# Radius Search API

Basic documentation for the Radius Search APIs is located at <https://api.egi.co.uk/radius-dx/data-management/documentation#/>



There are 4 endpoints one for each of the following record types:

* Availabilities
* Lettings
* Occupational Sales
* Investment Sales

## Http Headers

The Search API requires an authorisation token be added to the “Authorization” http header (see the below screenshot from PostMan). This will be provided by EG Support. The “Content-Type” header must also be set the value “application/vnd.api+json”



## Example Request Payloads

The request payload has a filter object with attributes/parameters specifying:

* Date Range (max 30 days)
* Location (by specifying either a major postcode or a polygon defined by long/lat values)
* Sectors (an array containing any of the values: “Hotels and Leisure”, “Industrial”, “Land”, “Office”, “Other”, “Residential” or “Retail” in a comma separated list.)

These parameters are effectively filters and omitting them will return unfiltered results, i.e. omitting location and postcode values will result in results being returned for the whole of the UK.

Requests that contain both a location polygon and a major postcode will only return the records in the overlapping area. The Radius Search API effectively returns records that match the major post code ***and*** are in the specified polygon.

The request object also includes pageNumber and pageSize attributes. The *response* meta object will inform you of how many pages of records were found. A specific page can be retrieved by specifying it in the pageNumber attribute.

A sort parameter allows you to specify whether to return the results in descending or ascending date order (transactionDate for deals onMarketDate for availabilities). Default is descending order.

### Example 1

A search for office lettings in the major post code “W6” for July 2019

{

  "pageNumber": 1,

  "pageSize": 10,

  "filter": {

    "date": {

      "from": "2019-07-01",

      "to": "2019-07-30"

    },

    "majorPostcode": "W6",

    "sectors": [

      "Office"

    ]

  },

  "sort": [

    {

      "transactionDate": {

        "order": "desc"

      }

    }

  ]

}

### Example 2

A search for office lettings in the Hammersmith region for July 2019, but specifying a location polygon rather than a postcode.

{

  "pageNumber": 1,

  "pageSize": 10,

  "filter": {

    "date": {

      "from": "2019-07-01",

      "to": "2019-07-30"

    },

    "location": {

      "polygon": [

        "51.498,-0.233",

        "51.498,-0.216",

        "51.489,-0.216",

        "51.492,-0.243"

      ]

    }

  },

  "sort": [

    {

      "transactionDate": {

        "order": "desc"

      }

    }

  ]

}

**Note:** You may want your long/lats to be finer grained than this example.

## Search API Responses

A Search API response will include several objects (each with specific attributes).

In summary, the following common objects are returned for all responses:

* address – full address of the property in question
* meta – timestamps and owner
* unit – comprehensive details of the property e.g. size, levels grade of space
* agents involved – company and contact details
* documents – links to particulars, floorplans, EPC reports etc
* media – links to images or videos associated with this transaction
* notes
* property – any media associated with the property record
* One of these objects depending on record type
	+ lease – details of the lease agreement e.g. rent achieved, lease end date
	+ sale – vendors, purchasers, asking and achieved prices etc. Investment sales will have objects for total rental income and yield

### Example Response

{

    "jsonapi": {

        "version": "1.0"

    },

    "meta": {

        "requestId": "b2e5c234-1814-48fc-beb5-7088f294a731",

        "total-pages": 1,

        "total": 2

    },

    "data": [

        {

            "attributes": {

                "id": "b383ec1d-7c21-3ce9-ba54-594d9e3fe24c",

                "transactionDate": "2019-05-31",

                "uprn": "34077117",

                "preferredDisplayAddress": "1st floor (Unit 14 - Part), Cambridge Court, 210, Shepherds Bush Road, London, W6 7NJ",

                "lease": {

                    "type": "Lease",

                    "isPreLet": **false**,

                    "rent": {

                        "amount": 349.83,

                        "measurement": "SqM"

                    },

                    "tenant": {

                        "type": "Company",

                        "company": {

                            "name": "Uzbekistan Airways",

                            "regNo": "FC030189",

                            "primaryBusinessType": "H"

                        }

                    },

                    "leaseEndDate": {

                        "date": "2024-05-31"

                    },

                    "leaseLength": {

                        "years": 5

                    },

                    "leaseStartDate": {

                        "date": "2019-05-31"

                    }

                },

                "unit": {

                    "unitName": "1st floor (Unit 14 - Part)",

                    "primaryUseType": {

                        "sector": "Business (B1a)",

                        "name": "Office",

                        "category": "Office",

                        "parentCategory": "Office",

                        "displayName": "Business (B1a) - Office"

                    },

                    "totalSpace": {

                        "measurement": "SqM",

                        "value": 64.19546508789,

                        "conversions": [

                            {

                                "measurement": "SqM",

                                "value": 64.19546508789

                            },

                            {

                                "measurement": "SqFt",

                                "value": 690.9935666595392

                            }

                        ]

                    },

                    "levels": [

                        {

                            "useType": {

                                "sector": "Business (B1a)",

                                "name": "Office",

                                "category": "Office",

                                "parentCategory": "Office",

                                "displayName": "Business (B1a) - Office"

                            },

                            "size": {

                                "measurement": "SqM",

                                "value": 64.19546508789,

                                "conversions": [

                                    {

                                        "measurement": "SqM",

                                        "value": 64.19546508789

                                    },

                                    {

                                        "measurement": "SqFt",

                                        "value": 690.9935666595392

                                    }

                                ]

                            }

                        }

                    ]

                },

                "agents": [

                    {

                        "type": "Disposing Agent",

                        "company": {

                            "name": "Frost Meadowcroft",

                            "regNo": "06582636",

                            "contact": {

                                "phoneNumbers": [

                                    {

                                        "number": "020 8748 1200"

                                    }

                                ]

                            },

                            "address": {

                                "no": "22",

                                "streets": [

                                    "St Peter's Square"

                                ],

                                "postcode": {

                                    "major": "W6",

                                    "minor": "9NW"

                                },

                                "town": "London",

                                "region": "London",

                                "country": "UK"

                            }

                        }

                    }

                ],

                "notes": [

                    {

                        "date": "2019-07-05T10:18:38.000Z",

                        "description": "Source: Frost Meadowcroft"

                    }

                ],

                "address": {

                    "uprn": "34077117",

                    "fullAddress": "CAMBRIDGE COURT, 210, SHEPHERD'S BUSH ROAD, LONDON, W6 7NJ",

                    "buildingNumber": "210",

                    "localAuthority": "HAMMERSMITH AND FULHAM",

                    "region": "GREATER LONDON",

                    "buildingName": "CAMBRIDGE COURT",

                    "usrn": 21000727,

                    "streets": [

                        "SHEPHERD'S BUSH ROAD"

                    ],

                    "town": "LONDON",

                    "postcode": "W6 7NJ",

                    "longitude": -0.2242219,

                    "latitude": 51.4952603

                },

                "meta": {

                    "created": {

                        "timestamp": "2019-07-05T10:17:03.000Z"

                    },

                    "updated": {

                        "timestamp": "2020-06-11T18:44:47.545Z"

                    },

                    "accepted": {

                        "timestamp": "2019-07-05T10:18:38.000Z"

                    },

                    "owner": {

                        "type": "EG Research",

                        "company": {

                            "name": "EG"

                        }

                    }

                },

                "property": {

                    "media": [

                        {

                            "caption": "ADD-01103467-01.JPG",

                            "type": "Image",

                            "assetUrl": "https://api.egi.co.uk/radius-dx/asset-management/v1/fetch/c7cab71b-678e-4619-847b-8895941ecbae.jpg"

                        }

                    ]

                }

            },

            "type": "lettingDeals",

            "id": "b383ec1d-7c21-3ce9-ba54-594d9e3fe24c"

        }

    ]

}