

# Ansible DevTools

*What's **new** in Q4 2024*

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# Ansible Development Tools

- Comprehensive collection utilities for creating and maintaining Ansible content
- Curated, supported, and opinionated
- Enables content creators to write better Ansible content
- Helps maintaining ansible content



# Ansible development tools

**Components** that help you create, test and deploy Ansible content

## Create

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### **ansible-creator**

Scaffold projects and content

### **ansible-navigator**

Develop and troubleshoot with execution environments

### **ansible-dev-environment**

Build and manage virtual environments for content development

### **VS Code Ansible Extension**

Native graphical user interface to Ansible  
LightSpeed and command line tools

## Test

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### **molecule**

Functional test runner for collections, playbooks and roles

### **ansible-lint**

Identify and correct stylistic errors and anti-patterns

### **pytest-ansible**

Added functions for module and plugin  
Python code unit testing

### **tox-ansible**

Test collections under different Python interpreters and Ansible core versions

## CI/CD Support

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### **run-ansible-lint Github Action**

Linters can be run on your GitHub pull request by just adding few lines to your GHA workflow.

### **ansible-content-actions (experimental)**

The experimental next generation of Github Actions for testing Ansible content, fully integrating all quality assurance tools and publishing into a single workflow.

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### **VS Code Ansible Extension**

Provides a graphical user interface to all components of ansible-dev-tools.

# ansible-lint

## What is it?

- ▶ Command-line tool for any Ansible users to lint playbooks, roles and collections
- ▶ Promote best practices and patterns.
- ▶ Develop consistent code across teams and scale using an opinionated strategy.
- ▶ Integrate into larger development workflows and CI tools.
- ▶ Helps upgrade to later Ansible core versions.
- ▶ Run transforms using ``ansible-lint --fix`` to easily fix some rules.

# Ansible development tools package (ansible-dev-tools)

## What is it?

A package of tools that enable automation developers to create, test and deploy Ansible automation quickly, consistently and effectively

- ▶ Easy way to install and discover the best tools.
- ▶ Ensures compatible versions of the tools are installed.
- ▶ Available as python package and EE container upstream or RPM package for AAP 2.5 users

```
$ pip3 install ansible-dev-tools

$ adt --version
ansible-builder           3.1.0
ansible-core              2.17.1
ansible-creator           24.6.0
ansible-dev-environment  24.4.3
ansible-dev-tools        24.9.1.dev3
ansible-lint              24.6.1.dev11
ansible-navigator         24.9.0
ansible-sign              0.1.1
molecule                 24.9.0
pytest-ansible            24.1.3
```

# Ansible Molecule – functional test runner

## What is new?

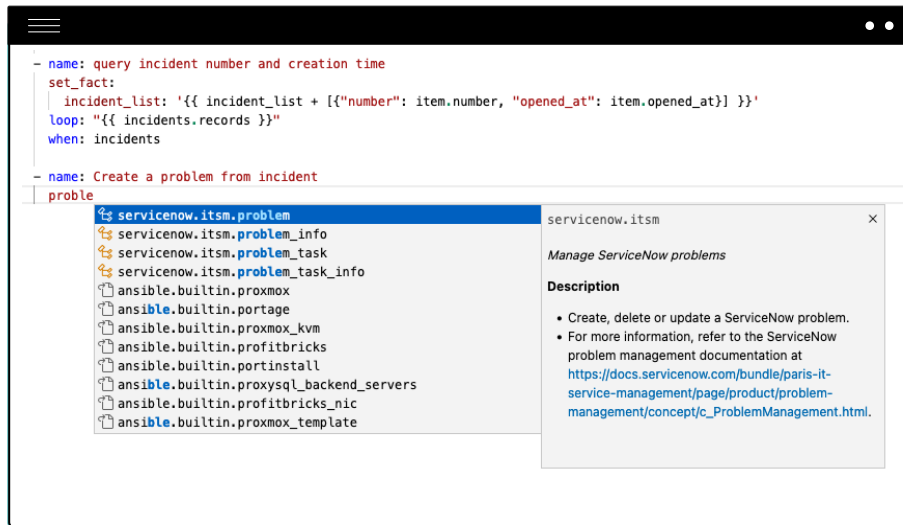
- ▶ "Molecule 6" was a refocus of the project as a test runner for functional testing of Ansible playbooks and roles with Ansible itself
- ▶ **delegated** driver become the only supported driver
- ▶ **testinfra** tester was removed from distribution
- ▶ **Future:** Improved interoperability with **collections** and functionality for running collection integration tests

# Ansible VS Code extension

## Simplify content creation

### What is it?

- ▶ Syntax highlighting of keywords
- ▶ Live validation of your code while you type
- ▶ Ansible LightSpeed generative AI suggestions
- ▶ Hover and goto functionality
- ▶ Auto-completion on play, block, or task contents, hosts, etc
- ▶ Supports Ansible content development on Windows and MacOS workstation

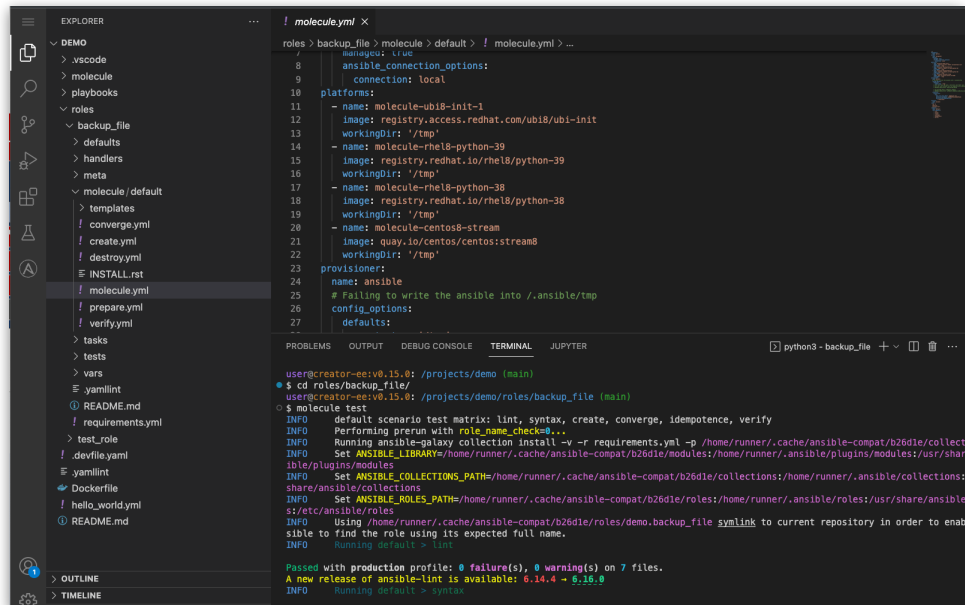


# Ansible VS Code extension

Simplify content creation

## What is it?

- ▶ Supports writing and running Ansible content with execution environments
- ▶ Integration with ansible-playbook, ansible-lint, ansible-navigator, and the rest of Ansible development tools
- ▶ tox-ansible and pytest-ansible integration with the test explorer view
- ▶ Documentation references as you code



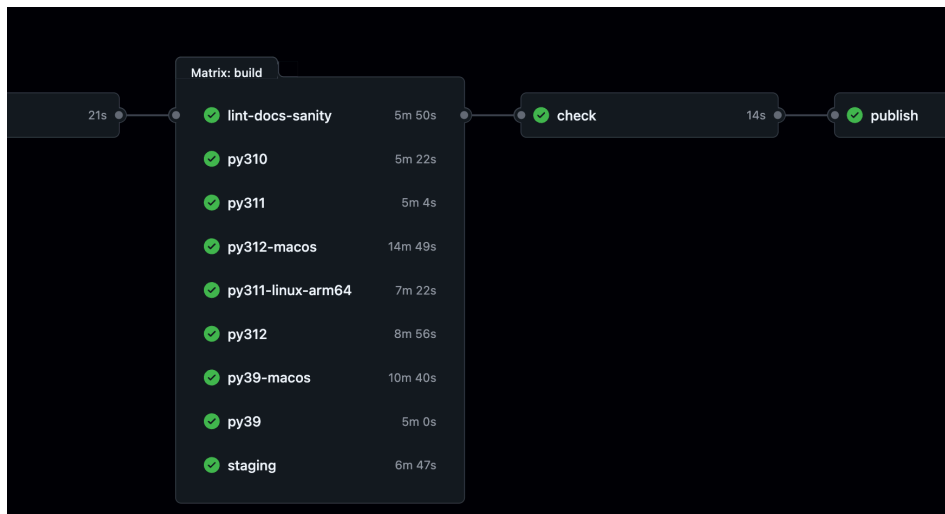


# ansible-content-actions (experimental)

## Using Github Actions with minimal effort

Features we aim to address:

- Leverage power of tox-ansible to determine the **test matrix** (ansible versions, python versions,...)
- Be able to **reduce CI/CD footprint** by chaining different tests under a single Github Actions job execution
- Allow maintainers to skip running specific test matrix components.
- Build and publish **changelog** without having to manually create changelog.yml entries.
- Automatically enable testing jobs with newer versions of **ansible-core** when this is released
- Publishing to galaxy
- All under a single unified workflow



Remark: As of Sep. 2024, content-actions are not ready for

9 production testing yet.

Question time!

# Thank you

- More about Ansible DevTools team and project by visiting **[ansible.readthedocs.io/projects/team-devtools/](https://ansible.readthedocs.io/projects/team-devtools/)**
- Watch **#devtools** tag on the **[forum.ansible.com](https://forum.ansible.com)**
- For live chat, use matrix