

# iVeri Web API Developers Guide

(Version 1.0.0.7)



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## Revision History

<i>Version</i>	<i>Author</i>	<i>Date</i>	<i>Description</i>
1.0.0.0	M. Barnard	24 July 2013	Initial Draft
1.0.0.1	M. Barnard	7 October 2013	Document updates
1.0.0.2	M. Barnard	8 October 2013	Added steps needed to install Root Certificate
1.0.0.3	E.Kriek	12 January 2014	Added Signature image upload
1.0.0.4	B. Habe	08 May 2017	<ul style="list-style-type: none"><li>• Replaced <a href="https://gateway.iveri.co.za">https://gateway.iveri.co.za</a> with <a href="https://portal.nedsecure.co.za">https://portal.nedsecure.co.za</a></li></ul>
1.0.0.5	B Habe	16-11-2017	<ul style="list-style-type: none"><li>• Removed <a href="https://portal.nedsecure.co.za">https://portal.nedsecure.co.za</a> replaced it with the <a href="https://backoffice.nedsecure.co.za">https://backoffice.nedsecure.co.za</a></li><li>• endpoint</li></ul>
1.0.0.6	B. Habe	14/02/2019	<ul style="list-style-type: none"><li>• Added Gateway endpoint by Acquiring bank</li><li>• Added Sample Code for CNP/ecommerce transactions</li></ul>
1.0.0.7	B Habe	11/06/2019	<ul style="list-style-type: none"><li>• Added the Gateway URL For CIM merchants</li></ul>

## 1.Introduction

The iVeri Web API Developers Guide, deals only with request and response message using the REST API.

To make use of the REST API, a UserGroup, together with user credentials (username and password) are required for the gateway you will be connecting to. This information is usually captured and supplied by the support help desk.

The various parameters (amount, time of transaction, card details etc.) that need to be set when performing a transaction, are returned by the gateway, as well as transaction logic, are dealt with in detail in the **iVeri Client Developers Guide**.

Interaction between the Miura POS device is dealt with in the **iVeri mPress API Developers Guide**

The additional guides can be downloaded from [www.iveri.com](http://www.iveri.com).

## 2. Installing Gateway Root Certificate

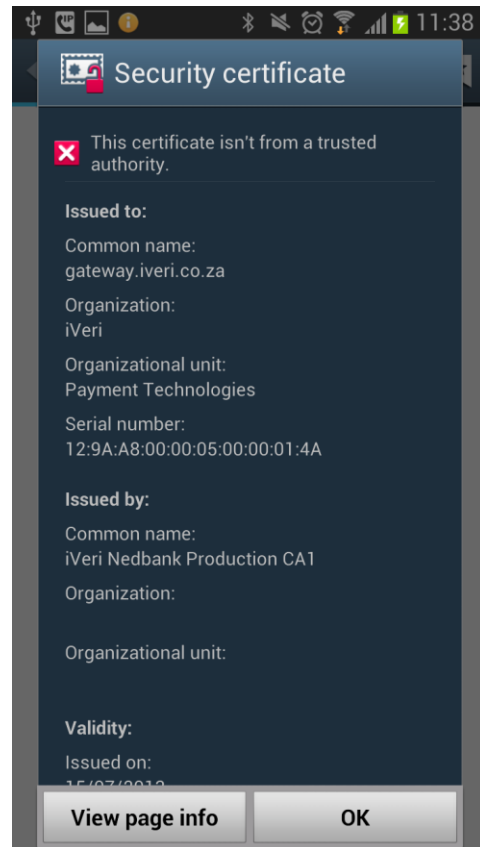
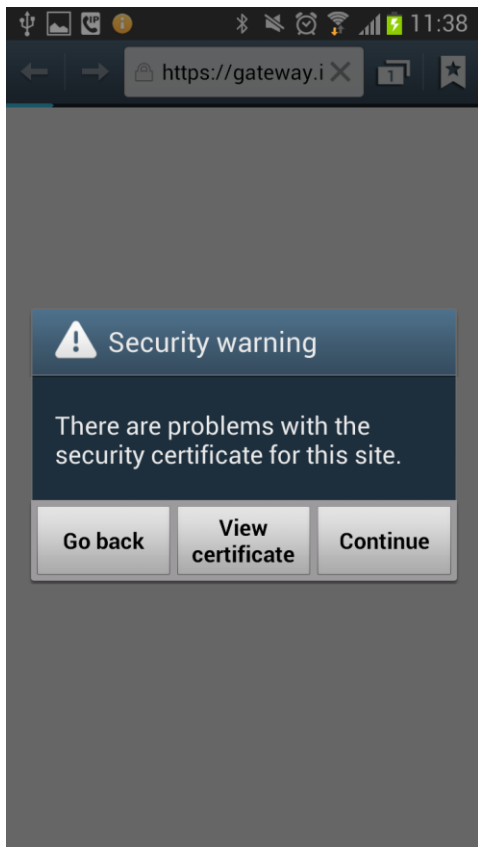
Before using the REST API, you will need to install the root certificate of the gateway onto your device.

For the Nedbank Gateway, <https://backoffice.nedsecure.co.za>, the root certificate “iVeri Root CA” can be downloaded from [http://crl.iveri.com/eccentrix\\_iVeri%20Root%20CA\(5\).crt](http://crl.iveri.com/eccentrix_iVeri%20Root%20CA(5).crt)

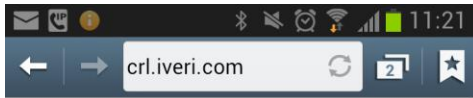
### 2.1 Android

**NB** Installing the iVeri root certificate on your android device will require you to make use of the trusted storage on your device. When enabled you will need to make use of a pin to unlock your device thereafter.

If you do not already have the iVeri root certificate installed on your device, when navigating to the gateway, you will be presented with a Security Warning.



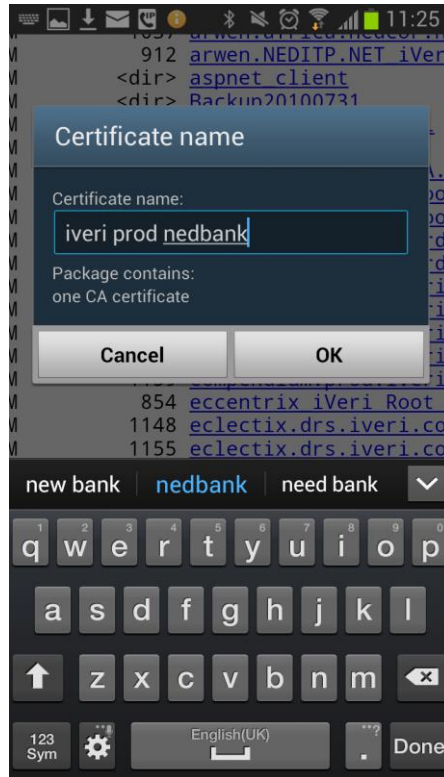
1. Navigate to <http://crl.iveri.com> in your browser, and select the “**eccentrix iVeri Root CA(5).crt**” certificate.



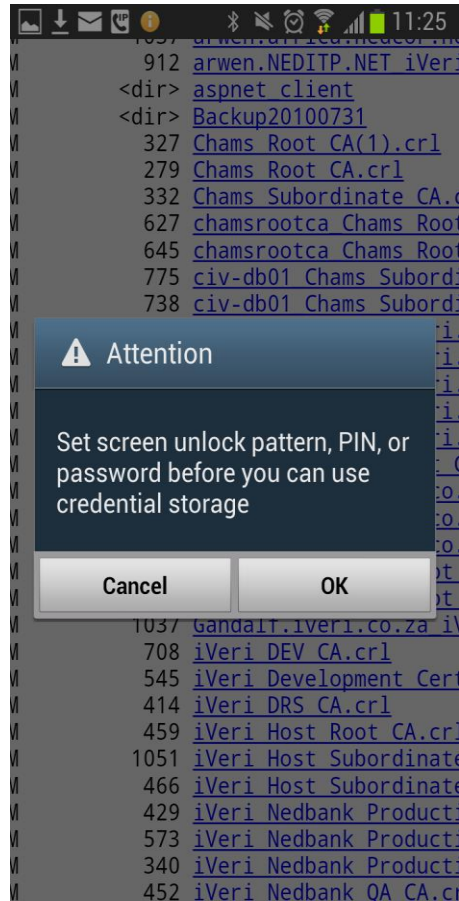
crl.iveri.com - /

Friday, February 17, 2012 10:30 AM	1051	americas.iveri-host-subordinate.crl.crl
Tuesday, February 07, 2012 9:43 AM	1050	americas.iveri-host-subordinate.crl.crl
Monday, February 21, 2011 5:48 PM	1014	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1187	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1187	americas.iveri-host-subordinate.crl.crl
Saturday, September 15, 2007 10:02 PM	1027	americas.iveri-host-subordinate.crl.crl
Friday, August 15, 2008 10:31 AM	1037	americas.iveri-host-subordinate.crl.crl
Tuesday, August 11, 2008 1:41 PM	1037	americas.iveri-host-subordinate.crl.crl
Thursday, July 17, 2008 5:43 PM	1037	americas.iveri-host-subordinate.crl.crl
Tuesday, July 24, 2011 8:57 AM	912	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1187	americas.iveri-host-subordinate.crl.crl
Saturday, November 17, 2012 10:46 PM	912	americas.iveri-host-subordinate.crl.crl
Monday, July 15, 2008 5:20 PM	912	americas.iveri-host-subordinate.crl.crl
Saturday, July 31, 2010 5:53 PM	912	americas.iveri-host-subordinate.crl.crl
Thursday, March 31, 2011 3:51 PM	279	americas.iveri-host-subordinate.crl.crl
Thursday, March 31, 2011 3:51 PM	332	americas.iveri-host-subordinate.crl.crl
Tuesday, February 23, 2010 3:21 PM	621	americas.iveri-host-subordinate.crl.crl
Thursday, March 31, 2011 3:51 PM	621	americas.iveri-host-subordinate.crl.crl
Thursday, March 21, 2011 3:14 PM	775	americas.iveri-host-subordinate.crl.crl
Wednesday, February 24, 2010 2:58 PM	730	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1185	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1185	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1185	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1185	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1185	americas.iveri-host-subordinate.crl.crl
Monday, July 25, 2011 1:29 PM	854	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1188	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1188	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	884	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	884	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	884	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	884	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	884	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	884	americas.iveri-host-subordinate.crl.crl
Friday, February 06, 2013 7:57 AM	1051	americas.iveri-host-subordinate.crl.crl
Thursday, February 07, 2013 9:43 AM	1050	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	429	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	429	americas.iveri-host-subordinate.crl.crl
Saturday, November 17, 2012 10:46 PM	429	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	429	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	429	americas.iveri-host-subordinate.crl.crl
Friday, July 25, 2011 4:14 PM	429	americas.iveri-host-subordinate.crl.crl
Monday, July 25, 2011 1:29 PM	429	americas.iveri-host-subordinate.crl.crl
Friday, July 30, 2010 4:14 PM	429	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1144	americas.iveri-host-subordinate.crl.crl
Monday, February 21, 2011 12:42 PM	900	americas.iveri-host-subordinate.crl.crl
Thursday, February 16, 2011 3:50 PM	900	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	333	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	333	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	333	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	333	americas.iveri-host-subordinate.crl.crl
Wednesday, February 23, 2011 11:00 AM	4547	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	4547	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1153	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1179	americas.iveri-host-subordinate.crl.crl
Tuesday, May 15, 2007 3:09 PM	1143	americas.iveri-host-subordinate.crl.crl

2. You will then be prompted for a name of the certificate.



3. You may be prompted, to configure the lock screen before the certificate is installed. Selecting OK, will take you through the process of configuring your lock screen. If you select CANCEL at this point your certificate will now be installed.



4. After successfully installation of the iVeri root certificate, when navigating back to the gateway website, you will no longer receive the security warning.



5.



### 3. Authorisation Header

The authorisation header must be recalculated and sent on every request. If the token calculated server side does not match the token sent, the client will receive “HTTP Error 401 Unauthorised”.

Authorisation Header:

**Authorisation: Basic usergroup="", username="", timestamp="", token=""**

Usergroup = Backoffice credentials used to login to the backoffice website

UserName = Backoffice credentials used to login to the backoffice website

Timestamp = UTC date time in the format of “yyyyMMddHHmmssfff”(in java this would be “yyyyMMddHHmmssSSS”)

Token =Base64 value, calculation shown below

Calculating the authorisation token:

**c#**

```
MD5 md5Hash = MD5.Create();
SHA256 sha256 = SHA256.Create();
string formattedDateTime = DateTime.UtcNow.ToString("yyyyMMddHHmmssfff");

byte[] urlInBytes = Encoding.UTF8.GetBytes("url");
```

```

byte[] timeStampInBytes = Encoding.UTF8.GetBytes(formattedDateTime);
byte[] hashedPasswordInBytes =
md5Hash.ComputeHash(Encoding.UTF8.GetBytes("password"));

byte[] token = new byte[urlInBytes.Length + timeStampInBytes.Length +
hashedPasswordInBytes.Length];
Buffer.BlockCopy(urlInBytes, 0, token, 0, urlInBytes.Length);
Buffer.BlockCopy(timeStampInBytes, 0, token, urlInBytes.Length, timeStampInBytes.Length);
Buffer.BlockCopy(hashedPasswordInBytes, 0, token, urlInBytes.Length +
timeStampInBytes.Length, hashedPasswordInBytes.Length);

byte[] hashedTokenInBytes = sha256.ComputeHash(token);
string base64Token = Convert.ToBase64String(hashedTokenInBytes);

```

## java

```

MessageDigest md5 = MessageDigest.getInstance("MD5");
md5.update(password.getBytes());
byte[] md5Pass = md5.digest();

DateFormat dateFormat = new SimpleDateFormat("yyyyMMddHHmmssSSS");
dateFormat.setTimeZone(TimeZone.getTimeZone("GMT"));
String formattedDate = dateFormat.format(new Date()); //formatted in UTC/GMT time
byte[] urlDateBytes = (url + formattedDate).getBytes();

byte[] tokenBytes = new byte[md5Pass.length + urlDateBytes.length];
System.arraycopy(urlDateBytes, 0, tokenBytes, 0, urlDateBytes.length);
System.arraycopy(md5Pass, 0, tokenBytes, urlDateBytes.length, md5Pass.length);
MessageDigest sha256 = MessageDigest.getInstance("SHA-256");
sha256.update(tokenBytes);
byte[] tokenHash = sha256.digest();

String token = Base64.encodeToString(tokenHash, Base64.NO_WRAP);

```

## 4. REST Endpoints

On all endpoints the following applies:

- Only GET, POST methods are supported
- JSON formatting of data

Submission of transactions to the correct Gateway endpoint relates to the acquiring bank that holds the merchant agreement. To submit transactions to the iVeri Gateway, merchants can

connect to following end points.

- **Nedbank Merchants:** <https://portal.nedsecure.co.za/>
- **CSC acquiring bank merchants** <https://portal.cscacquiring.com/>
- **CBZ Bank merchants:** <https://portal.host.iveri.com/>
- **I&M Bank merchants:** <https://portal.host.iveri.com/>
- **CIM Merchants** <https://portal.merchant.cim.mu>

## 4.1 Endpoint Overview

`/api/merchant/authenticate`

- HttpMethod: GET
- returns the server UTC datetime formatted as “yyyyMMddHHmssfff”

`/api/merchant/configuration?mode=live|test`

- HttpMethod: GET
- returns the user parameters configured in the BackOffice website.
- Mode is optional. When not specified “live” configuration will be returned

`/api/merchant/bins`

- HttpMethod: GET
- returns the current bin list used by the gateway in determining whether or not to prompt for PIN entry on POS devices when the card service code incorrectly identifies this requirement.

`/api/transactions`

- HttpMethod: POST
- submit transaction to the gateway

`/api/transactions?applicationid={applicationid}`

- HttpMethod: GET
- returns the application transaction history for the last 7 days

`/api/transactions/{requestid}`

- HttpMethod: GET
- returns transaction details for a particular transaction identified by the requestid

`/api/transactions/{requestid}/receipt`

- HttpMethod: POST
- upload cardholder digital signature to the gateway

/api/transactions/{requestid}/receipt

- HttpMethod: GET
- returns the merchantreceipt for a transaction identified by the requested

## 4.2 Endpoints in Detail

### 4.2.1 /api/merchant/authenticate

Returns the current server time, in UTC, formatted as yyyyMMddHHmmssfff. This time can be used to check the client time against that of the server. A deviation of five minutes or less is allowed between the client and server time.

**yyyy** – four-digit year

**MM** – two-digit month

**dd** – two-digit day

**HH** – Hour formatted as 24-Hour time

**mm** – two-digit minutes

**ss** – two-digit seconds

**fff** – current millisecond

Example

Monday, 7<sup>th</sup> October 2013, 17:02:45 PM would be formatted as 20131007150245442.

JSON Response:

```
20131007150245442
```

### 4.2.2 /api/merchant/configuration

Returns the user parameters as configured in the BackOffice website.

The user parameters consist of  
list of applications selected for the user  
list of currencies selected for the user  
list of permissions selected for the user

JSON Response:

```
{
  "Applications": [{
    "Description": "mPress test application",
    "ApplicationID": "1d76a36f-f10e-4388-87f4-4675c78a5511",
    "CertificateID": "4c96973f-71dd-4044-802d-6e234effe8f2",
```

```

        "Mode": "Live"
    },
    {
        "Description": "mPress test application",
        "ApplicationID": "1d76a36f-f10e-4388-87f4-4675c78a5511",
        "CertificateID": "7dcb6189-bfad-414b-b4ed-ea9d5875ea12",
        "Mode": "Live"
    }
},
"Currencies": [{
    "Format": "SCA,.R ",
    "DecimalPlaces": 2,
    "Code": "ZAR"
}],
"Permissions": [{
    "Name": "AUTHORISATION",
    "Allowed": "true"
},
{
    "Name": "REFUND",
    "Allowed": "true"
},
{
    "Name": "SALE",
    "Allowed": "true"
}
]]
}

```

**NB.** If no applications are returned in the response configuration, you will need to contact the administrator of the usergroup and request the necessary configuration changes to be made to the respective user.

#### Application list

You will need to select only one of the applications returned.

The application id, certificate id and mode will be used when performing a transaction to the gateway. The description is returned for display use only and not when performing the transaction

**NB:** You cannot simply switch to mode test using an application id received for mode live. You will need to download the configuration each time you change between test and live.

#### Permissions list

The permissions returned in the list relate to the transaction types that the user can perform using the REST API. If the “Allowed” value for any of the transaction types is set to “false”, that transaction option should not be presented to the user.

In all cases irrespective of the allowed transaction types, the void transaction type is allowed.

### 4.2.3 /api/merchant/bins

Returns the current bin list used by the gateway in determining whether or not to prompt for PIN entry while using a POS device when the card service code incorrectly identifies this requirement.

JSON Response:

```
[[
  {
    "BIN": "201010",
    "IsOnlineOnly": 1,
    "IsPinCard": 2,
    "MaxLength": 20
  },
  {
    "BIN": "225050",
    "IsOnlineOnly": 1,
    "IsPinCard": 2,
    "MaxLength": 20
  },
  {
    "BIN": "3045",
    "IsOnlineOnly": 1,
    "IsPinCard": 2,
    "MaxLength": 20
  }
],]
```

The section “**16.6.4 Determining if a card is PIN based**” of the iVeri Client Developers Guide, describes how the bin list together with the card's service code is used in determining whether or not to prompt for PIN.

A worked example is also provided in the mPress API.

### 4.2.4 /api/transactions

Submit a transaction to the gateway.

**JSON Request:**

*Sample request for an mPress SDK (Card Present) implementation*

```
{
  "Version": "2.0",
  "CertificateID": "{7dcb6189-bfad-414b-b4ed-ea9d5875ea12}",
  "ProductType": "Enterprise",
  "ProductVersion": "mPress",
  "Direction": "Request",
  "Transaction": {
    "ApplicationID": "{1d76a36f-f10e-4388-87f4-4675c78a5511}",
    "Command": "Debit",
    "Mode": "Live",
  }
}
```

```
"MerchantReference": "{11f1167c-9112-46ca-a69d-b0e856271f4b}",
"MerchantTrace": "{76c8813c-09ad-4b48-bbf5-4a4b320d6659}",
"DeviceMake": "Miura",
"DeviceSerialNumber": "02000567",
"EMV_ApplicationIdentifier": null,
"EMV_ApplicationInterchangeProfile": null,
"EMV_ApplicationTransactionCounter": null,
"EMV_ApplicationVersion": null,
"EMV_AuthorisationRequestCryptogram": null,
"EMV_CardHolderVerificationMethodResult": null,
"EMV_CardSequenceNumber": null,
"EMV_CryptogramInformationData": null,
"EMV_IssuerApplicationData": null,
"EMV_TerminalCapabilities": null,
"EMV_TerminalType": null,
"EMV_TerminalVerificationResult": null,
"EMV_UnpredictableNumber": null,
"EMV_TransactionStatusInformation": null,
"Currency": "ZAR",
"KeySerialNumber": "FF ... 14",
"Track2KeySerialNumber": "FF ... 44",
"Track2": "37E ... C155",
"PINBlock": "1F ... 6F",
"Amount": "2500",
"ExpiryDate": "816",
"CardSecurityCode": null
}
}
```

JSON Response:

```
{
  "Version": "2.0",
  "Direction": "Response",
  "Transaction": {
    "MerchantTrace": "76c8813c-09ad-4b48-bbf5-4a4b320d6659",
    "Amount": "2500",
    "AuthorisationCode": "660156",
    "Currency": "ZAR",
    "ExpiryDate": "082016",
    "MerchantReference": "11f1167c-9112-46ca-a69d-b0e856271f4b",
    "Terminal": "11111111",
    "TransactionIndex": "{63D6D3F5-1F1B-46CE-B0EC-AD6F092F51B3}",
    "MerchantName": "iVeri",
    "MerchantUSN": "2169017345",
    "Acquirer": "NedbankPostilion",
    "AcquirerReference": "31008:00660156",
    "AcquirerDate": "20131007",
    "AcquirerTime": "184550",
    "DisplayAmount": "R 25.00",
    "BIN": "504931",
    "Association": "MasterCard",
    "CardType": "Unknown Card Type",
    "Issuer": "Unknown Issuer",
    "Jurisdiction": "Local",
    "PANMode": "Swiped,PIN,EncryptedTrack2",
    "ReconReference": "00660156",
    "CardHolderPresence": "CardPresent",
    "MerchantAddress": "MERCHANT ADDRESS",
    "MerchantCity": "Johannesburg",
    "MerchantCountryCode": "ZA",
    "MerchantCountry": "South Africa",
    "ApplicationID": "{1D76A36F-F10E-4388-87F4-4675C78A5511}",
    "Command": "Debit",
    "Mode": "Live",
    "RequestID": "{A832F735-9A17-429D-8C82-46C833271D31}",
    "Result": {
      "Status": "0",
      "AppServer": "QAGW2012APP1",
      "DBServer": "QAGW2012DB1",
      "Gateway": "QA"
    },
    "PAN": "5049.....0023"
  }
}
```



## JSON Request:

*Sample request for an eCommerce/CNP transaction*

```
{
  "Version": "2.0",
  "CertificateID": "{7dcb6189-bfad-414b-b4ed-ea9d5875ea12}",
  "ProductType": "Enterprise",
  "ProductVersion": "mPress",
  "Direction": "Request",
  "Transaction": {
    "ApplicationID": "{1d76a36f-f10e-4388-87f4-4675c78a5511}",
    "Command": "Debit",
    "Mode": "Live",
    "MerchantReference": "{11f1167c-9112-46ca-a69d-b0e856271f4b}",
    "MerchantTrace": "{76c8813c-09ad-4b48-bbf5-4a4b320d6659}",
    "Currency": "ZAR",
    "Amount": "2500",
    "ExpiryDate": "816",
    "CardSecurityCode": null,
    "PAN": "4242424242424242"
  }
}
```

JSON Response:

```
{
  "Version": "2.0",
  "Direction": "Response",
  "Transaction": {
    "MerchantTrace": "76c8813c-09ad-4b48-bbf5-4a4b320d6659",
    "Amount": "2500",
    "AuthorisationCode": "660156",
    "Currency": "ZAR",
    "ExpiryDate": "082016",
    "MerchantReference": "11f1167c-9112-46ca-a69d-b0e856271f4b",
    "Terminal": "11111111",
    "TransactionIndex": "{63D6D3F5-1F1B-46CE-B0EC-AD6F092F51B3}",
    "MerchantName": "iVeri",
    "MerchantUSN": "2169017345",
    "Acquirer": "NedbankPostilion",
    "AcquirerReference": "31008:00660156",
    "AcquirerDate": "20131007",
    "AcquirerTime": "184550",
    "DisplayAmount": "R 25.00",
    "BIN": "504931",
    "Association": "MasterCard",
    "CardType": "Unknown Card Type",
    "Issuer": "Unknown Issuer",
    "Jurisdiction": "Local",
    "PANMode": "Swiped,PIN,EncryptedTrack2",
    "ReconReference": "00660156",
    "CardHolderPresence": "CardPresent",
    "MerchantAddress": "MERCHANT ADDRESS",
    "MerchantCity": "Johannesburg",
    "MerchantCountryCode": "ZA",
    "MerchantCountry": "South Africa",
    "ApplicationID": "{1D76A36F-F10E-4388-87F4-4675C78A5511}",
    "Command": "Debit",
    "Mode": "Live",
    "RequestID": "{A832F735-9A17-429D-8C82-46C833271D31}",
    "Result": {
      "Status": "0",
      "AppServer": "QAGW2012APP1",
      "DBServer": "QAGW2012DB1",
      "Gateway": "QA"
    },
    "PAN": "4242.....4242"
  }
}
```

#### 4.2.5 /api/transactions?applicationid={applicationid}

Returns the application transaction history for the last 7 days.  
The JSON Response is a list of transaction responses.

#### 4.2.6 /api/transactions/{requestid}

Returns transaction details for a particular transaction identified by the requestid.

JSON Response:

```
{
  "Version": "2.0",
  "Direction": "Response",
  "Transaction": {
    "MerchantTrace": "76c8813c-09ad-4b48-bbf5-4a4b320d6659",
    "Amount": "2500",
    "AuthorisationCode": "660156",
    "Currency": "ZAR",
    "ExpiryDate": "082016",
    "MerchantReference": "11f1167c-9112-46ca-a69d-b0e856271f4b",
    "Terminal": "11111111",
    "TransactionIndex": "{63D6D3F5-1F1B-46CE-B0EC-AD6F092F51B3}",
    "MerchantName": "iVeri",
    "MerchantUSN": "2169017345",
    "Acquirer": "NedbankPostilion",
    "AcquirerReference": "31008:00660156",
    "AcquirerDate": "20131007",
    "AcquirerTime": "184550",
    "DisplayAmount": "R 25.00",
    "BIN": "504931",
    "Association": "MasterCard",
    "CardType": "Unknown Card Type",
    "Issuer": "Unknown Issuer",
    "Jurisdiction": "Local",
    "PANMode": "Swiped,PIN,EncryptedTrack2",
    "ReconReference": "00660156",
    "CardHolderPresence": "CardPresent",
    "MerchantAddress": "MERCHANT ADDRESS",
    "MerchantCity": "Johannesburg",
    "MerchantCountryCode": "ZA",
    "MerchantCountry": "South Africa",
    "ApplicationID": "{1D76A36F-F10E-4388-87F4-4675C78A5511}",
    "Command": "Debit",
    "Mode": "Live",
    "RequestID": "{A832F735-9A17-429D-8C82-46C833271D31}",
    "Result": {
      "Status": "0",
      "AppServer": "QAGW2012APP1",
    }
  }
}
```

```
        "DBServer": "QAGW2012DB1",
        "Gateway": "QA"
    },
    "PAN": "5049.....0023"
}
}
```

#### [4.2.7 /api/transactions/{requestid}/receipt](#)

Upload a Cardholder signature to be added to a MerchantReceipt linked to a transaction identified by the requestid.

JSON Request:

```
{
  "Version": "2.0",
  "CertificateID": "{7dcb6189-bfad-414b-b4ed-ea9d5875ea12}",
  "Direction": "Request",
  "Enquiry": {
    "ApplicationID": "{1d76a36f-f10e-4388-87f4-4675c78a5511}",
    "Command": "Debit",
    "RequestID": "{A832F735-9A17-429D-8C82-46C833271D31}",
    "CardholderName": "Russel King",
    "SignatureImageFormat": "jpeg",
    "SignatureImage": "hexified image data"
  }
}
```