

Introduction to



SALTSTACK

@HugoHerter

SaltStack is extremely fast and scalable systems and configuration management software for predictive orchestration, cloud and data center automation, server provisioning, application deployment and more.

1. Make sure that a machine is in the desired state
2. Remotely for all your machines (master-minions)



Salt States

1. Define the properties of the state
2. Transition your system to the defined state
3. Get a report on:
 - ◆ changed
 - ◆ unchanged
 - ◆ failed

Salt States - Hello Web

/srv/salt/top.sls

```
base:
  '*':
    - helloweb
```

/srv/salt/helloweb.sls

```
nginx:
  pkg.installed

/etc/nginx/sites-enabled/helloweb:
  file.managed:
    - source: salt://helloweb.html
```

/srv/salt/helloweb.html

```
<!doctype html>
<html><body><h1>Hello Web</h1></body></html>
```

```
# salt-call --local state.highstate
```

```
# salt-call --local state.sls helloweb
```

Salt States - Report

```
root@helloweb:/srv/salt# salt-call --local state.sls helloweb
```

```
[WARNING ] Although 'dmidecode' was found in path, the current user cannot execute it. Grains
```

```
[WARNING ] Although 'dmidecode' was found in path, the current user cannot execute it. Grains
```

```
[INFO    ] Loading fresh modules for state activity
```

```
[INFO    ] Fetching file from saltenv 'base', ** done ** 'helloweb.sls'
```

```
[INFO    ] Running state [nginx] at time 16:30:06.365206
```

```
[INFO    ] Executing state pkg.installed for nginx
```

```
[INFO    ] Executing command "dpkg-query --showformat='${Status} ${Package} ${Version} ${Archi
```

```
[INFO    ] Package nginx is already installed.
```

```
[INFO    ] Completed state [nginx] at time 16:30:06.662521
```

```
[INFO    ] Running state [/var/www/html/index.html] at time 16:30:06.662770
```

```
[INFO    ] Executing state file.managed for /var/www/html/index.html
```

```
[INFO    ] Fetching file from saltenv 'base', ** done ** 'helloweb.html'
```

```
[INFO    ] File changed:
```

```
New file
```

```
[INFO    ] Completed state [/var/www/html/index.html] at time 16:30:06.670372
```

```
local:
```

```
-----
```

```
    ID: nginx
```

```
  Function: pkg.installed
```

```
    Result: True
```

[INFO] Completed state [/var/www/html/index.html] at time 16:30:06.670372

local:

ID: nginx

Function: pkg.installed

Result: True

Comment: Package nginx is already installed.

Started: 16:30:06.365206

Duration: 297.315 ms

Changes:

ID: /var/www/html/index.html

Function: file.managed

Result: True

Comment: File /var/www/html/index.html updated

Started: 16:30:06.662770

Duration: 7.602 ms

Changes:

diff:

New file

mode:

0644

Summary

Succeeded: 2 (changed=1)

Failed: 0

Total states run: 2

Salt States - Batteries included

- File present
- Line present
- Package installed
- Git repo cloned
- Mercurial
- Service running
- Virtualenvs
- Pip dependencies
- Linux Containers
- Network interfaces
- iptables
- Bower
- HTTP
- LVM
- PostgreSQL
- Supervisord
- Chef
- ...

[Full list of builtin state modules](#)

Demo