9 mins read

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How to setup Ansible Lint extension in VSCode on Windows using WSL

A step-by-step guide to setup ansible-lint correctly. Fixing errors like 'Ansible-lint is not available. Kindly check the path or disable validation using ansible-lint' in VSCode.

Intro

Welcome! Following this guide to get to know how to setup Ansible Lint extension in Visual Studio Code on Windows with WSL. Here you will find a step-by-step guide to setup ansible-lint correctly. Fixing errors like 'Ansible-lint is not available. Kindly check the path or disable validation using ansible-lint' in VSCode.

To follow this guide, make sure you have WSL (Windows Subsystem for Linux) installed and configured on your Windows machine, with Ansible and ansible-lint properly set up in the WSL environment. We will install the official Ansible extension for VS Code and open your Ansible workspace in VS Code on WSL. Then we will verify that ansible-lint is functioning by creating a simple pipeline. Let’s get started!

Prerequisites

Since you want to set up code checking in VSCode using ansible lint, we will assume that you have already installed Visual Studio Code and Ansible in your WSL environment. If not, here is the link to the official documentation for installing Ansible and link to download the latest version of VSCode. Ansible Lint is installed via pip. If you don't have pip, install it according to the instructions in the official documentation. By the end of the command `wsl`.

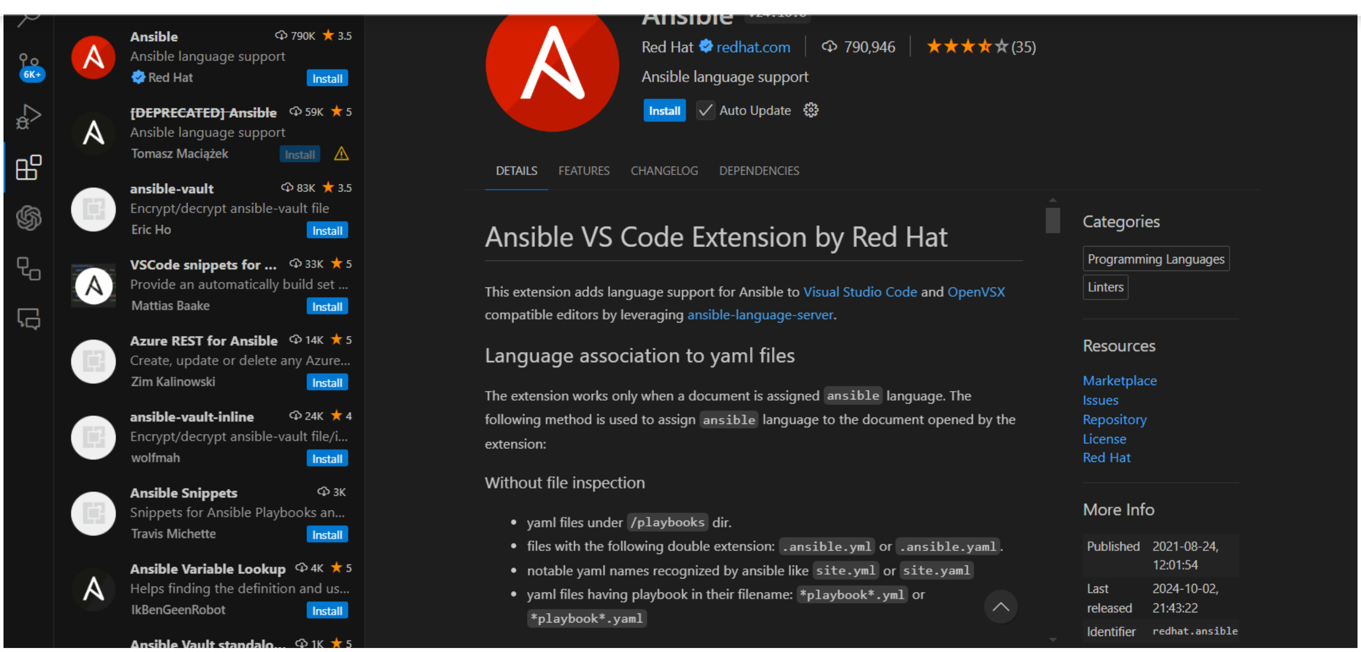
Step 1: Install Ansible Lint in WSL

The ansible-lint command is part of the ansible-tools package. It can be installed either independently or along with all Ansible Tools packages (the latter is preferable). To install Ansible Lint in WSL, run the following pip command:

```
pip3 install ansible-dev-tools
# or pip3 install ansible-lint
```

Step 2: Install Ansible Lint extension in VSCode

Start VSCode and open Extension panel with `Ctrl` + `Shift` + `X` or by clicking on the Extensions icon in the Activity Bar on the side of the VSCode window. Search for "Ansible" in the Extensions panel and install the official Ansible extension by Microsoft. If you can't find it, you can use this link to install it.



Ansible 790K ★ 3.5
Ansible language support
Red Hat Install
~~[DEPRECATED] Ansible~~ 59K ★ 5
Ansible language support
Tomasz Maciążek Install
ansible-vault 83K ★ 3.5
Encrypt/decrypt ansible-vault file
Eric Ho Install
VSCode snippets for ... 33K ★ 5
Provide an automatically build set ...
Mattias Baake Install
Azure REST for Ansible 14K ★ 5
Create, update or delete any Azure...
Zim Kalinowski Install
ansible-vault-inline 24K ★ 4
Encrypt/decrypt ansible-vault file/i...
wolfmah Install
Ansible Snippets 3K
Snippets for Ansible Playbooks an...
Travis Michette Install
Ansible Variable Lookup 4K ★ 5
Helps finding the definition and us...
IkBenGeenRobot Install
Ansible Vault standalo... 1K ★ 5
Ansible
Red Hat redhat.com 790,946 ★★★★☆ (35)
Ansible language support
Install Auto Update
DETAILS FEATURES CHANGELOG DEPENDENCIES
Categories
Programming Languages
Linters
Resources
Marketplace
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More Info

Ansible VS Code Extension by Red Hat

This extension adds language support for Ansible to Visual Studio Code and OpenVSX compatible editors by leveraging ansible-language-server.

Language association to yaml files

The extension works only when a document is assigned `ansible` language. The following method is used to assign `ansible` language to the document opened by the extension:

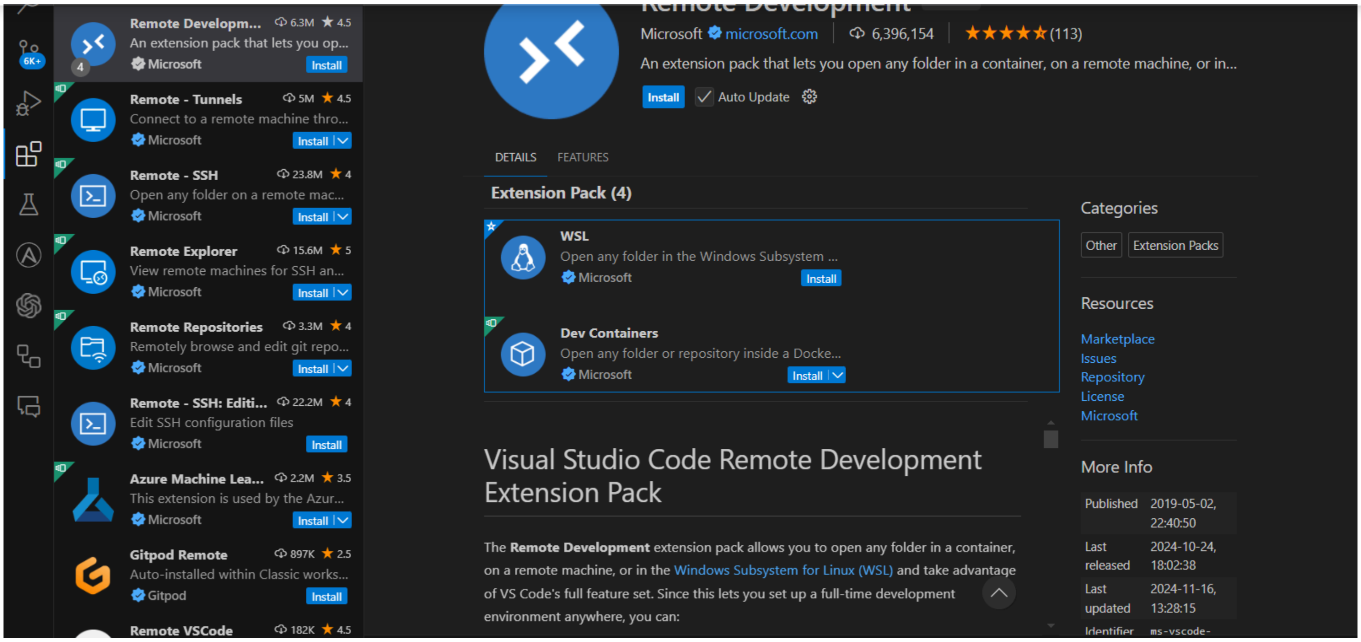
Without file inspection

- yaml files under `/playbooks` dir.
- files with the following double extension: `.ansible.yml` or `.ansible.yaml`.
- notable yaml names recognized by ansible like `site.yml` or `site.yaml`
- yaml files having playbook in their filename: `*playbook*.yml` or `*playbook*.yaml`

Published	2021-08-24, 12:01:54
Last released	2024-10-02, 21:43:22
Identifier	redhat.ansible

Step 3: Install Remote extension in VSCode

Since Ansible Lint was installed in WSL, we need to install the Remote extension in VSCode. This will allow us to work with files in WSL from VSCode. The extension can be found in the VSCode marketplace by the name "Remote". This is an official extension supported by Microsoft. This extension pack consists of the WSL extension, in addition to the Remote - SSH, and Dev Containers extensions, enabling you to open any folder in a container, on a remote machine, or in WSL. If you can't find it, use this link to install it.



Remote Developm... 6.3M ★ 4.5
An extension pack that lets you op...
Microsoft Install

Remote - Tunnels 5M ★ 4.5
Connect to a remote machine thro...
Microsoft Install

Remote - SSH 23.8M ★ 4
Open any folder on a remote mac...
Microsoft Install

Remote Explorer 15.6M ★ 5
View remote machines for SSH an...
Microsoft Install

Remote Repositories 3.3M ★ 4
Remotely browse and edit git repo...
Microsoft Install

Remote - SSH: Editi... 22.2M ★ 4
Edit SSH configuration files
Microsoft Install

Azure Machine Lea... 2.2M ★ 3.5
This extension is used by the Azur...
Microsoft Install

Gitpod Remote 897K ★ 2.5
Auto-installed within Classic works...
Gitpod Install

Remote VSCode 182K ★ 4.5

Remote Development
Microsoft microsoft.com | 6,396,154 | ★★★★★(113)
An extension pack that lets you open any folder in a container, on a remote machine, or in...
Install ☑ Auto Update

DETAILS FEATURES

Extension Pack (4)

WSL
Open any folder in the Windows Subsystem ...
Microsoft Install

Dev Containers
Open any folder or repository inside a Docke...
Microsoft Install

Visual Studio Code Remote Development Extension Pack

The **Remote Development** extension pack allows you to open any folder in a container, on a remote machine, or in the Windows Subsystem for Linux (WSL) and take advantage of VS Code's full feature set. Since this lets you set up a full-time development environment anywhere, you can:

Categories

Other Extension Packs

Resources

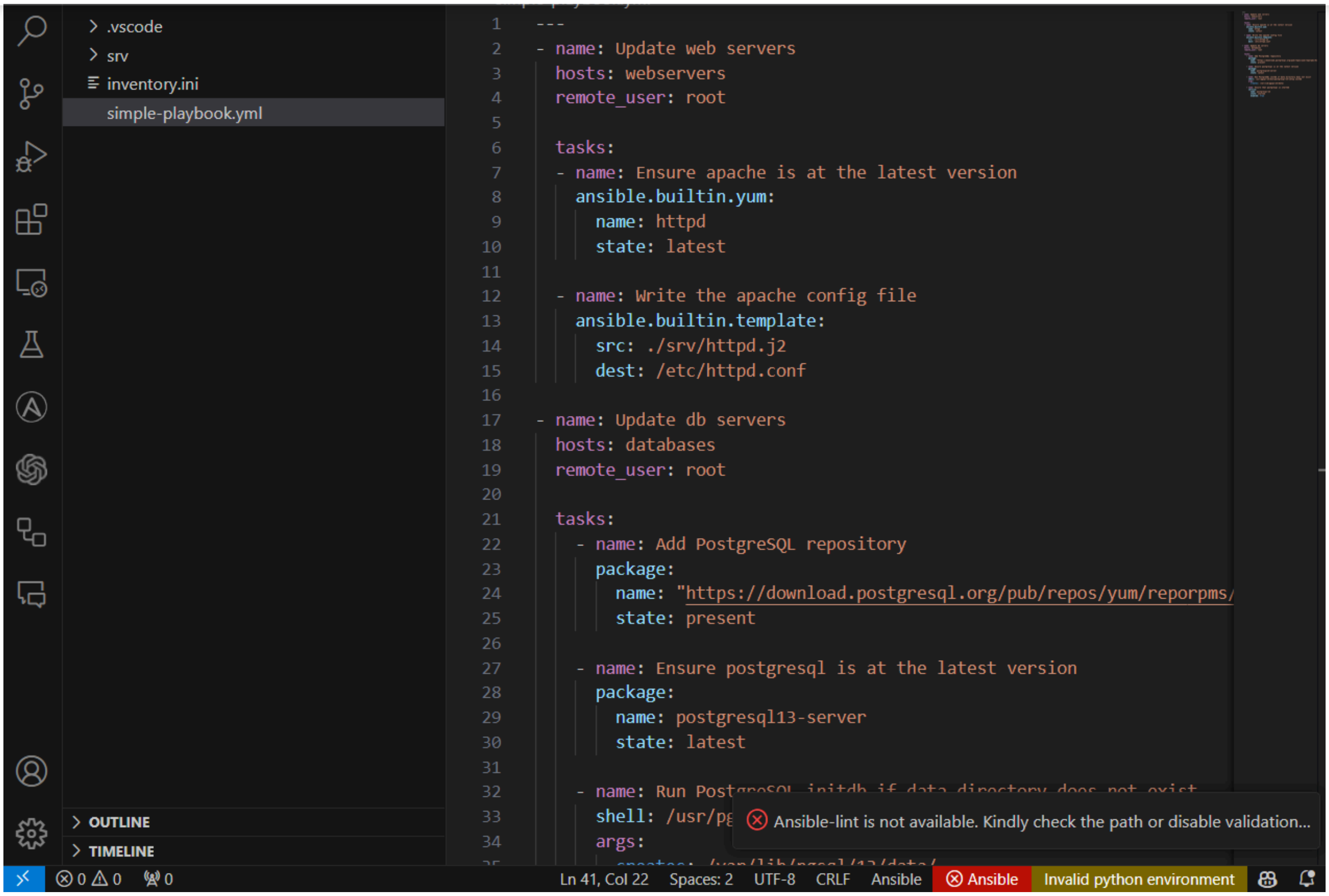
Marketplace
Issues
Repository
License
Microsoft

More Info

Published	2019-05-02, 22:40:50
Last released	2024-10-24, 18:02:38
Last updated	2024-11-16, 13:28:15
Identifier	ms-vscode-

Step 4: Open your ansible workspace in VSCode

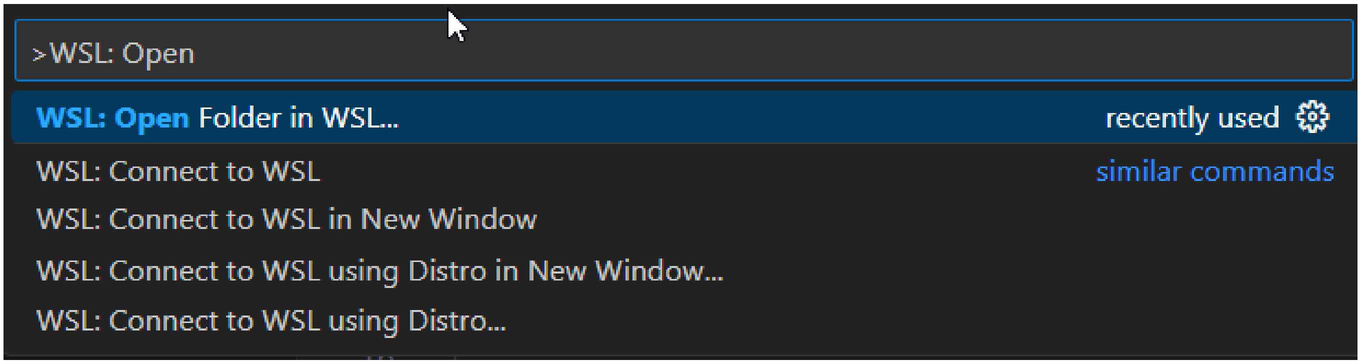
For now, if you try to open your Ansible playbooks in VSCode, you will get syntax highlights but also a linting error since VSCode is trying to find Ansible on your Windows host and cannot do it.



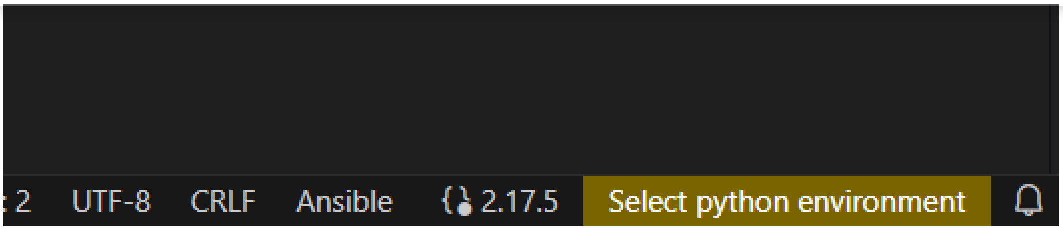
```yaml
---
- name: Update web servers
  hosts: webservers
  remote_user: root

  tasks:
  - name: Ensure apache is at the latest version
    ansible.builtin.yum:
      name: httpd
      state: latest

  - name: Write the apache config file
    ansible.builtin.template:
      src: ./srv/httpd.j2
      dest: /etc/httpd.conf

- name: Update db servers
  hosts: databases
  remote_user: root

  tasks:
    - name: Add PostgreSQL repository
      package:
        name: "https://download.postgresql.org/pub/repos/yum/reporpms/
        state: present

    - name: Ensure postgresql is at the latest version
      package:
        name: postgresql13-server
        state: latest

    - name: Run PostgreSQL initdb if data directory does not exist
      shell: /usr/pg
      args:
```

⊗ Ansible-lint is not available. Kindly check the path or disable validation...

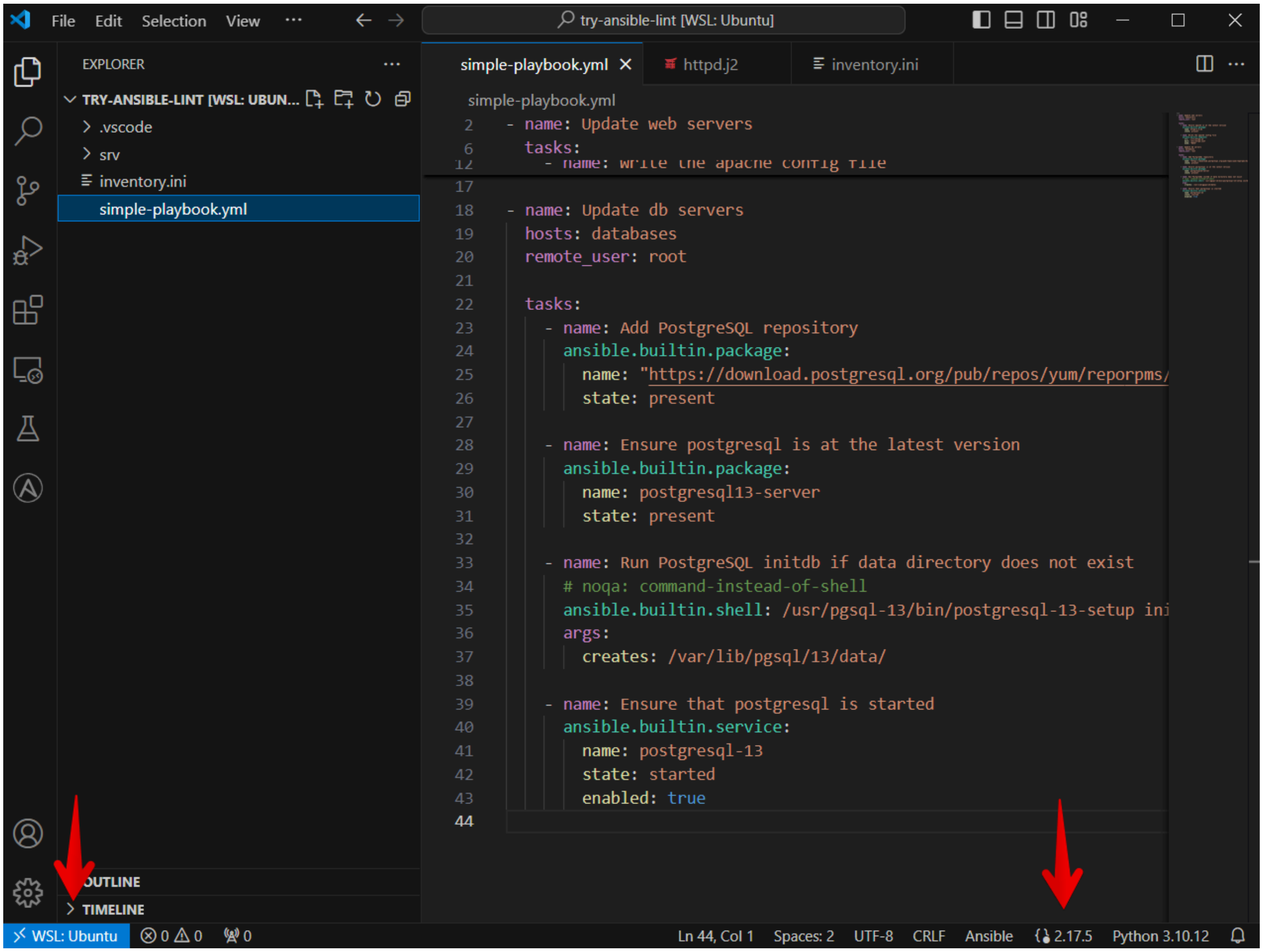
To fix this, you should open your project with VSCode on WSL. To do this, open the command panel with `Ctrl`+`Shift`+`P`, search for `>WSL: Open Folder in WSL`, and pick your project folder.


>WSL: Open
WSL: Open Folder in WSL...
recently used
WSL: Connect to WSL
similar commands
WSL: Connect to WSL in New Window
WSL: Connect to WSL using Distro in New Window...
WSL: Connect to WSL using Distro...

Now your project is opened in WSL and linting should run correctly. If your WSL has multiple Python installations, the Ansible extension will let you choose the Python interpreter manually.



You should now see that your project is opened in WSL, Ansible version detected, and ansible-lint is working correctly.



```
- name: Update web servers
  tasks:
    - name: write the apache config file

- name: Update db servers
  hosts: databases
  remote_user: root

  tasks:
    - name: Add PostgreSQL repository
      ansible.builtin.package:
        name: "https://download.postgresql.org/pub/repos/yum/reporpms/
        state: present

    - name: Ensure postgresql is at the latest version
      ansible.builtin.package:
        name: postgresql13-server
        state: present

    - name: Run PostgreSQL initdb if data directory does not exist
      # noqa: command-instead-of-shell
      ansible.builtin.shell: /usr/pgsql-13/bin/postgresql-13-setup ini
      args:
        creates: /var/lib/pgsql/13/data/

    - name: Ensure that postgresql is started
      ansible.builtin.service:
        name: postgresql-13
        state: started
        enabled: true
```

Step 5: Check working ansible-lint in VSCode

Let's create a simple playbook to check if ansible-lint is working in VSCode. Copy the following code to your Ansible playbook file named `simple-playbook.yml`:

```
  hosts: webservers
  remote_user: root

  tasks:
    - name: Ensure apache is at the latest version
      ansible.builtin.yum:
        name: httpd
        state: latest

    - name: Write the apache config file
      ansible.builtin.template:
        src: ./srv/httpd.j2
        dest: /etc/httpd.conf

- name: Update db servers
  hosts: databases
  remote_user: root

  tasks:
    - name: Add PostgreSQL repository
      package:
        name: "https://download.postgresql.org/pub/repos/yum/reporpms/EL-9-x86_64/pgdg
        state: present

    - name: Ensure postgresql is at the latest version
      package:
        name: postgresql13-server
        state: latest

    - name: Run PostgreSQL initdb if data directory does not exist
      shell: /usr/pgsql-13/bin/postgresql-13-setup initdb
      args:
        creates: /var/lib/pgsql/13/data/

    - name: Ensure that postgresql is started
      service:
        name: postgresql-13
        state: started
```

You will see that there are some errors highlighted in your playbook with the Ansible extension!

If you run `ansible-lint simple-playbook.yml` in your WSL terminal, you will see the same errors.

```
WARNING  Listing 11 violation(s) that are fatal
fqcn[action-core]: Use FQCN for builtin module actions (ansible.builtin.yum).
initial-playbook.yml:7 Use `ansible.builtin.dnf` or `ansible.legacy.dnf` instead.
package-latest: Package installs should not use latest.
initial-playbook.yml:7 Task/Handler: Ensure apache is at the latest version
yaml[indentation]: Wrong indentation: expected at least 3
initial-playbook.yml:7
risky-file-permissions: File permissions unset or incorrect.
initial-playbook.yml:12 Task/Handler: Write the apache config file
...
Read documentation for instructions on how to ignore specific rule violations.
                       Rule Violation Summary
 count tag                            profile    rule associated tags
     1 command-instead-of-shell       basic      command-shell, idiom
     1 yaml[indentation]              basic      formatting, yaml
     1 yaml[new-line-at-end-of-file] basic      formatting, yaml
     2 package-latest                 safety     idempotency
     1 risky-file-permissions         safety     unpredictability
     5 fqcn[action-core]              production formatting
Failed: 11 failure(s), 0 warning(s) on 1 files. Last profile that met the validation c
```

Let's try to fix them using hints from the Ansible VS Code extension! After fixing the highlighted errors, you will get the following valid Ansible playbook:

```
---
- name: Update web servers
  hosts: webservers
  remote_user: root
```

```
    - name: Ensure apache is at the latest version
      ansible.builtin.package:
        name: httpd-2.4.62
        state: present

    - name: Write the apache config file
      ansible.builtin.template:
        src: ./srv/httpd.j2
        dest: /etc/httpd.conf
        mode: "0644"

- name: Update db servers
  hosts: databases
  remote_user: root

  tasks:
    - name: Add PostgreSQL repository
      ansible.builtin.package:
        name: "https://download.postgresql.org/pub/repos/yum/reporpms/EL-9-x86_64/pgdg
        state: present

    - name: Ensure postgresql is at the latest version
      ansible.builtin.package:
        name: postgresql13-server
        state: present

    - name: Run PostgreSQL initdb if data directory does not exist
      # noqa: command-instead-of-shell
      ansible.builtin.shell: /usr/pgsql-13/bin/postgresql-13-setup initdb
      args:
        creates: /var/lib/pgsql/13/data/

    - name: Ensure that postgresql is started
      ansible.builtin.service:
        name: postgresql-13
        state: started
        enabled: true
```

Ansible files. To do this, you need to create a `.ansible-lint` file in the root of your Ansible project. For example, to prevent highlighting errors for using built-in modules without the prefix `ansible.builtin`, you could create the following `.ansible-lint` file:

```
---
skip_list:
  - fqcn-builtins
```

PROFIT!

If you find it usefull please follow me on Github to be notified about new lessons and content.

Useful links

- Install Ansible
- Install Ansible Lint
- VSCode Ansible extension
- VSCode Remote extension
- How to open a WSL project in VSCode
- Install WSL
- Install VSCode
- Install pip

ansible howto wsl

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