Installing a Salt Minion

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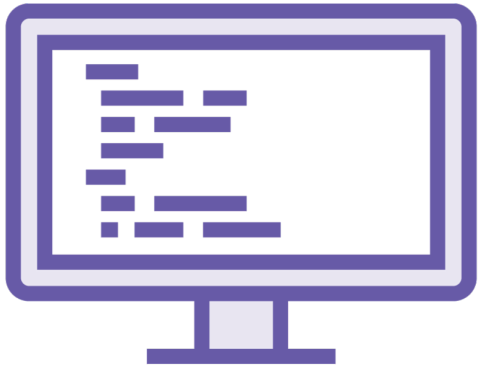
Installing a Salt Minion on Various Platforms



GNU/*nix

Largest installed base, most common case

Windows™

Same features, different file layout

Mac OS™

Software other than Homebrew packages require more tweaks

Targeting by Grain

Running salt in the shell

```
# Only ping servers running Debian
$ sudo salt -G 'os:Debian' test.ping

# List the OS of every Minion
$ sudo salt '*' grains.get os
```

webserver.sls

```
apache:
  pkg.installed:
    {% if grains['os'] == 'Debian' %}
    - name: apache2
    {% elif grains['os'] == 'RedHat' %}
    - name: httpd
    {% endif %}
```

Talking Head

Minion Installation

Run the Bootstrap Script

```
$ sudo install-salt.sh -P git v3000.3
```

Minion Installation

Run the Bootstrap Script

```
$ sudo install-salt.sh -P -A master.ip.address
     -i my-minion-id git v3000.3
```

Minion Installation

Run the Bootstrap Script

```
$ sudo install-salt.sh -P -A saltmaster.example.com
     -i carved-web-1 git v3000.3
```

Talking Head

If no Minion ID is specified, the hostname will be used automatically.

14-15>
2-3>
4-5>
12-13>
14-15>
16-17>
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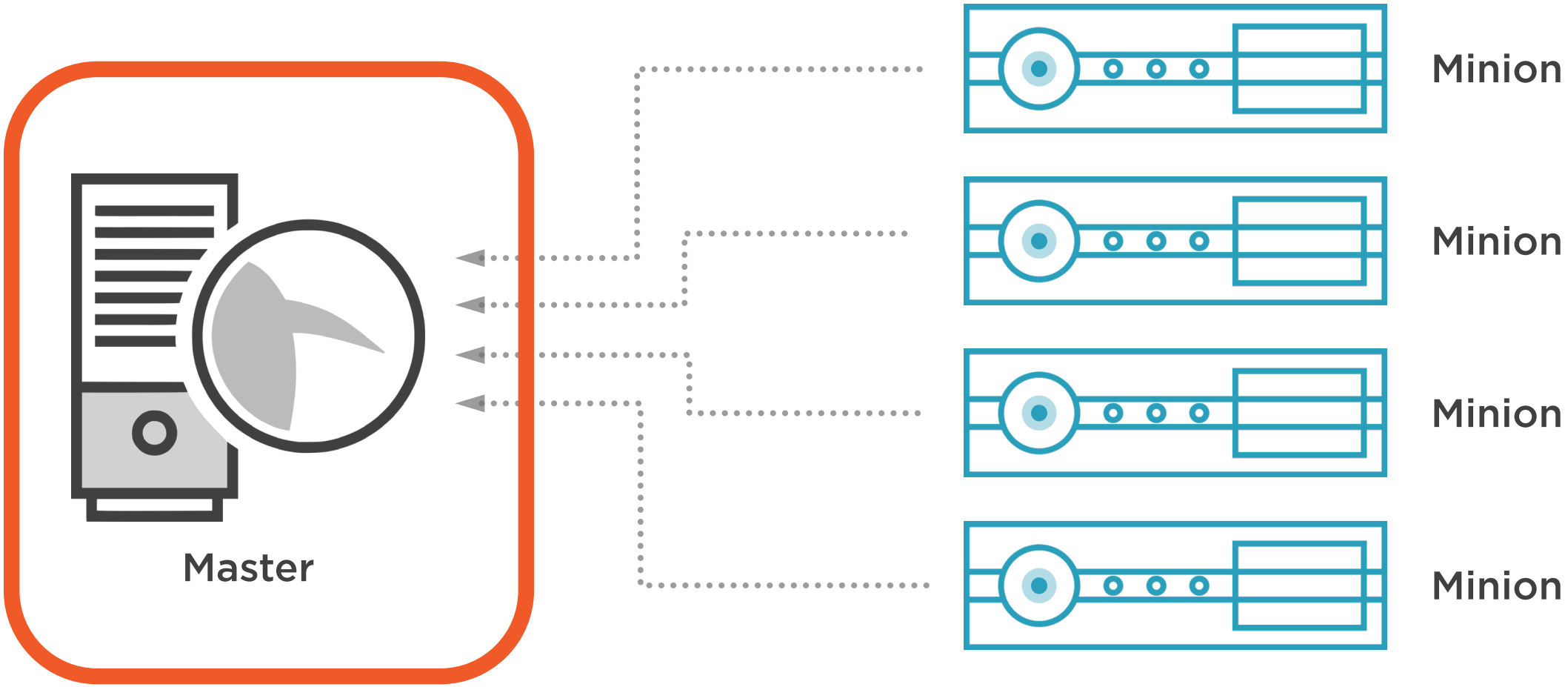
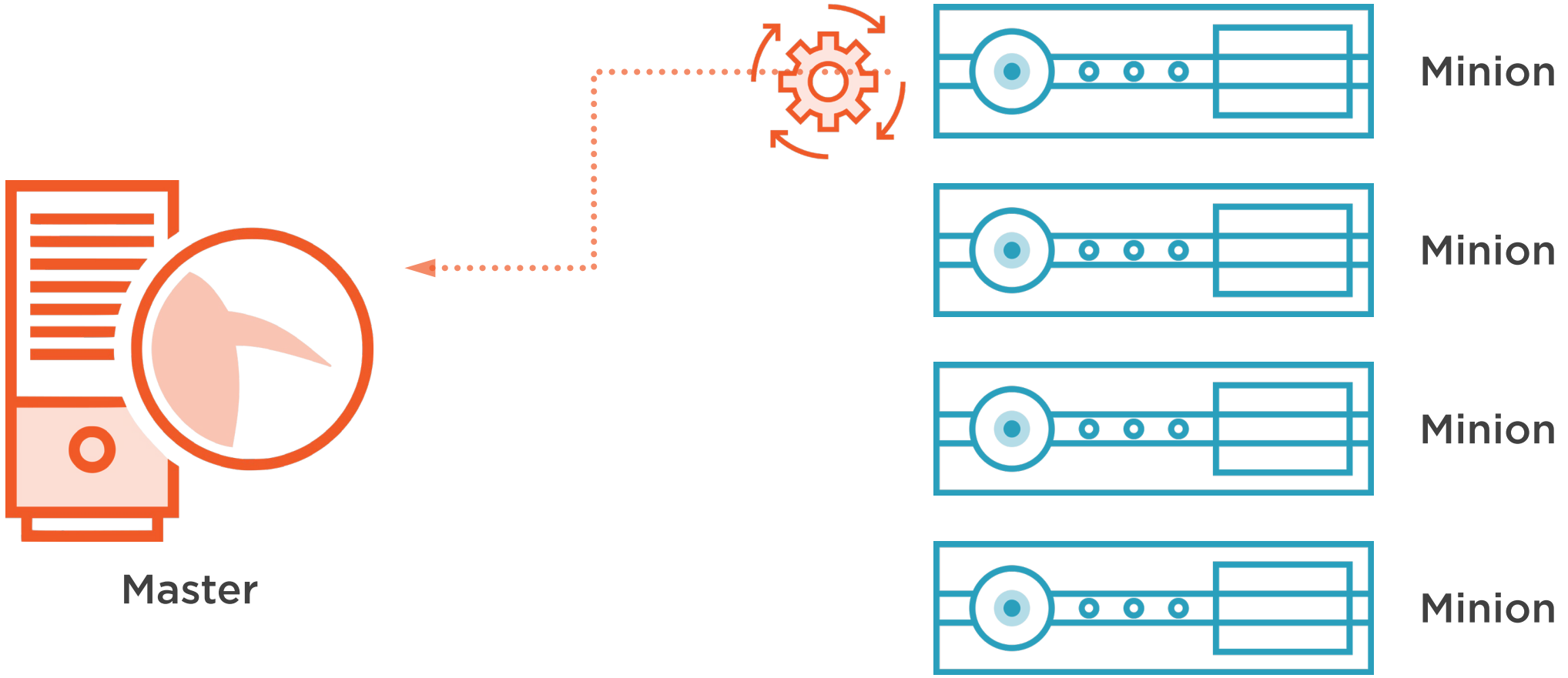
4-5>

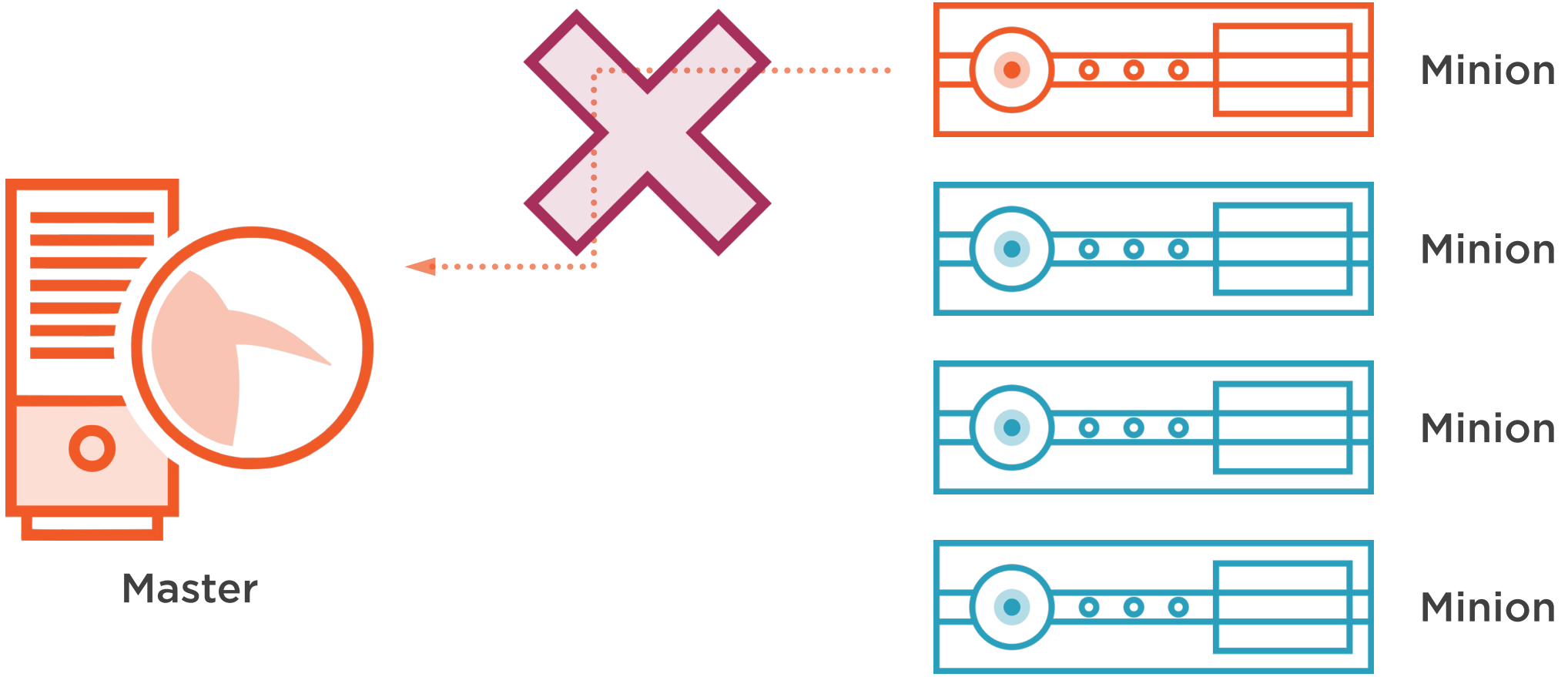
Upgrade the Master First



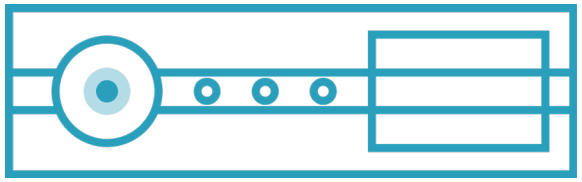
Minion Upgrade Considerations



Minion Upgrade Considerations



Minion Deferred Restart



Scheduled restart after upgrade

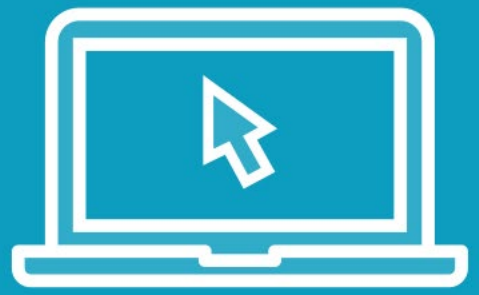
- salt-call with service.restart

Some Minion OSes require policy layers

Simplified in more recent versions

- salt cmd.run_bg
- Enables deferred process restart

Demo



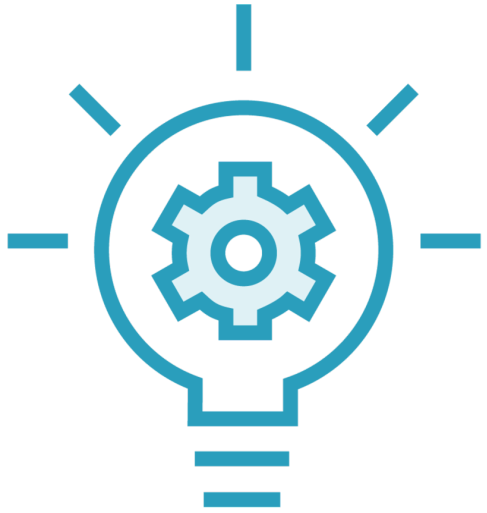
- Install the Minion on *nix
- Install the Minion on Windows
- Security: verify keys on both ends
- Basic command: test.ping
- Adding grains to the Minion
- Installing a package from the command line
- Installing the Minion through salt-ssh

Demo videos

Grains Enable Selective Targeting

Built-in Grains

OS, CPU type, kernel version,
machine type (virtual or physical),
network information,
and many more



Custom Grains

Physical location, data center name,
date of installation, warranty or
support information,
essentially any arbitrary data

Summary

Installed the Master

Installed the Minion

Run basic commands

Coming up:

- Targeting
- Package installation
- Synchronizing files