Food Standards Agency:
UK food hygiene rating data application programming interface (the 'FHRS/FHIS SEO API')

A developer's guide
Updated: July 2012
Version: 2.0

England, Wales and Northern Ireland:
The Food Hygiene Rating Scheme (FHRS)

Scotland:
The Food Hygiene Information Scheme (FHIS)

CONTENTS

ABOUT THIS GUIDANCE

Guidance for developers to access, in XML and JSON formats, the underlying Food Hygiene Rating Scheme (FHRS) and Food Hygiene Information Scheme (FHIS) data published at www.food.gov.uk/ratings. The FHRS is run in England, Wales and Northern Ireland, and the FHIS is run in Scotland.

SEO API

The FHRS/FHIS system exposes data via XML and JSON through a series of SEO-friendly routes. XML data meets the published XSD for FHRS Establishments.

Several different routes have been created to allow differing information to be extracted. These are grouped in to four areas: Search, Search Name, Search Address, Enhanced Search (Advanced) and Enhanced Search (Advanced Location). Each is discussed in the following sections. Each command has several different variations, which are all detailed.

All example calls are given in the format: `<web root>/<command>/<parameter 1>/.../<parameter x>`
`<web root>` is the base of the web site. It is different depending on the server it is running on. For example, on the live server it will be *http://ratings.food.gov.uk*; on a developer's machine it will be *http://localhost/FHRSWeb*.

SEARCH

This is the basic search operation. It replaced the former Quick Search methods, using a new sub-system named 'enhanced search'.

COMMAND SYNTAX

The command is structured in one of the following ways:

CULTURED

```
search/{lang}/{name}/{address}/{sortOrder}/{page}/{pageSize}/{format}
search/{lang}/{name}/{address}/{page}/{pageSize}/{format}
search/{lang}/{name}/{address}/{page}/{format}
search/{lang}/{name}/{address}/{format}
```

NON-CULTURED

```
search/{name}/{address}/{sortOrder}/{page}/{pageSize}/{format}
search/{name}/{address}/{page}/{pageSize}/{format}
search/{name}/{address}/{page}/{format}
search/{name}/{address}/{format}
```

PARAMETERS

The following parameters can be used. The value in the default column is used if the route does not explicitly supply a value. For example, if the route does not specify `pageSize`, a default value of 10 will be used.

Name	Type	Description	Default
lang	String	Must be either `en-GB` or `cy-GB`	en-GB
name	String	Name of business to search for. Supplying a ^ (caret) will search for all businesses	-
address	String	Part of the address (or postcode) to search for. Supplying a ^ (caret) will search for all addresses/post codes	-
sortOrder	String	Must be one of the following: • Alpha Returns the results in the order of Business Name in ascending order. • Desc_Alpha Returns the results in the order of Business Name in descending order • Type Returns the results in the order of Business Type in ascending order. • Desc_Type Returns the results in the order of Business Type in descending order. • Rating Returns the results in the order of Rating in ascending order (5,4,3,2,1,0,Pass, Pass and Eatsafe, Improvement Required, Awaiting Publication, Exempt, Awaiting Inspection) • Desc_Rating Returns the results in the order of Rating in descending order (0,1,2,3,4,5, Improvement Required,	

		Pass, Pass and Eatsafe, Awaiting Publication, Exempt, Awaiting Inspection)	
page	Numeric	Page to return	1
pageSize	Numeric	The number of results to return in a page	10
format	String	Must be either xml or json	-

EXAMPLE SEARCHES

To search for all establishments that have 'cafe' in the name and are in Norwich:
http://localhost/FHRSWeb/search/cafe/norwich/xml
http://localhost/FHRSWeb/search/en-gb/cafe/norwich/xml

To search for all establishments that have 'cafe' in the name and are in Norwich, returning page 2:
http://localhost/FHRSWeb/search/cafe/norwich/2/xml
http://localhost/FHRSWeb/search/en-gb/cafe/norwich/2/xml

To search for all establishments that have 'cafe' in the name and are in Norwich, returning page 2, where the page size is 30:
http://localhost/FHRSWeb/search/cafe/norwich/2/30/xml
http://localhost/FHRSWeb/search/en-gb/cafe/norwich/2/30/xml

To search for all establishment that have 'cafe' in the name, for all addresses:
http://localhost/FHRSWeb/search/cafe/^/xml
http://localhost/FHRSWeb/search/en-gb/cafe/^/xml

 To search for all establishments in Norwich:
http://localhost/FHRSWeb/search/^/norwich/xml
http://localhost/FHRSWeb/search/en-gb/^/norwich/xml

SEARCH-NAME

This is very similar to the Search function, except that no address can be supplied.

COMMAND SYNTAX

The command is structured in one of the following ways:

CULTURED

```
Search-name/{lang}/{name}/{sortOrder}/{page}/{pageSize}/{format}
search-name/{lang}/{name}/{page}/{pageSize}/{format}
search-name/{lang}/{name}/{page}/{format}
search-name/{lang}/{name}/{format}
```

NON-CULTURED

```
search-name/{name}/{sortOrder}/{page}/{pageSize}/{format}
search-name/{name}/{page}/{pageSize}/{format}
search-name/{name}/{page}/{format}
search-name/{name}/{format}
```

PARAMETERS

The following parameters can be used. The value in the default column is used if the route does not explicitly supply a value. For example, if the route does not specify `pageSize`, a default value of 10 will be used.

Name	Type	Description	Default
lang	String	Must be either `en-GB` or `cy-GB`	en-GB
name	String	Name of business to search for. Supplying a ^ (caret) will search for all businesses	-
sortOrder	String	Must be one of the following: • Alpha Returns the results in the order of Business Name in ascending order. • Desc_Alpha Returns the results in the order of Business Name in descending order. • Type Returns the results in the order of Business Typein ascending order. • Desc_Type Returns the results in the order of Business Type in descending order. • Rating Returns the results in the order of Rating in ascending order (5,4,3,2,1,0,Pass, Pass and Eatsafe, Improvement Required, Awaiting Publication, Exempt, Awaiting Inspection) • Desc_Rating Returns the results in the order of Rating in	

		descending order (0,1,2,3,4,5, Improvement Required, Pass, Pass and Eatsafe, Awaiting Publication, Exempt, Awaiting Inspection)	
page	Numeric	Page to return	1
pageSize	Numeric	The number of results to return in a page	10
format	String	Must be either `xml` or `json`	-

EXAMPLE SEARCHES

To search for all establishments that have 'cafe' in the name:
http://localhost/FHRSWeb/search-name/cafe/xml
http://localhost/FHRSWeb/search-name/en-gb/cafe/xml

To search for all establishments that have 'cafe' in the name, returning page 2:
http://localhost/FHRSWeb/search-name/cafe/2/xml
http://localhost/FHRSWeb/search-name/en-gb/cafe/2/xml

To search for all establishments that have 'cafe' in the name, returning page 2, where the page size is 30:
http://localhost/FHRSWeb/search-name/cafe/2/30/xml
http://localhost/FHRSWeb/search-name/en-gb/cafe/2/30/xml

SEARCH-ADDRESS

This is very similar to the Search function, except that no address can be supplied.

COMMAND SYNTAX

The command is structured in one of the following ways:

CULTURED

```
Search-address/{lang}/{address}/{sortOrder}/{page}/{pageSize}/{format}
search-address/{lang}/{address}/{page}/{pageSize}/{format}
search-address/{lang}/{address}/{page}/{format}
search-address/{lang}/{address}/{format}
```

NON-CULTURED

```
search-address/{address}/{sortOrder}/{page}/{pageSize}/{format}
search-address/{address}/{page}/{pageSize}/{format}
search-address/{address}/{page}/{format}
search-address/{address}/{format}
```

PARAMETERS

The following parameters can be used. The value in the default column is used if the route does not explicitly supply a value. For example, if the route does not specify `pageSize`, a default value of 10 will be used.

Name	Type	Description	Default
lang	String	Must be either `en-GB` or `cy-GB`	en-GB
address	String	Part of the address (or postcode) to search for. Supplying a ^ (caret) will search for all addresses/post codes	-
sortOrder	String	Must be one of the following: • Alpha Returns the results in the order of Business Name in ascending order. • Desc_Alpha Returns the results in the order of Business Name in descending order. • Type Returns the results in the order of Business Typein	

		ascending order.	
		• Desc_Type Returns the results in the order of Business Type in descending order.	
		• Rating Returns the results in the order of Rating in ascending order (5,4,3,2,1,0,Pass, Pass and Eatsafe, Improvement Required, Awaiting Publication, Exempt, Awaiting Inspection)	
		• Desc_Rating Returns the results in the order of Rating in descending order (0,1,2,3,4,5, Improvement Required, Pass, Pass and Eatsafe, Awaiting Publication, Exempt, Awaiting Inspection)	
page	Numeric	Page to return	1
pageSize	Numeric	The number of results to return in a page	10
format	String	Must be either `xml` or `json`	-

EXAMPLE SEARCHES

To search for all establishments that are in Norwich:
http://localhost/FHRSWeb/search-address/norwich/xml
http://localhost/FHRSWeb/search-address/en-gb/norwich/xml

To search for all establishments that are in Norwich, returning page 2:
http://localhost/FHRSWeb/search-address/norwich/2/xml
http://localhost/FHRSWeb/search-address/en-gb/norwich/2/xml

To search for all establishments that are in Norwich, returning page 2, where the page size is 30:
http://localhost/FHRSWeb/search-address/norwich/2/30/xml
http://localhost/FHRSWeb/search-address/en-gb/norwich/2/30/xml

ENHANCED SEARCH (ADVANCED)

This is an advanced search operation that requires a longer command to achieve results, but gives more search options.

COMMAND SYNTAX

The command is structured in two ways:

CULTURED

`enhanced-search/{lang}/{name}/{address}/{sortOrder}/{businessType}/{la}/{page}/{pageSize}/{format}`

NON-CULTURED

`enhanced-search/{name}/{address}/{sortOrder}/{businessType}/{la}/{page}/{pageSize}/{format}`

PARAMETERS

The following parameters can be used. The value in the default column is used if the route does not explicitly supply a value. For example, if the route does not specify `pageSize`, a default value of 10 will be used.

Name	Type	Description	Default
lang	String	Must be either `en-GB` or `cy-GB`	en-GB
name	String	Name of business to search for. Supplying a ^ (caret) will search for all businesses	-
address	String	Part of the address (or postcode) to search for. Supplying a ^ (caret) will search for all addresses/post codes	-
sortOrder	String	Must be one of the following: • Alpha Returns the results in the order of Business Name in ascending order. • Desc_Alpha Returns the results in the order of Business Name in descending order. • Type	-

		Returns the results in the order of Business Type in ascending order. • Desc_Type Returns the results in the order of Business Type in descending order. • Rating Returns the results in the order of Rating in ascending order (5,4,3,2,1,0,Pass, Pass and Eatsafe, Improvement Required, Awaiting Publication, Exempt, Awaiting Inspection) • Desc_Rating Returns the results in the order of Rating in descending order (0,1,2,3,4,5, Improvement Required, Pass, Pass and Eatsafe, Awaiting Publication, Exempt, Awaiting Inspection)	
businessType	Numeric	FSA Business Type ID. Specifying a value of 0 will include all business types	
la	String	FSA Local Authority ID. Supplying a ^ (caret) will search for all Local Authorities	
page	Numeric	Page to return	1
pageSize	Numeric	The number of results to return in a page	10
format	String	Must be either xml or json	-

EXAMPLE SEARCHES

To search for all establishments for council 107 (Wealdon):
http://localhost/FHRSWeb//enhanced-search/en-GB/^/^/ALPHA/0/107/1/30/xml

To search for all establishments that have a business type of 2 (Hotel/Guest House):
http://localhost/FHRSWeb//enhanced-search/en-GB/^/^/ALPHA/2/^/1/30/xml

ENHANCED SEARCH (ADVANCED WITH LOCATION)

This is an advanced search operation that requires a longer command to achieve results, but gives more search options. It performs location based searching.

COMMAND SYNTAX

The command is structured in two ways:

CULTURED

```
enhanced-
search/{lang}/{name}/{address}/{sortOrder}/{businessType}/{la}/{long}/{lat}/{page}/{pageSize}/{format}
```

NON-CULTURED

```
enhanced-
search/{name}/{address}/{sortOrder}/{businessType}/{la}/{long}/{lat}/{page}/{pageSize}/{format}
```

PARAMETERS

The following parameters can be used. The value in the default column is used if the route does not explicitly supply a value. For example, if the route does not specify `pageSize`, a default value of 10 will be used.

Name	Type	Description	Default
lang	String	Must be either `en-GB` or `cy-GB`	en-GB
name	String	Name of business to search for. Supplying a ^ (caret) will search for all businesses	-
address	String	Part of the address (or postcode) to search for. Supplying a ^ (caret) will search for all addresses/post codes	-
sortOrder	String	Must be one of the following: • Distance Returns results by closest businesses to the supplied Long and Lat.	-
businessType	Numeric	FSA Business Type ID. Specifying a value of 0 will include all business types	

la	String	FSA Local Authority ID. Supplying a ^ (caret) will search for all Local Authorities	
long	float	Longitude	
lat	float	Latitude	
page	Numeric	Page to return	1
pageSize	Numeric	The number of results to return in a page	10
format	String	Must be either `xml` or `json`	-

EXAMPLE SEARCHES

To search for all establishments that near the specified point:
http://localhost/FHRSWeb/enhanced-search/en-GB/^/^/DISTANCE/0/^/-4.73561176951173/55.9421692082746/1/30/xml

BUSINESS DETAILS

This is a business details operation that retrieves the details of a business.

COMMAND SYNTAX

The command is structured in one of the following ways:

CULTURED
```
business/{lang}/{fhrsid}/{format}
```

NON-CULTURED
```
business/{fhrsid}/{format}
```

PARAMETERS

The following parameters can be used. The value in the default column is used if the route does not explicitly supply a value. For example, if the route does not specify `lang`, a default value of en-GB will be used.

Name	Type	Description	Default
lang	String	Must be either `en-GB` or `cy-GB`	en-GB
fhrsid	String	Unique identifier for the business.	-
format	String	Must be either `xml` or `json`	-

EXAMPLE SEARCHES

To search for all establishments that have cafe in the name and are in Norwich:
http://localhost/FHRSWeb/business/80928/xml
http://localhost/FHRSWeb/business/en-GB/80928/xml

LOCAL AUTHORITY LIST

This is a local authority operation that retrieves all a list of all local authorities within the system. An entry in the list, does not guarantee data will be available for the authority.

COMMAND SYNTAX

The command is structured in one of the following ways:

CULTURED
`authorities/{lang}/{format}`

NON-CULTURED
`authorities/{format}`

PARAMETERS

The following parameters can be used. The value in the default column is used if the route does not explicitly supply a value. For example, if the route does not specify `lang`, a default value of en-GB will be used.

Name	Type	Description	Default
lang	String	Must be either `en-GB` or `cy-GB`	en-GB
format	String	Must be either `xml` or `json`	-

EXAMPLE SEARCHES

To search for all establishments that have 'cafe' in the name and are in Norwich:
http://localhost/FHRSWeb/authorities/en-GB/xml
http://localhost/FHRSWeb/authorities/xml

SCHEME TYPES

Two types of scheme are supported by the API; two (the FHIS) and six (the FHRS) tiers. A local authority can belong to one scheme. The scheme in which they participate is determined by the country in which the local authority is located. The scheme/countries are list below:

Scheme Code	Scheme Name	Country
FHIS	Food Hygiene Information Scheme	Scotland
FHRS	Food Hygiene Rating System	England, Wales and Northern Ireland

RATING VALUES AND KEYS

The rating value is the result of an inspection for a business. These are different between scheme types. The FHIS uses status messages only, while FHRS uses either a rating (between 0 and 5) or a status. See below for a complete list.

The rating key can be used by developers to decide which rating image to show within their application. The keys correspond to images available on the FSA website (http://ratings.food.gov.uk/open-data-resources/images/images.zip). Images have been made available in three sizes and should not be modified in any way. Images supplied by the FSA must only be used in accordance with the Terms and Conditions at: www.food.gov.uk/ratings-terms-and-conditions.

Supported cultures are English and Welsh (en-GB and cy-GB). Images available are:

large: 290 x 147 pixels (72ppi; 163ppi; 326ppi)

medium: 185 x 43 pixels (72ppi, 163ppi, 326ppi)

small: 120 x 61 pixels (72ppi)

FHRS		
Rating Value	Rating Key	Culture

0	fhrs_0_en-gb	en-GB
1	fhrs_1_en-gb	en-GB
2	fhrs_2_en-gb	en-GB
3	fhrs_3_en-gb	en-GB
4	fhrs_4_en-gb	en-GB
5	fhrs_5_en-gb	en-GB
exempt	fhrs_exempt_en-gb	en-GB
awaitingpublication	fhrs_awaitingpublication_en-gb	en-GB
awaitinginspection	fhrs_awaitinginspection_en-gb	en-GB
0	fhrs_0_cy-gb	cy-GB
1	fhrs_1_cy-gb	cy-GB
2	fhrs_2_cy-gb	cy-GB
3	fhrs_3_cy-gb	cy-GB
4	fhrs_4_cy-gb	cy-GB
5	fhrs_5_cy-gb	cy-GB
exempt	fhrs_exempt_cy-gb	cy-GB
awaitingpublication	fhrs_awaitingpublication_cy-gb	cy-GB
awaitinginspection	fhrs_awaitinginspection_cy-gb	cy-GB

FHIS		
Rating Value	**Rating Key**	**Culture**
Pass	fhis_pass	-
Exempt	fhis_exempt	-
Improvement Required	fhis_improvement_required	-
Awaiting Inspection	fhis_awaiting_inspection	-
Awaiting Publication	fhis_awaiting_publication	-
Pass and Eat Safe	fhis_pass_and_eat_safe	-

FSA BUSINESS TYPES

The following business types are returned by the API:

English (en-GB)	Welsh (cy-GB)	Business Type ID
Restaurant/Cafe/Canteen	Bwyty/Caffi/Ffreutur	1
Hotel/Guest House	Gwesty/Ty llety	2
Supermarket/Hypermarket	Archfarchnad/Goruwchfarchnad	4
Hospitals/Childcare/Caring premises	Ysbytai/Safleoedd Gofal Plant/Safleoedd Gofal	5
Restaurants and Caterers - Other	Bwytai ac Arlwywyr – Arall	6

Distributors/Transporters	Dosbarthwyr/Cludwyr	7
Pub/Club	Tafarn/Clwb	8
Take-Away	Siop Tecawê	10
School/College	Ysgol/Coleg	11
Mobile Food Unit	Uned Fwyd Symudol	12
Manufacturers and Packers	Gweithgynhyrchwyr a Phecynnwyr	13
Importers/Exporters	Mewnforwyr/Allforwyr	14
Primary Producers	Cynhyrchwyr Sylfaenol	72
Other food retailers**	Manwerthwyr bwyd eraill	4613

** The system currently returns the two different business types – 'Small retailers' and 'Retailers – other' – that make up the 'Other food retailers' category.