



## **Directgov Syndication API Implementation Guide**

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# Directgov Syndication API - Implementation Guide

## Introduction

The Directgov syndication API allows you to provide all Directgov articles, news stories and government contact details through your own websites or applications.

You can provide articles by keyword and date published so, for example, you can publish recent articles on a topic like driving licences.

This guide will give you the details to get started. We'll be updating the Directgov | Innovate blog with any announcements on changes to the feeds as they happen. If you need any further assistance using Directgov content please post to the data.gov.uk forums ([www.data.gov.uk/forum](http://www.data.gov.uk/forum)) or email [syndication.innovate@directgov.gsi.gov.uk](mailto:syndication.innovate@directgov.gsi.gov.uk)

## Using the API

The API follows REST (Representational State Transfer) conventions.

To start you'll need to register to use the syndication API. Once you've done this you'll be given a username and password. (We use this username and password as a token to find out the popularity of Directgov content.)

Once registered you can browse the content available via <http://syndication.innovate.direct.gov.uk> or start accessing the content straightaway through the syndication API.

To access the API you will need to authenticate using one of three options:

1. Using HTTP Basic Authentication header (Authorization), including the username and password (separated by a colon); Base64 encoding them and prefixing this with the word Basic. The header should look something like this:

```
Authorization: Basic YZRtbW46aYF1NFpOK4M=
```

Almost all programming and scripting languages will provide a means to generate this for you.

*Note: This is the suggested method as it keeps authentication separate from your use of URIs.*

2. Prefixing your colon separated username and password to the URI e.g.

```
http://username:password@syndication.innovate.direct.gov.uk/id/article/DG_123456
```

*Note: Not all HTTP clients (web browser, curl, PHP class, etc) support this method of authentication (e.g. IE6 and some online widget engines)*

3. Passing your username and password as parameters in the URI eg.

```
http://syndication.innovate.direct.gov.uk/id/article/DG_123456?username=foo&password=bar
```

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*Note: This is provided as a compatibility mode. We recommend you don't use this method as it will require you to add your credentials to each URI we serve you.*

## Integrating Directgov articles

Through the syndication API you can access Directgov articles via the hierarchical structure used on the Directgov website, keywords or take an ATOM feed of articles since a given date (specified by you).

Articles are available in the following representations:

- XHTML
- ATOM
- JSON

### Articles by topic

Directgov articles are divided into topics and 'n' number of sub-topics which link to individual articles. The syndication URIs have been designed to mirror the Directgov website.

For example, if you want to include content on Driver Licensing the corresponding URI would match the hierarchy on Directgov:

```
.../article/motoring/DrivingLicensing
```

or a set of articles about Income Tax

```
.../article/MoneyTaxAndBenefits/Taxes/BeginnersGuideToTax/IncomeTax
```

Note: both examples would begin with <http://syndication.innovate.direct.gov.uk>

When integrating Directgov section pages, you will be provided with the following elements:

- Hyperlinked breadcrumb trail
- Link to the original source page
- Page title
- Page links to articles or other sub-sections

### Individual articles

Each article has a page ID (typically in the form of a DG\_<number>), which is unique to that article, so when accessing an individual article the site structure is ignored. For example, the article 'Beginner's guide to tax' has a reference DG\_10013700, the corresponding syndication URI would be:

```
.../id/article/DG_10013700
```

Note: site structure isn't used in the URI

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When integrating article pages, you will be provided with the following elements:

- Hyperlinked breadcrumb trail
- Link to the original source page
- Language identifier
- Article description
- Article keywords (editor-defined) and subjects (automated keywords based on article content)
- Article title
- Main article content including page links (note: no images or other media are included)

## Articles by keyword

Selections of articles are also available by keyword metadata taken from each article. For example, all articles relating to jobs are accessible via the URI:

```
.../keywords/job
```

## Articles since

An ATOM feed of articles by a given date and site section, specified by you, is also available. The feed can be created manually via <http://syndication.innovate.direct.gov.uk/articles/since> or by passing the following parameters via a URI:

Parameter	Format
Year	YYYY (e.g. 2010)
Month	MM (e.g. 04)
Day	DD (e.g. 04)
Path	URL path format (e.g. path%2FMotoring)

An example URI would be:

```
.../article/since?year=2010&month=04&day=30&path%2FMotoring%2FDriverLicensing
```

## Integrating news articles

Through the syndication API you can also access news articles from Directgov. News articles cover the latest public announcements like the volcanic ash cloud problem affecting flights in and out of the UK.

The news articles are organised via a main news section covering general affairs and then seven other news topic sections:

- Consumer
- Crime
- Education

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- Employment
- Green
- Money
- Travel

News topics again mirror the Directgov website. For example, the URI to access all Directgov Travel News is:

```
.../news/TravelNews
```

Individual articles are handled in the same way as ordinary articles (i.e. with a unique ID) and are accessed in the same way. They are also available in the same formats.

## Integrating contacts

The syndication API also includes access to a directory of contacts for central government (as an A-Z listing), local councils (as an A-Z listing and via regions) and useful contacts by category. The structure of the contacts section mirrors the Directgov website.

Each individual contact page is available in the following representations:

- XML
- XHTML
- JSON
- vCard

## Formats/Representations

Depending on the content you are accessing, Directgov content can be provided in a variety of formats by specifying the format in the request Accept: header.

The following shows each format and the corresponding header accept code and the extension you can add to the URI if you just want to quickly check a format in your browser.

### XHTML

```
Header - Accept: application/xml+xhtml  
Extension - none required (default format)
```

### JSON

```
Header - Accept: application/json  
Extension - .json
```

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## XML

Header – Accept: application/xml  
Extension - .xml

## ATOM

Header – Accept: application/atom+xml  
Extension - .atom

## vCard

Header – Accept: application/vcard  
Extension - .vcard

## Responses and error handling

The HTTP response status code indicates the success or failure of your request. Common status codes are as follows:

- 200: Successful GET request
- 400: Bad request (change your headers or URL and try again)
- 401: Unauthorized (check your Basic HTTP Authentication)
- 404: Resource not found
- 405: Method not allowed (you may have tried to POST a GET-only URL)
- 406: Not acceptable (you asked for a media type in your Accept : header that cannot be supplied)
- 500: Internal server error

## Your conduct

You're free to use as much of our content as you want. However please design your programs to use the syndication API considerately. Try to limit the frequency of your requests. If you'd like to make a considerable number of requests to our server – please get in touch (via [syndication.innovate@directgov.gsi.gov.uk](mailto:syndication.innovate@directgov.gsi.gov.uk)) so we can discuss options with you.

If you find something wrong with the API, please contact us directly so we can fix it speedily. As this is a pilot we rely on your feedback to improve the service.

If you have any other questions or issues feel free to get in contact.

## Frequently asked questions

**Q: How up to date is your API?**

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A: News is updated every 30 minutes, articles three times a day and contacts daily.

### Q: Can I display the content in my own template?

A: Yes, the content is free for you to use. However, please observe the terms & conditions and accredit the content to Directgov.

### Q: Can I display the content on a mobile website or application

A: Yes. The syndication API is designed to be device agnostic and provide content in a variety of representation, without formatting, for you to use.

### Q: Can I cache the content on my own server/database?

A: Yes, feel free to do this. However please refresh your content at least every 24 hours to ensure you have the most up to date content.

### Q: Why no video or image content provided?

A: Directgov does not own the rights to syndicate the images and videos it uses on the Directgov website ([www.direct.gov.uk](http://www.direct.gov.uk)). At present, we are only able to link to resources on the Directgov website.

### Q: How can I provide feedback on your syndication API

A: We suggest you discuss ideas and feedback on the [data.gov.uk](http://data.gov.uk/forums) forums ([www.data.gov.uk/forums](http://www.data.gov.uk/forums)). You can also leave a comment on our syndication blog post or email us directly at [syndication.innovate@directgov.gsi.gov.uk](mailto:syndication.innovate@directgov.gsi.gov.uk).