Gas Retail Energy Location Data

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Provided by:

Obtaining Gas Meter Point REL Data

There are two main routes that gas suppliers can use to obtain the Retail Energy Location (REL) address data for gas meter points:

- Manually via the gas Data Enquiry Service (DES) screens

- Or via the Supply Point Switching API service (this service is also available to PCWs and TPIs)

In addition an API service has been developed to enable Gas Transporters to obtain REL data for meter points connected to their network. Details of this service have not been included here but further details are available on request.

DES Screen REL Search Function

Provided by:

DES Screen REL Search Function

- REL Search Screen

  - Valid/Invalid Search Combinations
  - Error Messages

- REL Search Field Mapping

- REL Search Results Screen

- REL Search Details Screen

REL Search Screen

This function enables users to search for associated MPL and REL addresses via a new dedicated search screen.

Users are required to confirm that this data is being used for the purposes of switching.

This follows the same basis of the current gas meter point search screen with the additional of the CSS Registration ID and UPRN

REL Search Screen

Where data is entered into a search field, the screen will grey out certain other fields to help prevent invalid search combinations from being entered

For example, Meter Point Reference Number is a unique to a single Address so all other search fields are greyed out if an MPRN is entered

REL Search Screen

Searches using the address fields allow more flexibility. Full address data can be entered for a specific search or a broader search, just via postcode for example, can be performed

Invalid Search Combination

Certain search combinations are not permitted in order to prevent searches that are too broad, Building Number and Street for example

If an an invalid search combination is attempted, the relevant error message will be displayed in red text at the top of the screen

No Records Found

If a valid search is attempted but no records can be found matching the search criteria, an error message stating "No Records Found, Please modify the search criteria" will be displayed

REL Search Field Mapping

Address Search fields entered as part of a valid search combination will be matched against specified fields within the MPL and REL Address database to identify a match

A record will be considered a match if the searched values are found within either the MPL or REL Address database in line with the mapping tables shown on this slide

A search resulting in multiple MPL address records being matched will display on the REL Search Results screen

A search resulting in a singe MPL record being matched will display on the REL Search Details screen

Address Search Field Mapping

REL Search Field	MPL Address Fields Matched Against	REL Address Fields Matched Against
Building Number	Building Number	Primary Name Secondary Name
Building Name	Building Name	Primary Name Secondary Name
Street	Street	Street1 Street2 Locality1 Locality2
Town	Town	Town
Full Postcode	Postcode	Postcode
Outcode	Outcode	Outcode

Unique Search Field Mapping

REL Search Field	System Field
Meter Point Reference	The given value should be matched only against the Meter Point Reference Number in the system
Confirmation Reference	The given value should be matched only against the Confirmation Reference in the system
CSS Registration ID	The given value should be matched only against the CSS Registration ID in the system
IUPRN	The given value should be matched only against UPRN provided by CSS as part of REL address

10

REL Search Results Screen

The REL Search Results screen lists the matched MPL addresses with any associated REL addresses displayed below it

By selecting an MPL Address from the list, the REL Search Details screen will be displayed

*Screenshot displays test REL address data so the associated MPL and REL address are not necessarily similar

REL Search Details Screen

The REL Search Details screen displays the full details for a specific MPL address and the associated REL addresses

Supply Point Switching API

Provided by:

Supply Point Switching API

- **Process Overview**

- **Supply Point Switching Address Search API**

- **Supply Point Switching Switch Gas Data API**

Supply Point Switching API Process Overview

This API allows for a two step search to be undertaken; firstly via and an optional address lookup to enable the correct address record to be identified from multiple possible options, then via the gas data search to obtain the meter point data along with the related REL information
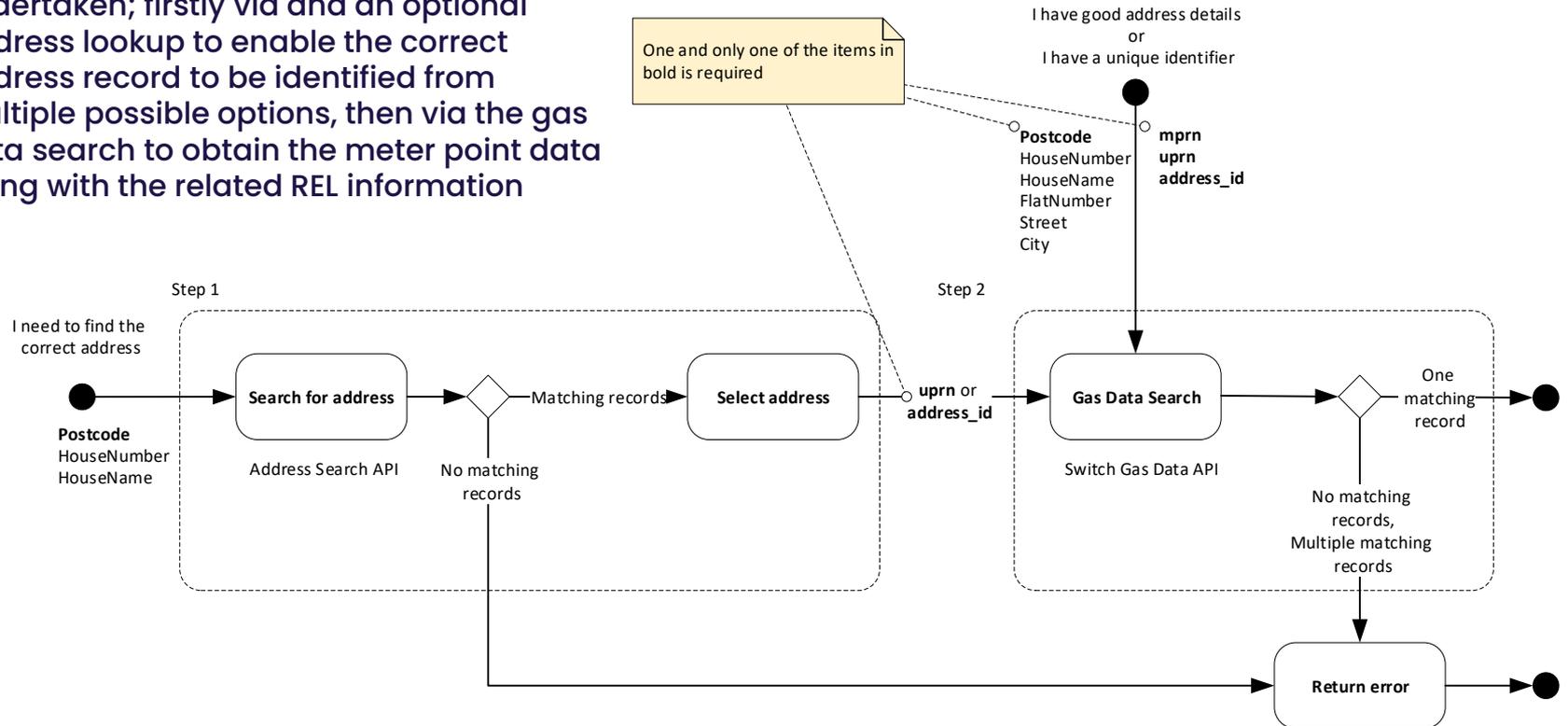
Supply Point Switching Address Search API

Address Search API Input Data Items

The address search API allows for user to search for address details based on a limited set of data to enable multiple address records to be returned to enable easy identification of an address.

The search request for the Switching API is a URL encoded query string such as you would see in the internet browser address bar.

Method: GET

Route: /query/v1/supply-point-address

Input query string: /query/v1/supply-point-address?**postcode**=value&houseNumber=value&houseName=value

Items in bold are mandatory (**postcode**)

/query/v1/supply-point-address?postcode=AB1%203CD&houseNumber=21a

Address Search API Response

The address search will use the input values provided to identify the all matching address records across both the Meter Point Location and Retail Energy Location data sets and will provide full address details as shown in the example.

The Address ID will only be provided where a MPL match has been found for the input, and the UPRN where a REL address is found.

`/query/v1/supply-point-address?postcode=AB11%20XX& houseNumber=001`

Match found in MPL and REL records

Match found in REL records

```
{
    "switchAddress": [{
        "addressId": "6011773466",
        "uprn": 9000000110,
        "country": "England",
        "county": "Aberdeenshire",
        "deliveryPointAlias": "",
        "dependentLocality": "",
        "dependentStreet": "",
        "doubDependentLocality": "",
        "houseName": "",
        "houseNumber": "00",
        "poBoxNumber": "",
        "postcode": "AB11 7XX",
        "street": "FLINTHILL TERRACE",
        "subBuildingName": "FLAT 1",
        "town": "Aberdeen"
    },
    {
        "addressId": "6011773466",
        "uprn": 9000000110,
        "country": "",
        "county": "",
        "deliveryPointAlias": "",
        "dependentLocality": "",
        "dependentStreet": "",
        "doubDependentLocality": "",

        "houseName": "00",
        "houseNumber": "FLAT 1",
        "poBoxNumber": "",
        "postcode": "AB11 7XX",
        "street": "FLINTHILL TERRACE",
        "subBuildingName": "FLAT 1",
        "town": "ABERDEEN"
    },
    {
        "addressId": "",
        "uprn": 9000000110,
        "country": "",
        "county": "",
        "deliveryPointAlias": "",
        "dependentLocality": "",
        "dependentStreet": "",
        "doubDependentLocality": "",
        "houseName": "00",
        "houseNumber": "FLAT A",
        "poBoxNumber": "",
        "postcode": "AB11 7XX",
        "street": "FLINTHILL TERRACE",
        "subBuildingName": "FLAT A",
        "town": "ABERDEEN"
    } ]
}
```

Address Search API Error Response

If there is a problem processing the request then the relevant error details will be returned

```
{
"fault": [{
    "faultString": "Request cannot be processed because
invalid query parameter(s) supplied.",
    "detail": {
      "errorCode": "XSCH6003",
      "item": "houseNumber "
    }
  }]
}
```

Supply Point Switching
Gas Data API

Gas Data Search API Input Data Items

The gas data search API allows for users to search for details of a single meter point based on either the Address Search output (via the Address ID or UPRN), through an expanded address data set or directly via the MPRN.

The search request for the Switching API is a URL encoded query string such as you would see in the internet browser address bar.

Method: GET

Route: /query/v1/switch

Input query string:
/query/v1/switch?**addressId**=value&**meterPointReferenceNumber**=value
uprn=value&**postcode**=value&houseNumber=value&houseName=value&flatNumber=value&street=value&city=value

One and only one of the items in bold is required (**addressId, uprn, meterPointReferenceNumber, postcode**)

Gas Data API Response

The gas data API will use the input values provided to identify the single matching Meter Point record, where address data was used the search will be undertaken against address records in both the Meter Point Location and Retail Energy Location data sets.

The full set / array of REL address details for the MPRN will be provided as per the information received from CSS.

/query/v1/switch?addressId=71878423

```
{ "switchGasData": [{
    "addressId": "XXXXXXX",
    "houseName": "",
    "housenumber": "X",
    "country": "GB",
    "county": "",
    "currentSupplierId":    "ABC",
    "currentSupplierRegEffectiveDate": "2019-08-
07T00:00:00.000Z",
    "pendingSupplierRegEffectiveDate": "",
    "deliveryPointAlias": "",
    "dependentStreet": "",
    "dmq": "17799",
    "doubleDependentLocality": "",
    "gasTransportId": "Sample Gas Networks Plc.",
    "ldz_id": "SE",
    "meter_capacity": "1",
    "meter_mechanism_code": "NS",
    "meter_serial_number": "XXXXXXXXXX",
    "mpaq": "17799",
    " meterPointReferenceNumber": "XXXXXXXXX",
    "ndmq": "18467",
    "poBoxNumber": "",
    "postTown": "LONDON",
    "postcode": "XXX XXX",
    "smartEquipmentTechnicalCode": "BRG",
    "street": "NUTHURST AVENUE",
  "subBuildingName": "",
  "addressSource": "Match",
  "uprn": "100023336956",
            "relAddress": [{
                "primaryName": "4",
                "secondaryName": "",
                "street1": "Sample Terrace",
                "street2": "",
                "locality1": "Inverbervie",
                "locality2": "",
                "town": "Montrose",
                "postcode": "AA10 0BC",
                "logicalStatus": "1",
                "language": "ENG",
                "organisation": "",
                "addressType": "LPI",
                "confidenceScore": "1",
                "classification": "",
                "latitude": "52.411800000000",
                "longitude": "1.777600000000"
                }]
        }]
}
```

Gas Data Search API Error Response

If there is a problem processing the request then the relevant error details will be returned.

If multiple MPRN records are identified for the input data provide then an error response will be returned.

```
{
"fault": [{
    "faultString": "Request cannot be processed because invalid query parameter(s) supplied.",
    "detail": {
      "errorCode": "XSCH6003",
      "item": "houseNumber "
    }
  }]
}
```

Supply Point Switching
API – Error Codes

Supply Point Switching Address Search API Error Codes

Validation	HTTP Code	Rejection Code	Description
Twinstream	422 – Unprocessable Entity	e002	"Requested address has twin stream meter device. You are not authorised to view this data."
Shared Supply	422 – Unprocessable Entity	e003	"Requested address has shared supply meter device.You are not authorised to view this data."
Twinstream and Shared Supply	422 – Unprocessable Entity	e004	"Requested address has twin stream and shared supply meter device. You are not authorised to view this data."
Extinct meter point status.	422 – Unprocessable Entity	e005	"Requested address has extinct meter point status. You are not authorised to view this data"
MPRN not found	404 – Not Found	e007	"Requested meter reference number is not found"
MPRN has more than one matching records	422 – Unprocessable Entity	e008	"Requested meter reference number has more than one matching records; data can only be provided for unique match"
Multiple records at address	422 – Unprocessable Entity	e009	Submitted address details has multiple records; data is only provided for unique number"
No matching record for address	404 - Not Found	e011	"Requested address has no matching record. This may be because, there is no gas meter at this property (or) full postcode with a space is not entered (or) the entered details are incorrect ".

Useful Links

For more information on Xoserve's Data Enquiry Service and the consequential changes that are been made to DES and APIs for the inclusion of Retail Energy Data can be accessed via the following links:

Data Enquiry Service Overview / User Guides
https://www.xoserve.com/systems/data-enquiry-service/

UK Link and DES Business Requirements Documents
https://www.xoserve.com/change/switching-programme/

API Change Documentation
https://xoserve.sharepoint.com/:f:/r/sites/UKLink/Shared%20Documents/3.%20UK%20Link%20Interface%20Documents/3c.%20For%20Approval/CSSC%20API%20Documentation?csf=1&web=1&e=mXC9q7

Thank you