

# Zero Touch Stress Automation



**“Chiefs” present ...**

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# Core NetworkA

Motherboard IDA  
Hardware IDA



LLDP/CDPA



Configured IP:  
10.10.10.1/30A

Desired IP:  
10.10.10.2/30A

NAPALMA

Update Network  
Controller:A

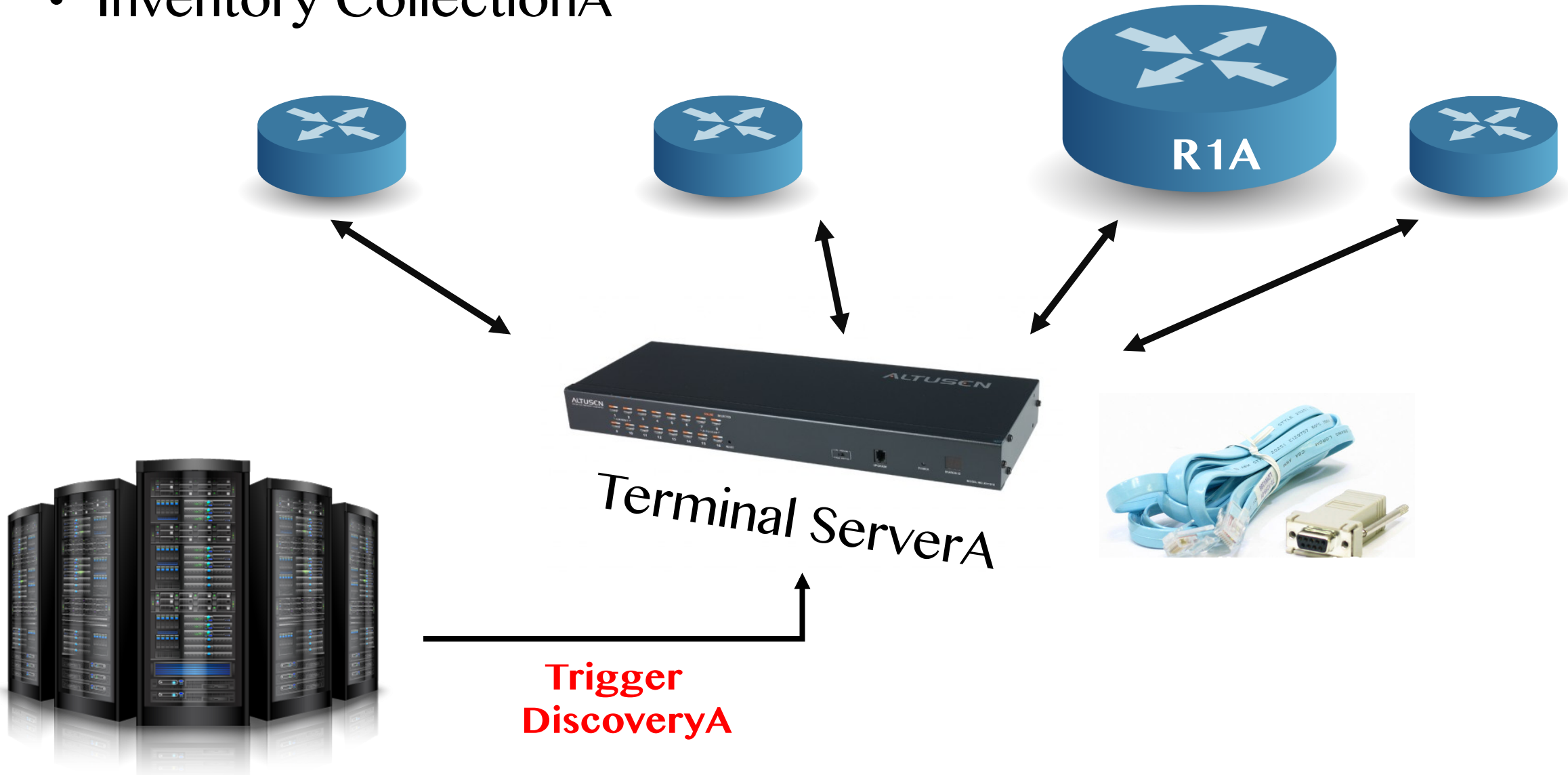
- SNMP TrapA
- SyslogA
- XMPPA



Network  
ControllerA

- Device Unique Identifier DiscoveryA
- Credentials DiscoveryA
- Inventory CollectionA

## Out-of-Band Management NetworkA



Branch: master ▾

[ndmtk-nanog-72-hackathon-data](#) / [vmx1](#) / `vmx1.show.chassis.hardware.detail.txt`

Hardware inventory:

Item	Version	Part number	Serial number	Description
Chassis			VMXd9	VMX
Midplane				
Routing Engine 0				RE-VMX
ad0	20473 MB	QEMU HARDDISK	QM00001	Hard Disk
CB 0				VMX SCB
CB 1				VMX SCB
FPC 0				Virtual FPC
CPU	Rev. 1.0	RIOT	123XYZ987	
MIC 0				Virtual
PIC 0		BUILTIN	BUILTIN	Virtual

Branch: master ▾

[ndmtk-nanog-72-hackathon-data](#) / [vmx1](#) / `vmx1.show.interfaces.statistics.txt`

Physical interface: **fxp0**, Enabled, Physical link is Up

Interface index: 8, SNMP ifIndex: 1

Current address: 2c:c2:60:73:ab:9f, Hardware address: 2c:c2:60:73:ab:9f

Protocol inet, MTU: 1500

Flags: Sendbroadcast-pkt-to-re, Is-Primary

Addresses, Flags: Is-Preferred Is-Primary

Destination: 10.0.0/24, Local: 10.0.0.31, Broadcast: 10.0.0.255



# Out-of-Band Management NetworkA



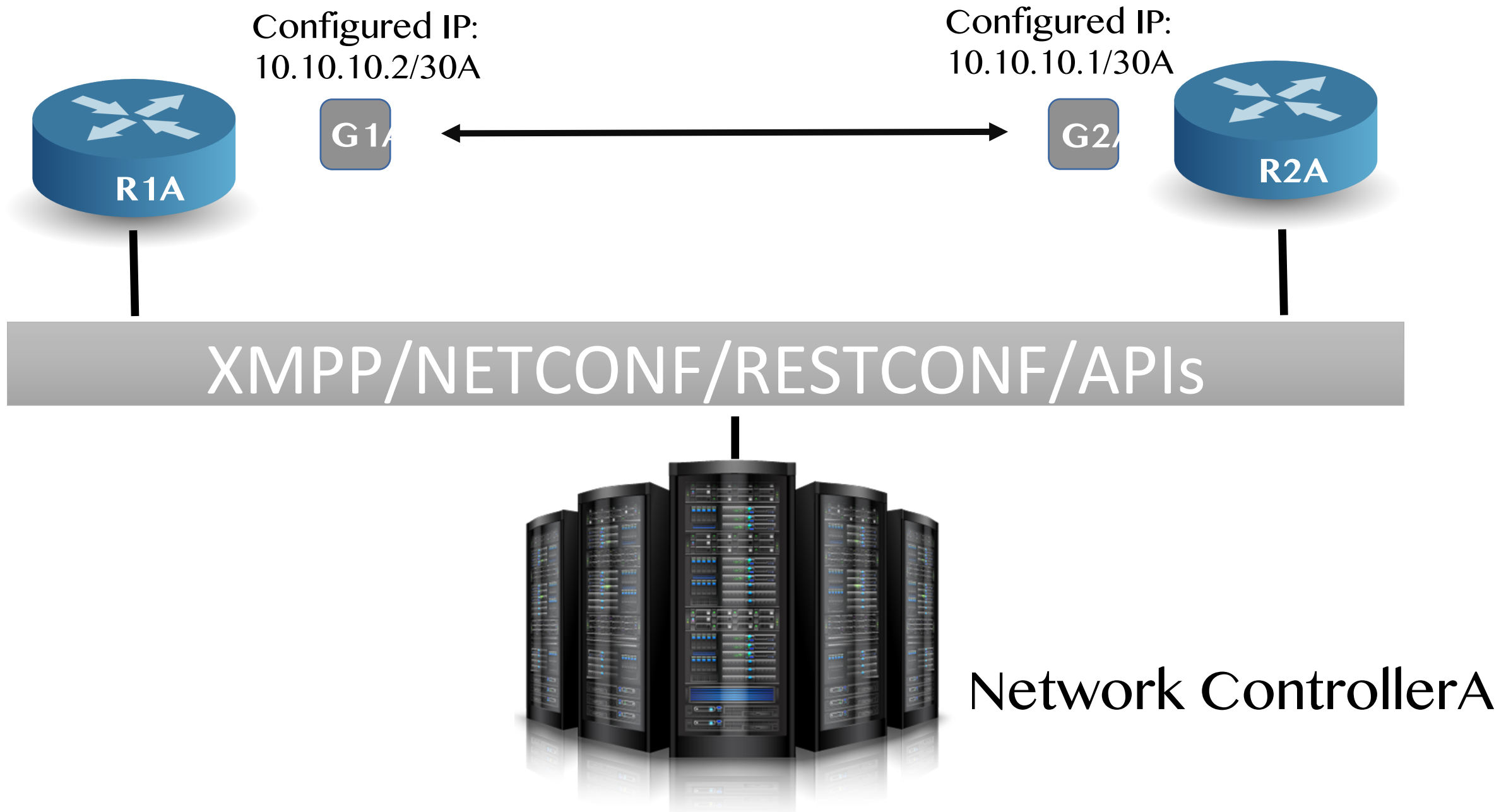
**Ansible/SaltA  
DrivenA**

- R1 G1 IP Address: 10.10.10.2  
(calculated from R2 G2)A
- Check Connectivity from R2 to R1  
(P2P)A
- R1 Lo0 IP address (algo based)A
- R1 IGP AdjacencyA
- R1 Redistribute connectedA
- etc.A

**Up-to-Date  
InventoryA**







# Personal Experiences I

- Connect with more people
- Build personal network
- Got to know about tools like ANSIBLE and NAPALM
- Get to talk with people about what they are doing on their job
- Thinking how the tools can solve other problems related to testing
- We are not programmers, yet found these tools very useful



# Personal Experiences II

- Wonderful time
- Meet nice people from different life experiences
- Learn about the tools
- Run and sell ideas for your own personal projects
- The environment allows for taking risks
- There was teaching and learning on each team
- Feel welcomed

**AutomationA**



**RightA**