



Enabling Workloads under z/VM for AI

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What does “MVP” mean to you?

Most Valuable Player? ✗

Minimum Viable Product ✓

- A term in development that allows recognition of progress without the “burden of perfection”
 - “Release early, release often”
- Your feedback is **required!**
 - How will clients respond to the installation process?
 - Will the process be a barrier to adoption:
 - Complexity
 - Dependence on IBM delivery skill
- Automation?

Resources

IBM Z Ansible Collections Samples:

- https://github.com/IBM/z_ansible_collections_samples.git

Spyre Accelerator User's Guide

- <https://www.ibm.com/docs/en/systems-hardware/linuxone/9175-ML1?topic=library-spyre-accelerator-users-guide>

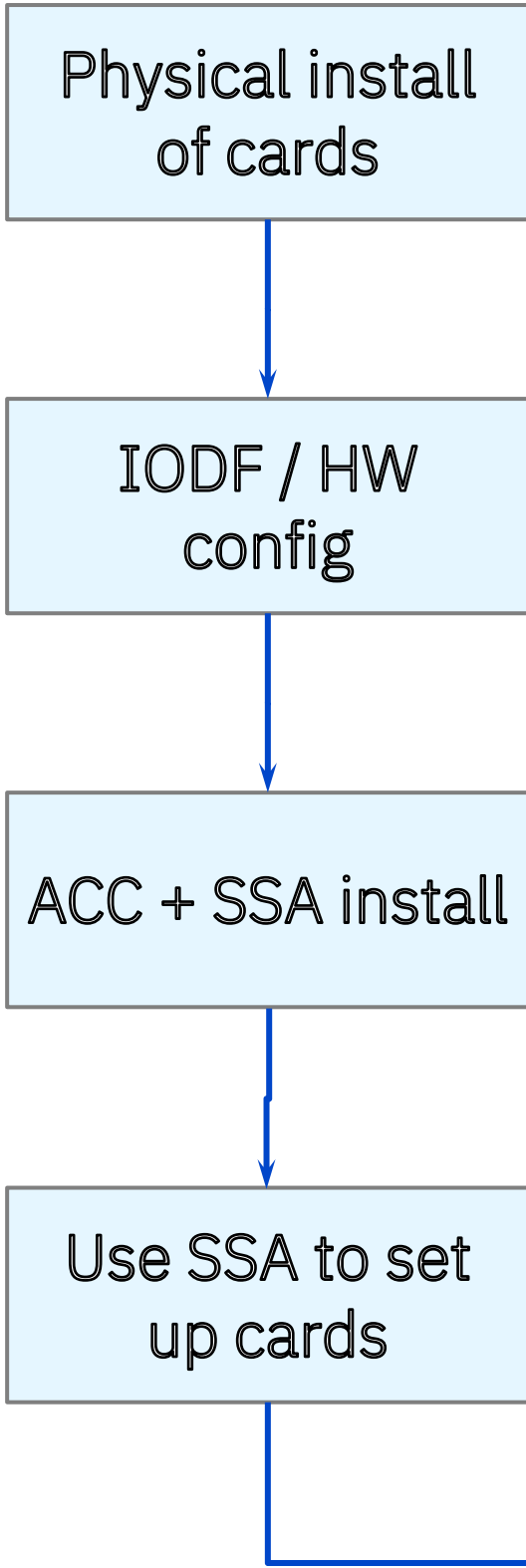
Appliance Control Center for IBM Z & IBM LinuxONE User's Guide

- <https://www.ibm.com/docs/en/systems-hardware/linuxone/9175-ML1?topic=library-appliance-control-center-z-linuxone-users-guide>

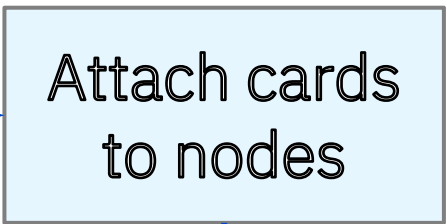
Spyre Support Appliance for IBM Z & IBM LinuxONE User's Guide

- <https://www.ibm.com/docs/en/systems-hardware/linuxone/9175-ML1?topic=library-spyre-support-appliance-z-linuxone-users-guide>

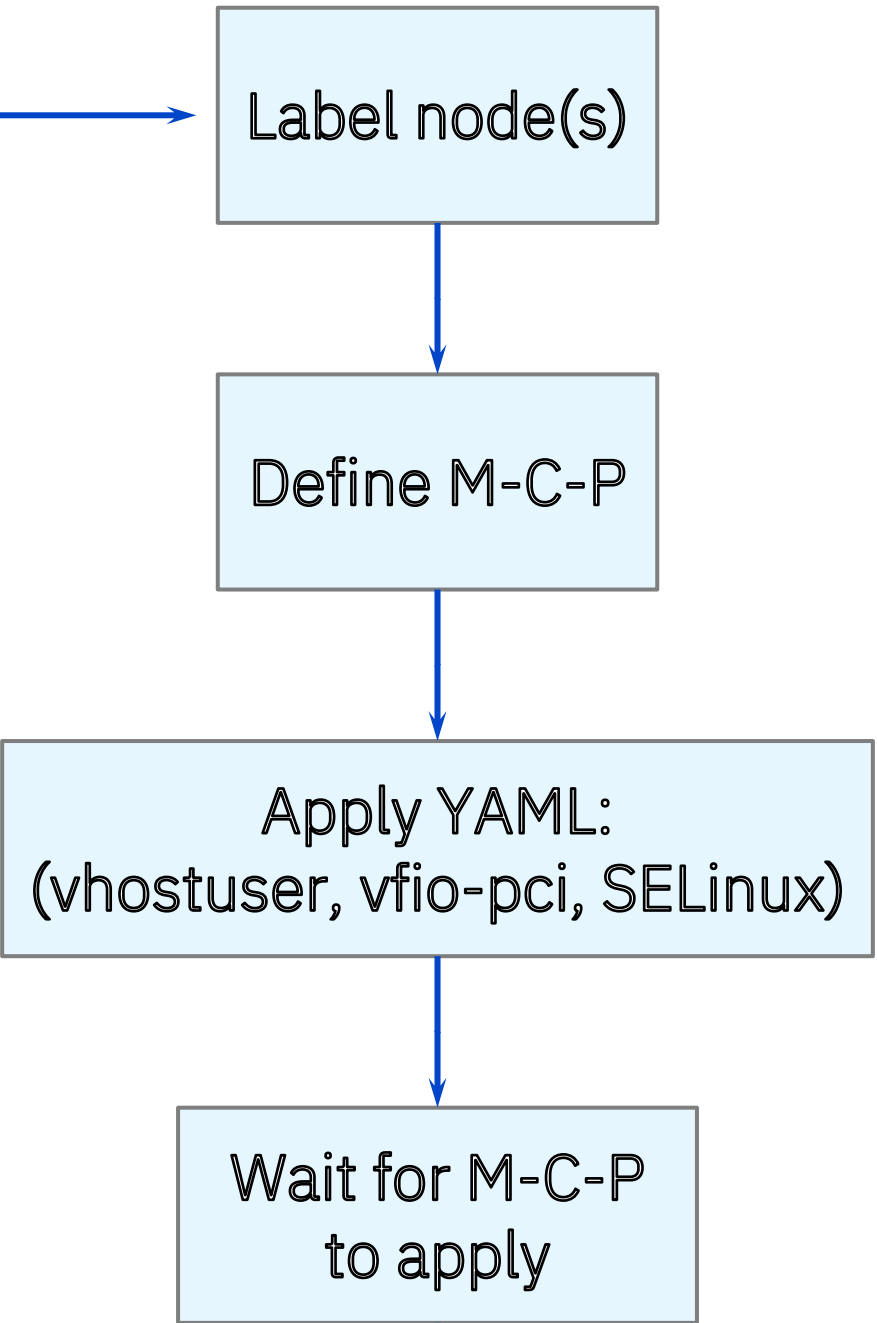
Overview of Spyre activation for RHOCP



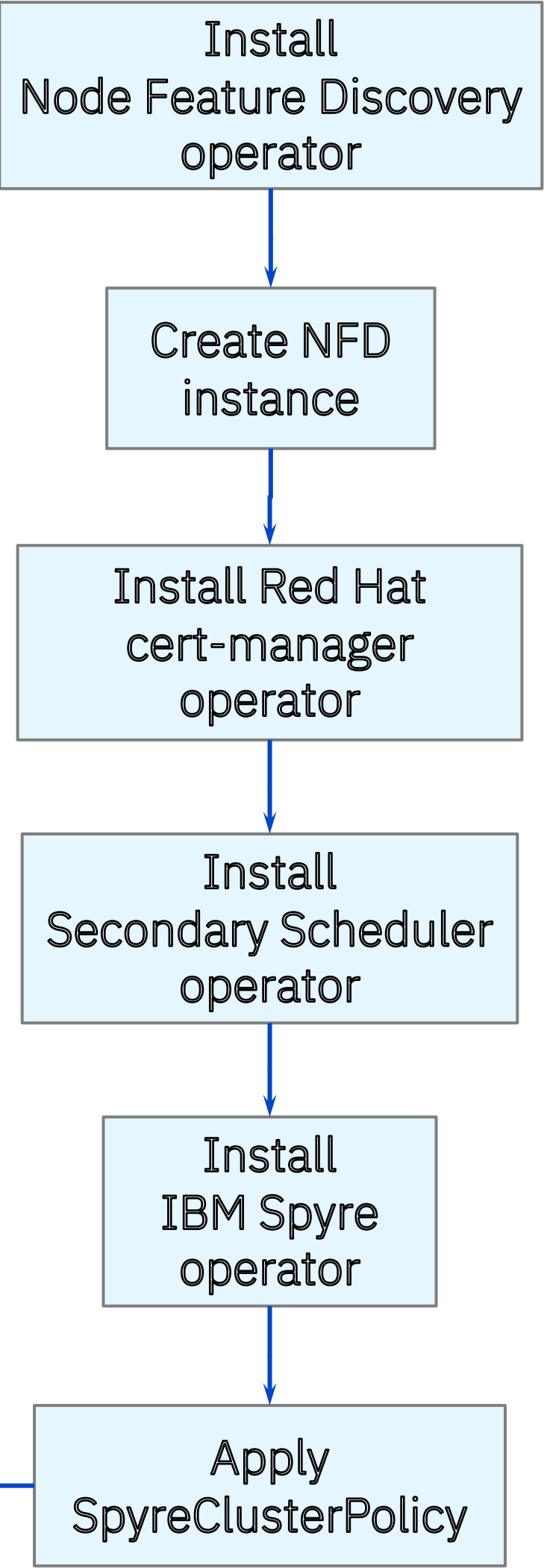
Hardware



Hypervisor



Command-line



RHOCP Console

ACC installation playbook

```
$ ansible-playbook acc_install_ansible/00_acc_install.yaml
```

```
[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'
```

```
PLAY [ACC Install playbook] *****
```

```
TASK [Gathering Facts] *****
ok: [localhost]
```

```
TASK [Reminder - Export credentials] *****
Pausing for 5 seconds
(ctrl+C then 'C' = continue early, ctrl+C then 'A' = abort)
[Reminder - Export credentials]
```

Before running this playbook, make sure that:

- You have installed the required software packages
- You have created a python virtual environment 'venv' in the directory
"/home/support/z_ansible_collections_samples/z_appliance_control_center/acc_install_ansible"
- You have installed the required python packages in the virtual environment

Moreover, please export credentials:

```
export HMC_USER=<enter_hmc_username>
export HMC_PASSWORD=<enter_hmc_password>
```

```
export ACC_ADMIN_USER=<admin_username>
export ACC_ADMIN_DEFAULT_PASSWORD=<admin_password>
```

Press Ctrl+C now to cancel if you haven't done this.
The playbook will continue shortly.

```
:
ok: [localhost]
```

```
...
```

```
...
```

```
ok: [localhost] => (item=) => {
  "msg": ""
}
ok: [localhost] => (item=✔ Found CPC: MENSA) => {
  "msg": "✔ Found CPC: MENSA"
}
ok: [localhost] => (item=🔍 Checking status for LPAR: MENSA21) => {
  "msg": "🔍 Checking status for LPAR: MENSA21"
}
ok: [localhost] => (item=🔍 Found LPAR: MENSA21) => {
  "msg": "🔍 Found LPAR: MENSA21"
}
ok: [localhost] => (item=🖨 OS Name: ZACC) => {
  "msg": "🖨 OS Name: ZACC"
}
ok: [localhost] => (item=🟢 Current Status: operating) => {
  "msg": "🟢 Current Status: operating"
}
ok: [localhost] => (item=) => {
  "msg": ""
}
ok: [localhost] => (item=🟢 Acceptable Status: operating) => {
  "msg": "🟢 Acceptable Status: operating"
}
ok: [localhost] => (item=) => {
  "msg": ""
}
ok: [localhost] => (item=✔ LPAR 'MENSA21' is in Appliance mode and operating.) => {
  "msg": "✔ LPAR 'MENSA21' is in Appliance mode and operating."
}
}
```

```
PLAY RECAP *****
localhost      : ok=6  changed=0  unreachable=0  failed=0  skipped=1  rescued=0  ignored=0
```

```
$
```

z/VM Directory Entry for the RHOCPC node

```
IDENTITY OCPATEST LBYONLY 24G 256G G
  INCLUDE LININST
  BUILD ON ASG1VM2 USING SUBCONFIG OCPATS-2
  CPU 00
  LOGONBY IBMVM1 VICCROSS
  MACHINE ESA 16
  CONSOLE 0009 3215 T OPMGRM1

SUBCONFIG OCPATS-2
  COMMAND DEFINE CPU 01-07 TYPE IFL
  COMMAND SET IO_OPT UID OFF
  COMMAND ATTACH PCIF 4026 *
  COMMAND ATTACH PCIF 4029 *
  COMMAND ATTACH PCIF 4032 *
  COMMAND ATTACH PCIF 4035 *
  IPL CMS
  NICDEF 0600 TYPE QDIO LAN SYSTEM VSWBASE2 DEVICES 3
  LINK ZR80CPI 0191 0191 RRD
  MDISK 0200 3390 1 262667 SG2LE0 MR
```

Notes:

- ID defined as a multi-config user, but only one BUILD statement
- Why a sub-config?
 - Pins the node to a given SSI member
 - Spyre adapters belong to a single z/VM system only
- Post-install reconfiguration in this example:
 - IPL statement change to 200
 - Increase default memory allocation

