Standardization of Automation Across the Enterprise

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for IBM Z
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Red Hat Ansible Certified Content for IBM Z: collections

Available on Automation Hub

Available on Ansible Galaxy here

ibm_zhmc
⬇ 3407 Downloads
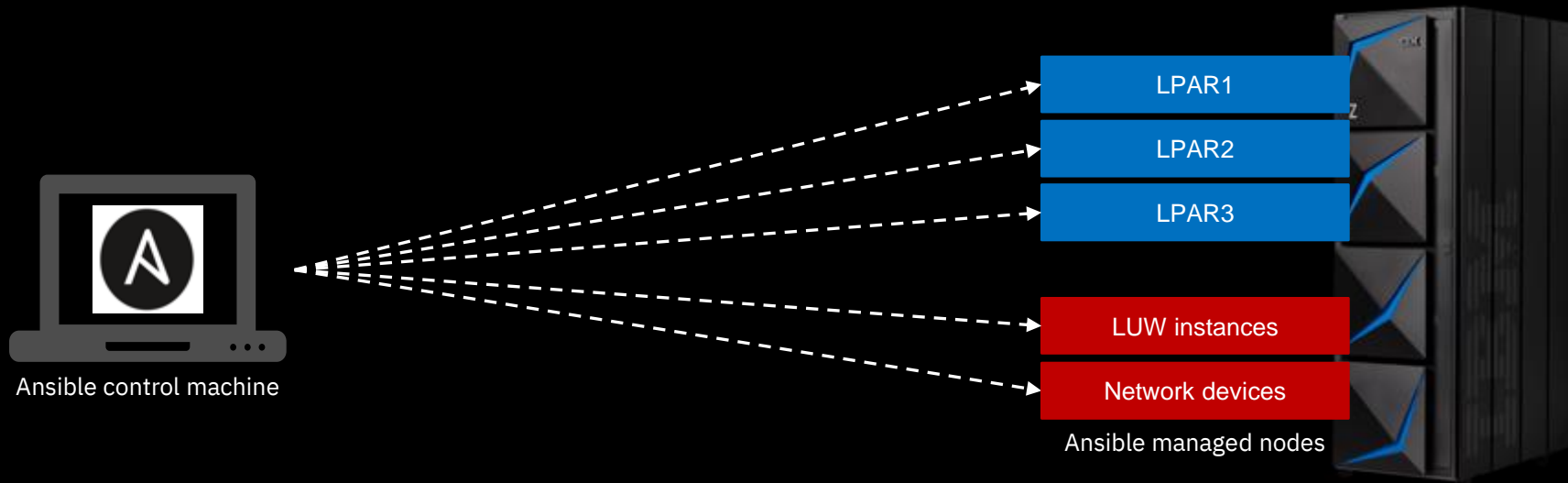
This collection can manage platform resources on IBM Z and LinuxONE machines, for example partitions, adapters, the Z system itself, or various resources on its Hardware Management Console (HMC).

11 Modules **0 Roles** **1 Plugins**

Current Version: 0.10.1 uploaded 7 days ago

`ibm` `z` `dpm` `hmc`

ibm_zos_cics
✅ 5 / 5 Score ⬇ 2507 Downloads

The Red Hat Ansible Certified Content for IBM Z CICS collection includes connection plugins, action plugins, modules and sample playbooks to automate tasks for CICS.

5 Modules **0 Roles** **2 Plugins**

Current Version: 1.0.3 uploaded 7 months ago

`ibm` `z` `zos` `z_os` `cics` `cmci`

ibm_zos_core
✅ 5 / 5 Score ⬇ 65224 Downloads

The IBM z/OS core collection includes connection plugins, action plugins, modules, filters and ansible-doc to automate tasks on z/OS.

18 Modules **0 Roles** **19 Plugins**

Current Version: 1.4.0-beta.1 uploaded 7 months ago

`ibm` `z` `zos` `z_os` `core` `zos_core` `ibm_zos_core` `data_set` `jcl` `uss` `mvs`

ibm_zos_ims
✅ 5 / 5 Score ⬇ 19517 Downloads

The IBM z/OS IMS collection includes modules and sample playbooks to automate tasks for IBM IMS.

7 Modules **0 Roles** **8 Plugins**

Current Version: 1.2.0-beta.1 uploaded 4 months ago

`ibm` `z` `zos` `z_os` `core` `zos_core` `data_set` `jcl` `uss` `mvs` `ims` `zos_ims`

ibm_zosmf
✅ 5 / 5 Score ⬇ 77 Downloads

Ansible collection consisting of modules and roles to work with z/OS based on z/OS Management Facility(z/OSMF).

3 Modules **7 Roles** **4 Plugins**

Current Version: 1.1.0 uploaded 16 days ago

`ibm` `z` `zos` `z_os` `mvs` `zosmf` `zos_management_facility` `zos_workflow` `zosmf_workflow` `cpm` `cloud_provisioning` `cics_provisioning_template` `db2_provisioning_template` `mq_provisioning_template` `liberty_provisioning_template` `was_provisioning_template` `zosconnect_provisioning_template` `sca` `security` `security_configuration_assistant`

ibm_zos_sysauto
✅ 5 / 5 Score ⬇ 454 Downloads

The IBM Z System Automation collection includes roles and sample playbooks to access the IBM Z System Automation Operations REST server.

0 Modules **2 Roles** **0 Plugins**

Current Version: 1.0.0 uploaded 10 months ago

`ibm` `z` `zos` `z_os` `zos_sa` `ibm_zos_sa` `system_automation`

IBM Z Hardware Management Console Collection

IBM z/OS CICS Collection

IBM z/OS Core Collection

IBM z/OS IMS Collection

IBM z/OSMF Collection

IBM Z System Automation Collection

Ansible® control nodes

- The orchestrator: where playbook execution occurs

- Connects to 1-n managed nodes

- Connections to IBM Z systems will be via either SSH or REST/SOAP APIs

Ansible® managed nodes

- Some examples of managed nodes for IBM Z could be:
  - z/OS LPARs
  - Linux on Z LPARs
  - z/VM guests
  - zD&T instances
  - KVM LPARs and guests

Ansible control machine

LPAR1

LPAR2

LPAR3

LUW instances

Network devices

Ansible managed nodes

Ansible managing to z/OS

Key Client Use Cases

Provisioning and Maintenance

Build and provision middleware

Roll out fix packs to thousand of servers

Self-service provisioning portals

CI/CD and Application Deployment

Integrate infrastructure provisioning and Z application deployment into CI/CD pipeline

Configuration management

Middleware configuration

Network and security configuration

Orchestration

Orchestrate and replace existing siloed in-house automation

Integrate existing automation into overall workflow

Security Automation

SSL certification renewal process

Password resets, create new users

Probe the mainframe

Collect audit and security configuration details, system status and health checks

How to get started?

5 Simple Steps:

1. Enable OpenSSH
2. Install Python
3. Install IBM Z Open Automation Utilities (ZOAU)
4. Install or update to Ansible 2.9+
5. Install the desired Ansible for z/OS collection from
   • Ansible Galaxy
   • Ansible Automation Hub (subscription required)

Pre-requisites (Free with Optional S&S)

z/OS as a managed node
- Unix System Services (USS) enabled on z/OS

- Secure Shell (SSH) enabled on z/OS
  https://www.ibm.com/support/knowledgecenter/SSLTBW_2.4.0/com.ibm.zos.v2r4.foto100/sshset.htm

- Python 3.9.2 – IBM Open Enterprise SDK for Python
  • Download PAX archive https://www.ibm.com/products/open-enterprise-python-zos/pricing (HAMB390)

  • SMP/E (CBPDO, ServerPac) (5655-PYT)

- IBM Z Open Automation Utilities (ZOAU)
  https://www.ibm.com/docs/en/zoau/1.2.0
  FMID HAL5200

Ansible control node
- Ansible engine 2.9 or higher
- Ansible Tower 3.6+

New content in the community

- [MODERNIZATION AND STANDARDIZATION FOR AUTOMATING ON IBM Z WITH RED HAT ANSIBLE](#)

- [Introducing Red Hat Ansible Automation Platform 2.1](#)

- [The business value of Red Hat Ansible Automation](#)

- [Ansible for IBM Z collections](#)

- [Sample Playbook Repository](#)

- [Ansible for IBM Z community](#)

- [Ansible for IBM Z videos on IBM Media Center](#)

- [Triton Ansible blog series](#)