



BALTIMORE
— DRUPALCON 2017 —

Beyond the Solr Eclipse

Building blazing fast Drupal 8 search with
Solr and no code

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WORLD INDIA MAP



Modules/Software Used

- . Drupal 8
- . https://www.drupal.org/project/search_api
- . https://www.drupal.org/project/search_api_solr
- . <https://www.drupal.org/project/facets>
- . Solarium (Required by Search API)
 - `composer require solarium/solarium`

What is Solr?

- an open source search platform
- built upon a Java library called Lucene

Who uses Solr?



Other Notable Users

AT&T
Ticketmaster
Chegg
eBay
Magento
Comcast

Instagram
Netflix
Disney
Internet Archive
IBM Websphere Commerce
MTV Networks

Buy.com
The Echo Nest
Adobe
SAP Hybris
Bloomberg
Travelocity

From <http://lucene.apache.org/solr/>

Problems with Core Search

Why do we need it in place of database search?

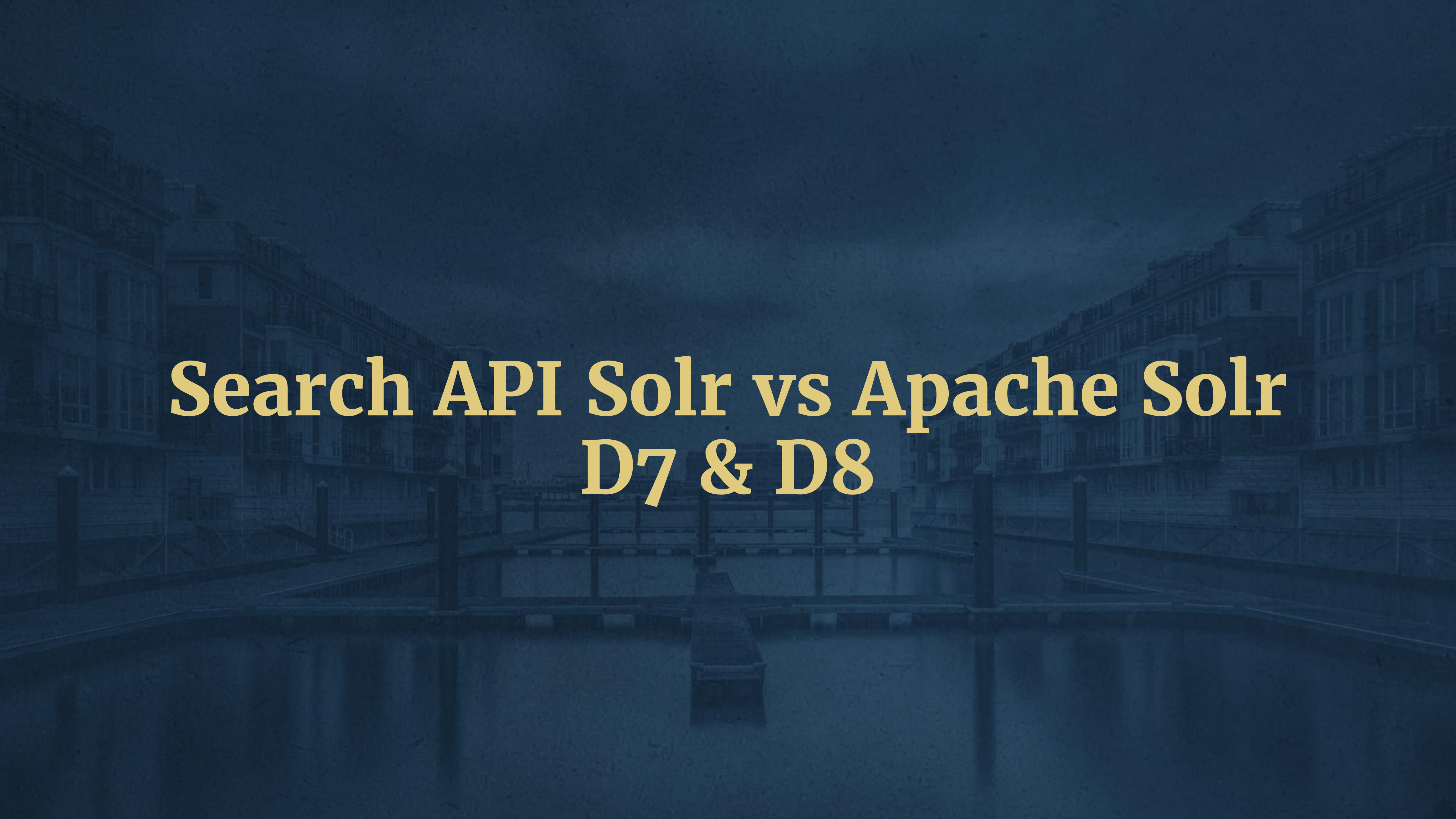
- Slow especially with a large number of nodes
- Features like Stemming, Highlighting, Spell check missing or tricky to accomplish
- Queries on Phrases don't work great, compared to solr

Apachesolr

“fast access to big data on a budget”

Options available for hosting Solr

- Acquia Search - Bundled with Acquia Cloud
- www.hostedapachesolr.com
- www.measuredsearch.com
- Fairly simple to spin up your own solr instance on AWS alongside your webserver



Search API Solr vs Apache Solr D7 & D8

What is a server?
What is an index?

Search API ☆

[Home](#) » [Administration](#) » [Configuration](#) » [Search and metadata](#)

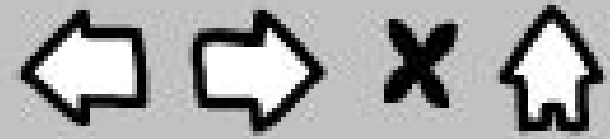
Below is a list of indexes grouped by the server they are associated with. A server is the definition of the actual indexing, querying and storage engine (for example, an Apache Solr server, the database, ...). An index defines the indexed content (for example, all content and all comments on "Article" posts).

+ Add server

+ Add index

TYPE	NAME	STATUS	OPERATIONS
------	------	--------	------------

There are no servers or indexes defined. For a quick start, we suggest you install the Database Search Defaults module.



http://



search

Search

Redmi 4a

Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone.

Refurbished Galaxy Note 7 with Android 7.0 Nougat gets Wi-Fi certification

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Refurbished Galaxy Note 7 with Android 7.0

Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone.



Brand *

Apple (16)



Operating System *

iOS (1)



Camera Resolution *

8.00

MP

Processor Speed *

1.00

GHz

Internal Memory *

2 GB (31)



Built-in Storage

☐ 2 GB

☐ 4 GB

☐ 8 GB

☒ 16 GB

☐ 32 GB

☒ 64 GB

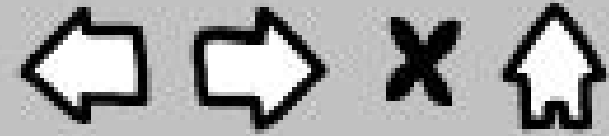
☒ 128 GB

☐ 256 GB

Battery Capacity *

3000

MAh



http://



Brand

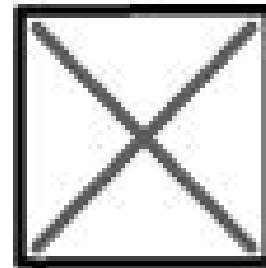
- ☐ Apple
- ☒ Oneplus
- ☒ Asus
- ☐ Samsung
- ☒ Oppo
- ☐ Xiaomi

Features

- ☐ Dual Camera
- ☒ Dual Sim
- ☒ Radio
- ☐ USB Tethering
- ☒ Quick Charging

Price in \$

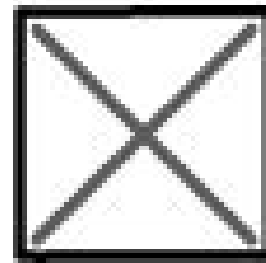
- ☒ 200-300
- ☐ 300-400
- ☐ 400-500



Oneplus 3T

A Day's Power in Half an Hour Dash Charge is faster, safer, cooler - and simply better - than any other fast charging technology available today. Unlike other technologies, charging speeds remain consistent

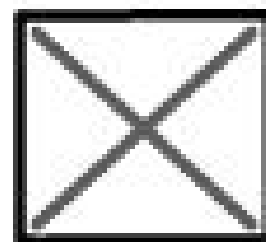
\$500



iPhone 6s Plus

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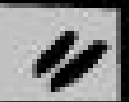
\$450



Redmi 4a

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\$135



Avg. Customer Review

★★★★★ & Up (41,861)

★★★★☆ & Up (70,332)

★★★☆☆ & Up (87,931)

★★☆☆☆ & Up (1,14,359)

New Arrivals

Last 30 days (1,31,22,828)

Last 90 days (2,24,46,019)

Item Condition

New (2,30,96,242)

Refurbished (85)

Used (787)

Price

Under ₹1,000 (2,19,77,291)

₹1,000 - ₹5,000 (10,08,137)

₹5,000 - ₹10,000 (1,01,067)

₹10,000 - ₹20,000 (5,860)

Over ₹20,000 (4,382)

₹ to ₹

Discount

10% Off or more (1,83,02,520)

25% Off or more (1,80,79,838)

35% Off or more (1,75,04,151)

50% Off or more (1,55,26,477)

Seller

☐ ASK CREATIONS (10,38,035)

☐ Print Hues (10,19,951)

☐ Print Vision (9,43,995)

☐ NEO WORLD (9,13,867)

MOBILE ACCESSORIES



MOBILE CASES



SCREEN PROTECTORS

PO

FEATURED BRANDS

SAMSUNG



Samsung Galaxy S7



APPLE



Apple iPhone 6



Micromax C



Adding a Server....



Hosted Apache Solr

[My Subscriptions](#)[About](#)[Log out](#)[My Subscriptions](#) »

Hosted Solr Setup Instructions

Thanks for purchasing a hosted Solr search plan! Setting up your site for Solr search is pretty easy. All you need to do is install the [Search API](#) and [Search API Solr](#) modules on your Drupal website, and on it's configuration page (at `example.com/admin/config/search/search_api/add_server`), add a new server with a Backend of "Solr", and enter the following values for a new Solr service server (see illustration below):

- **Solr host:** `nyc9.hostedapachesolr.com`
- **Solr port:** `80`
- **Solr path:** `/solr`
- **Solr core:** `YCoM09dFg9_d8solryba5yv8hqi_devcloud_acqui`

<https://hostedapachesolr.com>

Server name *

Machine

name: hosted_solr_server_1 [\[Edit\]](#)

Enter the displayed name for the server.

☒ Enabled

Only enabled servers can index items or execute searches.

Description



Enter a description for the server.

Backend *

☒ Solr

Choose a backend to use for this server.

▼ CONFIGURE *SOLR* BACKEND

Index items using an Apache Solr search server.

Solr Connector *

☐ Basic Auth

☒ Standard

Choose a connector to use for this Solr server.

▼ CONFIGURE *STANDARD* SOLR CONNECTOR

A standard connector usable for local installations of the standard Solr distribution.

HTTP protocol

The HTTP protocol to use for sending queries.

Solr host *

The host name or IP of your Solr server, e.g. localhost or www.example.com.

Solr port *

The Jetty example server is at port 8983, while Tomcat uses 8080 by default.

Solr path

The path that identifies the Solr instance to use on the server.

Solr core

The name that identifies the Solr core to use on the server.

Query timeout *

The timeout in seconds for search queries sent to the Solr server.

Index timeout *

The timeout in seconds for indexing requests to the Solr server.

Optimize timeout *

The timeout in seconds for background index optimization queries on a Solr server.

▼ CONFIGURE *SOLR* BACKEND

Index items using an Apache Solr search server.

Solr Connector *

☐ Basic Auth

☒ Standard

Choose a connector to use for this Solr server.

ADVANCED

☐ Retrieve result data from Solr

When checked, result data will be retrieved directly from the Solr server. This might make item loads unnecessary. Only indexed fields can be retrieved. Note also that the returned field data might not always be correct, due to preprocessing and caching issues.

☐ Skip schema verification

Skip the automatic check for schema-compatibillity. Use this override if you are seeing an error-message about an incompatible schema.xml configuration file, and you are sure the configuration is compatible.

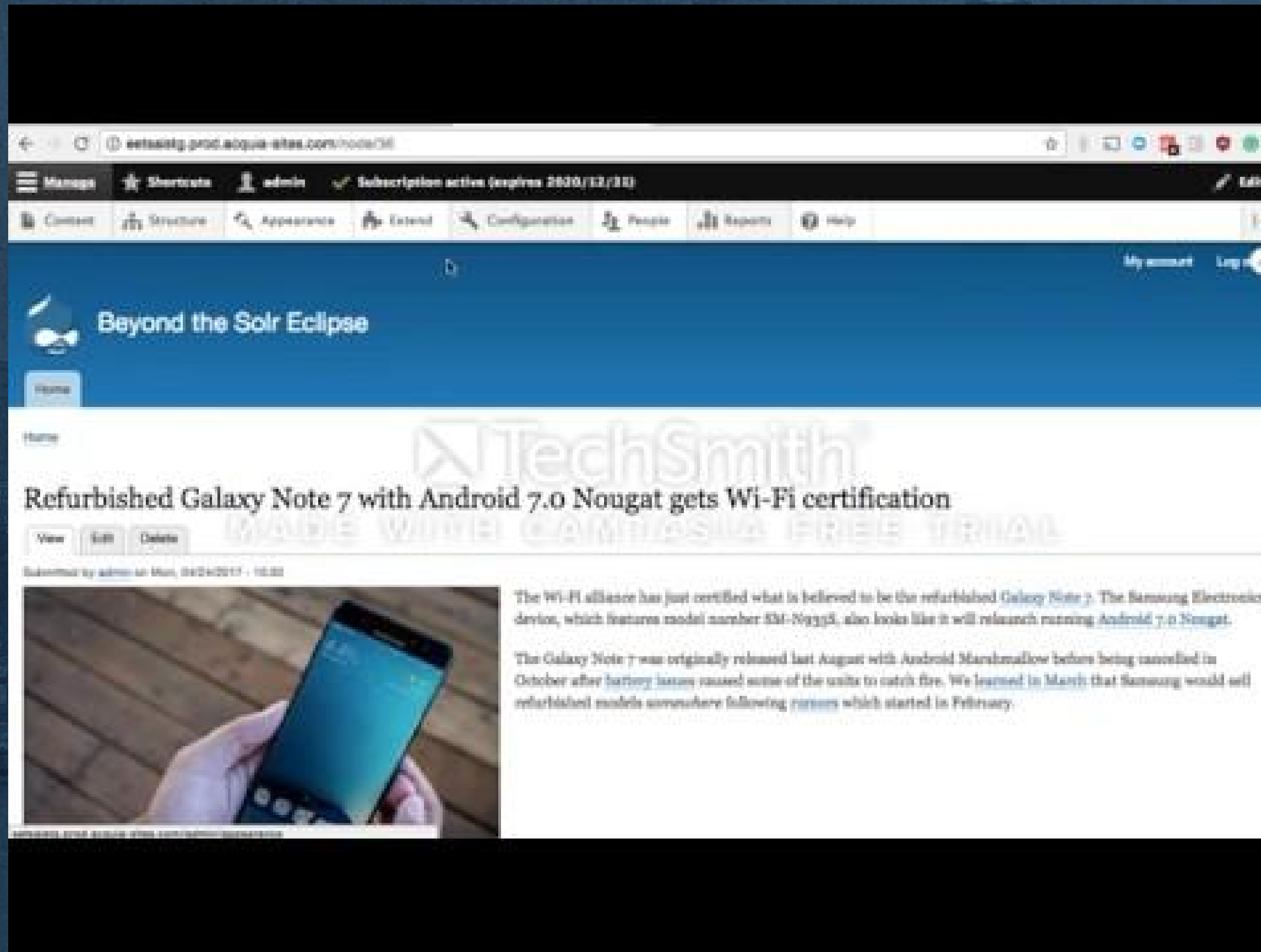
MULTI-SITE COMPATIBILITY

☒ Retrieve results for this site only

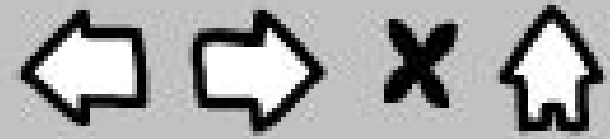
Automatically filter all searches to only retrieve results from this Drupal site. By default a Solr server (and core) is able to index the data of multiple sites. Disable if you want to retrieve results from multiple sites at once.

Save

Building the Index..



The screenshot displays a web application interface. At the top, a browser address bar shows the URL `teststg.prod.acquia-sites.com/node/151`. Below this is a navigation bar with links: **Manage**, **Shortcuts**, **admin**, and **Subscription active (expires 2020/12/24)**. A secondary navigation bar contains links: **Content**, **Structure**, **Appearance**, **Extend**, **Configuration**, **People**, **Reports**, and **Help**. The main content area features a blue header with the text **Beyond the Solar Eclipse** and a **Home** button. Below the header, the article title **Refurbished Galaxy Note 7 with Android 7.0 Nougat gets Wi-Fi certification** is displayed, along with **View**, **Edit**, and **Delete** buttons. The article is attributed to **Submitted by admin on Mon, 06/04/2017 - 10:22**. The article content includes an image of a hand holding a smartphone and two paragraphs of text. The first paragraph states: "The Wi-Fi alliance has just certified what is believed to be the refurbished Galaxy Note 7. The Samsung Electronics device, which features model number SM-N935, also looks like it will relaunch running Android 7.0 Nougat." The second paragraph states: "The Galaxy Note 7 was originally released last August with Android Marshmallow before being cancelled in October after battery issues caused some of the units to catch fire. We learned in March that Samsung would sell refurbished models somewhere following returns which started in February."



http://



search

Search

Redmi 4a

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Refurbished Galaxy Note 7 with Android 7.0 Nougat gets Wi-Fi certification

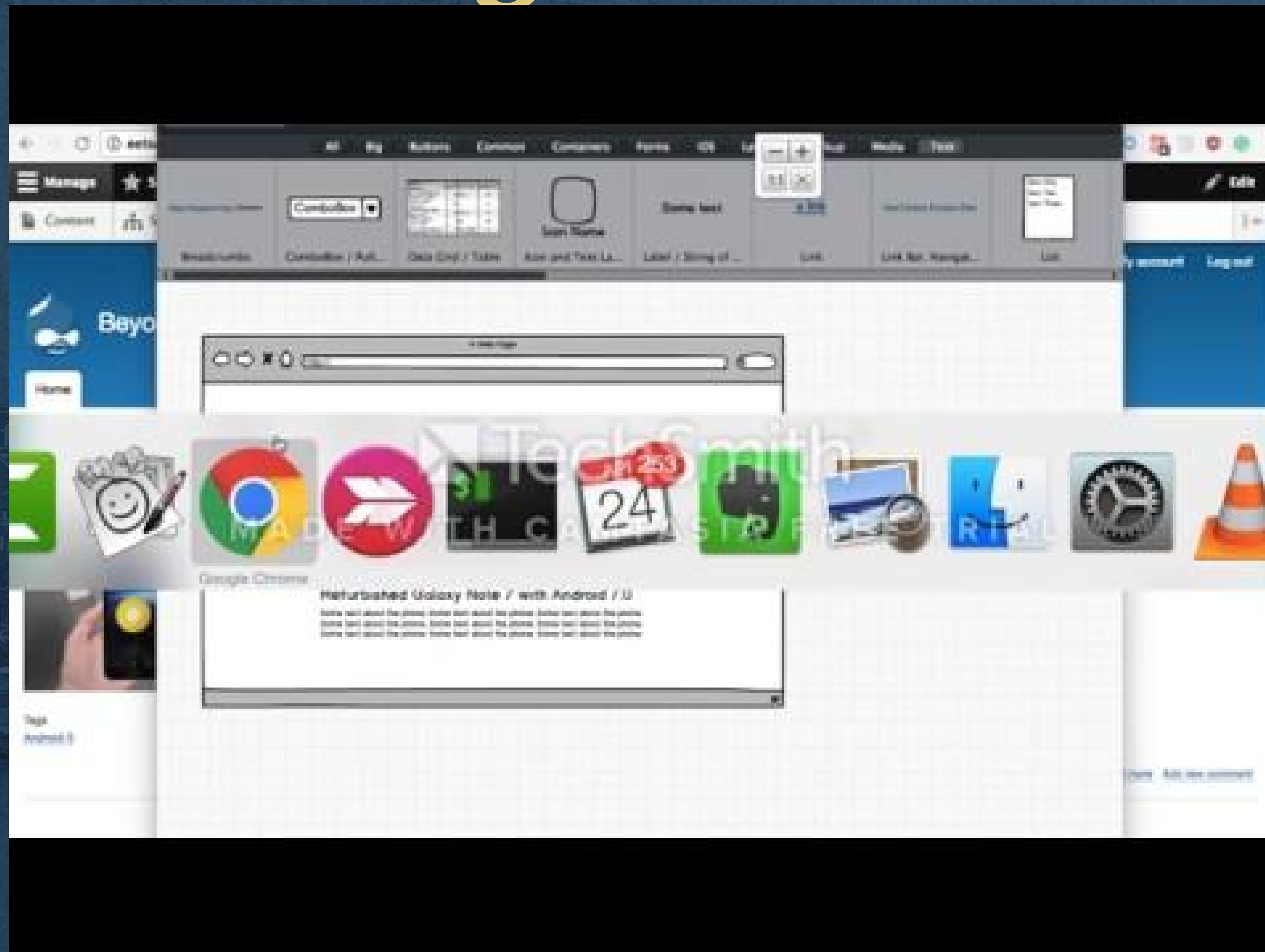
Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone.

Refurbished Galaxy Note 7 with Android 7.0

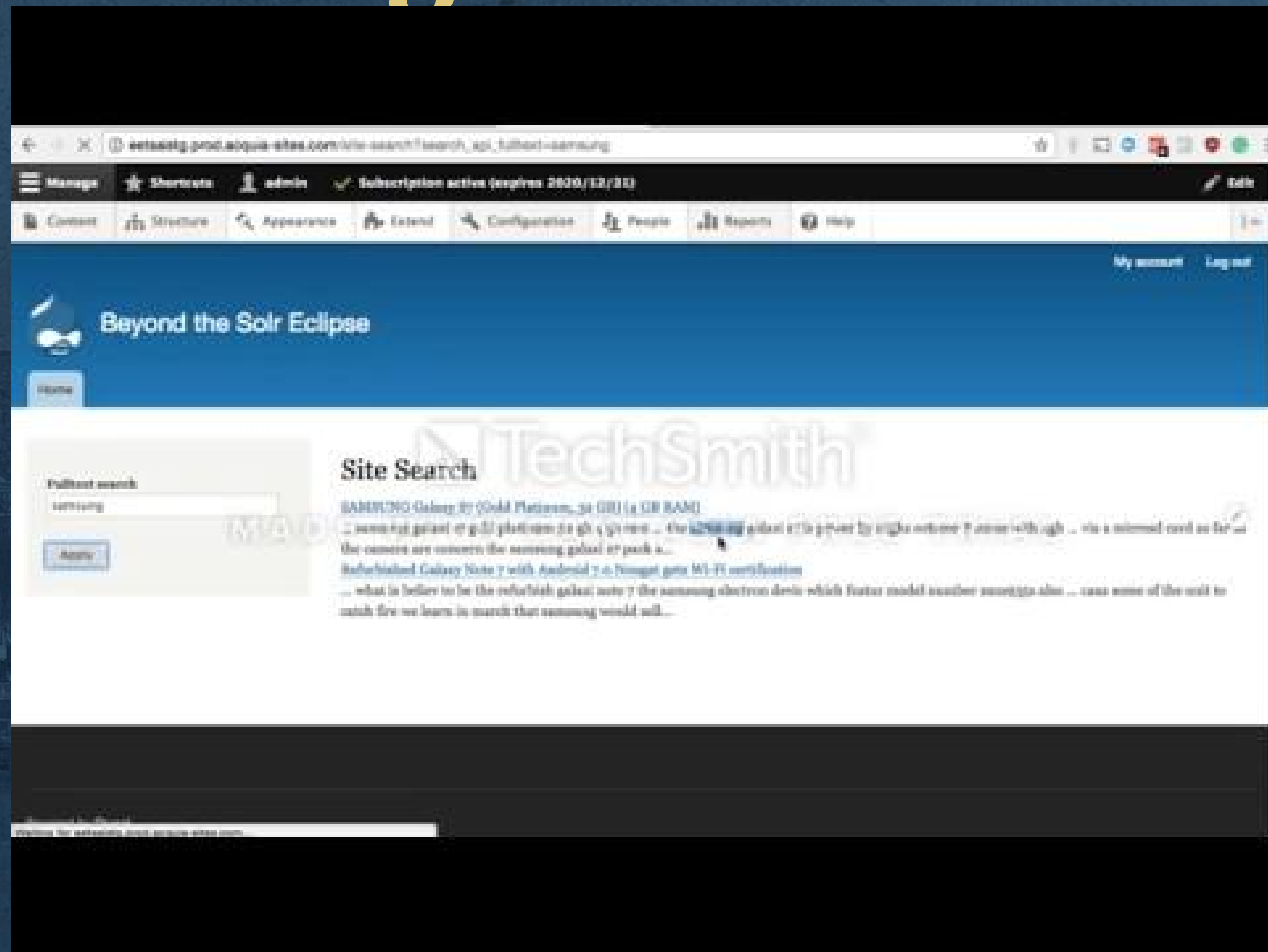
Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone. Some text about the phone.



Building the View..



Building the Search Box..



Building “Phone Finder”

[illegible]

- 1) Check index - See all fields
- 2) Create View - display results only
- 3) Enable Facets module
- 4) Create “Brand” Facet
- 5) Place the block
- 6) Create “Price” Exposed filter
- 7) Place the block
- 8) Create “Features” Facet
- 9) Place the block



Module Compatibility

- drupal:8.3.1
- search_api:8.x-1.0-rc2 (Latest : 8.x-1.0 released on April 26))
- search_api_solr:8.x-1.0-beta2 (Latest : beta2)
- facets:1.0.0-alpha9 (Latest)

More modules in the ecosystem..

https://www.drupal.org/project/search_api_attachments - In Beta

▼ DATA ALTERATIONS

Select the alterations that will be executed on indexed items, and their order.

Enabled data alterations

☐ Bundle filter

Exclude items from indexing based on their bundle (content type, vocabulary, ...).

☐ Exclude unpublished nodes

Exclude unpublished nodes from the index.

☒ File attachments

Extract the content out of attached files and index it.

Work in Progress..

- Autocomplete - Needs work
- Multilingual - Needs work
- Spell Check / “Did you mean..” - In Sandbox - Needs work

Our small work on D7 Apachesolr

[Drupal Core](#)[Distributions](#)[Modules](#)[Themes](#)

ApacheSolr Search Language Fallback

[View](#)[Edit](#)[Version control](#)[View history](#)[Maintainers](#)[Automated testing](#)

Posted by [saitanay](#) on 13 May 2015

Simple Module. No configuration required. Reindex content after enabling the module.

On a multilingual site, Apachesolr by default shows search results from all languages. This module when enabled, displays search results from the current language of the site whenever available and the default language results as a fallback if the search term matches the content from a default language when the translation is not available.

ie:

If a node is not available in the current language and if the search term matches the content of the node present in the default language of the site, then the default language node is shown in the search results, as a fallback.



Also Checkout..

www.d8cards.com

Questions?

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jayakrishnan.jayabal@acquia.com

@ Acquia Booth - Between 2PM-3PM today

Site Building Videos available at
<http://bit.ly/beyondsolr>

