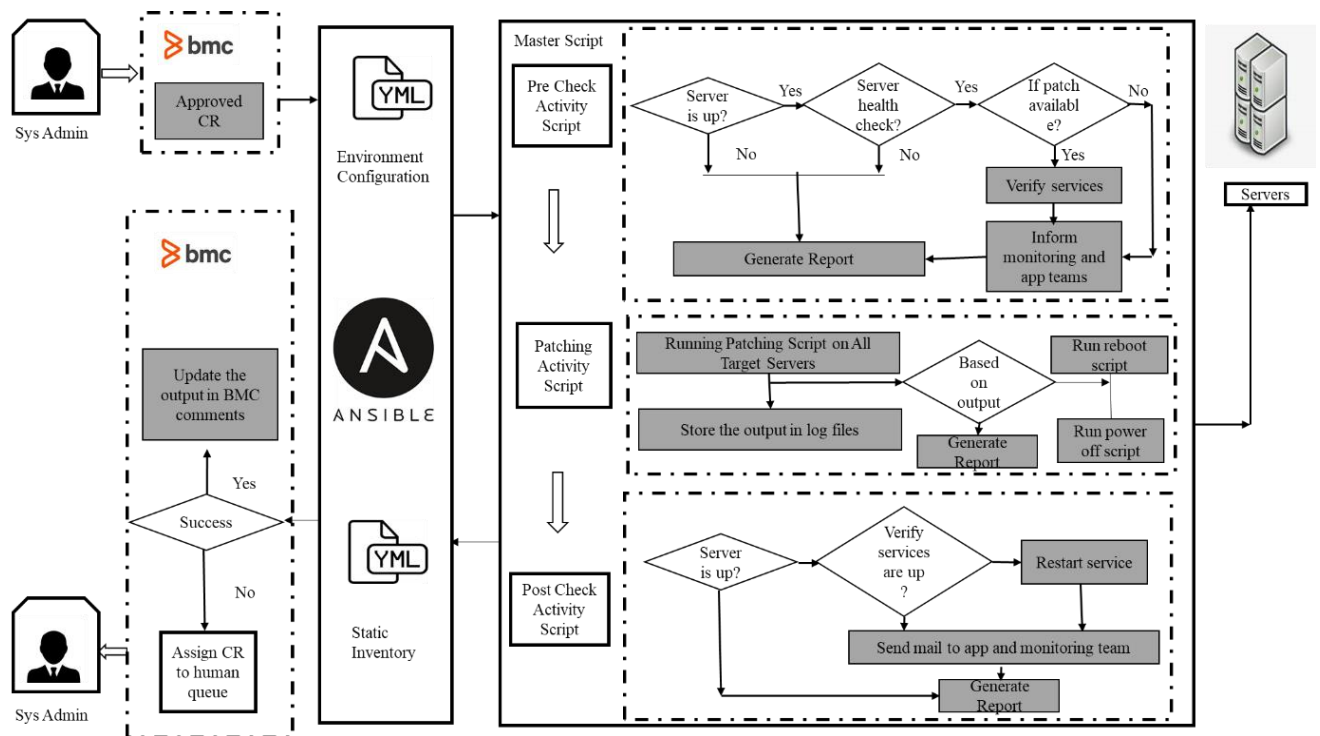
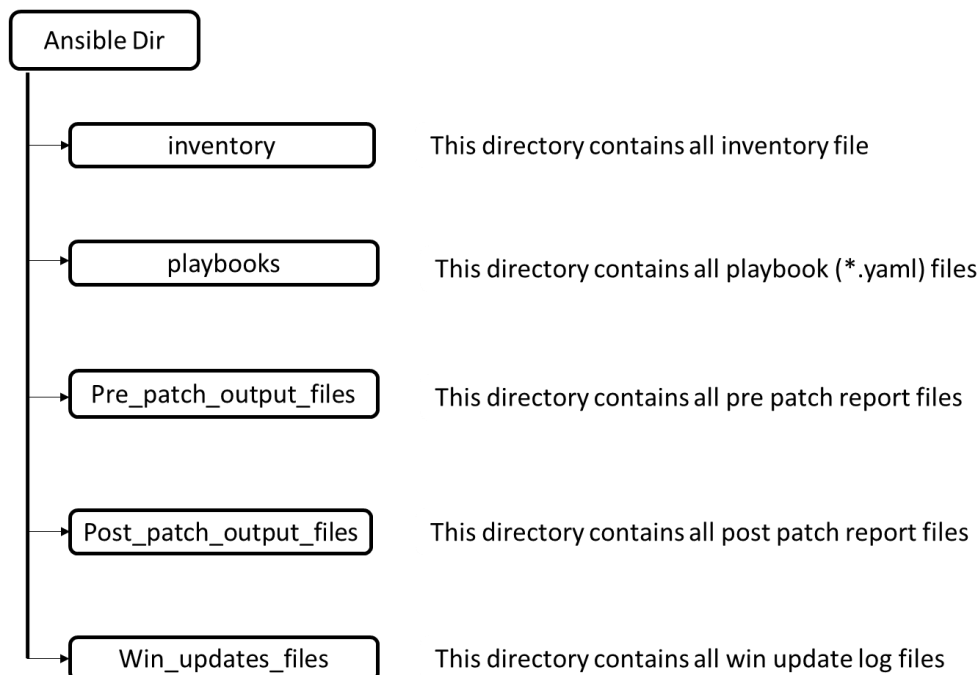


CELCOM TECHNICAL DOC

BLUEPRINT:



WINDOWS PATCHING USECASE DIRECTORY STRUCTURE

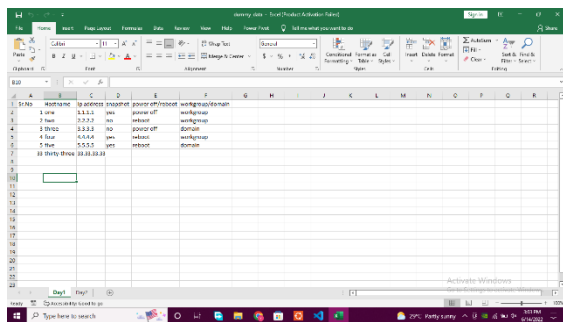


Points:

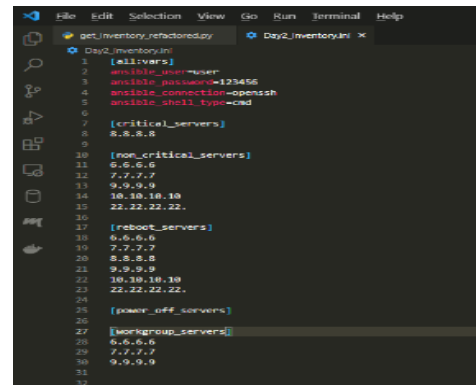
- I. Inventory Creation
- II. Pre-check Activities
- III. Patching Activities
- IV. Post-check Activities

I. Inventory Creation

- a. We are extracting details required for inventory file from excel sheet which is created on monthly basis and divide then in server group according to critical / Non critical or power off / reboot sequence and workgroup



IP	hostname	is critical	power off	reboot	workgroup
1	10.10.10.1	yes	power off	reboot	workgroup
2	10.10.10.2	no	power off	reboot	workgroup
3	10.10.10.3	no	power off	reboot	workgroup
4	10.10.10.4	yes	power off	reboot	workgroup
5	10.10.10.5	yes	power off	reboot	workgroup
6	10.10.10.6	yes	power off	reboot	workgroup
7	10.10.10.7	yes	power off	reboot	workgroup
8	10.10.10.8	yes	power off	reboot	workgroup
9	10.10.10.9	yes	power off	reboot	workgroup
10	10.10.10.10	yes	power off	reboot	workgroup
11	10.10.10.11	yes	power off	reboot	workgroup
12	10.10.10.12	yes	power off	reboot	workgroup
13	10.10.10.13	yes	power off	reboot	workgroup
14	10.10.10.14	yes	power off	reboot	workgroup
15	10.10.10.15	yes	power off	reboot	workgroup
16	10.10.10.16	yes	power off	reboot	workgroup
17	10.10.10.17	yes	power off	reboot	workgroup
18	10.10.10.18	yes	power off	reboot	workgroup
19	10.10.10.19	yes	power off	reboot	workgroup
20	10.10.10.20	yes	power off	reboot	workgroup
21	10.10.10.21	yes	power off	reboot	workgroup
22	10.10.10.22	yes	power off	reboot	workgroup
23	10.10.10.23	yes	power off	reboot	workgroup
24	10.10.10.24	yes	power off	reboot	workgroup
25	10.10.10.25	yes	power off	reboot	workgroup
26	10.10.10.26	yes	power off	reboot	workgroup
27	10.10.10.27	yes	power off	reboot	workgroup
28	10.10.10.28	yes	power off	reboot	workgroup
29	10.10.10.29	yes	power off	reboot	workgroup
30	10.10.10.30	yes	power off	reboot	workgroup
31	10.10.10.31	yes	power off	reboot	workgroup
32	10.10.10.32	yes	power off	reboot	workgroup



```
get_inventory_refactored.py
Day2_inventory.ini
[all:vars]
ansible_host=10.10.10.1
ansible_password=123456
ansible_connection=openssh
ansible_ssh_host=10.10.10.1
[critical_servers]
8.8.8.8
[non_critical_servers]
6.6.6.6
7.7.7.7
9.9.9.9
10.10.10.10
22.22.22.22
[reboot_servers]
6.6.6.6
7.7.7.7
8.8.8.8
9.9.9.9
10.10.10.10
22.22.22.22
[power_off_servers]
6.6.6.6
7.7.7.7
9.9.9.9
```

- b. Details of Ansible username, password, and connection protocol for remote login and host list.

II. Pre check Activities

- a) Master_pre_patch.yaml:
 - i. Send pre patch activity starting mail to team
 - ii. Include Pre patch file tasks -----> pre_patch.yaml
 - iii. Send pre patch activity report to team via mail
- b) pre_patch.yaml:
 - i. Check CPU utilization
 - ii. Check Disk Space
 - iii. Make List of running services
 - iv. Generating win_updates log file in target host
 - v. Fetch the win_updates log file from target host to controller node
 - vi. Check if patches are available or not on target host
 - vii. Generate pre patch report

OUTPUT:

```
root@UPPUNUTHULA-V4:/ansible_dir# cd pre_patch_output_files/
root@UPPUNUTHULA-V4:/ansible_dir/pre_patch_output_files# ls
2022-06-13_12H-20M-31S_pre_patch.txt  2022-06-14_12H-30M-34S_pre_patch.txt  2022-06-14_12H-48M-22S_pre_patch.txt  2022-06-14_14H-28M-55S_pre_patch.txt
2022-06-14_10H-01M-31S_pre_patch.txt  2022-06-14_12H-34M-29S_pre_patch.txt  2022-06-14_13H-42M-48S_pre_patch.txt  2022-06-14_14H-57M-24S_pre_patch.txt
2022-06-14_10H-47M-38S_pre_patch.txt  2022-06-14_12H-36M-25S_pre_patch.txt  2022-06-14_14-14-27_pre_patch.txt
2022-06-14_11H-17M-58S_pre_patch.txt  2022-06-14_12H-47M-01S_pre_patch.txt  2022-06-14_14-25-45_pre_patch.txt
root@UPPUNUTHULA-V4:/ansible_dir/pre_patch_output_files# cat 2022-06-14_14H-57M-24S_pre_patch.txt
Hostname: 192.168.1.4,CPU Utilization: 29%,Disk Free space: 39.55629348754883, Count of processes: 89, Number of patches available: 1, List of available patches: [
'KB2267602']"]
Unreachable hosts: ['192.168.0.103']
root@UPPUNUTHULA-V4:/ansible_dir/pre_patch_output_files#
```

III. Patching Activities

- a. Master_windows_patching.yaml:
 - i. Send window patching activity starting mail
 - ii. Include Main Patching tasks
 - iii. Send windows patching activity starting mail
- b. windows_patching.yaml:
 - i. Install Windows Updates
 - ii. Reboot and retry
 - iii. Reboot windows to retry update installation if server is in reboot group in inventory
 - iv. Power off servers if server is in poweroff group in inventory
 - v. Generate Post patch report

IV. Post Check Activities:

- a. Master_post_patch.yaml:
 - i. Send post patch activity starting mail to team
 - ii. Include Post patch file tasks -----> post_patch.yaml
 - iii. Send post patch activity report to team via mail
- b. Post_patch.yaml:
 - i. Installing service stack update
 - ii. Restarting NTP services for workgroup servers
 - iii. Check CPU utilization
 - iv. Check Disk Space
 - v. Make List of running services