环境准备：

准备4台虚拟机，rhel7.3系统，关闭防火墙，SELinux

192.168.4.10 master

192.168.4.11 node01

192.168.4.12 node02

192.168.4.13 node03

修改/etc/hosts文件，保证可以ping通主机名

在宿主机建立saltstack的yum源

##安装salt-master

[root@master ~]# vim /etc/yum.repos.d/development.repo

[root@master ~]# cat /etc/yum.repos.d/development.repo

[development]

name=rhel7

baseurl=ftp://192.168.4.254/pub/iso/rhel7

enabled=1

gpgcheck=0

[saltstack]

name=saltstack

baseurl=ftp://192.168.4.254/pub/iso/salt

enabled=1

gpgcheck=0

[root@master ~]# yum clean all ; yum repolist

已加载插件：langpacks, product-id, search-disabled-repos,

: subscription-manager

This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.

正在清理软件源： development saltstack

Cleaning up everything

已加载插件：langpacks, product-id, search-disabled-repos,

: subscription-manager

This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.

development | 4.1 kB 00:00

saltstack | 2.9 kB 00:00

(1/3): saltstack/primary\_db | 15 kB 00:00

(2/3): development/group\_gz | 136 kB 00:00

(3/3): development/primary\_db | 3.9 MB 00:00

源标识 源名称 状态

development rhel7 4,751

saltstack saltstack 26

repolist: 4,777

[root@master ~]# yum search salt-master

已加载插件：langpacks, product-id, search-disabled-repos,

: subscription-manager

This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.

================= N/S matched: salt-master =================

salt-master.noarch : Management component for salt, a

: parallel remote execution system

名称和简介匹配 only，使用“search all”试试

##修改好4台虚拟机的yum源

##在master上安装salt-master，在node上安装salt-minion

[root@master ~]# yum -y install salt-master

已加载插件：langpacks, product-id, search-disabled-repos,

: subscription-manager

This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.

正在解决依赖关系

--> 正在检查事务

---> 软件包 salt-master.noarch.0.2016.11.6-1.el7 将被 安装

--> 正在处理依赖关系 salt = 2016.11.6-1.el7，它被软件包 salt-master-2016.11.6-1.el7.noarch 需要

--> 正在检查事务

---> 软件包 salt.noarch.0.2016.11.6-1.el7 将被 安装

--> 正在处理依赖关系 python-msgpack > 0.3，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-tornado >= 4.2.1，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-futures >= 2.0，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-crypto >= 2.6.1，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-zmq，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-markupsafe，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-jinja2，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 PyYAML，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在检查事务

---> 软件包 PyYAML.x86\_64.0.3.11-1.el7 将被 安装

--> 正在处理依赖关系 libyaml-0.so.2()(64bit)，它被软件包 PyYAML-3.11-1.el7.x86\_64 需要

---> 软件包 python-jinja2.noarch.0.2.7.2-2.el7 将被 安装

--> 正在处理依赖关系 python-babel >= 0.8，它被软件包 python-jinja2-2.7.2-2.el7.noarch 需要

---> 软件包 python-markupsafe.x86\_64.0.0.11-10.el7 将被 安装

---> 软件包 python-tornado.x86\_64.0.4.2.1-1.el7 将被 安装

---> 软件包 python-zmq.x86\_64.0.15.3.0-2.el7 将被 安装

--> 正在处理依赖关系 libzmq.so.5()(64bit)，它被软件包 python-zmq-15.3.0-2.el7.x86\_64 需要

---> 软件包 python2-crypto.x86\_64.0.2.6.1-13.el7 将被 安装

--> 正在处理依赖关系 libtomcrypt.so.0()(64bit)，它被软件包 python2-crypto-2.6.1-13.el7.x86\_64 需要

---> 软件包 python2-futures.noarch.0.3.0.5-1.el7 将被 安装

---> 软件包 python2-msgpack.x86\_64.0.0.4.8-1.el7 将被 安装

--> 正在检查事务

---> 软件包 libtomcrypt.x86\_64.0.1.17-23.el7 将被 安装

--> 正在处理依赖关系 libtommath >= 0.42.0，它被软件包 libtomcrypt-1.17-23.el7.x86\_64 需要

--> 正在处理依赖关系 libtommath.so.0()(64bit)，它被软件包 libtomcrypt-1.17-23.el7.x86\_64 需要

---> 软件包 libyaml.x86\_64.0.0.1.4-11.el7\_0 将被 安装

---> 软件包 python-babel.noarch.0.0.9.6-8.el7 将被 安装

---> 软件包 zeromq.x86\_64.0.4.1.4-5.el7 将被 安装

--> 正在处理依赖关系 libsodium.so.13()(64bit)，它被软件包 zeromq-4.1.4-5.el7.x86\_64 需要

--> 正在处理依赖关系 libpgm-5.2.so.0()(64bit)，它被软件包 zeromq-4.1.4-5.el7.x86\_64 需要

--> 正在检查事务

---> 软件包 libsodium.x86\_64.0.1.0.5-1.el7 将被 安装

---> 软件包 libtommath.x86\_64.0.0.42.0-4.el7 将被 安装

---> 软件包 openpgm.x86\_64.0.5.2.122-2.el7 将被 安装

--> 解决依赖关系完成

依赖关系解决

============================================================

Package 架构 版本 源 大小

============================================================

正在安装:

salt-master noarch 2016.11.6-1.el7 saltstack 1.6 M

为依赖而安装:

PyYAML x86\_64 3.11-1.el7 saltstack 160 k

libsodium x86\_64 1.0.5-1.el7 saltstack 144 k

libtomcrypt x86\_64 1.17-23.el7 saltstack 224 k

libtommath x86\_64 0.42.0-4.el7 saltstack 35 k

libyaml x86\_64 0.1.4-11.el7\_0 development 55 k

openpgm x86\_64 5.2.122-2.el7 saltstack 171 k

python-babel noarch 0.9.6-8.el7 development 1.4 M

python-jinja2 noarch 2.7.2-2.el7 development 516 k

python-markupsafe x86\_64 0.11-10.el7 development 25 k

python-tornado x86\_64 4.2.1-1.el7 saltstack 636 k

python-zmq x86\_64 15.3.0-2.el7 saltstack 520 k

python2-crypto x86\_64 2.6.1-13.el7 saltstack 476 k

python2-futures noarch 3.0.5-1.el7 saltstack 26 k

python2-msgpack x86\_64 0.4.8-1.el7 saltstack 83 k

salt noarch 2016.11.6-1.el7 saltstack 7.1 M

zeromq x86\_64 4.1.4-5.el7 saltstack 556 k

事务概要

============================================================

安装 1 软件包 (+16 依赖软件包)

总下载量：14 M

安装大小：54 M

Downloading packages:

(1/17): PyYAML-3.11-1.el7.x86\_64.rpm | 160 kB 00:00

(2/17): libtomcrypt-1.17-23.el7.x86\_64 | 224 kB 00:00

(3/17): libsodium-1.0.5-1.el7.x86\_64.r | 144 kB 00:00

(4/17): libtommath-0.42.0-4.el7.x86\_64 | 35 kB 00:00

(5/17): openpgm-5.2.122-2.el7.x86\_64.r | 171 kB 00:00

(6/17): python-babel-0.9.6-8.el7.noarc | 1.4 MB 00:00

(7/17): libyaml-0.1.4-11.el7\_0.x86\_64. | 55 kB 00:00

(8/17): python-markupsafe-0.11-10.el7. | 25 kB 00:00

(9/17): python-jinja2-2.7.2-2.el7.noar | 516 kB 00:00

(10/17): python-tornado-4.2.1-1.el7.x8 | 636 kB 00:00

(11/17): python-zmq-15.3.0-2.el7.x86\_6 | 520 kB 00:00

(12/17): python2-futures-3.0.5-1.el7.n | 26 kB 00:00

(13/17): python2-crypto-2.6.1-13.el7.x | 476 kB 00:00

(14/17): python2-msgpack-0.4.8-1.el7.x | 83 kB 00:00

(15/17): salt-2016.11.6-1.el7.noarch.r | 7.1 MB 00:00

(16/17): salt-master-2016.11.6-1.el7.n | 1.6 MB 00:00

(17/17): zeromq-4.1.4-5.el7.x86\_64.rpm | 556 kB 00:00

------------------------------------------------------------

总计 15 MB/s | 14 MB 00:00

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

正在安装 : python-markupsafe-0.11-10.el7.x86\_6 1/17

正在安装 : python2-msgpack-0.4.8-1.el7.x86\_64 2/17

正在安装 : libsodium-1.0.5-1.el7.x86\_64 3/17

正在安装 : libtommath-0.42.0-4.el7.x86\_64 4/17

正在安装 : libtomcrypt-1.17-23.el7.x86\_64 5/17

正在安装 : python2-crypto-2.6.1-13.el7.x86\_64 6/17

正在安装 : openpgm-5.2.122-2.el7.x86\_64 7/17

正在安装 : zeromq-4.1.4-5.el7.x86\_64 8/17

正在安装 : python-zmq-15.3.0-2.el7.x86\_64 9/17

正在安装 : python-tornado-4.2.1-1.el7.x86\_64 10/17

正在安装 : python-babel-0.9.6-8.el7.noarch 11/17

正在安装 : python-jinja2-2.7.2-2.el7.noarch 12/17

正在安装 : python2-futures-3.0.5-1.el7.noarch 13/17

正在安装 : libyaml-0.1.4-11.el7\_0.x86\_64 14/17

正在安装 : PyYAML-3.11-1.el7.x86\_64 15/17

正在安装 : salt-2016.11.6-1.el7.noarch 16/17

正在安装 : salt-master-2016.11.6-1.el7.noarch 17/17

development/productid | 1.6 kB 00:00

验证中 : python-markupsafe-0.11-10.el7.x86\_6 1/17

验证中 : python-jinja2-2.7.2-2.el7.noarch 2/17

验证中 : salt-master-2016.11.6-1.el7.noarch 3/17

验证中 : libyaml-0.1.4-11.el7\_0.x86\_64 4/17

验证中 : python2-futures-3.0.5-1.el7.noarch 5/17

验证中 : python-babel-0.9.6-8.el7.noarch 6/17

验证中 : python-tornado-4.2.1-1.el7.x86\_64 7/17

验证中 : libtomcrypt-1.17-23.el7.x86\_64 8/17

验证中 : python-zmq-15.3.0-2.el7.x86\_64 9/17

验证中 : zeromq-4.1.4-5.el7.x86\_64 10/17

验证中 : openpgm-5.2.122-2.el7.x86\_64 11/17

验证中 : libtommath-0.42.0-4.el7.x86\_64 12/17

验证中 : libsodium-1.0.5-1.el7.x86\_64 13/17

验证中 : PyYAML-3.11-1.el7.x86\_64 14/17

验证中 : salt-2016.11.6-1.el7.noarch 15/17

验证中 : python2-msgpack-0.4.8-1.el7.x86\_64 16/17

验证中 : python2-crypto-2.6.1-13.el7.x86\_64 17/17

已安装:

salt-master.noarch 0:2016.11.6-1.el7

作为依赖被安装:

PyYAML.x86\_64 0:3.11-1.el7

libsodium.x86\_64 0:1.0.5-1.el7

libtomcrypt.x86\_64 0:1.17-23.el7

libtommath.x86\_64 0:0.42.0-4.el7

libyaml.x86\_64 0:0.1.4-11.el7\_0

openpgm.x86\_64 0:5.2.122-2.el7

python-babel.noarch 0:0.9.6-8.el7

python-jinja2.noarch 0:2.7.2-2.el7

python-markupsafe.x86\_64 0:0.11-10.el7

python-tornado.x86\_64 0:4.2.1-1.el7

python-zmq.x86\_64 0:15.3.0-2.el7

python2-crypto.x86\_64 0:2.6.1-13.el7

python2-futures.noarch 0:3.0.5-1.el7

python2-msgpack.x86\_64 0:0.4.8-1.el7

salt.noarch 0:2016.11.6-1.el7

zeromq.x86\_64 0:4.1.4-5.el7

完毕！

[root@master ~]# systemctl enable salt-master.service

Created symlink from /etc/systemd/system/multi-user.target.wants/salt-master.service to /usr/lib/systemd/system/salt-master.service.

[root@node01 ~]# yum -y install salt-minion

已加载插件：langpacks, product-id, search-disabled-repos,

: subscription-manager

This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.

development | 4.1 kB 00:00

saltstack | 2.9 kB 00:00

(1/3): development/group\_gz | 136 kB 00:00

(2/3): saltstack/primary\_db | 15 kB 00:00

(3/3): development/primary\_db | 3.9 MB 00:00

正在解决依赖关系

--> 正在检查事务

---> 软件包 salt-minion.noarch.0.2016.11.6-1.el7 将被 安装

--> 正在处理依赖关系 salt = 2016.11.6-1.el7，它被软件包 salt-minion-2016.11.6-1.el7.noarch 需要

--> 正在检查事务

---> 软件包 salt.noarch.0.2016.11.6-1.el7 将被 安装

--> 正在处理依赖关系 python-msgpack > 0.3，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-tornado >= 4.2.1，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-futures >= 2.0，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-crypto >= 2.6.1，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-zmq，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-markupsafe，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 python-jinja2，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在处理依赖关系 PyYAML，它被软件包 salt-2016.11.6-1.el7.noarch 需要

--> 正在检查事务

---> 软件包 PyYAML.x86\_64.0.3.11-1.el7 将被 安装

--> 正在处理依赖关系 libyaml-0.so.2()(64bit)，它被软件包 PyYAML-3.11-1.el7.x86\_64 需要

---> 软件包 python-jinja2.noarch.0.2.7.2-2.el7 将被 安装

--> 正在处理依赖关系 python-babel >= 0.8，它被软件包 python-jinja2-2.7.2-2.el7.noarch 需要

---> 软件包 python-markupsafe.x86\_64.0.0.11-10.el7 将被 安装

---> 软件包 python-tornado.x86\_64.0.4.2.1-1.el7 将被 安装

---> 软件包 python-zmq.x86\_64.0.15.3.0-2.el7 将被 安装

--> 正在处理依赖关系 libzmq.so.5()(64bit)，它被软件包 python-zmq-15.3.0-2.el7.x86\_64 需要

---> 软件包 python2-crypto.x86\_64.0.2.6.1-13.el7 将被 安装

--> 正在处理依赖关系 libtomcrypt.so.0()(64bit)，它被软件包 python2-crypto-2.6.1-13.el7.x86\_64 需要

---> 软件包 python2-futures.noarch.0.3.0.5-1.el7 将被 安装

---> 软件包 python2-msgpack.x86\_64.0.0.4.8-1.el7 将被 安装

--> 正在检查事务

---> 软件包 libtomcrypt.x86\_64.0.1.17-23.el7 将被 安装

--> 正在处理依赖关系 libtommath >= 0.42.0，它被软件包 libtomcrypt-1.17-23.el7.x86\_64 需要

--> 正在处理依赖关系 libtommath.so.0()(64bit)，它被软件包 libtomcrypt-1.17-23.el7.x86\_64 需要

---> 软件包 libyaml.x86\_64.0.0.1.4-11.el7\_0 将被 安装

---> 软件包 python-babel.noarch.0.0.9.6-8.el7 将被 安装

---> 软件包 zeromq.x86\_64.0.4.1.4-5.el7 将被 安装

--> 正在处理依赖关系 libsodium.so.13()(64bit)，它被软件包 zeromq-4.1.4-5.el7.x86\_64 需要

--> 正在处理依赖关系 libpgm-5.2.so.0()(64bit)，它被软件包 zeromq-4.1.4-5.el7.x86\_64 需要

--> 正在检查事务

---> 软件包 libsodium.x86\_64.0.1.0.5-1.el7 将被 安装

---> 软件包 libtommath.x86\_64.0.0.42.0-4.el7 将被 安装

---> 软件包 openpgm.x86\_64.0.5.2.122-2.el7 将被 安装

--> 解决依赖关系完成

依赖关系解决

============================================================

Package 架构 版本 源 大小

============================================================

正在安装:

salt-minion noarch 2016.11.6-1.el7 saltstack 34 k

为依赖而安装:

PyYAML x86\_64 3.11-1.el7 saltstack 160 k

libsodium x86\_64 1.0.5-1.el7 saltstack 144 k

libtomcrypt x86\_64 1.17-23.el7 saltstack 224 k

libtommath x86\_64 0.42.0-4.el7 saltstack 35 k

libyaml x86\_64 0.1.4-11.el7\_0 development 55 k

openpgm x86\_64 5.2.122-2.el7 saltstack 171 k

python-babel noarch 0.9.6-8.el7 development 1.4 M

python-jinja2 noarch 2.7.2-2.el7 development 516 k

python-markupsafe x86\_64 0.11-10.el7 development 25 k

python-tornado x86\_64 4.2.1-1.el7 saltstack 636 k

python-zmq x86\_64 15.3.0-2.el7 saltstack 520 k

python2-crypto x86\_64 2.6.1-13.el7 saltstack 476 k

python2-futures noarch 3.0.5-1.el7 saltstack 26 k

python2-msgpack x86\_64 0.4.8-1.el7 saltstack 83 k

salt noarch 2016.11.6-1.el7 saltstack 7.1 M

zeromq x86\_64 4.1.4-5.el7 saltstack 556 k

事务概要

============================================================

安装 1 软件包 (+16 依赖软件包)

总下载量：12 M

安装大小：52 M

Downloading packages:

(1/17): PyYAML-3.11-1.el7.x86\_64.rpm | 160 kB 00:00

(2/17): libsodium-1.0.5-1.el7.x86\_64.r | 144 kB 00:00

(3/17): libtomcrypt-1.17-23.el7.x86\_64 | 224 kB 00:00

(4/17): libtommath-0.42.0-4.el7.x86\_64 | 35 kB 00:00

(5/17): openpgm-5.2.122-2.el7.x86\_64.r | 171 kB 00:00

(6/17): libyaml-0.1.4-11.el7\_0.x86\_64. | 55 kB 00:00

(7/17): python-babel-0.9.6-8.el7.noarc | 1.4 MB 00:00

(8/17): python-jinja2-2.7.2-2.el7.noar | 516 kB 00:00

(9/17): python-markupsafe-0.11-10.el7. | 25 kB 00:00

(10/17): python-tornado-4.2.1-1.el7.x8 | 636 kB 00:00

(11/17): python-zmq-15.3.0-2.el7.x86\_6 | 520 kB 00:00

(12/17): python2-futures-3.0.5-1.el7.n | 26 kB 00:00

(13/17): python2-crypto-2.6.1-13.el7.x | 476 kB 00:00

(14/17): python2-msgpack-0.4.8-1.el7.x | 83 kB 00:00

(15/17): salt-minion-2016.11.6-1.el7.n | 34 kB 00:00

(16/17): zeromq-4.1.4-5.el7.x86\_64.rpm | 556 kB 00:00

(17/17): salt-2016.11.6-1.el7.noarch.r | 7.1 MB 00:00

------------------------------------------------------------

总计 16 MB/s | 12 MB 00:00

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

正在安装 : python-markupsafe-0.11-10.el7.x86\_6 1/17

正在安装 : python2-msgpack-0.4.8-1.el7.x86\_64 2/17

正在安装 : python-tornado-4.2.1-1.el7.x86\_64 3/17

正在安装 : libsodium-1.0.5-1.el7.x86\_64 4/17

正在安装 : libtommath-0.42.0-4.el7.x86\_64 5/17

正在安装 : libtomcrypt-1.17-23.el7.x86\_64 6/17

正在安装 : python2-crypto-2.6.1-13.el7.x86\_64 7/17

正在安装 : openpgm-5.2.122-2.el7.x86\_64 8/17

正在安装 : zeromq-4.1.4-5.el7.x86\_64 9/17

正在安装 : python-zmq-15.3.0-2.el7.x86\_64 10/17

正在安装 : python-babel-0.9.6-8.el7.noarch 11/17

正在安装 : python-jinja2-2.7.2-2.el7.noarch 12/17

正在安装 : python2-futures-3.0.5-1.el7.noarch 13/17

正在安装 : libyaml-0.1.4-11.el7\_0.x86\_64 14/17

正在安装 : PyYAML-3.11-1.el7.x86\_64 15/17

正在安装 : salt-2016.11.6-1.el7.noarch 16/17

正在安装 : salt-minion-2016.11.6-1.el7.noarch 17/17

development/productid | 1.6 kB 00:00

验证中 : python-markupsafe-0.11-10.el7.x86\_6 1/17

验证中 : python-jinja2-2.7.2-2.el7.noarch 2/17

验证中 : libyaml-0.1.4-11.el7\_0.x86\_64 3/17

验证中 : python2-futures-3.0.5-1.el7.noarch 4/17

验证中 : python-babel-0.9.6-8.el7.noarch 5/17

验证中 : salt-2016.11.6-1.el7.noarch 6/17

验证中 : libtomcrypt-1.17-23.el7.x86\_64 7/17

验证中 : python-zmq-15.3.0-2.el7.x86\_64 8/17

验证中 : zeromq-4.1.4-5.el7.x86\_64 9/17

验证中 : openpgm-5.2.122-2.el7.x86\_64 10/17

验证中 : libtommath-0.42.0-4.el7.x86\_64 11/17

验证中 : libsodium-1.0.5-1.el7.x86\_64 12/17

验证中 : PyYAML-3.11-1.el7.x86\_64 13/17

验证中 : python-tornado-4.2.1-1.el7.x86\_64 14/17

验证中 : salt-minion-2016.11.6-1.el7.noarch 15/17

验证中 : python2-msgpack-0.4.8-1.el7.x86\_64 16/17

验证中 : python2-crypto-2.6.1-13.el7.x86\_64 17/17

已安装:

salt-minion.noarch 0:2016.11.6-1.el7

作为依赖被安装:

PyYAML.x86\_64 0:3.11-1.el7

libsodium.x86\_64 0:1.0.5-1.el7

libtomcrypt.x86\_64 0:1.17-23.el7

libtommath.x86\_64 0:0.42.0-4.el7

libyaml.x86\_64 0:0.1.4-11.el7\_0

openpgm.x86\_64 0:5.2.122-2.el7

python-babel.noarch 0:0.9.6-8.el7

python-jinja2.noarch 0:2.7.2-2.el7

python-markupsafe.x86\_64 0:0.11-10.el7

python-tornado.x86\_64 0:4.2.1-1.el7

python-zmq.x86\_64 0:15.3.0-2.el7

python2-crypto.x86\_64 0:2.6.1-13.el7

python2-futures.noarch 0:3.0.5-1.el7

python2-msgpack.x86\_64 0:0.4.8-1.el7

salt.noarch 0:2016.11.6-1.el7

zeromq.x86\_64 0:4.1.4-5.el7

完毕！

[root@node01 ~]# systemctl enable salt-minion.service

Created symlink from /etc/systemd/system/multi-user.target.wants/salt-minion.service to /usr/lib/systemd/system/salt-minion.service.

#node02、node03同步操作

##启动salt-master服务

[root@master ~]# systemctl start salt-master.service

[root@master ~]# netstat -anptu

Active Internet connections (servers and established)

Proto Recv-Q Send-Q Local Address Foreign Address State PID/Program name

tcp 0 0 0.0.0.0:111 0.0.0.0:\* LISTEN 1/systemd

tcp 0 0 0.0.0.0:22 0.0.0.0:\* LISTEN 805/sshd

tcp 0 0 0.0.0.0:4505 0.0.0.0:\* LISTEN 2037/python

tcp 0 0 127.0.0.1:25 0.0.0.0:\* LISTEN 897/master

tcp 0 0 0.0.0.0:4506 0.0.0.0:\* LISTEN 2043/python

tcp 0 0 192.168.4.10:22 192.168.4.254:46260 ESTABLISHED 1735/sshd: root@pts

tcp6 0 0 :::111 :::\* LISTEN 1/systemd

tcp6 0 0 :::22 :::\* LISTEN 805/sshd

tcp6 0 0 ::1:25 :::\* LISTEN 897/master

udp 0 0 127.0.0.1:323 0.0.0.0:\* 528/chronyd

udp6 0 0 ::1:323 :::\* 528/chronyd

#开启4505/4506端口

##启动minion服务

#注意 ，修改配置文件是master和id的冒号后边都有空格\*\*\*

[root@node01 ~]# sed -n '16p' /etc/salt/minion

master: master

[root@node01 ~]# sed -n '103p' /etc/salt/minion

id: node01

[root@node01 ~]# systemctl start salt-minion.service

#node02、node03同步操作

[root@master ~]# salt-key -L

Accepted Keys:

Denied Keys:

Unaccepted Keys:

node01

node02

node03

Rejected Keys:

##验证状态

##建立互信

[root@master ~]# salt-key -A -y

The following keys are going to be accepted:

Unaccepted Keys:

node01

node02

node03

Key for minion node01 accepted.

Key for minion node02 accepted.

Key for minion node03 accepted.

[root@master ~]# salt-key -L

Accepted Keys:

node01

node02

node03

Denied Keys:

Unaccepted Keys:

Rejected Keys:

#由unaccepted 变成accepted

##salt命令：salt ‘host’ function.method arguments

[root@master ~]# salt '\*' test.ping

node03:

True

node02:

True

node01:

True

[root@master ~]# salt '\*' cmd.run 'uname -a'

node01:

Linux node01.tedu.cn 3.10.0-514.el7.x86\_64 #1 SMP Wed Oct 19 11:24:13 EDT 2016 x86\_64 x86\_64 x86\_64 GNU/Linux

node03:

Linux node03.tedu.cn 3.10.0-514.el7.x86\_64 #1 SMP Wed Oct 19 11:24:13 EDT 2016 x86\_64 x86\_64 x86\_64 GNU/Linux

node02:

Linux node02.tedu.cn 3.10.0-514.el7.x86\_64 #1 SMP Wed Oct 19 11:24:13 EDT 2016 x86\_64 x86\_64 x86\_64 GNU/Linux

[root@master ~]# salt '\*' cmd.run 'id'

node02:

uid=0(root) gid=0(root) groups=0(root)

node03:

uid=0(root) gid=0(root) groups=0(root)

node01:

uid=0(root) gid=0(root) groups=0(root)

[root@master ~]# salt -E 'node0[12]' cmd.run 'uptime'

node02:

00:35:48 up 1:44, 1 user, load average: 0.00, 0.01, 0.05

node01:

00:35:48 up 1:49, 1 user, load average: 0.00, 0.01, 0.05

[root@master ~]# salt -L "node01,node03" cmd.run 'hostname'

node01:

node01.tedu.cn

node03:

node03.tedu.cn

#给客户端分组

#通过ip/掩码的方式，掩码用子网划分的方式计算，11/12/13/33用27或28隔开，命令是salt -S

[root@master ~]# cat /etc/salt/master | grep -v ^# | grep -v ^$

nodegroups:

group1: 'L@node01, node03'

[root@master ~]# systemctl restart salt-master.service

[root@master ~]# salt -N 'group1' test.ping

node03:

True

node01:

True

##分发文件

[root@master ~]# mkdir -pv /srv/salt/files

mkdir: 已创建目录 "/srv/salt"

mkdir: 已创建目录 "/srv/salt/files"

[root@master ~]# cd /srv/salt/files/

[root@master files]# seq 9 > test.txt

[root@master files]# cat test.txt

1

2

3

4

5

6

7

8

9

[root@master files]# salt '\*' cp.get\_file salt://files/test.txt /tmp/test.txt

node02:

/tmp/test.txt

node03:

/tmp/test.txt

node01:

/tmp/test.txt

[root@master files]# salt '\*' cmd.run 'ls /tmp'

node02:

test.txt

node01:

test.txt

node03:

test.txt

[root@master files]# md5sum test.txt

22e400a2ddbb013acf2a5852d6ab69fc test.txt

[root@master files]# salt '\*' cmd.run 'md5sum /tmp/test.txt'

node01:

22e400a2ddbb013acf2a5852d6ab69fc /tmp/test.txt

node03:

22e400a2ddbb013acf2a5852d6ab69fc /tmp/test.txt

node02:

22e400a2ddbb013acf2a5852d6ab69fc /tmp/test.txt

#校验分发文件的md5值，确认为同一文件

##列出所有可用模块

[root@master files]# salt 'node01' sys.list\_modules

node01:

- acl

- aliases

- alternatives

- archive

- artifactory

- at

- augeas

- beacons

- bigip

- blockdev

- bridge

- btrfs

- buildout

- cloud

- cmd

- composer

- config

- consul

- container\_resource

- cp

- cron

- data

- defaults

- devmap

- dig

- disk

- django

- dnsmasq

- dnsutil

- drbd

- elasticsearch

- environ

- etcd

- ethtool

- event

- extfs

- file

- firewalld

- gem

- genesis

- gnome

- grains

- group

- hashutil

- hipchat

- hosts

- http

- img

- incron

- infoblox

- ini

- inspector

- introspect

- ip

- ipset

- iptables

- jboss7

- jboss7\_cli

- k8s

- key

- keyboard

- kmod

- locale

- locate

- logrotate

- lowpkg

- lvm

- match

- mine

- minion

- modjk

- mount

- nagios\_rpc

- network

- nova

- nspawn

- openscap

- openstack\_config

- pagerduty

- pagerduty\_util

- pam

- partition

- pillar

- pip

- pkg

- pkg\_resource

- postfix

- publish

- pushover

- pyenv

- quota

- raid

- random

- random\_org

- rbenv

- rest\_sample\_utils

- ret

- rsync

- rvm

- s3

- s6

- salt\_proxy

- saltutil

- schedule

- scsi

- sdb

- seed

- serverdensity\_device

- service

- shadow

- slack

- slsutil

- smbios

- smtp

- sqlite3

- ssh

- state

- status

- supervisord

- sys

- sysctl

- sysfs

- syslog\_ng

- system

- telemetry

- temp

- test

- timezone

- tls

- tuned

- udev

- uptime

- user

- vbox\_guest

- virtualenv

- x509

- xfs

- zenoss

#查看某一模块的方法

[root@master files]# salt 'node01' sys.list\_functions cp

node01:

- cp.cache\_dir

- cp.cache\_file

- cp.cache\_files

- cp.cache\_local\_file

- cp.cache\_master

- cp.get\_dir

- cp.get\_file

- cp.get\_file\_str

- cp.get\_template

- cp.get\_url

- cp.hash\_file

- cp.is\_cached

- cp.list\_master

- cp.list\_master\_dirs

- cp.list\_master\_symlinks

- cp.list\_minion

- cp.list\_states

- cp.push

- cp.push\_dir

- cp.recv

- cp.stat\_file

#查看帮助

[root@master files]# salt 'node01' sys.doc cmd.run

cmd.run:

Execute the passed command and return the output as a string

Note that ``env`` represents the environment variables for the command, and

should be formatted as a dict, or a YAML string which resolves to a dict.

:param str cmd: The command to run. ex: ``ls -lart /home``

:param str cwd: The current working directory to execute the command in,

defaults to ``/root`` (``C:\`` in windows)

:param str stdin: A string of standard input can be specified for the

command to be run using the ``stdin`` parameter. This can be useful in cases

where sensitive information must be read from standard input.

:param str runas: User to run script as. If running on a Windows minion you

must also pass a password.

:param str password: Windows only. Required when specifying ``runas``. This

parameter will be ignored on non-Windows platforms.

New in version 2016.3.0

:param str shell: Shell to execute under. Defaults to the system default

shell.

:param bool python\_shell: If ``False``, let python handle the positional

arguments. Set to ``True`` to use shell features, such as pipes or

redirection.

:param bool bg: If ``True``, run command in background and do not await or

deliver it's results

New in version 2016.3.0

:param list env: A list of environment variables to be set prior to

execution.

Example:

salt://scripts/foo.sh:

cmd.script:

- env:

- BATCH: 'yes'

Warning:

The above illustrates a common PyYAML pitfall, that \*\*yes\*\*,

\*\*no\*\*, \*\*on\*\*, \*\*off\*\*, \*\*true\*\*, and \*\*false\*\* are all loaded as

boolean ``True`` and ``False`` values, and must be enclosed in

quotes to be used as strings. More info on this (and other) PyYAML

idiosyncrasies can be found :ref:`here <yaml-idiosyncrasies>`.

Variables as values are not evaluated. So $PATH in the following

example is a literal '$PATH':

salt://scripts/bar.sh:

cmd.script:

- env: "PATH=/some/path:$PATH"

One can still use the existing $PATH by using a bit of Jinja:

{% set current\_path = salt['environ.get']('PATH', '/bin:/usr/bin') %}

mycommand:

cmd.run:

- name: ls -l /

- env:

- PATH: {{ [current\_path, '/my/special/bin']|join(':') }}

:param bool clean\_env: Attempt to clean out all other shell environment

variables and set only those provided in the 'env' argument to this

function.

:param str template: If this setting is applied then the named templating

engine will be used to render the downloaded file. Currently jinja, mako,

and wempy are supported

:param bool rstrip: Strip all whitespace off the end of output before it is

returned.

:param str umask: The umask (in octal) to use when running the command.

:param str output\_loglevel: Control the loglevel at which the output from

the command is logged. Note that the command being run will still be logged

(loglevel: DEBUG) regardless, unless ``quiet`` is used for this value.

:param int timeout: A timeout in seconds for the executed process to return.

:param bool use\_vt: Use VT utils (saltstack) to stream the command output

more interactively to the console and the logs. This is experimental.

:param bool encoded\_cmd: Specify if the supplied command is encoded.

Only applies to shell 'powershell'.

Warning:

This function does not process commands through a shell

unless the python\_shell flag is set to True. This means that any

shell-specific functionality such as 'echo' or the use of pipes,

redirection or &&, should either be migrated to cmd.shell or

have the python\_shell=True flag set here.

The use of python\_shell=True means that the shell will accept \_any\_ input

including potentially malicious commands such as 'good\_command;rm -rf /'.

Be absolutely certain that you have sanitized your input prior to using

python\_shell=True

CLI Example:

salt '\*' cmd.run "ls -l | awk '/foo/{print \\$2}'"

The template arg can be set to 'jinja' or another supported template

engine to render the command arguments before execution.

For example:

salt '\*' cmd.run template=jinja "ls -l /tmp/{{grains.id}} | awk '/foo/{print \\$2}'"

Specify an alternate shell with the shell parameter:

salt '\*' cmd.run "Get-ChildItem C:\\ " shell='powershell'

A string of standard input can be specified for the command to be run using

the ``stdin`` parameter. This can be useful in cases where sensitive

information must be read from standard input.:

salt '\*' cmd.run "grep f" stdin='one\\ntwo\\nthree\\nfour\\nfive\\n'

If an equal sign (``=``) appears in an argument to a Salt command it is

interpreted as a keyword argument in the format ``key=val``. That

processing can be bypassed in order to pass an equal sign through to the

remote shell command by manually specifying the kwarg:

salt '\*' cmd.run cmd='sed -e s/=/:/g'

[root@master files]# salt 'node02' file.copy /etc/passwd /tmp/passwd

node02:

True

[root@master files]# salt 'node02' cmd.run 'ls /tmp'

node02:

passwd

test.txt

#测试file.copy方法

[root@master files]# salt 'node02' cmd.run 'cp /tmp/test.txt /tmp/test.sh'

node02:

[root@master files]# salt 'node02' cmd.run 'ls /tmp'node02:

passwd

test.sh

test.txt

#file.copy等同于这种方法，但是多了一个返回值

[root@master files]# salt 'node02' file.copy /etc/selinux /tmp/aaa recurse=True

node02:

True

[root@master files]# salt 'node02' cmd.run 'ls /tmp'node02:

aaa

passwd

test.sh

test.txt

[root@node02 ~]# ls /tmp/aaa/

config final semanage.conf targeted tmp

#拷贝目录需要多加一个参数

##grains组件

#YAML规则，类似于python，以缩进为风格，严禁用tab键！！！

#YAML键值对对应python的字典，用：分隔，注意：后边有一个空格！！！

#YAML项目对应python的列表中的元素，用-表示，后边有一个空格！！！

#查看node01的grains信息

[root@master files]# salt 'node01' grains.items

node01:

----------

SSDs:

biosreleasedate:

01/01/2011

biosversion:

0.5.1

cpu\_flags:

- fpu

- de

- pse

- tsc

- msr

- pae

- mce

- cx8

- apic

- sep

- mtrr

- pge

- mca

- cmov

- pat

- pse36

- clflush

- mmx

- fxsr

- sse

- sse2

- syscall

- nx

- rdtscp

- lm

- constant\_tsc

- rep\_good

- nopl

- eagerfpu

- pni

- pclmulqdq

- ssse3

- fma

- cx16

- pcid

- sse4\_1

- sse4\_2

- x2apic

- movbe

- popcnt

- tsc\_deadline\_timer

- aes

- xsave

- avx

- hypervisor

- lahf\_lm

- 3dnowprefetch

- fsgsbase

- bmi1

- avx2

- smep

- bmi2

- invpcid

- rdseed

- adx

- smap

- xsaveopt

cpu\_model:

Intel Core Processor (Broadwell)

cpuarch:

x86\_64

disks:

- sda

- sr0

dns:

----------

domain:

ip4\_nameservers:

ip6\_nameservers:

nameservers:

options:

search:

- tedu.cn

sortlist:

domain:

tedu.cn

fqdn:

node01.tedu.cn

fqdn\_ip4:

- 192.168.4.11

fqdn\_ip6:

- fe80::ce1c:3066:be33:7278

gid:

0

gpus:

|\_

----------

model:

QXL paravirtual graphic card

vendor:

unknown

groupname:

root

host:

node01

hwaddr\_interfaces:

----------

eth0:

52:54:00:be:aa:02

eth1:

52:54:00:31:bb:02

eth2:

52:54:00:b9:cc:02

eth3:

52:54:00:4c:dd:02

lo:

00:00:00:00:00:00

id:

node01

init:

systemd

ip4\_interfaces:

----------

eth0:

- 192.168.4.11

eth1:

eth2:

eth3:

lo:

- 127.0.0.1

ip6\_interfaces:

----------

eth0:

- fe80::ce1c:3066:be33:7278

eth1:

eth2:

eth3:

lo:

- ::1

ip\_interfaces:

----------

eth0:

- 192.168.4.11

- fe80::ce1c:3066:be33:7278

eth1:

eth2:

eth3:

lo:

- 127.0.0.1

- ::1

ipv4:

- 127.0.0.1

- 192.168.4.11

ipv6:

- ::1

- fe80::ce1c:3066:be33:7278

kernel:

Linux

kernelrelease:

3.10.0-514.el7.x86\_64

locale\_info:

----------

defaultencoding:

UTF-8

defaultlanguage:

zh\_CN

detectedencoding:

UTF-8

localhost:

node01.tedu.cn

lsb\_distrib\_codename:

Red Hat Enterprise Linux Server 7.3 (Maipo)

lsb\_distrib\_id:

Red Hat Enterprise Linux Server

lsb\_distrib\_release:

7.3

machine\_id:

ecca5c21aff04da4897b8dbcbb1bca60

manufacturer:

Red Hat

master:

master

mdadm:

mem\_total:

992

nodename:

node01.tedu.cn

num\_cpus:

1

num\_gpus:

1

os:

RedHat

os\_family:

RedHat

osarch:

x86\_64

oscodename:

Maipo

osfinger:

Red Hat Enterprise Linux Server-7

osfullname:

Red Hat Enterprise Linux Server

osmajorrelease:

7

osrelease:

7.3

osrelease\_info:

- 7

- 3

path:

/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/bin:/sbin

pid:

1729

productname:

KVM

ps:

ps -efH

pythonexecutable:

/usr/bin/python

pythonpath:

- /usr/bin

- /usr/lib64/python27.zip

- /usr/lib64/python2.7

- /usr/lib64/python2.7/plat-linux2

- /usr/lib64/python2.7/lib-tk

- /usr/lib64/python2.7/lib-old

- /usr/lib64/python2.7/lib-dynload

- /usr/lib64/python2.7/site-packages

- /usr/lib64/python2.7/site-packages/gtk-2.0

- /usr/lib/python2.7/site-packages

pythonversion:

- 2

- 7

- 5

- final

- 0

saltpath:

/usr/lib/python2.7/site-packages/salt

saltversion:

2016.11.6

saltversioninfo:

- 2016

- 11

- 6

- 0

selinux:

----------

enabled:

False

enforced:

Disabled

server\_id:

711731267

shell:

/bin/sh

systemd:

----------

features:

+PAM +AUDIT +SELINUX +IMA -APPARMOR +SMACK +SYSVINIT +UTMP +LIBCRYPTSETUP +GCRYPT +GNUTLS +ACL +XZ -LZ4 -SECCOMP +BLKID +ELFUTILS +KMOD +IDN

version:

219

uid:

0

username:

root

uuid:

6af72889-a11e-4ca4-9e3e-1d135d347391

virtual:

kvm

zmqversion:

4.1.4

[root@master files]# salt '\*' grains.item fqdn

node03:

----------

fqdn:

node03.tedu.cn

node01:

----------

fqdn:

node01.tedu.cn

node02:

----------

fqdn:

node02.tedu.cn

[root@master files]# salt '\*' grains.item os

node02:

----------

os:

RedHat

node01:

----------

os:

RedHat

node03:

----------

os:

RedHat

[root@master files]# salt -G 'os:RedHat' test.ping

node01:

True

node02:

True

node03:

True

##定义grains角色

[root@node01 ~]# cat /etc/salt/minion | grep -v ^# | grep -v ^$

master: master

id: node01

grains:

roles:

- webserver

- dbserver

[root@node02 ~]# cat /etc/salt/minion | grep -v ^# | grep -v ^$

master: master

id: node02

grains:

roles:

- webserver

[root@node03 ~]# cat /etc/salt/minion | grep -v ^# | grep -v ^$

master: master

id: node03

grains:

roles:

- dbserver

#修改完配置文件后重启minion服务

[root@master files]# salt '\*' grains.item roles

node02:

----------

roles:

- webserver

node03:

----------

roles:

- dbserver

node01:

----------

roles:

- webserver

- dbserver

#获取节点roles信息

[root@master files]# salt -G 'roles:webserver' test.ping

node01:

True

node02:

True

[root@master files]# salt -G 'roles:dbserver' test.ping

node01:

True

node03:

True

#按grains类型从多维度进行分组

##pillar应用

[root@master ~]# vim /etc/salt/master

768 pillar\_roots:

769 base:

770 - /srv/pillar

[root@master ~]# systemctl restart salt-master.service

[root@master ~]# mkdir /srv/pillar

[root@master ~]# cd /srv/pillar/

[root@master pillar]# salt '\*' pillar.items

node02:

----------

node03:

----------

node01:

----------

#pillar数据需要管理员自定义，文件采用YAML格式，配置文件有固定名称，top.sls，top.sls中定义项目，搜索方式为项目名.sls或项目名的目录下的init.sls.。

[root@master pillar]# cat top.sls

base: #环境

'node01': #生效客户端

- data #数据名

[root@master pillar]# cat data.sls

appname: website #客户端标签

flow: #私有数据

maxcoon: 5000

maxmem: 4G

[root@master pillar]# salt '\*' saltutil.refresh\_pillar #下发数据

node01:

True

node03:

True

node02:

True

[root@master pillar]# salt '\*' pillar.items #查看pillar信息

node01:

----------

appname:

website

flow:

----------

maxcoon:

5000

maxmem:

4G

node02:

----------

node03:

----------

[root@master pillar]# salt '\*' pillar.item appname

node01:

----------

appname:

website

node03:

----------

appname:

node02:

----------

appname:

[root@master pillar]# salt -I 'appname:website' test.ping

node01:

True

[root@master pillar]# mkdir user

[root@master pillar]# vim user/init.sls

[root@master pillar]# vim users.sls

[root@master pillar]# cat users.sls

users:

zhangsan: 4000

lisi: 2001

[root@master pillar]# cat user/init.sls

users:

zhangsan: 4000

wangwu: 2002

[root@master pillar]# salt '\*' saltutil.refresh\_pillar

node01:

True

node02:

True

node03:

True

[root@master pillar]# salt '\*' pillar.items

node02:

----------

users:

----------

lisi:

2001

zhangsan:

4000

node03:

----------

users:

----------

wangwu:

2002

zhangsan:

4000

node01:

----------

appname:

website

flow:

----------

maxcoon:

5000

maxmem:

4G

[root@master pillar]# salt -I "users:zhangsan" test.ping

node03:

True

node02:

True

[root@master pillar]# salt -I 'users:zhangsan' user.add zhangsan 4000 10

node03:

True

node02:

True

[root@master pillar]# salt '\*' cmd.run 'id zhangsan'

node02:

uid=4000(zhangsan) gid=10(wheel) groups=10(wheel)

node01:

id: zhangsan: no such user

node03:

uid=4000(zhangsan) gid=10(wheel) groups=10(wheel)

ERROR: Minions returned with non-zero exit code #报错没有问题，不是所有minion都有zhangsan用户

##pillar用于存储动态的客户端信息，便于动态数据管理

Jinja基于Python的模板引擎—一个模板文件，引用变量生成配置文件

States是saltstack中的配置语言，采用YAML格式。

[root@master pillar]# salt 'node01' sys.list\_state\_modules #查看states模块

[root@master pillar]# salt 'node01' sys.list\_state\_functions #查看status方法

[root@master pillar]# salt 'node01' sys.state\_doc file.copy #查看states方法帮助

##配置states

[root@master ~]# vim /etc/salt/master

file\_roots:

base:

- /srv/salt/base

dev:

- /srv/salt/dev

prod:

- /srv/salt/prod

[root@master ~]# systemctl restart salt-master.service

[root@master salt]# mkdir base dev prod

[root@master salt]# ls

base dev files prod

#语法格式与pillar完全一致

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- dns\_file

[root@master base]# cat dns\_file.sls

resolv\_conf: #标签

file.managed: #方法

- name: /etc/resolv.conf #目的、目标路径

- source: salt://files/resolv.conf #源、源文件（以这个文件为模板进行改动，不是上传）

- user: root #属主

- group: root #属组

- mode: 644 #权限

[root@master base]# mkdir files

[root@master base]# cat files/resolv.conf

nameserver 8.8.8.8

nameserver 8.8.4.4

[root@master base]# salt '\*' cmd.run 'cat /etc/resolv.conf'

node03:

# Generated by NetworkManager

search tedu.cn

node01:

# Generated by NetworkManager

search tedu.cn

node02:

# Generated by NetworkManager

search tedu.cn

[root@master files]# salt '\*' state.highstate saltenv=base test=True #测试执行

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: None

Comment: The file /etc/resolv.conf is set to be changed

Started: 23:55:27.295261

Duration: 138.64 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

-# Generated by NetworkManager

-search tedu.cn

+nameserver 8.8.8.8

+nameserver 4.4.4.4

Summary for node02

------------

Succeeded: 1 (unchanged=1, changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 138.640 ms

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: None

Comment: The file /etc/resolv.conf is set to be changed

Started: 23:55:26.945451

Duration: 178.061 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

-# Generated by NetworkManager

-search tedu.cn

+nameserver 8.8.8.8

+nameserver 4.4.4.4

Summary for node03

------------

Succeeded: 1 (unchanged=1, changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 178.061 ms

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: None

Comment: The file /etc/resolv.conf is set to be changed

Started: 23:55:28.362040

Duration: 130.448 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

-# Generated by NetworkManager

-search tedu.cn

+nameserver 8.8.8.8

+nameserver 4.4.4.4

Summary for node01

------------

Succeeded: 1 (unchanged=1, changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 130.448 ms

[root@master base]# salt '\*' state.highstate saltenv=base test=False #执行

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf updated

Started: 23:58:06.154530

Duration: 183.379 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

-# Generated by NetworkManager

-search tedu.cn

+nameserver 8.8.8.8

+nameserver 4.4.4.4

Summary for node03

------------

Succeeded: 1 (changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 183.379 ms

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf updated

Started: 23:58:07.087847

Duration: 237.528 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

-# Generated by NetworkManager

-search tedu.cn

+nameserver 8.8.8.8

+nameserver 4.4.4.4

Summary for node01

------------

Succeeded: 1 (changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 237.528 ms

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf updated

Started: 23:58:06.725235

Duration: 302.33 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

-# Generated by NetworkManager

-search tedu.cn

+nameserver 8.8.8.8

+nameserver 4.4.4.4

Summary for node02

------------

Succeeded: 1 (changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 302.330 ms

[root@master base]# salt '\*' cmd.run 'cat /etc/resolv.conf' #验证结果

node02:

nameserver 8.8.8.8

nameserver 4.4.4.4

node01:

nameserver 8.8.8.8

nameserver 4.4.4.4

node03:

nameserver 8.8.8.8

nameserver 4.4.4.4

##使用jinja模板

[root@master base]# cat dns\_file.sls

resolv\_conf:

file.managed:

- name: /etc/resolv.conf

- source: salt://files/resolv.conf

- user: root

- group: root

- mode: 644

- template: jinja

- defaults:

DNS\_IP: 192.168.4.254

[root@master base]# cat files/resolv.conf

nameserver 8.8.8.8

nameserver {{DNS\_IP}}

[root@master base]# salt '\*' state.highstate saltenv=base test=False

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf updated

Started: 10:45:39.344033

Duration: 177.112 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

nameserver 8.8.8.8

-nameserver 4.4.4.4

+nameserver 192.168.4.254

Summary for node02

------------

Succeeded: 1 (changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 177.112 ms

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf updated

Started: 10:45:40.215242

Duration: 204.236 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

nameserver 8.8.8.8

-nameserver 4.4.4.4

+nameserver 192.168.4.254

Summary for node01

------------

Succeeded: 1 (changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 204.236 ms

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf updated

Started: 10:45:40.760301

Duration: 222.057 ms

Changes:

----------

diff:

---

+++

@@ -1,2 +1,2 @@

nameserver 8.8.8.8

-nameserver 4.4.4.4

+nameserver 192.168.4.254

Summary for node03

------------

Succeeded: 1 (changed=1)

Failed: 0

------------

Total states run: 1

Total run time: 222.057 ms

[root@master base]# salt '\*' cmd.run 'cat /etc/resolv.conf'

node03:

nameserver 8.8.8.8

nameserver 192.168.4.254

node01:

nameserver 8.8.8.8

nameserver 192.168.4.254

node02:

nameserver 8.8.8.8

nameserver 192.168.4.254

#向文件追加内容

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- dns\_file

'node01':

- issue

[root@master base]# cat issue.sls

issue\_file:

file.append:

- name: /etc/issue

- test:

- Red Hat Enterprise Linux 7

- Tedu Ltd Server

[root@master base]# salt '\*' state.highstate saltenv=base test=False

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:11:02.010984

Duration: 138.809 ms

Changes:

Summary for node03

------------

Succeeded: 1

Failed: 0

------------

Total states run: 1

Total run time: 138.809 ms

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:11:01.129352

Duration: 227.59 ms

Changes:

Summary for node02

------------

Succeeded: 1

Failed: 0

------------

Total states run: 1

Total run time: 227.590 ms

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:11:02.083260

Duration: 101.054 ms

Changes:

----------

ID: issue\_file

Function: file.append

Name: /etc/issue

Result: True

Comment: Appended 2 lines

Started: 11:11:02.184546

Duration: 4.312 ms

Changes:

----------

diff:

---

+++

@@ -1,3 +1,5 @@

\S

Kernel \r on an \m

+Red Hat Enterprise Linux 7

+Tedu Ltd Server

Summary for node01

------------

Succeeded: 2 (changed=1)

Failed: 0

------------

Total states run: 2

Total run time: 105.366 ms

[root@master base]# salt '\*' cmd.run 'cat /etc/issue' #验证结果

node03:

\S

Kernel \r on an \m

node02:

\S

Kernel \r on an \m

node01:

\S

Kernel \r on an \m

Red Hat Enterprise Linux 7

Tedu Ltd Server

#创建目录

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- dns\_file

'node01':

- issue

'node02':

- rpm\_pkgs

[root@master base]# cat rpm\_pkgs.sls

rpms:

file.directory:

- name: /opt/rpm\_pkgs

- user: root

- group: root

- dir\_mode: 755

- file\_mode: 644

[root@master base]# salt '\*' state.highstate saltenv=base test=False

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:19:59.607120

Duration: 107.204 ms

Changes:

----------

ID: issue\_file

Function: file.append

Name: /etc/issue

Result: True

Comment: File /etc/issue is in correct state

Started: 11:19:59.714475

Duration: 5.232 ms

Changes:

Summary for node01

------------

Succeeded: 2

Failed: 0

------------

Total states run: 2

Total run time: 112.436 ms

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:19:59.937367

Duration: 197.632 ms

Changes:

Summary for node03

------------

Succeeded: 1

Failed: 0

------------

Total states run: 1

Total run time: 197.632 ms

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:19:59.297510

Duration: 122.14 ms

Changes:

----------

ID: rpms

Function: file.directory

Name: /opt/rpm\_pkgs

Result: True

Comment: Directory /opt/rpm\_pkgs updated

Started: 11:19:59.419825

Duration: 1.319 ms

Changes:

----------

/opt/rpm\_pkgs:

New Dir

Summary for node02

------------

Succeeded: 2 (changed=1)

Failed: 0

------------

Total states run: 2

Total run time: 123.459 ms

[root@master base]# salt '\*' cmd.run 'ls /opt/' #验证结果

node01:

rh

node03:

rh

node02:

rh

rpm\_pkgs

[root@node02 ~]# stat /opt/rpm\_pkgs/

文件："/opt/rpm\_pkgs/"

大小：6 块：0 IO 块：4096 目录

设备：803h/2051d Inode：8419276 硬链接：2

权限：(0755/drwxr-xr-x) Uid：( 0/ root) Gid：( 0/ root)

最近访问：2017-12-26 11:19:59.419394607 +0800

最近更改：2017-12-26 11:19:59.419394607 +0800

最近改动：2017-12-26 11:19:59.419394607 +0800

创建时间：-

#安装软件包

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- dns\_file

- add\_socat

'node01':

- issue

'node02':

- rpm\_pkgs

[root@master base]# cat add\_socat.sls

add\_socat:

pkg.installed:

- name: socat

[root@master base]# salt '\*' state.highstate saltenv=base test=False

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:39:33.277538

Duration: 207.774 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: The following packages were installed/updated: socat

Started: 11:39:34.581024

Duration: 6833.507 ms

Changes:

----------

socat:

----------

new:

1.7.2.2-5.el7

old:

----------

ID: issue\_file

Function: file.append

Name: /etc/issue

Result: True

Comment: File /etc/issue is in correct state

Started: 11:39:41.428664

Duration: 292.468 ms

Changes:

Summary for node01

------------

Succeeded: 3 (changed=1)

Failed: 0

------------

Total states run: 3

Total run time: 7.334 s

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:39:33.538890

Duration: 186.806 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: The following packages were installed/updated: socat

Started: 11:39:35.781120

Duration: 6932.128 ms

Changes:

----------

socat:

----------

new:

1.7.2.2-5.el7

old:

Summary for node03

------------

Succeeded: 2 (changed=1)

Failed: 0

------------

Total states run: 2

Total run time: 7.119 s

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 11:39:32.852428

Duration: 129.414 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: The following packages were installed/updated: socat

Started: 11:39:34.348540

Duration: 7512.196 ms

Changes:

----------

socat:

----------

new:

1.7.2.2-5.el7

old:

----------

ID: rpms

Function: file.directory

Name: /opt/rpm\_pkgs

Result: True

Comment: Directory /opt/rpm\_pkgs is in the correct state

Started: 11:39:41.864044

Duration: 124.191 ms

Changes:

Summary for node02

------------

Succeeded: 3 (changed=1)

Failed: 0

------------

Total states run: 3

Total run time: 7.766 s

[root@master base]# salt '\*' cmd.run 'rpm -qa | grep socat' #验证结果

node02:

socat-1.7.2.2-5.el7.x86\_64

node03:

socat-1.7.2.2-5.el7.x86\_64

node01:

socat-1.7.2.2-5.el7.x86\_64

##cmd模块

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- dns\_file

- add\_socat

- exec\_date

'node01':

- issue

'node02':

- rpm\_pkgs

[root@master base]# cat exec\_date.sls

date +%F\_%T >> /tmp/a.log:

cmd.run

[root@master base]# salt '\*' state.highstate statenv=base test=False

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 14:29:43.500324

Duration: 133.364 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 14:29:44.593274

Duration: 883.366 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 14:29:45.478679

Duration: 13.937 ms

Changes:

----------

pid:

2368

retcode:

0

stderr:

stdout:

Summary for node03

------------

Succeeded: 3 (changed=1)

Failed: 0

------------

Total states run: 3

Total run time: 1.031 s

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 14:29:43.191817

Duration: 204.767 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 14:29:45.134044

Duration: 771.153 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 14:29:45.906663

Duration: 9.022 ms

Changes:

----------

pid:

2424

retcode:

0

stderr:

stdout:

----------

ID: issue\_file

Function: file.append

Name: /etc/issue

Result: True

Comment: File /etc/issue is in correct state

Started: 14:29:45.915914

Duration: 3.936 ms

Changes:

Summary for node01

------------

Succeeded: 4 (changed=1)

Failed: 0

------------

Total states run: 4

Total run time: 988.878 ms

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 14:29:42.627943

Duration: 267.296 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 14:29:44.659749

Duration: 737.34 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 14:29:45.398364

Duration: 9.534 ms

Changes:

----------

pid:

2398

retcode:

0

stderr:

stdout:

----------

ID: rpms

Function: file.directory

Name: /opt/rpm\_pkgs

Result: True

Comment: Directory /opt/rpm\_pkgs is in the correct state

Started: 14:29:45.408081

Duration: 0.956 ms

Changes:

Summary for node02

------------

Succeeded: 4 (changed=1)

Failed: 0

------------

Total states run: 4

Total run time: 1.015 s

[root@master base]# salt '\*' cmd.run 'cat /tmp/a.log'

node03:

2017-12-26\_14:29:45

node01:

2017-12-26\_14:29:45

node02:

2017-12-26\_14:29:45

##执行判断条件--unless条件返回为假的时候执行命令

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- dns\_file

- add\_socat

- exec\_date

- add\_user

'node01':

- issue

'node02':

- rpm\_pkgs

[root@master base]# cat add\_user.sls

useradd -u 3000 -g 10 zhangsan:

cmd.run:

- unless: id zhangsan

[root@master base]# salt '\*' state.highstate statenv=base test=False

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 15:08:10.668641

Duration: 219.709 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 15:08:12.240937

Duration: 970.614 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 15:08:13.213303

Duration: 10.943 ms

Changes:

----------

pid:

2630

retcode:

0

stderr:

stdout:

----------

ID: useradd -u 3000 -g 10 zhangsan

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 15:08:13.224714

Duration: 10.704 ms

Changes:

Summary for node03

------------

Succeeded: 4 (changed=1)

Failed: 0

------------

Total states run: 4

Total run time: 1.212 s

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 15:08:10.486015

Duration: 156.717 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 15:08:11.527248

Duration: 1283.569 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 15:08:12.812552

Duration: 22.051 ms

Changes:

----------

pid:

2684

retcode:

0

stderr:

stdout:

----------

ID: useradd -u 3000 -g 10 zhangsan

Function: cmd.run

Result: True

Comment: Command "useradd -u 3000 -g 10 zhangsan" run

Started: 15:08:12.834850

Duration: 99.678 ms

Changes:

----------

pid:

2687

retcode:

0

stderr:

stdout:

----------

ID: issue\_file

Function: file.append

Name: /etc/issue

Result: True

Comment: File /etc/issue is in correct state

Started: 15:08:12.934896

Duration: 3.985 ms

Changes:

Summary for node01

------------

Succeeded: 5 (changed=2)

Failed: 0

------------

Total states run: 5

Total run time: 1.566 s

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 15:08:10.107042

Duration: 179.88 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 15:08:11.953154

Duration: 820.523 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 15:08:12.774879

Duration: 8.337 ms

Changes:

----------

pid:

2657

retcode:

0

stderr:

stdout:

----------

ID: useradd -u 3000 -g 10 zhangsan

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 15:08:12.783411

Duration: 7.963 ms

Changes:

----------

ID: rpms

Function: file.directory

Name: /opt/rpm\_pkgs

Result: True

Comment: Directory /opt/rpm\_pkgs is in the correct state

Started: 15:08:12.791625

Duration: 0.864 ms

Changes:

Summary for node02

------------

Succeeded: 5 (changed=1)

Failed: 0

------------

Total states run: 5

Total run time: 1.018 s

[root@master base]# salt '\*' cmd.run 'id zhangsan'

node01:

uid=3000(zhangsan) gid=10(wheel) groups=10(wheel)

node02:

uid=4000(zhangsan) gid=10(wheel) groups=10(wheel)

node03:

uid=4000(zhangsan) gid=10(wheel) groups=10(wheel)

#执行判断条件--onlyif返回条件为真时执行命令

[root@master base]# vim top.sls

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- dns\_file

- add\_socat

- exec\_date

- add\_user

- del\_user

'node01':

- issue

'node02':

- rpm\_pkgs

[root@master base]# cat del\_user.sls

userdel -r zhangsan:

cmd.run:

- onlyif: id zhangsan

[root@master base]# salt '\*' state.highstate statenv=base test=False

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 15:14:31.176931

Duration: 120.162 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 15:14:32.619804

Duration: 984.428 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 15:14:33.605585

Duration: 10.459 ms

Changes:

----------

pid:

2869

retcode:

0

stderr:

stdout:

----------

ID: useradd -u 3000 -g 10 zhangsan

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 15:14:33.616274

Duration: 9.847 ms

Changes:

----------

ID: userdel -r zhangsan

Function: cmd.run

Result: True

Comment: Command "userdel -r zhangsan" run

Started: 15:14:33.626313

Duration: 85.154 ms

Changes:

----------

pid:

2873

retcode:

0

stderr:

stdout:

----------

ID: rpms

Function: file.directory

Name: /opt/rpm\_pkgs

Result: True

Comment: Directory /opt/rpm\_pkgs is in the correct state

Started: 15:14:33.711867

Duration: 1.57 ms

Changes:

Summary for node02

------------

Succeeded: 6 (changed=2)

Failed: 0

------------

Total states run: 6

Total run time: 1.212 s

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 15:14:32.057639

Duration: 126.628 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 15:14:33.078369

Duration: 1376.415 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 15:14:34.456023

Duration: 9.257 ms

Changes:

----------

pid:

2902

retcode:

0

stderr:

stdout:

----------

ID: useradd -u 3000 -g 10 zhangsan

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 15:14:34.465623

Duration: 9.678 ms

Changes:

----------

ID: userdel -r zhangsan

Function: cmd.run

Result: True

Comment: Command "userdel -r zhangsan" run

Started: 15:14:34.475568

Duration: 50.9 ms

Changes:

----------

pid:

2906

retcode:

0

stderr:

stdout:

----------

ID: issue\_file

Function: file.append

Name: /etc/issue

Result: True

Comment: File /etc/issue is in correct state

Started: 15:14:34.526749

Duration: 3.785 ms

Changes:

Summary for node01

------------

Succeeded: 6 (changed=2)

Failed: 0

------------

Total states run: 6

Total run time: 1.577 s

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 15:14:32.360733

Duration: 220.908 ms

Changes:

----------

ID: add\_socat

Function: pkg.installed

Name: socat

Result: True

Comment: Package socat is already installed

Started: 15:14:34.305814

Duration: 921.616 ms

Changes:

----------

ID: date +%F\_%T >> /tmp/a.log

Function: cmd.run

Result: True

Comment: Command "date +%F\_%T >> /tmp/a.log" run

Started: 15:14:35.228420

Duration: 8.905 ms

Changes:

----------

pid:

2842

retcode:

0

stderr:

stdout:

----------

ID: useradd -u 3000 -g 10 zhangsan

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 15:14:35.237527

Duration: 8.347 ms

Changes:

----------

ID: userdel -r zhangsan

Function: cmd.run

Result: True

Comment: Command "userdel -r zhangsan" run

Started: 15:14:35.246050

Duration: 51.283 ms

Changes:

----------

pid:

2846

retcode:

0

stderr:

stdout:

Summary for node03

------------

Succeeded: 5 (changed=2)

Failed: 0

------------

Total states run: 5

Total run time: 1.211 s

[root@master base]# salt '\*' cmd.run 'id zhangsan'

node01:

id: zhangsan: no such user

node03:

id: zhangsan: no such user

node02:

id: zhangsan: no such user

ERROR: Minions returned with non-zero exit code

##系统初始化

[root@master base]# cat top.sls

base:

'L@node01,node02,node03':

- init.dns

- init.histime

- init.sysctl

- init.adduser

[root@master base]# cat init/\*

useradd -u 5000 -g 100 wangermazi:

cmd.run:

- unless: id wangermazi

echo "123456" | passwd --stdin wangermazi:

cmd.run:

- onlyif: id wangermazi

chage -d0 wangermazi:

cmd.run:

- onlyif: id wangermazi

resolv\_conf:

file.managed:

- name: /etc/resolv.conf

- source: salt://files/resolv.conf

- user: root

- group: root

- mode: 644

- template: jinja

- defaults:

DNS\_IP: 192.168.4.254

history\_time:

file.append:

- name: /etc/profile

- text:

- export HISTTIMEFORMAT="%F\_%T $(whoami)"

net.ipv4.ip\_forward:

sysctl.present:

- value: 1

[root@master base]# salt '\*' state.highstate statenv=base test=False

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 16:55:46.723757

Duration: 142.346 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: Appended 1 lines

Started: 16:55:46.866286

Duration: 3.055 ms

Changes:

----------

diff:

---

+++

@@ -74,3 +74,4 @@

unset i

unset -f pathmunge

+export HISTTIMEFORMAT="%F\_%T $(whoami)"

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Updated sysctl value net.ipv4.ip\_forward = 1

Started: 16:55:46.874113

Duration: 86.674 ms

Changes:

----------

net.ipv4.ip\_forward:

1

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: Command "useradd -u 5000 -g 100 wangermazi" run

Started: 16:55:46.962924

Duration: 200.209 ms

Changes:

----------

pid:

3136

retcode:

0

stderr:

stdout:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 16:55:47.163431

Duration: 215.509 ms

Changes:

----------

pid:

3174

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 16:55:47.379276

Duration: 101.956 ms

Changes:

----------

pid:

3178

retcode:

0

stderr:

stdout:

Summary for node03

------------

Succeeded: 6 (changed=5)

Failed: 0

------------

Total states run: 6

Total run time: 749.749 ms

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 16:55:45.867491

Duration: 288.541 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: Appended 1 lines

Started: 16:55:46.156226

Duration: 8.214 ms

Changes:

----------

diff:

---

+++

@@ -74,3 +74,4 @@

unset i

unset -f pathmunge

+export HISTTIMEFORMAT="%F\_%T $(whoami)"

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Updated sysctl value net.ipv4.ip\_forward = 1

Started: 16:55:46.167244

Duration: 116.829 ms

Changes:

----------

net.ipv4.ip\_forward:

1

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: Command "useradd -u 5000 -g 100 wangermazi" run

Started: 16:55:46.286706

Duration: 292.45 ms

Changes:

----------

pid:

3158

retcode:

0

stderr:

stdout:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 16:55:46.579410

Duration: 49.57 ms

Changes:

----------

pid:

3206

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 16:55:46.629201

Duration: 26.026 ms

Changes:

----------

pid:

3210

retcode:

0

stderr:

stdout:

Summary for node02

------------

Succeeded: 6 (changed=5)

Failed: 0

------------

Total states run: 6

Total run time: 781.630 ms

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 16:55:46.531712

Duration: 246.999 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: Appended 1 lines

Started: 16:55:46.779040

Duration: 6.303 ms

Changes:

----------

diff:

---

+++

@@ -74,3 +74,4 @@

unset i

unset -f pathmunge

+export HISTTIMEFORMAT="%F\_%T $(whoami)"

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Updated sysctl value net.ipv4.ip\_forward = 1

Started: 16:55:46.789915

Duration: 118.53 ms

Changes:

----------

net.ipv4.ip\_forward:

1

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: Command "useradd -u 5000 -g 100 wangermazi" run

Started: 16:55:46.911576

Duration: 317.332 ms

Changes:

----------

pid:

3193

retcode:

0

stderr:

stdout:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 16:55:47.229131

Duration: 43.142 ms

Changes:

----------

pid:

3241

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 16:55:47.272477

Duration: 26.981 ms

Changes:

----------

pid:

3245

retcode:

0

stderr:

stdout:

Summary for node01

------------

Succeeded: 6 (changed=5)

Failed: 0

------------

Total states run: 6

Total run time: 759.287 ms

#验证结果

[root@node01 ~]# history

1 2017-12-26\_17:16:09 rootvim /etc/selinux/config

2 2017-12-26\_17:16:09 rootsystemctl disable firewalld.service

3 2017-12-26\_17:16:09 rootps aux | grep udev

4 2017-12-26\_17:16:09 rootsystemctl disable systemd-udevd

5 2017-12-26\_17:16:09 rootvim /etc/yum.repos.d/development.repo

6 2017-12-26\_17:16:09 rootinit 0

7 2017-12-26\_17:16:09 rootcd /etc/sysconfig/network-scripts/

8 2017-12-26\_17:16:09 rootls

[root@node01 ~]# cat /etc/resolv.conf

nameserver 8.8.8.8

nameserver 192.168.4.254

[root@node01 ~]# id wangermazi

uid=5000(wangermazi) gid=100(users) 组=100(users)

[root@node01 ~]# sysctl -a | grep ip\_forward

net.ipv4.ip\_forward = 1

##部署rpm包

[root@master prod]# cat top.sls

prod:

'L@node01,node02,node03':

- httpd

[root@master prod]# cat httpd.sls

install\_httpd:

pkg.installed:

- name: httpd

[root@master prod]# salt '\*' state.highstate statenv=prod test=False

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 17:34:07.397152

Duration: 172.576 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 17:34:07.570044

Duration: 10.4 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 17:34:07.583021

Duration: 114.215 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 17:34:07.698546

Duration: 50.664 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 17:34:07.749458

Duration: 154.22 ms

Changes:

----------

pid:

3980

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 17:34:07.903983

Duration: 149.943 ms

Changes:

----------

pid:

3991

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: The following packages were installed/updated: httpd

Started: 17:34:09.939688

Duration: 8066.859 ms

Changes:

----------

apr:

----------

new:

1.4.8-3.el7

old:

apr-util:

----------

new:

1.5.2-6.el7

old:

httpd:

----------

new:

2.4.6-45.el7

old:

httpd-tools:

----------

new:

2.4.6-45.el7

old:

mailcap:

----------

new:

2.1.41-2.el7

old:

Summary for node03

------------

Succeeded: 7 (changed=3)

Failed: 0

------------

Total states run: 7

Total run time: 8.719 s

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 17:34:05.927669

Duration: 118.668 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 17:34:06.046566

Duration: 4.465 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 17:34:06.055120

Duration: 53.557 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 17:34:06.110473

Duration: 18.053 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 17:34:06.129433

Duration: 105.76 ms

Changes:

----------

pid:

4035

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 17:34:06.235508

Duration: 58.793 ms

Changes:

----------

pid:

4056

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: The following packages were installed/updated: httpd

Started: 17:34:07.155425

Duration: 10564.38 ms

Changes:

----------

apr:

----------

new:

1.4.8-3.el7

old:

apr-util:

----------

new:

1.5.2-6.el7

old:

httpd:

----------

new:

2.4.6-45.el7

old:

httpd-tools:

----------

new:

2.4.6-45.el7

old:

mailcap:

----------

new:

2.1.41-2.el7

old:

Summary for node02

------------

Succeeded: 7 (changed=3)

Failed: 0

------------

Total states run: 7

Total run time: 10.924 s

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 17:34:06.433020

Duration: 195.716 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 17:34:06.628986

Duration: 3.028 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 17:34:06.634260

Duration: 91.346 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 17:34:06.726801

Duration: 18.483 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 17:34:06.745541

Duration: 111.063 ms

Changes:

----------

pid:

4115

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 17:34:06.856823

Duration: 244.649 ms

Changes:

----------

pid:

4136

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: The following packages were installed/updated: httpd

Started: 17:34:08.495269

Duration: 10325.1 ms

Changes:

----------

apr:

----------

new:

1.4.8-3.el7

old:

apr-util:

----------

new:

1.5.2-6.el7

old:

httpd:

----------

new:

2.4.6-45.el7

old:

httpd-tools:

----------

new:

2.4.6-45.el7

old:

mailcap:

----------

new:

2.1.41-2.el7

old:

Summary for node01

------------

Succeeded: 7 (changed=3)

Failed: 0

------------

Total states run: 7

Total run time: 10.989 s

[root@master prod]# salt '\*' cmd.run 'rpm -qa | grep httpd' #验证结果

node03:

httpd-2.4.6-45.el7.x86\_64

httpd-tools-2.4.6-45.el7.x86\_64

node01:

httpd-2.4.6-45.el7.x86\_64

httpd-tools-2.4.6-45.el7.x86\_64

node02:

httpd-2.4.6-45.el7.x86\_64

httpd-tools-2.4.6-45.el7.x86\_64

##安装软件、修改配置文件、启动服务--一键完成

[root@master prod]# cat files/httpd.conf | grep -v '#' | grep -v ^$

ServerRoot "/etc/httpd"

Listen 8080

Include /etc/httpd/conf.modules.d/\*.conf

User apache

Group apache

ServerAdmin root@localhost

ServerName localhost

<Directory />

AllowOverride none

Require all denied

</Directory>

DocumentRoot "/var/www/html"

<Directory "/var/www">

AllowOverride None

Require all granted

</Directory>

<Directory "/var/www/html">

Options Indexes FollowSymLinks

AllowOverride None

Require all granted

deny from 192.168.4.1

</Directory>

<IfModule dir\_module>

DirectoryIndex index.html

</IfModule>

<Files ".ht\*">

Require all denied

</Files>

ErrorLog "logs/error\_log"

LogLevel warn

<IfModule log\_config\_module>

LogFormat "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\"" combined

LogFormat "%h %l %u %t \"%r\" %>s %b" common

<IfModule logio\_module>

LogFormat "%h %l %u %t \"%r\" %>s %b \"%{Referer}i\" \"%{User-Agent}i\" %I %O" combinedio

</IfModule>

CustomLog "logs/access\_log" combined

</IfModule>

<IfModule alias\_module>

ScriptAlias /cgi-bin/ "/var/www/cgi-bin/"

</IfModule>

<Directory "/var/www/cgi-bin">

AllowOverride None

Options None

Require all granted

</Directory>

<IfModule mime\_module>

TypesConfig /etc/mime.types

AddType application/x-compress .Z

AddType application/x-gzip .gz .tgz

AddType text/html .shtml

AddOutputFilter INCLUDES .shtml

</IfModule>

AddDefaultCharset UTF-8

<IfModule mime\_magic\_module>

MIMEMagicFile conf/magic

</IfModule>

EnableSendfile on

IncludeOptional conf.d/\*.conf

[root@master prod]# cat top.sls

prod:

'L@node01,node02,node03':

- httpd

[root@master prod]# cat httpd.sls

install\_httpd:

pkg.installed:

- name: httpd

httpd\_conf:

file.managed:

- name: /etc/httpd/conf/httpd.conf

- source: salt://files/httpd.conf

- require:

- pkg: install\_httpd

httpd\_service\_running:

service.running:

- name: httpd

- enable: true

- restart: true

- watch:

- file: httpd\_conf

[root@master prod]# salt '\*' state.highstate statenv=prod test=False

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 17:56:00.238863

Duration: 303.165 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 17:56:00.542214

Duration: 3.077 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 17:56:00.547914

Duration: 135.023 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 17:56:00.684194

Duration: 27.733 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 17:56:00.712151

Duration: 137.345 ms

Changes:

----------

pid:

4362

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 17:56:00.849910

Duration: 154.481 ms

Changes:

----------

pid:

4386

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: Package httpd is already installed

Started: 17:56:02.288985

Duration: 962.613 ms

Changes:

----------

ID: httpd\_conf

Function: file.managed

Name: /etc/httpd/conf/httpd.conf

Result: True

Comment: File /etc/httpd/conf/httpd.conf updated

Started: 17:56:03.252350

Duration: 19.309 ms

Changes:

----------

diff:

---

+++

@@ -39,7 +39,7 @@

# prevent Apache from glomming onto all bound IP addresses.

#

#Listen 12.34.56.78:80

-Listen 80

+Listen 8080

#

# Dynamic Shared Object (DSO) Support

@@ -53,7 +53,7 @@

# Example:

# LoadModule foo\_module modules/mod\_foo.so

#

-Include conf.modules.d/\*.conf

+Include /etc/httpd/conf.modules.d/\*.conf

#

# If you wish httpd to run as a different user or group, you must run

@@ -92,7 +92,7 @@

#

# If your host doesn't have a registered DNS name, enter its IP address here.

#

-#ServerName www.example.com:80

+ServerName localhost

#

# Deny access to the entirety of your server's filesystem. You must

@@ -154,6 +154,7 @@

# Controls who can get stuff from this server.

#

Require all granted

+ deny from 192.168.4.1

</Directory>

#

----------

ID: httpd\_service\_running

Function: service.running

Name: httpd

Result: True

Comment: Service httpd has been enabled, and is running

Started: 17:56:03.272917

Duration: 461.291 ms

Changes:

----------

httpd:

True

Summary for node02

------------

Succeeded: 9 (changed=4)

Failed: 0

------------

Total states run: 9

Total run time: 2.204 s

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 17:56:01.485047

Duration: 103.28 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 17:56:01.588501

Duration: 3.148 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 17:56:01.594318

Duration: 48.342 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 17:56:01.644137

Duration: 12.492 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 17:56:01.656911

Duration: 87.603 ms

Changes:

----------

pid:

4358

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 17:56:01.744858

Duration: 50.132 ms

Changes:

----------

pid:

4365

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: Package httpd is already installed

Started: 17:56:03.331377

Duration: 1556.472 ms

Changes:

----------

ID: httpd\_conf

Function: file.managed

Name: /etc/httpd/conf/httpd.conf

Result: True

Comment: File /etc/httpd/conf/httpd.conf updated

Started: 17:56:04.888605

Duration: 20.68 ms

Changes:

----------

diff:

---

+++

@@ -39,7 +39,7 @@

# prevent Apache from glomming onto all bound IP addresses.

#

#Listen 12.34.56.78:80

-Listen 80

+Listen 8080

#

# Dynamic Shared Object (DSO) Support

@@ -53,7 +53,7 @@

# Example:

# LoadModule foo\_module modules/mod\_foo.so

#

-Include conf.modules.d/\*.conf

+Include /etc/httpd/conf.modules.d/\*.conf

#

# If you wish httpd to run as a different user or group, you must run

@@ -92,7 +92,7 @@

#

# If your host doesn't have a registered DNS name, enter its IP address here.

#

-#ServerName www.example.com:80

+ServerName localhost

#

# Deny access to the entirety of your server's filesystem. You must

@@ -154,6 +154,7 @@

# Controls who can get stuff from this server.

#

Require all granted

+ deny from 192.168.4.1

</Directory>

#

----------

ID: httpd\_service\_running

Function: service.running

Name: httpd

Result: True

Comment: Service httpd has been enabled, and is running

Started: 17:56:04.910373

Duration: 366.441 ms

Changes:

----------

httpd:

True

Summary for node03

------------

Succeeded: 9 (changed=4)

Failed: 0

------------

Total states run: 9

Total run time: 2.249 s

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 17:56:00.981659

Duration: 301.481 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 17:56:01.283403

Duration: 10.544 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 17:56:01.296497

Duration: 224.731 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 17:56:01.523172

Duration: 34.028 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 17:56:01.557430

Duration: 149.816 ms

Changes:

----------

pid:

4460

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 17:56:01.707651

Duration: 198.45 ms

Changes:

----------

pid:

4487

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: Package httpd is already installed

Started: 17:56:03.324608

Duration: 1584.994 ms

Changes:

----------

ID: httpd\_conf

Function: file.managed

Name: /etc/httpd/conf/httpd.conf

Result: True

Comment: File /etc/httpd/conf/httpd.conf updated

Started: 17:56:04.910165

Duration: 27.476 ms

Changes:

----------

diff:

---

+++

@@ -39,7 +39,7 @@

# prevent Apache from glomming onto all bound IP addresses.

#

#Listen 12.34.56.78:80

-Listen 80

+Listen 8080

#

# Dynamic Shared Object (DSO) Support

@@ -53,7 +53,7 @@

# Example:

# LoadModule foo\_module modules/mod\_foo.so

#

-Include conf.modules.d/\*.conf

+Include /etc/httpd/conf.modules.d/\*.conf

#

# If you wish httpd to run as a different user or group, you must run

@@ -92,7 +92,7 @@

#

# If your host doesn't have a registered DNS name, enter its IP address here.

#

-#ServerName www.example.com:80

+ServerName localhost

#

# Deny access to the entirety of your server's filesystem. You must

@@ -154,6 +154,7 @@

# Controls who can get stuff from this server.

#

Require all granted

+ deny from 192.168.4.1

</Directory>

#

----------

ID: httpd\_service\_running

Function: service.running

Name: httpd

Result: True

Comment: Service httpd has been enabled, and is running

Started: 17:56:04.938845

Duration: 410.501 ms

Changes:

----------

httpd:

True

Summary for node01

------------

Succeeded: 9 (changed=4)

Failed: 0

------------

Total states run: 9

Total run time: 2.942 s

[root@master prod]# nmap -p 8080 192.168.4.11-13 #验证结果

Starting Nmap 6.40 ( http://nmap.org ) at 2017-12-26 17:57 CST

Nmap scan report for node01 (192.168.4.11)

Host is up (0.00075s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

MAC Address: 52:54:00:BE:AA:02 (QEMU Virtual NIC)

Nmap scan report for node02 (192.168.4.12)

Host is up (0.00085s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

MAC Address: 52:54:00:BE:AA:03 (QEMU Virtual NIC)

Nmap scan report for node03 (192.168.4.13)

Host is up (0.00077s latency).

PORT STATE SERVICE

8080/tcp open http-proxy

MAC Address: 52:54:00:BE:AA:04 (QEMU Virtual NIC)

Nmap done: 3 IP addresses (3 hosts up) scanned in 0.07 seconds

[root@master prod]# salt '\*' cmd.run 'systemctl list-unit-files | grep httpd'

node01:

httpd.service enabled

node03:

httpd.service enabled

node02:

httpd.service enabled

##源码包部署

[root@master dev]# ls

~ nginx\_install top.sls

[root@master dev]# cat top.sls

dev:

'L@node01,node02,node03':

- nginx\_install

[root@master dev]# ls nginx\_install/

files initpkg.sls init.sls install.sls nginx\_init.sls

[root@master dev]# cat nginx\_install/init.sls

include:

- .initpkg

- .install

- .nginx\_init

[root@master dev]# cat nginx\_install/initpkg.sls

init\_pkg\_install:

pkg.installed:

- names:

- gcc

- gcc-c++

- make

- autoconf

- openssl-devel

- pcre-devel

[root@master dev]# cat nginx\_install/install.sls

nginx\_src\_install:

file.managed:

- name: /usr/local/src/nginx-1.9.2.tar.gz

- source: salt://nginx\_install/files/nginx-1.9.2.tar.gz

- user: root

- group: root

- mode: 644

cmd.script:

- source: salt://nginx\_install/files/build.sh

- cwd: /usr/local/src

- user: root

- unless: test -d /usr/local/nginx

- require:

- file: nginx\_src\_install

- pkg: init\_pkg\_install

[root@master dev]# cat nginx\_install/nginx\_init.sls

nginx\_init:

file.managed:

- name: /usr/lib/systemd/system/nginx.service

- source: salt://nginx\_install/files/nginx.service

- user: root

- group: root

- mode: 644

nginx\_service:

service.running:

- name: nginx

- enable: true

- restart: true

[root@master dev]# ls nginx\_install/files/

build.sh nginx-1.9.2.tar.gz nginx.service

[root@master dev]# cat nginx\_install/files/build.sh

#!/bin/bash

useradd -s /sbin/nologin nginx

tar -xf nginx-1.9.2.tar.gz

cd nginx-1.9.2

./configure --prefix=/usr/local/nginx --user=nginx --group=nginx

make

make install

[root@master dev]# cat nginx\_install/files/nginx.service

[Unit]

Description=nginx - high performance web server

Documentation=http://nginx.org/en/docs/

After=network.target remote-fs.target nss-lookup.target

[Service]

Type=forking

PIDFile=/usr/local/nginx/logs/nginx.pid

ExecStartPre=/usr/local/nginx/sbin/nginx -t -c /usr/local/nginx/conf/nginx.conf

ExecStart=/usr/local/nginx/sbin/nginx -c /usr/local/nginx/conf/nginx.conf

ExecReload=/usr/local/nginx/sbin/nginx -s reload

ExecStop=/usr/local/nginx/sbin/nginx -s quit

PrivateTmp=true

[Install]

WantedBy=multi-user.target

[root@master dev]# salt '\*' state.highstate statenv=dev test=False

node03:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 19:28:59.067074

Duration: 166.398 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 19:28:59.233651

Duration: 3.867 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 19:28:59.241580

Duration: 55.354 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 19:28:59.298274

Duration: 11.417 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 19:28:59.309898

Duration: 61.713 ms

Changes:

----------

pid:

7902

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 19:28:59.371975

Duration: 60.646 ms

Changes:

----------

pid:

7906

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: Package httpd is already installed

Started: 19:29:01.376350

Duration: 1061.501 ms

Changes:

----------

ID: httpd\_conf

Function: file.managed

Name: /etc/httpd/conf/httpd.conf

Result: True

Comment: File /etc/httpd/conf/httpd.conf is in the correct state

Started: 19:29:02.439059

Duration: 25.149 ms

Changes:

----------

ID: httpd\_service\_running

Function: service.running

Name: httpd

Result: True

Comment: The service httpd is already running

Started: 19:29:02.466075

Duration: 72.398 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: gcc

Result: True

Comment: Package gcc is already installed

Started: 19:29:02.538772

Duration: 0.786 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: pcre-devel

Result: True

Comment: Package pcre-devel is already installed

Started: 19:29:02.539764

Duration: 0.6 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: make

Result: True

Comment: Package make is already installed

Started: 19:29:02.540487

Duration: 0.58 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: openssl-devel

Result: True

Comment: Package openssl-devel is already installed

Started: 19:29:02.541187

Duration: 0.502 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: autoconf

Result: True

Comment: Package autoconf is already installed

Started: 19:29:02.541914

Duration: 0.511 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: gcc-c++

Result: True

Comment: Package gcc-c++ is already installed

Started: 19:29:02.542541

Duration: 0.563 ms

Changes:

----------

ID: nginx\_src\_install

Function: file.managed

Name: /usr/local/src/nginx-1.9.2.tar.gz

Result: True

Comment: File /usr/local/src/nginx-1.9.2.tar.gz is in the correct state

Started: 19:29:02.543255

Duration: 108.948 ms

Changes:

----------

ID: nginx\_src\_install

Function: cmd.script

Result: True

Comment: unless execution succeeded

Started: 19:29:02.660787

Duration: 268.562 ms

Changes:

----------

ID: nginx\_init

Function: file.managed

Name: /usr/lib/systemd/system/nginx.service

Result: True

Comment: File /usr/lib/systemd/system/nginx.service is in the correct state

Started: 19:29:02.929568

Duration: 74.04 ms

Changes:

----------

ID: nginx\_service

Function: service.running

Name: nginx

Result: True

Comment: The service nginx is already running

Started: 19:29:03.003770

Duration: 67.184 ms

Changes:

Summary for node03

-------------

Succeeded: 19 (changed=2)

Failed: 0

-------------

Total states run: 19

Total run time: 2.041 s

node02:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 19:28:58.363400

Duration: 147.646 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: File /etc/profile is in correct state

Started: 19:28:58.511277

Duration: 4.37 ms

Changes:

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 19:28:58.518742

Duration: 81.076 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 19:28:58.601357

Duration: 18.204 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 19:28:58.619881

Duration: 89.469 ms

Changes:

----------

pid:

7896

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 19:28:58.709677

Duration: 83.245 ms

Changes:

----------

pid:

7929

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: Package httpd is already installed

Started: 19:28:59.840118

Duration: 1730.162 ms

Changes:

----------

ID: httpd\_conf

Function: file.managed

Name: /etc/httpd/conf/httpd.conf

Result: True

Comment: File /etc/httpd/conf/httpd.conf is in the correct state

Started: 19:29:01.570900

Duration: 24.614 ms

Changes:

----------

ID: httpd\_service\_running

Function: service.running

Name: httpd

Result: True

Comment: The service httpd is already running

Started: 19:29:01.596634

Duration: 56.385 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: gcc

Result: True

Comment: Package gcc is already installed

Started: 19:29:01.653236

Duration: 0.916 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: pcre-devel

Result: True

Comment: Package pcre-devel is already installed

Started: 19:29:01.654295

Duration: 3.372 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: make

Result: True

Comment: Package make is already installed

Started: 19:29:01.657812

Duration: 0.518 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: openssl-devel

Result: True

Comment: Package openssl-devel is already installed

Started: 19:29:01.658642

Duration: 0.888 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: autoconf

Result: True

Comment: Package autoconf is already installed

Started: 19:29:01.659719

Duration: 1.463 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: gcc-c++

Result: True

Comment: Package gcc-c++ is already installed

Started: 19:29:01.661370

Duration: 0.91 ms

Changes:

----------

ID: nginx\_src\_install

Function: file.managed

Name: /usr/local/src/nginx-1.9.2.tar.gz

Result: True

Comment: File /usr/local/src/nginx-1.9.2.tar.gz is in the correct state

Started: 19:29:01.662552

Duration: 91.952 ms

Changes:

----------

ID: nginx\_src\_install

Function: cmd.script

Result: True

Comment: unless execution succeeded

Started: 19:29:01.763835

Duration: 152.548 ms

Changes:

----------

ID: nginx\_init

Function: file.managed

Name: /usr/lib/systemd/system/nginx.service

Result: True

Comment: File /usr/lib/systemd/system/nginx.service is in the correct state

Started: 19:29:01.916708

Duration: 59.426 ms

Changes:

----------

ID: nginx\_service

Function: service.running

Name: nginx

Result: True

Comment: The service nginx is already running

Started: 19:29:01.976329

Duration: 77.557 ms

Changes:

Summary for node02

-------------

Succeeded: 19 (changed=2)

Failed: 0

-------------

Total states run: 19

Total run time: 2.625 s

node01:

----------

ID: resolv\_conf

Function: file.managed

Name: /etc/resolv.conf

Result: True

Comment: File /etc/resolv.conf is in the correct state

Started: 19:28:58.984160

Duration: 283.793 ms

Changes:

----------

ID: history\_time

Function: file.append

Name: /etc/profile

Result: True

Comment: Appended 1 lines

Started: 19:28:59.268252

Duration: 10.813 ms

Changes:

----------

diff:

---

+++

@@ -75,3 +75,4 @@

unset i

unset -f pathmunge

export HISTTIMEFORMAT="%F\_%T $(whoami): "

+export HISTTIMEFORMAT="%F\_%T $(whoami) '\'"

----------

ID: net.ipv4.ip\_forward

Function: sysctl.present

Result: True

Comment: Sysctl value net.ipv4.ip\_forward = 1 is already set

Started: 19:28:59.282319

Duration: 159.778 ms

Changes:

----------

ID: useradd -u 5000 -g 100 wangermazi

Function: cmd.run

Result: True

Comment: unless execution succeeded

Started: 19:28:59.443545

Duration: 21.271 ms

Changes:

----------

ID: echo "123456" | passwd --stdin wangermazi

Function: cmd.run

Result: True

Comment: Command "echo "123456" | passwd --stdin wangermazi" run

Started: 19:28:59.465061

Duration: 52.297 ms

Changes:

----------

pid:

9242

retcode:

0

stderr:

stdout:

Changing password for user wangermazi.

passwd: all authentication tokens updated successfully.

----------

ID: chage -d0 wangermazi

Function: cmd.run

Result: True

Comment: Command "chage -d0 wangermazi" run

Started: 19:28:59.517587

Duration: 38.871 ms

Changes:

----------

pid:

9246

retcode:

0

stderr:

stdout:

----------

ID: install\_httpd

Function: pkg.installed

Name: httpd

Result: True

Comment: Package httpd is already installed

Started: 19:29:00.732325

Duration: 1570.824 ms

Changes:

----------

ID: httpd\_conf

Function: file.managed

Name: /etc/httpd/conf/httpd.conf

Result: True

Comment: File /etc/httpd/conf/httpd.conf is in the correct state

Started: 19:29:02.303827

Duration: 101.159 ms

Changes:

----------

ID: httpd\_service\_running

Function: service.running

Name: httpd

Result: True

Comment: The service httpd is already running

Started: 19:29:02.406501

Duration: 96.607 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: gcc

Result: True

Comment: Package gcc is already installed

Started: 19:29:02.503347

Duration: 0.859 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: pcre-devel

Result: True

Comment: Package pcre-devel is already installed

Started: 19:29:02.504332

Duration: 0.553 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: make

Result: True

Comment: Package make is already installed

Started: 19:29:02.505068

Duration: 0.869 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: openssl-devel

Result: True

Comment: Package openssl-devel is already installed

Started: 19:29:02.506160

Duration: 0.561 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: autoconf

Result: True

Comment: Package autoconf is already installed

Started: 19:29:02.506842

Duration: 0.545 ms

Changes:

----------

ID: init\_pkg\_install

Function: pkg.installed

Name: gcc-c++

Result: True

Comment: Package gcc-c++ is already installed

Started: 19:29:02.507568

Duration: 0.562 ms

Changes:

----------

ID: nginx\_src\_install

Function: file.managed

Name: /usr/local/src/nginx-1.9.2.tar.gz

Result: True

Comment: File /usr/local/src/nginx-1.9.2.tar.gz updated

Started: 19:29:02.508257

Duration: 209.093 ms

Changes:

----------

diff:

New file

mode:

0644

----------

ID: nginx\_src\_install

Function: cmd.script

Result: True

Comment: unless execution succeeded

Started: 19:29:02.718310

Duration: 162.774 ms

Changes:

----------

ID: nginx\_init

Function: file.managed

Name: /usr/lib/systemd/system/nginx.service

Result: True

Comment: File /usr/lib/systemd/system/nginx.service is in the correct state

Started: 19:29:02.881310

Duration: 35.518 ms

Changes:

----------

ID: nginx\_service

Function: service.running

Name: nginx

Result: True

Comment: The service nginx is already running

Started: 19:29:02.916975

Duration: 38.038 ms

Changes:

Summary for node01

-------------

Succeeded: 19 (changed=4)

Failed: 0

-------------

Total states run: 19

Total run time: 2.785 s

[root@master dev]# nmap -p 80 192.168.4.11-13 #验证结果

Starting Nmap 6.40 ( http://nmap.org ) at 2017-12-26 19:30 CST

Nmap scan report for node01 (192.168.4.11)

Host is up (0.00058s latency).

PORT STATE SERVICE

80/tcp open http

MAC Address: 52:54:00:BE:AA:02 (QEMU Virtual NIC)

Nmap scan report for node02 (192.168.4.12)

Host is up (0.00064s latency).

PORT STATE SERVICE

80/tcp open http

MAC Address: 52:54:00:BE:AA:03 (QEMU Virtual NIC)

Nmap scan report for node03 (192.168.4.13)

Host is up (0.00056s latency).

PORT STATE SERVICE

80/tcp open http

MAC Address: 52:54:00:BE:AA:04 (QEMU Virtual NIC)

Nmap done: 3 IP addresses (3 hosts up) scanned in 0.07 seconds