



Support For Bulk Worker Creation

This chapter provides CLI instructions for creating workers in a bulk.

Bulk Worker Creation

Prerequisites

- The user has bootstrapped the V2PC cluster from the launcher node.
- The user has created the provider, network, and zone from the V2PC GUI.

Bulk Creation Flow

The user can initiate bulk worker creation from a launcher node, master node, or repo node. Bulk worker creation requires the v2p-vm-mgr RPM and the SM authorization token.

```
[root@cdd5c8500444 wizard]#cd /opt/cisco/v2p/v2pc/python/vm_manager/wizard
[root@1f821a61029b wizard]# python v2p-create-worker-wizard.py
Reading default values from ./v2p-cw-default.json
```

```
===== V2PC Bulk Worker Creation =====
Enter Service Manager leader node IP
[choices: []]
[default: 100.2.31.152]:
Enter the V2PC infra provider name
[choices: [(0, u'Default_Provider')]]
[default: Default_Provider]:
get infra Default_Provider from SM IP 100.2.31.152 mock 0
Enter the V2PC zone name
[choices: [(0, u'zone2'), (1, u'zone1'), (2, u'rack1')]]
[default: zone2]:
Enter image to be used for worker creation
[choices: [(0, u'cisco-centos-7.0'), (1, u'cisco-coreos-3.0')]]
[default: cisco-centos-7.0]:
Enter the image flavor name
[choices: [(0, 'medium'), (1, 'large'), (2, 'xlarge'), (3, '2xlarge')]]
[default: medium]:
Number of V2PC worker nodes to be created. (max 10)
[default: 10]:
```

```
===== V2PC Bulk Worker Management Network =====
```

```

Enter V2PC network name for management network
[choices: [(0, u'data-in-netname'), (1, u'management-network1'), (2,
u'data-out-netname')]]
[default: management-network1]:
Enter your network address eg: 192.168.2.0/24 or 192.168.2.0/255.255.255.0
[default: 100.2.31.0/24]:
Enter Start IP in the network
[choices: Start IP address should be in the range 100.2.31.1 to 100.2.31.254]
[default: 100.2.31.159]:

===== V2PC Bulk Worker Data In Network Decision =====
Do you want to add data-in network interface
[choices: [(0, 'YES'), (1, 'NO')]]
[default: NO]: 0

===== V2PC Bulk Worker Data In Network =====
Enter V2PC network name for data-in network
[choices: [(0, u'data-in-netname'), (1, u'management-network1'), (2,
u'data-out-netname')]]
[default: data-in-netname]:
Enter your network address of data-in network. eg: 192.168.2.0/24 or
192.168.2.0/255.255.255.0
[default: 192.168.2.0/24]:
Enter Start IP of data-in network
[choices: (Data-in) start IP address should be in the range 192.168.2.1 to 192.168.2.254]
[default: 192.168.2.40]:

===== V2PC Bulk Worker Data Out Network Decision =====
Do you want to add data-out network interface
[choices: [(0, 'YES'), (1, 'NO')]]
[default: NO]:

SUCCESS: Create worker manifest file created.
Execute the below program to start worker creation.
>>>cd /opt/cisco/v2p/v2pc/python/vm_manager/wizard/
>>>python create_workers.py create -m
/opt/cisco/v2p/v2pc/python/vm_manager/wizard/workers-
manifest-Default_Provider-zone2-255.json

[root@cdd5c8500444 wizard]# python create_workers.py create -m
/opt/cisco/v2p/v2pc/python/vm_manager/wizard/workers-manifest-Default_Provider-zone1-567.j
son Check lock file /var/cache/cisco/v2pc/Default_Provider-zone1-lock
get infra Default_Provider from SM IP 100.2.31.152 mock 0 Creating worker worker-zone1-157
with ip 100.2.31.157 Waiting for 10 sec to spin up another worker VM.
Creating worker worker-zone1-158 with ip 100.2.31.158 Waiting for 20 sec to spin up
another worker VM. Creating worker worker-zone1-159 with ip 100.2.31.159 Waiting for 30
sec to spin up another worker VM. Creating worker worker-zone1-160 with ip 100.2.31.160
Waiting for 40 sec to spin up another worker VM. Creating worker worker-zone1-161 with ip
100.2.31.161
SUCCESS: Worker Creation request submitted to V2P Controller. Visit the V2P UI to observe
the progress of worker node creation.

[root@cdd5c8500444 wizard]# python create_workers.py create -m
/opt/cisco/v2p/v2pc/python/vm_manager/wizard/workers-manifest-Default_Provider-zone1-567.j
son Check lock file /var/cache/cisco/v2pc/Default_Provider-zone1-lock
WARNING: Existing bulk worker node creation detected for Infra (Default_Provider) zone
(zone1) WARNING: Please check the V2P UI for worker creation progress.
WARNING: If bulk worker creation is complete for this zone then please delete file.

*** /var/cache/cisco/v2pc/Default_Provider-zone1-lock ***
Lock file exists /var/cache/cisco/v2pc/Default_Provider-zone1-lock ERROR: Worker creation
failed. Check log file /var/log/create_worker.log

```

EXAMPLE Worker Manifest file

```
{  
  
  "sm_ip": "localhost",  
  "start_ip": "192.168.3.1",  
  "zone_name": "zone3",  
  "num_ips": 5,  
  "region": "region-0",  
  
  "net_addr": "192.168.3.0/24",  
  "worker_name_prefix": "worker-zone3-",  
  "infra_name": "sujit_infra",  
  "image_tag": "cisco-centos-7.0",  
  "mgmt_network": "net-mgmt",  
  "mock": false  
}
```

Limitations

- The CLI does not check the worker node status after worker creation SM REST. Use the V2PC GUI to check worker status.
- There is no GUI support for creating bulk workers.
- There is a soft limit of maximum 10 worker nodes creation at a time.
- There is soft enforcement of multiple bulk creation requests at the same time from the same host.
- Bulk worker creation only supports contiguous IP address ranges.
- If the SM leader IP address changes during execution of this script, the script will exit.

