



Veri-fy API Specification v1.1

Version 1.1

Date 13 February 2008

Changes 1.1 – DG – Add county element to postoffices.
1.1 – DG – Allow multiple formUsage elements for each form.

1. Introduction

This document is intended for 3rd party developers wishing to integrate their products with the Veri-fy system.

It details the format and structure of the Veri-fy XML API to assist developers to integrate Veri-fy data into their own systems.

2. Scope of the API

Version 1.0 of the Veri-fy API allows third party developers to request and receive details of Veri-fy form usage. Each request must either specify a list of unique barcodes, or provide two dates to find all form usage between.

3. Using the API

All Veri-fy API requests must be made as a post body via HTTPS, to:

<https://www.veri-fy.co.uk/servlet/API>

Any request not made via HTTPS will be rejected, and an error response will be returned. The request and response DTDs, are located on the Veri-fy website:

http://www.veri-fy.co.uk/dtd/form-request-v1_0.dtd

http://www.veri-fy.co.uk/dtd/form-response-v1_0.dtd

3.1. Staged URL

A staging URL is available to test this system this can be found at:

<http://verify.eleventeenth.com/servlet/API>

4. Authentication

Every API request must contain authentication for the company to be queried. If the username or password is not matched then an error will be returned.

5. Date fields

All date fields must be in the standard format of YYYYMMDD, e.g. "20080213".

6. Form responses

If a form is requested by barcode, there will always be an entry in the response for that form. If Veri-fy hold no usage details for that form, it will be an empty form element.

```
<form barcode="123456789012345678"/>
```

If Veri-fy do have form usage details, the form element will contain a complete formUsage element(see examples). In some circumstances each form can be used more than once, so each <form> element can contain multiple <formUsage> elements.

7. Error codes

If there is an error processing the request an error response will be returned. This will provide an error code, and a description of the problem. The following error codes are defined:

7.1. Error 400 – Bad Request

The request was invalid XML or did not match the Veri-fy request DTD.

7.2. Error 401 – Authentication Failed

The username or password was incorrect.

7.3. Error 403 – HTTPS must be used

The request was made via HTTP not HTTPS.

7.4. Error 500 – Internal Server Error

The Veri-fy server encountered an unexpected error. The error message will give more details.

8. Request DTD

```
<!ELEMENT request (auth, (forms|dateQuery))>
<!ATTLIST request
  type (formQuery|dateQuery) #REQUIRED
>
<!ELEMENT auth EMPTY>
<!ATTLIST auth
  username CDATA #REQUIRED
  password CDATA #REQUIRED
>
<!ELEMENT forms (form+)>
<!ELEMENT form EMPTY>
<!ATTLIST form
  barcode CDATA #REQUIRED
>
<!ELEMENT dateQuery EMPTY>
<!ATTLIST dateQuery
  dateFrom CDATA #REQUIRED
  dateTo CDATA #REQUIRED
>
```

9. Response DTD

```
<!ELEMENT response (error? | forms)>
<!ATTLIST response
  type (forms|error) #REQUIRED
>
<!ELEMENT error (#PCDATA)>
<!ATTLIST error
  code CDATA #REQUIRED
>
<!ELEMENT forms (form*)>
<!ELEMENT form (formUsage*)>
<!ATTLIST form
  barcode CDATA #REQUIRED
>
<!ELEMENT formUsage (postoffice?,extraDetails?)>
<!ATTLIST formUsage
  postOfficeCounterDate CDATA #REQUIRED
>
<!ELEMENT postoffice
(postOfficeName?,streetAddress1?,streetAddress2?,streetAddress3?,townCity?,postcode?)>
<!ATTLIST postoffice
  postOfficeCode CDATA #REQUIRED
>
<!ELEMENT postOfficeName (#PCDATA)>
<!ELEMENT streetAddress1 (#PCDATA)>
<!ELEMENT streetAddress2 (#PCDATA)>
<!ELEMENT streetAddress3 (#PCDATA)>
<!ELEMENT townCity (#PCDATA)>
<!ELEMENT postcode (#PCDATA)>
<!ELEMENT county (#PCDATA)>
<!ELEMENT extraDetails (#PCDATA)>
```

10.Request example 1 (barcode list)

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE request SYSTEM "http://www.veri-fy.co.uk/dtd/form-request-v1_0.dtd">
<request type="formQuery">
<auth username="user" password="password"/>
<forms>
  <form barcode="123456789012345678"/>
  <form barcode="123456789012345679"/>
  <form barcode="123456789012345670"/>
</forms>
</request>
```

11.Request example 2 (date query)

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE request SYSTEM "http://www.veri-fy.co.uk/dtd/form-request-v1_0.dtd">
<request type="dateQuery">
  <auth username="user" password="password"/>
  <dateQuery dateFrom="20080201" dateTo="20080208"/>
</request>
```


12. Response example 1 (multiple forms)

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE response SYSTEM "http://www.veri-fy.co.uk/dtd/form-response-v1_0.dtd">
<response type="forms">
  <forms>
    <form barcode="123456789012345678">
      <formUsage postOfficeCounterDate="20080211">
        <postoffice postOfficeCode="0022268">
          <postOfficeName>Some post office</postOfficeName>
          <streetAddress1>1 some street</streetAddress1>
          <streetAddress2/>
          <streetAddress3/>
          <townCity>Sometown</townCity>
          <county>Some County</county>
          <postcode>S01 2NE</postcode>
        </postoffice>
        <extraDetails/>
      </formUsage>
    </form>
    <form barcode="123456789012345679">
      <formUsage postOfficeCounterDate="20080210">
        <postoffice postOfficeCode="0022269">
          <postOfficeName>Other post office</postOfficeName>
          <streetAddress1>2 another street</streetAddress1>
          <streetAddress2/>
          <streetAddress3/>
          <townCity>Sometown</townCity>
          <county>Some County</county>
          <postcode>S01 2NF</postcode>
        </postoffice>
        <extraDetails/>
      </formUsage>
    </form>
    <form barcode="123456789012345670">
      <formUsage postOfficeCounterDate="20080209">
        <postoffice postOfficeCode="0022268">
          <postOfficeName>Some post office</postOfficeName>
          <streetAddress1>1 some street</streetAddress1>
          <streetAddress2/>
          <streetAddress3/>
          <townCity>Sometown</townCity>
          <county>Some County</county>
          <postcode>S01 2NE</postcode>
        </postoffice>
        <extraDetails/>
      </formUsage>
    </form>
  </forms>
</response>
```

13. Response example 2 (No usage details)

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE response SYSTEM "http://www.veri-fy.co.uk/dtd/form-response-v1_0.dtd">
<response type="forms">
  <forms>
    <form barcode="123456789012345678"/>
    <form barcode="123456789012345679"/>
    <form barcode="123456789012345670"/>
  </forms>
</response>
```

14. Response Example 3 (error)

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE response SYSTEM "http://www.veri-fy.co.uk/dtd/form-response-v1_0.dtd">
<response type="error">
<error code="401">The username or password was incorrect.</error>
</response>
```