

# Indexing your office documents with Elastic and FSCrawler

David Pilato

Developer I Evangelist, Community

@dadoonet









### Apache Tika - a content analysis toolkit

The Apache Tika™ 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</u> <u>development list</u>.

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

### **Latest News**

### 18 August 2021: Apache Tika Release

Apache Tika 2.1.0 has been released! This release includes a significant refactoring in the tika-parsers-extended modules and numerous bug fixes (especially in the pipes modules) and dependency upgrades. Please see the <a href="CHANGES.txt">CHANGES.txt</a> if 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 2.1.0.

#### 19 July 2021: Apache Tika Release

Apache Tika 2.0.0 has been released! This release includes a significant refactoring from the 1.x branch including modularization of the parsers modules, the new pipes modules and 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 2.0.0.

#### 6 July 2021: Apache Tika Release

Apache Tika 1.27 has been released! This release includes a new JSON handler for the /tika endpoint in tika-server, a new MP4 parser based on Drew Noakes' metadata-extractor and numerous bug fixes and have a look at the download page for more information on how to obtain Apache Tika 1.27.

dependency npgrades. 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 1.27.

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#### Apache Tika

#### Introduction

Download
Contribute
Mailing Lists
Tika Wiki

#### Documentation

Security

- Apache Tika 2.1.0
   Getting Started
   Supported Formats
   Parser API
   Parser 5min Quick Start Guide
   Content and Language
   Detection
   Configuring Tika
   Usage Examples
   API Documentation
   REST API Documentation
   (Miredot)
- Apache Tika 2.0.0
- Apache Tika 1.27
- Apache Tika 1.26
- Apache Tika 1.25
- o Apache Tika 1.24.1
- Apache Tika 1.24
- Apache Tika 1.23
- Apache Tika 1.22
- Apache Tika 1.21
- Apache Tika 1.20
- o Apache Tika 1.19.1
- o Apache Tika 1.19
- Apache Tika 1.18
- o Apache Tika 1.17
- Apache Tika 1.16
- Apache Tika 1.15
- Apache Tika 1.14
- Apache Tika 1.13
- o Apache Tika 1.12
- Apache Tika 1.11
- Apache Tika 1.12
   Apache Tika 1.11





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. • Supported Document Formats • HyperText Markup Language XML and derived formats 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 CAD formats Font formats Scientific formats Executable programs and libraries Crypto formats Database formats Natural Language Processing SEDONA 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);
```



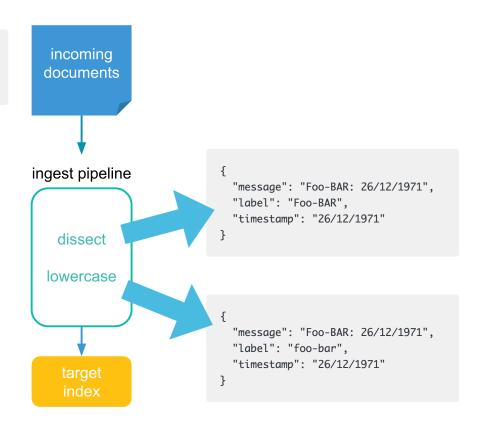


ingest-attachment plugin extracting from BASE64 or CBOR



### An ingest pipeline

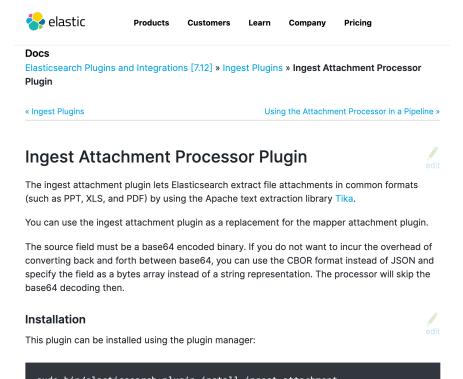
```
{
   "message": "Foo-BAR: 26/12/1971"
}
```



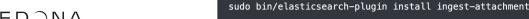


### ingest-attachment processor plugin

### using Tika behind the scene







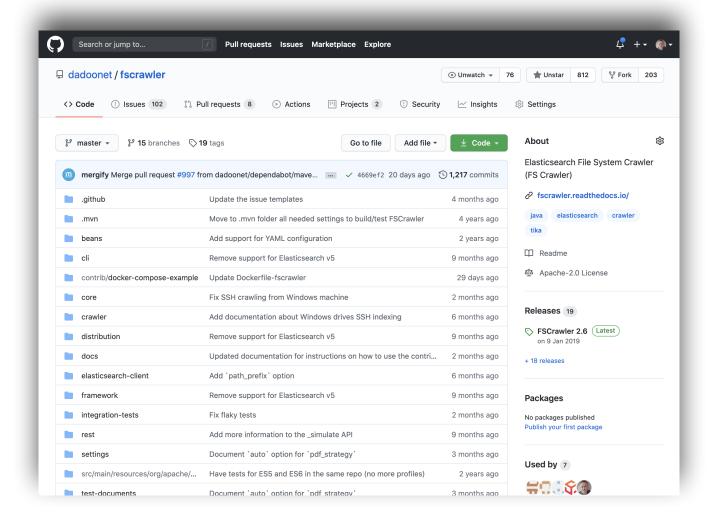


https://cloud.elastic.co



FSCrawler You know, for files...











# Disclaimer'

This project is a community project.

It is not officially supported by Elastic.

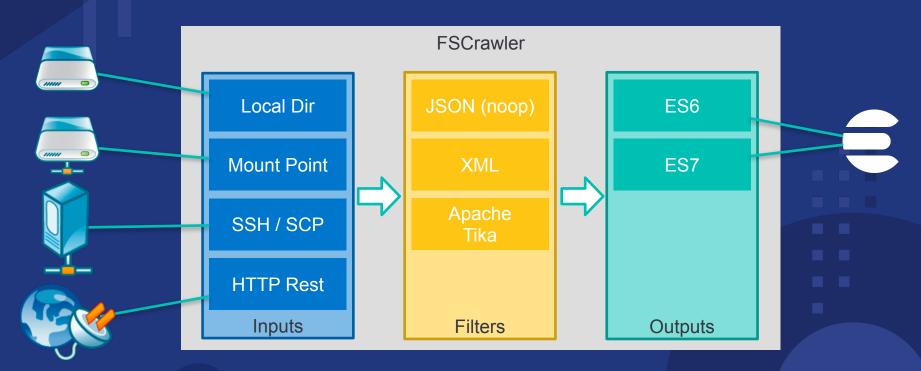
Support is only provided by FSCrawler community on discuss and stackoverflow.

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 <a href="https://fscrawler.readthedocs.io/en/latest/admin/fs/elasticsearch.html#generated-fields">https://fscrawler.readthedocs.io/en/latest/admin/fs/elasticsearch.html#generated-fields</a>)
- 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



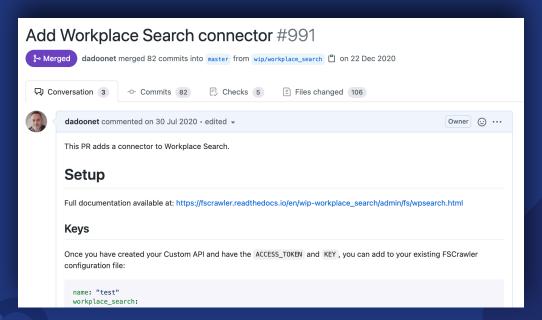




FSCrawler even better with a UI

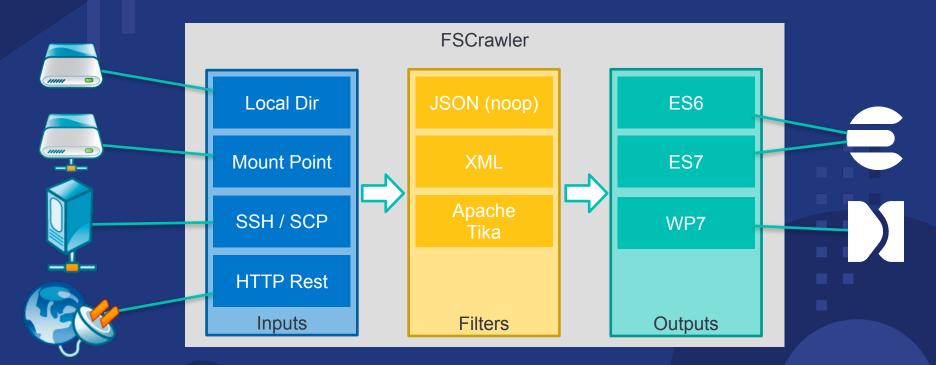


Workplace Search integration





Architecture







https://cloud.elastic.co



PR are warmly welcomed!

https://github.com/dadoonet/fsdrawler