**22 - R710 Proxmox Ansible NTP on Terraformed VMs pointing to NTP server on run host**

These notes cover adding a NTP as a server server to the run3 host and setting up via Ansible NTP on Terraformed VM’s to point at the NTP server on run3.

This document builds upon the previous documents.

You will need to have created the VM template with VMID 9000 on both hypervisors.

# Setup NTP on run3 for it to serve Terraformed VM’s:

1. Log into rhys@run3
2. Do:  
   **sudo apt install ntp**
3. Its status can be checked with:  
   **systemctl status ntp**
4. To check that NTP is synchronizing correctly, do:  
   **ntpq - p**  
     
   to see something like:  
    *remote refid st t when poll reach delay offset jitter*

*==============================================================================*

*0.ubuntu.pool.n .POOL. 16 p - 64 0 0.000 0.000 0.000*

*1.ubuntu.pool.n .POOL. 16 p - 64 0 0.000 0.000 0.000*

*2.ubuntu.pool.n .POOL. 16 p - 64 0 0.000 0.000 0.000*

*3.ubuntu.pool.n .POOL. 16 p - 64 0 0.000 0.000 0.000*

*ntp.ubuntu.com .POOL. 16 p - 64 0 0.000 0.000 0.000*

*-static.135.154. 212.7.1.132 2 u 6 64 1 53.373 -0.008 0.301*

*+ntp1.m-online.n 212.18.1.106 2 u 5 64 1 36.598 2.021 0.138*

*-185.78.166.100 203.159.70.33 2 u 3 64 1 313.461 -42.613 3.322*

*\*time.rdg.uk.as4 85.199.214.100 2 u 3 64 1 18.800 2.168 0.601*

*+telesto.host.st 124.216.164.14 2 u 5 64 1 35.418 2.890 0.200*

*-058176194188.ct .GPS. 1 u 4 64 1 208.675 3.824 0.871*

*85.199.214.99 ( .GPS. 1 u 1 64 1 15.857 0.306 1.119*

*-grampus.irb.hr 83.143.51.50 2 u 9 64 1 52.332 -0.275 0.472*

*pugot.canonical 17.253.34.253 2 u 20 64 1 22.115 1.408 0.000*

*mail.redwebonli 195.66.241.3 2 u 6 64 1 40.701 -0.216 1.234*

*golem.canonical 17.253.108.253 2 u 18 64 1 20.507 2.632 0.000*

*ntp1.wirehive.n 92.21.53.217 2 u 7 64 1 17.426 1.314 0.560*

*chilipepper.can 17.253.34.123 2 u 16 64 1 14.365 0.525 0.000*

*alphyn.canonica 145.238.203.14 2 u 15 64 1 91.889 1.987 0.000*

1. In file /etc/ntp.conf adjust this line (as root):  
   **#restrict 192.168.123.0 mask 255.255.255.0 notrust**  
   to be:  
   **restrict 192.168.124.0 mask 255.255.255.0**  
     
   to limit access to this NTP server to local clients only and only allow read-only access.  
     
   Then restart ntp with:  
   **sudo systemctl restart ntp**
2. And check it’s still working with:  
   **systemctl status ntp**

# Install NTP on Terraformed VM’s:

1. Log into: **rhys@run3**
2. Then in the **terraform** directory, run:

**./clear-sshs**

**terraform init**

**terraform plan  
  
terraform apply -target=module.cw1.proxmox\_vm\_qemu.test\_server**

1. You can then log into the new VM:

**ssh rhys@cw1**

1. Then log out of cw1 and in the **ansible** directory, create file **ntpmgmt.yml** and put the following into it:  
   ---

- hosts: cw1

become: yes

vars:

# point at host 'run3'

ntp\_server1: 192.168.124.162

tasks:

- name: check/install ntp client package

apt:

name=ntp

state=latest

update\_cache=yes

- name: deploy ntp.conf to hosts

template:

src=templates/ntp.conf.j2

dest=/etc/ntp.conf

owner=root

group=root

mode=0644

backup=yes

notify:

start\_restart\_ntp\_client

handlers:

- name: start\_restart\_ntp\_client

systemd:

name: ntp

state: restarted

enabled: yes

1. Then in the ansible directory, to apply the ntpmgmt.yml file, do:  
   **ansible-playbook --ask-become-pass ntpmgmt.yml**
2. And to check that ntp is now operating on cw1, do:  
   **ansible cw1 -m shell -a 'ntpq -p'**

To get:  
*cw1 | CHANGED | rc=0 >>*

*remote refid st t when poll reach delay offset jitter*

*==============================================================================*

*\*192.168.124.162 195.171.43.10 2 u 6 64 1 0.149 -0.035 0.704*

**ansible cw1 -m shell -a 'date'**

To get:

*cw1 | CHANGED | rc=0 >>*

*Sun Feb 20 09:13:01 UTC 2022*

1. Also log into cw1 and run:  
   **ntpq -p**  
     
   to get something like:  
    *remote refid st t when poll reach delay offset jitter*

*==============================================================================*

*\*192.168.124.162 195.171.43.10 2 u 12 64 7 0.205 0.347 0.918*

1. Finally, in the terraform directory destroy **cw1** with::  
   **terraform destroy -target=module.cw1.proxmox\_vm\_qemu.test\_server**