

Searchex

full text search in pure Elixir

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<http://searchex.org>



[/elixir-search](#)



[/searchex](#)

Need for Searchex

Service	Phoenix	Rails
Web Server	Elixir	Nginx
Load Balancer	Elixir	HAProxy
KV Server	Elixir	Redis
Cache Daemon	Elixir	Memcached
Job Queue	Elixir	Sidekiq
Process Monitor	Elixir	Monit
Performance Graphs	Elixir	RRD/Graphite
Search Engine	Elixir Searchex	Elastic Search

Opportunity for Searchex

Concurrency and Streaming

- OTP
- GenServer
- GenStage
- Task.async_stream
- CRDTs
- ...



- Kafka
- Confluent
- Spark
- Storm
- Flink
- ...

Searchex Goals

Simplicity

- **Easy to use CLI**
- **Sharable Repos**

Streaming

- **Concurrent Processing**
- **Off-the-shelf Adapters**

Simple Installation

```
> mix escript.install hex searchex
```

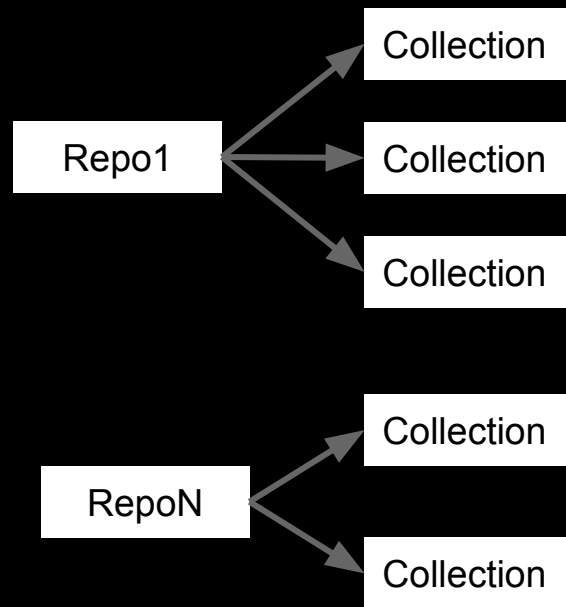
Repos and Collections

Repo

- Managed by Git
- Fetchable

Collection

- YAML config file
- Doctypes, Metadata, etc.



Collection Settings

YAML config file

One per collection

Under ~/.searchex

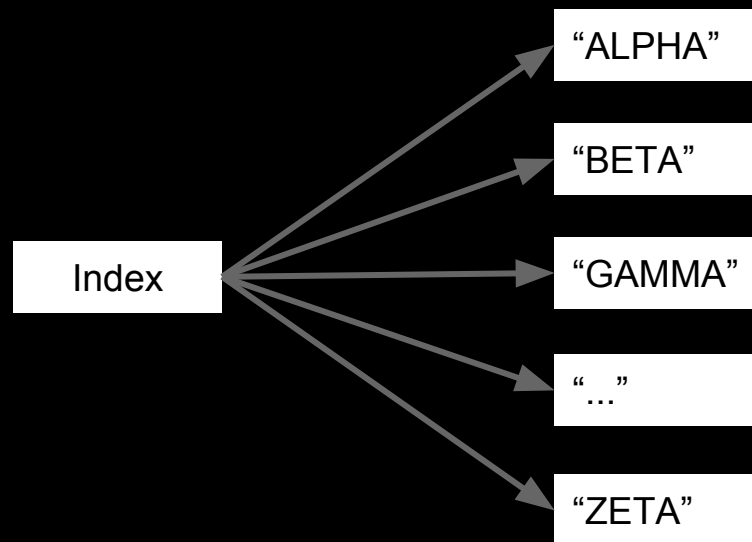
```
---
:collection:      tiny
:cache_dir:       "cache"
:adapter:
  :type:           "Filesys"
  :file_roots:     ["docs/tiny"]
  :file_types:     ["txt", "md", "wlog"]
  :file_maxnum:    50
  :file_maxkb:     50
:display_fields:  "f:filename1 doclength i:from i:date body"
:input_fields:
  :from:
    :regex:        "from: (?<from>.*)"
    :default:      "NA"
  :date:
    :regex:        "date: (?<date>.*)"
    :default:      "NA"
```

OTP and Search

Every keyword is a
GenServer

Fast Access

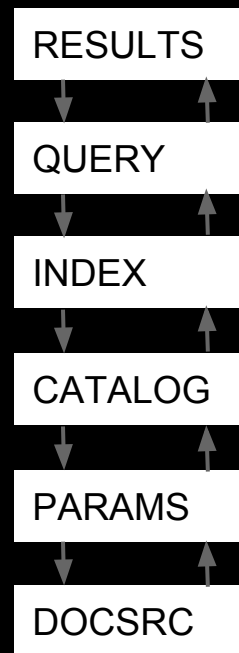
Easy to Change



Search Middleware

Similar to Plug

Composable



Source Adapters

Middleware
that
connects to
document
sources.

Streaming,
P2P

Filesystem,
Ecto,
Twitter,
Facebook,
Searchex, ...

Phoenix Integration

- Pre-configured Ecto integration
- Search-page generator
- Up and running in less than a minute

Thanks!

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