

# Using Sieve to Filter Email

LPIC-2: Linux Engineer (202-450)

## Objectives:

At the end of this episode, I will be able to:

1. Describe the Sieve filtering language and its uses.
2. Configure Dovecot to apply Sieve filter rules to incoming email.

Additional resources used during the episode can be obtained using the download link on the overview episode.

- Using Sieve to Filter Email
  - Introduction to Sieve
  - Configuring Sieve with Dovecot
  - Creating Sieve Rules
- Introduction to Sieve
  - <http://sieve.info/>
  - Email filter scripting language
  - Used by most web-mail and anti-spam systems
    - Spam Assassin
    - ClamAV
    - Dovecot
    - Roundcube
  - Has a unique syntax
  - <https://www.rfc-editor.org/rfc/rfc5228.html>

## Configuring Sieve with Dovecot

### 1. Install Required Packages

```
sudo apt install dovecot-sieve dovecot-managesieved dovecot-lmtpd
```

### 2. Enable the Local Mail Transfer Protocol (LMTP)

```
sudoedit /etc/dovecot/conf.d/10-master.conf
```

```
service lmtp {  
    unix_listener /var/spool/postfix/private/dovecot-lmtp {  
        mode = 0600  
        user = postfix  
        group = postfix  
    }  
}
```

```
sudoedit /etc/postfix/main.cf
```

```
mailbox_transport = lmtp:unix:private/dovecot-lmtp  
smtpUTF8_enable = no
```

### 3. Enable Sieve

```
sudoedit /etc/dovecot/conf.d/20-lmtp.conf
```

```
postmaster_address = admin@lab.itpro.tv  
mail_plugins = $mail_plugins sieve
```

```
sudoedit /etc/dovecot/conf.d/20-imap.conf
```

```
mail_plugins = $mail_plugins imap_sieve
```

```
sudoedit /etc/dovecot/conf.d/90-sieve.conf
```

```
plugin {
  sieve = ~/.dovecot.sieve
  sieve_global_path = /var/lib/dovecot/sieve/default.sieve
  sieve_dir = ~/sieve
  sieve_global_dir = /var/lib/dovecot/sieve/
}
```

#### 4. Restart and Test

```
systemctl restart postfix dovecot
```

```
telnet 127.0.0.1 4190
```

#### Creating Sieve Rules

##### 1. create a folder for global rules

- `sudo mkdir /var/lib/dovecot/sieve`
- `sudo touch /var/lib/dovecot/sieve/default.sieve`
- `sudo chown -R dovecot:dovecot /var/lib/dovecot/sieve`

##### 2. Define Rules

- `sudoedit /var/lib/dovecot/sieve/default.sieve`

##### 3. Compile Rules

- `sudo sievec /var/lib/dovecot/sieve/default.sieve`

#### Example Sieve Filter Rules

```
require "fileinto";
if address "From" "bob@aol.com"
{
  fileinto "Junk";
}
if address :contains "From" "@aol.com"
{
  fileinto "Junk";
}
if header :contains "X-Spam-Flag" "YES"
{
  fileinto "Junk";
}
```