

Getting Started with Processors

A processor is a component that operates on a single record that flows through a pipeline. It can either transform the record, or filter it out based on some criteria. Since they are part of pipelines, making yourself familiar with [pipeline semantics](#) is highly recommended.

Processors are optional components in a pipeline (i.e. a pipeline can be started without them), and they are always attached to a single parent, which can be either a connector or a pipeline:

- Connector processors
- `:*` Source processors
 - only receive messages originating at a specific source connector. Source
- `:` Destination processors
 - processors are created by specifying the corresponding source connector as the parent entity.
- `:` Destination processors
 - only receive messages that are meant to be sent to a specific
- `:` destination connector. Destination processors are created by specifying the corresponding destination connector as
 - the parent entity.
- Pipeline processors
 - receive all messages that flow through the pipeline, regardless of the
 - source or destination. Pipeline processors are created by specifying the pipeline as the parent entity.

Processor types

When it comes to using a processor, Conduit supports different types:

- [Built-in processors](#)
- will perform the most common operations you could expect such as filtering fields, replacing fields, posting payloads to a HTTP endpoint, etc. These are already coming as part of Conduit, and you can simply start using them with a bit of configuration. [Check out this document to see everything that's available](#)
- [Standalone processors](#)
- are the ones you could write yourself to do anything that's not already covered by the [Built-in](#)
- ones. [Here's](#)
- more information about them.

How to use a processor

In these following examples, we're using the [json.decode](#), but you could use any other you'd like from our [Built-in](#) ones, or even [reference](#) your own [Standalone processor](#).

When referencing the name of a processor plugin there are different ways you can make sure you're using the one you'd like. Please, check out the [Referencing Processors](#) documentation for more information.

Using [a pipeline configuration file](#)

Using a pipeline processor

Creating a pipeline processor through a pipeline configuration file can be done as below:

version :

2.2 pipelines : -

id : example - pipeline connectors :

define source and destination connectors

...

processors : -

id : extract - name plugin : json.decode settings : field : name

Using a connector processor

Similarly, we can configure a connector processor, i.e. a processor attached to a connector:

version :

2.2 pipelines : -

id : example - pipeline connectors : -

id : conn1

other connector configuration

processors : -

id : extract - name plugin : json.decode settings : field : name

other connectors

The documentation about pipeline configuration files can be found [here](#) .

Using the [HTTP API](#)

The processor endpoints live under the `/v1/processors` namespace, and to attach a processor to either connector or a pipeline, you could do a POST request to `/v1/processors` specifying `parent.type` as `TYPE_PIPELINE` or `TYPE_CONNECTOR` . Default value is `TYPE_UNSPECIFIED` .

[Here's](#) how the entire request could look like.

tip To list all the different API HTTP requests you could perform check out our [HTTP API](#) . These are also described in our [api.swagger.json](#) . [Edit this page](#) [Previous Specifications](#) [Next Builtin Processors](#)