

## Paramiko sftp

```
1    t = paramiko.Transport((hostname, port))
2    try:
3        t.connect(username=username, password=password)
4        sftp = paramiko.SFTPClient.from_transport(t)
5        sftp.get(source, dest)
6    finally:
7        t.close()
```

## Paramiko ssh

```
1 client = paramiko.SSHClient()
2 client.load_system_host_keys()
3 client.set_missing_host_key_policy(paramiko.WarningPolicy)
4 client.connect(host, username=username,
5               pkey=paramiko.RSAKey.from_private_key_file(ke
6               look_for_keys=False)
7 client.connect(host, username=username, password=password)
8 client.exec_command(command)
```

## HyperV

- WMI
- pywinrm
- IP
- <http://antigluk.blogspot.com/2014/04/control-hyper-v-with-python.html>

## WMI

- <https://pypi.python.org/pypi/WMI/>
- <http://tingolden.me.uk/python/wmi/tutorial.html>

## WinRM

```
1 import winrm
2 s = winrm.Session('windows-host.example.com', auth=('john.smith'))
3 r = s.run_cmd('ipconfig', ['/all'])
4 print(r.status_code)
5 print(r.std_out)
6 r = s.run_ps(ps_script)
```

## Ansible installation

```
1 # python3 -m venv ansible
2 # source ansible/bin/activate
3 # pip install 'pywinrm>=0.2.2'
4 # pip install ansible
5 # ansible --version
```

## Ansible

- Inventory
  - Config
  - Playbooks
- 
- hosts
  - xxx1.yml
  - xxx2.yml
  - group\_vars/
    - HOST\_GROUP\_NAME1.yml
    - HOST\_GROUP\_NAME2.yml
    - all.yml

## Inventory

```
1 [ group1 ]
2 IP_OR_HOSTNAME PARAM=VAL PARAM=VAL
3 IP_OR_HOSTNAME2
4
5 [ group2 ]
6 IP_OR_HOSTNAME3 PARAM=VAL PARAM=VAL
7 IP_OR_HOSTNAME4
8
9 [ group3 : children ]
10 group1
11 group2
```