# Sifter3 - Sieve email filter

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Sifter3 is a Python 3 implementation of the Sieve email filter language (RFC 5228)

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#### **FEATURES**

- Supports all of the base Sieve spec from RFC 5228, except for features still listed under TODO below
  - multiline strings (since version 0.2.2)
  - bracketed comments (since version 0.2.4)
- Extensions supported:
  - regex (draft-ietf-sieve-regex-01)
  - body (RFC 5173)
  - variables (RFC 5229)
  - enotify (RFC 5435, particularly the mailto method RFC 5436)
  - imap4flags (RFC 5232: setflag, addflag, removeflag; not supported: hasflags, :flags)
  - reject and ereject (RFC 5429) (since version 0.2.4)
  - ihave (RFC 5463) (since version 0.2.5)

CHAPTER 2	
INSTALL	

pip install sifter3

**EXAMPLE** 

```
import email
import sifter.parser
rules = sifter.parser.parse_file(open('my_rules.sieve'))
msg = email.message_from_file(open('an_email_to_me.eml'))
msg_actions = rules.evaluate(msg)
```

In the above example, msg\_actions is a list of actions to apply to the email message. Each action is a tuple consisting of the action name and action-specific arguments. It is up to the caller to manipulate the message and message store based on the actions returned.

#### **COMMAND LINE**

The output of the command line tool can be parsed as json.

```
$ sifter tests/evaluation_1.rules tests/evaluation_1.msg
[['redirect', 'acm@example.com']]
```

#### **WARNINGS**

- No thought has been given yet to hardening against malicious user input. The current implementation is aimed at users that are running their own sieve scripts.
- The current implementation is not optimized for performance, though hopefully it's not too slow for normal inputs.

#### **TODO**

- An example adaptor that provides Unix LDA behavior using sieve for filtering
- Base spec features not yet implemented:
  - encoded characters (section 2.4.2.4)
  - message uniqueness (section 2.10.3)
  - envelope test (section 5.4)
  - handle message loops (section 10)
  - limit abuse of redirect action (section
  - address test should limit allowed headers to those that contain addresses (section 5.1)