The Web as a Content Management System on the BBC Music Beta

The BBC has a long and distinguished track record of bringing music to new audiences. From shows like:
Later Live... with Jools Holland

Broadcast live from BBC Television Centre, Jools Holland presents new, legendary and relatively unknown artists in performance.

Coming up

Tuesday, 22:00 on BBC Two

Series 34
Episode 4
Jools is joined by Depeche Mode, Lily Allen, Sonic Youth, Raphael Saadiq and Taj Mahal.

1 more programme coming up in the next 7 days.

More like this

Find related BBC Two programmes.

Categories

GENRE:
Music
FORMAT:
Performances & Events
Welcome to the Proms

Everything you need to know: What are the BBC Proms? When did they begin? Where is the Royal Albert Hall? With video guides.

Inspire 2009

The 2009 BBC Proms Inspire Young Composers’ Competition is now open for entries!

What's On

100 concerts!

76 Proms at the Royal Albert Hall and 19 chamber recitals at Cadogan Hall. Plus 5 Proms in the Park.

April Preview Concerts

Four special concerts to mark the launch of BBC Proms 2009, with a chance to hear about this year's Proms from Director Roger Wright.
Kick ass techno tantrums!
Acid Casuals join Bethan Elfyn

Elephants in session on Huw
More genre-hopping under the radar tunes!

The Punk Show: Frank Turner
An exclusive acoustic track and interview!

In The Company of PJ Harvey
She performs a very special session track

Jaguar Skills joins Trevor
Hear his special Festival Rocker Mix

Wake Up Guest Mix
Lil' Silva plays a heavy mix on Ras's show

Feeling the burn?
Gyms 'need to help' over-exercisers

Calvin Harris
I'm Not Alone

And our radio networks such as Radio 1
About a month ago we launched the new BBC Music Beta. The aim of the site is to provide a comprehensive guide to all this fantastic music content available across the BBC.
Bat for Lashes

Bat for Lashes is a performance name for the person Natasha Khan.

In particular, we are publishing a page for EVERY artist where we can highlight and link to their activities on the BBC.
This is built using existing, open data repositories: MusicBrainz and Wikipedia.
Structured data

<table>
<thead>
<tr>
<th>Artist:</th>
<th>Bat for Lashes</th>
</tr>
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<tbody>
<tr>
<td>Release:</td>
<td></td>
</tr>
<tr>
<td>Track: 1</td>
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</table>

MusicBrainz is basically an editable database for the music domain. It covers artists, releases, tracks and record labels.

For example, this is the form for adding a new release – as you can see, the data is very well structured.
All edits to MusicBrainz are peer-reviewed: users can vote against an edit if they disagree with it.

So the quality of the data is generally high, especially around popular artists where many fans keep a close eye on new edits.
Active user community

<table>
<thead>
<tr>
<th>Editor</th>
<th>Edits</th>
<th>[ open edits ]</th>
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<tbody>
<tr>
<td>MeinDummy</td>
<td>2907</td>
<td></td>
</tr>
<tr>
<td>drsaunde</td>
<td>1048</td>
<td></td>
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<tr>
<td>fred576</td>
<td>1013</td>
<td></td>
</tr>
<tr>
<td>NAvAP</td>
<td>943</td>
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</table>

<table>
<thead>
<tr>
<th>Voter</th>
<th>Votes</th>
<th>[ open edits ]</th>
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</thead>
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<tr>
<td>voiceinsideyou</td>
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<td></td>
</tr>
<tr>
<td>chabreyflint</td>
<td>931</td>
<td></td>
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<tr>
<td>drsaunde</td>
<td>744</td>
<td></td>
</tr>
<tr>
<td>ym</td>
<td>594</td>
<td></td>
</tr>
</tbody>
</table>

There’s an incredibly active user community, very busy adding new data to the site. These are the number of edits individual users have entered in the last week – one user alone, “MeinDummy” has contributed nearly 3000 edits.
A curious feature of MusicBrainz is their use of these rather long, opaque identifiers for their resources. For example, an artist page in musicbrainz is musicbrainz.org/artist/:guid. And we’re reusing these identifiers on our site, so the artist profile on BBC is: www.bbc.co.uk/music/artists/:guid.

This what people refer to “Web scale identifiers” – the way DBPedia uses Wikipedia article titles is the best example of this.

Michael Smethurst, an Information Architect at the BBC has written a really good blog post about this.

And this reuse makes it really easy to build mashups and join this data with other sources on the web – you just take an artist ID and query other applications using MusicBrainz like last.fm.
MusicBrainz Licensing

Core data

- artists, releases, tracks, labels
- advanced relationships

Remainder of data

- annotations, tags, third party data

Live data feed

In terms of licensing
Core data – Public Domain
Remainder – Creative Commons Attribution-NonCommercial-ShareAlike 2.0 license

MusicBrainz provides a live data feed so that people can host their own MusicBrainz mirrors - any edits made in MusicBrainz appear on BBC Music within a couple of hours.

As the LiveDataFeed includes both datasets, the highest license needs to be applied to these data packets. So comes under Creative Commons license.
Taking an artist profile like Madonna
The discography, artist and label relationships and links come from MusicBrainz
If an artist’s profile in MusicBrainz has been given a Wikipedia link, we are able to fetch the article abstract from Wikipedia.

Using a pretty popular pubsub mechanism (involving IRC!) we keep the abstract up to date in realtime – an edit in Wikipedia will appear on BBC Music in a few seconds.
The Web as a Content Management System

BBC editorial staff are contributing to MusicBrainz and Wikipedia instead of internal systems.

So when we say that we are using the web as a content management system, we mean that BBC staff are editing MusicBrainz and Wikipedia instead of an internal tool.

These guys are domain experts: their job is to research and publish all sorts of things about music. (even if they’re a bit obsessed by jazz).

They are in a position where they can make some really valuable expert contributions to the MusicBrainz and Wikipedia projects.
And because these are open data sets powered by their communities on the web, we are able to publish many more artist pages than would otherwise be possible!

We’re now publishing over 450,000 artist profiles!
We are able to support a wider diversity of music, much more than if we were to maintain our own data source!
Isaac Hayes
Isaac Hayes performs as Chef.

Isaac Hayes
Biography
Isaac Lee Hayes, Jr. (August 20, 1942 – August 10, 2008) was an American singer-songwriter, actor and musician. Hayes was one of the main creative forces behind southern soul music label Stax Records, where he served as both an in-house songwriter and producer with partner David Porter during the mid-1960s. Hayes & Porter were named to the Songwriters Hall of Fame in 2005 in recognition of their string of successful hit songs for Sam & Dave, Carla Thomas and others.

And the community ensures that our data doesn’t grow stale. Whenever an artist passes away or a famous band breaks up it’s reflected on our page within a few hours.
Credit the source

Read more at Wikipedia...

This entry is from Wikipedia, the user-contributed encyclopedia. It may not have been reviewed by professional editors and is licensed under the GNU Free Documentation License. If you find the biography content factually incorrect, defamatory or highly offensive you can edit this article at Wikipedia. Find out more about our use of this data.

We credit our sources so it’s clear to our users where the data is coming from. As we only publish the abstract users go over to wikipedia if they want to know more.
Encourage users to contribute

More importantly, we encourage our users to get involved and contribute to the datasets themselves.

For example, the band “Harmonica Fats” hasn’t been given a Wikipedia URL so we can’t pull in a biography. We ask our users if they know a Wikipedia article exists to add it to MusicBrainz.

And as the site becomes established, some of these users might be the record labels, music promoters or even band members themselves.
Content from the BBC

So what BBC content are we providing?
We are publishing over 3000 album reviews, which are very popular with our users. We find lots of users commenting on the reviews.

These reviews are licensed under a Creative Commons Attribution Non-commercial Share-a-like license.
Now On The BBC

**BBC Four Sessions - Marianne Faithfull**

**Marianne Faithfull on Later with Jools Holland**
Marianne Faithfull performs and chats to Jools on Later.

Featured content can be promoted on an artist page, for example when they perform live on a BBC show.
A fun feature on the site is that for each artist played by the BBC we display a chart of the shows that played that artist the most. The network or station that played the artist the most gets to “own” their profile with a large branding graphic.

For the BBC, this is the most important aspect of the site: it enables our users to discover our most valuable asset: our programmes.
On the programmes side, we are publishing clickable tracklist for radio shows.

For example, on this Wake up to Wogan episode each song on the tracklist has...
<table>
<thead>
<tr>
<th></th>
<th>Tracknumber</th>
<th>Artist</th>
<th>Song</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td><strong>Carpenters</strong> —</td>
<td>Please Mr Postman</td>
<td>The Carpenters - Yesterday Once More</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>The Carpenters</strong></td>
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<tr>
<td>2</td>
<td>2</td>
<td><strong>Rod Stewart</strong> —</td>
<td>The Motown Song</td>
<td>Rod Stewart - Vagabond Heart</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Rod Stewart</strong></td>
<td></td>
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<tr>
<td>3</td>
<td>3</td>
<td><strong>Gary Go</strong> —</td>
<td>Open Arms</td>
<td>(CD Single)</td>
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<tr>
<td></td>
<td></td>
<td><strong>Gary Go</strong></td>
<td></td>
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<tr>
<td>4</td>
<td>4</td>
<td><strong>The Bangles</strong> —</td>
<td>Manic Monday</td>
<td>Fantastic 80's - 3 (Various Artists)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>The Bangles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td><strong>Steve Miller Band</strong></td>
<td>The Joker</td>
<td>Steve Miller Band Greatest Hits 1974-</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Steve Miller Band</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td><strong>The Foundations</strong></td>
<td>Baby Now That I've Found You</td>
<td>Fifty Number Ones Of The 60's (Various Artists)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>The Foundations</strong></td>
<td></td>
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<tr>
<td>7</td>
<td>7</td>
<td><strong>The Corrs</strong> —</td>
<td>So Young (K-Klass Remix)</td>
<td>Talk On Corners (Special Edition)</td>
</tr>
<tr>
<td></td>
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<td><strong>The Corrs</strong></td>
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<tr>
<td>8</td>
<td>8</td>
<td><strong>Al Green</strong> —</td>
<td>Just For Me</td>
<td>Lay It Down</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Al Green</strong></td>
<td></td>
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<tr>
<td>9</td>
<td>9</td>
<td><strong>Sam Cooke</strong> —</td>
<td>Having A Party</td>
<td>Sam Cooke - The Man &amp; His Music</td>
</tr>
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<td></td>
<td></td>
<td><strong>Sam Cooke</strong></td>
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<td>10</td>
<td>10</td>
<td><strong>Brendy Crawford</strong></td>
<td>You Might Need Somebody</td>
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<td></td>
<td></td>
<td><strong>Brendy Crawford</strong></td>
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a link to the artist profile and an image if it is available, as well details about the song.

This has gone live on Radio 2, other networks will follow over the next few months.
Using a rich source like MusicBrainz we are able to add value in interesting ways. We publish a news feed for each artist, so here you see news stories about Madonna. And it’s done automatically by exploiting the link information in MusicBrainz.
Madonna 'to set solo tour record'

Madonna's current Sticky and Sweet tour is set to become the biggest-selling tour by a solo artist.

The 50-year-old will have raked in an estimated $282m (£185.7m) when the tour finishes in Sao Paulo, Brazil, later this month.

Tour producer Live Nation said the star's 28-date US leg sold 550,000 tickets and grossed $91.5m (£60.2m).

Madonna had held the previous record with her Confessions tour in 2006, having taken $193.7m (£127.5m).

Including her European run, the singer has already made an estimated $207.5m (£135.6m) in ticket sales.

Madonna finished the North American leg of her Sticky and Sweet tour last week in front of 50,000 people at Dolphin Stadium in Miami, before heading south to Mexico City.

The tour, supporting her album Hard Candy, will conclude with three nights from 16-21 December in Sao Paulo.
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LIKE A LINK TO THE ARTISTS’ HOME PAGE

http://www.madonna.com/
In MusicBrainz, we know Madonna has that home page – so we can reliably associate this news story with the Madonna profile. This really simple approach is pretty accurate as it is based on the link information added by our editorial staff.

We’re also doing this for all of the BBC Blogs too (DJs, shows, Chart Show). Before, editors were tagging individual stories to artists news journalists linking to music pages – not joined up, pages gets stale now they simply add links to MusicBrainz, and journalists are encouraged to link to artists – improving the web.

We’re also encouraging them to link directly to our artist profile pages, which will improve our ranking in the search engine rankings. Also links to artist resources can be messy (index.php, bad myspace, bad homepage), so linking to the artist profile will be more stable (links are maintained by the community in MusicBrainz).
Our website is the API

Persistence
Linked open data
RESTful
One web

http://www.bbc.co.uk/music/developers

We provide an API for our site

Because of the way we design our sites, making sure we get our resource design right, our website is our RESTful API – we embrace the “One Web” idea.

Find out more here: bbc.co.uk/music/developers

Most resources are available in different representations: HTML, XML, JSON and RDF – so we’re contributing to the Linked Data cloud.

We are using a very simple, pragmatic approach to publish our RDF: it’s implemented using a template in the view of our MVC framework. We support Content Negotiation for the RDF.
Here’s some of our RDF, please ask if you want me to go into more detail!
Acknowledgments

Tom Scott
Michael Smethurst
Yves Raimond
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