Managing Cisco NX-OS Using Puppet

Nick Russo

NETWORK ENGINEER

@nickrusso42518   www.njrusmc.net

Agenda

Puppet and NX-API refresher
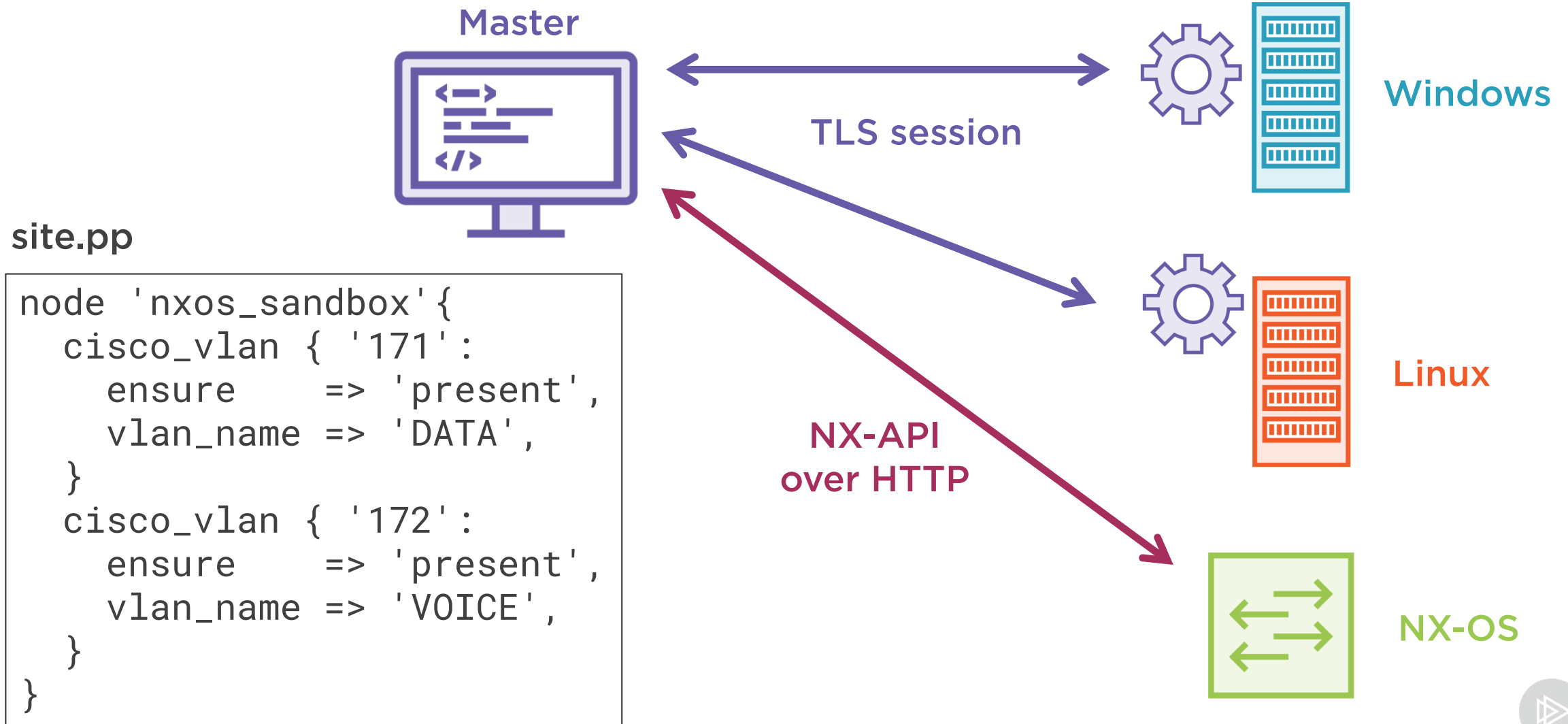
Using Puppet to manage NX-OS VLANs

Using "git revert" to undo changes

Puppet Architecture

Master

site.pp

```
node 'nxos_sandbox'{
  cisco_vlan { '171':
    ensure     => 'present',
    vlan_name => 'DATA',
  }
  cisco_vlan { '172':
    ensure     => 'present',
    vlan_name => 'VOICE',
  }
}
```

TLS session

Windows

Linux

NX-API over HTTP

NX-OS

Demo

Simplified Puppet "bootstrapping"

Demo

Managing NX-OS VLANs with Puppet

Git Commands You Should Know

Working directory   **Staging area**   **Local repository**   **Remote repository**

git add

git commit

git push

git reset HEAD

git reset (sha1)

git clone / git pull
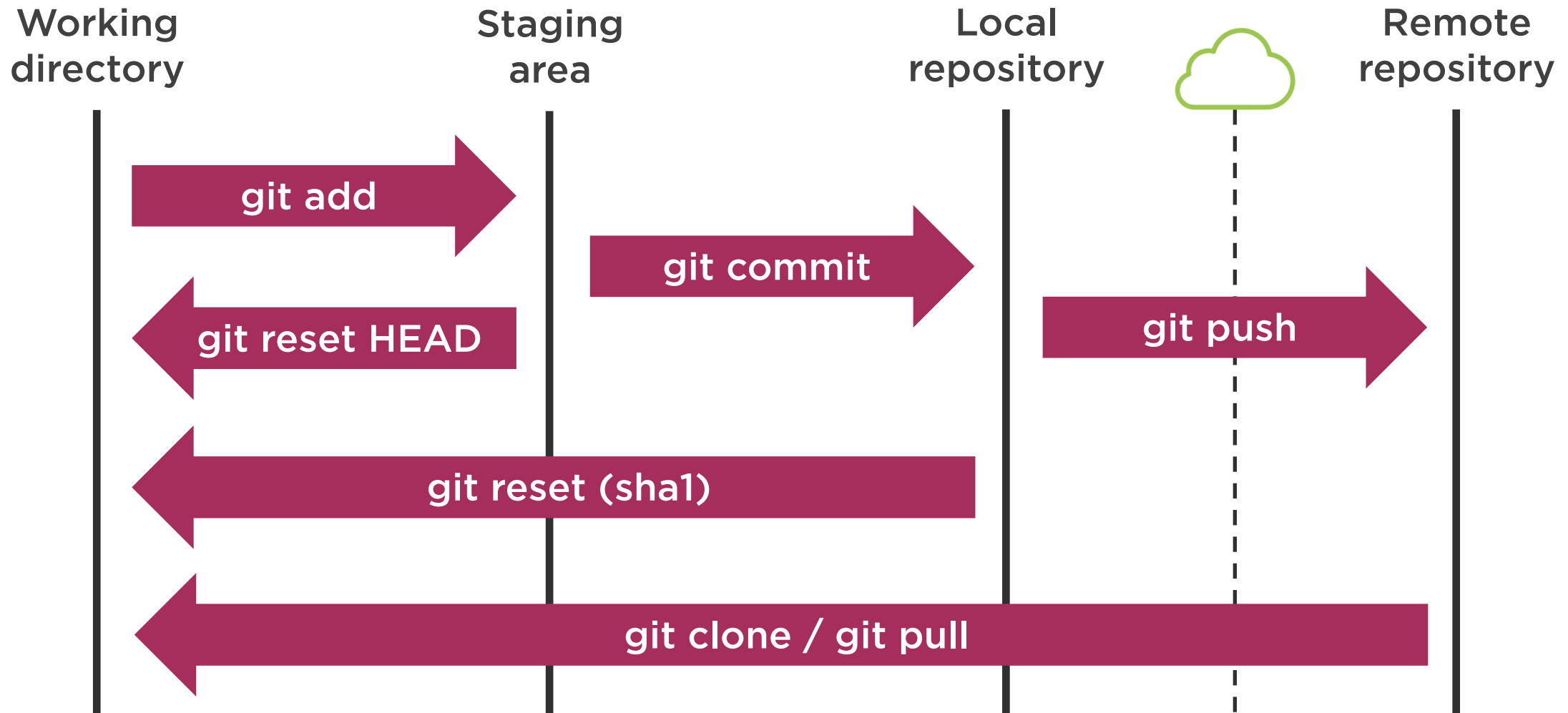
Infrastructure as Code Operational Flow

Dev workstation

Code repository

CI/CD pipeline

"git push"

"git clone"

Manage infra

"git revert HEAD"

```
* e2f7a44 Revert "vlan manifest"
* 7ee1703 vlan manifest
* 7da2366 Fixes #85
* 52c2210 readme, ci, reqts
* 617ffb1 initial
```

VLAN updates
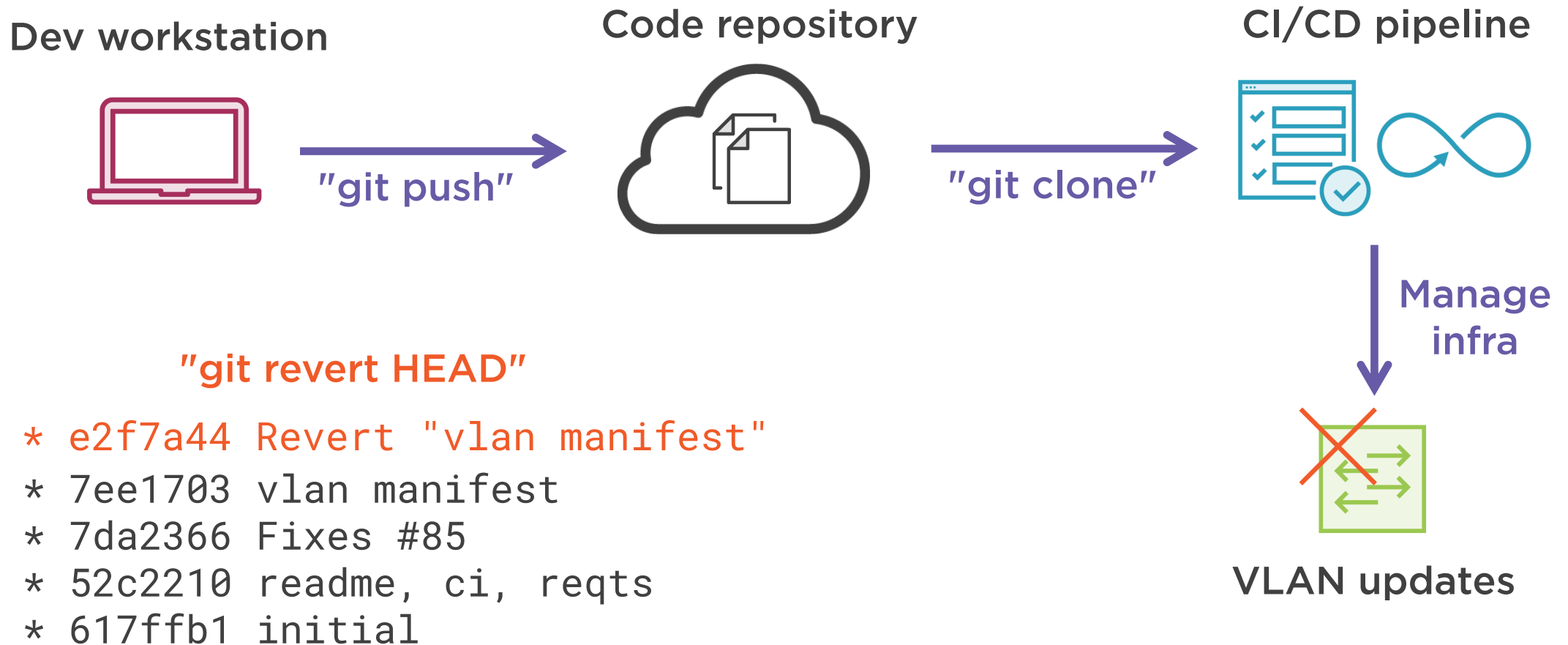
Demo

Using "git revert" to undo pushed code

Summary

Puppet installation can be tricky

Excellent infra-as-code solution

"git revert" for undoing coding mistakes