YAPT
Provision SRX devices

Quick Start Guide (Virtualbox)

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YAPT- Prerequisites

To use this quick start guide we need vagrant and VirtualBox being installed. This Quick Start uses staging area approach with OSSH plugin. There are more options which could be used like: PHS / TFTP / DHCP

```
➜  ~ vagrant -v
Vagrant 1.8.6
```

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YAPT - Vagrant Box Topology

- Download YAPT Vagrant file from: https://git.juniper.net/cklewar/YAPT/tree/dev/vagrant
- Unzip Vagrant box file
  - tar xvfz yapt-vagrant.tar.gz
- Bring VM up
  - cd yapt-vagrant
  - vagrant up
- Download vSRX image
- Convert image from vmdk to vdi
- Configure vSRX VM settings
  - Download vSRX (15.1X49-D1xy) image
  - Edit vSRX Network settings
  - Set Adapter1
    - Attached to: internal-network
    - Name: yapt-staging
  - Mount juniper.iso image in cdrom
  - Start vSRX VM
- Connect to YAPT VM
  - vagrant ssh
- Connect to YAPT WebUI: http://172.28.128.3:8080/yapt/ui
- New device will show up after a while in job table

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YAPT – Start Vagrant (VirtualBox) VM

```
➜  yapt vagrant up
Bringing machine 'yapt01' up with 'virtualbox' provider...
==> yapt01: Importing base box 'yapt-centos7-01'...
==> yapt01: Matching MAC address for NAT networking...
==> yapt01: Setting the name of the VM: yapt_yapt01_1495015520894_92961
==> yapt01: Clearing any previously set network interfaces...
==> yapt01: Preparing network interfaces based on configuration...
    yapt01: Adapter 1: nat
    yapt01: Adapter 2: intnet
    yapt01: Adapter 3: hostonly
==> yapt01: Forwarding ports...
    yapt01: 22 (guest) => 2222 (host) (adapter 1)
==> yapt01: Running 'pre-boot' VM customizations...
==> yapt01: Booting VM...
==> yapt01: Waiting for machine to boot. This may take a few minutes...
    yapt01: SSH address: 127.0.0.1:2222
    yapt01: SSH username: vagrant
    yapt01: SSH auth method: private key
    yapt01: Warning: Remote connection disconnect. Retrying...
    yapt01: Warning: Remote connection disconnect. Retrying...
    yapt01:
    yapt01: Vagrant insecure key detected. Vagrant will automatically replace
    yapt01: this with a newly generated keypair for better security.
    yapt01:
    yapt01: Inserting generated public key within guest...
    yapt01: Removing insecure key from the guest if it's present...
    yapt01: Key inserted! Disconnecting and reconnecting using new SSH key...
==> yapt01: Machine booted and ready!
[yapt01] GuestAdditions 5.1.21 running --- OK.
==> yapt01: Checking for guest additions in VM...
==> yapt01: Setting hostname...
==> yapt01: Configuring and enabling network interfaces...
==> yapt01: Mounting shared folders...
    yapt01: /vagrant => /yapt-vagrant/yapt
```


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YAPT- vSRX

- Download vSRX image
- Unpack vSRX image
  - tar xvf media-srx-vsrx-vmdisk-15.1X49-D110.4.ide.ova
- Convert vSRX Image to vdi
  - vboxmanage clonehd -format VDI media-srx-vsrx-vmdisk-15.1X49-D110.4-disk1.vmdk junos-vsrx-15.1X49-D110.4.vdi

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YAPT – Configure vSRX Settings

General

Name: vsrx_ztp01
Operating System: Other Linux (64-bit)

System

Base Memory: 4096 MB
Processors: 2
Boot Order: Floppy, Optical, Hard Disk
Acceleration: VT-x/AMD-V, Nested Paging, PAE/NX, KVM Paravirtualization

Display

Video Memory: 16 MB
Remote Desktop Server: Disabled
Video Capture: Disabled

Storage

Controller: IDE
IDE Primary Master: junos-vsrx-15.1X49-D110.4.vdi (Normal, 16,00 GB)
IDE Secondary Master: [Optical Drive] juniper.iso (900,00 KB)

Audio

Disabled

Network

Adapter 1: Intel PRO/1000 MT Desktop (Internal Network, 'yapt-staging')
Adapter 2: Intel PRO/1000 MT Desktop (Not attached)
Adapter 3: Intel PRO/1000 MT Desktop (Not attached)
Adapter 4: Intel PRO/1000 MT Desktop (Not attached)

USB

USB Controller: OHCI, EHCI
Device Filters: 0 (0 active)

Shared folders

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YAPT – Configure vSRX Network Settings

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YAPT – vSRX Virtualbox Caveats

- Running vSRX in Virtualbox only supports fxp0 interface
- Control Plane performance is slow since missing nested virtualization support in Virtualbox

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YAPT – SSH into VM / show logs

```
➜  yapt vagrant ssh
Last login: Fri Apr 28 23:48:51 2017
[vagrant@yapt01 ~]$ sudo su
[root@yapt01 vagrant]# cd
[root@yapt01 ~]# cd junpiper-yapt-0.0.2
[root@yapt01 ~]# tail -f ./logs/info.log
```


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YAPT– Open Web UI

http://172.28.128.3:8080/yapt/ui

Yet Another Provisioning Tool | Jobs | History | About

Job Overview

	Name	Model	Serial	Version	IP	Last Seen	Progress
	vsrx_ztp01	VSRX	CFF465DEA504	15.1X49-D90.7	172.16.146.132	2017-05-17 00:58:59	100%

Configuration:

Connection: 0x109bc5a20

Log Source: phslogreader

Init	Script	Software	Configuration	Cleanup
Done	Done	Device version newer	Done	Done

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YAPT – Restart Provisioning Process

```
vsrx01>request system reboot
```


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