

## Exercise 3.0 - Windows Patching with Ansible

Patching windows systems can be a very time consuming task, but working with ansible you could reduce this time significantly.

In this exercise, you will update your windows nodes.

# Creating a new Playbook

## Step 1:

Within Visual Studio Code, create a new directory in your git repo and create a site.yml file.

In the Explorer accordion you should have a 'student#-playbooks' section.

Create a folder called **windows\_patching** and a file called **patch\_windows.yml**.

Hover over the **student#-playbooks** section and click the **New Folder** button.

Type **windows\_patching** and press enter. Then click that folder so it is selected.

Hover over the **student#-playbooks** section again and click the **New File** button.

Type **patch\_windows.yml** and press enter.

You should now have an editor open in the right pane that can be used for creating your playbook.

## Step 2:

Add a play to your playbook. These include defining serial parameter which executes the playbook in stages so it doesn't try patch all systems all at once.

```

---
- hosts: windows
  serial:
    - 25%
  max_fail_percentage: 25%
  vars:
    win_updates_categories:
      - CriticalUpdates
      - SecurityUpdates
  tasks:
    - name: Check for missing updates
      win_updates:
        state: searched
        category_names: "{{ win_updates_categories }}"
      register: search_updates

    - name: Show missing updates
      debug:
        var: search_updates

    - name: Install missing updates.
      win_updates:
        category_names: "{{ win_updates_categories }}"
      register: apply_updates

    - name: Reboot if needed
      win_reboot:
        when: apply_updates.reboot_required

```

## Step 3: Commit and Review

Your new, improved playbook is done! But remember we still need to commit the changes to source code control.

Click **File** → **Save All** to save the files you've written

Click on the Source Code icon, type in a commit message such as **Adding basic playbook**, and click the check box above.

Sync to gitlab by clicking the arrows on the lower left blue bar. When prompted, click **OK** to push and pull commits.

It should take 20-30 seconds to finish the commit. The blue bar should stop rotating and indicate 0 problems...

## Running your playbook from Tower

## Step 1:

Create a new job template in tower and add patch\_windows playbook.

## Step 2:

Run the playbook from Tower and review the results.

## End Result

After running the playbook from Tower, it will update your nodes with the latest patches.