

# **Catalogue Feeds**

7digital Catalogue Feeds allow you to ingest metadata of the entire 7digital music catalogue licensed in specific territory and maintain the ingested content up-to-date on a daily basis.

The feeds are provided in CSV format and served as gzip compressed files.

All feeds files can only be accessed using **2-legged** OAuth signed HTTP GET requests. More details on using OAuth can be found in our API documentation here: <a href="http://api.7digital.com/1.2/static/documentation/7digitalpublicapi.html#OAuth\_Authentication">http://api.7digital.com/1.2/static/documentation/7digitalpublicapi.html#OAuth\_Authentication</a>. You might also find useful our <a href="OAuth reference console">OAuth reference console</a> for debugging any Oauth signature generation issues.

We provide full feeds updated on a weekly basis and incremental updates which are published daily.

A small sample of each feed can be downloaded from: http://7digital.com/cms/feeds/feeds-samples.zip (No authentication required)

# Weekly full feeds

Full catalogue feeds are updated weekly and represent a snapshot of the entire catalogue at the time they were generated.

The full feeds are intended to provide you a starting point to populate your system with the entire 7digital back-catalogue.

# Daily incremental updates

Incremental feeds allow you to keep your catalogue in sync with the 7digital catalogue. The incremental updates are published daily.

Each incremental feed only contains catalogue items that have been inserted ("I"), updated ("U") or deleted ("D") during previous day.

Rows in incremental feeds are ordered chronologically. In some cases the same item can appear multiple times in a single feed, e.g. item with the same ID with 3 rows "U", "D" and "I" means that the item has been updated, deleted and then inserted again over the course of day. You have to process all the changes logged in the incremental feed in exactly the same order as

they are provided and apply the changes cumulatively.

The amount of incremental updates for each period will vary on daily basis. **Occasionally the number of changes may reach the size of the entire catalogue** (e.g. a change of VAT rate in a country can trigger price change of every single track). Make sure your ingestion process can handle big spikes in the amount of provided data.

If no changes have occurred on previous day the provided feed will be empty (i.e. only contain header row)

# TIP: Using API for "emergency" ingestion

Since the update feeds are generated daily at certain times your catalogue might be up-to 24 hours behind 7digital's. If there are any important catalogue updates throughout the day (e.g. new release by major artist with lots of publicity) if you rely solely on feeds these updates will not be available on your service until the next day feed is processed.

To cater for these cases we recommend building a simple tool that will allow you to ingest or update content on request using the 7digital API as the source of the data - content administrator enters artist, release or track ID (e.g. acquired from 7digital.com website or API search) and the ingestion tools fetches all the relevant data from 7digital API and updates your DB.

# Feeds Schedule and Availability

Full feeds are published every week on Monday evening (GMT) (the exact time will vary for each country). All full feeds should be available before Tuesday midday (GMT).

Update feeds are published every morning and typically will be available before midday (GMT) that day. Occasionally, if a substantial catalogue update happened the previous day, the update feeds for some countries might only be available later that day. (We recommend upon encountering a missing update feed you retry in an hour)

### Example feeds schedule:

	Date of feed	FULL FEED published every Mon night	UPDATES FEED published every day			
	date= query string parameter	captures catalogue state at:	captures updates during period:			
MON	20121001	time of generation e.g. Mon, Oct 1, 20:15	Sun, Sep 30, 00:00 - Mon, Oct 1, 00:00			
TUE	20121002	х	Mon, Oct 1, 00:00 - Tue, Oct 2, 00:00			
WED	20121003	х	Tue, Oct 2, 00:00 - Wed, Oct 3, 00:00			
THU	20121004	х	Wed, Oct 3, 00:00 - Thu, Oct 4, 00:00			
FRI	20121005	х	Thu, Oct 4, 00:00 - Fri, Oct 5, 00:00			
SAT	20121006	х	Fri, Oct 5, 00:00 - Sat, Oct 6, 00:00			

SUN	20121007	x	Sat, Oct 6, 00:00 - Sun, Oct 7, 00:00
MON	20121008	time of generation e.g. Mon, Oct 8, 20:05	Sun, Oct 7, 00:00 - Mon, Oct 8, 00:00

When requesting a catalogue feed you must always provide a specific date (using the date parameter). If you request a feed for a day when given feed is not published (i.e. for full feeds any day apart from Monday) or is not available yet a **404** HTTP error is returned.

In order to initialize your catalogue database you must first ingest the most recent full feed published on the previous Monday. You must then process each subsequent incremental feed, commencing with Tuesday's, as published in chronological order. Note that each incremental feed reflects the catalogue changes since the previous incremental feed and as such there may be changes which are already reflected in the full feed - e.g. "inserts" of content which already exists in the full feed. Any subsequent update feeds can then be treated as distinct sets of changes.

All feeds will remain available for 1 extra week, i.e. at any point, you can access full feeds from this week's Monday as well as last week's Monday, and all of the update feeds from the last week's Monday feeds up to today.

### **Basic feeds information**

All CSV files are **UTF-8** encoded.

Total estimated files size of full catalogue per 1 country (as of May 2012): **3.2GB (500MB compressed)** 

All data field names within feeds match our naming conventions used in standard API responses and description of individual fields can be found in the API documentation.

Links to images provided in the feeds don't refer to any particular image size, instead an image size placeholder - <\$size\$> - is provided within the links. To construct the actual image link the placeholder needs to be replaced with a <u>valid image size</u> (with no leading 0s).

E.g. for 300 pixels wide artist image for Keane

http://cdn.7static.com/static/img/artistimages/00/000/0000000001\_<\$size\$>.jpg needs to be converted to

http://cdn.7static.com/static/img/artistimages/00/000/0000000001\_300.jpg

If no value has been set for certain fields this is represented by empty string (rather than a special value). Please refer to <u>API documentation</u> for more details on what implications has no value for a field (e.g. if no price is set for a track, the track is not available for purchase

#### individually)

Please note that all the field sizes listed below are indicative only and might change at any time. Make sure you can gracefully handle also values larger than the ones indicated (e.g. by automatically truncating the data and logging a warning during your ingestion process).

Also note that the list of fields is not definitive and additional fields will be added in the future. Each feed contains a header row identifying the data fields it refers to. Use this header row to map feed columns to your data-structure. **Never refer to the columns in feed just by the columns' order, always use the header row.** 

Certain fields might also be deprecated and eventually removed from the feeds. In such cases we will endeavour to provide at least 1 month's notice.

All gzipped CSV files are served with 7digital internal filename (in the Content-disposition HTTP header), e.g. 00496\_track\_updt\_20120612.gz. These are intended only for more convenient ad-hoc testing and we strongly recommend you save any retrieved feed files under your own filenames. The format of the provided internal filenames might change without prior notice.

All feeds are provided for each country separately and each of these feeds contains only that sub-set of 7digital catalogue available in the given country.

The following types of feeds are published:

- artist
- release
- track

A small sample of each feed can be downloaded from:

http://7digital.com/cms/feeds/feeds-samples.zip (No authentication required)

NB: These are just snippets of the actual feeds. As such they are not self-contained, i.e. the data in the samples might reference data that is not included in the samples.

# **Artists Feeds**

the feed contains a list of all artists with releases available in given country

#### **URLs**:

Full feed	http://feeds.api.7digital.com/1.2/feed/artist/full
Incremental updates	http://feeds.api.7digital.com/1.2/feed/artist/updates

## Request parameters:

name	type	use	description06
country	ISO 3166-1 Alpha-2 code	required	country code of the catalogue
date	date (in YYYYMMDD format)	required	the date when feed was published

#### Available data fields

action string(1) updates files only.

Possible values: i (insert), u (update), d (delete)

artistId integer

name string(4000) (optional)
popularity decimal (optional)
url string(800) (optional)

tags array[string(400)] (optional)

image string(400) (optional)

estimated uncompressed CSV file size: 180MB

Example request (needs to be OAuth signed using your API credentials): <a href="http://feeds.api.7digital.com/1.2/feed/artist/full?date=20000102&country=GB">http://feeds.api.7digital.com/1.2/feed/artist/full?date=20000102&country=GB</a>

http://feeds.api.7digital.com/1.2/feed/artist/updates?date=20000102&country=GB

# **Releases Feeds**

the feed contain all details for all releases available in given country excluding track listings

### **URLs**:

Full feed	http://feeds.api.7digital.com/1.2/feed/release/full
Incremental updates	http://feeds.api.7digital.com/1.2/feed/release/updates

# Request parameters:

name	type	use	description
country	ISO 3166-1 Alpha-2 code	required	country code of the catalogue
date	date (in YYYYMMDD format)	required	the date when feed was published

#### Available data fields:

action string(1) updates files only. Possible values: i (insert), u (update), d (delete) releaseId integer title string(4000) (optional) version string(4000) (optional) artistId integer (optional) artistAppearsAs string(4000) (optional) barcode string(100) (optional) string(100) (optional) type integer (optional) year explicitContent boolean (optional) trackCount integer (optional) duration integer (optional) array[string(400)] (optional) tags image string(400) (optional) dateAdded datetime (optional) releaseDate datetime (optional) labelId integer (optional) labelName string(200) (optional) labelName licensorId integer (optional) price decimal (optional) decimal (optional) rrp url string(800) (optional) array[integer] (optional) formats

estimated uncompressed CSV file size: 360MB each

Example request (needs to be OAuth signed using your API credentials):

http://feeds.api.7digital.com/1.2/feed/release/full?date=20000102&country=GB http://feeds.api.7digital.com/1.2/feed/release/updates?date=20000102&country=GB

### **Tracks Feeds**

the feed contains all details for all tracks available in given country

#### **URLs**:

Full feed	http://feeds.api.7digital.com/1.2/feed/track/full
Incremental updates	http://feeds.api.7digital.com/1.2/feed/track/updates

#### Request parameters:

name	type	use	description
country	ISO 3166-1 Alpha-2 code	required	country code of the catalogue
date	date (in YYYYMMDD format)	required	the date when feed was published

#### Available data fields:

action string(1) updates files only. Possible values: i (insert), u (update), d (delete) trackId integer version string(100) (optional) artistId integar ( title string(4000) (optional) artistAppearsAs string(4000) (optional) releaseId integer type string(100) (optional) string(50) (optional) explicitContent boolean (optional) trackNumber integer (optional) discNumber duration integer (optional) integer (optional) string(500) (optional) url price decimal (optional) decimal (optional) rrp array[integer] (optional) formats[] popularity\* decimal (optional) streamingReleaseDatedatetime (optional)

estimated uncompressed CSV file size: 2.7GB each

Example request (needs to be OAuth signed using your API credentials): http://feeds.api.7digital.com/1.2/feed/track/full?date=20000102&country=GB http://feeds.api.7digital.com/1.2/feed/track/updates?date=20000102&country=GB

<sup>\*</sup> due to popularity changing on a daily basis across the entire catalogue, if only track's popularity changes on

given day the track will not be included in the daily update feed. If you're making use of the popularity field you can use the weekly full feeds to keep it up to date.

# Countries, territories and custom content catalogues

There are three types of catalogues provided by feeds:

### **Country specific**

7digital has licensed localised content for over 20 countries worldwide. (As we're continually launching in more and more countries, for most up to date list please visit 7digital.com.) Catalogue for each country is provided in a separate feed and the content is priced in local currency. When requesting a country specific feed please provide the <a href="ISO 3166-1 Alpha-2 code">ISO 3166-1 Alpha-2 code</a> of given country.

# **Territory specific**

In addition to feeds for individual countries, we also provide the following feeds covering broader territories:

# "7digital Europe" – country code "XE"

This feed contains content that is licensed in all territories in the <u>European Economic</u> <u>Area</u> except where a local country specific catalogue is available (i.e. it should not be used by users in GB, FR, etc. but can be used by EEA users where local 7digital store is not currently available e.g. SK, CZ). The content is priced in EUR.

# • "7digital WW" - country code "XW"

This feed contains content that is licensed globally except EEA countries or where a local country specific catalogue is available (i.e. it should not be used by users in GB, US, SK, CZ, etc. but can be used by non-EEA users where local 7digital store is not currently available e.g., KY, MA). The content is priced in USD.

#### Partner specific

7digital also provides option for partners to host their own catalogue of custom content. If you do have such a custom content pool you will be assigned a dedicated "shop" ID. To access catalogue feeds of your own content pool you will need to replace the standard country=XX parameter with shopId parameter along with the ID you've been assigned.

# Legal obligations

Access to 7digital Catalogue Feeds allows you to store the provided data within your infrastructure for the length of your contract.

The feeds contain content of the entire 7digital catalogue. It is your responsibility to filter out content which your application does not support, e.g. tracks of type "video".

Unless you are able to indicate clearly to end users that releases and tracks having future release dates are available only for pre-ordering you should ensure that this content is not shown until the release date.

7digital is contractually obliged to honour take down notices issued by content providers within two (2) working days and the same applies to partners. All take-downs will be reflected in the daily incremental updates and it is your responsibility to ensure that content marked as deleted is removed from your services.

Media files (album artwork, artist images, preview clips, audio streams, etc) must never be retrieved and/or stored by 3rd party servers for any amount of time. All media files must be served to end users directly from 7digital servers. Temporary caching of images and preview clips is permitted on end user's client side only

If your contract includes access to 7digital web API you can complement the data provided by 7digital Catalogue Feeds with any additional information available via the 7digital Catalogue API but only through user driven requests. Automated scraping of data via the API is strictly forbidden and will result in your 7digital API key being blocked. If there's some information that you miss in the feeds data please let us know instead.

# **CSV Format of the Feeds**

CSV conventions in use:

- each line consists of field separated by commas
- each line is ended by a linefeed character
- if any field in a feed file contains a comma then that field is escaped in its entirety by starting the field with a double-quote (") and ending it with another double-quote
- if a text field is escaped, any double-quote (") appearing within the text field is escaped by placing an extra double-quote in front of the double-quote, resulting in a two consecutive double-quotes ("")
- array fields' individual elements are separated by commas. (If array contains more than one element then the whole array field will be escaped with a double-quote (") as any other field containing comma(s)). Individual elements within an array field will never contain quote or comma.

# Example code

A simple example in Ruby showing how to download 7digital Catalgoue Feeds can be found here: <a href="https://github.com/7digital/7digital-feed-fetcher-example">https://github.com/7digital/7digital-feed-fetcher-example</a>

# **APPENDIX**

# **Track Formats**

The below table lists all formats that 7digital content might be available in. Please note that additional formats might be added in the future, we will notify you in such cases. We will also be exposing this list via our API in the near future.

formatld	fileFormat	bitRate	drmFree	description
1	WMA	192	FALSE	Windows Media Audio 192
2	M4A	192	TRUE	AAC 192
4	WMV		FALSE	Windows Media Video
6	MP3	192	TRUE	MP3 192
9	MP4		TRUE	iPod Vid
10	PDF		TRUE	PDF file
11	ZIP		TRUE	Generic binary
13	WMV		FALSE	WMV Portable
17	MP3	320	TRUE	MP3 320
18	MP3	128	TRUE	MP3 128 Audiobook
19	WMA	320	FALSE	Windows Media 320
21	MP4		TRUE	MPEG 4 large vid
24	WMA	128	FALSE	WMA128
26	MP3	128	TRUE	MP3 128
27	M4A	128	TRUE	AAC 128
28	M4A	256	TRUE	AAC 256
33	M4A	320	TRUE	AAC 320
35	WMV		TRUE	WMV DRM Free
37	WMV		TRUE	WMV Portable DRM Free
40	WMA	192	TRUE	Windows Media Audio DRM Free
42	WAV		TRUE	Lossless WAV
43	WMA		TRUE	Lossless WMA
45	FLAC		TRUE	Flac
48	MP3	256	TRUE	MP3 256
50	MP3	64	TRUE	MP3 64
52	FLAC		TRUE	Flac HD
55	M4A	64	TRUE	HE-AAC 64
56	M4A	160	TRUE	AAC 160

# Licensors

LicensorId is provided in the release feed to allow filtering out content in cases when your service

is missing licenses from one of the licensors. (Licensors information is not meant to be displayed to end users - see <u>Label and Licensor</u> section in our API documentation)

The below table lists the most relevant licensors (in total there's over 200 of them). In the unlikely case you require to filter out content by licensor not listed here please contact us.

licensorId	licensorName
1	Universal
2	Sony Music
3	Universal US
13	EMI
18	Warner
39	Beggars