

Ansible Content Creator Toolsand the Road Forward

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Ansible Content Creator Tools

- Highlights of today
- Demos!
- What is coming tomorrow
- More demos!







Ansible content navigator (ansible-navigator).

Create, review, and debug content

What is it?

Command line utility and text-based user interface (TUI) for running, testing, and developing Ansible automation content

- Review EEs
- Develop collections
- Develop playbooks
- ► Run content on EEs
- Troubleshoot problems

```
$ ansible-navigator run playbook.yml -i inventory.ini
```



Ansible lint (ansible-lint)

Improving practices and behavior

- Command-line tool for any Ansible users to lint playbooks, roles and collections
- Promote best practices and and patterns.
- Develop consistent code across teams and scale using an opinionated strategy.
- Integrate into larger development workflows and CI tools.
- Helps upgrade playbooks to later Ansible Core versions.

```
$ ansible-lint playbook.yml
```



Ansible VS Code extension

Simplify content creation

- Syntax highlighting of keywords
- Live validation of your code while you type
- ► Al based Ansible task suggestions
- Integration with ansible-lint, ansible-navigator and ansible-playbook
- Auto-completion on play, block, or task contents, etc
- Supports writing and running Ansible content with execution environments
- Documentation references as you code

```
.
- name: guery incident number and creation time
 set fact:
   incident list: '{{ incident list + [{"number": item.number. "opened at": item.opened at}] }}'
 loop: "{{ incidents.records }}"
 when: incidents
- name: Create a problem from incident
 proble
        ☆ servicenow.itsm.problem
                                                                       servicenow.itsm
        servicenow.itsm.problem_info
         servicenow.itsm.problem task
                                                                       Manage ServiceNow problems
         servicenow.itsm.problem_task_info
                                                                       Description
        ansible.builtin.proxmox
         ansible.builtin.portage

    Create, delete or update a ServiceNow problem.

          ansible.builtin.proxmox_kvm
                                                                        . For more information, refer to the ServiceNow
         🖺 ansible.builtin.profitbricks
                                                                         problem management documentation at
          ansible.builtin.portinstall
                                                                         https://docs.servicenow.com/bundle/paris-it-
         ansible.builtin.proxysql_backend_servers
                                                                         service-management/page/product/problem-
         ansible.builtin.profitbricks_nic
                                                                         management/concept/c_ProblemManagement.html.
        ansible.builtin.proxmox_template
```



Noteworthy others

ansible.scm

A collection of source code management utilities for supporting GitOps workflows in Ansible workflows

https://github.com/ansible-collections/ansible.scm

ansichaut

Recently adopted by Ansible from Sebastian Gumprich (@rndmh3ro), antsichaut automates the filling of a changelog.yaml used by antsibull-changelog.

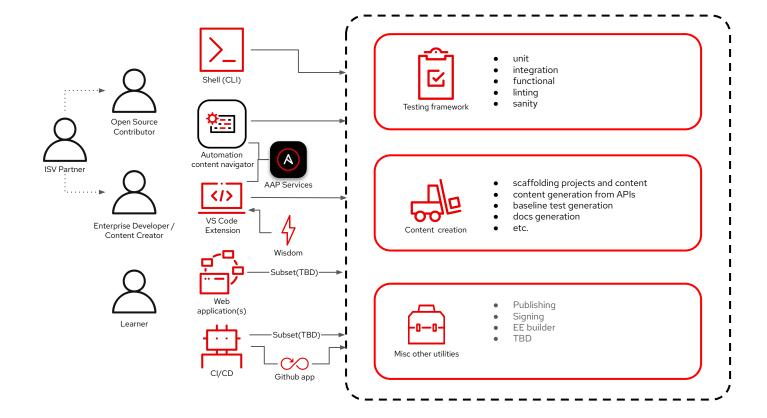
https://github.com/ansible-community/antsichaut

Demos!











Ansible Molecule (molecule)

Developer preview

- "Molecule 6" will be a refocus of the project as a test runner for functional testing of Ansible playbooks and roles with Ansible itself
- Will have breaking changes:
 - o delegated driver only <u>#3919</u>
 - Remove testinfra from distribution <u>#3920</u>
 - Scenarios as a single file #3918
 - Ansible vars to replace molecule.yml #3921
- Releasing as a developer preview to collect feedback while moving towards making this a supported component of AAP.
- Coming Q3 2023 as a follow-up to the general availability of AAP 2.4.

```
$ molecule test
```



Ansible testing framework

Coverage for all content

- A larger vision to provide a comprehensive and integrated, standards-based testing framework for all Ansible content creators
- Will provide an alternative for ansible-test* that is designed for the testing of Ansible collection modules and plugins
- Core components will be made up of ansible-lint, molecule, and the pytest-ansible and tox-ansible plugins
- Working towards being fully supported AAP components that are accessible through various Ansible creator user interfaces



^{*} ansible-test will still be needed for static code analysis sanity checks



The building blocks

pytest-ansible

A pytest plugin that adds several fixtures for running Ansible modules and inspecting ansible_facts.

https://github.com/ansible-community/pytest-ansible

tox-ansible

A tox plugin designed to simplify the testing of ansible content collections with a full matrix of different python interpreter and ansible-core versions in virtual environments.

https://github.com/tox-dev/tox-ansible



The building blocks

ansible-lint

A linter that checks playbooks and roles for practices and behavior that could potentially be improved.

https://github.com/ansible/ansible-lint

molecule

Test runner that aids in the development and end-to-end testing of Ansible content: collections, playbooks and roles

https://github.com/ansible-community/molecule



In the planning stages

"Content creator"

A framework for scaffolding Ansible content and projects – create file structures, config files, generate baseline tests, generate docs, provide workflow utilities and eventually generate modules and plugins from API schemas

"Content tools installer"

A single package that installs the many components that make up the suite of Ansible content tools

More demos!





What do you need to be successful?





Thanks!

GitHub: https://github.com/ansible/community

Matrix: #community:ansible.com or #social:ansible.com