Getting Started with ZTP using IOS-XR and Cisco Crosswork

Network automation from Day 0!

Akshat Sharma, TME, Cisco

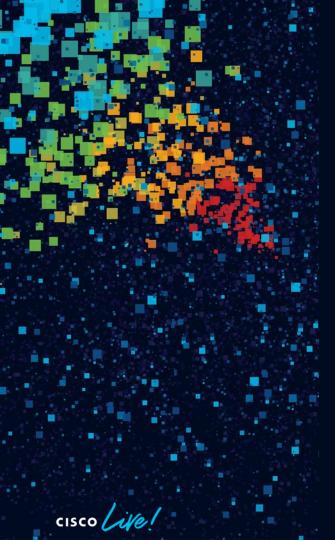




https://github.com/akshshar





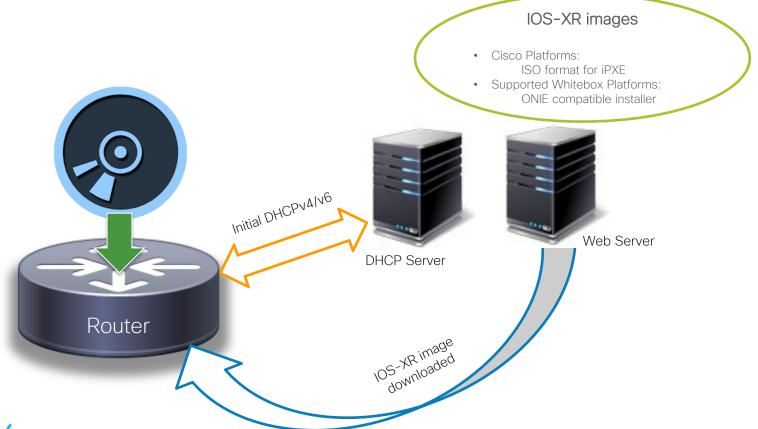


Agenda

- IOS-XR ZTP Crash Course
- Introducing Cisco Crosswork
- Cisco Crosswork ZTP Server
- Demo!
- Learn More!



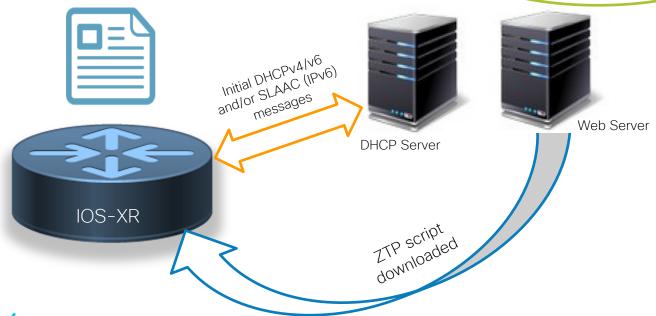
Automated Installation of IOS-XR images



Automated Provisioning using ZTP

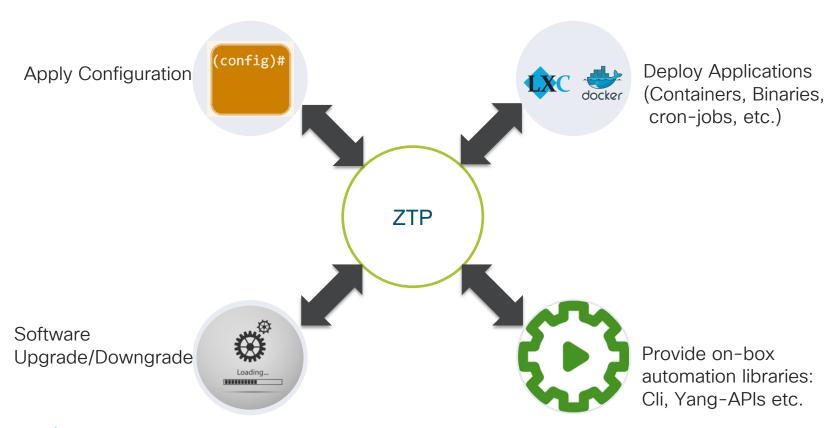
ZTP Artifacts

- CLI Configuration
- ZTP script:
 - > Native Python scripts
 - Native bash scripts,
 - ➤ Golang/c++/pyinstaller binaries





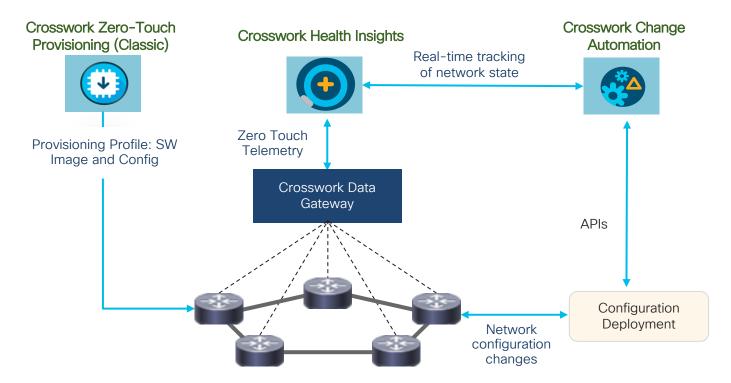
ZTP Functions



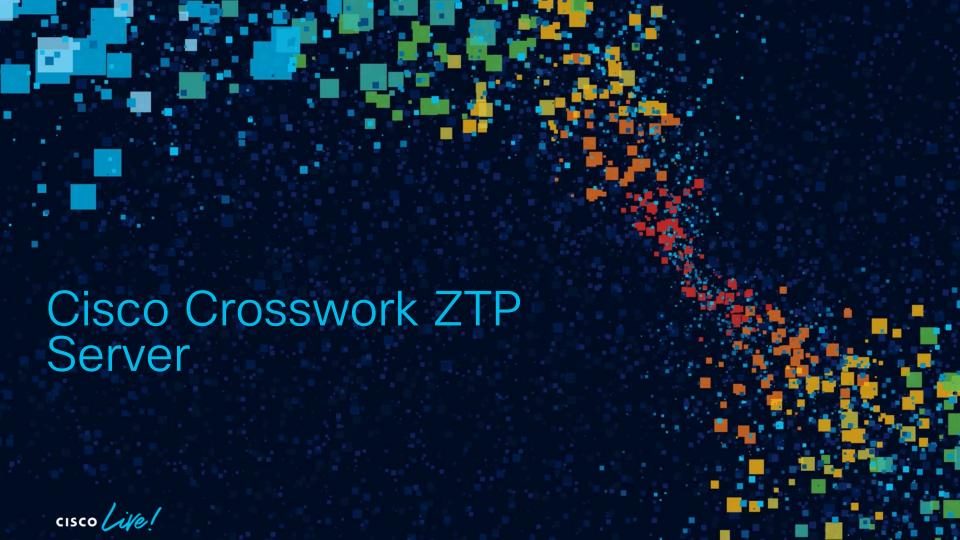




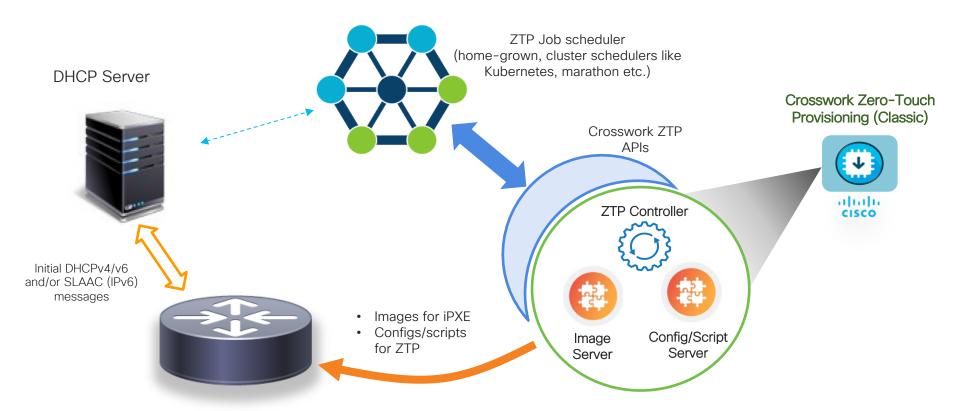
Cisco Crosswork: Automation and Analytics at every stage of the Device Lifecycle







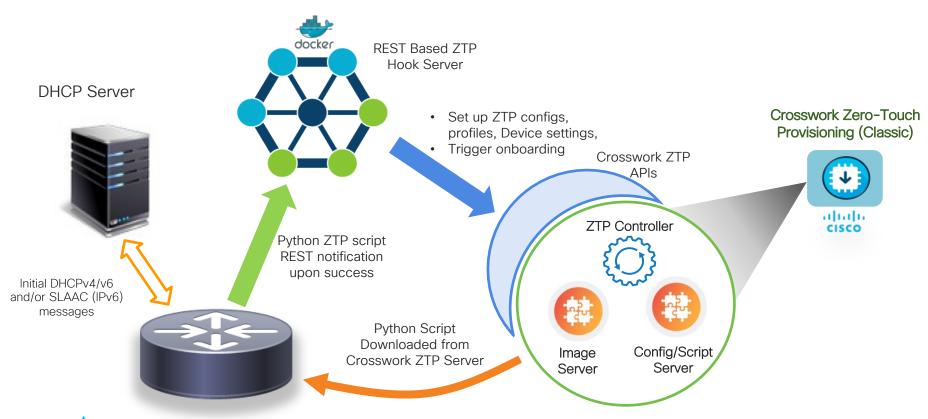
Enter Crosswork ZTP Server Enabling dynamic scheduling of ZTP workflows







Demo! Closed loop automation with IOS-XR ZTP and Cisco Crosswork



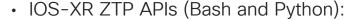


Explore More on IOS-XR ZTP

• Blogs on xrdocs:

https://xrdocs.io/device-lifecycle/

- IOS-XR ZTP: Learning through Packet Captures
- Working with Zero Touch Provisioning
- <u>iPXE Deep Dive</u>

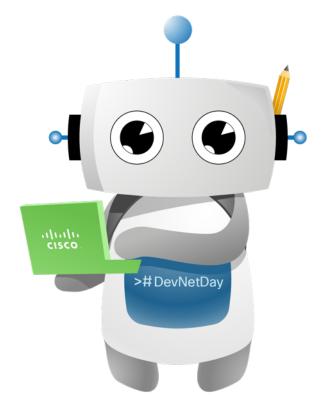


- <u>DevNet Sandbox based Learning Labs</u>
- IOS-XR ZTP on Github
 - IOS-XR ZTP Python library, sample scripts
 - xr-restztp (ZTP hook server used in the demo)











Explore More on Cisco Crosswork for ZTP

Cisco Crosswork on Devnet



Cisco Crosswork API, Getting Started and more

Postman Collection from Today's ZTP demo:

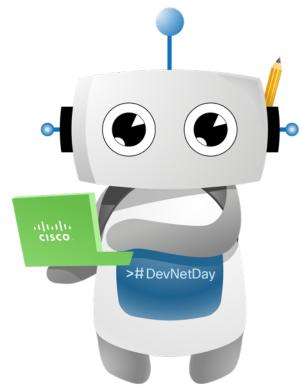




Cisco Crosswork Installation Guides:



 https://www.cisco.com/c/en/us/support/cloud-systemsmanagement/crosswork-network-automation/productsinstallation-guides-list.html







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