

Podcasting 2.0: it's all about Interoperability

(How Podcasting 2.0 will save the Open Internet)



I am Benjamin Bellamy.



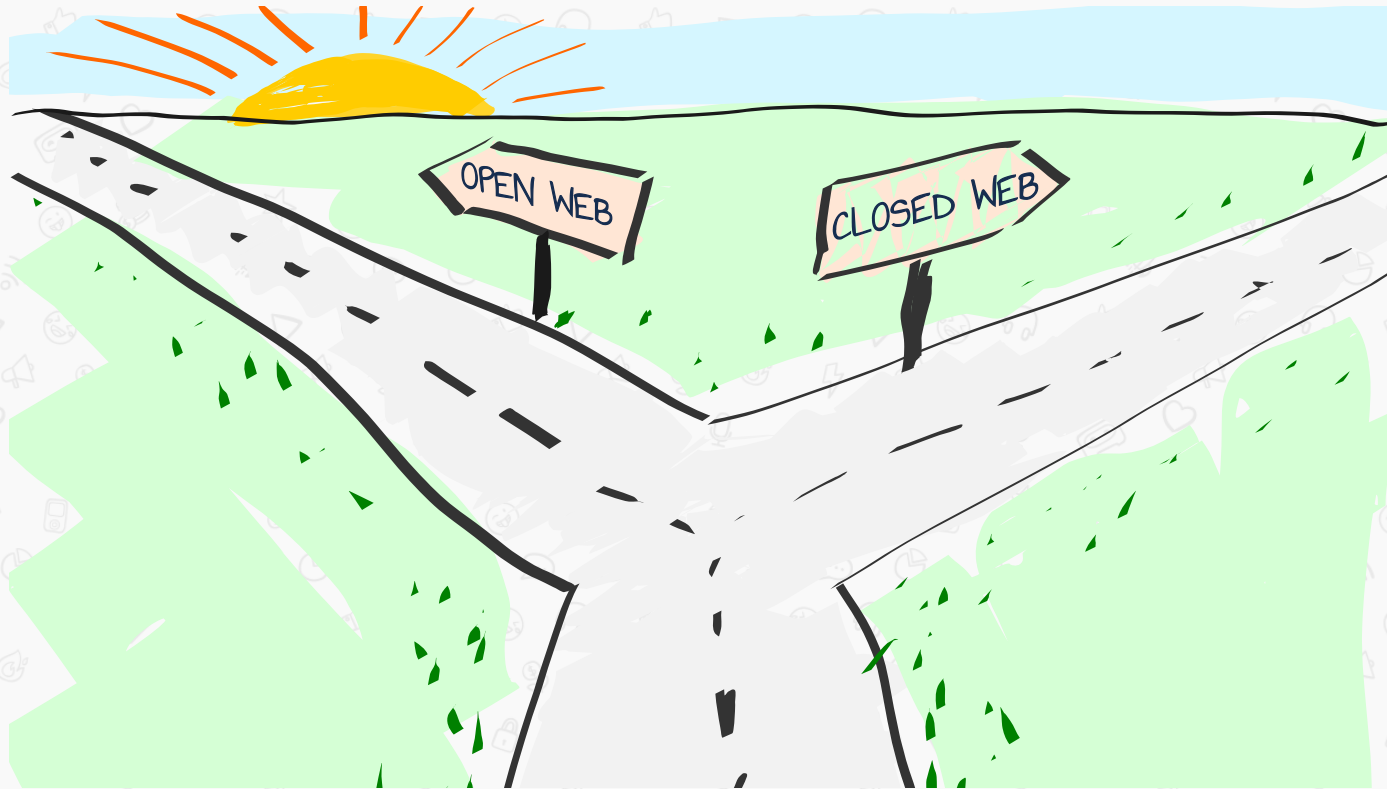
- I ❤️ Podcasts.
- I ❤️ Open-Source.
- Founder and CEO of **Ad Aures**.
- Father of **Castopod**.

What about you?

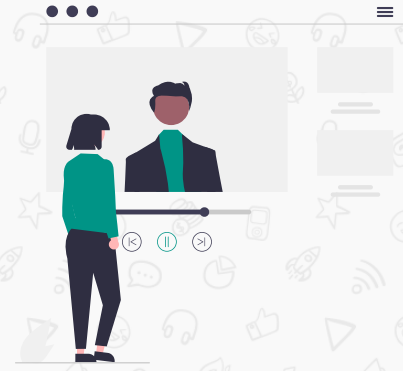
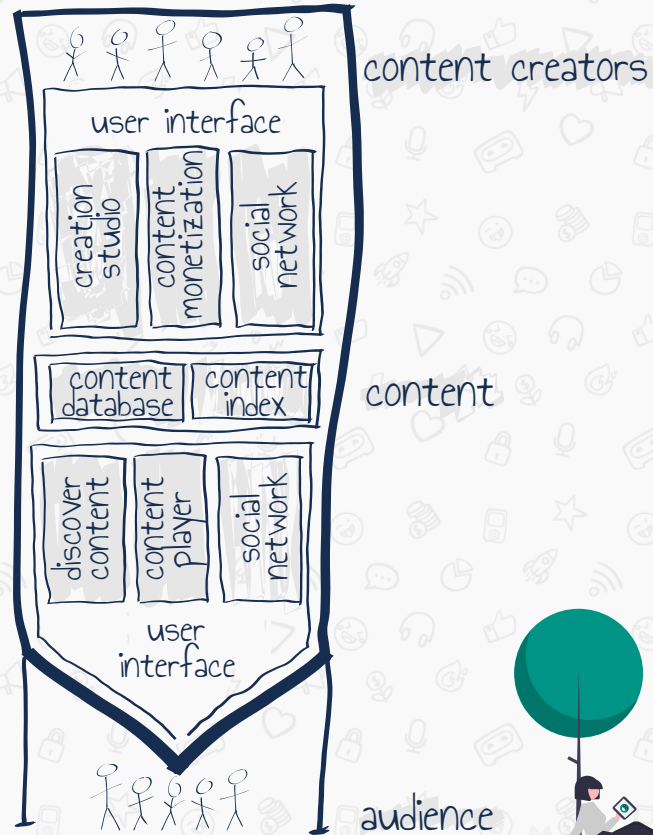
- Are you a podcaster?
- Are you a developer?
- Have you heard of Podcasting 2.0?
- Have you heard of Castopod?



The user's dilemma



Closed silos are comfortable



What influences your content

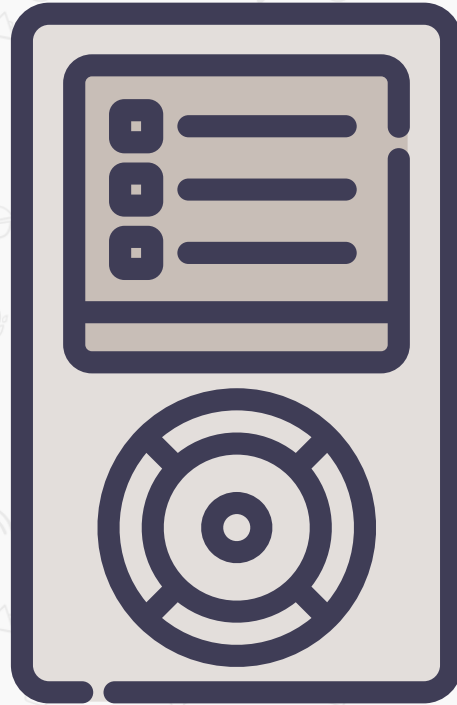
On the Open Web (federated network, self hosted...)

- The law

On the Closed Web (Youtube, Apple, Facebook...)

- The law
- Terms and Conditions
- Economic, political and ideological interests specific to the platform
- Government pressure on the platform
- Mass reporting of my content by opponents or competitors
- A bot
- A moderator in a bad mood
- Platform shutting down

Let's talk about *audioblogging*!



“But what to call it?”

“Audioblogging?
Podcasting?
GuerillaMedia?”

Ben Hammersley
The Guardian (2004)



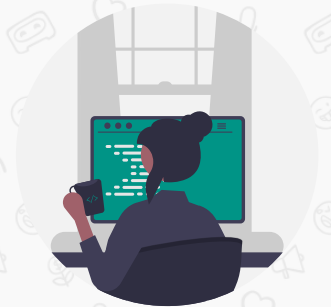
The Founders

- 1989: Иллюзия независимого радио
(The Illusion of Independent Radio)
- 2004: Daily Source Code
- 2005: Podcasting: Do-It-Yourself Guide
- 2006: The Lance Anderson Podcast Experiment
- 2014: Serial
- ...



The Architects

- 1993: Fraunhofer-Gesellschaft
- 1995 : Ramanathan V. Guha, Aaron Swartz, Dave Winer
- 2000: Tristan Louis, Adam Curry, Dave Winer
- 2003: Adam Curry
- 2005: Steve Jobs, Eddy Cue



But what is a Podcast?

“I consider a **Podcast** to be any **RSS** feed that has an **enclosure**.”

Adam Curry

This is *not* a podcast:

The screenshot shows a podcast player interface. On the left is a navigation sidebar with options: Home, Search, Your Library, and Premium. The main content area displays the episode title '#1930 - Adam Curry' in large grey text, with a back arrow on the left and a menu icon on the right. Below the title is the podcast name 'The Joe Rogan Experience' and the episode duration 'JAN 25 • 3 HRS 18 MINS LEFT'. A prominent green 'Play' button is centered. To the right of the play button are icons for share, add to library, and download. At the bottom left, there is a small thumbnail image of Adam Curry, the episode title 'Adam Curry', and the podcast name 'The Joe Rogan Experience'. Below the thumbnail are icons for full screen, play/pause, and a 15-second skip forward button. A descriptive paragraph follows: 'Adam Curry is an internet entrepreneur, former MTV VJ, and podcasting pioneer. He is the co-host, along with John C. Dvorak, of the "No Agenda" podcast.'

This is a podcast:

```
-<rss version="2.0" xml:base="https://serialpodcast.org">
-<channel>
  <title>Serial</title>
  <link>https://serialpodcast.org</link>
-<description>
  Serial is a podcast from the creators of This American Life, hosted by Sarah Koenig. Serial unfolds one story - a true story - over the course of a whole season. The show follows the plot and characters wherever they lead, through many surprising twists and turns. Sarah won't know what happens at the end of the story until she gets there, not long before you get there with her. Each week she'll bring you the latest chapter, so it's important to listen in, starting with Episode 1. New episodes are released on Thursday mornings.
  <description>
  <language>en</language>
  <copyright>Copyright 2023 Serial Podcast</copyright>
  <itunes:type>episodic</itunes:type>
  <itunes:author>This American Life</itunes:author>
  <itunes:subtitle>A podcast from the creators of This American Life</itunes:subtitle>
-<itunes:owner>
  <itunes:email>rich@thislife.org</itunes:email>
  <itunes:owner>
  <itunes:category text="News"/>
  <itunes:category text="True Crime"/>
  <itunes:image href="https://serialpodcast.org/sites/all/modules/custom/serial/img/serial-itunes-logo.png"/>
-<item>
  <title>Nice White Parents - Ep. 5</title>
  <link>
    https://www.nytimes.com/2020/08/20/podcasts/nice-white-parents-school.html
  </link>
  <description>
    <p>Chana has traced the history of the school from its founding and come to the present. But now: One unexpected last chapter. Last year, the school district for BHS mandated a change in the zoning process to ensure all middle schools would be racially integrated. No longer can white families hoard resources in a few select schools. Black and Latino parents have been demanding this change since the late 1950s. The courts have mandated it. Chana asks: How did this happen? And is this a blueprint for real, systemic change?</p>
  </description>
  <pubDate>Thu, 20 Aug 2020 09:00:00 +0000</pubDate>
  <guid isPermaLink="false">nwp-e05</guid>
  <itunes:episodeType>full</itunes:episodeType>
  <itunes:title>Nice White Parents - Ep. 5</itunes:title>
  <itunes:author>This American Life</itunes:author>
  <itunes:duration>00:53:00</itunes:duration>
  <itunes:explicit>yes</itunes:explicit>
  <enclosure url="https://dts.podtrac.com/redirect.mp3/nytimes.simplecastaudio.com/521189a6-a4f6-404d-85cf-455a989a10a4/episodes/4a49fb56-5d6d-4800-8b83-72047d6b81e7/audio/128/default.mp3?aid=rss_feed&awCollectionId=521189a6-a4f6-404d-85cf-455a989a10a4&awEpisodeId=4a49fb56-5d6d-4800-8b83-72047d6b81e7&feed=xl36XBC2" type="audio/mpeg" length="0"/>
  <itunes:subtitle>
    An unexpected last chapter. Some white parents start behaving differently.
  </itunes:subtitle>
  <itunes:summary>
    An unexpected last chapter. Some white parents start behaving differently.
  </itunes:summary>
</item>
```

It's called a changeover...

“**Steve Jobs** would like to meet with you, do you have any time for that?”

Eddy Cue to Adam Curry, 2005



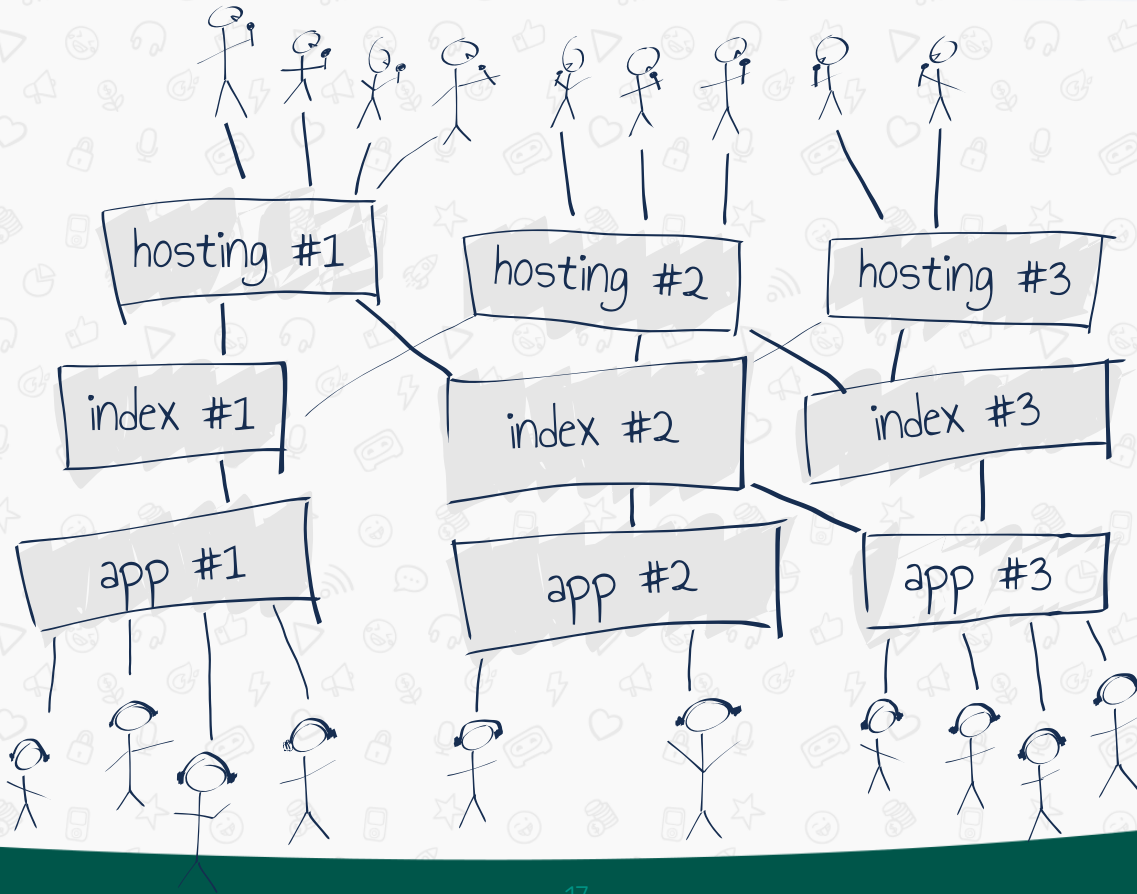
Let's recap

1993 Mosaic 1995 Win95 1998 ADSL 2002 iPod 2005 Youtube 2006 Facebook 2007 iPhone 2013 4G 2017 Mastodon

1993 MP3 1995 RSS 2000 RSS+MP3 2003 RSS→iPod 2005 → iTunes



The status quo of Podcasting



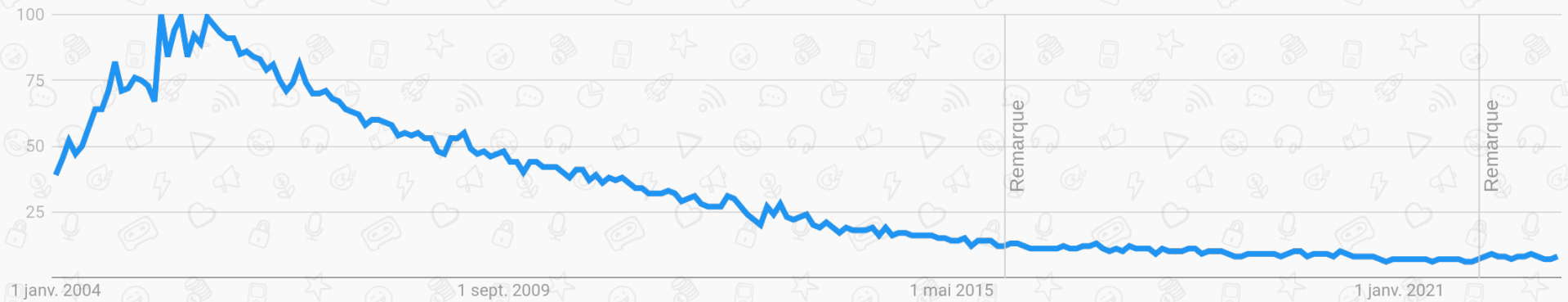
Podcasting is still decentralized!



**But not a single feature
has been added.**



And RSS has died. Many times.



- Google Reader discontinued in 2013
- Youtube removed it
- Twitter removed it
- ...



The 10 year hiatus

“There were 10 years of **no development** because we had this **chicken and the egg** problem.”

Adam Curry

2020: Podcasting 2.0



- Initiated by Adam Curry (again) and Dave Jones
- Open Specification
- Namespace extending Podcast DTD
<https://github.com/Podcastindex-org/podcast-namespace>



github.com/Podcastindex-org/podcast-namespace

Keeping podcasting free

“Podcasting 2.0 is about **decentralizing**, returning to the idea of free and **open-source**.”

Dave Jones

Focused on UX and features

Alternate enclosures, Boostagrams, Chapters, Episodes, Seasons, Funding, GUID, Live, Location, Locked, Medium, OP3, Person, Podping, Sat Streaming, Social Interact, Soundbite, Transcript, Txt...



Works everywhere

“Podcasting 2.0 is **backward compatible.**”

Adam Curry

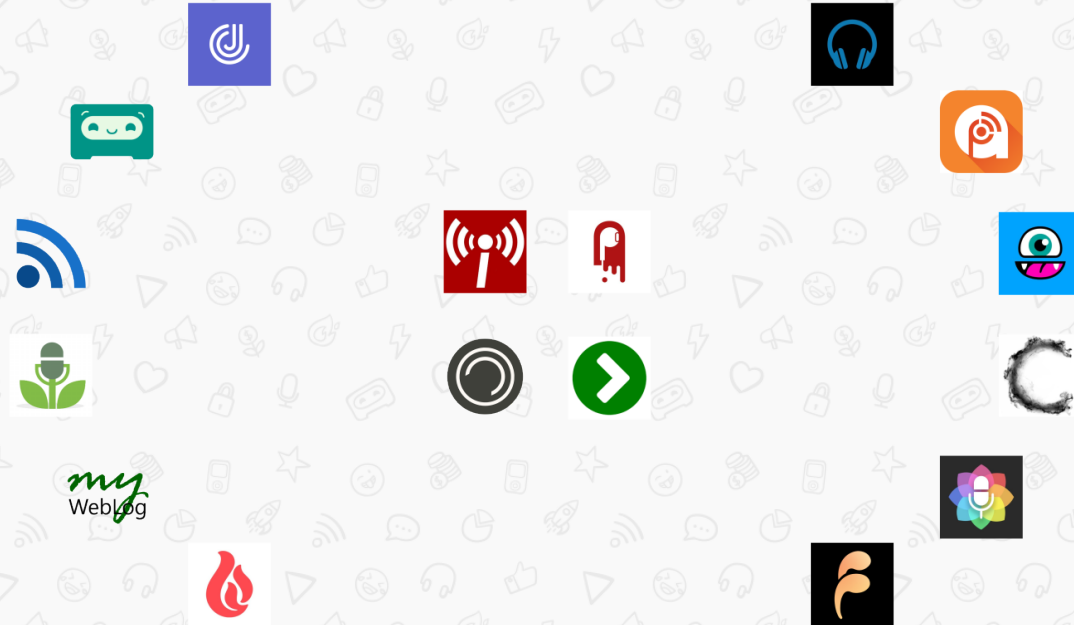
Current status

“There are over **400,000 podcasts** that declare the **Podcasting 2.0** namespace in their **RSS feed**.

We will probably be at **half a million** podcasts by early 2023.”

Dave Jones

Interoperability is key



Podcast hosting platforms, directories, apps...

The battle is not over



A powerfull ally

Podcasting 2.0 has a friend:

PodcastIndex is an open-data directory for **all podcasts** dedicated to Podcasting 2.0.



podcastindex.org



PodcastIndex.org

“PodcastIndex is a central aggregator that tries to find **every podcast that exists** in the world.

There's **no preference** to any one over the other.”

Dave Jones

Twice as big as Apple Podcasts!

Total podcasts in the index ...

4,102,361

Shows published in the last ...

3 DAYS

123,116

10 DAYS

254,955

30 DAYS

352,072

60 DAYS

437,054

90 DAYS

493,445

Let's recap again

1993 Mosaic 1995 Win95 1998 ADSL 2002 iPod 2005 Youtube 2006 Facebook 2007 iPhone 2013 4G 2017 Mastodon

1993 MP3 1995 RSS 2000 RSS+MP3 2003 RSS→iPod 2005 → iTunes 2020 Podcasting 2.0



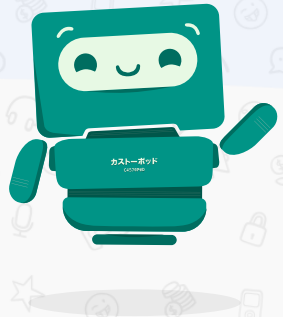
How does this work?

Let's try Castopod!



What is Castopod?


- Open-source Podcast Hosting (AGPL3)
- PHP/MySQL
- Podcasting 2.0
(Chapters, Funding, GUID, Location, Locked, OP3, Person, Soundbite, Transcript, Social Interact / ActivityPub built-in social network...)



Sustainability

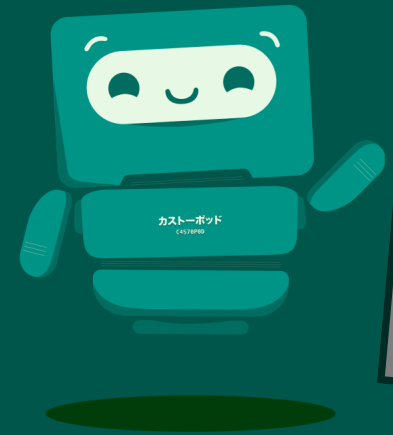
- Ad Aures
<https://adaures.com/>
- NLnet
<https://nlnet.nl/project/Castopod/>
- Open Collective
<https://opencollective.com/castopod>
- Paid hosting
<https://castopod.com/>



 **v1.0 is officially out!** New roles, automatic database ... [Learn more](#) →

The free and open-source solution to your podcasting 2.0 journey

Self-host your podcasts with ease, keep control over what you create and talk to your audience without any middleman. Your podcast and your audience belong to you and you only.



 [Download Castopod](#)

[Get started](#) →



Browser address bar: <https://docs.castopod.org/getting-started/install.html>

Castopod documentation

Home | Blog | Github | Languages | Source code

Introduction

Getting started

- Install**
- Requirements
- Install instructions
- Community packages

Docker

Security

Update

Auth

Contributing

- Guide
- Dev Setup

How to install Castopod?

Castopod was thought-out to be easy to install. Whether using dedicated or shared hosting, you can install it on most PHP-MySQL compatible web servers.

Note

We've released official Docker images for Castopod!

If you prefer using Docker, you may skip this and go straight to the [docker documentation](#) for Castopod.


Requirements

- PHP v8.1 or higher
- MySQL version 5.7 or higher or MariaDB version 10.2 or higher
- HTTPS support

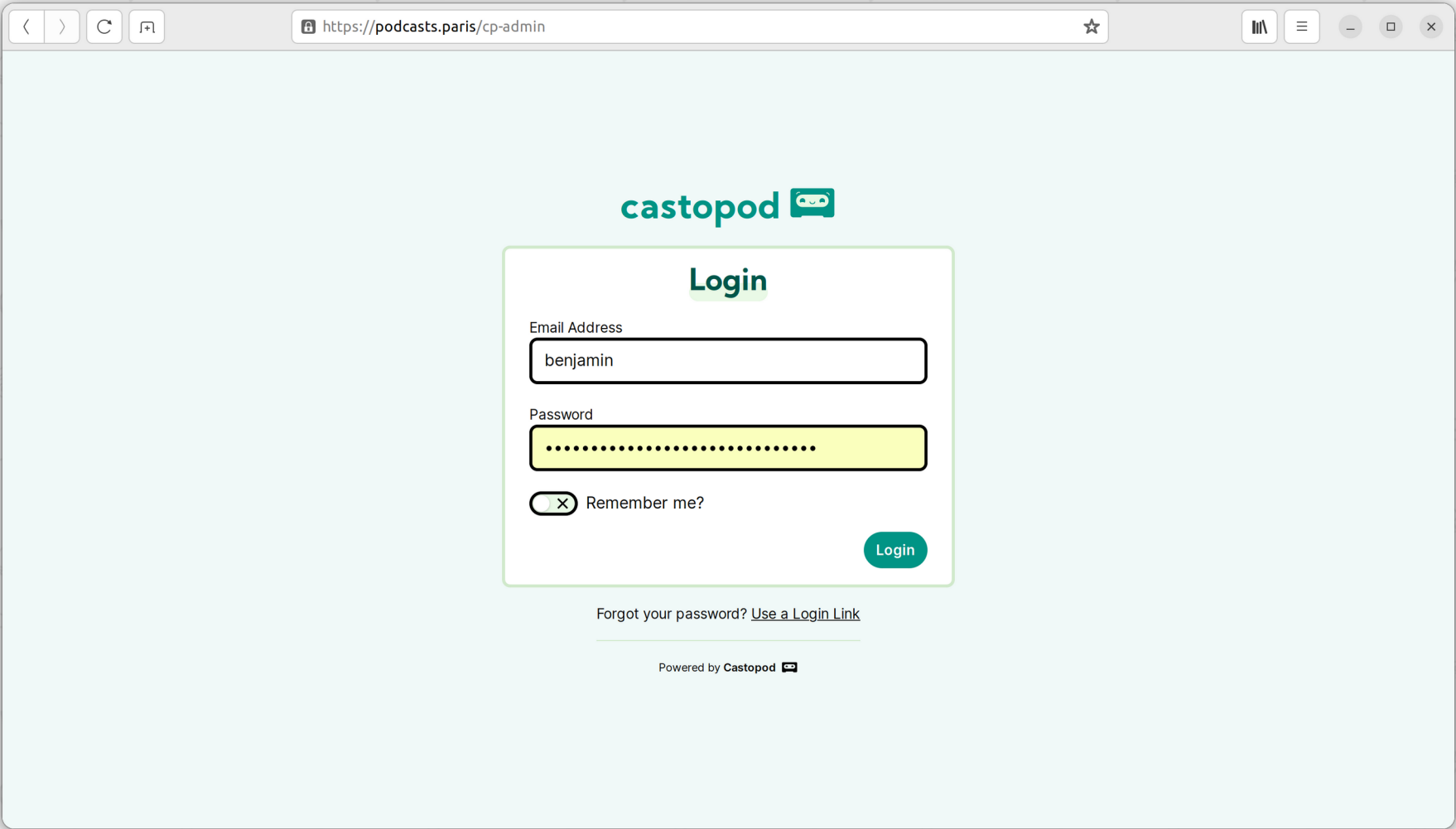
PHP v8.1 or higher

PHP version 8.1 or higher is required, with the following extensions installed:

- [intl](#)
- [libcurl](#)
- [mbstring](#)
- [gd](#) with [JPEG](#), [PNG](#) and [WEBP](#) libraries



docs.castopod.org



castopod 

Login


Email Address

Password

Remember me?

Login

Forgot your password? [Use a Login Link](#)

Powered by Castopod 

Go to website

Dashboard

Home

Podcasts

- All podcasts
- New podcast
- Import a podcast

Persons

- All persons
- New person

Fediverse

- Blocked accounts
- Blocked domains

Users

- All users
- New user

Pages

- All pages
- New Page

Settings

Powered by Castopod 1.1.2

Admin dashboard

PODCASTS >
Last published on Sep 19, 2021

6

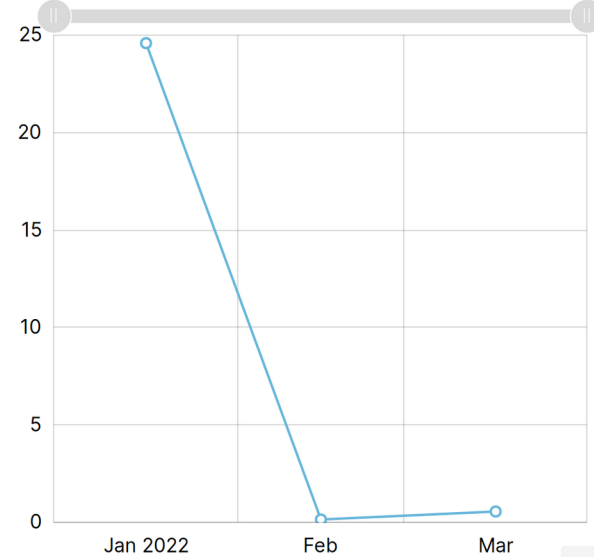
EPISODES
Last published on Mar 17, 2022

26

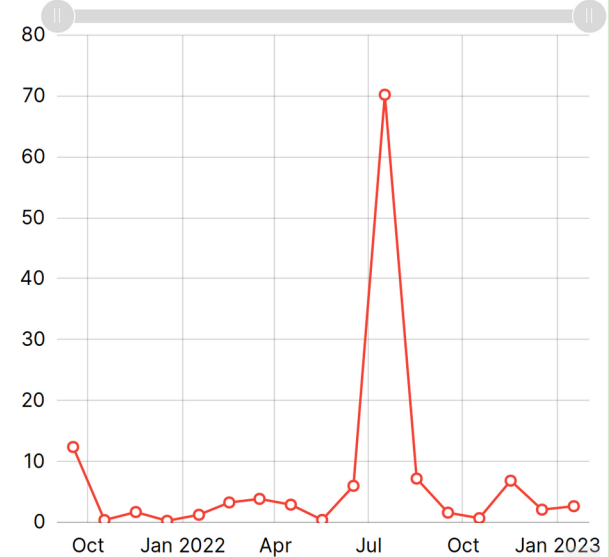
STORAGE
25.4MB out of 100GB

0%

Monthly storage (in MB)



Monthly used bandwidth (in MB)



Browser address bar: <https://podcasts.paris/cp-admin/podcasts/new>

Navigation: Go to website

User: benjamin

Create podcast

Podcast identity

These fields allow you to get noticed.

Podcast cover

castopod-avatar.png

Cover must be squared and at least 1400px wide and tall.

Podcast banner (optional)

castopod-cover.png

Banner must have a 3:1 ratio and be at least 1500px wide.

Title

Handle

Description

B *I*

This is my new podcast!

Powered by **Castopod** 1.1.2

Browser address bar: <https://podcasts.paris/cp-admin/podcasts/1/episodes/new>

Navigation: Go to website | User: benjamin

Museums in Paris

@museums

- Podcast dashboard
 - Home
 - Edit podcast
 - Manage persons
- Episodes
 - All episodes (7)
 - > New episode
- Premium
 - All subscriptions
 - Add subscription
- Analytics
 - Audience overview
 - Unique listeners
 - Listening time
 - Players
 - Locations
 - Time periods
 - Web pages visits

Powered by Castopod 1.1.2

Add an episode

Episode info

Audio file

my-first-podcast-episode.mp3

Size limit: 64MiB.

Episode cover (optional)

castopod-demo-podcast-season1.jpg

Cover must be squared and at least 1400px wide and tall.

Title

Permalink

.../@museums/ my-first-episode

Season (optional) Episode (optional)


Type


Full Trailer Bonus

Parental advisory

undefined Clean Explicit

<https://podcasts.paris/@museums/episodes>





Museums in Paris @museums
 5 followers


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Season 1 episodes (7) Season 1 ▾


 S01:E07 11 months ago
Musée Grévin

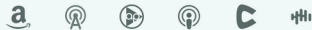

 S01:E06 17 months ago


[RSS Podcast feed](#)

Find Museums in Paris on



Listen on

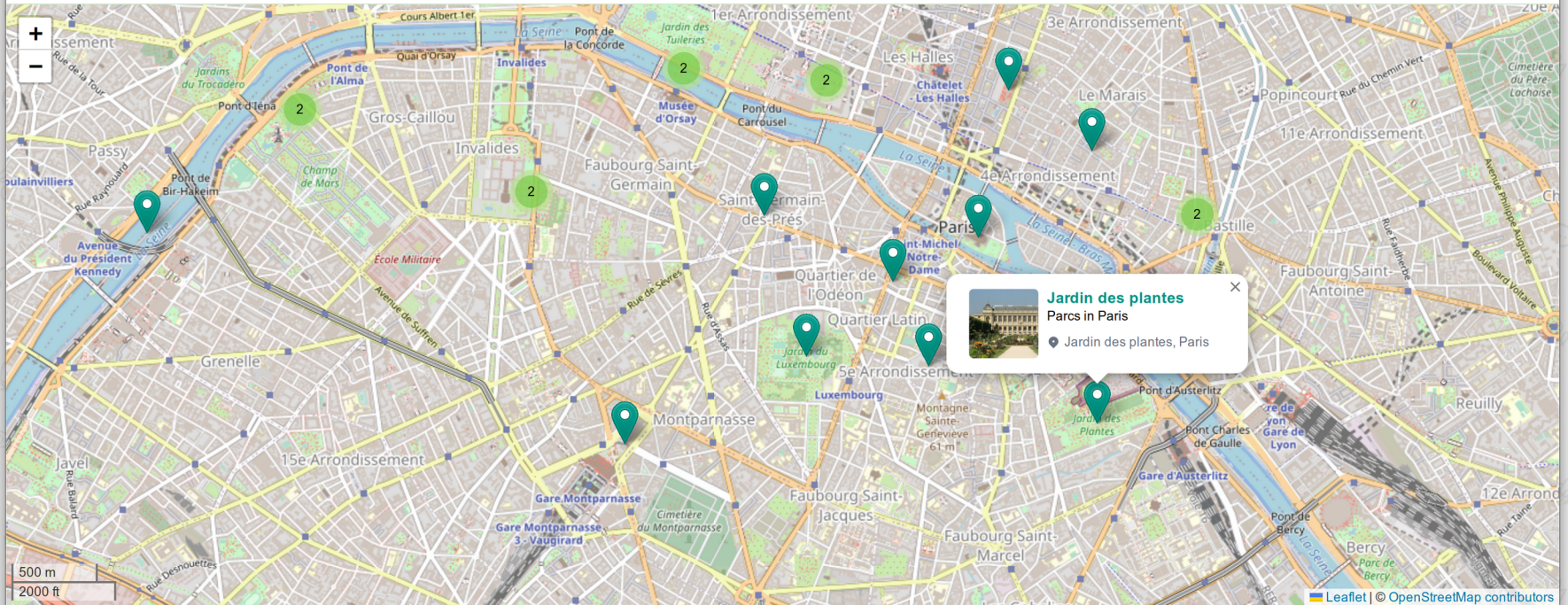



Musée Grévin
 Museums in Paris


00:00 ————— 00:30


← Back to home

Map



<https://podcasts.paris/@museums/posts/7d0c2c3a-0489-41b7-9823-c9ff1222004a>





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[← Back to Museums in Paris posts](#)


Museums in Paris @museums
 17 months ago

The Musée Rodin in Paris, France, is a museum that was opened in 1919, primarily dedicated to the works of the French sculptor Auguste Rodin.




S01:E04 17 months ago
Musée Rodin




[RSS Podcast feed](#)


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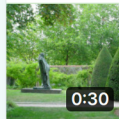
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← Back to Museums in Paris posts

 **Museums in Paris** @museums
17 months ago

The Musée Rodin in Paris, France, is a museum that was opened in 1919, primarily dedicated to the works of the French sculptor Auguste Rodin.



S01:E04 17 months ago

Musée Rodin



2

1


2

Reply to @museums

 **Benjamin Bellamy** @benjamin@paris.podcasts.chat 17 months ago


@museums Great place to go to on a sunny day! 🌞☀️

0 0 0

 **Parcs in Paris** @parcs 17 months ago

What a lovely parc! 🌳🌳🌳

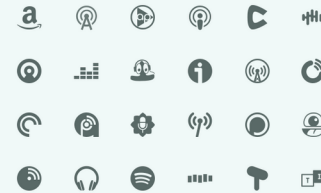
0 0 1

 RSS Podcast feed

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[Legal notice](#)

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169

downloads in last 7 days
as of Thu, February 2



714

downloads in last 30 days
as of Thu, February 2



749

downloads
in January



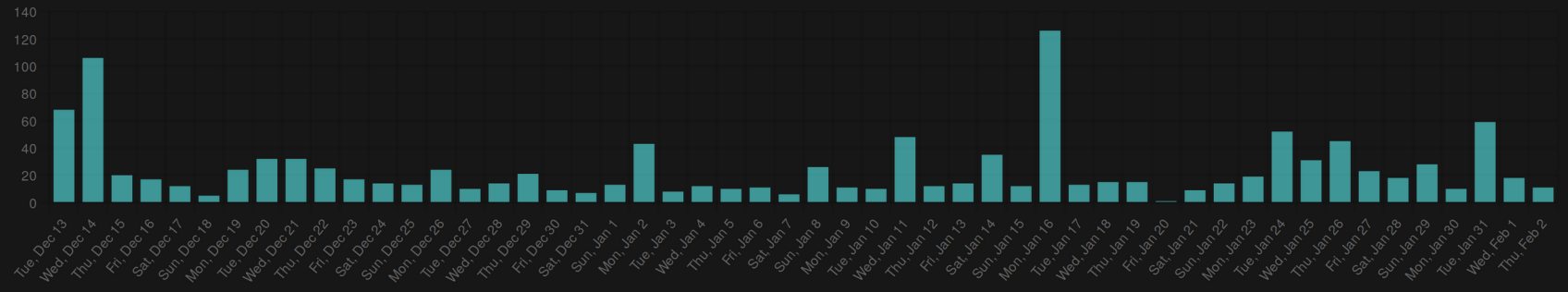
359

unique audience
in January



How OP3 calculates Downloads ->

Daily Downloads December 13 – February 2



Last updated: February 2 (yesterday)

Dates and times are in UTC

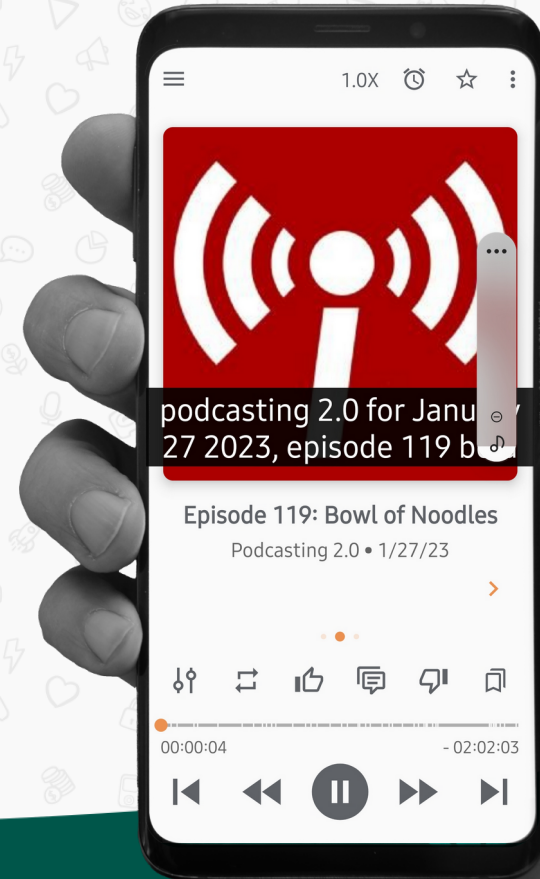
Europe/Paris is 1 hour ahead of UTC

Works everywhere

With more than 60 services, indexes, apps



<https://NewPodcastApps.com/>

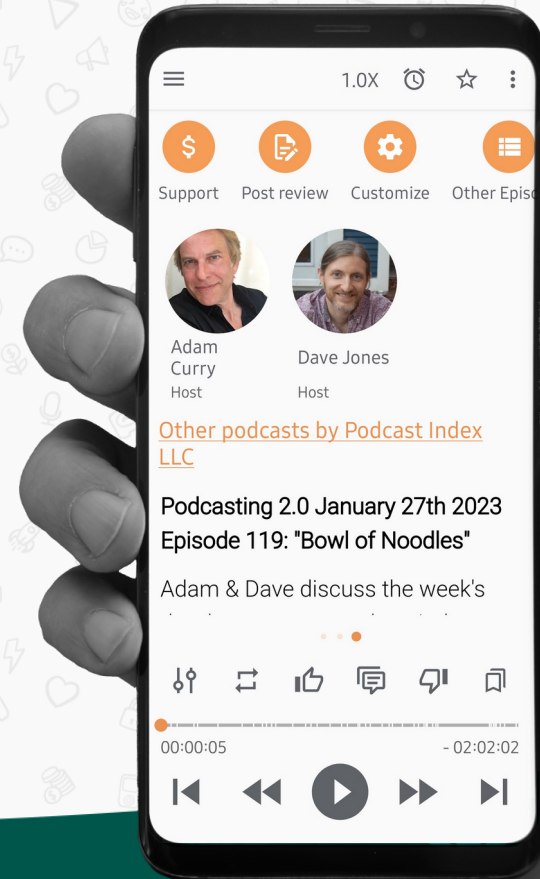


Works everywhere

With more than 60 services, indexes, apps



<https://NewPodcastApps.com/>



Conclusion

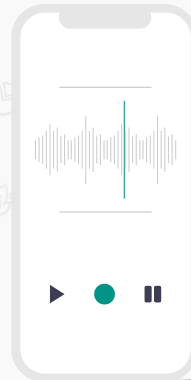


“Try a **Podcasting 2.0** app.”

Adam Curry



<https://NewPodcastApps.com/>



Further Reading...

- The Podfather 2.0, La Saga des Pionniers continue
<https://podcastmagazine.fr/boutique/> (Podcast Magazine n°2, en Français)
<https://blog.castopod.org/rss/> (Castopod's blog, in English)
- Podcasting 2.0 is just a vision, and the standards to realize it.
<https://podcasting20.substack.com/p/podcasting-20-is-just-a-vision-and>
- What is Podcasting 2.0, and why is it important?
<https://origin.fm/blog/podcasting-2point0/>
- How podcasting will save the open Web and free speech
<https://blog.castopod.org/how-podcasting-will-save-the-open-web-and-free-speech/>



Further listening...

- Podcasting 2.0

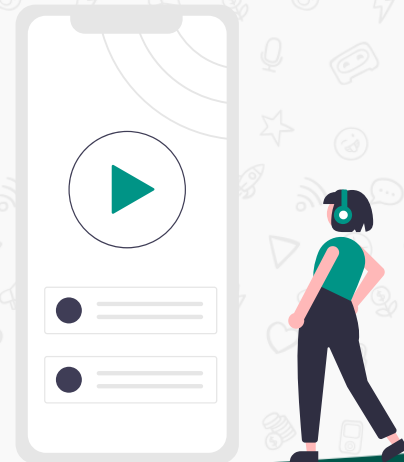
<https://podcastindex.org/podcast/920666>

- Podnews Weekly Review

<https://weekly.podnews.net/>

- Podnews

<https://podnews.net/>



Thank you!



castopod.org/fosdem23



benjamin@castopod.org



[@benjaminbellamy@podcastindex.social](https://podcastindex.social/@benjaminbellamy)



[@benjaminbellamy:matrix.org](https://matrix.org/@benjaminbellamy:matrix.org)