



# Indexing your office documents with Elastic and FSCrawler

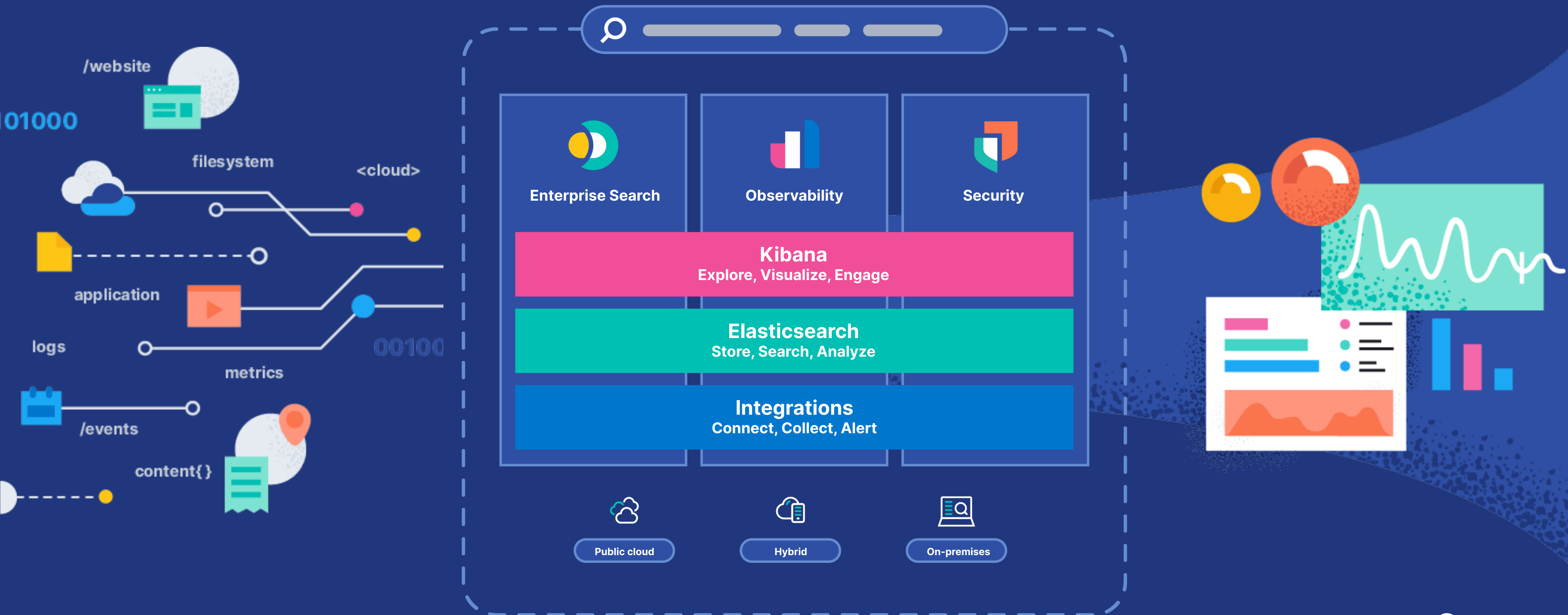
David Pilato

*Developer / Evangelist, Community*

*@dadoonet*

**Capitole du Libre**

# The Elastic Search Platform









## 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.

For more in-depth documentation, see our [wiki](#) , especially for [tika-server](#) .

If you're interested in contributing to Tika, please see the [Contributing](#) page or send an email to the [Tika development list](#).

Tika is a project of the [Apache Software Foundation](#) , and was formerly a subproject of [Apache Lucene](#) .

## Latest News

### 2 May 2022: Apache Tika Release

Apache Tika 2.4.0 has been released! This release includes new mime detection for http-responses, frictionless data packages, DGN files and others. Added basic parsers for WARC and WACZ. Added configuration for metadata write filters, custom content handler decorators and

WARC. Added configuration for metadata write filters, custom content handler decorators and responses, frictionless data packages, DGN files and others. Added basic parsers for WARC and

### Apache Tika

[Introduction](#)

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[Tika Wiki](#) 

[Tika Server Wiki](#) 

[Issue Tracker](#) 

[Security](#)

### Documentation

- [Apache Tika 2.4.0](#)
  - [Getting Started](#)
  - [Supported Formats](#)
  - [Parser API](#)
  - [Parser 5min Quick Start Guide](#)
  - [Content and Language Detection](#)
  - [Configuring Tika](#)
  - [Usage Examples](#)
  - [API Documentation](#)
- [Apache Tika 1.28.2](#)
- [Apache Tika 2.3.0](#)
- [Apache Tika 1.28.1](#)
- [Apache Tika 2.2.1](#)
- [Apache Tika 1.28](#)
- [Apache Tika 2.2.0](#)
- [Apache Tika 2.1.0](#)
- [Apache Tika 2.0.0](#)
- [Apache Tika 1.27](#)
- [Apache Tika 1.26](#)
- [Apache Tika 1.25](#)
- [Apache Tika 1.24](#)
- [Apache Tika 1.23](#)
- [Apache Tika 1.22](#)
- [Apache Tika 1.21](#)
- [Apache Tika 1.20](#)
- [Apache Tika 1.19](#)
- [Apache Tika 1.18](#)
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- [Apache Tika 1.16](#)
- [Apache Tika 1.15](#)
- [Apache Tika 1.14](#)
- [Apache Tika 1.13](#)
- [Apache Tika 1.12](#)
- [Apache Tika 1.11](#)
- [Apache Tika 1.10](#)
- [Apache Tika 1.9](#)
- [Apache Tika 1.8](#)
- [Apache Tika 1.7](#)
- [Apache Tika 1.6](#)
- [Apache Tika 1.5](#)
- [Apache Tika 1.4](#)
- [Apache Tika 1.3](#)
- [Apache Tika 1.2](#)
- [Apache Tika 1.1](#)
- [Apache Tika 1.0](#)

**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](#)
  - [Image and Video object recognition](#)



# Parsing a stream

## and getting content and metadata

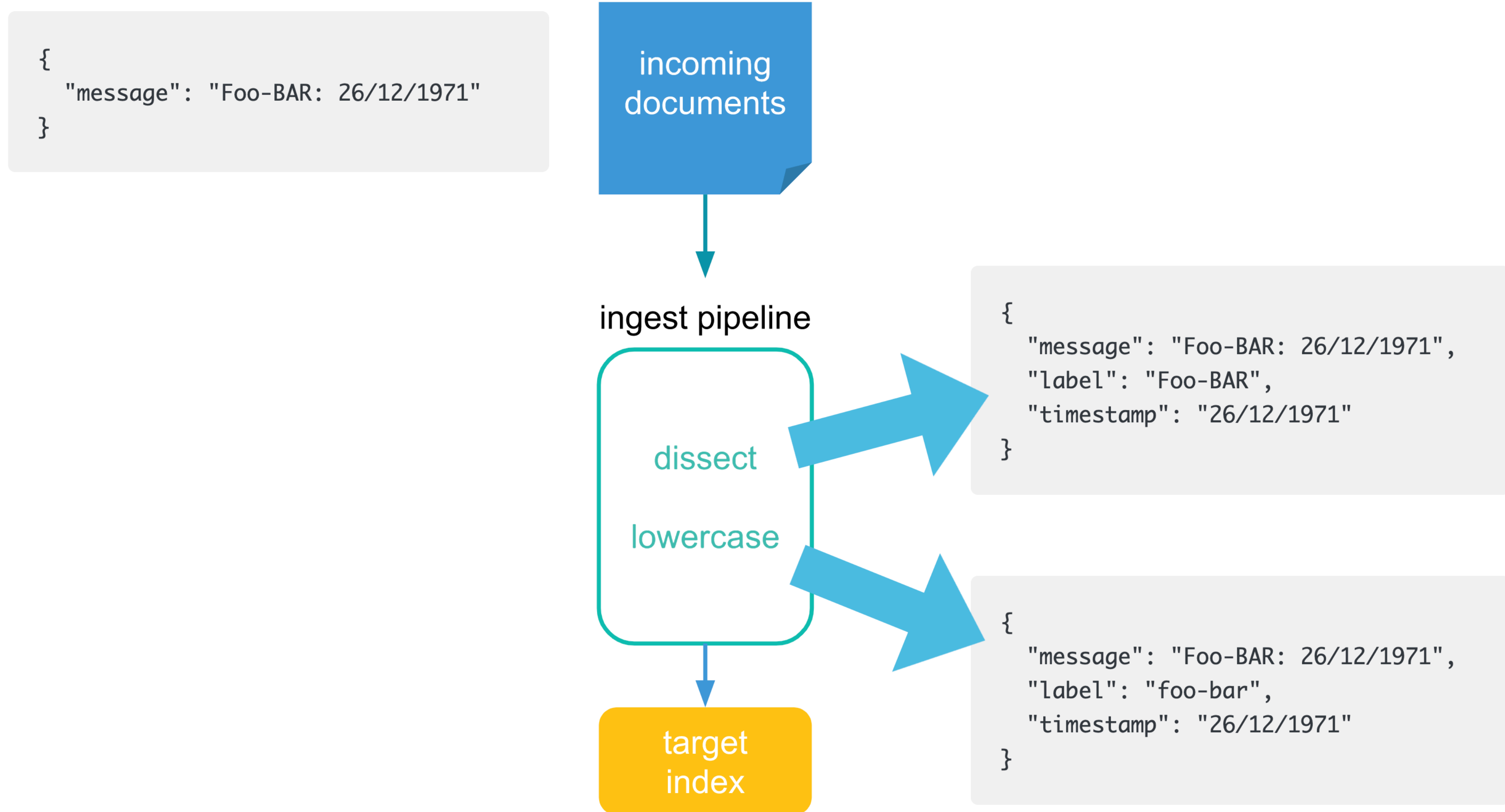
```
static void extractTextAndMetadata(InputStream stream) throws Exception {
    BodyContentHandler handler = new BodyContentHandler();
    Metadata metadata = new Metadata();
    try (stream) {
        new DefaultParser().parse(stream, handler, metadata, new ParseContext());
        String extractedText = 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

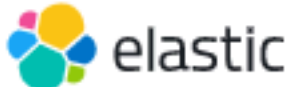


# An ingest pipeline



# ingest-attachment processor plugin

## using Tika behind the scene


ProductsCustomersLearnCompanyPricing

Docs

[Elasticsearch Plugins and Integrations \[8.0\]](#) » [Ingest Plugins](#) » **Ingest Attachment Processor Plugin**

[« Ingest Plugins](#)[Using the Attachment Processor in a Pipeline »](#)

## Ingest Attachment Processor Plugin




The ingest attachment plugin lets Elasticsearch extract file attachments in common formats (such as PPT, XLS, and PDF) by using the Apache text extraction library [Tika](#).

You can use the ingest attachment plugin as a replacement for the mapper attachment plugin.

The source field must be a base64 encoded binary. If you do not want to incur the overhead of converting back and forth between base64, you can use the CBOR format instead of JSON and specify the field as a bytes array instead of a string representation. The processor will skip the base64 decoding then.

### Installation



This plugin can be installed using the plugin manager:

```
sudo bin/elasticsearch-plugin install ingest-attachment
```

The plugin must be installed on every node in the cluster, and each node must be restarted after installation.





# Demo



<https://cloud.elastic.co>






# FSCrawler




You know, for files...










Search or jump to... /


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 **We found potential security vulnerabilities in your dependencies.**  
Only the owner of this repository can see this message.


See Dependabot alerts













 master  17 branches  22 tags

Go to file


Add file 

Code 

 **dadoonet** Merge pull request [#1428](#) from dadoonet/remove-waitfor ✓ 453aa80 18 hours ago 🕒 1,978 commits

 .github	Fix tests for 6.8	2 months ago
 .mvn	Move to .mvn folder all needed settings to build/test FSCrawler	5 years ago
 3rdparty	Revert "Add the waitfor maven plugin"	18 hours ago
 beans	Clean up Json util classes	3 months ago
 cli	Fix --trace and --debug modes	3 months ago
 contrib	Update to 8.1.1	2 months ago
 core	Allow switching between nodes and retry if node is failing	3 months ago
 crawler	prepare for next development iteration	4 months ago
 distribution	Merge pull request <a href="#">#1389</a> from rhaist/patch-1	2 months ago
 docs	Upgrade to Tika 2.4.0	2 days ago
 elasticsearch-client	Update waitfor-maven-plugin to 1.4-SNAPSHOT	2 months ago
 framework	Fix unit tests	2 months ago







### About



Elasticsearch File System Crawler (FS Crawler)



[fscrawler.readthedocs.io/](#)

[java](#) [elasticsearch](#) [crawler](#) [tika](#)

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 [Apache-2.0 license](#)  
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 **1.1k stars**  
 **74 watching**  
 **263 forks**

### Releases


4

 **v2.9**  Latest  
on 8 Mar

[+ 3 releases](#)

### Packages

No packages published  
[Publish your first package](#)

 elastic





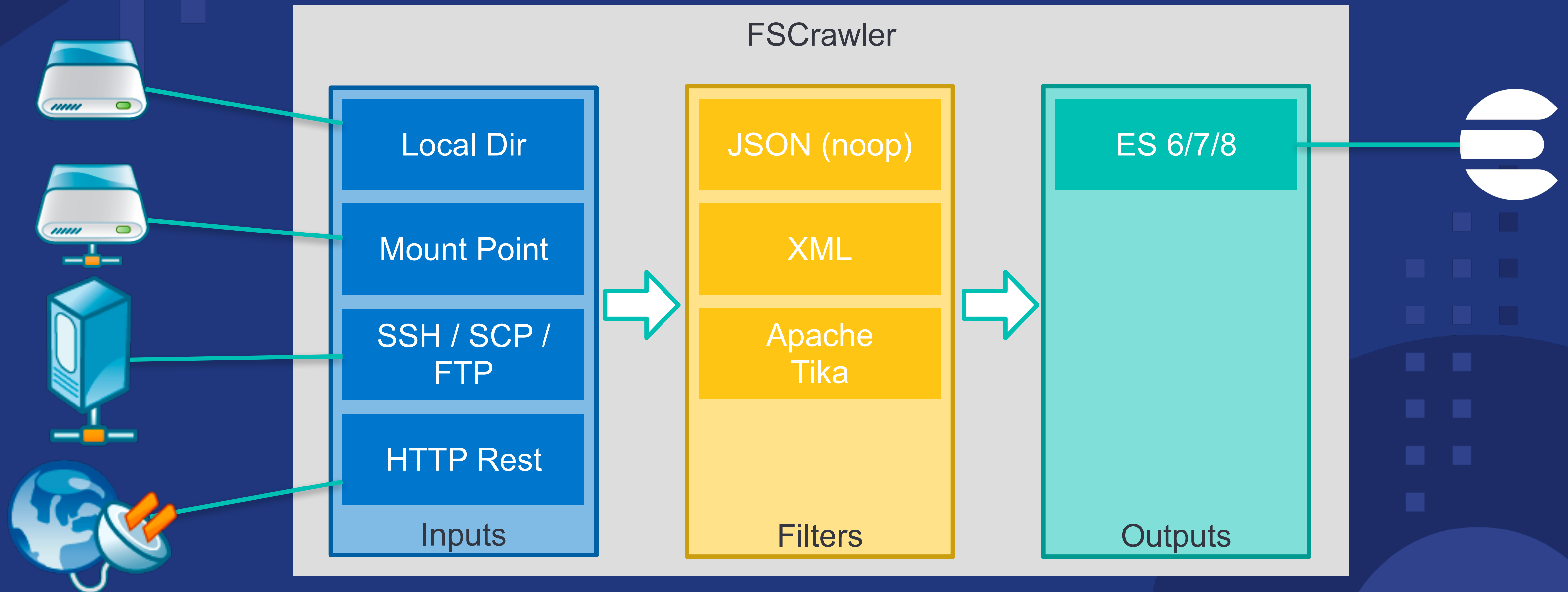
# *Disclaimer*

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>

# FSCrawler

## Architecture



# FSCrawler

## 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>)
- Extraction of non standard metadata





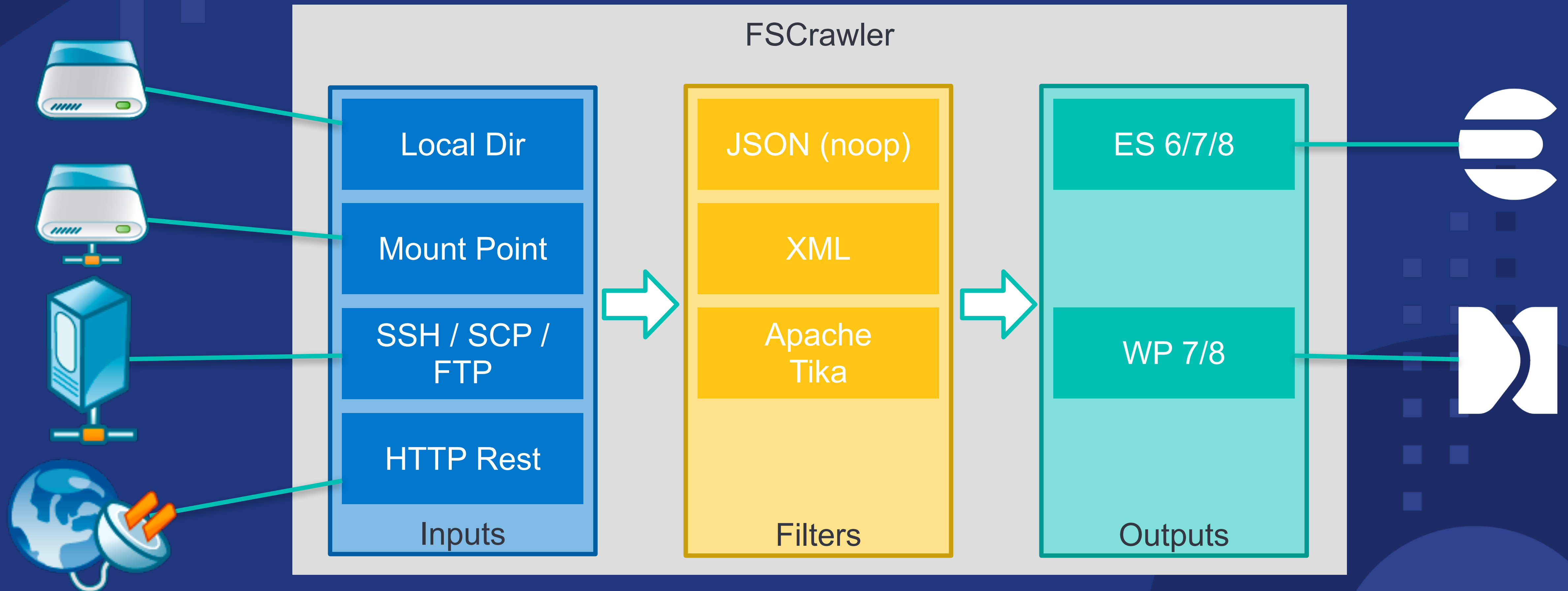
# FSCrawler

even better with a UI



# FSCrawler

## Architecture





# Demo



<https://cloud.elastic.co>



Beta  
2.8.0

# Network drives connector package

for Enterprise Search

<https://github.com/elastic/enterprise-search-network-drives-connector/>



# Thanks!

PR are warmly welcomed!

<https://github.com/dadoonet/fscrawler>

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