CraftyPostcode

A-Z Overview

v 1.1

craftyclicks.co.uk

Anatomy of a Post Code

The UK has a very advanced postcode system developed by the Royal Mail. Each postcode identifies a small number of delivery points – 15 on average. This means that an exact address can be located given the postcode and a street or house number only.

The postcode is an essential part of the address and allows for very efficient sortation of mail. It has also increasingly found an application in speeding up address capture – capturing a postcode and a street number is much faster and more accurate than spelling or typing out the full address.

Each postcode consists of between 5 and seven letters and is broken down into two parts – the out code and the in code.

Anatomy of an Address

The Royal Mail implements so called 'Flexible Addressing'. To ensure proper routing of a mail item the address MUST include:

1. Some delivery point identification – eg. combination of: house name, number, business name, street name etc.
2. Post town
3. Postcode

Any additional information can be included but will most likely be ignored for mail sorting purposes.

Royal Mail Postal Address File (PAF)

The Royal Mail is in a unique position and is the only organisation in the UK capable of maintaining an accurate database of all postal delivery points. Their PAF database is the only reliable method of translating postcodes into correct addresses. Royal Mail makes the PAF data available through a network of authorised resellers.

Each month there are thousands of updates to the PAF – new houses are built, new businesses start up, postal areas are sometimes re-coded, etc.

For each postcode the PAF database holds the following information:

1. Post Town - always present
2. Locality - optional
3. Dependent Locality - optional, only present if Locality is present
4. Thoroughfare (street name) – optional
5. Dependent Thoroughfare - optional, only present if Thoroughfare is present
6. Street Number - optional, only present if Thoroughfare is present
7. House Name - optional
8. Sub House Name - optional, only present if House Name is present
9. PO Box Number – optional
10. Organisation & Department Name – optional

Address Web Forms

A surprising amount of research goes into perfecting the layout and usability of web forms. The consensus on principles for constructing good web forms seems to be:

1. Make it quick – auto complete where possible
2. Capture only the information you really need
3. Layout for maximum clarity

The aim is to make life as easy as possible for website visitors. Unnecessary keystrokes cost time and effort. E-commerce is supposed to be all about saving time!

In the UK the postcode system offers the option of having the ultimate in auto completion. Visitors should only need to provide a postcode and then be offered a selection of addresses to choose from.

We think the case is very clear for having some kind of address finder / postcode lookup functionality to assist visitors in address entry on a website.

Keeping flexible addressing in mind, we think that an address web form in UK should consists of:

1. Address line 1 (required)
2. Address line 2 (optional)
3. Address line 3 (very optional) - if you have the space to spare.
4. Town (required)
5. Postcode (required)

Address lines 1 – 3 should contain at least 2 or more of the optional PAF fields. Some addresses will easily fit on one line, but some rural addresses may look better if split across two or three lines.

This information is sufficient to accurately deliver a shipment. Making any more information a requirement is unnecessary and should be avoided in our opinion. The county name, for example, is completely ignored by Royal Mail. In many parts of the UK county names are ambiguous and sometimes even contentious.

Address Finder / Postcode Lookup Basics

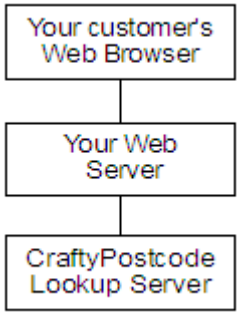
Once you decide to add address finder / postcode lookup functionality to your website the next step is to decide how you would like your customers to use it. There are many possible ways, and you can come up with your own version. Broadly there are two flavours:

1. Enter postcode → click button → select address from a list → confirm/edit if needed
2. Enter house name/number, enter postcode → click button → confirm/edit if needed

The first option has the benefit of fewer keystrokes required. The second could potentially be faster, but if the house name or number cannot be matched a full list may still need to be displayed.

CraftyPostcode Technology

At the heart of CraftyPostcode is a lookup server. Client servers connect to the CraftPostcode server over HTTP.



Your customers are not aware that the data is provided by a 3rd party. All information is relayed via your own server and is 100% integrated into your website.

When you sign up for an account with CraftyClicks, you will be given an access token. This token is used when communicating with our lookup server.

When your customers' enter a postcode it is passed on to our lookup server as a GET request over HTTP. We then return a list of addresses in an XML message.

The XML format can be consumed by any programming language of your choice.

Evaluating and Integrating CraftyPostcode

For the purpose of evaluation and integration we allow free access to our lookup server. We only restrict the number of different postcodes that can be used to 5 per day. There is no limit on the total number of lookups as long as only 5 different postcodes are used.

To make use of this free access, simply sign up for an account at:

www.craftyclicks.co.uk/myaccount?task=register.

An access token will be automatically generated for you.

Feel free to modify any of our sample code to fit your needs or, if you prefer, you can start from scratch. If you need assistance at any stage, we are only an email away – support@craftyclicks.co.uk.

Your CraftyClicks Account

Once you are happy with the integration you will need to buy credits for your account before launching the address finder functionality on a live site.

Access Token

When you sign up for the first time an access token will be generated for you. You can get your token at any time by logging into the MyAccount section of our website.

The access token is needed to authorise connections to our lookup server.

Credits and Credit Packs

Every time a properly formatted postcode is submitted to our server, one credit is used up. Credits must be bought in advance.

Credits are sold in packs of various sizes to suit any usage level. For up to date pricing please visit our website.

Credit packs expire after one year of first being used. If you buy more than one credit pack, only

one of them will be considered 'active' and the time will not be counting on others.

You can check your current usage and remaining credit packs by logging into the MyAccount section on our website.

Reminder Trigger Levels and Auto Topup

In the MyAccount section of our website you can set up two trigger levels. We will send you reminder emails when the available credits on your account fall below these levels. You can then visit our website to purchase additional credits.

There is also an option to set up Auto Topup. You will have the chance to set this up during the check out process and it can be cancelled at any time.

We will keep your card details and automatically buy your chosen credit pack when your available credits drop below the 2nd trigger level. Please note that we NEVER save your card's CVV number. Your other card details are stored on a secure server.

If you wish, you can erase your card details at any time. However, if you do so, Auto Topup will not be possible until you manually buy more credits on our website.

It is important that we have your correct email address at all times and that the trigger levels are set to sensible values to prevent your account from running out of credits.

Revision History

v 1.1 (24/11/2008)

- updated the description of how an evaluation access token is created and used.

v 1.0 – initial release.