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# Unify your local music library

*[WORKSHOP] Introducing MusicBrainz,  
Picard, and ultimate music categorization*

[Justin W. Flory](#) (licensed under [CC-BY-SA 4.0](#))

**Twitter:** @jflory7

**Blog:** [blog.justinwflory.com](http://blog.justinwflory.com)

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# MusicBrainz: Wat?

- Open source music metadata encyclopedia (est. 2000)
    - Creative Commons
  - Store, categorize, sort (all languages and scripts)
  
  - Used by...
    - **Developers:** Build cool music apps!
    - **Commercial users:** Update local music databases with live updates from MusicBrainz (Spotify, Amazon, Google, Last.fm, etc.)
    - **Users (that's us!):** Tagging your own music
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# Metadata matters

## Visibility

Find your music!

## Record keeping

Write music history!

## Research

Discover music science!

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# Is MusicBrainz really that big?

Let's look at [some numbers](#)...

- **Artists:** 1,189,376
  - **Releases:** 1,769,002
  - **Recordings:** 17,152,131
  - **Artist locations:**
    - **Countries:** 259
    - **Cities:** 74,087
    - **Islands:** 96
  - **Editor accounts:** 1,781,906 registered (1,329 active last week)
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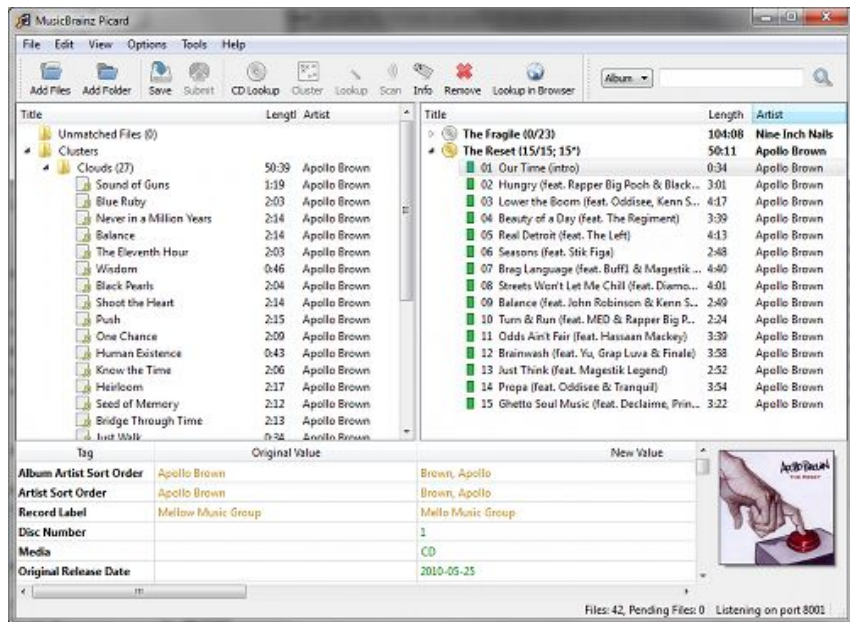
# But what about my audio dramas?

Yes, you can have your audio dramas, all 257 of them.



# Introducing...

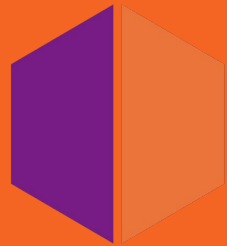
# Picard



- Tool to sort, scan, and correct metadata for you
  - References MusicBrainz database
- Puts the right metadata in the right place
  - Album name, artist name, album artwork, release year...
  - Helpful for music tracking services (e.g. Last.fm / Libre.fm)
  - Helpful for cloud music players (upload and forget)
- Available for Windows, macOS, Linux

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Installing and using



**Picard**

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# Available for... almost everything

[picard.musicbrainz.org](http://picard.musicbrainz.org)

- **Windows / macOS:** Installers available

- **Linux:**

- *Ubuntu:*

```
sudo add-apt-repository ppa:musicbrainz-developers/stable
sudo apt-get update
```

- *Fedora:*

```
sudo dnf install picard chromaprint-tools
```

[Why do I need chromaprint-tools?](#)

- *Arch Linux, Debian, Gentoo, OpenSUSE, and others* ([see the docs](#))
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MusicBrainz Picard Automatically look up metadata from existing metadata X

File Edit View Options Tools Help

Scan file to get audio fingerprint to look up metadata

Manually look up the metadata on musicbrainz.org


Add Folder Add Files Play file Save Submit Lookup CD Cluster Lookup Scan Info Remove Lookup in Browser Album

Title	Length	Artist	Title	Length	Artist
Unmatched Files (113)			Transitions (7/7; 0 images)	36:...	El Ten Eleven
Clusters (150)			Yellow Bridges (single) (3/3; 1 image)	15:...	El Ten Eleven
The Empties (13)	46:03	The Empties	Point Breeze (single) (1/1; 1 image)	3:22	El Ten Eleven
Inception (OST) (12)	49:21	Hans Zimmer	Idea 40 (1/1; 0 images)	4:12	El Ten Eleven
Party Starter: 80s Mix (7)	27:43	Billy Idol	Fast Forward (9/9; 1 image)	36:...	El Ten Eleven
The Peach EP (5)	17:38	Louis La Roche	El Ten Eleven (9/9; 0 images)	35:...	El Ten Eleven
18 (18)	71:25	Moby	These Promises Are Being Videotaped (...)	27:...	El Ten Eleven
Boston (2)	9:49	Boston	Mixtape 001 (9/9; 1 image)	39:...	El Ten Eleven
United (10)	37:53	Phoenix	It's Still Like a Secret (12/12; 0 images)	41:...	El Ten Eleven
Wolfgang Amadeus Phoenix (10)	36:27	Phoenix	Bulletproof (Shadow the Machine Ang...)	4:17	Shadow the Machine Angel
Three Dog Night: The Complete Hit Singles (2)	6:28	Three Dog Night	Baby (Shadow the Machine Angel Remi...)	4:07	Shadow the Machine Angel
Give Up (10)	44:57	The Postal Service	miDNiGHT SuN (10/10; 1 image)	37:...	Shadow the Machine Angel
Give Up (Deluxe 10th Anniversary Edition) (26)	106:...	The Postal Service	Hurry Up, We're Dreaming (22/22; 1 im...)	73:...	M83
In Rainbows (10)	42:39	Radiohead	1-01 Intro	5:23	M83
The Bends (12)	48:40	Radiohead	1-02 Midnight City	4:04	M83
Hail To The Thief (27)	108:...	Radiohead	1-03 Reunion	3:55	M83

Tag	Original Value	New Value
Title	Midnight City	Midnight City
Artist	M83	M83
Album	Hurry Up, We're Dreaming	Hurry Up, We're Dreaming
Track Number	2	2
Length	4:04	4:04
Date	2011-10-18	2011-10-18
AcoustiD	4dfd11f7-5361-4607-9d8e-d764af87efa9	4dfd11f7-5361-4607-9d8e-d764af87efa9
Album Artist	M83	M83
Album Artist Sort Order	M83	M83

/home/jflory/Music/Google Play/M83/Hurry Up, We're Dreaming/1-02 Midnight City.m4a (100%)

2172 44 Listening on port 8001



## Exploring the MusicBrainz Picard interface

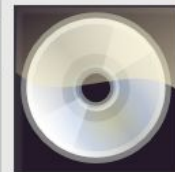
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# Conceptual demo

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Tag	Original Value	New Value
Title	(different across 8 items)	(different across 8 items)
Artist	Hiatus	Hiatus
Album	Music for a Film	Music for a Film
Track Number	(different across 8 items)	(different across 8 items)
Length	(different across 8 items)	(different across 8 items)
Date	2010-12-25	2010-12-25
AcoustID	(different across 8 items)	(different across 8 items)
Album Artist	Hiatus	Hiatus
Album Artist Sort Order	Hiatus	Hiatus



*(1) Hey, look, this album doesn't have album artwork, but I have it on my computer.*

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put ... Databa... Axhend... Present... MusicB... Downlo... MusicB... FAQ - ... Music |... Hiatus ... Hiatus ... Rele... x

https://beta.musicbrainz.org/release/1eda6f2e-c454-45ae-886c-ef6cca5558b9

MusicBrainz jflory7 My Data Search Artist

About Us Products Search Editing Documentation English

### Music for a Film

~ Release by Hiatus (see all versions of this release, 1 available)

Overview Disc IDs Cover Art Aliases Tags Details Edit

#### Tracklist

Display Credits at Bottom

#	Title	Rating	Length
1	Ruins	★★★★★	1:22
2	Dawn	★★★★★	3:40
3	Shelter	★★★★★	1:48
4	Gulf	★★★★★	1:58
5	Veiled	★★★★★	1:23
6	Kite	★★★★★	2:30
7	Contrail	★★★★★	1:23
8	Foreigner	★★★★★	2:50

#### Credits

Release [download for free: http://hiatusmusic.bandcamp.com/album/free-download-music-for-a-film](http://hiatusmusic.bandcamp.com/album/free-download-music-for-a-film) [info]

No cover art available.

#### Release information

**Format:** Digital Media  
**Length:** 16:54

#### Additional details

**Type:** EP + Soundtrack  
**Packaging:** None  
**Status:** Promotion  
**Language:** English  
**Script:** Latin  
**Data Quality:** Normal

#### Labels

- [no label]

#### Release events

- [Worldwide] 2010-12-25

#### Release group rating

★★★★★

#### Tags

(none)

  
Tag

#### External links

- [bc] Bandcamp

#### Editing

- Edit relationships
- Change release quality

(2) Looks like there's no artwork added to this release... let's fix that!

### Add Cover Art

Select images... or drop files here

File: cover.jpg (1.9 MB)

Type:  Front  Back  Booklet  Medium  Obi  
 Spine  Track  Other  Tray  Sticker  
 Poster  Liner  Watermark

[Remove](#)

Please see the [Cover Art Types](#) documentation for a description of these types.

Comment:

**Position:** (no other cover art)

### Edit Note

Entering an [edit note](#) that describes where you got your information is highly recommended. Not only does it make it clear where you got your information, but it can also encourage other users to vote on your edit — thus making your edit get applied faster.

Even just providing a URL or two is helpful!

Edit note: Bandcamp release. <https://hiatusmusic.bandcamp.com/album/free-download-music-for-a-film>

Make all edits votable.

[Enter edit](#)

*(3) Adding the front cover of the album artwork to the album (and cite the source!)*

Browser tabs: jaba..., Axhenda..., Present..., MusicB..., Downlo..., MusicB..., FAQ - ..., FREE D..., Hiatus ..., Hiatus ..., Rele..., Open E...

Address bar: <https://beta.musicbrainz.org/release/1eda6f2e-c454-45ae-886c-ef6cca5558b9/cover-art>

Search: [Search] Artist: [▼] [Q]

Navigation: About Us, Products, Search, Editing, Documentation


Language: English

### Music for a Film

~ Release by Hiatus (see all versions of this release, 1 available)

Overview | Disc IDs | **Cover Art** | Aliases | Tags | Details | Edit

#### Cover Art



Types: Front

All sizes: 250px | 500px | original


Edit Remove

These images provided by the [Cover Art Archive](#). You can also see them at the [Internet Archive](#).

Add Cover Art

#### Hiatus

MUSIC FOR A FILM



**Release information**  
Format: Digital Media

**Additional details**  
Type: EP + Soundtrack  
Packaging: None  
Status: Promotion  
Language: English  
Script: Latin  
Data Quality: Normal

**Labels**  
[no label]

**Release events**  
[Worldwide] 2010-12-25

**Release group rating**  
\*\*\*\*\*

(4) Awesome, we did it! Album artwork is open to review for seven days before approval.

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Tag	Original Value	New Value
Title	<i>(different across 8 items)</i>	<i>(different across 8 items)</i>
Artist	Hiatus	Hiatus
Album	Music for a Film	Music for a Film
Track Number	<i>(different across 8 items)</i>	<i>(different across 8 items)</i>
Length	<i>(different across 8 items)</i>	<i>(different across 8 items)</i>
Date	2010-12-25	2010-12-25
AcoustiD	<i>(different across 8 items)</i>	<i>(different across 8 items)</i>
Album Artist	Hiatus	Hiatus
Album Artist Sort Order	Hiatus	Hiatus



(5) *Guess who's album artwork is in their music player now?*

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**Hands-on demo!**

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## Two different scenarios...

*I know what I downloaded, but the music metadata could be improved or be more accurate. Now what?*

*I have literally no idea what this MP3 is or where it came from, but it's catchy and I want to know more about it. Halp?*

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# Open floor!

# Comments?

# Questions? Ideas?

Find these slides  
and more at:

[git.io/vsU2d](https://git.io/vsU2d)

## By the way...

Looking for a summer internship?

MetaBrainz, the project behind MusicBrainz and plenty of other music-related projects, is participating in [Google Summer of Code!](#)

If working on open source music projects over the summer and getting paid sounds interesting, check out their slots!

[musicbrainz.org/doc/Development/Summer\\_of\\_Code/2017](https://musicbrainz.org/doc/Development/Summer_of_Code/2017)

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