2022-01: We are adding support for https://dev.tiki.org/Manticore-Search

- Unfortunately, Elasticsearch is no longer Open Source: https://www.elastic.co/blog/licensing-change
- https://www.elastic.co/blog/license-change-clarification

> Meanwhile, organizations that refuse to run proprietary software in production will no longer be able to run Elasticsearch in good conscious (at least, not the SSPL versions). I work for Wikimedia and we use Elasticsearch to power article search. We're going to have to drop it.
>
> — Ryan Kemper (@RyanKemper10) January 15, 2021

https://opensource.org/node/1099

# Context

Context: https://doc.tiki.org/Unified-Index-Comparison

Also, So, i think for Virtualmin 7 (...) we'll switch the default database in Virtualmin installations to mariadb for all distros.

# Goals

1. For the default Tiki Unified Index engine to be suitable for most projects, as has been for many years with MySQL/MariaDB using the MyISAM storage engine.
    - Ideally, can be used for https://doc.tiki.org/Federated-Search for *.tiki.org
    - Ideally, performance is good enough that it can be used for search on avan.tech, and proposals.evoludata.com
    - Ideally, we can add facets
    - Ideally, we address MySQL-limitations-for-Unified-Index
2. For advanced needs, support an Open Source solution (candidates are listed below) to replace our use of Elasticsearch of the last few years.
3. Switching between options should produce same results in lists (Although full text search results will vary because relevance algorithm will be different)
4. Revisit our discussion about the abstraction layer
5. Make it clear how functionality may change with non-default engine
6. Integrate with Rubix ML as was done for More Like This
7. Maintain Elasticsearch support on current versions (Until end of life of Tiki 21.x LTS) but not in Tiki 24.x unless it's very little work.
8. https://wikisuite.org/Component-criteria
9. Segmentation: Each Virtualmin Virtual Server should have its own data.
    - Open Distro offers role-based access control/multi-tenancy

Information:

- So, i think for Virtualmin 7 (...) we'll switch the default database in Virtualmin installations to mariadb for all distros.

# Options

## MariaDB Full-Text Index

- https://mariadb.com/kb/en/full-text-index-overview/
  - How can it be improved?
  - https://mariadb.com/kb/en/choosing-the-right-storage-engine/#search-optimized

## Open Semantic Search

- https://github.com/opensemanticsearch
- https://opensemanticsearch.org/ (down as of 2021-11-28)

## OpenSearch (was Open Distro for Elasticsearch)

https://aws.amazon.com/blogs/opensource/introducing-opensearch/

- https://opendistro.github.io/for-elasticsearch/
- https://github.com/opendistro-for-elasticsearch
- https://aws.amazon.com/blogs/opensource/stepping-up-for-a-truly-open-source-elasticsearch/
- Many security features, including role-based access control/multi-tenancy
  - https://blog.brianbeach.com/posts/2021-04-26-mult-tenant-elasticsearch/

## PostgreSQL Full Text Search

- https://www.postgresql.org/docs/current/textsearch.html
- https://blog.js.wiki/news/2021/wiki-js-3-going-full-postgresql

## Apache Solr

- http://lucene.apache.org/solr/
- https://github.com/virtualmin/virtualmin-gpl/issues/138

## Mroonga / Groonga

- https://mariadb.com/kb/en/library/about-mroonga/
- http://groonga.org/

## Xapian

- https://xapian.org/

## TNTSearch

- https://github.com/teamtnt/tntsearch

## Manticore

- https://manticoresearch.com/2021/03/15/manticore-search-3-years-after-forking-from-sphinx/ **importany to read**
- https://github.com/manticoresoftware/manticoresearch
- https://manticoresearch.com/about/
- https://github.com/manticoresoftware/manticoresearch-php
- https://packagist.org/packages/manticoresoftware/manticoresearch-php
- https://hub.docker.com/u/manticoresearch
- https://manticoresearch.com/2018/05/09/from-sphinxse-to-federated/
- https://dev.tiki.org/Manticore-Search

## Zinc

- https://github.com/zinclabs/zinc

## Sphinx

- https://sphinxsearch.com/
- https://mariadb.com/kb/en/about-sphinxse/

## Typesense

- https://typesense.org/docs/0.18.0/guide/
- https://github.com/typesense/typesense

## Pucene

- https://github.com/pucene/pucene

## CLucene

- http://clucene.sourceforge.net/

## LucenePlusPlus

https://github.com/luceneplusplus/LucenePlusPlus

## Meili

- https://blog.meilisearch.com/meili-fundraise/
- https://www.openhub.net/p/MeiliSearch

## Arango

- https://github.com/arangodb/arangodb

## Crate

- https://github.com/crate

## Weaviate

- https://github.com/semi-technologies/weaviate

## Virtuoso

- https://db-engines.com/en/system/Virtuoso

## Lunr.js

- https://github.com/olivernn/lunr.js

# Vespa

https://github.com/vespa-engine/vespa

# Jina

https://github.com/jina-ai/

# Sonic

https://github.com/valeriansaliou/sonic

# QWAZR

https://github.com/qwazr which replaces https://github.com/jaeksoft/opensearchserver
https://sourceforge.net/p/opensearchserve/discussion/947147/thread/a2ef9cfb/?limit=25#3ba5

# YaCy

Search Engine Software for Web and Intranet Search
https://github.com/yacy

# Kibana-related

- https://grafana.com/blog/2019/09/03/the-mostly-complete-history-of-grafana-ux/

# Desktop-search

- https://en.wikipedia.org/wiki/Tracker_(search_software)

# Related links

- https://db-engines.com/en/ranking/search+engine
- https://logz.io/blog/open-source-elasticsearch-doubling-down/