

Ireland (IRE) With Eircodes



Copyright

All copyright and other rights in this manual and the licensed programs described in this manual are the property of Experian Ltd save for copyright in data in respect of which the copyright belongs to the relevant data provider.

No part of this manual may be copied, reproduced, translated or reduced to any electronic medium or machine-readable form without the written consent of Experian Ltd.

Microsoft, Word and Windows are trademarks of Microsoft Corporation.

© Experian Ltd. 2020

Contacts and Support

For resolutions to common issues, answers to frequently asked questions and hints and tips for using our products:

www.edq.com/documentation/contact-support/

For information about data expiry, data vintage and how to keep your data up to date:

www.edq.com/documentation/data

For more information about us and to get in touch:

www.edq.com

Revision 2, November 2020

Contents

Introduction	4
Ireland (IRE) with Eircodes Address Data Information	4
Eircodes Additional Dataset	4
List of Available Data Files	4
About This Data	5
Area Covered	5
Address Elements	5
Using This Data	6
Eircode Format	6
Address Format with Eircode	6
Configuration for Batch, Pro API and Pro Web	6
With Pro API	8
Scenarios	8
With Pro Web	9
Search Examples: Single Line	9
Eircode Reverse Lookup	9
Unique address with a single Eircode	10
Building name match	10
Multiple exactly matching different addresses, each with its own Eircode	10
No Eircode supplied	10
Eircode supplied	11
Non-unique address with multiple Eircodes	11
Partial sub-premise match	11
No Eircode supplied	12
Correct Eircode supplied	12
Eircode with spelling mistakes supplied	12
Wrong Eircode supplied	13
With Batch	13
Search Examples	13
Eircode Reverse Lookup	13
Address Lookup with Eircode Enrichment	14
Verification of Address including Eircode	14

Introduction

Ireland (IRE) with Eircodes Address Data Information

This guide provides an overview of the Ireland (IRE) with Eircodes (ERC) Additional Dataset.

For general information about the Ireland address data, see the *Ireland (IRE) Data Guide*.

You must have the IRE Dataset installed to use the Eircodes Additional Dataset.

Eircodes Additional Dataset

Dataset Code:	ERC
Filenames:	ireerc.ads, ireerc.kfx, ireerc.tpx, ireerc.zlx
Approximate Data Size:	62MB
Data Source:	Capita and Experian
Update Frequency:	Quarterly The data release dates are: <ul style="list-style-type: none"> February May August November
Expiry:	Data files will expire approximately 13 months after creation. For example, February data will expire in March the following year. Ensure every data update is applied promptly, otherwise the data may expire and the product will become unusable.

List of Available Data Files

File Extension	File Type	Comment
.ads	Additional Dataset	Additional Dataset data. Must be used to conjunction with a .dts
.kfx	Keyfinder Index File	Indexing data for use with Keyfinder searching.
.tpx	System file	System file required by all engines.
.zlx	Single Line Index File	Indexing data for use with Single Line searching.

About This Data

This chapter provides detailed information about the ERC Additional Dataset.

Area Covered

The ERC Additional Dataset covers Republic of Ireland's postcodes as defined by Eircode (Ireland's postcode system, launched in July 2015). An Eircode is assigned to a single premise and in many cases to a single sub-premise.

Address Elements

The ERC Additional Dataset contains additional Eircode information for the IRE Dataset. Eircode information is contained in the following ERC address elements:

- Eircode (element code C11)
- Eircode Routing Key (element code C111)
- Eircode Unique Identifier (element code C112)

For a full list of address elements, see the *Ireland (IRE) Data Guide*.

Using This Data

This chapter provides search tips and other product-specific information when using Pro API, Pro Web, or Batch.

These searches are accurate at the time of data release. However, search results may differ depending on the data release you are using.

Eircode Format

Example: D02 AF30

An Eircode is a seven character alpha-numeric code made up of two parts:

- A Routing Key (D02 in the example) that consists of the first three characters and defines a principal post town span of delivery.
- A Unique Identifier (AF30 in the example) that distinguishes one address from another.

The single space between the Routing Key and Unique Identifier is mandatory when using Eircodes in postal address forms.

Address Format with Eircode

The Eircode is appended at the end of the address, example:

Ballyboughal Post Office
Grange
Ballyboughal
Co Dublin
A41 A095

Configuration for Batch, Pro API and Pro Web

Edit qawserve.ini and specify the ERC additional dataset so it will enhance your IRE dataset. You might add two lines in the DataMappings setting, one without the additional dataset and one including it:

```
DataMappings=IRE,IRE,IRE  
+ERC,Ireland with Eircodes,IRE+IREERC
```

Note: The InstalledData setting will remain the same:

```
InstalledData=IRE,<data_directory>
```

Ireland (IRE)

To retrieve ERC additional dataset information with your addresses, you should configure your address layout so that it contains lines specifically for additional dataset.

Edit qaworld.ini (for Batch) / qawserve.ini (for Pro API/Pro Web) and add the following two layouts:

```
[IREERC]
```

```
CountryBase=ERC  
CleaningAction=Enhanced  
CDFVariation=2
```

```
MultiValueDPSeparator=~
```

```
AddressLineCount=6  
AddressLine1=W40  
AddressLine2=W40  
AddressLine3=W40  
AddressLine4=W40  
AddressLine5=W40  
AddressLine6=W40
```

```
[IREERC_Keyfinder]
```

```
CountryBase=ERC  
CleaningAction=Enhanced  
CDFVariation=2
```

```
MultiValueDPSeparator=~
```

```
InputLineCount=1  
InputLine1=K11
```

```
AddressLineCount=6  
AddressLine1=W40  
AddressLine2=W40  
AddressLine3=W40  
AddressLine4=W40  
AddressLine5=W40  
AddressLine6=W40
```

With Pro API

This section details the information relevant to using Pro API with *Ireland (IRE) with Eircodes* data.

Scenarios

The following table indicates the relevant search examples for each Pro API scenario and search engine that supports ERC address data.

Scenario	Search engine	Search examples (links)
Eircode Reverse Lookup	Single Line	Example
Unique address with a single Eircode - Building name match	Single Line	Example
Multiple exactly matching different addresses, each with its own Eircode - No Eircode supplied	Single Line	Example
Multiple exactly matching different addresses, each with its own Eircode - Eircode supplied	Single Line	Example
Non-unique address with multiple Eircodes	Single Line	Example
Partial sub-premise match - No Eircode supplied	Single Line	Example
Partial sub-premise match - Correct Eircode supplied	Single Line	Example
Partial sub-premise match - Eircode with spelling mistakes supplied	Single Line	Example
Partial sub-premise match - Wrong Eircode supplied	Single Line	Example

With Pro Web

This section details the information relevant to using Pro Web with *Ireland (IRE) with Eircodes* data.

Search Examples: Single Line

The following examples utilize Pro Web's SOAP interface. The provided inputs should be entered into request messages and sent using a SOAP-enabled tool, such as SoapUI.

Alternatively, you can use the supplied Test Harness (TestHarness64.exe)

The template of a SOAP request message is given below.

```
<web:QASearch Language="">
  <web:Country>ERC</web:Country>
  <web:Engine Flatten="true">Singleline</web:Engine>
  <!--Optional:-->
  <web:Layout>IREERC</web:Layout>
  <web:Search> [search address] </web:Search>
  <!--Optional:-->
  <web:FormattedAddressInPicklist>>false</web:FormattedAddressInPicklist>
</web:QASearch>

<qas:QASearchResult xmlns:qas="http://www.qas.com/web-2013-12">
  <qas:QAPicklist>
    <qas:FullPicklistMoniker> [full picklist moniker] </qas:FullPicklistMoniker>
    <qas:PicklistEntry FullAddress="[true|false]">
      <qas:Moniker> [picklist entry moniker] </qas:Moniker>
      <qas:PartialAddress> [entry partial address] </qas:PartialAddress>
      <qas:Picklist> [entry picklist text] </qas:Picklist>
      <qas:Postcode> [entry Eircode] </qas:Postcode>
      <qas:Score> [entry score] </qas:Score>
    </qas:PicklistEntry>
    <qas:Prompt>Enter selection</qas:Prompt>
    <qas:Total>1</qas:Total>
    <qas:PotentialMatches>1</qas:PotentialMatches>
  </qas:QAPicklist>
</qas:QASearchResult>
```

Eircode Reverse Lookup

Obtaining an address from an Eircode.

Input address: A41 A095

Address returned:

```
<qas:PicklistEntry FullAddress="true">
  <qas:PartialAddress>Ballyboughal Post Office, Grange, Co Dublin, A41A095</qas:PartialAddress>
  <qas:Postcode>A41 A095</qas:Postcode>
  <qas:Score>100</qas:Score>
</qas:PicklistEntry>
<qas:Total>1</qas:Total>
```

Unique address with a single Eircode

For this input, a single premise-level (street number or building name) address matches exactly.

The address will have a single Eircode attached to it.

The resulting picklists contains a single item.

Building name match

Input: Ballyboughal Post Office, Grange, Ballyboughal, Dublin

Address returned:

```
<qas:PicklistEntry FullAddress="true">
  <qas:PartialAddress>Ballyboughal Post Office, Grange, Co Dublin, A41A095</qas:PartialAddress>
  <qas:Postcode>A41 A095</qas:Postcode>
  <qas:Score>100</qas:Score>
</qas:PicklistEntry>
<qas:Total>1</qas:Total>
```

Multiple exactly matching different addresses, each with its own Eircode

For these inputs, multiple addresses match exactly. This meaning that each input term has been matched to an address data item.

These inputs usually point to a location or street name but do not supply further detail. However, there exist premises or sub-premises below this point in our data.

Since we have no way of picking one unique address over another, the picklist contains all addresses below the match point.

If an Eircode is supplied, the picklist contains the single corresponding address.

No Eircode supplied

Input: Shed Road, Levitstown, Maganey, Co Kildare

Picklist returned:

```
<qas:PicklistEntry FullAddress="true">
  <qas:PartialAddress>632, Shed Road, Levitstown, Maganey, Co Kildare, R93C8A0</qas:PartialAddress>
  <qas:Postcode>R93 C8A0</qas:Postcode>
  <qas:Score>100</qas:Score>
</qas:PicklistEntry>
```

[... similar entries skipped ...]

```
<qas:PicklistEntry FullAddress="true">
  <qas:PartialAddress>633, Shed Road, Levitstown, Maganey, Co Kildare, R93W2D1</qas:PartialAddress>
  <qas:Postcode>R93 W2D1</qas:Postcode>
  <qas:Score>100</qas:Score>
</qas:PicklistEntry>
```

```
<qas:Total>47</qas:Total>
```

Eircode supplied

Input: Shed Road, Levitstown, Maganey, Co Kildare, R93 C8A0

Address returned:

```
<qas:PicklistEntry FullAddress="true">
  <qas:PartialAddress>632, Shed Road, Levitstown, Maganey, Co Kildare, R93 C8A0</qas:PartialAddress>
  <qas:Postcode>R93 C8A0</qas:Postcode>
  <qas:Score>100</qas:Score>
</qas:PicklistEntry>
<qas:Total>1</qas:Total>
```

Non-unique address with multiple Eircodes

These match to an final address but is not unique - for example, a primary locality that is a leaf in the DTS.

The addition of Eircodes makes it possible to identify multiple unique addresses beneath what was, up to now, a final address.

The picklist contains all Eircodes attached to the address:

Input: Brickfield, Effin, Co Limerick

Picklist returned:

```
<qas:PicklistEntry FullAddress="true">
<qas:PartialAddress>Brickfield, Effin, Co Limerick, V35 A313</qas:PartialAddress>
<qas:Postcode>V35 A313</qas:Postcode>
<qas:Score>100</qas:Score>
</qas:PicklistEntry>
```

[... similar entries skipped ...]

```
<qas:PicklistEntry FullAddress="true">
<qas:PartialAddress>Brickfield, Effin, Co Limerick, V35 YV84</qas:PartialAddress>
<qas:Postcode>V35 YV84</qas:Postcode>
<qas:Score>100</qas:Score>
</qas:PicklistEntry>
```

[... alias match entries skipped - these have AliasMatch="true", and may indicate townlands ...]

```
<qas:Total>62</qas:Total>
```

Partial sub-premise match

The input contains sub-premise address elements, but they're incomplete and can't produce a unique address.

The picklist contains all matching sub-premises.

Adding an Eircode has the following effect:

- If the Eircode matches exactly to a single sub-premise, it is returned as a single picklist item.
- If there are mistakes in the Eircode, the sub-premise is returned with a corrected Eircode.
- If the Eircode is significantly or entirely wrong, a picklist of all sub-premises will be returned as if no Eircode was supplied.

No Eircode supplied

Input: Unit,Cois Sruthain,Ballyboughal,Dublin

Picklist returned:

```
<qas:PicklistEntry FullAddress="true">  
<qas:PartialAddress>Unit A, Cois Srutháin, Co Dublin, A41PW99</qas:PartialAddress>  
<qas:Postcode>A41 PW99</qas:Postcode>  
<qas:Score>95</qas:Score>  
</qas:PicklistEntry>
```

```
<qas:PicklistEntry FullAddress="true">  
<qas:PartialAddress>Unit B, Cois Srutháin, Co Dublin, A41EP26</qas:PartialAddress>  
<qas:Postcode>A41 EP26</qas:Postcode>  
<qas:Score>95</qas:Score>  
</qas:PicklistEntry>
```

```
<qas:Total>2</qas:Total>
```

Correct Eircode supplied

Input: Unit,Cois Sruthain,Ballyboughal,Dublin, A41 PW99

Address returned:

```
<qas:PicklistEntry FullAddress="true">  
<qas:PartialAddress>Unit A, Cois Srutháin, Co Dublin, A41PW99</qas:PartialAddress>  
<qas:Postcode>A41 PW99</qas:Postcode>  
<qas:Score>96</qas:Score>  
</qas:PicklistEntry>  
<qas:Total>1</qas:Total>
```

Eircode with spelling mistakes supplied

Input: Unit,Cois Sruthain,Ballyboughal,Dublin, A41 PW9G

Address returned:

```
<qas:PicklistEntry FullAddress="true">  
<qas:PartialAddress>Unit A, Cois Srutháin, Co Dublin, A41PW99</qas:PartialAddress>  
<qas:Postcode>A41 PW99</qas:Postcode>  
<qas:Score>76</qas:Score>  
</qas:PicklistEntry>  
<qas:Total>1</qas:Total>
```

Wrong Eircode supplied

Input: Unit,Cois Sruthain,Ballyboughal,Dublin, F12 D9P7

Picklist returned:

```
<qas:PicklistEntry FullAddress="true">  
  <qas:PartialAddress>Unit A, Cois Srutháin, Co Dublin, A41PW99</qas:PartialAddress>  
  <qas:Postcode>A41 PW99</qas:Postcode>  
  <qas:Score>60</qas:Score>  
</qas:PicklistEntry>
```

```
<qas:PicklistEntry FullAddress="true">  
  <qas:PartialAddress>Unit B, Cois Srutháin, Co Dublin, A41EP26</qas:PartialAddress>  
  <qas:Postcode>A41 EP26</qas:Postcode>  
  <qas:Score>60</qas:Score>  
</qas:PicklistEntry>
```

```
<qas:Total>2</qas:Total>
```

With Batch

This section details the information relevant to using Batch with *Ireland (IRE) with Eircodes* data.

Search Examples

Eircode Reverse Lookup

Obtaining an address from Eircode is done by using the [IREERC_Keyfinder] layout and searching for an

Eircode. Example:

Input address: A41 A095

Supplied: A41 A095

Return status from QABatchWV_Clean: 0

Generic result code: R92300000020

Dataset info: 00000000

Extended Dataset info: 00000000

Country code: IRL

Postcode: A41 A095

Address returned:

Ballyboughal Post Office

Grange

Ballyboughal

Co Dublin

A41 A095

Address Lookup with Eircode Enrichment

Enrichment is done by searching using the [IREERC] layout. If the address is verified with enough confidence the Eircode will be returned at the end. The resulting match type will be R instead of Q.

Examples when using:

[IREERC] layout:

Input address: Ballyboughal Post Office,Grange,Ballyboughal,Dublin
Supplied: Ballyboughal Post Office,Grange,Ballyboughal,Dublin

Return status from QABatchWV_Clean: 0
Generic result code: R92300000020
Dataset info: 00004000
Extended Dataset info: 00000000
Country code: IRL
Postcode: A41 A095

Address returned:

Ballyboughal Post Office
Grange
Ballyboughal
Co Dublin
A41 A095

Verification of Address including Eircode

Verification of an address already including an Eircode is done using the [IREERC] layout as well. If there is a discrepancy the verification confidence will be lowered. The address elements have precedence over the Eircode, i.e. in case there is a discrepancy, the corrected Eircode will be returned.

Examples when using:

Correct address with its assigned Eircode:

Input address: Ballyboughal Post Office, Grange, Ballyboughal, Dublin, A41 A095
Supplied: Ballyboughal Post Office, Grange, Ballyboughal, Dublin, A41 A095

Return status from QABatchWV_Clean: 0
Generic result code: R91300000060
Dataset info: 00004010
Extended Dataset info: 00000000
Country code: IRL
Postcode: A41 A095

Address returned:

Ballyboughal Post Office
Grange
Ballyboughal
Co Dublin
A41 A095

The result is R9 as expected.

Ireland (IRE)

Incorrect Eircode:

Input address: Ballyboughal Post Office,Grange,Ballyboughal,Dublin,A41 A093
Supplied: Ballyboughal Post Office,Grange,Ballyboughal,Dublin,A41 A093

Return status from QABatchWV_Clean: 0
Generic result code: R93300000020
Dataset info: 00004000
Extended Dataset info: 00000000
Country code: IRL
Postcode: A41 A095

Address returned:

Ballyboughal Post Office
Grange
Ballyboughal
Co Dublin
A41 A095

Here the result is with the corrected Eircode (ends in 95 instead of the 93 supplied in the input). Although the match result is R9 as well, it indicated that the postcode has been corrected in the Postal Code Action Indicator.

Partially supplied address using the [IREERC] layout:

Input address: Ballyboughal Post Office, A41 A095
Supplied: Ballyboughal Post Office, A41 A095

Return status from QABatchWV_Clean: 0
Generic result code: R01324100020
Dataset info: 10024000
Extended Dataset info: 00000000
Country code: IRL
Postcode: A41 A095

Address returned:

Ballyboughal Post Office
Grange
Ballyboughal
Co Dublin
A41 A095

In this example the supplied address info is very limited, and the resulting confidence is low (R0). The postcode action indicator verifies the Eircode.

Although this layout can be used to do reverse Eircode lookup as well, it is slower than the Keyfinder mode and will always return low address confidence since it expects an address to be supplied.

In case a reverse Eircode lookup is needed the [IREERC_Keyfinder] mode should be used instead.