Manticore Search

Manticore Search is an Open Source database that was created in 2017 as a continuation of Sphinx Search engine (Started in 2001). It is integrated with Tiki Wiki CMS Groupware and one of the components of WikiSuite. This is especially interesting for the Tiki Trackers database web app builder.

Status:

- Experimental in Tiki 25
- Will be stable in Tiki 26

You can check out benchmarks at: https://db-benchmarks.com/

```
mysql> create table movies(title text, description text, year int) morphology='lemmatize_en';
Query OK, 0 rows affected (0.00 sec)

mysql> insert into movies values(0,'Hate', '24 hours in the lives of three young men in the French suburbs the day after a violent riot.', 1995),(0, 'The Godfather', 'The aging patriarch of an organized crime dynasty in postwar New York City transfers control of his clandestine empire to his reluctant youngest son.', 1972);
Query OK, 2 rows affected (0.00 sec)

mysql> select title, highlight(), year from movies where match(\texttt{control transfer})

<table>
<thead>
<tr>
<th>title: The Godfather</th>
</tr>
</thead>
<tbody>
<tr>
<td>highlight(): The aging patriarch of an organized crime dynasty in postwar New York City &lt;b&gt;transfers control&lt;/b&gt; of his clandestine empire to his reluctant youngest son.</td>
</tr>
<tr>
<td>year: 1972</td>
</tr>
<tr>
<td>1 row in set (0.00 sec)</td>
</tr>
</tbody>
</table>

mysql> select title, highlight(), year from movies where match(\texttt{young man})

<table>
<thead>
<tr>
<th>title: Hate</th>
</tr>
</thead>
<tbody>
<tr>
<td>highlight(): 24 hours in the lives of three &lt;b&gt;young men&lt;/b&gt; in the French suburbs the day after a violent riot.</td>
</tr>
<tr>
<td>year: 1995</td>
</tr>
<tr>
<td>1 row in set (0.01 sec)</td>
</tr>
</tbody>
</table>
```

How to install

It is normally this:

```
sudo apt-get install wikisuite-manticore
```

But as of 2022-10-03, you should temporarily use the nightly builds from
WikiSuite: The most comprehensive and integrated Open Source enterprise solution.


**Start service at server reboot**

```bash
sudo systemctl enable manticore
```

In some newer operating systems it can fail with error "Failed to enable unit: Unit ... is transient or generated.". In this case you can remove the generator and try again. It's unlikely you need the generator ever again after Manticore is installed. In Debian-based operating systems run:

```bash
sudo rm /lib/systemd/system-generators/manticore-generator
sudo systemctl daemon-reload
```

For more detail, please see:
https://manual.manticoresearch.com/Starting_the_server/Linux#Starting-and-stopping-using-systemd

Then reboot to test

```bash
sudo reboot
```

**How to verify version**

This also confirms it's running

```bash
root~# searchd -v
Manticore 5.0.2 348514c86@220530 dev (columnar 1.15.4 2fef34e@220522) (secondary 1.15.4 2fef34e@220522)
Copyright (c) 2001-2016, Andrew Aksyonoff
Copyright (c) 2008-2016, Sphinx Technologies Inc (http://sphinxsearch.com)
Copyright (c) 2017-2022, Manticore Software LTD (https://manticoresearch.com)
```

**Indicate to Tiki to use Manticore Search**

1. Pick Manticore as **Unified search engine** at tiki-admin.php?page=search
2. Rebuild index
   - Small sites, via GUI
   - Medium and large sites, via CLI `php console.php index:rebuild --log`
3. Enjoy!
WikiSuite: The most comprehensive and integrated Open Source enterprise solution.

Configuration file

On Debian 10 and 11, it is located at /etc/manticoresearch/manticore.conf

Advanced morphology

Lemmatization, stemming, word forms, etc.:

- https://manual.manticoresearch.com/Creating_an_index/NLP_and_tokenization/Morphology
- https://manual.manticoresearch.com/Creating_an_index/NLP_and_tokenization/Wordforms#Word-forms

Related links

- https://manticoresearch.com/about/
- https://dev.tiki.org/Manticore-Search
- https://gitlab.com/tikiwiki/tiki/-/merge_requests/1805
- https://manticoresearch.com/blog/manticore-alternative-to-elasticsearch/
- https://roadmap.manticoresearch.com
- https://doc.tiki.org/Unified-Index-Comparison