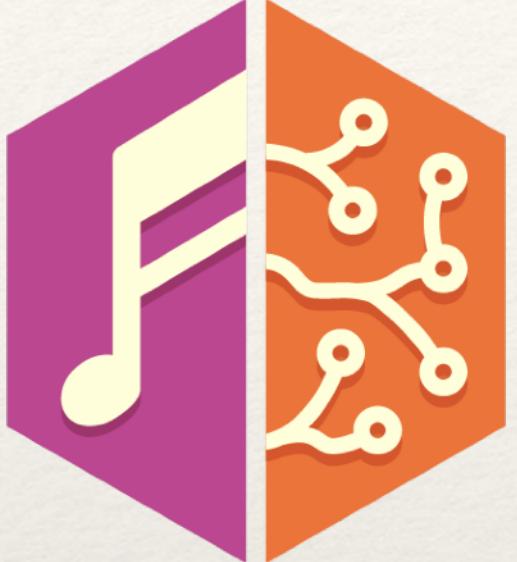
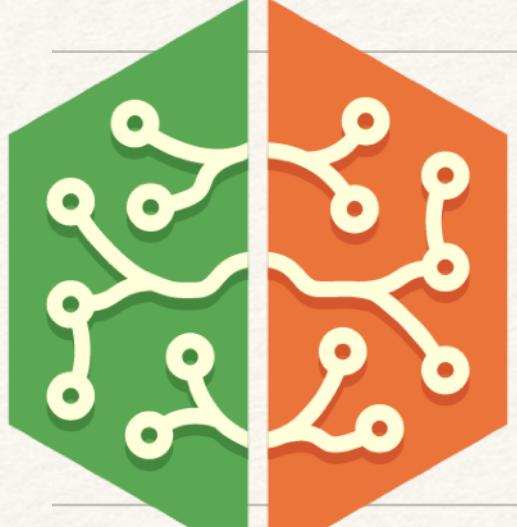


MetaBrainz Database Schemas

Alastair Porter (MetaBrainz, MTG-UPF)
LinkedMusic Project Meeting
21 October 2023

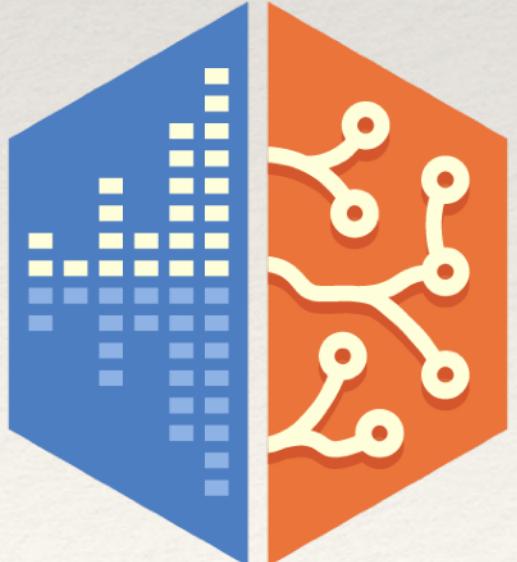
MetaBrainz projects



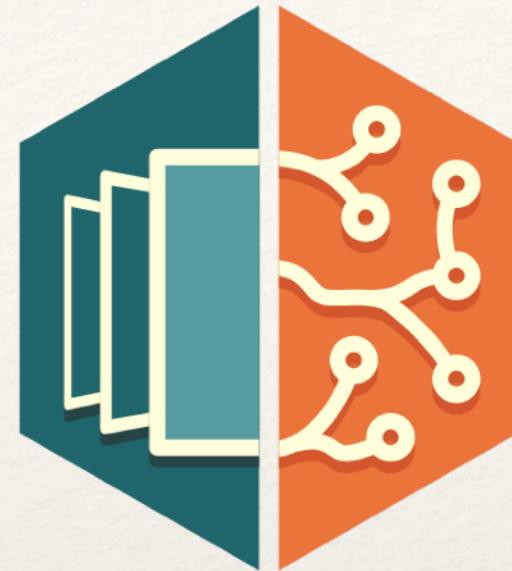
MusicBrainz



CritiqueBrainz



AcousticBrainz



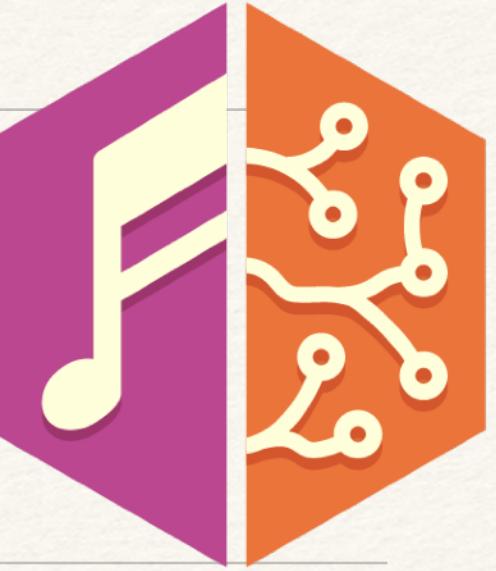
Cover Art Archive



ListenBrainz



BookBrainz



MusicBrainz

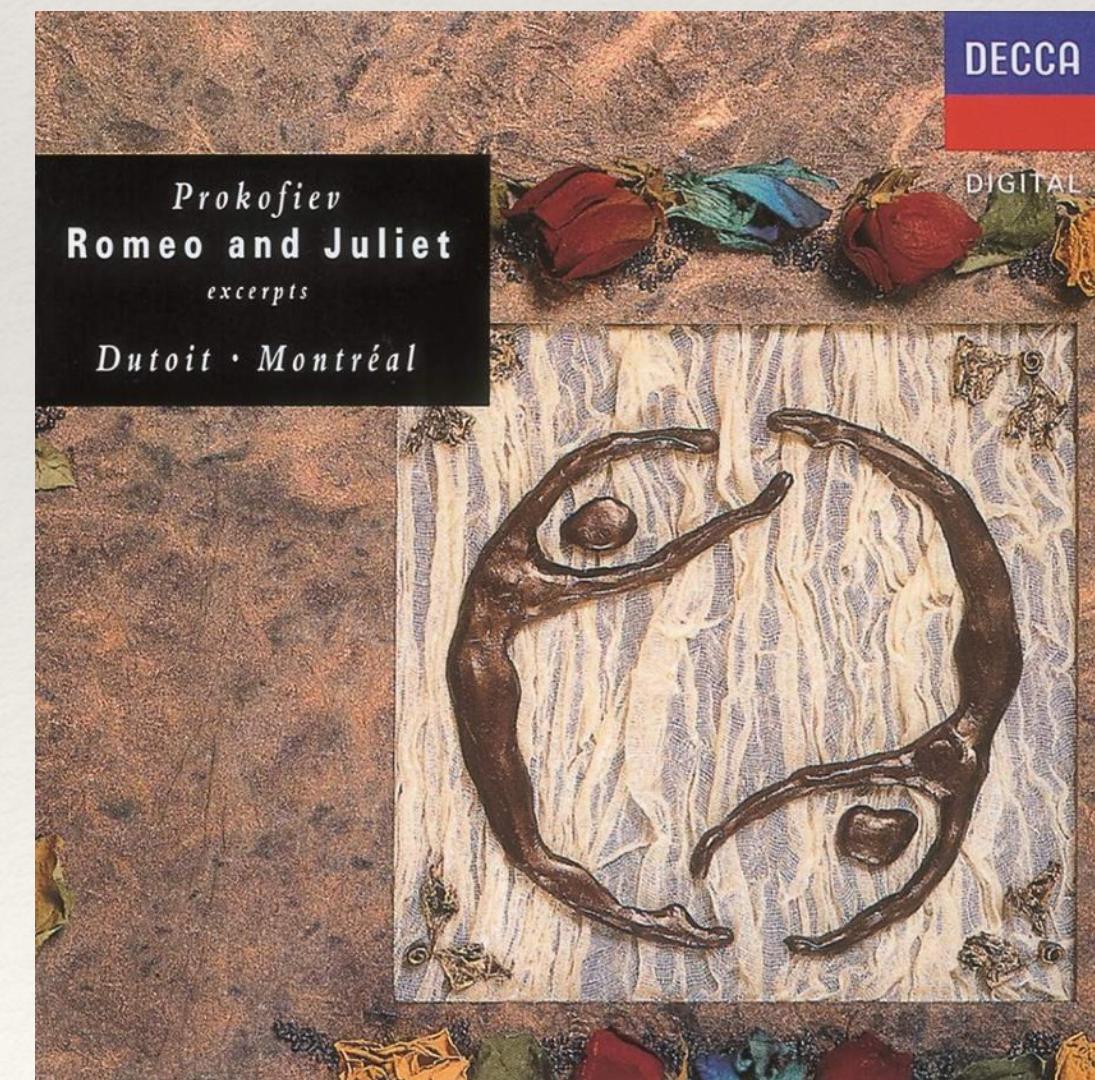
<https://musicbrainz.org>

- ❖ Open database of (recorded) music metadata
- ❖ Run by the MetaBrainz Foundation (California non-profit)
- ❖ 12 Paid developers/team members
- ❖ Community of 20,000+ active volunteers who add data
- ❖ Foundation funded by licensing fees for access to the MusicBrainz database

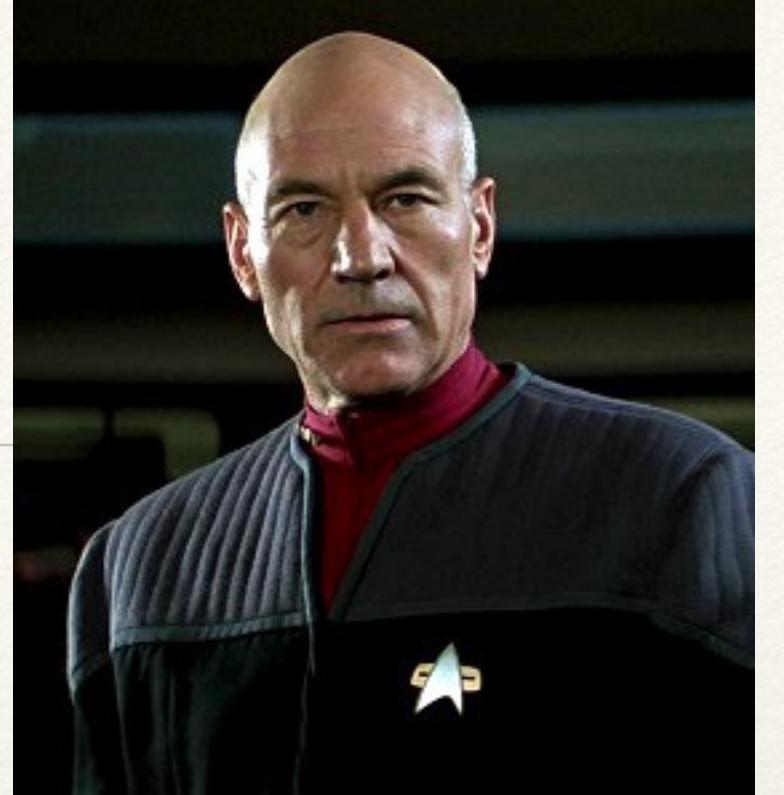
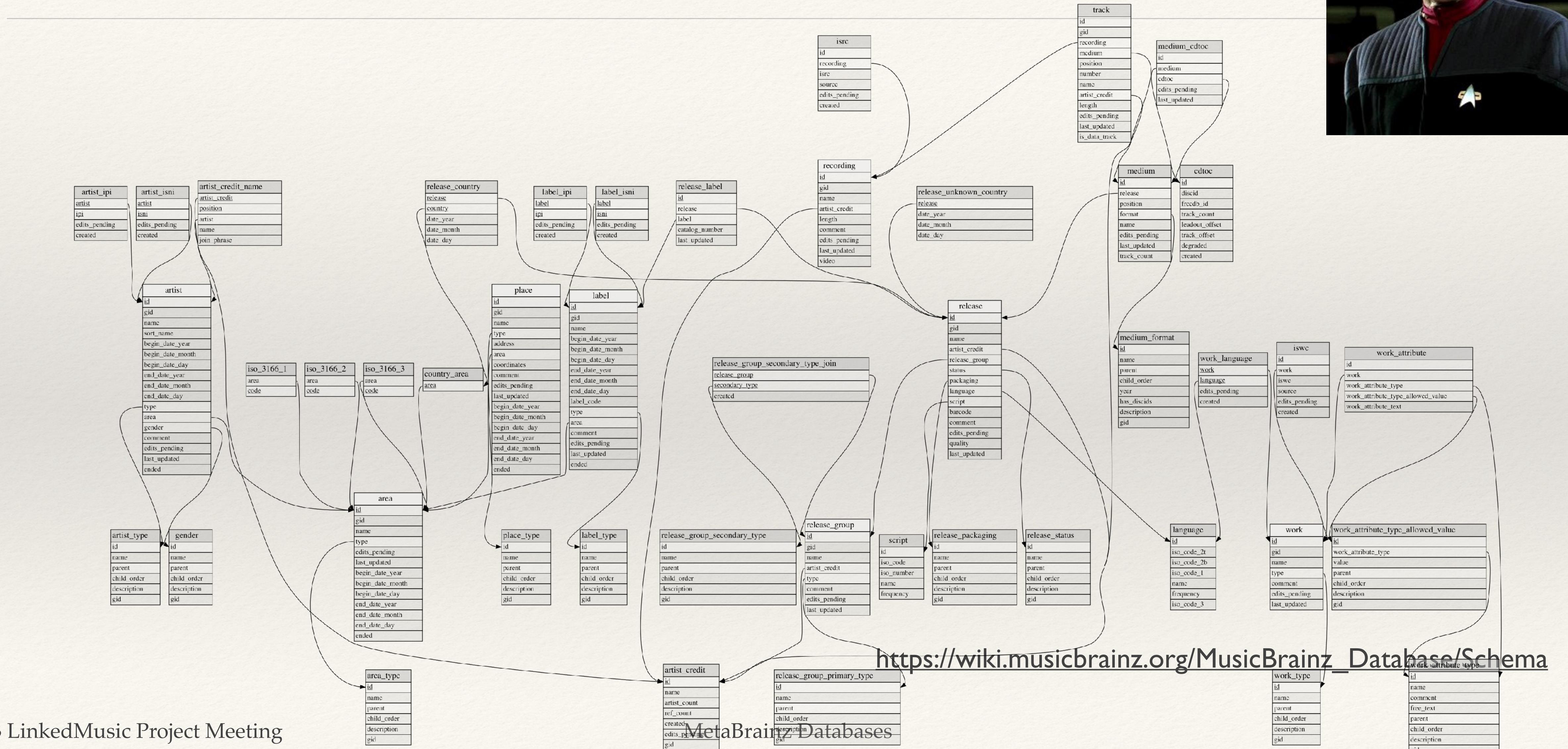
The screenshot shows a web browser displaying the MusicBrainz website. The URL in the address bar is <https://musicbrainz.org/release/492511c2-bc58-4f0c-ba73-7de3befc9710>. The page title is "Release 'A Night at the Opera'". The main content area shows details for the album "A Night at the Opera" by Queen, including the cover art (a colorful illustration of a lion and a unicorn), release information (Format: Vinyl, Length: 39:59), and tracklist. The tracklist includes "Death on Two Legs (Dedicated To...)" and "Lazing on a Sunday Afternoon". The right side of the screen contains a sidebar with various links and details about the release, such as labels (EMI), release events (Netherlands, 1975-11-21), and release group rating (★★★★★). The bottom of the sidebar has sections for genres, other tags, external links, and release group external links.

Original schema

- ❖ Originally a copy of the CDDB structure:Artist,Album,Track
- ❖ The same recording on different albums is in the database twice
- ❖ Multi-CD albums get entered as different albums
- ❖ The "Classical Music Problem"



The Next Generation Schema

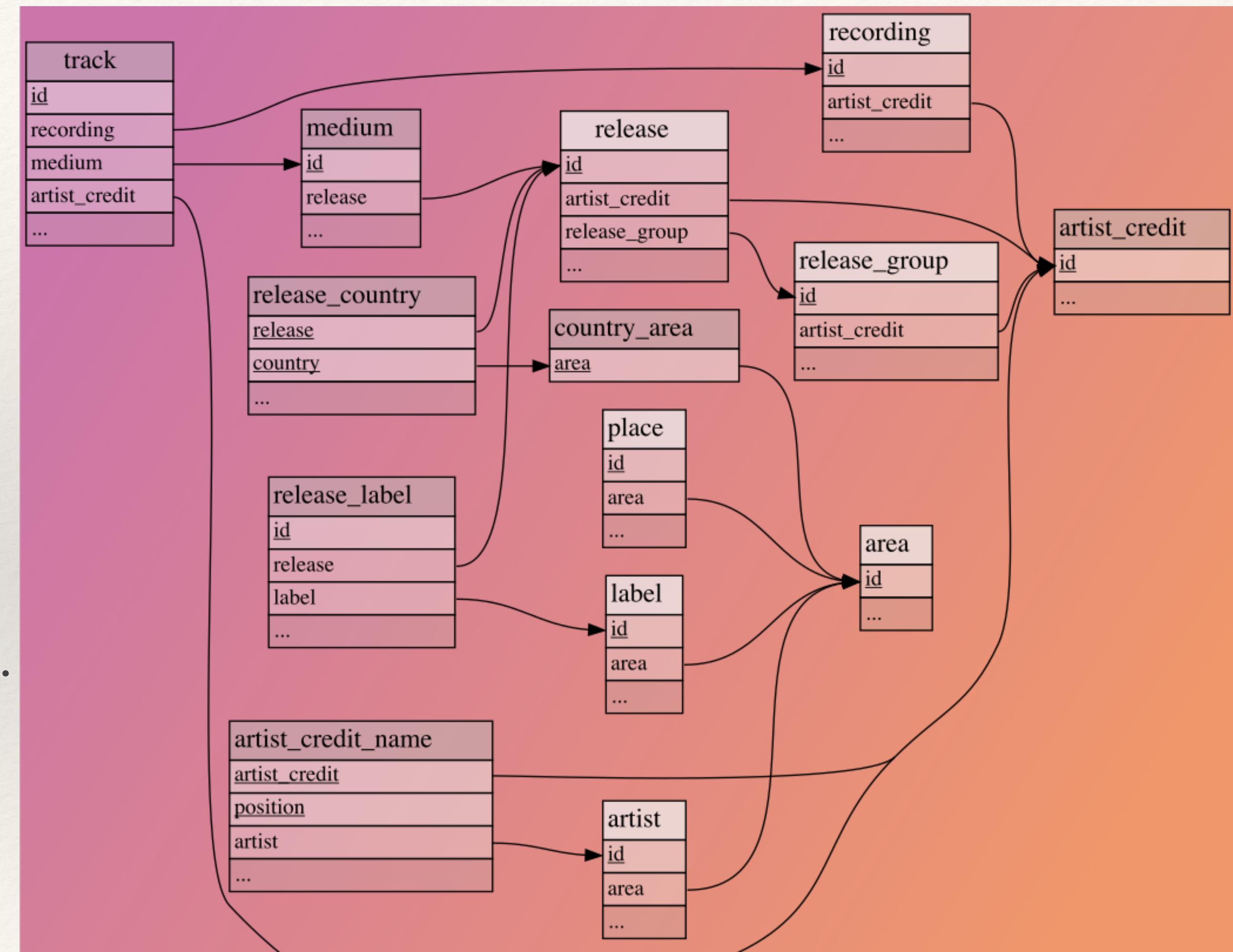


Schema

- ❖ https://wiki.musicbrainz.org/MusicBrainz_Database/Schema
- ❖ The schema was built from scratch (2011)
 - ❖ Solve a specific problem that we had
 - ❖ Not specifically based on an existing data schema (FRBR, Schema.org, MO, MARC)
 - ❖ We saw that we implemented many features of existing metadata schemas
 - ❖ Periodic updates to add new features (up to 2 releases per year, usually fewer)
- ❖ All items in the database have a MusicBrainz ID (Random UUID) for public identification
 - ❖ In our experience, every time we thought that this wasn't necessary, we eventually realised that it would be useful

Core entities

- ❖ **Release Group**: contains multiple variants of the same **release** (vinyl, cassette, CD, reissue, country variants)
- ❖ A release can have 1 or more mediums (CD1, CD2, CD3...)
- ❖ **Recordings** can be shared between multiple releases. Link between medium-track-recording. Tracks are unique, but recordings may not be
- ❖ **Artist** credits explain who performed



Artist credits

- ❖ https://wiki.musicbrainz.org/Artist_Credits
- ❖ Who is the release attributed to?
- ❖ Recordings can optionally have another artist credit (otherwise it is shared with the release)
- ❖ Credits can include additional text (join phrase)
- ❖ The name of the artist in the credit can be different to the artist's original name

The screenshot shows a web browser displaying the MusicBrainz website for the release "Pearl" by Gaucho featuring Tamar Korn. The page includes a navigation bar with links like Overview, Disc IDs (1), Cover Art (4), Aliases, Tags, Details, Edit, and Edit Relationships. Below this is a "Tracklist" section for CD 1, listing eight tracks: Sing On, Little Sweetie, Doublebarrel, Waiting, Pazzo, Mariposa Waltz, Pearl, and Sergei Stomp. Each track entry includes recording, lyricist, and composer information. To the right of the tracklist is a "Release information" sidebar with details such as Barcode: 852515002143, Format: CD, Length: 50:51, Type: Album, Packaging: Digipak, Status: Official, Language: English, Script: Latin, Data Quality: Normal, Label: Porto Franco Records PFR026, Release events: United States 2010-10-19, and Release group rating: ★★★★☆ (see all ratings). The sidebar also features a small illustration of a bird.

Other entities

- ❖ Not an exhaustive list, but these items have a MusicBrainz ID
- ❖ https://musicbrainz.org/doc/MusicBrainz_Entity
- ❖ Area (geographical)
- ❖ Place (Studio, Stadium)
- ❖ Event (Concert, Festival)
- ❖ Artists (Person or Group)
- ❖ Release ("Album")
- ❖ Release Group (Collection of releases)
- ❖ Recording
- ❖ Series
- ❖ Work ("Composition", but also movement, symphony)
- ❖ Genre
- ❖ Instrument

Instruments

<https://musicbrainz.org/instruments>

Instrument List - MusicBrainz

musicbrainz.org/instruments

alastairp My Data

Search Artist

About Us Products Search Editing Documentation English

Instrument List

Wind instrument

- accordina (harmonica/accordion hybrid) — Harmonica/Accordion hybrid where the bellows for the accordion bit with buttons/keys receive air though the user blowing into the instrument like an harmonica
- accordion (Commonly used bellowed free reed with keys/buttons) — Invented and developed by several people in the early 1800's, it has an arm operated bellows with keys or buttons at one end and bass buttons at the other.
- algozey — The algozey is a wooden, beaked double-flute traditionally played by goat herders in the Punjab region of India and Pakistan.
- alphorn — The alphorn, or alpine horn, is a conical wood horn used for communication in mountains.
- alto clarinet — The alto clarinet is a clarinet in E♭ or sometimes F, normally with a curved neck.
- alto flute — The alto flute is a concert flute in G, lower in tone than the flûte d'amour.
- alto saxophone (Middle member of the saxophone family) — The most common member of the saxophone family, it is the alto member.
- Anglo concertina (Historical hybrid between English and German style concertinas) — Bisonoric and button layout like the German, reeds and hexagonal ends like the english, this concertina was created to rival the popular German variant imported into England.
- antara (Andean single row panpipe) — Used in traditional Andes music, it consists of a single row of pipes.
- arghul — The arghul is a traditional Egyptian double-pipe, single-reed woodwind instrument.
- bagpipe — The bagpipe is an instrument consisting of a series of enclosed reeds fed by a bag of air.
- bandoneón — Invented and used in 1800's Europe, it became popular in Argentina. Unlike concertinas it is square, but alike its button action is parallel, typically it has several reeds per button.
- bansuri — The bansuri is a transverse alto flute, which is the North Indian counterpart to the venu.
- baritone horn — The baritone horn is a piston valve brass instrument with a wide-rimmed cup mouthpiece which is pitched in B♭, one octave below the B♭ trumpet.
- baritone saxophone (Middle-Low member of the saxophone family) — The most common of the lower members of the saxophone family, it is the middle-low baritone.
- baroque rackett (Conical bored compact double reed) — Improved by Johann Christoph Denner sometime around 1730, its "coiled snake" bore now is conical, in addition it is played through a removable metal curled mouth piece.
- baroque trumpet (20th century reinvented natural trumpet) — Based on the natural trumpet used in the 1500s to 1700s, this mid 20th century reinvention lacks valves but may have vents.
- barrel organ — A barrel organ is a mechanical musical instrument typically operated by a person turning a crank which turns a barrel which has music encoded onto it.
- bass clarinet — The bass clarinet is a clarinet, typically pitched an octave below the soprano B♭ clarinet.
- bass flute — The bass flute is a flute, pitched one octave below the C concert flute, with a tube about 1.5 meters long.
- bass harmonica — The bass harmonica is a type of octave harmonica where the lowest note (E) is the same as that on a bass guitar.
- bass oboe — The bass oboe is a double reed woodwind instrument which is about twice the size of a regular oboe.
- bass recorder
- bass saxophone (Second lowest member of the saxophone family) — Second largest and lowest member of the saxophone family. It is similar to the baritone, but larger and with a longer loop near the mouthpiece.
- bass trombone
- bass trumpet — The bass trumpet is a type of low trumpet similar to the valve trombone.
- basset clarinet
- basset horn
- bassoon
- hawu — The hawu is a Chinese wind instrument. Although shaped like a flute, it is actually a free reed instrument with a single metal reed.

Wind instrument "melodica" - MusicBrainz

musicbrainz.org/instrument/8ab40df2-106b-4b9b-a50c-0798ee95da8f

alastairp My Data

Search Artist

About Us Products Search Editing Documentation English

melodica (Free-reed keyboard mouth-organ)

Wind instrument

Overview Artists Releases Recordings Aliases Tags Details

Description

Popular as a musical education tool, it is usually made of plastic with a keyboard, its free-reed mouthpiece can also have an optional air tube. It has many brandnames.

Wiki

The **melodica** is a handheld free-reed instrument similar to a pump organ or harmonica. It features a musical keyboard on top, and is played by blowing air through a mouthpiece that fits into a hole in the side of the instrument. The keyboard usually covers two or three octaves. Melodicas are small, lightweight, and portable, and many are designed for children to play. They are popular in music education programs, especially in Asia. The modern form of the instrument was invented by Hohner in the late 1950s, though similar instruments have been known in Italy since the 19th century.

Continue reading at [Wikipedia...](#) Wikipedia content provided under the terms of the [Creative Commons BY-SA license](#)

Relationships

- type of: [mouth organ](#)
- derivations: [vibrandoneon](#) (accordina with piano keys)
- related instruments: [claviola](#) (free reed aerophone with pitching pipes.)
- has hybrids: [accordina](#) (harmonica/accordion hybrid)
- picture: <https://staticbrainz.org/irombook/melodica/melodica.png> [info]
- Wikidata: [Q512191](#) [info]
- other databases: https://saisabatake.ame-zaiku.com/gakki/gakki_jiten_pianica.html [info]

Tags

- free reed
- keyboard
- wind
- woodwind

External links

- IROMBOOK 私家版楽器事典
- Wikidata: Q512191

Editing

- Open edits
- Editing history

Collections

My collections

- Add to a collection of instruments
- Add to a new collection

Other collections

- Found in 1 user collection

Last updated on 2018-08-29 18:26 GMT+2

Aliases

- ❖ Alternate names for entities
- ❖ Most entity types can have an alias
- ❖ Per-language variations
 - ❖ <https://musicbrainz.org/artist/9ddd7abc-9e1b-471d-8031-583bc6bc8be9>
 - ❖ Name: Пётр Ильич Чайковский
 - ❖ "English Primary Alias": Pyotr Ilyich Tchaikovsky
 - ❖ "Search hints" (common misspellings)

The screenshot shows the MusicBrainz website for the instrument "melodica". The URL is musicbrainz.org/instrument/8ab40df2-106b-4b9b-a50c-0798ee95da8f/aliases. The page title is "Wind instrument "melodica"".

Aliases

An alias is an alternate name for an entity. They typically contain common misspellings or variations of the name and are also used to improve search results. View the [alias documentation](#) for more details.

| Alias | Sort name | Begin Date | End Date | Type | Locale |
|-------------|-------------|------------|----------|-----------------|---------------------|
| میلودیکا | miludika | | | Instrument name | Arabic (primary) |
| المیلودیکا | almayludika | | | Instrument name | Arabic |
| melòdica | | | | Instrument name | Catalan (primary) |
| Melodica | | | | Instrument name | German (primary) |
| μελόντικα | melóntika | | | Instrument name | Greek (primary) |
| melodica | | | | Instrument name | English (primary) |
| blovklavaro | | | | Instrument name | Esperanto (primary) |
| melódica | | | | Instrument name | Spanish (primary) |
| meloodika | | | | Instrument name | Estonian (primary) |
| melodiko | | | | Instrument name | Basque (primary) |
| ملوڈیکا | mlwdakea | | | Instrument name | Persian (primary) |
| melodika | | | | Instrument name | Finnish (primary) |
| mélodica | | | | Instrument name | French (primary) |
| melodica | | | | Instrument name | Irish (primary) |
| מלודיקה | mlwdyqh | | | Instrument name | Hebrew (primary) |

Instrument Information
Type: Wind instrument

Genres
(none)

Other tags
free reed + - 1
keyboard + - 1
wind + - 1
woodwind + - 1

External links
IROMBOOK 私家版楽器事典
Wikidata: Q512191

Editing
Open edits
Editing history

Collections
My collections
Add to a collection of instruments
Add to a new collection

Other collections
Found in 1 user collection

Last updated on 2018-08-29 18:26 GMT+2

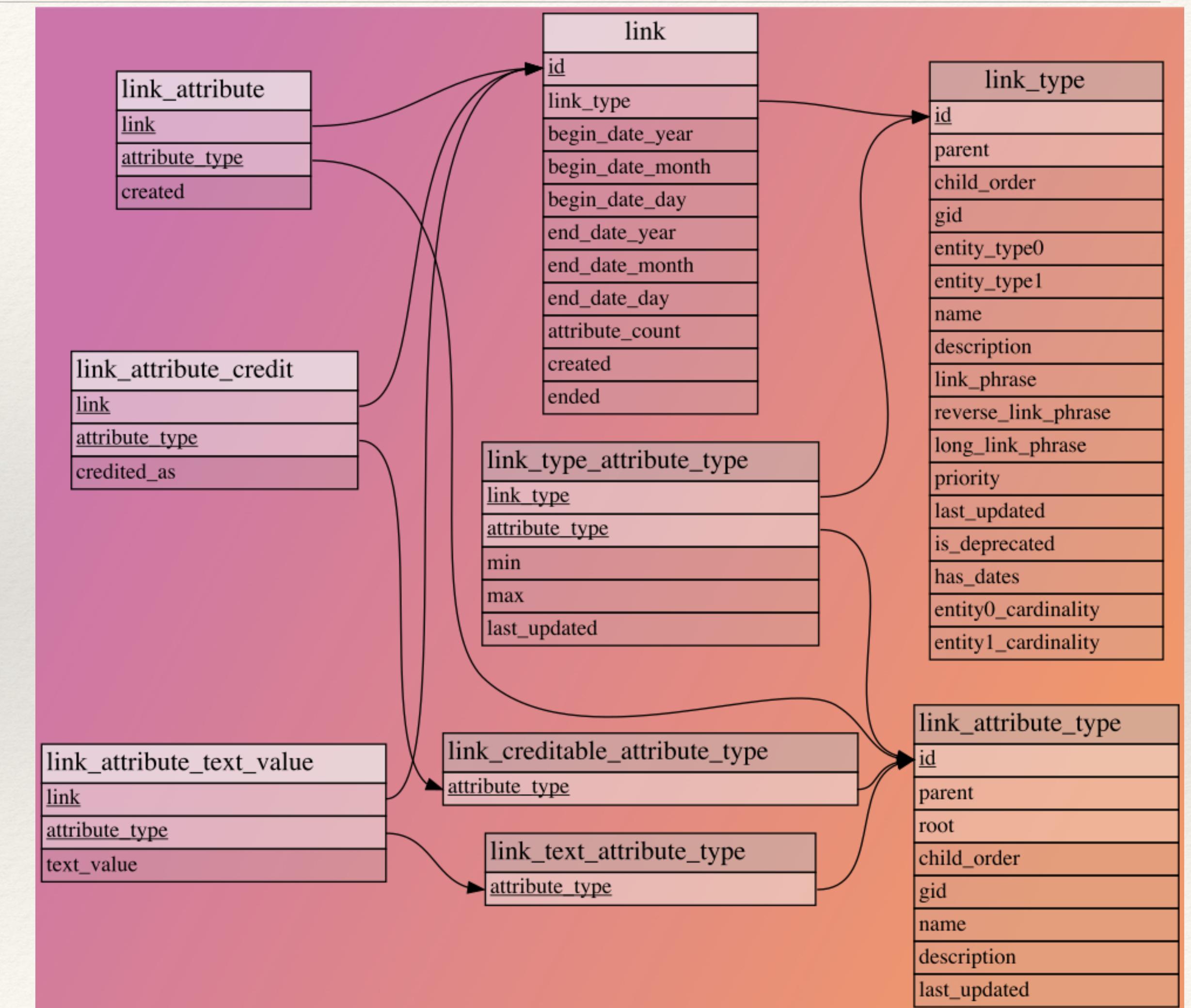
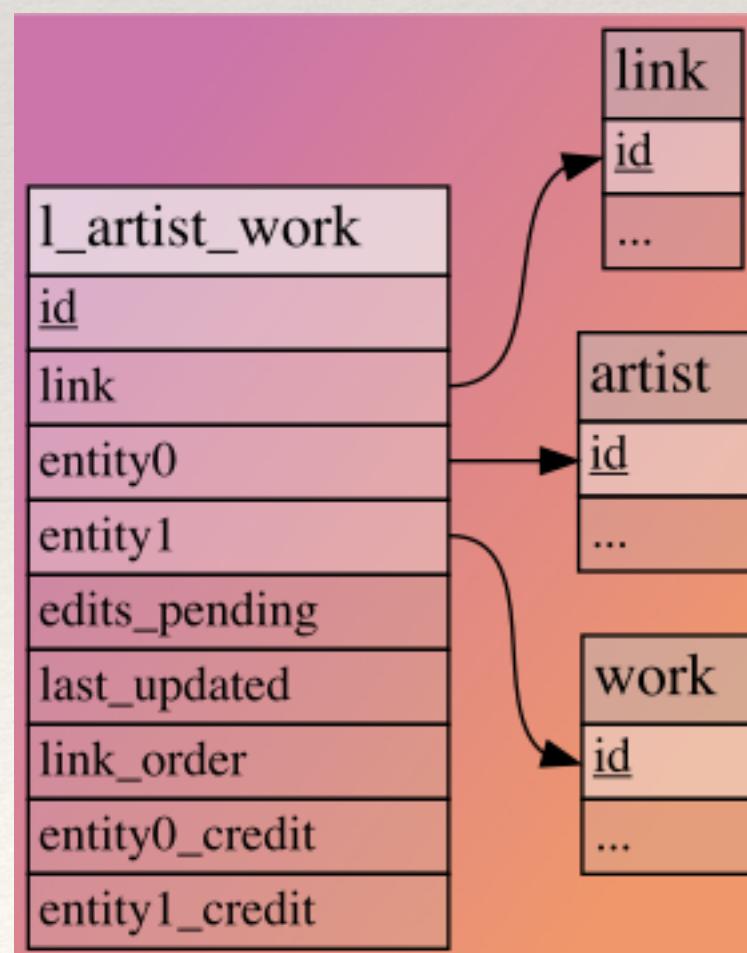
Attributes

- ❖ <https://musicbrainz.org/relationships>
- ❖ Used to create links between entities in the database
 - ❖ Artist - composed - a work
 - ❖ Person - published - a work
 - ❖ Person - performed [instrument] - on a recording
 - ❖ Recording - was recorded [on date] - at place

The screenshot shows a web browser window for the MusicBrainz website. The URL in the address bar is musicbrainz.org/relationships/artist-work. The page title is "Artist-Work Relationship Types". The header includes the MusicBrainz logo, a user dropdown for "alastairp", a "My Data" link, a search bar, and a language selector set to "English". Below the header, there's a navigation menu with links for "About Us", "Products", "Search", "Editing", and "Documentation". The main content area is titled "Relationships" and contains two tabs: "Relationship Types" (which is selected) and "Relationship Attributes". A link "[Back to all relationship types](#)" is visible. The main content is titled "Artist-Work relationship types" and includes a "Expand all descriptions" link. A detailed description for the "composition" relationship type is provided, mentioning it is used for artists composing works. Other relationship types listed include writer, composer, lyricist, librettist, revised by, translator, reconstructed by, arranger, instrument arranger, orchestrator, vocal arranger, previous attribution, misc, commissioned, dedication, premiere, and publishing.

Attributes

- ❖ One table per pair of items that can be related
- ❖ link: metadata about the link itself
- ❖ link_type: the nature of the link between the entities
- ❖ attributes: [lead] performer, [assistant] producer



External sites (URLs)

- ❖ Point to external locations
- ❖ Turns out these are just relationships (URL is an entity)
- ❖ Other authority catalogues
- ❖ <https://musicbrainz.org/artist/0383dadf-2a4e-4d10-a46a-e9e041da8eb3>
- ❖ Some relationship types are specific to a site
 - ❖ Other types are generic (other database)

fan pages: <http://queen.musichall.cz/en/> [info]
<http://queen.shanemcdonald.org/> [info]
<http://www.meddows.com/> [info]
<http://www.queenconcerts.com/> [info]
<http://www.queenfanclub.nl/> [info]
<https://shanemcdonald.ie/queen> [info]

purchase music for mail-order: <https://www.cdjapan.co.jp/person/700192881> [info]
purchase music for download: <https://itunes.apple.com/gb/artist/id3296287> [info]
<https://uk.7digital.com/artist/queen> [info]
<https://play.google.com/store/music/artist?id=A52ikp5gjplylwfrj7bjwdfozi> [info] (until 2020-10-12)

IMDb: <https://www.imdb.com/name/nm1277102/> [info]
Discogs: <https://www.discogs.com/artist/81013> [info]

official homepages: <http://www.queenonline.com/> [info]
discography pages: <http://www.queenonstage.com/> [info]
<http://www.queenpedia.com/> [info]
<http://www.queensongs.info/> [info]

online communities: <https://discord.com/invite/queenofficial> [info]
other databases: <http://d-nb.info/gnd/1216393-4> [info]
<http://id.loc.gov/authorities/names/n81144041> [info]
http://musicmoz.org/Bands_and_Artists/Q/Queen/ [info]
<http://mvdbase.com/person.php?id=A1497> [info]
<http://soundtrackcollector.com/composer/255/> [info]
<http://www.45cat.com/artist/queen> [info]
<https://catalogue.bnfi.fr/ark:/12148/cb13905983b> [info]
<https://imvdb.com/n/queen> [info]
<https://nla.gov.au/nla.party-1252469> [info]
<https://openlibrary.org/works/OL2786044A> [info]
<https://prateyourmusic.com/artist/queen> [info]
<https://theatricalia.com/person/2fbw/queen> [info]
<https://www.livefans.jp/artists/21342> [info]
<https://www.musik-sammler.de/artist/queen> [info]
<https://www.muziekweb.nl/Link/M00000071922/POPULAR/> [info]
<https://www.spirit-of-rock.com/en/band/Queen> [info]
<https://www.whosampled.com/Queen/> [info]
<https://www.worldcat.org/identities/lccn-n81144041> [info]

Myspace: <https://myspace.com/queen> [info]
BBC Music: <https://www.bbc.co.uk/music/artists/0383dadf-2a4e-4d10-a46a-e9e041da8eb3> [info] (until 2020-11-19)

social networking: <https://www.facebook.com/Queen> [info]
<https://www.tiktok.com/@queenofficial> [info]
<https://plus.google.com/111434746288415573196> [info] (until 2019-04-02)
<https://twitter.com/QueenWillRock> [info] (from 2009-12-22 to present)
<https://www.instagram.com/officialqueenmusic/> [info] (from 2014-06-12 to present)

YouTube channels: <https://www.youtube.com/user/queenofficial> [info]
stream for free: <https://open.spotify.com/artist/1dfeR4HaWDbWqFHLxsg1d> [info]
<https://www.deezer.com/artist/412> [info]

lyrics page: <http://muzikum.eu/en/122-3908/queen/lyrics.html> [info]
<https://genius.com/artists/Queen> [info]
<https://www.musixmatch.com/artist/Queen> [info]

Allmusic: <https://www.allmusic.com/artist/mn0000858827> [info]
SoundCloud: <https://soundcloud.com/queen-69312> [info]
SecondHandSongs: <https://secondhandsongs.com/artist/374> [info]
VIAF ID: [261960117](#) [info]
Wikidata: [Q15862](#) [info]
Songkick: <https://www.songkick.com/artists/469904> [info]
setlist.fm: <https://www.setlist.fm/setlists/queen-43d6e37f.html> [info]
Last.fm: <https://www.last.fm/music/Queen> [info]
streaming page: [Amazon Music US](#) [info]
<https://music.apple.com/gb/artist/3296287> [info]
<https://tidal.com/artist/8992> [info]
<https://us.napster.com/artist/queen> [info]
<https://www.8tracks.com/artist/queen> [info]

Work attributes

- ❖ CompMusic project (2011-2017)
- ❖ We decided to add all content to MusicBrainz instead of creating a separate database
- ❖ Some information didn't fit in the existing MusicBrainz schema
- ❖ We used tags to temporarily store it
- ❖ MusicBrainz added additional functionality for our requirements (also subsequently used for other purposes)
- ❖ <https://musicbrainz.org/work/adcdc472-8b19-4e6f-aa4e-be8c6aea5f8a>
- ❖ <https://musicbrainz.org/work/bb332094-7f0c-469a-9f3b-4cce7b28c7f4>

The screenshot shows a MusicBrainz page for the song "Viriboni". The page includes sections for Relationships (listing the composer as Pachimiriyam Adiyappaiah), Recordings (a table of 20 live recordings by various artists from 1974 to 2014), and Work attributes (Rāga (Carnatic): Bhairavi, Tāla (Carnatic): Atta). A sidebar on the right lists various identifiers for the work, such as AACIMH ID, ACAM ID, and ACDAM ID.

| Date | Title | Attributes | Artist | Length |
|--------|-------------------|------------|--------------------------------|--------|
| 1974 | Viriboni | live | M. D. Ramanathan | 9:49 |
| 1986 - | Viriboni | live | K.V. Narayanaswami | 7:57 |
| | Varnam - Viriboni | | T. N. Seshagopalan | 9:18 |
| | Viriboni | live | M. D. Ramanathan | 14:46 |
| | Viriboni | live | Malladi Brothers | 9:33 |
| | Viriboni | live | K.V. Narayanaswami | 9:33 |
| | Viriboni | live | K.V. Narayanaswami | 6:18 |
| | Viriboni | live | M.S. Subbulakshmi | 10:32 |
| | Viriboni | live | M. D. Ramanathan | 6:14 |
| | Viriboni | live | T. R. Mahalingam | 10:21 |
| | Viriboni | live | Gayathri Venkataraghavan | 8:08 |
| | Viriboni | live | K.V. Narayanaswami | 6:57 |
| | Viriboni | live | Kunnakkudi M Balamuralikrishna | 7:21 |
| | Viriboni | live | T. M. Krishna | 8:01 |
| | Viriboni | live | M.S. Subbulakshmi | 9:36 |
| | Viriboni | live | Sanjay Subrahmanyam | 6:01 |
| | Viriboni | live | K.V.Narayanaswamy | 6:35 |
| | Viriboni | live | K.V. Narayanaswami | 7:13 |
| | Viriboni | live | Abhishek Raguram | 11:28 |

Work information
Type: Song
Lyrics Languages: Telugu

Work attributes
Rāga (Carnatic): Bhairavi
Tāla (Carnatic): Atta

Rating
★★★★★

Genres
(none)

Other tags
raaga : bhairavi + - 1
taala : khanda ata + - 1

Editing
Add annotation
Merge
Open edits
Editing history

Collections
My collections
Add to work collection
Add to a new collection

Other collections
Found in 0 user collections

Last updated on 2015-09-15 15:01 GMT+2

Key
Identifiers
AACIMH ID
ACAM ID
ACDAM ID
AEI ID
AGADU ID
AKKA/LAA ID
AKM ID
AMRA ID
APA ID
APDAYC ID
APRA ID
ARTISJUS ID
ASCAP ID
BMI ID
BUMA/STEMRA ID
CASH ID
CCLI ID
COMPASS ID
COSCAP ID
COTT ID
ECAD ID
GEMA ID
GMR ID
HFA ID
ICE ID
IMRO ID
IPRS ID
JACAP ID
JASRAC ID
KODA ID
KOMCA ID
LatinNet ID
MACP ID
MCSC ID
MCT ID
MÜST ID
NexTone ID

Edits

- ❖ All changes to the database are proposed as *edits* to the database
- ❖ Edits are voted on by the community to determine if they are valid
- ❖ An edit history is stored for all entities
- ❖ A list of edits is also used to perform updates to database mirrors
- ❖ [https://musicbrainz.org/search/edits?
auto_edit_filter=&order=desc&negation=0&com
binator=and&conditions.0.field=artist&conditions
.0.operator=%3D&conditions.0.name=R.E.M.&c
onditions.0.args.0=10302&conditions.1.field=type&
conditions.1.operator=%3D&conditions.1.args=2](https://musicbrainz.org/search/edits?auto_edit_filter=&order=desc&negation=0&combinator=and&conditions.0.field=artist&conditions.0.operator=%3D&conditions.0.name=R.E.M.&conditions.0.args.0=10302&conditions.1.field=type&conditions.1.operator=%3D&conditions.1.args=2)

Found 7 edits

| Edit # | Title | Author | Artist | Disambiguation | Status |
|----------|-------------|------------|-------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------|
| 46962365 | Edit artist | drsaunde | R.E.M. (Athens, US rock band) | Athens, US rock band | My vote: None automatically applied Closed: 2017-08-03 20:04 GMT+2 |
| 24192395 | Edit artist | drsaunde | R.E.M. (Athens, US rock band) | Georgia, United States Athens, Georgia, United States | My vote: None automatically applied Closed: 2013-10-21 00:09 GMT+2 |
| 23571672 | Edit artist | drsaunde | R.E.M. (Athens, US rock band) | Georgia, United States | My vote: None automatically applied Closed: 2013-09-02 04:34 GMT+2 |
| 15240021 | Edit artist | PhantomOTO | R.E.M. (Athens, US rock band) | Dissolved: 2011-09-21 | My vote: None automatically applied Closed: 2011-09-21 19:39 GMT+2 |

Data correctness

- ❖ The Style Guide describes how data should be entered in the case of uncertainty
- ❖ Rules mostly agreed by consensus, but there is an authoritarian style leader to break deadlocks if required

The screenshot shows a web browser window displaying the MusicBrainz Style / Release documentation at <https://musicbrainz.org/doc/Style/Release>. The page is titled "Style / Release" and includes a sidebar with navigation links such as "About Us", "Products", "Search", "Editing", and "Documentation". A search bar is located at the top right. The main content area contains sections for "Title", "Artist", "Track artist", "Date", "Barcode", and "Label", each with detailed guidelines. A "Status" note at the top states: "Status: This is an official style guideline." On the right side, there is a "Contents" sidebar listing numbered items from 1 to 15, corresponding to the sections in the main content.

Status: This is an [official style guideline](#).

Title
See the [titles guidelines](#) for the release, medium and track titles.
If several versions of a title are provided, such as when release title differs between cover and spine, or the track titles differ between the back cover and a booklet tracklist, it's generally better to follow the more detailed one.

Artist
In general, you should just enter the artist(s) as shown on the release (see the [guidelines for artist credits](#)). If no artist is credited, but a company is (such as a video game studio or a production music library), you can credit the company as a release artist. Otherwise, see [Special Purpose Artist](#) for what to enter when there is no proper artist or the artist is unknown.

Track artist
Track artists should follow the release artist, except where another artist is credited in the track listing of the release. This can include various artists releases, [featured artists](#), and tracks credited to another artist. If the release artist is a Special Purpose Artist, the performer should be credited if known, or [\[unknown\]](#) otherwise.

Date
The [release date](#) is the day when *this specific release* was first made available. It should not be used to store the performance/recording date, the copyright date or the import date.
For a reissue of an earlier release, this is the date when the reissue was released (for example, do not use the original vinyl date for a CD reissue).
For digital music, note that online platforms often do not display release dates, or will display the release date from an earlier physical release instead (which may sometimes be even earlier than the date the platform itself was launched). In cases where you are not certain that a release date is correct, it's better to not enter a date at all, or to indicate it in the annotation only while listing your misgivings about it.

Barcode
Only one barcode can currently be stored in this field. If a release has add-on codes, store them in the annotation. Similarly, if a release has multiple full barcodes, enter all others in the annotation.
The actual (machine-readable) barcode should be chosen over the printed (human-readable) number in cases where the second is incomplete (e.g. missing the check digit) or incorrect.

Label
If the release is a white label, self released or has no label, check the guidelines for [special purpose labels](#).

Contents

- 1 Title
- 2 Artist
- 3 Track artist
- 4 Date
- 5 Barcode
- 6 Label
- 7 Catalog number
- 8 Status
- 9 Language and script
- 10 Medium format
- 11 Medium title
- 12 What should be added as a single release?
- 13 What should be added as multiple releases?
- 14 Cover art
- 15 Replaced releases

Data access

- ❖ Multiple different formats
- ❖ Originally: XML WebService
- ❖ Later: JSON API
- ❖ Also: JSON-LD (for indexing into search engines)
 - ❖ Send Accept: application/ld+json to get this

Data formats

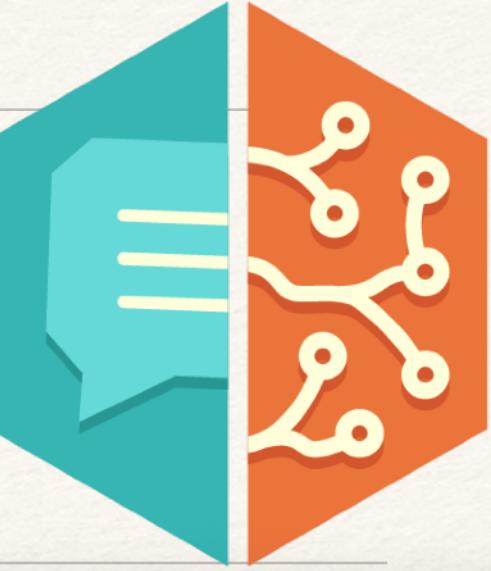
- ❖ API available via XML (with schema), JSON
- ❖ Main pages also available via JSON-LD (used by search engines)

```
{
  "name": "Queen",
  "isnis": [
    "0000000115265309"
  ],
  "gender": null,
  "sort-name": "Queen",
  "type-id": "e431f5f6-b5d2-343d-8b36-72607ffb74b",
  "disambiguation": "UK rock group",
  "ipis": [],
  "area": {
    "id": "8a754a16-0027-3a29-b6d7-2b40ea0481ed",
    "iso-3166-1-codes": [
      "GB"
    ],
    "name": "United Kingdom",
    "disambiguation": "",
    "type": null,
    "sort-name": "United Kingdom",
    "type-id": null
  },
}
```

```
{
  "@id": "http://musicbrainz.org/artist/0383dadf-2a4e-4d10-a46a-e9e041da8eb3",
  "@type": "MusicGroup",
  "album": [
    {
      "creditedTo": "Queen",
      "albumProductionType": "http://schema.org/StudioAlbum",
      "byArtist": {
        "name": "Queen",
        "@type": "MusicGroup",
        "@id": "http://musicbrainz.org/artist/0383dadf-2a4e-4d10-a46a-e9e041da8eb3",
        "genre": [
          "http://musicbrainz.org/genre/0e3fc579-2d24-4f20-9dae-736e1ec78798",
          "http://musicbrainz.org/genre/51cb9f91-e6a2-41bf-891f-e78e3f1e52ab",
          "http://musicbrainz.org/genre/54d89e62-5fb-42bc-a321-9230e6fdcd75",
          "http://musicbrainz.org/genre/b7ef058e-6d83-4ca4-8123-9724bff4648b",
          "http://musicbrainz.org/genre/797e2e85-5ffd-495c-a757-8b4079052f0e"
        ]
      },
      "@type": "MusicAlbum",
      "@id": "http://musicbrainz.org/release-group/810068af-2b3c-3e9c-b2ab-68a3f3e3787d",
      "name": "Queen"
    }
  ]
}
```

Offline data access

- ❖ Data dumps made available twice a week
- ❖ Mostly CC0 (Factual data)
 - ❖ Some data is CC-SA (annotations, tags, ratings)
- ❖ PostgreSQL: https://musicbrainz.org/doc/MusicBrainz_Database/Download
- ❖ Easy-to-install MusicBrainz server (database, website, search) via docker:
 - ❖ <https://github.com/metabrainz/musicbrainz-docker>
- ❖ JSON Dumps: Entire output of the JSON API
 - ❖ https://musicbrainz.org/doc/Development/JSON_Data_Dumps



CritiqueBrainz

- ❖ <https://critiquebrainz.org>
- ❖ Open database of reviews of music (and books)

The screenshot shows the CritiqueBrainz homepage. At the top, there's a navigation bar with the CritiqueBrainz logo, 'Sign in', 'Reviews', 'Statistics', a search bar, and an 'Artist' dropdown. To the right is a sidebar titled 'Statistics' with a table showing the number of reviews (10,399) and users (2,722). The main content area features a welcome message and information about the database being based on MusicBrainz and BookBrainz. Below this is a section titled 'Popular reviews' with five entries, each showing a release group thumbnail, the title, the reviewer, and a brief summary.

| Description | Number |
|-------------------|--------|
| Number of Reviews | 10,399 |
| Number of Users | 2,722 |

Welcome to CritiqueBrainz!

CritiqueBrainz is a repository for Creative Commons licensed music and book reviews. Here you can read what other people have written about an album or event and write your own review!

CritiqueBrainz is based on data from MusicBrainz - open music encyclopedia and BookBrainz - open book encyclopedia. Everyone - including you - can participate and contribute.

Popular reviews

| Release Group | Title | Review by | Description |
|---------------|---------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------|
| | RAYFORCE by ZUNTATA | UCHUBomb | One of the most unique shmp OST's for one of the most unique arcade shmps ever made, and arguably Tamayo Kawamoto's... |
| | Spaceball: The American Radio Sessions by ... | Jon Lusk | Subtitled The American Radio Sessions, this double-disc set collects largely acoustic versions of classic T. Rex songs performed in... |
| | Kamaal the Abstract by Q-Tip | Stevie Chick | That Q-Tip spent his own money to purchase the rights to this previously-shelved album suggests how close it is to his heart. That it... |
| | Odd and Awkward by Nils Wogram | Peter Marsh | Trombonist Nils Wogram is pretty much unknown over here but has made a name for himself on the Eurojazz circuit, and this... |
| | Bongo Bong | rob | This track has long been the stand-out track that exemplifies Manu Chao for me -- I've been loving this song ever since it came out ... |
| | Summer Days (and Summer Nights!!) by The Beach Boys | Chris Roberts | Released just four months after Today! in July 1965, The Beach Boys' ninth album was at first deemed by some to be a regression. Its... |

CritiqueBrainz API

- ❖ API
 - ❖ <https://critiquebrainz.readthedocs.io/>
- ❖ Database download
 - ❖ <http://data.musicbrainz.org/pub/musicbrainz/critiquebrainz/dump/>
- ❖ Main entity type: Review
 - ❖ Linked to a specific MusicBrainz/BookBrainz entity
 - ❖ Reviews have revisions (public edits)
 - ❖ A review can include text, a rating, or both
 - ❖ Others can vote on the quality of a review
- ❖ Coming soon: Integration into ListenBrainz

The screenshot shows a web browser displaying the CritiqueBrainz API documentation at <https://critiquebrainz.readthedocs.io/api/endpoints.html>. The page is titled "Endpoint reference — CritiqueBrainz latest". The left sidebar contains a navigation menu with sections like "Introduction", "API", "Endpoint reference", "Reviews", "Users", "OAuth", "Constants", "OAuth 2.0", "Contributing", "Database", "Exporting data", and "Translation". The main content area is titled "GET /review/{uuid: review_id}/revisions/{int: rev}" and describes it as "Get a particular revisions of review with a specified UUID". It includes a "Request Example" section with a curl command and a "Response Example" section showing a JSON response object.

Request Example:

```
$ curl https://critiquebrainz.org/ws/1/review/b7575c23-13d5-4adc-ac09-2f55a647d3de/ -X GET
```

Response Example:

```
{  
    "revision": {  
        "id": 1,  
        "review_id": "b7575c23-13d5-4adc-ac09-2f55a647d3de",  
        "text": "TEXT CONTENT OF REVIEW",  
        "rating": 5,  
        "timestamp": "Tue, 10 Aug 2010 00:00:00 GMT",  
        "votes_negative": 0,  
        "votes_positive": 0  
    }  
}
```

Status Codes

- 200 OK – no error
- 404 Not Found – review not found

Response Headers

- Content-Type – application/json

GET /review/{uuid: review_id}/revisions

Get revisions of review with a specified UUID.

Request Example:



ListenBrainz

<https://listenbrainz.org>

- ❖ Open database of user listening history
- ❖ import from lastfm, spotify
- ❖ Statistics
- ❖ Community functionality
- ❖ Recommendations

The screenshot shows the ListenBrainz user profile for 'alastair'. At the top, there's a navigation bar with links for Home, Feed, Recent, Data, Explore, and About. A search bar and a dropdown menu for the user 'alastair' are also present. Below the navigation, the user's name 'alastair' is displayed, along with a link to their MusicBrainz profile. A 'Recent listens' section lists seven songs with their artists and release times. To the right, a summary states 'You have listened to 25,297 songs so far'. Below that, a 'Followers' section shows 'Followers (6)' and a list of users: 'mr_monkey' (Following), 'iliekcomputers' (Following), and 'trai-bot' (Following). At the bottom, there are navigation icons for back, forward, and search.

| Song | Artist | Length | Time Ago | Action |
|-----------------------------------------|---------------------------------|--------|----------------|--------------|
| Learning To Fly | Tom Petty and the Heartbreakers | 4:02 | 5 minutes ago | Heart More |
| Roll Um Easy | Little Feat | 2:31 | 9 minutes ago | Heart More |
| Get It On | T. Rex | 4:22 | 12 minutes ago | Heart More |
| I Want To See The Bright Lights Tonight | Richard & Linda Thompson | 3:07 | 16 minutes ago | Heart More |
| Blue Red And Grey | The Who | 2:46 | 19 minutes ago | Heart More |
| Hazy Jane II | Nick Drake | 3:46 | 22 minutes ago | Heart More |
| Heaven on the Beach with You | Robert Lester Folsom | 2:02 | 26 minutes ago | Heart More |

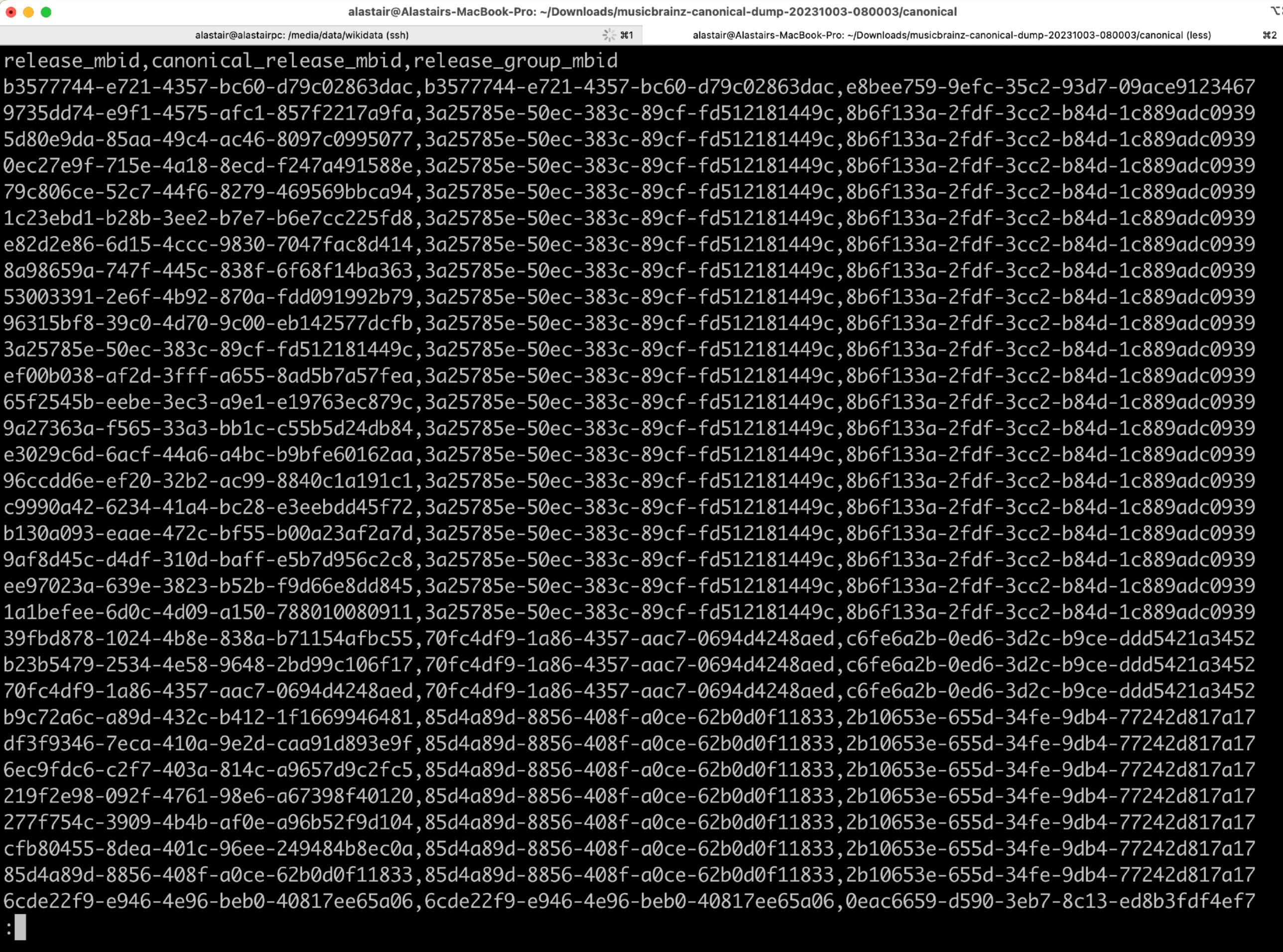
ListenBrainz data access

- ❖ Primary data object, a "Listen"
 - ❖ user x listened to track y at time z
 - ❖ plus additional metadata if you want
 - ❖ automatically linked to MusicBrainz when the data is submitted (see Canonical - next)
- ❖ <https://data.musicbrainz.org/pub/musicbrainz/listenbrainz/>

```
- {
    inserted_at: 1697804497,
    listened_at: 1697804053,
    recording_msid: "4c00aaa6-a2ab-42ef-93d5-8c66b1ad22bc",
    - track_metadata: {
        - additional_info: {
            - artist_names: [
                "The Magnetic Fields"
            ],
            discnumber: 1,
            duration_ms: 166853,
            isrc: "USN011600667",
            music_service: "spotify.com",
            origin_url: "https://open.spotify.com/track/3XSmaFNg87VuralouTs5yf",
            recording_msid: "4c00aaa6-a2ab-42ef-93d5-8c66b1ad22bc",
            release_artist_name: "The Magnetic Fields",
            - release_artist_names: [
                "The Magnetic Fields"
            ],
            - spotify_album_artist_ids: [
                "https://open.spotify.com/artist/6RWjT0qILL7a1t00VapyLK"
            ],
            spotify_album_id: "https://open.spotify.com/album/2b3Jj0vKw9UN47ND80Tvri",
            - spotify_artist_ids: [
                "https://open.spotify.com/artist/6RWjT0qILL7a1t00VapyLK"
            ],
            spotify_id: "https://open.spotify.com/track/3XSmaFNg87VuralouTs5yf",
            submission_client: "listenbrainz",
            tracknumber: 3
        },
        artist_name: "The Magnetic Fields",
        - mbid_mapping: {
            - artist_mbids: [
                "3ff72a59-f39d-411d-9f93-2d4a86413013"
            ],
            - artists: [
                {
                    artist_credit_name: "The Magnetic Fields",
                    artist_mbid: "3ff72a59-f39d-411d-9f93-2d4a86413013",
                    join_phrase: ""
                }
            ],
            caa_id: 16168564506,
            caa_release_mbid: "9d812089-052f-4f5d-a474-7448a6fd80d1",
            recording_mbid: "786734f0-135b-48e4-ae16-62eec3d88523",
            recording_name: "'68 A Cat Called Dionysus",
            release_mbid: "bd7de75d-3587-49ec-a07f-2e2c825d3538"
        },
        release_name: "50 Song Memoir",
    }
}
```

ListenBrainz ancillary datasets: Canonical

- ❖ Because of the nature of the MusicBrainz database it contains many instances where metadata exists for many different versions (formats, reissues) of the same album, or many versions (live recordings, alternate versions) of a recording.
- ❖ However for some tasks such as music recommendation, it's often useful to be able to use a single identifier when talking about a recording or a release, both in order to improve the quality of a training dataset for machine learning and when providing results to an end user.
- ❖ https://musicbrainz.org/doc/Canonical_MusicBrainz_data



The screenshot shows a terminal window with two tabs. The active tab displays a long list of canonical identifiers for releases, starting with 'release_mbid, canonical_release_mbid, release_group_mbid' followed by numerous unique identifiers. The second tab is visible in the background. The terminal window has a dark theme with white text and a black background.

```
release_mbid, canonical_release_mbid, release_group_mbid
b3577744-e721-4357-bc60-d79c02863dac, b3577744-e721-4357-bc60-d79c02863dac, e8bee759-9efc-35c2-93d7-09ace9123467
9735dd74-e9f1-4575-afc1-857f2217a9fa, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
5d80e9da-85aa-49c4-ac46-8097c0995077, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
0ec27e9f-715e-4a18-8ecd-f247a491588e, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
79c806ce-52c7-44f6-8279-469569bbca94, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
1c23ebd1-b28b-3ee2-b7e7-b6e7cc225fd8, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
e82d2e86-6d15-4ccc-9830-7047fac8d414, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
8a98659a-747f-445c-838f-6f68f14ba363, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
53003391-2e6f-4b92-870a-fdd091992b79, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
96315bf8-39c0-4d70-9c00-eb142577dcfb, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
3a25785e-50ec-383c-89cf-fd512181449c, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
ef00b038-af2d-3fff-a655-8ad5b7a57fea, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
65f2545b-eebe-3ec3-a9e1-e19763ec879c, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
9a27363a-f565-33a3-bb1c-c55b5d24db84, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
e3029c6d-6acf-44a6-a4bc-b9bfe60162aa, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
96ccdd6e-ef20-32b2-ac99-8840c1a191c1, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
c990a42-6234-41a4-bc28-e3eebdd45f72, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
b130a093-eaae-472c-bf55-b00a23af2a7d, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
9af8d45c-d4df-310d-baff-e5b7d956c2c8, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
ee97023a-639e-3823-b52b-f9d66e8dd845, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
1a1befee-6d0c-4d09-a150-788010080911, 3a25785e-50ec-383c-89cf-fd512181449c, 8b6f133a-2fdf-3cc2-b84d-1c889adc0939
39fdb878-1024-4b8e-838a-b71154afbc55, 70fc4df9-1a86-4357-aac7-0694d4248aed, c6fe6a2b-0ed6-3d2c-b9ce-ddd5421a3452
b23b5479-2534-4e58-9648-2bd99c106f17, 70fc4df9-1a86-4357-aac7-0694d4248aed, c6fe6a2b-0ed6-3d2c-b9ce-ddd5421a3452
70fc4df9-1a86-4357-aac7-0694d4248aed, 70fc4df9-1a86-4357-aac7-0694d4248aed, c6fe6a2b-0ed6-3d2c-b9ce-ddd5421a3452
b9c72a6c-a89d-432c-b412-1f1669946481, 85d4a89d-8856-408f-a0ce-62b0d0f11833, 2b10653e-655d-34fe-9db4-77242d817a17
df3f9346-7eca-410a-9e2d-caa91d893e9f, 85d4a89d-8856-408f-a0ce-62b0d0f11833, 2b10653e-655d-34fe-9db4-77242d817a17
6ec9fdc6-c2f7-403a-814c-a9657d9c2fc5, 85d4a89d-8856-408f-a0ce-62b0d0f11833, 2b10653e-655d-34fe-9db4-77242d817a17
219f2e98-092f-4761-98e6-a67398f40120, 85d4a89d-8856-408f-a0ce-62b0d0f11833, 2b10653e-655d-34fe-9db4-77242d817a17
277f754c-3909-4b4b-af0e-a96b52f9d104, 85d4a89d-8856-408f-a0ce-62b0d0f11833, 2b10653e-655d-34fe-9db4-77242d817a17
cfb80455-8dea-401c-96ee-249484b8ec0a, 85d4a89d-8856-408f-a0ce-62b0d0f11833, 2b10653e-655d-34fe-9db4-77242d817a17
85d4a89d-8856-408f-a0ce-62b0d0f11833, 85d4a89d-8856-408f-a0ce-62b0d0f11833, 2b10653e-655d-34fe-9db4-77242d817a17
6cde22f9-e946-4e96-beb0-40817ee65a06, 6cde22f9-e946-4e96-beb0-40817ee65a06, 0eac6659-d590-3eb7-8c13-ed8b3fdf4ef7
```

MLHD+

- ❖ Improved version of MLHD (DDMAL, 2017)
 - ❖ Follow redirects:
 - ❖ Identify Canonical Recordings: Allow direct comparison if two people listened to the same recording which was previously reported as 2 items
 - ❖ Lookup correct Artist and Releases using Canonical recordings
 - ❖ Other data problems: Remove missing data that doesn't match any known MBID
 - ❖ Better compression
- ❖ <https://blog.metabrainz.org/2022/10/28/cleaning-up-the-music-listening-histories-dataset/>

The screenshot shows a web browser displaying a blog post from the MetaBrainz Foundation community blog. The title of the post is "Cleaning up the Music Listening Histories Dataset". The author is alastairporter, and the date is October 28, 2022. The post discusses the process of cleaning up a dataset of music listening histories. It includes a bio of the author, Prathamesh Ghatole, and a summary of his journey over the past 18 weeks. The sidebar features links to the MetaBrainz Foundation and various forums, as well as a search bar.



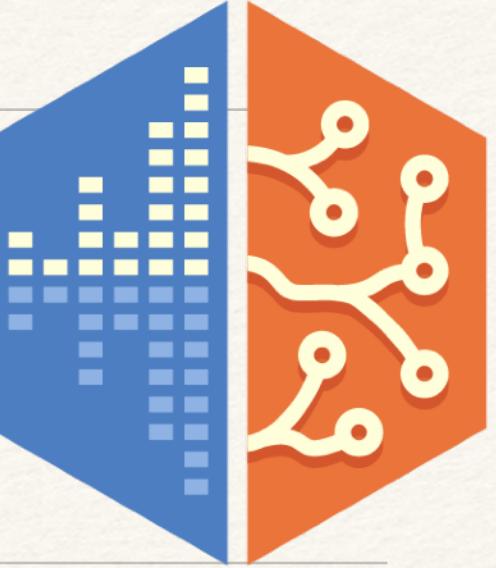
BookBrainz

<https://bookbrainz.org>

- ❖ Open database of books
- ❖ API (in testing still)
 - ❖ <https://api.test.bookbrainz.org/>
l/docs/
- ❖ Database download
 - ❖ [https://data.musicbrainz.org/
pub/musicbrainz/bookbrainz/](https://data.musicbrainz.org/pub/musicbrainz/bookbrainz/)

The screenshot shows a web browser displaying the BookBrainz website at <https://bookbrainz.org/edition/b2d02a9f-167b-438b-92f0-e2a6096123a1>. The page title is "Die Höhe bekommt uns nicht: Erzählungen" by Doris Lessing. The page includes details such as Sort Name (Höhe bekommt uns nicht, Die: Erzählungen), Status (Official), Languages (German), Dimensions (WxHxD) (?x?x? mm), Weight (?g), and Page Count (294). It also lists the publisher as Deutscher Taschenbuch Verlag. Below the main details, there's an "Annotation" section with a "Lizenzausgabe" (1. Auflage März 1989) and a "Show more..." link. The "Last modified" timestamp is 2022-11-12 (revision #102258). The "Works" section lists several short stories by Doris Lessing, all in German and categorized as Short Story.

| Name | Author | Languages | Type |
|----------------------------------------------------|-------------------------------|-----------|-------------|
| Das Ärgernis | Doris Lessing | German | Short Story |
| Winter im Juli | Doris Lessing | German | Short Story |
| Ich weiß, was er gesagt hat | Doris Lessing | German | Short Story |
| Lucy Grange (German translation) | Doris Lessing | German | Short Story |
| Ein harmloser Heuschreckenüberfall | Doris Lessing | German | Short Story |



AcousticBrainz

<https://acousticbrainz.org>

- ❖ Public archive of features automatically extracted from music
- ❖ Uses Essentia (<https://essentia.upf.edu/>)
- ❖ Audio descriptors (MFCCs), Tonal features (key, chords), Rhythmic Features (bpm)
- ❖ Support Vector Machines to compute features using common MIR tasks
- ❖ Ran from 2015-2022

The screenshot shows a web browser displaying the AcousticBrainz website for a specific recording. The URL in the address bar is <https://acousticbrainz.org/4ad2ca2d-5a12-4142-8371-e402b3401be8>. The page title is "Recording 'You Look Like I Need a Drink' by Against Me!".
See Similar

| Metadata | value |
|--------------|--------------------------------------|
| MBID | 4ad2ca2d-5a12-4142-8371-e402b3401be8 |
| title | You Look Like I Need a Drink |
| artist | Against Me! |
| release | As the Eternal Cowboy |
| track number | 9 / 11 |
| track length | 2:14 |

Submission #1 out of 18 →

Low-level information

| Tonal & Rhythm | value |
|----------------|------------------|
| key | A# minor (46.0%) |
| chords key | D minor |
| danceability | 1.04 |
| bpm | 143 |
| beat count | 302 |

High-level information

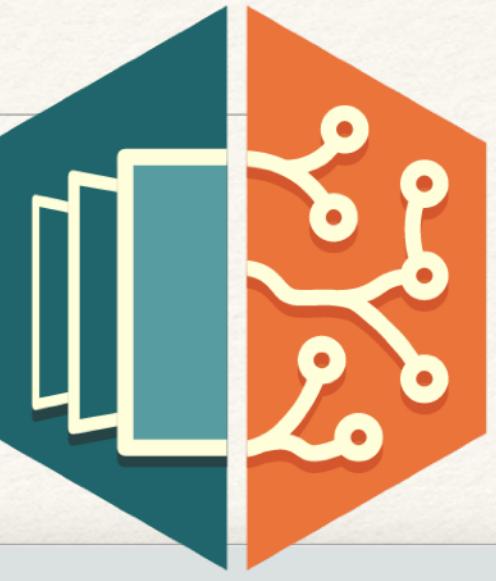
| Voice, timbre, gender, etc. | value | probability |
|-----------------------------|--------------|-------------|
| Voice | Instrumental | 100% |

This video is unavailable

AcousticBrainz data

- ❖ API to download data for a single recording
 - ❖ <https://acousticbrainz.readthedocs.io/api.html>
- ❖ Download a copy of the entire database
 - ❖ <https://acousticbrainz.org/download>
- ❖ Data format is based on the Essentia data extractor
 - ❖ https://essentia.upf.edu/streaming_extractor_music.html#music-descriptors

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CAA

- ❖ <https://coverartarchive.org/>
- ❖ Open database of image cover art
- ❖ Collaboration between metabrainz and the internet archive (which stores the images)

The screenshot shows a web browser window for ListenBrainz. The top navigation bar includes Home, Feed, Recent, Data, Explore, About, a search bar for 'Search Listener', and a user profile for 'alastairp'. Below the navigation is a title 'Huesound beta' followed by a grid of 25 album covers. To the left of the grid is a large, multi-colored circular chart divided into segments of varying sizes. At the bottom of the page, there is a player interface showing 'Curmudgeon - Flacid' and a play button.

Cover art archive data

- ❖ JSON API Available: https://musicbrainz.org/doc/Cover_Art_Archive/API
 - ❖ Given a release, get all associated images
 - ❖ Download the front image for a release
- ❖ Can also download the raw data as part of the main musicbrainz database
 - ❖ `cover_art_archive.cover_art` table

| | id | release | comment | edit | ordering | date_uploaded |
|----|------------|---------|---------|----------|----------|-----------------------------------|
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Thanks

<https://metabrainz.org>

<https://musicbrainz.org>

<https://twitter.com/musicbrainz>

