

# Common Tools

## pip

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pip is an installer for Python libraries

### Install OSX

```
sudo easy_install pip
```

# Memory Analysis

## Volatility

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Volatility uses Python 2.6 or higher not Python 3

### Download using the repository

```
git clone  
https://github.com/volatilityfoundation/volatility  
.git
```

### Setup volatility

```
sudo python setup.py install
```

### Libraries you may need (see Common Tools for pip)

```
sudo pip install Distorm3  
sudo pip install Yara  
sudo pip install PyCrypto  
sudo pip install PIL  
sudo pip install OpenPyxl  
sudo pip install ujson
```

### List all profiles, plugins, and other things currently installed

```
python vol.py --info
```

### Convert pagefile.sys/hiberfile.sys to raw images

```
python vol.py -f <memory file> --profile<profile>  
imagecopy -O <new_file_location>
```

## Save volatility output to a file

```
python vol.py -f <memory file> --profile=<profile>  
<volatility command> > <file>
```

## List general info and possible profiles of memory file

```
python vol.py -f <memory file> imageinfo
```

## Check profile

```
python vol.py -f <memory file> --profile=<profile>  
kdbgscan
```

## Check for more than 0 processes in *PsActiveProcessHead*

## List processes

```
python vol.py -f <memory file> --profile=<profile>  
psscan
```

## List network connections

```
python vol.py -f <memory file> --profile=<profile>  
netlist
```

## Find potential malware

```
python vol.py -f <memory file> --profile=<profile>  
malfind --dump-dir <directory>
```

## Volatility Plugins

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### Recreate Ethernet traffic

Download the source from

<https://code.google.com/archive/p/jamaal-re-tools/>

Put the ethscan.py file into volatility/volatility/plugins

```
python vol.py -f <memory file> --profile=<profile>  
ethscan > capture.pcap
```

### Get Chrome history

Download the source from

<https://github.com/superponible/volatility-plugins>

Put the chromehistory.py and sqlite\_help.py files into  
volatility/volatility/plugins

```
python vol.py -f <memory file> --profile=<profile>  
chromehistory
```

## File Analysis

### Hashing

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#### Get MD5

##### Linux

```
md5sum <file>
```

##### OSX

```
md5 <file>
```

## Malware Checking

### VirusTotal.com

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#### Check hash

Use the search tab