**Manage Windows Servers with Ansible**

**WinRM Configuration**

When connecting to a Windows server, there are a couple of different options that can be used for authentication.

* We will use **Basic** authentication because it support HTTP(5985 port).
* $url = "https://raw.githubusercontent.com/ansible/ansible/devel/examples/scripts/ConfigureRemotingForAnsible.ps1"
* $file = "$env:temp\ConfigureRemotingForAnsible.ps1"
* (New-Object -TypeName System.Net.WebClient).DownloadFile($url, $file)
* powershell.exe -ExecutionPolicy ByPass -File $file
* If third step is not working then Download the url file” [**https://raw.githubusercontent.com/ansible/ansible/devel/examples/scripts/ConfigureRemotingForAnsible.ps1**](https://raw.githubusercontent.com/ansible/ansible/devel/examples/scripts/ConfigureRemotingForAnsible.ps1)” on to the target machine.
* And run the 4th point by specifying the path of the file using 2nd point. And Install it.
* Verify that the **Basic** authentication is enabled.

winrm get winrm/config/Service

winrm get winrm/config/Winrs

**Installation**

Ansible uses the pywinrm package to communicate with Windows servers over WinRM. At the time of writing this, the package is not installed by default with the Ansible package. Install it manually (I’m using a Debian-based system here):

$ sudo apt install python3-pip

$ pip3 install pywinrm

**Ansible Configuration**

In the inventory file like hosts,

$ sudo nano /etc/ansible/hosts

[windows]

Windows.domain.com

10.x.x.x

The content of the file group\_vars/windows can be seen below.

## It is suggested that these be encrypted with ansible-vault.

ansible\_connection: winrm

## May also be passed on the command-line via --user

ansible\_user: ansible

## May also be supplied at runtime with --ask-pass

ansible\_password: PUT\_YOUR\_WINDOWS\_PASSWORD\_HERE

## Option for ansible\_winrm\_transport: basic

ansible\_winrm\_transport: ntlm

ansible\_port: 5985

ansible\_winrm\_scheme: http

ansible\_winrm\_server\_cert\_validation: ignore

**Testing using win\_ping module**

$ ansible windows -i hosts -m win\_ping

**Troubleshoot**

If service is not pingable, do degrade the packages. Then check ping operation, go to **Testing using win\_ping module section.**

* pywinrm from 0.4.2 to 0.4.1
* requests from 2.26.0 to 2.24.0
* pyOpenSSL from 21.0.0 to 19.1.0
* requests from 1.2.0 to 1.1.1