### Postcode Address Search

services.3xsoftware.co.uk/Search/ByPostcode/{Format}?username={Username}&key={Key}&postcode={postcode}
e}[&callback={Callbackfuncname}]

Parameter Key

Format = JSON or XML

**Username** = Postcode Username

Key = Postcode Key

Postcode=Postcode Search String

CallBackFunctionName = Function Called to Process Returned Address Data

This returns an array of Summary objects with Our 'Address ID', 'StreetAddress' and 'Place'.

### An example Postcode Address Search using JSON is detailed below:

http://services.3xsoftware.co.uk/Search/ByPostcode/json?username=uuuuuuu&key=xxxx-xxxx-xxxx &postcode=11298ht&callback=yourCallbackFunctionName

```
vourCallbackFunctionName({"Summaries":[{"Id":14668457,"StreetAddress":"3X Software Ltd","Place":"23
Princes Drive Colwyn Bay"), {"Id":14668460, "StreetAddress": "Aslets The Letting Agents Ltd", "Place": "23 Princes Drive Colwyn Bay"}, {"Id":14668449, "StreetAddress": "Barclays Bank Plc", "Place": "Raymond Court
Princes Drive Colwyn Bay"}, {"Id":14668444, "StreetAddress": "Clybiau Plant Cymru Kids Clubs", "Place": "19
Princes Drive Colwyn Bay"}, {"Id":14668459, "StreetAddress": "Curvasure Ltd", "Place": "23 Princes Drive Colwyn
Bay"},{"Id":14668455,"StreetAddress":"D I P","Place":"13 Princes Drive Colwyn
Bay"}, ("Id":14668453, "StreetAddress": "Emmanuel Solicitors", "Place": "25 Princes Drive Colwyn
Bay"},{"Id":14668447,"StreetAddress":"Evans Wolfenden Partnership Llp","Place":"27 Princes Drive Colwyn
Bay"},{"Id":14668441,"StreetAddress":"Flat 1","Place":"15 Princes Drive Colwyn Bay"},{"Id":14668461,"StreetAddress":"Flat 2","Place":"15 Princes Drive Colwyn
Bay"},{"Id":14668462,"StreetAddress":"Flat 3","Place":"15 Princes Drive Colwyn
Bay"}, {"Id":14668452, "StreetAddress": "Glyn Owen & Co", "Place": "25 Princes Drive Colwyn
Bay"}, {"Id":14668458, "StreetAddress":"Jackson Accounting Ltd", "Place":"23 Princes Drive Colwyn
Bay"},{"Id":14668451,"StreetAddress":"Manor Service Station Ltd","Place":"Princes Drive Colwyn Bay"},{"Id":14668448,"StreetAddress":"Mark Roberts Environmental","Place":"27 Princes Drive Colwyn
Bay"},{"Id":14668442,"StreetAddress":"Mcintyre & Daughters Ltd","Place":"Alliance House 21 Princes Drive
Colwyn Bay"}, {"Id":14668456, "StreetAddress": "Nacro", "Place": "13 Princes Drive Colwyn
Bay"},{"Id":14668454,"StreetAddress":"Quality Solicitors Edward Hughes","Place":"25 Princes Drive Colwyn Bay"},{"Id":14668446,"StreetAddress":"Ravenscroft Homes N W Ltd","Place":"27 Princes Drive Colwyn Bay"},{"Id":14668443,"StreetAddress":"T Brackstone & Co","Place":"19 Princes Drive Colwyn
Bay"},{"Id":14668450,"StreetAddress":"Thornley Leisure Parks","Place":"William Sutcliffe Suite Raymond
Court Princes Drive Colwyn Bay"}, {"Id":14668445, "StreetAddress": "Y Gadwyn", "Place": "19 Princes Drive
Colwyn Bay"}, {"Id":14668463, "StreetAddress":"17 Princes Drive", "Place": "Colwyn Bay"}]});
```

# A detailed description of the data returned for a Postcode Search using JSON is described below.

The name of the callback function you want to call to process the returned address summaries as specified in

```
yourCallbackFunctionName
```

```
the request.
({"Summaries":[
                                                Summaries is an array of the summary addresses that match
                                                the specified postcode
                                                FIRST ADDRESS
                                                1st Address Postcodes4u Address Reference/Id
    { "Id":14668457,
     "StreetAddress": "3X Software Ltd",
                                               1st Street Address Summary
     "Place": "23 Princes Drive Colwyn Bay"
                                               1st Place name Summary
   }, . . . .
                                                LAST ADDRESS
   {"Id":14668463,
                                                        Address Postcodes4u Address Reference
                                               Last
```

"StreetAddress":"17 Princes Drive", Last Street Address Summary
"Place":"Colwyn Bay" Last Place name Summary
}
});

### An example Postcode Address Search using XML is detailed below:

http://services.3xsoftware.co.uk/Search/ByPostcode/xml?username=uuuuuuu&key=xxxx-xxxx-xxxx &postcode=11298ht&callback=yourCallbackFunctionName

```
<Results xmlns="http://schemas.datacontract.org/2004/07/PostcodeAPI.Classes" xmlns:i="http://www.w3.org/2001/XMLSche</pre>
ma-instance">
        <Summaries>
                <Summary>
                         <Id>14832125</Id>
                         <StreetAddress>3X Software Ltd</StreetAddress>
                         <Place>23 Princes Drive Colwyn Bay</Place>
                </Summary>
                 <Summary>
                         <Id>14832128</Id>
                         <StreetAddress>Aslets The Letting Agents Ltd</StreetAddress>
                         <Place>23 Princes Drive Colwyn Bay</Place>
                </Summary>
                <Summary>
                         <Id>14832119</Id>
                         <StreetAddress>Barclays Bank Plc</StreetAddress>
                         <Place>Raymond Court Princes Drive Colwyn Bay</Place>
        ... Further Address Summary Entries ... Finally, ...
                <Summary>
                         <Id>14832130</Id>
                         <StreetAddress>17 Princes Drive</StreetAddress>
                         <Place>Colwyn Bay</Place>
                 </Summary>
        </Summaries>
</Results>
```

The XML Values returned for each address, stored as a 'Summaries' array of 'Summary' entries, are detailed below:

<Id> - Postcodes4u Address Reference/Id

<StreetAddress> - Street Address Summary
<Place> - Place Name Summary

### Postcode Address Select

services.3xsoftware.co.uk/Search/ByPId/{format}?username={username}&key={key}&id={Id}[&callback={callbackfuncname}]

#### **Postcode Address Select Parameter Key**

Format = JSON or XML
Username = Postcode Username
Key = Postcode Key

Id = Postcodes4u Address ID for address details required to return
CallBackFunctionName= Function Called to Process Returned Address Data

This returns an array of 'Full Results' objects containing all the postcode data for the specified address – in addition to the detailed address data it is also summarised into a 4 part address (Field 'Line1' to 'Line4') for generic Address display.

#### An example Postcode Address Selection using JSON is detailed below:

http://services.3xsoftware.co.uk/Search/ById/json?username=uuuuu&key=xxxx-xxxx-xxxx-xxxx-xxxx id=14832125&callback=yourCallbackFunctionName

```
yourCallbackFunctionName({"Address":{"AddressId":14832125,"AdministrativeCounty":"Conwy","Barcode":"","BuildingName":"","BuildingNumber":"23","Company":"3X Software
Ltd","CountryName":"","County":"Clwyd","DeliveryPointSuffix":"1F","Department":"","DependentLocality":"","
DoubleDependentLocality":"","Easting":284817,"Latitude":53.2973366,"LatitudeShort":53.297,"Line1":"3X
Software Ltd","Line2":"23 Princes Drive","Line3":"Colwyn Bay","Line4":"LL29 8HT","Longitude":-
3.72968817,"LongitudeShort":-3.729,"Northing":379215,"Pobox":"","PostTown":"Colwyn
Bay","PostalCounty":"Clwyd","Postcode":"LL29 8HT","PrimaryStreet":"Princes
Drive","PrimaryStreetName":"Princes","PrimaryStreetType":"Drive","SecondaryStreet":"","SecondaryStreetName
":"","SecondaryStreetType":"","StreetAddress1":"3X Software Ltd","StreetAddress2":"23 Princes
Drive","StreetAddress3":null,"SubBuilding":"","TraditionalCounty":"Denbighshire","Type":""}});
```

## A detailed description of the data returned for a Postcode Address Selection using JSON is described below.

```
The name of the callback function you want to call to
vourCallbackFunctionName
                                                process the returned address summaries as specified in
                                                the request.
     "Address":{
                                            Address is the data item of the full address details.
( {
     "AddressId":14832125,
                                            Postcodes4u Address Reference/Id
     "AdministrativeCounty": "Conwy",
                                            Administrative County Name
      "Barcode":"",
                                            Post Office Barcode Data
      "BuildingName":""
                                            Building Name
     "BuildingNumber": "23",
                                            Building Number
      "Company": "3X Software Ltd",
                                            Company Name
     "CountryName":"",
                                            Country Name
      "County": "Clwyd",
                                            County Name
      "DeliveryPointSuffix":"1F",
                                            Post Office Delivery Point Suffix Value
     "Department": "",
                                            Department Name
      "DependentLocality":"",
                                            Post Office Dependent Locality
      "DoubleDependentLocality":"",
                                            Post Office Double Dependent Locality
     "Easting":284817,
"Latitude":53.2973366,
                                            Post Office 'Easting Position Value'
                                            Postcode Position Full 'Latitude' in degrees.
Postcode Position Short 'Latitude' in degrees (3dec places)
     "LatitudeShort":53.297,
     "Line1": "3X Software Ltd",
                                            Processed/Summarised Address Line1
     "Line2": "23 Princes Drive",
                                            Processed/Summarised Address Line?
     "Line3": "Colwyn Bay",
                                            Processed/Summarised Address Line3
      "Line4":"LL29 8HT"
                                            Processed/Summarised Address Line4
     "Longitude": -3.72968817,
                                            Postcode Position Full 'Longitude' in degrees.
                                            Postcode Position Short 'Longitude' in degrees (3dec places)
     "LongitudeShort": -3.729,
      "Northing": 379215,
                                            Post Office 'Northing Position Value'
     "Pobox":"",
                                            PO Box
     "PostTown": "Colwyn Bay",
                                            Post Town
     "PostalCounty": "Clwyd",
                                            Postal County Name
     "Postcode": "LL29 8HT",
                                            Postcode
     "PrimaryStreet": "Princes Drive",
                                            Primary Street
     "PrimaryStreetName": "Princes",
                                            Primary Street Name
     "PrimaryStreetType": "Drive",
                                            Primary Street Type
```

#### Postcode Address Selection using JSON continued.

```
"SecondaryStreet":"",
                                            Secondary Street
   "SecondaryStreetName":"",
                                            Secondary Street Name
   "SecondaryStreetType":"",
                                            Secondary Street Type
   "StreetAddress1": "3X Software Ltd",
                                            Street Address 1
    "StreetAddress2": "23 Princes Drive",
                                            Street Address 2
    "StreetAddress3":null,
                                            Street Address 3
   "SubBuilding":""
                                            Sub Building
    "TraditionalCounty": "Denbighshire",
                                            Traditional County Name
   "Type":""
                                            Post Office Address Type
}});
```

## An example Postcode Address Selection using XML is detailed below:

http://services.3xsoftware.co.uk/Search/ById/xml?username=uuuuu&key=xxxx-xxxx-xxxx-xxxx id=14832125&callback=yourCallbackFunctionName

```
<Results xmlns="http://schemas.datacontract.org/2004/07/PostcodeAPI.Classes" xmlns:i="http://www.w3.org/20</pre>
01/XMLSchema-instance">
       <Address>
               <AddressId>14832125</AddressId>
               <AdministrativeCounty>Conwy</AdministrativeCounty>
               <Barcode/>
               <BuildingName/>
               <BuildingNumber>23</BuildingNumber>
               <Company>3X Software Ltd</Company>
               <CountryName/>
               <County>Clwyd</County>
               <DeliveryPointSuffix>1F</DeliveryPointSuffix>
               <Department/>
               <DependentLocality/>
               <DoubleDependentLocality/>
               <Easting>284809</Easting>
               <Latitude>53.29737</Latitude>
               <LatitudeShort>53.297</LatitudeShort>
               <Line1>3X Software Ltd</Line1>
               <Line2>23 Princes Drive</Line2>
               <Line3>Colwyn Bay</Line3>
               <Line4>LL29 8HT</Line4>
               <Longitude>-3.72980952</Longitude>
               <LongitudeShort>-3.729</LongitudeShort>
               <Northing>379219</Northing>
               <Pobox/>
               <PostTown>Colwyn Bay</PostTown>
               <PostalCounty>Clwyd</PostalCounty>
               <Postcode>LL29 8HT</Postcode>
               <PrimaryStreet>Princes Drive</PrimaryStreet>
               <PrimaryStreetName>Princes</primaryStreetName>
               <PrimaryStreetType>Drive</primaryStreetType>
               <SecondaryStreet/>
               <SecondaryStreetName/>
               <SecondaryStreetType/>
               <StreetAddress1>3X Software Ltd</StreetAddress1>
               <StreetAddress2>23 Princes Drive</StreetAddress2>
               <StreetAddress3 i:nil="true"/>
               <SubBuilding/>
               <TraditionalCounty>Denbighshire/TraditionalCounty>
               <Type/>
       </Address>
```

</Results>

# A detailed description of the data returned for a Postcode Address Selection using XML is described below.

<AddressId> Postcodes4u Address Reference/Id <a href="#">AdministrativeCounty></a> Administrative County Name <Barcode> Post Office Barcode Data <BuildingName> Building Name <BuildingNumber>, Building Number <Company> Company Name <CountryName> Country Name <County"> County Name Post Office Delivery Point Suffix Value <DeliveryPointSuffix> <Department> Department Name <DependentLocality> Post Office Dependent Locality <DoubleDependentLocality> Post Office Double Dependent Locality <Easting> Post Office 'Easting Position Value' Postcode Position Full 'Latitude' in degrees.
Postcode Position Short 'Latitude' in degrees (3dec places) <Latitude> <LatitudeShort> <Line1> Processed/Summarised Address Line1 Processed/Summarised Address Line2 <Line2> Processed/Summarised Address Line3 <Line3> Processed/Summarised Address Line4  $\langle T_i ine4 \rangle$ <Longitude> Postcode Position Full 'Longitude' in degrees. <LongitudeShort> Postcode Position Short 'Longitude' in degrees (3dec places) <Northing> Post Office 'Northing Position Value' <Pobox> PO Box <PostTown> Post Town <PostalCounty> Postal County Name <Postcode> Postcode <PrimaryStreet> Primary Street <PrimaryStreetName> Primary Street Name <PrimaryStreetType> Primary Street Type <SecondaryStreet> Secondary Street ...onuaryStreetName>
<SecondaryStreetType>
<StreetAddrese1</pre> Secondary Street Name Secondary Street Type Street Address 1 <StreetAddress2> Street Address 2 <StreetAddress3> Street Address 3 <SubBuilding> Sub Building <TraditionalCounty> Traditional County Name

Post Office Address Type

<**Type>** 

### Postcode Location Search

services.3xsoftware.co.uk/Search/ByLatLong/{Format}?username={Username}&key={Key}&lat={Latitude}&lon
g={longitude} [&callback={callbackfuncname}]

#### **Postcode Location Search Parameter Key**

Format = JSON or XML

**Username** = Postcode Username **Key** = Postcode Key

**Latitude** = Latitude for search **Longitude** = Longitude for search **CallBackFunctionName** = Function Called to Process Returned Address Data

This returns an array of GeoSummary objects with Our 'Address ID', 'StreetAddress', 'Place' and 'Postcode'.

#### An example Postcode Location Search using JSON is detailed below:

http://services.3xsoftware.co.uk/Search/ByLatLong/json?username=uuuuu&key=xxxx-xxxx-xxxx-xxxx &lat=53.297&long=-3.829&callback=yourCallbackFunctionName

```
callbackfuncname({"GeoSummaries":[{"Id":14850437,"StreetAddress":"1 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850440,"StreetAddress":"2 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850441,"StreetAddress":"3 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850442,"StreetAddress":"4 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850443,"StreetAddress":"5 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850444,"StreetAddress":"6 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850445,"StreetAddress":"7 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850446,"StreetAddress":"8 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850447,"StreetAddress":"9 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850438,"StreetAddress":"10 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850439,"StreetAddress":"11 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850439,"StreetAddress":"11 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850439,"StreetAddress":"11 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"},{"Id":14850439,"StreetAddress":"11 Rathbone Terrace","Place":"Deganwy
Conwy","Postcode":"LL319EQ"}]});
```

# A detailed description of the data returned for a Postcode Location Search using JSON is described below.

```
{\tt yourCallbackFunctionName}
```

```
The name of the callback function you want to call to process the returned address summaries as specified in the request.
```

GeoSummaries is an array of the summary addresses that match the specified latitude and longitude position

```
FIRST ADDRESS

1st Address Postcodes4u Address Reference/Id

1st Street Address Summary

1st Address Place Name Summary

1st Address Postcode

. . .

LAST ADDRESS

Last Address Postcodes4u Address Reference

Last Street Address Summary

Last Address Place Name Summary

Last Address Postcode
```

]});

# A detailed description of the data returned for a Postcode Location Search using XML is described below.

http://services.3xsoftware.co.uk/Search/ByPostcode/xml?username=uuuuuuu&key=xxxx-xxxx-xxxx &postcode=ll298ht&callback=yourCallbackFunctionName

```
<Results xmlns="http://schemas.datacontract.org/2004/07/PostcodeAPI.Classes" xmlns:i="http://www.w3.org/2001/XMLSche</pre>
ma-instance">
        <GeoSummaries>
                <GeoSummary>
                         <Id>14850437</Id>
                         <StreetAddress>1 Rathbone Terrace</StreetAddress>
                         <Place>Deganwy Conwy</Place>
                         <Postcode>LL319EQ</Postcode>
                 </GeoSummary>
                <GeoSummary>
                         <Id>14850440</Id>
                         <StreetAddress>2 Rathbone Terrace</StreetAddress>
                         <Place>Deganwy Conwy</Place>
                         <Postcode>LL319EQ</Postcode>
                </GeoSummary>
        ... etc ...
                <GeoSummary>
                         <Id>14850439</Id>
                         <StreetAddress>11 Rathbone Terrace/StreetAddress>
                         <Place>Deganwy Conwy</Place>
                         <Postcode>LL319EQ</Postcode>
                </GeoSummary>
        </GeoSummaries>
</Results>
```

The XML Values returned for each address, stored as a 'GeoSummaries' array of 'GeoSummary' entries, are detailed below:

<Id> - Postcodes4u Address Reference/Id
<StreetAddress - Street Address Summary
<Place> - Place Name Summary
<Postcode> - Address Postcode