

Tier4 Services S.A.

Configure automatic updates with Ansible for NS Windows 10 PCs

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1. Introduction
   1. Purpose

The purpose of this document is to explain how to configure a Windows 10 PC to be updated using Ansible AWX

* 1. Scope

T4 Staff, NS Tech Staff

1. Network requirements

The Ansible host in this case 172.16.4.131 must be able to reach to the Windows host trough port 5986

The Windows host must be able to connect to internet (Windows Update) or the local WSUS trough port 8530 or 8531 if SSL is enabled.

If internet is used to update the machines, please check this URLs are reachable from the Windows 10 host.

http://windowsupdate.microsoft.com

http://\*.windowsupdate.microsoft.com

https://\*.windowsupdate.microsoft.com

http://\*.update.microsoft.com

https://\*.update.microsoft.com

http://\*.windowsupdate.com

http://download.windowsupdate.com

http://download.microsoft.com

http://\*.download.windowsupdate.com

http://wustat.windows.com

http://ntservicepack.microsoft.com

http://stats.microsoft.com

https://stats.microsoft.com

1. Windows 10 host requirements

Check the following

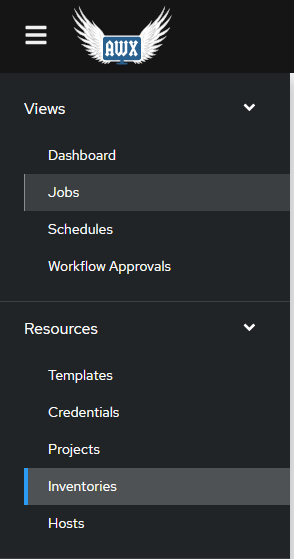
1. The computer MUST have a static IP Address
2. The computer MUST have a local administrator, regardless with a static password or a password stored in Password Manager.
3. Check if the machine is actually reaching the WSUS or internet (refer to point #2 of this document)
4. Check the Firewall, If Windows Firewall or any 3rd party Firewall is enabled create a rule to enable the computer listen connections from 172.16.4.131:5986 TCP, also enable the reply.
5. Open Powershell ISE as Adminstrator
   1. Copy the contents of the following file to the ISE script section and then press execute.



1. Ansible configurations

For the first time for a single or a group of targets a configuration on Ansible is in order, we have to set a host, and inventory a template and a schedule if needed, also these templates can be used on demand so a schedule is not mandatory.

1. Log in to the Ansible web console
   1. <https://awx.local.t4.cr>
   2. Credentials on Password Manager, for NS machines please use ns\_awx user
2. Create an Inventory
   1. On the left menu, go to Resources 🡪 Inventories



* 1. Look out for **NS - 1 - Patching Inventory #1** and press the **Copy Inventory** button
     1. Rename this inventory to **NS - \*CONSECUTIVE\* - \*PURPOSE\* Inventory**
        1. Example: NS - 2 - Patching Inventory
  2. Edit the copy of the Inventory press the **Edit Inventory** button
  3. Go back to Inventories and then select the inventory name set on the previous step
     1. Go to the Hosts tab
        1. Edit the host / Add a host
           1. Change the parameters as required

Change the following parameters:

hostnameIP (No blank spaces)

LogFile (Avoid using dots)

AutoReboot (yes or no)

---

hostnameIP: "172.31.5.147-ES-01"

ansible\_connection: winrm

ansible\_winrm\_transport: ntlm

ansible\_winrm\_server\_cert\_validation: ignore

LogLocation: c:\

LogFile: Patching-ES-01.txt

ansible\_PMP\_Resource: 'NS\_Password\_Manager'

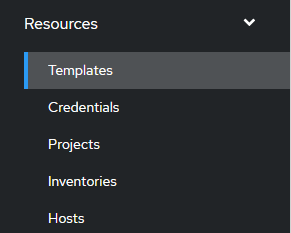
ansible\_user: 't4.support'

ansible\_password: "{{ lookup('passwordmanagerpro','{{ ansible\_PMP\_Resource }}','{{ ansible\_user }}') }}"

AutoReboot: no

* + - * 1. Save the changes
      1. Actually the Web interface don’t allow to copy or clone hosts so if more needed, add a new Host to the inventory and set the parameters.

1. Create a template
   1. On the left menu, go to Resources 🡪 Templates



* 1. Press the button **Add**, and then select **Add job template**
     1. Set a name for the Template
        1. Use the same name schema used on the inventory
           1. NS - \***INVENTORYNUMBER**\*.\***CONSECUTIVE**\* - **PURPOSE**
           2. Example: NS - 1.0 - Patching
     2. Set a description for the Template
     3. Set the Job Type to **Check**
     4. Select the required inventory
     5. Chose one of the following playbooks
        1. Windows\_10\_Patching\_BULK.yml
           1. This playbook will execute all the task on all the host on the inventory at the same time as fast as it can.
        2. Windows\_10\_Patching\_OneByOne.yml
           1. This playbook will execute all the task on the first host on the inventory until finish or fail and then it will continue on the second one and so on.
        3. Windows\_CheckForUpdates.yml
           1. This playbook just checks updates on the hosts and then send an email with the report of needed patches.
     6. Variables
        1. Set the variables according the following data.

---

MailServer: 'mail.t4.cr'

MailPort: 465

MailUser: 'patchautomation@t4.cr'

MailPassword: '4TierInt.2020'

MailTo: 'support@t4.cr’

MailTo2: 'javila@t4.cr'

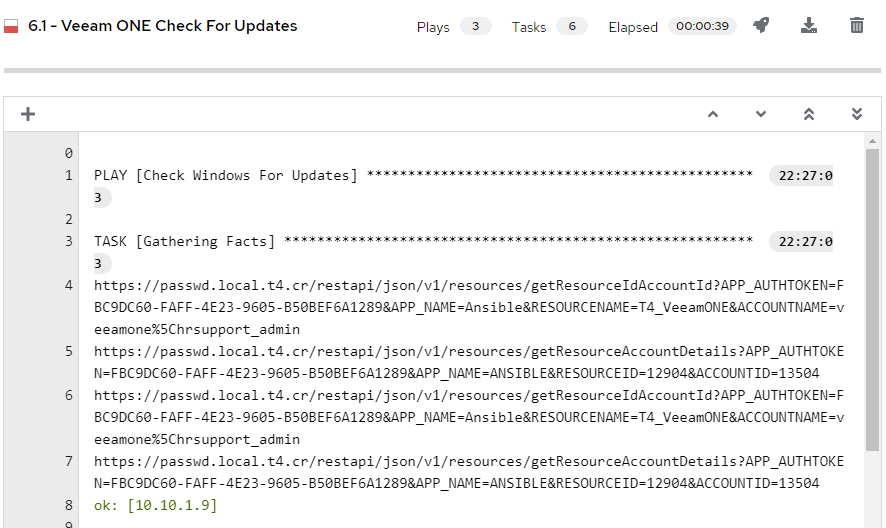
MailCC: 'mrodriguez@t4.cr'

MailSubject: T4 AS - NS Check for updates!

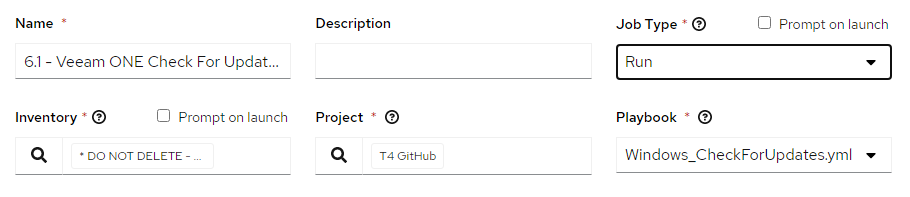
MailLink: https://awx.local.t4.cr/#/jobs/playbook/{{ tower\_job\_id }}/output

* + 1. Save the template

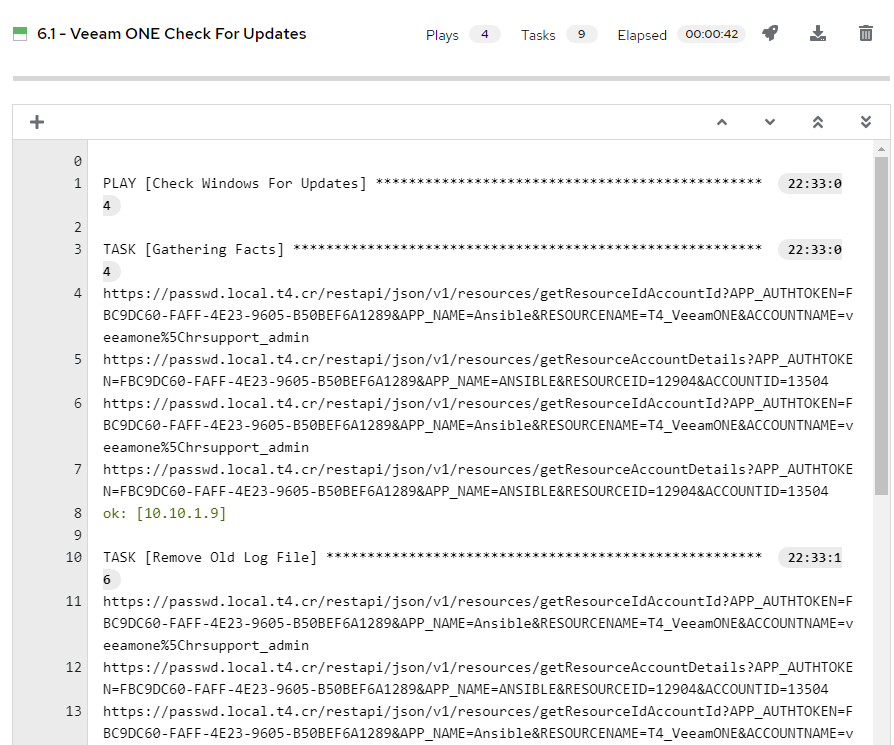
1. Test the template
   1. On the left menu, go to Resources 🡪 Templates
   2. Look out for the template created previously, press the **Launch Template** (rocket) button
   3. Wait for the results (this will check if the tasks of the Playbook can be accomplished and if the hosts were reachable), the playbook could fail but this is normal depending of the task, because these playbooks create files on the Windows host on the execution and the check job will not find them, check if at least the task **Gathering Facts** worked properly.



1. First execution of the template
   1. Edit the template and change it to RUN



* 1. Save the template
  2. Look out for the template and then press the **Launch Template** (rocket) button
  3. Wait for results
  4. The playbook must execute correctly as follows



* 1. And you must have greeted with a start email and finish email like the following ones.

