

Indexing your office documents with Elastic and FSCrawler

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Apache Tika - a content analysis toolkit

The Apache TikaTM toolkit detects and extracts metadata and text from over a thousand different file types (such as PPT, XLS, and PDF). All of these file types can be parsed through a single interface, making Tika useful for search engine indexing, content analysis, translation, and much more. You can find the latest release on the download page. Please see the Getting Started page for more information on how to start using Tika.

The Parser and Detector pages describe the main interfaces of Tika and how they work.

If you're interested in contributing to Tika, please see the <u>Contributing</u> page or send an email to the <u>Tika development list</u>.

Tika is a project of the Apache Software Foundation , and was formerly a subproject of Apache Lucene .

Latest News

29 March 2021: Apache Tika Release

Apache Tika 1.26 has been released! This release includes improved performance in the ForkParser, improved detection and parsing of XPS files and numerous bug fixes and dependency upgrades. Please see the CHANGES.txt of file for the full list of changes in the release and have a look at the download page for more information on how to obtain Apache Tika 1.26.

16 January 2021: Apache Tika 2.0.0-ALPHA Release

Apache Tika 2.0.0-ALPHA has been released! This ALPHA release includes a major refactoring of the modules to enable more fine-grained selection of resources, among many other refactorings. Note: There may still be breaking changes before the 2.0.0-BETA and 2.0.0 releases. Please see the CHANGES.txt of file for a list of major changes in the release. Please follow Migrating to Tika 2.x of for updates on migrating to Tika 2.x. See the download page for more information on how to obtain Apache Tika 2.0.0-ALPHA.

30 November 2020: Apache Tika Release

Apache Tika 1.25 has been released! This release includes detection of new file types (parquet, bplist, hprof and flat ODF), new parsers for XLZ, IDML and MIF and flat ODF files, and a critical fix to a license inconsistency in Adobe's xmpcore dependency. This release also includes numerous bug fixes and dependency upgrades. Please see the CHANGES.txt file for the full list of changes in the release and have a look at the download page for more information on how to obtain Apache Tika 1.25.

Apache Tika

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The Apache Software Foundation

About 🕏
License 🕏
Security 🕏



Please note that Apache Tika is able to detect a much wider range of formats than those listed below, this page only documents those formats from which Tika is able to extract metadata and/or textual content.

- <u>Supported Document Formats</u>
 - HyperText Markup Language
 XML and derived formats
 - A A VIL and derived forma
 - Microsoft Office document formats
 - OpenDocument Format
 - iWorks document formats
 - WordPerfect document formats
 - Portable Document Format
 - Electronic Publication Format
 - Rich Text Format
 - Compression and packaging formats
 - Text formats
 - Feed and Syndication formats
 - Help formats
 - Audio formats
 - Image formats
 - Video formats
 - Java class files and archives
 - Source code
 - Mail formats
 - Mail formats
 CAD formats
 - Eart format
 - Font formats
 - Scientific formats
 - Executable programs and libraries
 - Crypto formats
 - Database formats
 - Natural Language Processing
 - Image and Video object recognition



Parsing a stream

and getting content and metadata

```
static void extractTextAndMetadata(InputStream stream) throws Exception {
    BodyContentHandler handler = new BodyContentHandler();
    Metadata metadata = new Metadata();
    try (stream) {
        new DefaultParser().parse(stream, handler, metadata, new ParseContext());
        String extractedText = handler.toString();
        String title = metadata.get(TikaCoreProperties.TITLE);
        String keywords = metadata.get(TikaCoreProperties.KEYWORDS);
        String author = metadata.get(TikaCoreProperties.CREATOR);
```



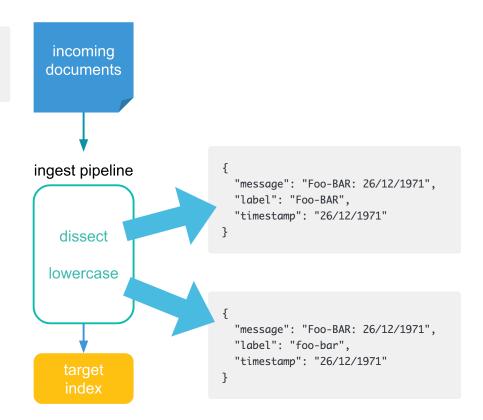


ingest-attachment plugin extracting from BASE64 or CBOR



An ingest pipeline

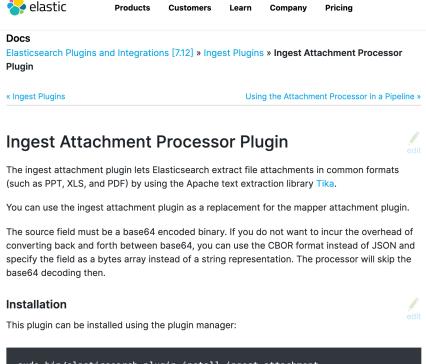
```
{
   "message": "Foo-BAR: 26/12/1971"
}
```





ingest-attachment processor plugin

using Tika behind the scene





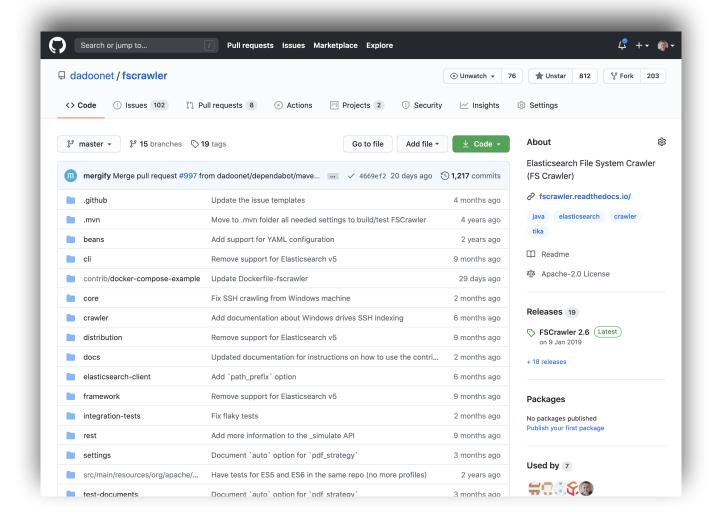


https://cloud.elastic.co



FSCrawler You know, for files...









Disclaimer

This project is a community project.

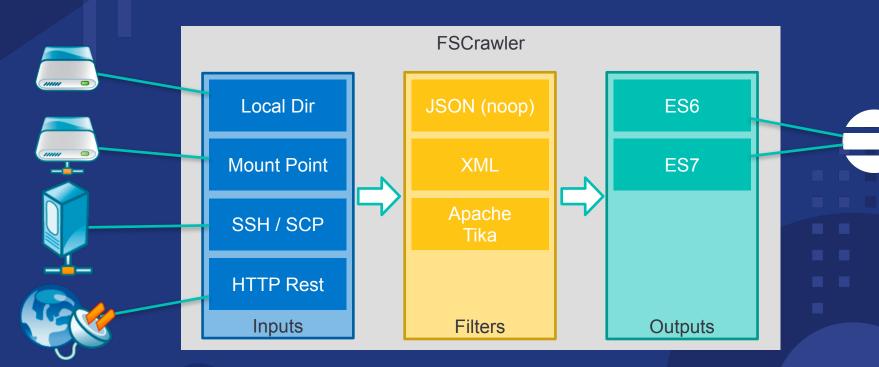
It is not officially supported by Elastic.

Support is only provided by FSCrawler community on discuss and stackoverflow.

http://discuss.elastic.co/ https://stackoverflow.com/questions/tagged/fscrawler



Architecture





Key Features

- Much more formats than ingest attachment plugin
- OCR (Tesseract)
- Much more metadata than ingest attachment plugin
 (See https://fscrawler.readthedocs.io/en/latest/admin/fs/elasticsearch.html#generated-fields)
- Language detection



Documentation

- https://fscrawler.readthedocs.io/
- https://fscrawler.readthedocs.io/en/latest/user/tutorial.html
- https://fscrawler.readthedocs.io/en/latest/user/formats.html
- https://fscrawler.readthedocs.io/en/latest/admin/fs/index.html





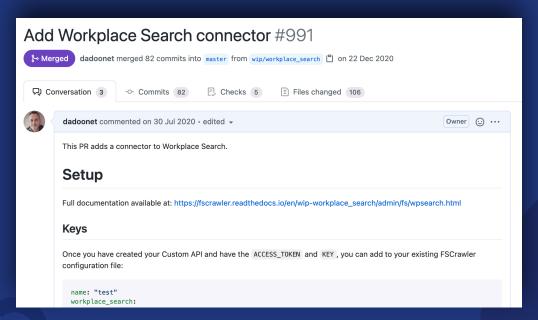
https://cloud.elastic.co



FSCrawler even better with a UI

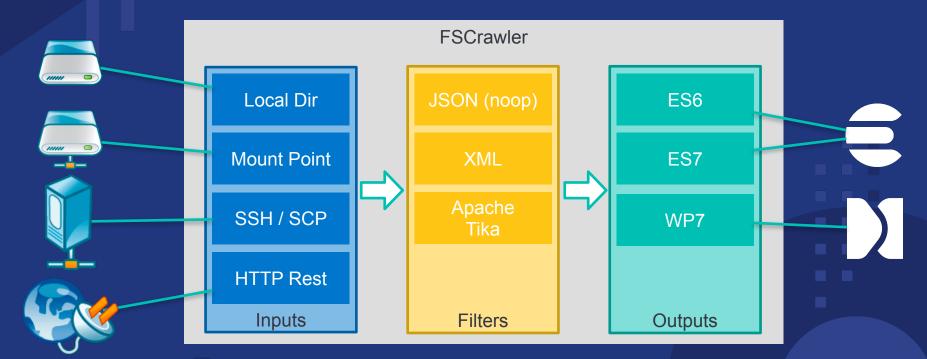


Workplace Search integration

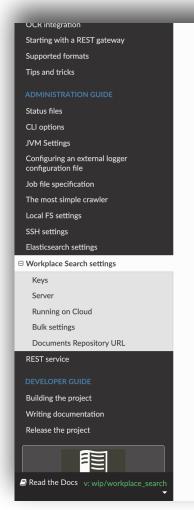




Architecture







Workplace Search settings

New in version 2.7.

FSCrawler can now send documents to Workplace Search.

• Note

Although this won't be needed in the future, it is still mandatory to have access to the elasticsearch instance running behind Workplace Search. In this section of the documentation, we will only cover the specifics for workplace search. Please refer to Elasticsearch settings chapter.

Hint

To easily start locally with Workplace Search, follow the steps:

• Check-out the source code on GitHub:

```
git clone git@github.com:dadoonet/fscrawler.git cd fscrawler cd contrib/docker-compose-workplacesearch docker-compose up
```

This will start Elasticsearch, Kibana (not used) and Workplace Search.

- Wait for it to start and open http://127.0.0.1:3002/ws.
- Enter enterprise_search as the login and changeme as the password.
- Click on "Add sources" button and choose Custom API.
- Name it fscrawler and click on "Create Custom API Source" button.
- Copy the "Access Token" value. We will mention it as ACCESS_TOKEN for the rest of this
 documentation.
- Copy the "Key" value. We will mention it as KEY for the rest of this documentation.



← Back to Sources

Create a Custom API Source



Custom API Source





https://cloud.elastic.co

Thanks!

PR are warmly welcomed!

https://github.com/dadoonet/fscrawler

