CASHBOX_REMOVED, CASHBOX_REPLACED, STOPPING, PAY_IN_ACTIVE, COIN_MECH_ENABLED, COIN_MECH_DISABLED, MAINTENANCE_REQUIRED, CHANNEL_DISABLE, CALIBRATION_FAILED, FRAUD_ATTEMPT, LIFTER_EVENT, REJECTING, REJECTED, COIN_MECH_JAMMED, NOTE_HELD_IN_BEZEL, BAR_CODE_TICKET_VALIDATED, BAR_CODE_TICKET_ACKNOWLEDGE, NOTE_FLOAT_REMOVED, NOTE_FLOAT_ATTACHED, NOTE_PATH_OPEN, SCSTATUS_NO_CARD, SCSTATUS_CARD_INITIALISING, SCSTATUS_CARD_READY, SCSTATUS_NO_ACTIVE_DATASET, SCSTATUS_CHANGING_DATASET, SCSTATUS_DATASET_READY
DispenserTransactionEventResponse (stateAsString)	IN_PROGRESS, COMPLETED, ERROR

type	Strings
CashEventResponse (eventTypeAsString)	ESCROW, STACKED, STACKED_FRAUD_ATTEMPT, STORED, STORED_FRAUD_ATTEMPT, DISPENSING, DISPENSED, REJECTED, RETRIEVED, MOVED_TO_CASHBOX, NOTE_IN_BEZEL_HOLD, VALUE_ADDED, TIME_OUT, INCOMPLETE_PAYOUT, INCOMPLETE_FLOAT, FRAUD_ATTEMPT, HALTED, CALIBRATION_FAILED, JAMMED, COIN_CREDIT, ERROR_DURING_PAYOUT, NOTE_CLEARED_TO_CASHBOX, NOTE_CLEARED_FROM_FRONT, MULTIESCROW_CANCELLING, MULTIESCROW_CANCELLED, MULTIESCROW_COMMITTING, MULTIESCROW_COMMITTED, MULTIESCROW_INCOMPLETE_CANCEL, MULTIESCROW_INCOMPLETE_COMMIT
ReplenishEventResponse (stateAsString)	REPLENISH_STORED, REPLENISH_SENT_TO_RC_TRAY, REPLENISH_CASSETTE_REMOVED, REPLENISH_CASSETTE_REPLACED, REPLENISH_CASSETTE_FULL

type	result
SetDenominationRouteFinishedEventResponse	True False

transactionType

- 0 = PAYOUT
- 1 = FLOAT
- 2 = REPLENISH
- 3 = EMPTY
- 4 = PAYOUT_BY_DENOMINATION

Response Examples

Status	Body	Notes

200	[
	{
	"type": "DeviceStatusResponse",
	"state": 1,
	"stateAsString": "CONNECTING",
	"isRunning": true,
	"message": "Device state changed: CONNECTING"
	},
	{
	"type": "DeviceStatusResponse",
	"state": 15,
	"stateAsString": "CONNECTED",
	"isRunning": true,
	"message": "Device state changed: CONNECTED"
	}
	]
		OK: Returns the list of states of the device.
		E.g. Returning a queue of states [CONNECTING, CONNECTED}

Status	Body	Notes

200	[
	  {
	  "type":"DeviceStatusResponse",
	  "stateAsString":"ACCEPTING",
	  "message":"Device state changed: ACCEPTING"
	  },
	  {
	  "type":"CashEventResponse",
	  "eventTypeAsString":"ESCROW",
	  "value":500,
	  "value2":0,
	  "countryCode":"GBP",
	  "message":"Cash event: ESCROW - Value: 500 Value2: 0 - CountryCode: GBP"
	  },
	  {
	  "type":"CashEventResponse",
	  "eventTypeAsString":"STORED",
	  "value":500,
	  "value2":0,
	  "countryCode":"GBP",
	  "message":"Cash event: STORED - Value: 500 Value2: 0 - CountryCode: GBP"
	  },
	  {
	  "type":"DeviceStatusResponse",
	  "stateAsString":"IDLE",
	  "message":"Device state changed: IDLE"
	  }
	]
		OK: Returns the list of states of the device.
		E.g. Returning a queue of states [ACCEPTING, ESCROW VALUE 500 GBP, STORED VALUE 500 GBP, IDLE}

500		Internal Server Error: If there is an error retrieving the device states.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetDeviceStatus?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetDeviceStatus?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetDeviceStatus?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetDeviceStatus?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetCounters

Description

Retrieves the counter information from the device and formats the data into a readable string:

- SMART_COIN_SYSTEM, TWIN_SMART_COIN_SYSTEM, SMART_HOPPER_4: Retrieves and formats the number of counters, coins paid out, coins paid in, feeder rejects, hopper jams, feeder jams, fraud attempts, calibration fails, resets, and coins sent to cashbox.
- NV4000, SPECTRAL_DEVICE: Retrieves and formats the number of counters, stacked, stored, dispensed, transferred to stack, and rejected counts.

Endpoint	GetCounters
Method	GET
URL	{server_url}/api/CashDevice/GetCounters
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	SPECTRAL_PAYOUT-COM5: { CountersData = Number of counters in set: 5 Stacked: 261 Stored: 42 Dispensed: 30 Transferred to stack: 11 Rejected: 26 }	OK: If the counters data was retrieved successfully.
400		Bad Request: If there is an error retrieving the counters data.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
```

```
var request = new RestRequest("/api/CashDevice/GetCounters?deviceID=SPECTRAL_PAYOUT-
COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetCounters?deviceID=SPECTRAL_PAYOUT-
COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetCounters?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetCounters?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetAllLevels

Description

- Retrieves the current levels of all denominations from the device and updates the internal state with this information.
- For each level entry, it calculates the index using the denomination value and currency code.
- If the index is valid, it updates the stored level for that denomination.

Endpoint	GetAllLevels
Method	GET
URL	{server_url}/api/CashDevice/GetAllLevels
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes

200	{
	"levels": [
	{
	"countryCode": "GBP",
	"value": 500,
	"stored": 0
	},
	{
	"countryCode": "GBP",
	"value": 1000,
	"stored": 0
	},
	{
	"countryCode": "GBP",
	"value": 2000,
	"stored": 0
	},
	{
	"countryCode": "GBP",
	"value": 5000,
	"stored": 0
	}
	],
	"success": true,
	"message": "Successfully retrieved all levels."
	}
		OK: Returns the levels information.

400		If there is an error retrieving levels information.

Response with 200. The response body contains a LevelsResult object. The structure of the LevelsResult is described below:

Field	Type	Description
Levels	List<LevelInfo>	A list of LevelInfo objects representing the levels of different denominations.
Success	bool	Indicates whether the operation was successful.
Message	string	A message providing additional information about the operation.

Each LevelInfo object in the Levels list has the following structure:

Field	Type	Description
Country Code	string	The country code of the denomination.

Field	Type	Description
Value	uint	The value of the denomination.
Stored	uint	The number of stored units of this denomination.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetAllLevels?deviceID=SPECTRAL_PAYOUT-COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetAllLevels?deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetAllLevels?deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetAllLevels?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetCurrencyAssignment

Description

Get the levels of cash currently stored for each channel in the devices dataset.

Endpoint	GetCurrencyAssignment
Method	GET
URL	{server_url}/api/CashDevice/GetCurrencyAssignment
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes

200	[
	{
	"type": 1,
	"valueCountryCode": {
	"value": 500,
	"countryCode": "GBP",
	"fraud_Attempt_Value": -1,
	"calibration_Failed_Value": -1
	},
	"value": 500,
	"countryCode": "GBP",
	"isInhibited": false,
	"isRecyclable": true,
	"acceptRoute": 7,
	"stored": 0,
	"storedInCashbox": 0,
	"channel": 1
	},
	{
	"type": 1,
	"valueCountryCode": {
	"value": 1000,
	"countryCode": "GBP",
	"fraud_Attempt_Value": -1,
	"calibration_Failed_Value": -1
	},
	"value": 1000,
	"countryCode": "GBP",
	"isInhibited": false,
	"isRecyclable": true,
	"acceptRoute": 7,
	"stored": 0,
	"storedInCashbox": 0,
	"channel": 2
	},
	{
	"type": 1,
	"valueCountryCode": {
	"value": 2000,
	"countryCode": "GBP",
	"fraud_Attempt_Value": -1,
	"calibration_Failed_Value": -1
	},
	"value": 2000,
	"countryCode": "GBP",
	"isInhibited": true,
	"isRecyclable": true,
	"acceptRoute": 0,
		Ok: If the currency assignments were retrieved successfully.

Status	Body	Notes

	"stored": 0,
	"storedInCashbox": 0,
	"channel": 3
	},
	{
	"type": 1,
	"valueCountryCode": {
	"value": 5000,
	"countryCode": "GBP",
	"fraud_Attempt_Value": -1,
	"calibration_Failed_Value": -1
	},
	"value": 5000,
	"countryCode": "GBP",
	"isInhibited": true,
	"isRecyclable": true,
	"acceptRoute": 0,
	"stored": 0,
	"storedInCashbox": 0,
	"channel": 4
	}
	]	

404		Not Found: If no currency assignments were found.
400		Bad Request: If there is an error retrieving the currency assignments.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetCurrencyAssignment?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
```

```
  'url': 'http://localhost:5000/api/CashDevice/GetCurrencyAssignment?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetCurrencyAssignment?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetCurrencyAssignment?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetDenominationLevel

Description

A command to increment the level of coins of the specified denomination stored in the hopper.

Endpoint	SetDenominationLevel
Method	POST
URL	{server_url}/api/CashDevice/SetDenominationLevel
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Body	SetDenominationLevelRequest: The request body containing Value, CountryCode and NumCoinsToAdd. • UInt32 Value: Value of denomination to set e.g 500, 1000 etc • string CountryCode: ASCII country code of denomination e.g. “GBP”, “EUR”, “USD” etc • uint numCoinsToAdd: the amount of coins to add to level (0 will clear the level) `{ "Value": 100, "CountryCode": "{{Currency}}", "NumCoinsToAdd": 1 }`

Responses

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM10: Denomination level set successfully.`	OK: If the denomination level was set successfully.
400		Bad Request: Failed to set denomination level.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetDenominationLevel?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Content-Type", "application/json");
```

```
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""Value"": 100, " + "\n" +
@"    ""CountryCode"": ""GBP"","" + "\n" +
@"    ""NumCoinsToAdd"": 1" + "\n" +
@"}" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetDenominationLevel?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "Value": 100,
    "CountryCode": "GBP",
    "NumCoinsToAdd": 1
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetDenominationLevel?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = json.dumps({
  "Value": 100,
  "CountryCode": "GBP",
  "NumCoinsToAdd": 1
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n    \"Value\": 100, \r\n
\"CountryCode\": \"GBP\",\r\n    \"NumCoinsToAdd\": 1\r\n}\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetDenominationLevel?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - EnablePayout

Description

Enables a connected pay-out module for storing and payout cash.

Endpoint	EnablePayout
Method	POST
URL	{server_url}/api/CashDevice/EnablePayout
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`Payout enabled successfully.`	OK: If the payout was enabled successfully.
400		Bad Request: If there is an error enabling the payout.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/EnablePayout?deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
```

```
  'url': 'http://localhost:5000/api/CashDevice/EnablePayout?deviceID=SPECTRAL_PAYOUT-
COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/EnablePayout?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/EnablePayout?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - EnablePayoutDevice

Description

Enables a connected pay-out module for storing and payout cash.

Endpoint	EnablePayoutDevice
Method	POST
URL	{server_url}/api/CashDevice/EnablePayoutDevice
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Payout device enabled successfully.`	OK: If the payout was enabled successfully.
400	`Cash device not found`	Cash device not found
500	`Failed to enable payout device. Error: {error_message}`	Internal Server Error: An error occurred while enabling the payout device.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/EnablePayoutDevice?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"";
request.AddParameter("text/plain", body,  ParameterType.RequestBody);
```

```
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/EnablePayoutDevice?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/EnablePayoutDevice?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = ""
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/EnablePayoutDevice?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - EnablePayoutDeviceWithByte

Description

These options do not persist in memory and after a reset they will go to their default values.

Enables a connected pay-out module for storing and payout cash with an additional byte for settings.

Endpoint	EnablePayoutDeviceWithByte
Method	POST
URL	{server_url}/api/CashDevice/EnablePayoutDeviceWithByte
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	EnablePayoutDeviceByte (byte): Specifies whether to enable the payout device with specific settings. `{ "EnablePayoutDeviceByte": 0 }`

Request Body Structure

Single Denomination Recycler

For NV11 / NV11S this request uses an addition data byte, a bit register allows some options to be set. When the additional byte is not sent, all the bits default to 0.

Bit	Function
0	GIVE_VALUE_ON_STORED. Set to 1 to enable the value of the note stored to be given with the Note Stored event.
1	NO_HOLD_NOTE_ON_PAYOUT. Set to 1 to enable the function of fully rejecting the dispensed banknote rather than holding it in the bezel.
2	Unused - Set to 0
3	Enable report reverse validated value on payout (NV11S only, fw >= 1.19). If set 1, unit will report reverse validated value on dispensed event. If set 0, unit will report expected note value.
4	Unused - Set to 0
5	Unused - Set to 0

Bit	Function
6	Unused - Set to 0
7	Unused - Set to 0

Multi Denomination Recycler

For Spectral Payout Range and NV22 this request uses an additional data byte, a bit register allows some options to be set. When the additional byte is not sent, all the bits default to 0.

Bit	Function
0	REQUIRE_FULL_STARTUP. If set to 1 the Payout will return busy until it has fully completed the startup procedure.
1	OPTIMISE_FOR_PAYIN_SPEED. If set to 1 the device will always move towards an empty slot when idle to try and ensure the shortest pay in speed possible.
2	HIGHEST_VALUE_SPLIT (**NV22 only**, Firmware versions ≥1.17). • Set to 0: unit will split the amount to pay it quicker • Set to 1: the unit will use the smallest number of notes to pay out the amount The highest value only applies to payout/float by amount.
3	**On Spectral Payout only** (FW versions ≥ 4.29). If bit is set to 1 unit will report dispensing event with expected note value when reverse validation fail. Dataset with reverse validation enabled must be used (EUR11, GBP11, USD11…).
4	Unused - Set to 0
5	Unused - Set to 0
6	Unused - Set to 0
7	Unused - Set to 0

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Payout device enabled successfully.`	OK: If the payout was enabled successfully.
404	`Cash device not found`	Not Found: The specified cash device was not initialised

Status	Body	Notes
500	`Failed to enable payout device. Error: {error_message}`	Internal Server Error: An error occurred while enabling the payout device.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/EnablePayoutDeviceWithByte?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""EnablePayoutDeviceByte"": 0" + "\n" +
@"}" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/EnablePayoutDeviceWithByte?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "EnablePayoutDeviceByte": 0
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json
```

```
url = "http://localhost:5000/api/CashDevice/EnablePayoutDeviceWithByte?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps({
  "EnablePayoutDeviceByte": 0
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n
\"EnablePayoutDeviceByte\": 0\r\n}\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/EnablePayoutDeviceWithByte?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - DisablePayout

Description

Disables a connected pay-out module.

Endpoint	DisablePayout
Method	POST
URL	{server_url}/api/CashDevice/DisablePayout
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	Payout disabled successfully.	OK: If the payout was disabled successfully.
400		Bad Request: If there is an error disabling the payout.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/DisablePayout?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/DisablePayout?
deviceID=SPECTRAL_PAYOUT-COM5',
```

```
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/DisablePayout?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/DisablePayout?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - EnableAcceptor

Description

Enables the cash device to accept currency, does not enable any connected pay-out modules.

Endpoint	EnableAcceptor
Method	POST
URL	{server_url}/api/CashDevice/EnableAcceptor
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`NV200S: Acceptor enabled successfully.`	OK: If the acceptor was enabled successfully.
500		Internal Server Error: If there is an error enabling the acceptor.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/EnableAcceptor?deviceID=NV200S",
Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
```

```
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/EnableAcceptor?deviceID=NV200S',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import http.client

conn = http.client.HTTPSConnection("localhost", 5000)
payload = ''
headers = {
  'Authorization': 'Bearer eyJhb.....'
}
conn.request("POST", "/api/CashDevice/EnableAcceptor?deviceID=NV200S", payload,
headers)
res = conn.getresponse()
data = res.read()
print(data.decode("utf-8"))
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/EnableAcceptor?deviceID=NV200S")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - DisableAcceptor

Description

Disables the acceptor to stop accepting currency, any connected and enabled pay-out modules will stay enabled and still pay-out cash

Endpoint	DisableAcceptor
Method	POST
URL	{server_url}/api/CashDevice/DisableAcceptor
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Acceptor disabled successfully.`	OK: If the acceptor was disabled successfully.
500		Internal Server Error: If there is an error disabling the acceptor.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/DisableAcceptor?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
```

```
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/DisableAcceptor?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/DisableAcceptor?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/DisableAcceptor?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetAutoAccept

Description

Enable or disable auto accept from escrow.

Endpoint	SetAutoAccept
Method	POST
URL	{server_url}/api/CashDevice/SetAutoAccept
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	(boolean) true to enable and false to disable auto accept notes held in escrow.

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Auto-accept set to True`	OK: If auto accept was set correctly.
500		Internal Server Error: If there is an error enabling the acceptor.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetAutoAccept?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"true";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetAutoAccept?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(true)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetAutoAccept?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = json.dumps(True)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "true");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetAutoAccept?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - AcceptFromEscrow

Description

Accepts a note currently being held in escrow.

Endpoint	AcceptFromEscrow
Method	POST
URL	{server_url}/api/CashDevice/AcceptFromEscrow
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Note can be accepted from escrow.`	OK: If the note can be accepted from escrow.
400	`SPECTRAL_PAYOUT-COM5: Error accepting note from escrow`	Fail: No note in escrow.
500		Internal Server Error: If there is an error accepting the note from escrow.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/AcceptFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/AcceptFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/AcceptFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/AcceptFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - ReturnFromEscrow

Description

Returns a note currently being held in escrow

Endpoint	ReturnFromEscrow
Method	POST
URL	{server_url}/api/CashDevice/ReturnFromEscrow
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Note can be returned from escrow.`	OK: If the note can be returned from escrow.
400	`SPECTRAL_PAYOUT-COM5: Error returning note from escrow`	Bad Request: No note in escrow.
500		Internal Server Error: If there is an error returning the note from escrow.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/ReturnFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/ReturnFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/ReturnFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/ReturnFromEscrow?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetMultiEscrowSize

Description

Used to set the Escrow note size for multi-escrow firmware.

> Maximum multi-escrow note limit is 20.
>
> Can only be used with the MNE protocol available on:
>
> - Spectral Payout
> - NV4000

Endpoint	SetMultiEscrowSize
Method	Post
URL	{server_url}/api/CashDevice/SetMultiEscrowSize
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	uint EscrowSize: The maximum number of notes used for multi-escrow. e.g to set the multi-escrow note limit to 20. `20`

Responses

Status	Body	Notes
200	`Successfully set multi-escrow size to 20.`	OK: Successfully set the multi-escrow note size.
400	`Failed to set new multi-escrow size.`	Bad Request: Unable to set the requested multi-escrow note size.
404		Not Found: The specified cash device was not initialised
500		Internal Server Error: Unable to set the multi-escrow note size.

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Post, "http://localhost:5000/api/
CashDevice/SetMultiEscrowSize?deviceID=SPECTRAL_PAYOUT-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var content = new StringContent("20", null, "application/json");
request.Content = content;
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetMultiEscrowSize?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(20)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetMultiEscrowSize?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps(20)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
```

```
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "20");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetMultiEscrowSize?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetMultiEscrowSize

Description

Used to get the Escrow note size for multi-escrow firmware.

> Maximum multi-escrow note limit is 20.
>
> Can only be used with the MNE protocol available on:
>
> - Spectral Payout
> - NV4000

Endpoint	GetMultiEscrowSize
Method	Get
URL	{server_url}/api/CashDevice/GetMultiEscrowSize
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`{ "multiEscrowSize": 20 }`	OK: Successfully retrieved the multi-escrow note size.
404		Not Found: The specified cash device was not initialised
500		Internal Server Error: Unable to get the multi-escrow note size.

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Get, "http://localhost:5000/api/
CashDevice/GetMultiEscrowSize?deviceID=SPECTRAL_PAYOUT-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
```

```
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetMultiEscrowSize?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetMultiEscrowSize?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetMultiEscrowSize?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetMultiEscrowValue

Description

Used to retrieve the value of notes currently stored in Escrow for the multi-escrow firmware.

Can only be used with the MNE protocol available on:

- Spectral Payout
- NV4000

Endpoint	GetMultiEscrowValue
Method	Get
URL	{server_url}/api/CashDevice/GetMultiEscrowValue
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes

200	{
	"multiEscrowValue": 1000,
	"multiEscrowCurrency": "EUR"
	}
		OK: Successfully retrieved the value of notes currently held in Escrow.

404		Not Found: The specified cash device was not initialised
500		Internal Server Error: Unable to get the multi-escrow note size.

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Get, "http://localhost:5000/api/
CashDevice/GetMultiEscrowValue?deviceID=SPECTRAL_PAYOUT-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var response = await client.SendAsync(request);
```

```
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetMultiEscrowValue?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetMultiEscrowValue?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetMultiEscrowValue?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - CommitMultiEscrow

Description

Used to commit notes currently held in Escrow. Notes will remain in the payout (available space permitting).

The routing of notes is disabled when using multi-escrow. Notes can be sent to the cashbox using the Float endpoint.

Can only be used with the MNE protocol available on:

- Spectral Payout
- NV4000

Endpoint	CommitMultiEscrow
Method	Post
URL	{server_url}/api/CashDevice/CommitMultiEscrow
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`Successfully committed multi-escrow.`	OK: Successfully committed escrow notes.
400	`Failed to commit multi-escrow.`	Bad Request: Failed to commit notes. Check notes are waiting to be committed using the GetMultiEscrowValue endpoint.
404		Not Found: The specified cash device was not initialised
500		Internal Server Error: Unable to get the multi-escrow note size.

Code Examples

C#

```
var client = new HttpClient();
```

```
var request = new HttpRequestMessage(HttpMethod.Post, "http://localhost:5000/api/
CashDevice/CommitMultiEscrow?deviceID=SPECTRAL_PAYOUT-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/CommitMultiEscrow?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/CommitMultiEscrow?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/CommitMultiEscrow?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - CancelMultiEscrow

Description

Used to return the notes currently held in Escrow. No credit given to the host.

Can only be used with the MNE protocol available on:

- Spectral Payout
- NV4000

Endpoint	CancelMultiEscrow
Method	Post
URL	{server_url}/api/CashDevice/CancelMultiEscrow
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	`true`

Responses

Status	Body	Notes
200	`Successfully cancelled multi-escrow.`	OK: Successfully cancelled the multi-escrow notes.
400	`Failed to cancel multi-escrow.`	Bad Request: Failed to cancel multi-escrow notes. Check notes are waiting to be cancelled using the GetMultiEscrowValue endpoint.
404		Not Found: The specified cash device was not initialised
500		Internal Server Error: Unable to get the multi-escrow note size.

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Post, "http://localhost:5000/api/
CashDevice/CancelMultiEscrow?deviceID=SPECTRAL_PAYOUT-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var content = new StringContent("true", null, "application/json");
request.Content = content;
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/CancelMultiEscrow?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(true)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/CancelMultiEscrow?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps(True)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
```

```
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "true");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/CancelMultiEscrow?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetDenominationInhibits

Description

Sets the inhibit status for a list of denomination and country code pairs.

Endpoint	SetDenominationInhibits
Method	POST
URL	{server_url}/api/CashDevice/SetDenominationInhibits
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	InhibitsRequest: The request body containing ValueCountryCodes and Inhibit. • List<string> ValueCountryCodes: A list of string representing the denominations and their respective country codes. • bool inhibit: Set true to inhibit the denominations, false to uninhibit `{ "ValueCountryCodes": ["2000 {{Currency}}", "5000 {{Currency}}"], "Inhibit": true }`

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Denomination inhibits set successfully.`	OK: If denomination inhibits set successfully.
400	`Failed to set denomination inhibits.`	Bad Request: Failed to set denomination inhibits.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
```

```
var request = new RestRequest("/api/CashDevice/SetDenominationInhibits?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""ValueCountryCodes"": [""2000 GBP"", ""5000 GBP""]," + "\n" +
@"    ""Inhibit"": true" + "\n" +
@"}" + "\n" +
@"" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetDenominationInhibits?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "ValueCountryCodes": [
      "2000 GBP",
      "5000 GBP"
    ],
    "Inhibit": true
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetDenominationInhibits?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps({
  "ValueCountryCodes": [
    "2000 GBP",
    "5000 GBP"
  ],
  "Inhibit": True
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}
```

```
response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n    \"ValueCountryCodes\":
[\"2000 GBP\", \"5000 GBP\"],\r\n    \"Inhibit\": true\r\n}\r\n\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetDenominationInhibits?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetDenominationRoute

Description

Configure the specified denomination to be either routed to cashbox or stored to be made available for later possible payout

Endpoint	SetDenominationRoute
Method	POST
URL	{server_url}/api/CashDevice/SetDenominationRoute
Parameters	• deviceID (string): The unique identifier of the cash device.

Body	SetDenomRoutesRequest: The request body containing Value, CountryCode and Route.
	• ValueCountryCode valueCountryCode: is an object representing the denomination and its respective country code:
	  • UInt32 Value: Denomination value e.g 500, 1000 etc
	  • string CountryCode: The country code of the currency e.g. “GBP”, “EUR”, “USD” etc
	• DenominationRoute route:
	  • `"Route": 0:` DenominationRoute.CASHBOX: Routes to cashbox
	  • `"Route": 1` : DenominationRoute.RECYCLER: Routes to single recycler (Smart Pay-out) or an available recycler (NV4000)
	  • `"Route": 2:` DenominationRoute.RECYCLER_1: Routes to the first (top) recycler, NV4000 only
	  • `"Route": 3:` DenominationRoute.RECYCLER_2: Routes to the second recycler, NV4000 only
	  • `"Route": 4:` DenominationRoute.RECYCLER_3: Routes to the third recycler, NV4000 only
	  • `"Route": 5:` DenominationRoute.RECYCLER_4: Routes to the fourth (bottom) recycler, NV4000 only
	
	`{ "Value": 500, "CountryCode": "{{currency}}", "Route": 1 }`

Responses

Status	Body	Notes
200	NV200S: Set 500 EUR route to RECYCLER successfully!	Ok: If the denomination route was set successfully.
400		Bad Request: If there is an error setting the denomination route.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetDenominationRoute?deviceID=NV200S",
Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{
" + "\n" +
@"    ""Value"": 500,
" + "\n" +
@"    ""CountryCode"": ""EUR"",
" + "\n" +
@"    ""Route"": 1
" + "\n" +
@"}
" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetDenominationRoute?deviceID=NV200S',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "Value": 500,
    "CountryCode": "EUR",
    "Route": 1
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetDenominationRoute?deviceID=NV200S"
```

```
payload = json.dumps({
  "Value": 500,
  "CountryCode": "EUR",
  "Route": 1
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n    \"Value\": 500,\r\n
\"CountryCode\": \"EUR\",\r\n    \"Route\": 1\r\n}\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetDenominationRoute?deviceID=NV200S")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetBarcodeReaderConfiguration

Description

Allows the host to set-up the barcode reader(s) configuration on the device

Endpoint	GetBarcodeReaderConfiguration
Method	GET
URL	{server_url}/api/CashDevice/GetBarcodeReaderConfiguration
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

- hardwareStatus:
  - None
  - Top reader fitted
  - Bottom reader fitted
  - Both fitted
- readerEnabled:
  - None
  - Top
  - Bottom
  - Both
- barcodeFormat:
  - None
  - Interleaced 2 of 5
- numCharacters:
  - Min6, Max 24

Status	Body	Notes
200	`{ "hardwareStatus": "Both fitted", "readersEnabled": "Both", "barcodeFormat": "Interleaved 2 of 5", "numCharacters": "18" }`	OK: Successfully retrieved the barcode reader configuration.
404	`Cash device not found`	Not Found: The specified cash device was not initialised

Status	Body	Notes
500	`Unable to get barcode reader configuration.`	Internal Server Error: Unable to retrieve barcode reader configuration.
500	`Error during barcode reader configuration: {error_message}`	Internal Server Error: An error occurred while retrieving the configuration.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"";
request.AddParameter("text/plain", body,  ParameterType.RequestBody);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = ""
```

```
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetBarcodeReaderConfiguration

Description

Allows the host to set-up the barcode reader(s) configuration on the device

Endpoint	SetBarcodeReaderConfiguration
Method	POST
URL	{server_url}/api/CashDevice/SetBarcodeReaderConfiguration
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• byte EnableReaders: Enable Readers
	  • 0x00 = Enable none
	  • 0x01 = Enable top
	  • 0x02 = Enable bottom
	  • 0x03 = Enable both
	• byte BarCodeFormat: Bar code format
	  • 0x00 = None
	  • 0x01 = Interleaved 2 of 5
	• byte NumberOfCharacters: Number of characters
	  • Min 6 – Max 24
	
	`{ "EnableReaders": 0, "BarCodeFormat": 0, "NumberOfCharacters": 6 }`

Responses

Status	Body	Notes
200	`Barcode reader configuration updated successfully.`	OK: Barcode reader configuration was successfully updated.
404	`Cash device not found`	Not Found: The specified cash device was not initialised
500	`Unable to update barcode reader configuration.`	Internal Server Error: Unable to retrieve Barcode Data.

Status	Body	Notes
500	`Error during barcode reader configuration: {error_message}`	Internal Server Error: An error occurred while updating configuration.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""EnableReaders"": 0," + "\n" +
@"    ""BarCodeFormat"": 0," + "\n" +
@"    ""NumberOfCharacters"": 6" + "\n" +
@"}";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "EnableReaders": 0,
    "BarCodeFormat": 0,
    "NumberOfCharacters": 6
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```python
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps({
  "EnableReaders": 0,
  "BarCodeFormat": 0,
  "NumberOfCharacters": 6
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```java
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n    \"EnableReaders\": 0,\r\n
\"BarCodeFormat\": 0,\r\n    \"NumberOfCharacters\": 6\r\n}");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetBarcodeReaderConfiguration?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetBarcodeData

Description

Obtains the last valid barcode ticket data.

Endpoint	GetBarcodeData
Method	Get
URL	{server_url}/api/CashDevice/GetBarcodeData
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes

200	{
	"ticketStatus":
	"ticket_status_value"
	"barcodeData":
	"barcode_ascii_data_value"
	}
		OK: Successfully retrieved the barcode data and ticket status

404	Cash device not found	Not Found: The specified cash device was not initialised
500	Failed to get Barcode Data	Internal Server Error: Unable to retrieve Barcode Data.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetBarcodeData?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Get);
```

```
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"";
request.AddParameter("text/plain", body,  ParameterType.RequestBody);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetBarcodeData?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetBarcodeData?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = ""
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetBarcodeData?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - DispenseValue

Description

Dispenses the specified value of a specified currency.

Endpoint	DispenseValue
Method	POST
URL	{server_url}/api/CashDevice/DispenseValue
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• The denomination and its respective country code.
	  • UInt32 Value: Denomination value to pay-out e.g 500, 1000 etc
	  • string CountryCode: The country code of the currency that is to be paid out e.g. “GBP”, “EUR”, “USD” etc
	
	`{ "Value": 1500, "CountryCode": "{{Currency}}" }`

Responses

Status	Body	Notes
200	`Dispense operation initiated successfully.`	OK: Pay-out can be completed.
400	`Failed to initiate dispense operation: INVALID_INPUT`	Bad Request: If there is an error during payout operation.

errorReason

Code	Error	Description
1	Not enough value in device	The value requested exceeds the level stored in the payout device
2	Cannot pay exact amount	The value requested cannot be paid with the levels stored in the payout device

Code	Error	Description
3	Device busy	The payout device cannot execute the payout request because it is busy with other tasks
4	Device disabled	The payout device is to its disabled state and hence refuses the payout request

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/DispenseValue?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"  ""Value"": 1500," + "\n" +
@"  ""CountryCode"": ""GBP""" + "\n" +
@"}" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/DispenseValue?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "Value": 1500,
    "CountryCode": "GBP"
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```python
import requests
import json

url = "http://localhost:5000/api/CashDevice/DispenseValue?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = json.dumps({
  "Value": 1500,
  "CountryCode": "GBP"
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```java
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n  \"Value\": 1500,\r\n
\"CountryCode\": \"GBP\"\r\n}\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/DispenseValue?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - Float

Description

Leaves the specified number of notes in the pay-out and moves the excess to the cashbox to maintain a stored pay-out amount for the purpose of being able to collect excess notes whilst leaving some for pay-out purposes.

Endpoint	Float
Method	POST
URL	{server_url}/api/CashDevice/Float
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• UInt32[] noteCounts:
	  • An array of UInt32 of size equal to the number of channels in the dataset. Each UInt32 is the number of notes to be left for payout, its index is the channel to float
	• E.g. For a GBP dataset containing £5, £10, £20 and £50
	  • If noteCounts = [2, 2, 2, 0]
	  • 2 x £5, 2 x £10, 2 x £20 and 0 x £50 notes would be left in the payout.
	`[2, 2, 2, 0]`

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Float operation completed successfully.`	OK: If the float operation was initiated successfully.
400	`Not enough value to perform float.`	Bad Request: If there is an error initiating the float operation.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
```

```
var request = new RestRequest("/api/CashDevice/Float?deviceID=SPECTRAL_PAYOUT-COM5",
Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @" [2, 2, 2, 0]" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/Float?deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify([
    2,
    2,
    2,
    0
  ])

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/Float?deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps([
  2,
  2,
  2,
  0
])
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, " [2, 2, 2, 0]\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/Float?deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetCashboxPayoutLimit

Description

Sets the cashbox payout limit by specifying the maximum number of notes for each denomination.

Not available for NV4000

Endpoint	SetCashboxPayoutLimit
Method	POST
URL	{server_url}/api/CashDevice/SetCashboxPayoutLimit
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• uint[] noteCounts: An array of note counts representing the maximum number of notes that can be paid out for each denomination. Each index corresponds to a specific denomination in the currency assignment array.
	• Allow the host to specify a maximum level of coins/notes, by denomination, to be left in the hopper/recycler. The default value after the unit is powered up/reset is 0 (no limit). Limit is enabled for the denomination only when the limit value is > 0.
	• When the denomination level is above the desired limit for the recycler, the note will be sent to cashbox even if routed to recycler.
	  • E.g. For the dataset containing £5, £10, £20, £50.
	  • To set the payout limit to 5 for £5, 5 for £10, 5 for £20, the parameter noteCounts would be [5,5,5,0].
	`[5,5,5,0]`

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Cashbox payout limit set successfully.`	OK: If the cashbox payout limit was set successfully.
400		Bad Request: If there is an error setting the cashbox payout limit.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetCashboxPayoutLimit?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"[5,5,5,0]";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetCashboxPayoutLimit?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify([
    5,
    5,
    5,
    0
  ])

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetCashboxPayoutLimit?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps([
  5,
  5,
  5,
  0
])
headers = {
```

```
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "[5,5,5,0]");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetCashboxPayoutLimit?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SmartEmpty

Description

Initiates a smart empty operation on the specified module number of the dispenser.

Endpoint	SmartEmpty
Method	POST
URL	{server_url}/api/CashDevice/SmartEmpty
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	• byte moduleNumber: the module number to empty. If NV4000 is true and moduleNumber is 0, all modules will be emptied. • bool NV4000: indicating whether the operation is for NV4000 model. Default is false. `{ "ModuleNumber": 0, "IsNV4000": false }`

Responses

Status	Body	Notes
200	`{ "dispenseResult": "COMPLETED" }`	OK: If the smart empty operation was completed successfully.
400		Bad Request: If there is an error performing the smart empty operation.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SmartEmpty?deviceID=SPECTRAL_PAYOUT-
COM5", Method.Post);
```

```
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"  ""ModuleNumber"": 0," + "\n" +
@"  ""IsNV4000"": false" + "\n" +
@"}";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SmartEmpty?deviceID=SPECTRAL_PAYOUT-
COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "ModuleNumber": 0,
    "IsNV4000": false
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SmartEmpty?deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps({
  "ModuleNumber": 0,
  "IsNV4000": False
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
```

```
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n  \"ModuleNumber\": 0,\r\n
\"IsNV4000\": false\r\n}");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SmartEmpty?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SendCustomCommand

Description

Sends a custom command to the device, constructed as an array of bytes

Endpoint	SendCustomCommand
Method	POST
URL	{server_url}/api/CashDevice/SendCustomCommand
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	string CustomCommandDataString: A string containing the raw byte data to be sent to the device. `{ "CustomCommandDataString": "01" }`

Responses

Status	Body	Notes
200	`Custom command sent successfully.`	OK: If the custom command was sent successfully and acknowledged by cash device.
400		Bad Request: If there is an error sending the custom command.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SendCustomCommand?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""CustomCommandDataString"": ""01""" + "\n" +
```

```
@"}" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SendCustomCommand?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "CustomCommandDataString": "01"
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SendCustomCommand?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = json.dumps({
  "CustomCommandDataString": "01"
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n
\"CustomCommandDataString\": \"01\"\r\n}\r\n");
Request request = new Request.Builder()
```

```
  .url("http://localhost:5000/api/CashDevice/SendCustomCommand?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - EnableCoinMechOrFeeder

Description

Enables the coin mechanism or feeder for specific device models

Endpoint	EnableCoinMechOrFeeder
Method	POST
URL	{server_url}/api/CashDevice/EnableCoinMechOrFeeder
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`Coin mechanism or feeder enabled successfully.`	OK: If successfully enabled.
400		Bad Request: If enable fails.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/EnableCoinMechOrFeeder?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
```

```
  'url': 'http://localhost:5000/api/CashDevice/EnableCoinMechOrFeeder?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/EnableCoinMechOrFeeder?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/EnableCoinMechOrFeeder?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - ResetDevice

Description

Resets the device to its initial state.

Endpoint	ResetDevice
Method	POST
URL	{server_url}/api/CashDevice/ResetDevice
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`Device reset successfully.`	OK: If the device was reset successfully.
400		Bad Request: If there is an error resetting the device.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/ResetDevice?deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
```

```
  'url': 'http://localhost:5000/api/CashDevice/ResetDevice?deviceID=SPECTRAL_PAYOUT-
COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/ResetDevice?deviceID=SPECTRAL_PAYOUT-
COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/ResetDevice?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - HaltPayout

Description

Halts the payout operation of the device.

Endpoint	HaltPayout
Method	POST
URL	{server_url}/api/CashDevice/HaltPayout
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`Payout halted successfully.`	OK: If the device was halted successfully.
400		Bad Request: If there is an error halting the payout.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/HaltPayout?deviceID=SPECTRAL_PAYOUT-COM5", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
```

```
  'url': 'http://localhost:5000/api/CashDevice/HaltPayout?deviceID=SPECTRAL_PAYOUT-
COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/HaltPayout?deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/HaltPayout?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetRCMode

Description

Retrieve the current mode of replenishment cassette.

- Replenishment Mode
- Payout Mode

Can only be used with the NV4000 with RC device model.

Endpoint	GetRCMode
Method	Get
URL	{server_url}/api/CashDevice/GetRCMode
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`RC_MODE_PAYOUT`	OK: Successfully retrieved the RC mode
404	`Cash device not found`	Not Found: The specified cash device was not initialised
500	`Failed to get RC Mode.`	Internal Server Error: Unable to retrieve RC Mode.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
```

```
var request = new RestRequest("/api/CashDevice/GetRCMode?deviceID=SPECTRAL_PAYOUT-
COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetRCMode?deviceID=SPECTRAL_PAYOUT-
COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetRCMode?deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetRCMode?deviceID=SPECTRAL_PAYOUT-
COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - Replenish

Description

Replenishes the specified number of notes from the replenishment cassette to the recyclers.

> Can only be used with the NV4000 with RC device model.

Endpoint	Replenish
Method	POST
URL	{server_url}/api/CashDevice/Replenish
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	• uint NumberToReplenish: The number of notes to replenish from the RC to the pay-out modules e.g. to replenish 5 notes to recyclers, set NumberToReplenish to 5. `5`

Responses

Status	Body	Notes
200	`Replenishment completed successfully.`	OK: Notes replenished successfully.
400		Bad Request: If there is an error during replenishment.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/Replenish?deviceID=NV4000-COM5",
Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"4";
```

```
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/Replenish?deviceID=NV4000-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(4)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/Replenish?deviceID=NV4000-COM5"

payload = json.dumps(4)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "4");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/Replenish?deviceID=NV4000-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - RefillMode

Description

Enables or disables the refill mode of the device

Endpoint	RefillMode
Method	POST
URL	{server_url}/api/CashDevice/RefillMode
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	• True to enable, or false to disable.

Responses

Status	Body	Notes
200	`NV4000-COM5: Refill mode disabled successfully.`	OK: If the refill mode was set successfully.
400		Bad Request: If there is an error setting the refill mode.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/RefillMode?deviceID=NV4000-COM5",
Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"false";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/RefillMode?deviceID=NV4000-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(false)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/RefillMode?deviceID=NV4000-COM5"

payload = json.dumps(False)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "false");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/RefillMode?deviceID=NV4000-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetHopperOptions

Description

Retrieves the current hopper options from the device and updates internal registers with this information.

Endpoint	GetHopperOptions
Method	GET
URL	{server_url}/api/CashDevice/GetHopperOptions
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Reg_0 bits and their meaning		
Bit	**Parameter**	**Function**
0	Pay Mode	**0x00 = Split by highest value (Default)**. The device will attempt to payout a requested value by starting from the highest to the lowest coins available. This mode will payout the minimum number of coins possible. 0x01 = Free pay. The device will payout a coin as it passes its discriminator system if it fits into the current payout value and will leave enough of other coins to payout the rest of the value. This may give a faster payout but could result in a large number of coins of small denominations paid out.
1	Level Check	0x00 = Disabled. The device will not refer to the level counters when calculating if a payout value can be made. **0x01 = Enabled (Default)**. The device will check the level counters and accept or refuse a payout request based on levels and/or split of available levels.
2	Motor Speed	0x00 = Low speed. Payouts run at a lower motor speed. **0x01 = High Speed (default always after reset)**. The motors run at max speed for payouts.

Reg_0 bits and their meaning		
3	Cashbox Pay Active	This bit is used in conjunction with Bit 0. If bit 3 is zero, then the Pay modes will be as described in bit 0. If Bit 3 is set then coins routed to the cashbox will be used in coins paid out of the front if they can fit into the current payout request. This is shown below. **Pay Mode Type Bit 0 Bit 3** Free Play 1 0 Highest Split 0 1 All Route Free Pay 1 1 All Route Highest Split 0 1
4	Route 0 level coins to cashbox	Set to 0x01 means that any coins detected with a level setting of 0 will be paid to the cashbox, even if it is routed to the payout.
5	High Efficiency Split	**Default set to 0x01** to enable a more efficient, smarter coin payout algorithm which will tend to use coins which have higher level counts - thus speeding up the payout process.
6	Unknown to Payout	Set to 0x01 means any unknown coins will be paid out during Smart Empty (otherwise they will be routed to cashbox).
7	Value Added	0x00 = Coin added event 0x01 = Value added event

Reg_1 bits and their meaning		
Bit	**Parameter**	**Function**
0	Reject Events	Set to 1 gives reject event 0xBA Coin Rejected.
1	Reject Events Full	Set to 1 gives reject event 0xBA with coin value if known.
2	Empty Route	Set to 1 will route coins to payout when a Empty or Smart Empty command is received.
3	Full to Cashbox	Set to 1 will start moving coins to cashbox during payouts when full.
4	Value Coin	Set to 1 gives individual coin payout events.
5	N/A	Set to 0.
6	N/A	Set to 0.
7	N/A	Set to 0.

Example Response

Status	Body	Notes
200	SMART_COIN_SYSTEM-COM10: { Reg0 = 04, Reg1 = 00 }	OK: If the hopper options were retrieved successfully.
400		Bad Request: If there is an error retrieving the hopper options.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhbimport requests

url = "http://localhost:5000/api/CashDevice/GetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer
eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzM4MDU1
NjEzLCJleHAiOjE3Mzg2NjA0MTMsImlhdCI6MTczODA1NTYxMywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xPR
1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.zi55PwWV2dwGkzqXEI7Jk4R3SQnXbphnZyyif72QC
Ws'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
```

```
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetHopperOptions

Description

Sets the hopper options on the device using the provided register values.

Endpoint	SetHopperOptions
Method	POST
URL	{server_url}/api/CashDevice/SetHopperOptions
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	HopperOptionsRequest: The request body containing the hopper options Reg0 and Reg1. • byte reg_0: The value to set for the first hopper register. • byte reg_1: The value to set for the second hopper register.

Reg_0 bits and their meaning

Bit	Parameter	Function
0	Pay Mode	**0x00 = Split by highest value (Default)**. The device will attempt to payout a requested value by starting from the highest to the lowest coins available. This mode will payout the minimum number of coins possible. 0x01 = Free pay. The device will payout a coin as it passes its discriminator system if it fits into the current payout value and will leave enough of other coins to payout the rest of the value. This may give a faster payout but could result in a large number of coins of small denominations paid out.
1	Level Check	0x00 = Disabled. The device will not refer to the level counters when calculating if a payout value can be made. **0x01 = Enabled (Default)**. The device will check the level counters and accept or refuse a payout request based on levels and/or split of available levels.
2	Motor Speed	0x00 = Low speed. Payouts run at a lower motor speed. **0x01 = High Speed (default)**. The motors run at max speed for payouts.
3	Cashbox Pay Active	This bit is used in conjunction with Bit 0. If bit 3 is zero, then the Pay modes will be as described in bit 0. If Bit 3 is set then coins routed to the cashbox will be used in coins paid out of the front if they can fit into the current payout request. This is shown below. **Pay Mode Type Bit 0 Bit 3** Free Play 1 0 Highest Split 0 1 All Route Free Pay 1 1 All Route Highest Split 0 1

Reg_0 bits and their meaning		
4	Route 0 level coins to cashbox	Set to 0x01 means that any coins detected with a level setting of 0 will be paid to the cashbox, even if it is routed to the payout.
5	High Efficiency Split	**Default set to 0x01** to enable a more efficient, smarter coin payout algorithm which will tend to use coins which have higher level counts - thus speeding up the payout process.
6	Unknown to Payout	Set to 0x01 means any unknown coins will be paid out during Smart Empty (otherwise they will be routed to cashbox).
7	Value Added	0x00 = Coin added event 0x01 = Value added event

Reg_1 bits and their meaning		
Bit	**Parameter**	**Function**
0	Reject Events	Set to 1 gives reject event 0xBA Coin Rejected.
1	Reject Events Full	Set to 1 gives reject event 0xBA with coin value if known.
2	Empty Route	Set to 1 will route coins to payout when a Empty or Smart Empty command is received.
3	Full to Cashbox	Set to 1 will start moving coins to cashbox during payouts when full.
4	Value Coin	Set to 1 gives individual coin payout events.
5	N/A	Set to 0.
6	N/A	Set to 0.
7	N/A	Set to 0.

Responses

Status	Body	Notes
200	`Hopper options set successfully.`	OK: If the hopper options were set successfully.
400		Bad Request: If there is an error setting the hopper options.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"  ""Reg0"": 4," + "\n" +
@"  ""Reg1"": 0" + "\n" +
@"}";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "Reg0": 4,
    "Reg1": 0
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = json.dumps({
  "Reg0": 4,
  "Reg1": 0
})
headers = {
  'Content-Type': 'application/json',
```

```
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n  \"Reg0\": 4,\r\n  \"Reg1\":
0\r\n}");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetHopperOptions?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetGlobalErrorCode

Description

Sets the globalErrorCode_0 and globalErrorCode_1 to the error code in the cash device

Endpoint	GetGlobalErrorCode
Method	GET
URL	{server_url}/api/CashDevice/GetGlobalErrorCode
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Please refer to Global Error State for detailed information on responses.

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM10: { ErrorCode0 = 00, ErrorCode1 = 00 }`	OK: If the global error code was retrieved successfully.
400		Bad Request: If there is an error retrieving the global error code.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetGlobalErrorCode?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetGlobalErrorCode?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetGlobalErrorCode?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetGlobalErrorCode?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetServiceInformation

Description

- Retrieves service information from the device based on the provided sub-command and formats the information into a readable string.
- The extracted information is formatted into a readable string and stored in the variable service_information_string

Endpoint	GetServiceInformation
Method	GET
URL	{server_url}/api/CashDevice/GetServiceInformation
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• byte subCommand: The sub-command to specify the type of service information to retrieve. Possible values:
	  • Byte: 0x00 - Service Type: Date Information - Description: Returns the current raw byte date
	  • Byte: 0x01 - Service Type: Note Information - Description: Extracts the number of notes since various events such as maintenance reset, last download, power on, and last jam.
	  • Byte: 0x02 - Service Type: Accept Note Information - Description: Extracts the number of accepted notes since maintenance reset, last download, and power on.
	  • Byte: 0x03 - Service Type: Jam Information - Description: Extracts the number of jams since maintenance reset, last download, and in the last 1000 notes.
	  • Byte: 0x04 - Service Type: Service Flags - Description: Returns current service flag status

Responses

Status	Body	Notes
200	NV4000-COM5: { ServiceInformation = (Note Information) Notes Since Maintenance Reset: 11902 Notes Since Last Download: 461 Notes Since Power On: 2 Notes Since Last Jam: 2 }	OK: If the service information is retrieved and formatted.
400		Bad Request: If fails to retrieve the service information.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetServiceInformation?deviceID=NV4000-
COM5", Method.Get);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"1" + "\n" +
@"" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetServiceInformation?deviceID=NV4000-
COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(1)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/GetServiceInformation?deviceID=NV4000-
COM5"

payload = json.dumps(1)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "1\r\n\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetServiceInformation?deviceID=NV4000-
COM5")
  .method("GET", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetServiceInformationForModule

Description

- Retrieves service information from the device based on the provided module and sub-command, and formats the information into a readable string.
- The extracted information is formatted into a readable string and stored in the variable service_information_string

Endpoint	GetServiceInformationForModule
Method	GET
URL	{server_url}/api/CashDevice/GetServiceInformationForModule
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• byte module: The module identifier specifying the type of module to retrieve information from.
	  • 0x05: NV4000 Lifetime Counts.
	  • 0x00, 0x01, 0x02, 0x03: Smart Coin System modules including Primary Hopper, Feeder, Secondary Hopper, and Lifter.
	• byte subCommand: The sub-command to specify the type of service information to retrieve. Possible values:
	  • Byte: 0x00 - Service Type: Service Status - Description: Returns the service status of the device
	  • Byte: 0x01 - Service Type: Next Service Due - Description: Returns the next service due. Should be sent for each module
	  • Byte: 0x02 - Service Type: Last Service Information - Description: Returns the last 3 services, 3 bytes per service, 9 bytes in total
	  • Byte: 0x03 - Service Type: Performance Since Last Service - Description: Extracts the number of coins processed, acceptance percentage, jams, and calibration failures since the last service
	  • Byte: 0x04 - Service Type: Service Flags - Description: Returns current service flags
	  • Byte: 0x05 - Service Type: Lifetime Counts - Description: Get the lifetime counts of the module
	
	`{ "Module": 5, "SubCommand": 0 }`

Responses

Status	Body	Notes
200	NV4000-COM5: { ServiceInformation = (Lifetime Counts) Total cycles: 32717 Power on count: 157 Power on time: 20580 }	OK: If the service information is retrieved and formatted.
400		Bad Request: If fails to retrieve the service information.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetServiceInformationForModule?
deviceID=NV4000-COM5", Method.Get);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""Module"": 5," + "\n" +
@"    ""SubCommand"": 0" + "\n" +
@"}" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetServiceInformationForModule?
deviceID=NV4000-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "Module": 5,
    "SubCommand": 0
  })

};
request(options, function (error, response) {
```

```
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/GetServiceInformationForModule?
deviceID=NV4000-COM5"

payload = json.dumps({
  "Module": 5,
  "SubCommand": 0
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n    \"Module\": 5,\r\n
\"SubCommand\": 0\r\n}\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetServiceInformationForModule?
deviceID=NV4000-COM5")
  .method("GET", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetServiceInformationMaintenanceReset

Description

Sets the maintenance reset information for the device using the provided ASCII bytes representing the week and year of the maintenance reset.

Endpoint	SetServiceInformationMaintenanceReset
Method	POST
URL	{server_url}/api/CashDevice/SetServiceInformationMaintenanceReset
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• ServiceInformationMaintenanceResetRequest: The request body containing WeekNumber1AsciiByte, WeekNumber2AsciiByte, YearNumber1AsciiByte and YearNumber2AsciiByte.
	  • byte weekNumber1_ascii_byte: The module identifier specifying the type of module to set the service information for.
	  • byte weekNumber2_ascii_byte: The type of service being set.
	  • byte yearNumber1_ascii_byte: The month of the service date.
	  • byte yearNumber2_ascii_byte: The year of the service date.
	
	`{ "WeekNumber1AsciiByte": 0, "WeekNumber2AsciiByte": 0, "YearNumber1AsciiByte": 0, "YearNumber2AsciiByte": 0 }`

Responses

Status	Body	Notes
200	`NV4000-COM5: Maintenance reset information set successfully.`	OK: If the maintenance reset information was set successfully.
400		Bad Request: If there is an error setting the maintenance reset information.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetServiceInformationMaintenanceReset?
deviceID=NV4000-COM5", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"  ""WeekNumber1AsciiByte"": 0," + "\n" +
@"  ""WeekNumber2AsciiByte"": 0," + "\n" +
@"  ""YearNumber1AsciiByte"": 0," + "\n" +
@"  ""YearNumber2AsciiByte"": 0" + "\n" +
@"}";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetServiceInformationMaintenanceReset?
deviceID=NV4000-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "WeekNumber1AsciiByte": 0,
    "WeekNumber2AsciiByte": 0,
    "YearNumber1AsciiByte": 0,
    "YearNumber2AsciiByte": 0
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetServiceInformationMaintenanceReset?
deviceID=NV4000-COM5"

payload = json.dumps({
  "WeekNumber1AsciiByte": 0,
```

```
  "WeekNumber2AsciiByte": 0,
  "YearNumber1AsciiByte": 0,
  "YearNumber2AsciiByte": 0
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n  \"WeekNumber1AsciiByte\":
0,\r\n  \"WeekNumber2AsciiByte\": 0,\r\n  \"YearNumber1AsciiByte\": 0,\r\n
\"YearNumber2AsciiByte\": 0\r\n}");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetServiceInformationMaintenanceReset?
deviceID=NV4000-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetNoPayinCount

Description

Sets the no-payin count for the device, which specifies the number of transactions allowed without pay-ins.

Endpoint	SetNoPayinCount
Method	POST
URL	{server_url}/api/CashDevice/SetNoPayinCount
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	• byte count: The number of transactions allowed without pay-ins.

Responses

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM10: { NoPayinCount = 0 }`	OK: If the no-payin count was set successfully.
400		Bad Request: If there is an error setting the no-payin count.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetNoPayinCount?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"0";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetNoPayinCount?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(0)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetNoPayinCount?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = json.dumps(0)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "0");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetNoPayinCount?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetCoinAcceptance

Description

Retrieves the coin acceptance status from the specified device and formats the data into a readable string

Endpoint	GetCoinAcceptance
Method	GET
URL	{server_url}/api/CashDevice/GetCoinAcceptance
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	• byte device: The byte representing the specific device component from which to retrieve the coin acceptance status

Device

Byte	Function	Size
0	Primary Hopper acceptance percentage	1
1	Feeder acceptance percentage	1
2	Secondary Hopper acceptance percentage	

Responses

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM10:` `{ CoinAcceptanceData = 64 }`	OK: If the coin acceptance data was retrieved successfully.
400	`Failed to retrieve coin acceptance data.`	Bad Request: If there is an error retrieving the coin acceptance data.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
```

```
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetCoinAcceptance?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Get);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @" 0";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetCoinAcceptance?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(0)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/GetCoinAcceptance?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = json.dumps(0)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, " 0");
```

```
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetCoinAcceptance?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("GET", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetCashboxLevels

Description

Sets the coin levels of the cashbox

Endpoint	SetCashboxLevels
Method	POST
URL	{server_url}/api/CashDevice/SetCashboxLevels
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	SetCashboxLevelsRequest: The request body containing NumCoinsToAdd, Denomination and CountryCode. • ushort NumCoinsToAdd: Number of coins to add to level (0 will clear the level) • uint Denomination: Value of denomination to set • string CountryCode: ASCII country code of denomination `{ "NumCoinsToAdd": 10, "Denomination": 10, "CountryCode": "{{Currency}}" }`

Responses

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM10: Cashbox levels set successfully.`	OK: If the cashbox levels were set successfully.
400		Bad Request: If there is an error setting the cashbox levels.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
```

```
var request = new RestRequest("/api/CashDevice/SetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""numCoinsToAdd"": 10," + "\n" +
@"    ""denomination"": 10," + "\n" +
@"    ""countryCode"": ""ITL""" + "\n" +
@"}" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "numCoinsToAdd": 10,
    "denomination": 10,
    "countryCode": "ITL"
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = json.dumps({
  "numCoinsToAdd": 10,
  "denomination": 10,
  "countryCode": "ITL"
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)
```

```
print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n    \"numCoinsToAdd\": 10,\r\n
\"denomination\": 10,\r\n    \"countryCode\": \"ITL\"\r\n}\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - ClearCashboxLevels

Description

Clears the cashbox levels on the SSP device.

Endpoint	ClearCashboxLevels
Method	POST
URL	{server_url}/api/CashDevice/ClearCashboxLevels
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM10: Cashbox levels cleared successfully.`	OK: If the cashbox levels were cleared successfully.
400		Bad Request: If there is an error clearing the cashbox levels.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/ClearCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
```

```
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/ClearCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/ClearCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/ClearCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetCashboxLevels

Description

- Retrieves the coins that have been flushed down to the cashbox.
- Reports in the same format as GetAllLevels()

Endpoint	GetCashboxLevels
Method	GET
URL	{server_url}/api/CashDevice/GetCashboxLevels
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	SMART_COIN_SYSTEM-COM10: { CashboxLevels = Number of denominations in device: 2 10 x 10 ITL 0 x 50 ITL Quantity of unknown coins: 0 }	OK: If the cashbox levels were retrieved successfully.
400		Bad Request: If there is an error retrieving the cashbox levels.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetCashboxLevels?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetNoteCashboxLevels

Description

Retrieves the notes that have been stored the cashbox.

Levels can be cleared with ClearNoteCashboxLevels when the cashbox is emptied, or can auto clear when the cashbox is removed and replaced by setting the option in the config file: serverconfig.json.

Endpoint	GetNoteCashboxLevels
Method	GET
URL	{server_url}/api/CashDevice/GetNoteCashboxLevels
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes

200	[
	{
	"value": 500,
	"countryCode": "GBP",
	"storedInCashbox": 0
	},
	{
	"value": 1000,
	"countryCode": "GBP",
	"storedInCashbox": 2
	},
	{
	"value": 2000,
	"countryCode": "GBP",
	"storedInCashbox": 5
	},
	{
	"value": 5000,
	"countryCode": "GBP",
	"storedInCashbox": 5
	}
	]
		OK: If the cashbox levels were retrieved successfully.

400		Bad Request: If there is an error retrieving the cashbox levels.

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Get, "http://localhost:5000/api/
CashDevice/GetNoteCashboxLevels?deviceID=SPECTRAL_PAYOUT-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetNoteCashboxLevels?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetNoteCashboxLevels?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetNoteCashboxLevels?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
```

```
  .build();
Response response = client.newCall(request).execute();
```

REST API - ClearNoteCashboxLevels

Description

Clears the cashbox levels on the SSP device.

Endpoint	ClearNoteCashboxLevels
Method	POST
URL	{server_url}/api/CashDevice/ClearNoteCashboxLevels
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`SPECTRAL_PAYOUT-COM5: Cashbox levels cleared.`	OK: If the cashbox levels were cleared successfully.
400		Bad Request: If there is an error clearing the cashbox levels.

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Post, "http://localhost:5000/api/
CashDevice/ClearNoteCashboxLevels?deviceID=SPECTRAL_PAYOUT-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/ClearNoteCashboxLevels?
deviceID=SPECTRAL_PAYOUT-COM5',
```

```
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/ClearNoteCashboxLevels?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/ClearNoteCashboxLevels?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("POST", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetSorterRoute

Description

Sets the route for the specified denomination to go to either PRIMARY or SECONDARY hopper of the Twin SMART Coin System

Endpoint	SetSorterRoute
Method	POST
URL	{server_url}/api/CashDevice/SetSorterRoute
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	SetSorterRouteRequest: The request body containing ValueCountryCode and SorterRoute.
	• ValueCountryCode valueCountryCode: is an object representing the denomination and its respective country code:
	  • UInt32 Value: Denomination value e.g 500, 1000 etc
	  • string CountryCode: The country code of the currency e.g. “GBP”, “EUR”, “USD” etc
	• byte sorterRoute: The sorter route to set for the specified denomination. Use 0x00 for PRIMARY hopper and 0x01 for SECONDARY hopper.
	`{ "Value": 100, "CountryCode": "{{Currency}}", "SorterRoute": 0 }`

Responses

Status	Body	Notes
200	`TWIN_SMART_COIN_SYSTEM-COM10: Sorter route set successfully.`	OK: If the sorter route was set successfully.
400		Bad Request: If there is an error setting the sorter route.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
```

```
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetSorterRoute?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"    ""Value"": 100, ""CountryCode"": ""ITL""," + "\n" +
@"    ""SorterRoute"": 0" + "\n" +
@"}" + "\n" +
@"";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetSorterRoute?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "Value": 100,
    "CountryCode": "ITL",
    "SorterRoute": 0
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetSorterRoute?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10"

payload = json.dumps({
  "Value": 100,
  "CountryCode": "ITL",
  "SorterRoute": 0
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)
```

```
print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n    \"Value\": 100,
\"CountryCode\": \"ITL\",\r\n    \"SorterRoute\": 0\r\n}\r\n");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetSorterRoute?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetSorterRouteAssignment

Description

Retrieves sorter route assignments.

Endpoint	GetSorterRouteAssignment
Method	GET
URL	{server_url}/api/CashDevice/GetSorterRouteAssignment
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes

200	[
	{
	"currentSorterRoute":0
	},
	{
	"currentSorterRoute":1
	},
	{
	"currentSorterRoute":0
	}
	]
		Ok: If the sorter route assignments were retrieved successfully.

404		Not Found: If no sorter route assignments were found.
400		Bad Request: If there is an error retrieving the sorter route assignments.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
```

```
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetSorterRouteAssignment?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetSorterRouteAssignment?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetSorterRouteAssignment?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetSorterRouteAssignment?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetPayoutLimit

Description

- Limits the number of coins that can be dispensed in one transaction
- Should be sent during the setup of the device

Endpoint	SetPayoutLimit
Method	POST
URL	{server_url}/api/CashDevice/SetPayoutLimit
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	ushort value: The maximum number of coins that can be dispensed in one transaction

Responses

Status	Body	Notes
200	`TWIN_SMART_COIN_SYSTEM-COM10: Payout limit set successfully.`	OK: If the payout limit was set successfully.
400		Bad Request: If there is an error setting the payout limit.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetPayoutLimit?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"5";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetPayoutLimit?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(5)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/SetPayoutLimit?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10"

payload = json.dumps(5)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "5");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetPayoutLimit?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetPayoutCount

Description

Gets the number of coins the hopper wants to pay out after it calculates the coin split on a test payout.

Endpoint	GetPayoutCount
Method	GET
URL	{server_url}/api/CashDevice/GetPayoutCount
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`TWIN_SMART_COIN_SYSTEM-COM10: { PayoutCount = 0 }`	OK: If the payout count was retrieved successfully.
400		Bad Request: If there is an error retrieving the payout count.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetPayoutCount?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
```

```
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetPayoutCount?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetPayoutCount?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetPayoutCount?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - SetTwInMode

Description

A command to select the operation mode of the Twin SCS

Endpoint	SetTwInMode
Method	POST
URL	{server_url}/api/CashDevice/SetTwInMode
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token

Body	• byte twinMode: The operation mode. Currently there are 4 modes available:
	  • **0**: Normal Smart Coin System: The master SCS works alone as a normal SCS. There is no need to connect the secondary hopper as it is unused in this mode.
	  • **1**: Twin Smart Coin System: The unit works as a complete Twin Smart Coin System. The secondary hopper needs to be connected to the main hopper.
	  • **2**: Twin Single Smart Coin System: The Twin Feeder is able to pay in coins to both routes (main hopper or lateral) based on host selection, but there is no control over the secondary hopper. That means in this mode only the main hopper is in control for the payouts. The slave hopper, if connected, should be controlled by the host individually. For this mode the following commands/events can be used by the host
	  • Get coin amount to lateral route: To account for the coins sent to the lateral path.
	  • Set coin amount to lateral route: To set/reset the coins amount to the lateral path.
	  • When working with individual coin events during pay-in (event coin credit 0x0D in CC2), every coin paid-in reports the value and the country code as usual, but also an extra byte with the route (main hopper or lateral). In this way the coins sent to lateral can be accounted in this Single Twin mode during a pay-in.
	  • **3**: Twin 1ec Balanced mode: This mode is the same as the Twin mode 0x01, but it handles the EUR 1ec in a way that the quantities are balanced in both hoppers. This mode improves the quantity of 1ec coins that the system can handle in the hoppers. Please note:
	  • During payins, the 1ec coins will be routed to the hopper with less quantity of coins.
	  • During payouts, the 1ec coins will be taken from the hopper with more 1ec coins (or from both if necessary).
	  • If the set coin amount command is sent, the levels will be updated in the slave hopper only (as for operation it might be easer to manipulate the levels). If a level 0 is sent both hoppers levels will be cleared of 1ec.

Responses

Status	Body	Notes
200	`TWIN_SMART_COIN_SYSTEM-COM10: Twin mode set successfully.`	OK: If the twin mode was set successfully.
400		Bad Request: If there is an error setting the twin mode.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/SetTwInMode?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhbG.....");
var body = @"1";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/SetTwInMode?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify(1)

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json
```

```
url = "http://localhost:5000/api/CashDevice/SetTwInMode?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10"

payload = json.dumps(1)
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "1");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/SetTwInMode?
deviceID=TWIN_SMART_COIN_SYSTEM-COM10")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - comPortReadError

Description

Checks if there is any read error on the COM port

Endpoint	comPortReadError
Method	GET
URL	{server_url}/api/CashDevice/comPortReadError
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	NV4000-COM5: { ComPortReadError = False }	OK: If the com port read error status was retrieved successfully.
400		Bad Request

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/comPortReadError?deviceID=NV4000-
COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
```

```
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/comPortReadError?deviceID=NV4000-
COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/comPortReadError?deviceID=NV4000-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/comPortReadError?deviceID=NV4000-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetLifterStatus

Description

Allows to get the current status of the lifter

Endpoint	GetLifterStatus
Method	GET
URL	{server_url}/api/CashDevice/GetLifterStatus
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	`SMART_COIN_SYSTEM-COM10: { LifterConnected = True, LifterOptoClear = True, LifterJammed = False }`	OK: If the lifter status was retrieved successfully.
400		Bad Request: If there is an error retrieving the lifter status.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetLifterStatus?
deviceID=SMART_COIN_SYSTEM-COM10", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetLifterStatus?
deviceID=SMART_COIN_SYSTEM-COM10',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetLifterStatus?
deviceID=SMART_COIN_SYSTEM-COM10"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetLifterStatus?
deviceID=SMART_COIN_SYSTEM-COM10")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetLastRejectCode

Description

Gets the reason the device rejected the last note

Endpoint	GetLastRejectCode
Method	GET
URL	{server_url}/api/CashDevice/GetLastRejectCode
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Status	Body	Notes
200	SPECTRAL_PAYOUT-COM5: { RejectCategory = Reject Reason: Channel Inhibit }	OK: If the last reject code was retrieved successfully.
400		Bad Request: If there is an error retrieving the last reject code.

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/CashDevice/GetLastRejectCode?
deviceID=SPECTRAL_PAYOUT-COM5", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/GetLastRejectCode?
deviceID=SPECTRAL_PAYOUT-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/GetLastRejectCode?
deviceID=SPECTRAL_PAYOUT-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/GetLastRejectCode?
deviceID=SPECTRAL_PAYOUT-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetSmartCurrencyData

Description

Retrieves the available currency files stored on the Smart Currency SD Card.

> Can be used on the SCU enabled NV200 Spectral only. Devices must be purchased as SCU devices as they cannot be configured retrospectively to SCU devices.

Endpoint	GetSmartCurrencyData
Method	GET
URL	{server_url}/api/CashDevice/GetSmartCurrencyData
Parameters	• deviceID (string): The value of "deviceID" obtained from the response to the OpenConnection request
Authorisation	Bearer Token
Body	None

Responses

Field	Description	Example
enabled	True for the currently enabled currency, otherwise false.	`"enabled": false,`
country	The ISO 4217 Currency Code.	`"country": "GBP",`
datasetCode	The dataset name of the available file.	`"datasetCode": "GBP07057",`
denomCount	The number of denomination channels in the dataset.	`"denomCount": 4,`
index	The index of the dataset.	`"index": 0`

Example Response

Status	Body	Notes

200	[
	{
	"enabled": false,
	"country": "GBP",
	"datasetCode": "GBP07057",
	"denomCount": 4,
	"index": 0
	},
	{
	"enabled": false,
	"country": "USD",
	"datasetCode": "USD01010",
	"denomCount": 7,
	"index": 1
	},
	{
	"enabled": false,
	"country": "EUR",
	"datasetCode": "EUR01045",
	"denomCount": 7,
	"index": 2
	}
	]
		OK: Successfully retrieved the Smart Currency data.

400		Bad Request: If there is an error retrieving the Smart Currency Data.

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Get, "http://localhost:5000/api/
CashDevice/?deviceID=SMART_CURRENCY_SYSTEM-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/CashDevice/?deviceID=SMART_CURRENCY_SYSTEM-COM5',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
```

```
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/CashDevice/?deviceID=SMART_CURRENCY_SYSTEM-COM5"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/?deviceID=SMART_CURRENCY_SYSTEM-COM5")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - UpdateSmartCurrencyDataset

Description

Sets the the dataset for the currency you wish to accept from the inserted SD card on the Smart Currency NV200 Spectral. Available datasets can be retrieved using the GetSmartCurrencyData endpoint.

Can be used on the SCU enabled NV200 Spectral only. Devices must be purchased as SCU devices as they cannot be configured retrospectively to SCU devices.

Endpoint	UpdateSmartCurrencyDataset
Method	POST
URL	{server_url}/api/Download/UpdateSmartCurrencyDataset
Parameters	None
Authorisation	Bearer Token
Body	The dataset code for the currency file you wish to accept. `"EUR01045"`

Responses

Status	Body	Notes
200	`Successfully updated smart currency dataset to EUR01045.`	OK: Successfully updated the dataset.
400		Bad Request
500		Internal Server Error

Code Examples

C#

```
var client = new HttpClient();
var request = new HttpRequestMessage(HttpMethod.Post, "http://localhost:5000/api/
CashDevice/UpdateSmartCurrencyDataset?deviceID=SMART_CURRENCY_SYSTEM-COM5");
request.Headers.Add("Authorization", "Bearer eyJhb.....");
var content = new StringContent("\"EUR01045\"", null, "application/json");
request.Content = content;
var response = await client.SendAsync(request);
response.EnsureSuccessStatusCode();
```

```
Console.WriteLine(await response.Content.ReadAsStringAsync());
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/CashDevice/UpdateSmartCurrencyDataset?
deviceID=SMART_CURRENCY_SYSTEM-COM5',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify("EUR01045")

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/CashDevice/UpdateSmartCurrencyDataset?
deviceID=SMART_CURRENCY_SYSTEM-COM5"

payload = json.dumps("EUR01045")
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "\"EUR01045\"");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/CashDevice/UpdateSmartCurrencyDataset?
deviceID=SMART_CURRENCY_SYSTEM-COM5")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - StartDownload

Description

Begins the download of the specified firmware/dataset file to the ITL cash device.

Not Available in Android APK at this time.

Endpoint	StartDownload
Method	POST
URL	{server_url}/api/Download/StartDownload
Parameters	None
Authorisation	Bearer Token

Body	<pre>{
	  "DownloadFileName": "{{DownloadFilePath}}\\{{UpdateFileName}}.bv1",
	  "ComPort": "{{ComPort}}",
	  "SspAddress": {{SspAddress}}
	}</pre>

Body Parameters

Parameter	Type	Description	Required	Default
DownloadFileName	string	Full path to the firmware/dataset file (.bv1)	Yes	
ComPort	string	The COM port to use	Yes	
SSPAddress	byte	SSP address	Yes	
PacketDownload	boolean	Enable Packet Download	No	true
BaudRate	int	The data transfer rate	No	115200

Responses

Status	Body	Notes
200	Download initiated. Check progress with /GetDownloadStatus.	OK: Successfully initiated download.
400	Invalid parameters. Please provide a valid file name and COM port.	Bad Request
500	Failed to initiate download.	Internal Server Error

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/Download/StartDownload", Method.Post);
request.AddHeader("Content-Type", "application/json");
request.AddHeader("Authorization", "Bearer eyJhb.....");
var body = @"{" + "\n" +
@"  ""DownloadFileName"": ""C:\\InnovativeTechnology\\UpdateFile\
\ITL01003_NVS2004311048000_IF_01.bv1""," + "\n" +
@"  ""ComPort"": ""COM5""," + "\n" +
@"  ""SspAddress"": 0" + "\n" +
@"}";
request.AddStringBody(body, DataFormat.Json);
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'POST',
  'url': 'http://localhost:5000/api/Download/StartDownload',
  'headers': {
    'Content-Type': 'application/json',
    'Authorization': 'Bearer eyJhb.....'
  },
  body: JSON.stringify({
    "DownloadFileName": "C:\\InnovativeTechnology\\UpdateFile\
\ITL01003_NVS2004311048000_IF_01.bv1",
    "ComPort": "COM5",
    "SspAddress": 0
```

```
  })

};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests
import json

url = "http://localhost:5000/api/Download/StartDownload"

payload = json.dumps({
  "DownloadFileName": "C:\\InnovativeTechnology\\UpdateFile\
\ITL01003_NVS2004311048000_IF_01.bv1",
  "ComPort": "COM5",
  "SspAddress": 0
})
headers = {
  'Content-Type': 'application/json',
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("application/json");
RequestBody body = RequestBody.create(mediaType, "{\r\n  \"DownloadFileName\": \"C:\\
\\InnovativeTechnology\\\\UpdateFile\\\\ITL01003_NVS2004311048000_IF_01.bv1\",\r\n
\"ComPort\": \"COM5\",\r\n  \"SspAddress\": 0\r\n}");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/Download/StartDownload")
  .method("POST", body)
  .addHeader("Content-Type", "application/json")
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

REST API - GetDownloadStatus

Description

Used to monitor the progress of a firmware/dataset update to the ITL cash device in real-time.

> Not Available in Android APK at this time.

Endpoint	GetDownloadStatus
Method	Get
URL	{server_url}/api/Download/GetDownloadStatus
Parameters	None
Authorisation	Bearer Token
Body	None

Responses

Field	Type	Description
State	string	Current state of the download: · IDLE · UPDATING · COMPLETE
CurrentDownloadBlock	integer	The current download block number
TotalDownloadBlock	integer	Total number of download blocks
Success	boolean	True if the download is complete, otherwise false

Example Responses

Status	Body	Notes

200	{
	"state": "UPDATING",
	"currentDownloadBlock": 4453,
	"totalDownloadBlock": 4655,
	"success": false
	}
		OK: Successfully initiated download.

Status	Body	Notes
400		Bad Request
500		Internal Server Error

Code Examples

C#

```
var options = new RestClientOptions("http://localhost:5000")
{
  MaxTimeout = -1,
};
var client = new RestClient(options);
var request = new RestRequest("/api/Download/GetDownloadStatus", Method.Get);
request.AddHeader("Authorization", "Bearer eyJhb.....");
RestResponse response = await client.ExecuteAsync(request);
Console.WriteLine(response.Content);
```

NodeJS

```
var request = require('request');
var options = {
  'method': 'GET',
  'url': 'http://localhost:5000/api/Download/GetDownloadStatus',
  'headers': {
    'Authorization': 'Bearer eyJhb.....'
  }
};
request(options, function (error, response) {
  if (error) throw new Error(error);
  console.log(response.body);
});
```

Python

```
import requests

url = "http://localhost:5000/api/Download/GetDownloadStatus"

payload = {}
headers = {
  'Authorization': 'Bearer eyJhb.....'
}

response = requests.request("GET", url, headers=headers, data=payload)

print(response.text)
```

Java

```
OkHttpClient client = new OkHttpClient().newBuilder()
  .build();
MediaType mediaType = MediaType.parse("text/plain");
RequestBody body = RequestBody.create(mediaType, "");
Request request = new Request.Builder()
  .url("http://localhost:5000/api/Download/GetDownloadStatus")
  .method("GET", body)
  .addHeader("Authorization", "Bearer eyJhb.....")
  .build();
Response response = client.newCall(request).execute();
```

Cash Device REST API Flows

- NV4000 Spectral
- Spectral Payout
- NV22 Spectral
- Banknote Validator
- SMART Coin System
- Twin SMART Coin System
- SMART Hopper

NV4000 Spectral

- NV4000 Spectral - Setup

NV4000 Spectral - Setup

Step	Prerequisites	Host Application	Cash Device REST Server	NV4000 Spectral	Error Handling	Notes & Comments
1	NV4000 Spectral connected to power (24VDC) and communication lines (either USB, TTL, RS232 or opto-isolated)					The NV4000 requires a **peak current of 7.5A** from the power supply. USB connection is recommended for highest communication speed.

Step	Prerequisites	Host Application	Cash Device REST Server	NV4000 Spectral	Error Handling	Notes & Comments
2		Start the ITL CashDevice REST Server	Output versions of CashDeviceRestAPI, ITLCashDevice.dll, ITLComms.dll and URL is listening on			Default URL is http://localhost:5000. The port number can be configured in the serverconfig.json file.

Step	Prerequisites	Host Application	Cash Device REST Server	NV4000 Spectral	Error Handling	Notes & Comments
3	Use default username and password in request body for the first authentication `{ "Username": "admin", "Password": "password" }`	Request a Bearer Token using the Authenticate endpoint Authenticate endpoint url: http://localhost:5000/api/Users/Authenticate Body: `{ "Username": "admin", "Password": "password" }`	Status: 200 (OK) Body: `{ "token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzUzMjUzMjM4LCJleHAiOjE3NTM4NTgwMzgsImlhdCI6MTc1MzI1MzI1MzOCwiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xPR1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVEUE5PTE9HWSJ9.ugYZw6KucLEXswtn1KNXnp0p9K4QhFSnyBlzFgj15Vs" }`		Status: 400 (Bad Request) Body: `{ "message": "Username or password is incorrect" }` Returns a message indicating that username or password is incorrect. Check: username and password in the / Authenticate request body Status: N/A Body: Error: connect ECONNREFUSED http://localhost:5000 Check: URL endpoint is correct and the server is running	

Step	Prerequisites	Host Application	Cash Device REST Server	NV4000 Spectral	Error Handling	Notes & Comments
			Returns a Bearer Token to be used as Authorisation Header for subsequent API calls			
4		Store the Bearer Token for authorisation of subsequent API requests				

Step	Prerequisites	Host Application	Cash Device REST Server	NV4000 Spectral	Error Handling	Notes & Comments
5		Change credentials (optional) for increased security using the UpdateCredentials endpoint UpdateCredentials endpoint url: http://localhost:5000/api/Users/UpdateCredentials Body: `{ "CurrentUsername": "admin", "CurrentPassword": "password", "NewUsername": "<new username>", "NewPassword": "<new password>" }`	Status: 200 (OK) Body: `{ "message": "Credentials updated successfully!" }` Returns a message indicating that the credentials have been updated successfully			Changing the credentials is optional but recommended for increased security. If the credentials are changed then correct user management is essential and needs to be applied to keep the communication between the REST server and the host appli

Step	Prerequisites	Host Application	Cash Device REST Server	NV4000 Spectral	Error Handling	Notes & Comments
						catio n alive.

Spectral Payout

NewEndpointTemplate

Description

Endpoint Description here

Request

Endpoint	**EndpointName**
Method	POST
URL	http://localhost:5000/api/Users/EndpointName
Authorisation	Bearer Token
Headers	Content-Type - application/json
Query Parameter	deviceID (The string value of the field "deviceID" obtained from the response to the OpenConnection request)
Tags	ALL_PRODUCTS NV4000_SPECTRAL SPECTRAL_PAYOUT NV22_SPECTRAL BANKNOTE_VALIDATOR SMART_COIN_SYSTEM TWIN_SMART_COIN_SYSTM SMART_HOPPER WORKFLOW_NAME AUTHENTICATION SECURITY SESSION_INITIALISATION

Body Parameter

NV4000 Spectral

Data Schema - application/json

Field	Object	Behaviour	Required	Description
Username	string	write-only	yes	Username for Authentication. Default: admin
Password	string	read/write	yes	Password for Authentication. Default: password

Example

```
{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}
```

Coming soon

Not applicable

Spectral Payout

Data Schema - application/json

Field	Object	Behaviour	Required	Description
Username	string	write-only	yes	Username for Authentication. Default: admin
Password	string	read/write	yes	Password for Authentication. Default: password

Example

```
{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}
```

Coming soon

Not applicable

NV22 Spectral

Data Schema - application/json

Field	Object	Behaviour	Required	Description
Username	string	write-only	yes	Username for Authentication. Default: admin
Password	string	read/write	yes	Password for Authentication. Default: password

Example

```
{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}
```

Coming soon

Not applicable

Banknote Validator

Data Schema - application/json

Field	Object	Behaviour	Required	Description
Username	string	write-only	yes	Username for Authentication. Default: admin
Password	string	read/write	yes	Password for Authentication. Default: password

Example

```
{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}
```

Coming soon

Not applicable

SMART Coin System

Data Schema - application/json

Field	Object	Behaviour	Required	Description
Username	string	write-only	yes	Username for Authentication. Default: admin
Password	string	read/write	yes	Password for Authentication. Default: password

Example

```
{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}
```

Coming soon

Not applicable

Twin SMART Coin System

Data Schema - application/json

Field	Object	Behaviour	Required	Description

Username	string	write-only	yes	Username for Authentication. Default: admin
Password	string	read/write	yes	Password for Authentication. Default: password

Example

```
{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}
```

Coming soon

Not applicable

SMART Hopper

Data Schema - application/json

Field	Object	Behaviour	Required	Description
Username	string	write-only	yes	Username for Authentication. Default: admin
Password	string	read/write	yes	Password for Authentication. Default: password

Example

```
{
    "Username": "{{Username}}",
    "Password": "{{Password}}"
}
```

Coming soon

Not applicable

Responses

NV4000 Spectral

200 (OK)

Data Schema - application/json

Field	Object	Behaviour	Required	Description

token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


400 (Bad Request)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


Coming soon

Not applicable

Spectral Payout

200 (OK)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
```

```
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


400 (Bad Request)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


Coming soon

Not applicable

NV22 Spectral

200 (OK)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


400 (Bad Request)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


Coming soon

Not applicable

Banknote Validator

200 (OK)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


400 (Bad Request)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example

```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


Coming soon

Not applicable

SMART Coin System

200 (OK)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


400 (Bad Request)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```

Coming soon

Not applicable

Twin SMART Coin System

200 (OK)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


400 (Bad Request)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


Coming soon

Not applicable

SMART Hopper

200 (OK)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


400 (Bad Request)

Data Schema - application/json

Field	Object	Behaviour	Required	Description
token	string	read-only	yes	Bearer Token to include in the Authorisation header for all subsequent API requests.

Example


```
{
    "token":
"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1bmlxdWVfbmFtZSI6ImFkbWluIiwibmJmIjoxNzU3NjY
zMDU3LCJleHAiOjE3NTgyNjc4NTcsImlhdCI6MTc1NzY2MzA1NywiaXNzIjoiSU5OT1ZBVElWRVRFQ0hOT0xP
R1kiLCJhdWQiOiJJTk5PVkFUSVZFVEVDSE5PTE9HWSJ9.d2q6RcqIvZCbEru1UpBuLjbNDLespzT7Gm_ZfqfE
094"
}
```


Coming soon

Not applicable

Code Examples

cURL

NV4000 Spectral

```
curl --location --request POST 'http://localhost:5000/api/Users/Authenticate' \
--header 'Content-Type: application/json' \
--data-raw '{
    "Username": "admin",
```

```
    "Password": "password"
}'
```

Coming soon

Not applicable

Spectral Payout

Coming soon

Not applicable

NV22 Spectral

Coming soon

Not applicable

Banknote Validator

Coming soon

Not applicable

SMART Coin System

Coming soon

Not applicable

Twin SMART Coin System

Coming soon

Not applicable

SMART Hopper

Coming soon

Not applicable

C#

NV4000 Spectral

Coming soon

Not applicable

Spectral Payout

Coming soon

Not applicable

NV22 Spectral

Coming soon

Not applicable

Banknote Validator

Coming soon

Not applicable

SMART Coin System

Coming soon

Not applicable

Twin SMART Coin System

Coming soon

Not applicable

SMART Hopper

Coming soon

Not applicable

NodeJS

NV4000 Spectral

Coming soon

Not applicable

Spectral Payout

Coming soon

Not applicable

NV22 Spectral

Coming soon

Not applicable

Banknote Validator

Coming soon

Not applicable

SMART Coin System

Coming soon

Not applicable

Twin SMART Coin System

Coming soon

Not applicable

SMART Hopper

Coming soon

Not applicable

Python

NV4000 Spectral

Coming soon

Not applicable

Spectral Payout

Coming soon

Not applicable

NV22 Spectral

Coming soon

Not applicable

Banknote Validator

Coming soon

Not applicable

SMART Coin System

Coming soon

Not applicable

Twin SMART Coin System

Coming soon

Not applicable

SMART Hopper

Coming soon

Not applicable

Java

NV4000 Spectral

Coming soon

Not applicable

Spectral Payout

Coming soon

Not applicable

NV22 Spectral

Coming soon

Not applicable

Banknote Validator

Coming soon

Not applicable

SMART Coin System

Coming soon

Not applicable

Twin SMART Coin System

Coming soon

Not applicable

SMART Hopper

Coming soon

Not applicable

JavaScript

NV4000 Spectral

Coming soon

Not applicable

Spectral Payout

Coming soon

Not applicable

NV22 Spectral

Coming soon

Not applicable

Banknote Validator

Coming soon

Not applicable

SMART Coin System

Coming soon

Not applicable

Twin SMART Coin System

Coming soon

Not applicable

SMART Hopper

Coming soon

Not applicable

PHP

NV4000 Spectral

Coming soon

Not applicable

Spectral Payout

Coming soon

Not applicable

NV22 Spectral

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Not applicable

Banknote Validator

Coming soon

Not applicable

SMART Coin System

Coming soon

Not applicable

Twin SMART Coin System

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Not applicable

SMART Hopper

Coming soon

Not applicable