





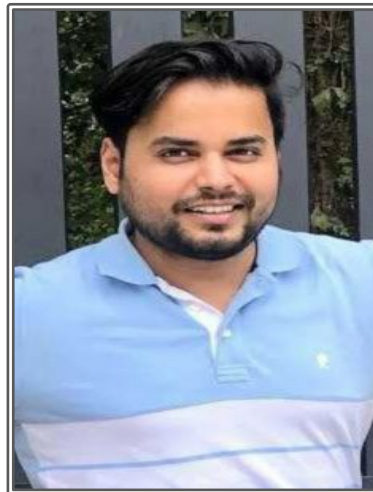
Seamless and Automated Integration with Ansible

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About Me

Sumit Jaiswal

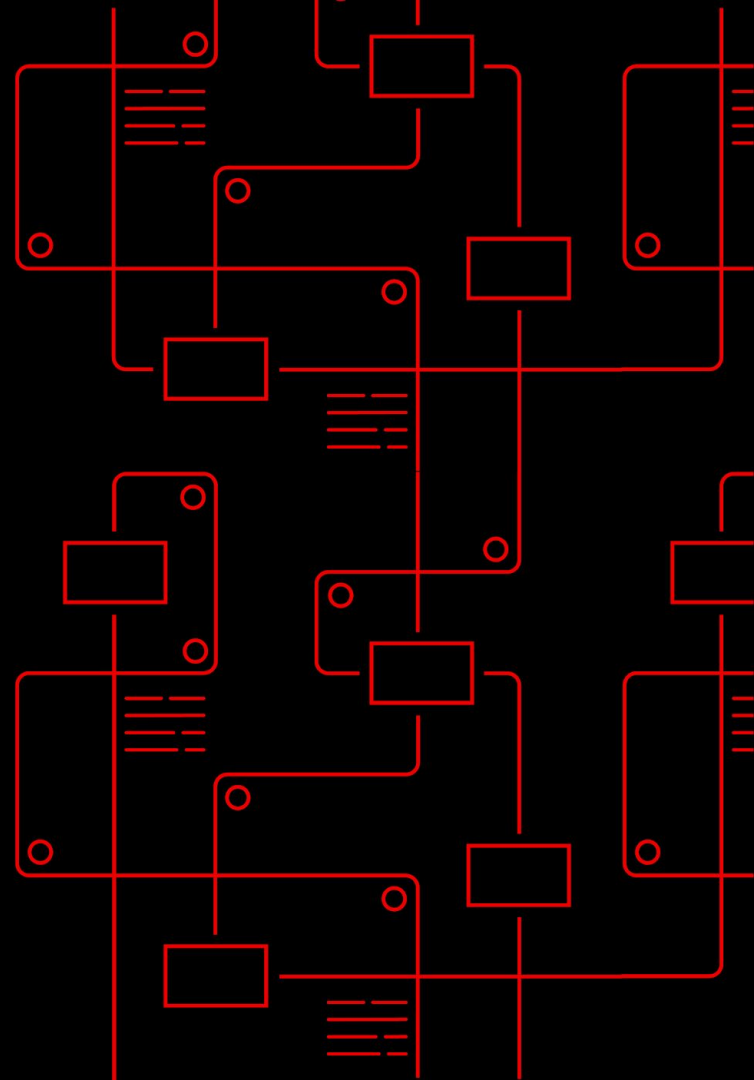
- *Principal Software Engineer @RedHat*
- *Working with Ansible Security and Wisdom engineering team*
-  *justjais*
-  *justsumit*



Agenda

- Ansible Introduction
- Ansible Modules Vs Ansible Resource Modules
- Ansible Content Builder
- Ansible OpenApi based scaffolding
- Demo

Ansible Introduction



What's Ansible? What Sets Ansible Apart?

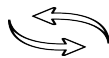
It's a **simple automation language** and an **automation engine** that runs Ansible Playbooks and provides **Automation for everyone**.



Simple

- Human readable automation
- No special coding skills needed
- Tasks executed in order
- Usable by every team

Get productive quickly



Powerful

- App deployment
- Configuration management
- Workflow orchestration
- Network, Security, Cloud & more

Orchestrate the app lifecycle

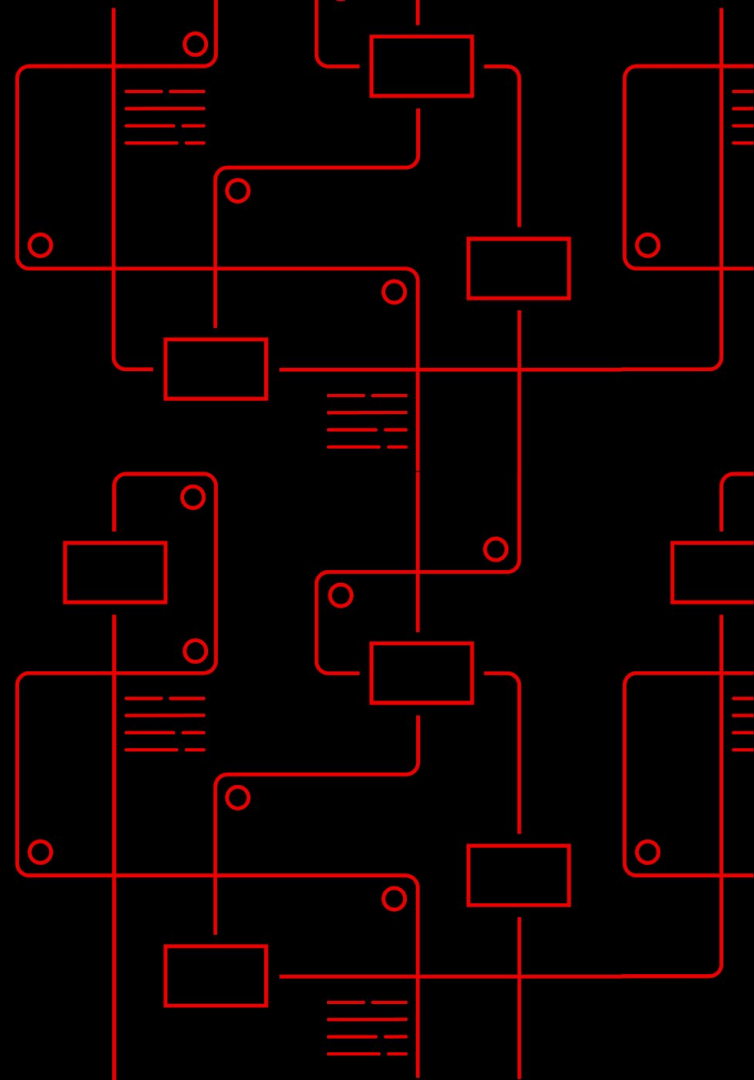


Agentless

- Agentless architecture
- Uses OpenSSH, HTTPAPI, & WinRM
- No agents to exploit or update
- Get started immediately

More efficient & more secure

Ansible Modules Vs Ansible Resource Modules



Ansible Modules Vs Ansible Resource Modules

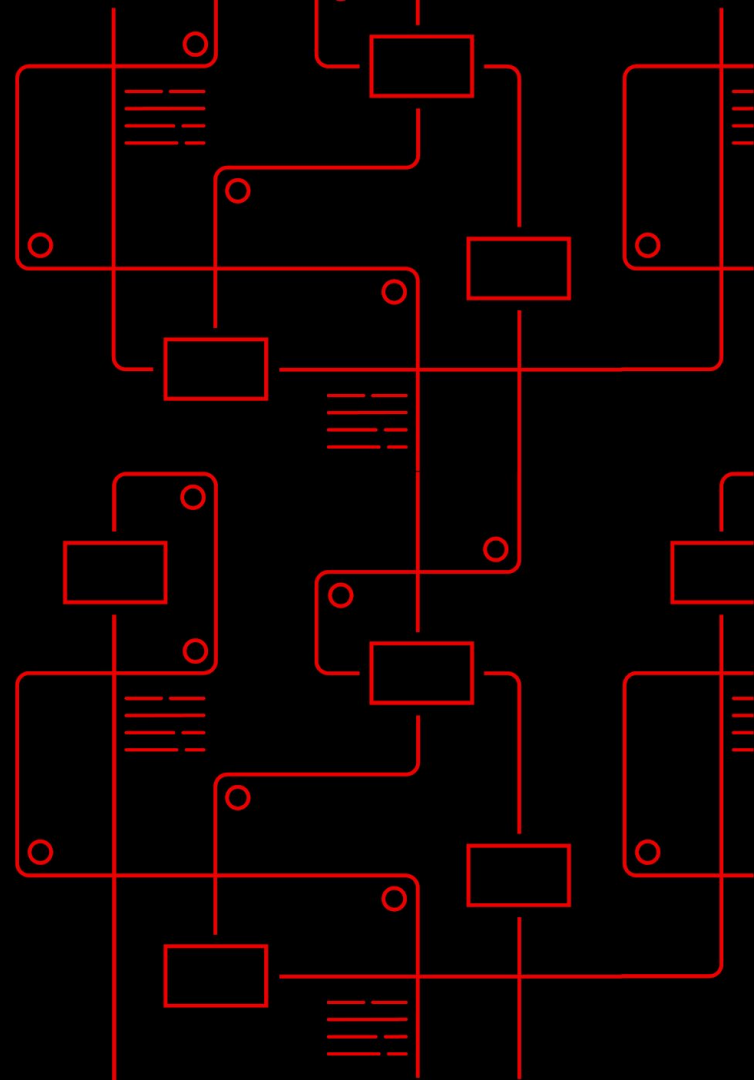
Ansible Modules

- Use-case focussed
- States: Present and Absent
- Less flexible around operational states
- Examples: Ansible built in modules like Copy, Uri and more Ansible modules.

Ansible Resource Modules(RMs)

- Resource and API focussed
- States: Merged, Replaced, Overridden, Deleted, Gathered and Rendered
- More flexible around operational states
- Examples: Ansible Networking, Security content modules like Cisco NXOS, Trendmicro Deepsecurity and more Ansible content modules.

Ansible Content Builder



Ansible Content Builder

WHY

- Bootstrapping Content collection is time taking process
- Multiple Module creation based of Use-Case and API is resource heavy
- Creators have to follow and implement Ansible Coding best practices
- Overall a time consuming process

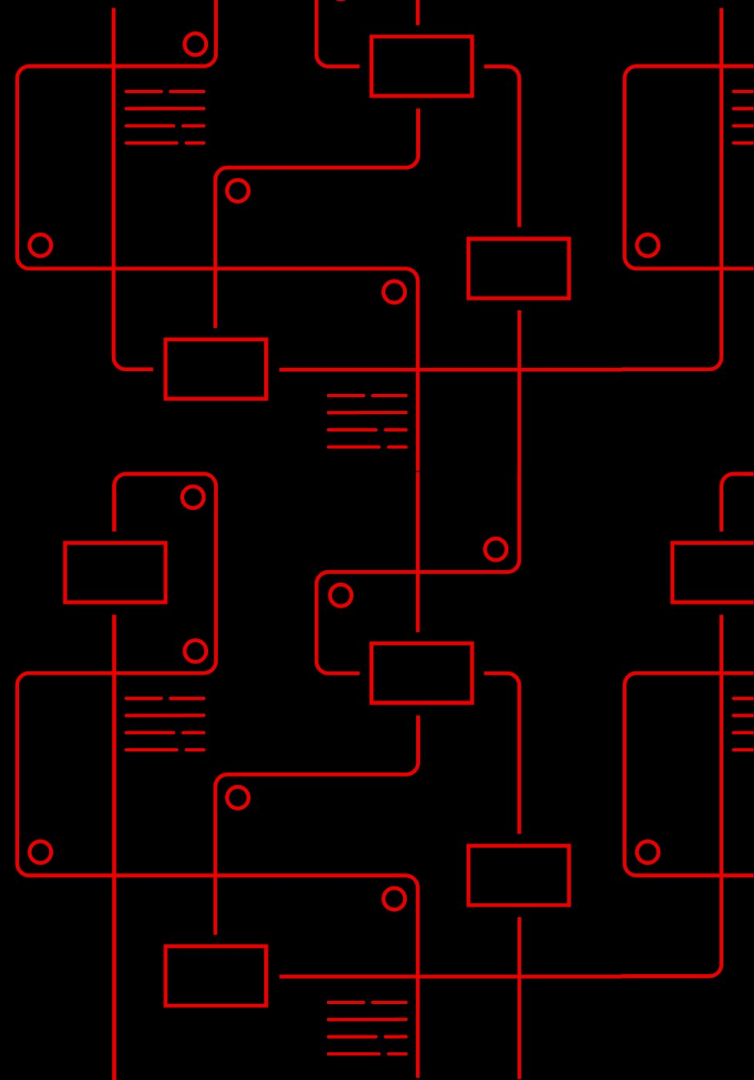


Ansible Content Builder

HOW

- Automated content collection generator
- Overall content collection with required files and folders automatically generated
- Create working Resource Module(RMs) out of the box
- All of Ansible best and standard practices already part of the generated Resource Module(RMs)
- Only time required is to RUN the scaffolding tool

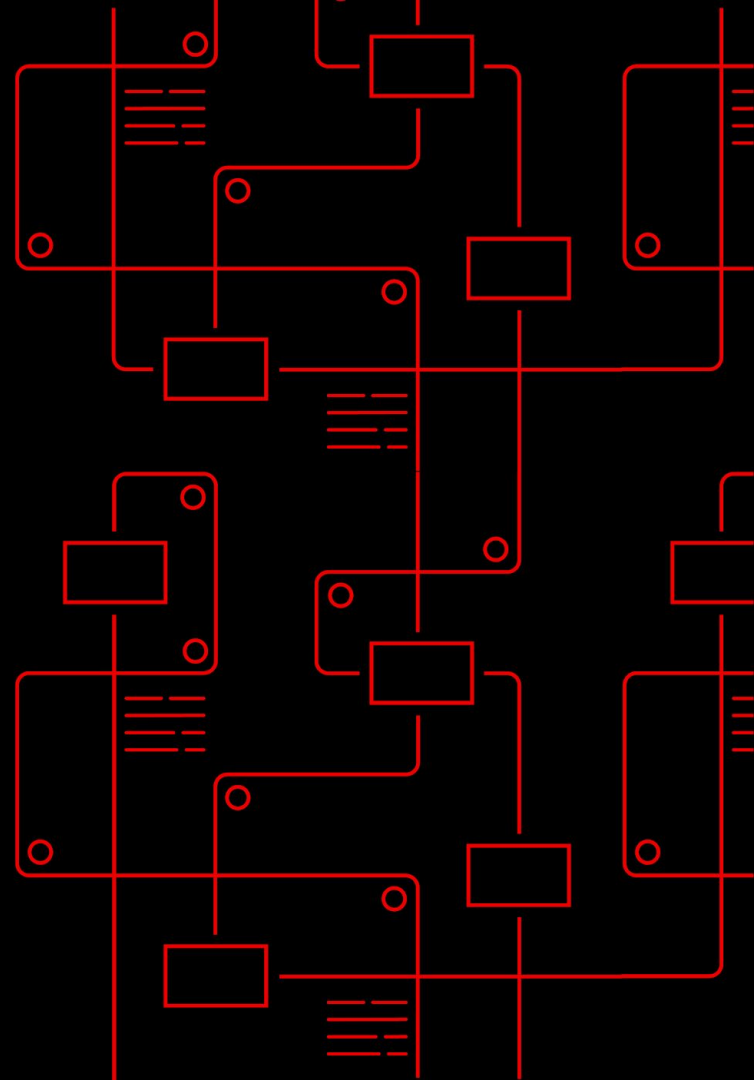
OpenApi based Scaffolding for Ansible RMs



OpenApi based Scaffolding for Ansible RMs

- Automated module generator using vendors OpenApi based Swagger JSON schema file
- Create working Resource Module for concerned APIs out of box
- Generated module would be ~90% functional with space for customisation as intended
- Currently the tool is optimised to generate RMs for Security and Cloud vendors

DEMO



Demo Time



In summary....

- Ansible Content Builder
- Resource module scaffolding tool for OpenAPI based JSON file
- You're the community and the experts! We need your help.





Thank you

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