

## Linux 下载安装Augeas

### Step 1

Run update command to update package repositories and get latest package information.

```
sudo apt-get update -y
```

### Step 2

Run the install command with -y flag to quickly install the packages and dependencies.

```
sudo apt-get install -y augeas-tools
```

## Augeas使用

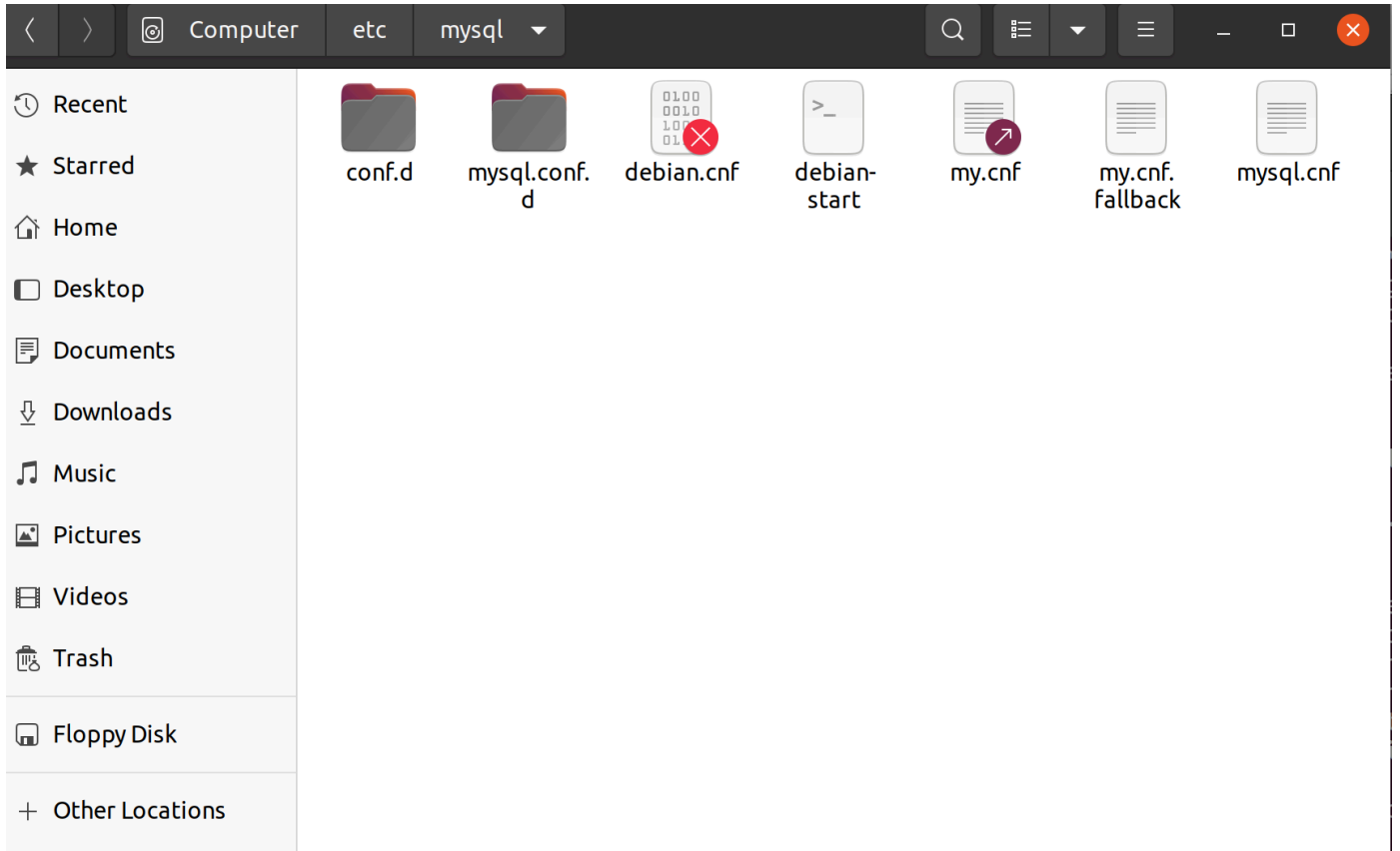
github源码链接:

<https://github.com/hercules-team/augeas>

augtool只能解析能识别的配置文件:

例如augtool只能识别mysql中的

```
changzw@ubuntu:~$ augtool ls /files/etc/mysql
conf.d/ = (none)
my.cnf/ = (none)
changzw@ubuntu:~$
```



但真正配置文件是

```
/etc/mysql/mysql.conf.d/mysqld.cnf
```

因此需要将该文件转换成augtool能够识别的文件

```
augtool --noautoload --transform "MySQL.lns incl /etc/mysql/mysql.conf.d/mysqld.cnf"
```

```
changzw@ubuntu:~$ augtool ls /files/etc/mysql
conf.d/ = (none)
my.cnf/ = (none)
changzw@ubuntu:~$ augtool print /files/etc/mysql/mysql.conf.d/mysqld.cnf
changzw@ubuntu:~$ augtool --noautoload --transform "MySQL.lns incl /etc/mysql/mysql.conf.d/mysqld.cnf"
augtool> print /files/etc/mysql/mysql.conf.d/mysqld.cnf
/files/etc/mysql/mysql.conf.d/mysqld.cnf
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[1] = "The MySQL database server configuration file."
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[2] = "One can use all long options that the program supports."
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[3] = "Run program with --help to get a list of available options and with"
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[4] = "--print-defaults to see which it would actually understand and use."
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[5] = "For explanations see"
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[6] = "http://dev.mysql.com/doc/mysql/en/server-system-variables.html"
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[7] = "Here is entries for some specific programs"
/files/etc/mysql/mysql.conf.d/mysqld.cnf/#comment[8] = "The following values assume you have at least 32M ram"
```

解析成功

## 解析mongodb

配置文件位置为

```
/etc/mongodb.conf
```

解析命令

```
augtool print /files/etc/mongodb.conf
```

```
changzw@ubuntu:~$ augtool print /files/etc/mongodb.conf
/files/etc/mongodb.conf
/files/etc/mongodb.conf/#comment[1] = "mongodb.conf"
/files/etc/mongodb.conf/#comment[2] = "Where to store the data."
/files/etc/mongodb.conf/dbpath = "/var/lib/mongodb"
/files/etc/mongodb.conf/#comment[3] = "where to log"
/files/etc/mongodb.conf/logpath = "/var/log/mongodb/mongodb.log"
/files/etc/mongodb.conf/logappend = "true"
/files/etc/mongodb.conf/bind_ip = "127.0.0.1"
/files/etc/mongodb.conf/#comment[4] = "port = 27017"
/files/etc/mongodb.conf/#comment[5] = "Enable journaling, http://www
/display/DOCS/Journaling"
/files/etc/mongodb.conf/#comment[6] = "http://www.mongodb.org/display/DOCS/Journaling"
```

## 解析Squid

配置文件位置为

```
/etc/squid/squid.conf
```

解析命令

```
augtool print /files/etc/squid/squid.conf
```

无输出，需要转换

转换命令：

```
changzw@ubuntu:~$ augtool --noautoload --transform 'Redis.lns incl /etc/squid/conf.d/debian.conf'
augtool> print /files/etc/squid/conf.d/debian.conf
/files/etc/squid/conf.d/debian.conf
/files/etc/squid/conf.d/debian.conf/#comment[1] = "Squid configuration settings for Debian"
/files/etc/squid/conf.d/debian.conf/#comment[2] = "Logs are managed by logrotate on Debian"
/files/etc/squid/conf.d/debian.conf/logfile_rotate = "0"
/files/etc/squid/conf.d/debian.conf/#comment[3] = "For extra security Debian packages only allow"
/files/etc/squid/conf.d/debian.conf/#comment[4] = "localhost to use the proxy on new installs"
/files/etc/squid/conf.d/debian.conf/#comment[5] = "http_access allow localnet"
```

好像Squid没有lens，可以使用Redis.lns替代一下

## 解析nginx

```
changzw@ubuntu:~$ augtool ls /files/etc/nginx
sites-enabled/ = (none)
sites-available/ = (none)
nginx.conf/ = (none)
changzw@ubuntu:~$ augtool print /files/etc/nginx/nginx.conf
/files/etc/nginx/nginx.conf
/files/etc/nginx/nginx.conf/user = "www-data"
/files/etc/nginx/nginx.conf/worker_processes = "auto"
/files/etc/nginx/nginx.conf/pid = "/run/nginx.pid"
/files/etc/nginx/nginx.conf/include = "/etc/nginx/modules-enabled/*.conf"
/files/etc/nginx/nginx.conf/events
/files/etc/nginx/nginx.conf/events/worker_connections = "768"
/files/etc/nginx/nginx.conf/events/#comment = "multi_accept on;"
/files/etc/nginx/nginx.conf/http
/files/etc/nginx/nginx.conf/http/#comment[1] = "#"
/files/etc/nginx/nginx.conf/http/#comment[2] = "Basic Settings"
/files/etc/nginx/nginx.conf/http/#comment[3] = "#"
/files/etc/nginx/nginx.conf/http/sendfile = "on"
/files/etc/nginx/nginx.conf/http/tcp_nopush = "on"
```

### 注意：

augeas只能解析配置文件，但不会直接转换成键值对，如何转换需要自己制定规则

例如如何将解析后的Nginx配置文件转换成键值对，见论文：

《ConfEx: A Framework for Automating Text-based Software Configuration Analysis in the Cloud》