API Documentation

South African Drivers Licenses Decoder and ID Verification service

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Contents

1. Change Control

Version	Date	Status	Change Description
1	2015-07-26	Created	Document Created
1	2015-07-31	Updated	Add Base64 Code Instructions

2. Definitions

Terms	Definitions
XML	Extensible Markup Language
JSON	JavaScript Object Notation
HTTP	Hypertext Transfer Protocol
REST	REpresentational State Transfer
POST	POST request method
GET	GET request method

3. Document Overview

This document serves as technical guide to allow 3rd parties to access VerifyID's South African Drivers License Decoder and ID Verification service. This is done by accessing a REST web service interface over a secure HTTP.

The South African Drivers License Decoder and ID Verification service enables a user to submit a encrypted 2D barcode scanned from the back of a South African Drivers License and send it to our service and in return the user will receive the following information:

1. All Related information pertaining to the Drivers license including the photo
2. All Verified Home affairs information concerning the ID Number on the drivers license

Note that this is not a free service and all transactions must be considered billable. To activate the service please contact VerifyID's Integration Team for more information.

4. Service Setup Requirements

Please contact VerifyID's Integration Team for more details on the requirements for activating this service.

5. Service Methods

The following 3 methods are exposed via the service:

Method Name	Description
my_credits	Used to get amount of credits available on system
authenticate	Used to authenticate to service and get api_key
sadl_decode	Used to decode the SADL and get ID Verification

Important - take note (Photo)

In the response from the sadl_decode function is the photo on the SA Drivers License this is in the format of a jpg and has been url encoded and BASE64 encode, you will need to decode first the URL encode and then decode the BASE64 encode. Once you have done this you can place the content into a file and call it something.jpg to view it.

Please also note that when sending the License scan it must be Base64 Encoded with URL Safe.

Php Code: rtrim(strtr(base64_encode($data), '+/', '-_'), '=');

JAVA Code : byte[] b64data = Base64.encodeBase64URLSafe(binaryData);

C# : base64 = base64.PadRight(base64.Length + (4 - base64.Length % 4) % 4, '=');

6. Service Interface

REST (REpresentational State Transfer) is an architectural style, and an approach to communications that is often used in the development of Web services. The use of REST is often preferred over the more heavyweight SOAP (Simple Object Access Protocol) style because REST does not leverage as much bandwidth, which makes it a better fit for use over the Internet.

Web Service URL
http://www.verifyid.co.za/webservice/{function}?{variables=parameters}

7. Service request

Each function can be called via the web service with a REST POST method, each function will then return either a JSON response or an XML response according to the application type set in the header of the request.

7.1 my_credits function call

Web Service URL
http://www.verifyid.co.za/webservice/my_credits
POST Variable : api_key

7.2 authenticate function call

Web Service URL
http://www.verifyid.co.za/webservice/authenticate
POST Variables : email_address and password

7.3 sadl_decode function call

Web Service URL
http://www.verifyid.co.za/webservice/sadl_decode
POST Variables : api_key and license

8. Service Response

All function within this web service will respond in one of two ways,

- Success
- Failure

In the event of a Successful query the result will contain two main records.

- Status
- Result

The Result will contain all data corresponding to the giving function call

In the event of a Unsuccessful query the result will also contain two main records

- Status
- Error

The Error will contain the reason for Failure

8.1 JSON Response

JSON Unsuccessful Response


```
{
    "Status": "Failure",
    "Error": "Your Email Address or Password was blank, please try again"
}
```


JSON Successful Response


```
{
    "Status": "Success",
    "Result": {
        "Id": "i2",
        "DateOfBirth": "1979-05-01T00:00:00",
        "DocumentNumber": "40360002HJSL",
        "DocumentType": "SADL",
        "FirstNames": "",
        "FullName": "",
        "Gender": "Male",
        "Initials": "P",
        "IssueCountry": "ZA",
        "IssuePlace": "ZA",
        "LastName": "CSAPLAR",
        "MiddleNames": "",
        "PersonIdentificationNumber": "7905015312088",
        "ValidFrom": "2012-08-03T00:00:00",
        "ValidTo": "2017-09-07T00:00:00",
        "DriversLicenseType": 2,
        "IssueNumber": 1,
        "PermitCategories": "-",
        "PermitValidTo": "0001-01-01T00:00:00",
        "Restrictions": "0",
        "VehicleCode": {
            "string": ["EB", "-", "-", "-"]
        },
```


```
        "VehicleFirstIssue": {
            "dateTime": ["2002-05-21T00:00:00", "0001-01-01T00:00:00", "0001-01-01T00:00:00", "0001-01-01T00:00:00"]
        },
        "VehicleRestriction": {
            "string": ["0", "-", "-", "-"]
        },
        "PhotoJPG":",
        "IDVerification": {
            "Result": {
                "Status": "ID Number Valid",
                "Verification": {
                    "Firstnames": "PHILIP ",
                    "Lastname": ["CSAPLAR"],
                    "Dob": "1979-05-01",
                    "Age": 36,
                    "Gender": "Male",
                    "Citizenship": "South African",
                    "DateIssued": ["1997-07-25T00:00:00+02:00"]
                }
            }
        }
    }
}
```

8.2 XML Response

XML Unsuccessful Response

```
<?xml version="1.0" encoding="UTF-8"?>
<xml>
  <Status>Failure</Status>
  <Error>Users Password is incorrect. Please contact support..</Error>
</xml>
```

XML Successful Response


```
<?xml version="1.0" encoding="UTF-8"?>
<xml>
  <Status>Success</Status>
  <Result>
    <Id>i2</Id>
    <DateOfBirth>1979-05-01T00:00:00</DateOfBirth>
    <DocumentNumber>40360002HJSL</DocumentNumber>
    <DocumentType>SADL</DocumentType>
    <FirstNames />
    <FullName />
    <Gender>Male</Gender>
    <Initials>P</Initials>
    <IssueCountry>ZA</IssueCountry>
    <IssuePlace>ZA</IssuePlace>
    <LastName>CSAPLAR</LastName>
    <MiddleNames />
    <PersonIdentificationNumber>7905015312088</PersonIdentificationNumber>
    <ValidFrom>2012-08-03T00:00:00</ValidFrom>
    <ValidTo>2017-09-07T00:00:00</ValidTo>
    <DriversLicenseType>2</DriversLicenseType>
    <IssueNumber>1</IssueNumber>
    <PermitCategories>-</PermitCategories>
    <PermitValidTo>0001-01-01T00:00:00</PermitValidTo>
    <Restrictions>0</Restrictions>
    <VehicleCode>
      <string>
```


```
      <item>EB</item>
      <item>-</item>
      <item>-</item>
      <item>-</item>
    </string>
  </VehicleCode>
  <VehicleFirstIssue>
    <dateTime>
      <item>2002-05-21T00:00:00</item>
      <item>0001-01-01T00:00:00</item>
      <item>0001-01-01T00:00:00</item>
      <item>0001-01-01T00:00:00</item>
    </dateTime>
  </VehicleFirstIssue>
  <VehicleRestriction>
    <string>
      <item>0</item>
      <item>-</item>
      <item>-</item>
      <item>-</item>
    </string>
  </VehicleRestriction>
  <PhotoJPG></PhotoJPG>
```


```
    <IDVerification>
      <Result>
        <Status>ID Number Valid</Status>
        <Verification>
          <Firstnames>PHILIP</Firstnames>
          <Lastname>
            <item>CSAPLAR</item>
          </Lastname>
          <Dob>1979-05-01</Dob>
          <Age>36</Age>
          <Gender>Male</Gender>
          <Citizenship>South African</Citizenship>
          <DateIssued>
            <item>1997-07-25T00:00:00+02:00</item>
          </DateIssued>
        </Verification>
      </Result>
    </IDVerification>
  </Result>
</xml>
```


9. Error Codes

- S01 - Successful Transaction
- II02 - Unsuccessful Transaction

10. PHP Example Code

```
<?php
    //file
    $file = 'barcode_encrypted.txt';
    //Get File_contents (This Content will be as if a Scanner had sent a Byte Array)
    $content = file_get_contents($file);
    //now we base64 encode the content with URL_safe  to send to REST Services
    $encoded_license = rtrim(strtr(base64_encode($content , '+/', '-_'), '=');


    //Now we Call the REST service, first we Authenticate and get our API Key (Session Key))


    $ch = curl_init();
    $curlConfig = array(
        CURLOPT_URL            => "http://www.verifyid.co.za/webservice/authenticate",     //    this is the address to be called
        CURLOPT_POST           => true,
        CURLOPT_RETURNTRANSFER => true,
        CURLOPT_HTTPHEADER     => array(
                        'Accept: application/json' //change to application/xml for xml output
                        ),
        CURLOPT_POSTFIELDS     => array(
            'email_address'         => 'philip@osit.co.za', //Your website login email address goes here
            'password'              => 'red1q2w3e4rhat' // Your website login password goes here
        )
    );
```

```
curl_setopt_array($ch, $curlConfig);
$result = curl_exec($ch);

curl_close($ch);
$result = json_decode($result, true);

if($result['Status'] == "Success"){
    //Now we can make the call to decode the SADL and get the ID Number Verification back

    $api_key = $result['Result']['API_KEY'];

    $ch1 = curl_init();
    $curlConfig1 = array(
        CURLOPT_URL            => "http://www.verifyid.co.za/webservice/sadl_decode", //    this is the address to be called
        CURLOPT_POST           => true,
        CURLOPT_HTTPHEADER     => array(
                    'Accept: application/json' //change to application/xml for xml output
                    ),
        CURLOPT_RETURNTRANSFER => true,
        CURLOPT_POSTFIELDS     => array(
          'api_key'              => $api_key,
          'license'              => $encoded_license
        )
    );

    curl_setopt_array($ch1, $curlConfig1);
    $result1 = curl_exec($ch1);

    curl_close($ch1);
```

```
    $result1 = json_decode($result1, true);
    //echo out returned array
    echo '<pre>' . print_r($result1, true) . '</pre>';
    //Undecode the urlencoding and the base64 encoding
    $decoded_photo = urldecode($result1['Result']['PhotoJPG']);
    $decoded_photo = base64_decode($decoded_photo);
    file_put_contents($result1['Result']['PersonIdentificationNumber'].'.jpg', $decoded_photo);
    echo '<img src="'.$result1['Result']['PersonIdentificationNumber'].'.jpg" />';

}else{
    echo $result['Error'];
}
```