nutanix-autodeployvm sample run and screen captures

hardev@nutanix.com May 2019

CSV Input File

	Α	В	C	D	E	F	G	Н	1	J	K	L	M	N	0	P	Q
1	vmname	networkname	ctr	vmramgb	vcpus	corespercpu	image	datadrivegb	newhostname	staticIP	gway	dns	pref	vmuser	vmpw	driveletter	label
2	stk1	DEV	BRONZE		4 2	1	Win12-tpl-on-BRONZE	64	stk1	10.42.67.150	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	D	DATA64
3	stk2	PROD	SILVER		В 4	1	Win12-tpl-on-SILVER	128	stk2	10.42.67.151	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	E	DATA128
4	stk3	PROD	GOLD	10	5 6	1	Win12-tpl-on-GOLD	256	stk3	10.42.67.152	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	F	DATA256
5	stk4	DEV	BRONZE	3:	2 8	1	Win16-tpl-on-BRONZE	512	stk4	10.42.67.153	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	G	DATA512
6	stk5	PROD	SILVER		4 2	1	Win16-tpl-on-SILVER	64	stk5	10.42.67.154	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	D	DATA64
7	stk6	PROD	GOLD		В 4	1	Win16-tpl-on-GOLD	128	stk6	10.42.67.155	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	E	DATA128
8	stk7	DEV	BRONZE	10	6 6	1	Win12-tpl-on-BRONZE	256	stk7	10.42.67.156	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	F	DATA256
9	stk8	PROD	SILVER	33	2 8	1	Win12-tpl-on-SILVER	512	stk8	10.42.67.157	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	G	DATA512
10	stk9	PROD	GOLD		4 2	1	Win12-tpl-on-GOLD	64	stk9	10.42.67.158	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	D	DATA64
11	stk10	DEV	BRONZE		8 4	1	Win16-tpl-on-BRONZE	128	stk10	10.42.67.159	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	E	DATA128
12	stk11	PROD	SILVER	10	5 6	1	Win16-tpl-on-SILVER	256	stk11	10.42.67.160	10.42.67.1	10.00.00.10	24	administrator	XXXXXXXX	F	DATA256
13	stk12	DEV	GOLD	3:	2 8	1	Win16-tpl-on-GOLD	512	stk12	10.42.67.161	10.42.67.1	10.00.00.10	24	administrator	XXXXXXX	G	DATA512

Execution Log

```
PS> .\CloneCsvPrl.ps1 -csvfile .\bank12VMs.csv csv file: .\bank12VMs.csv which has 13 lines Clone VM, Working for stk1 Container BRONZE
Not connected to any server. Please connect to a server and try again.
Nutanix Cluster: 10.42.67.37
Username for 10.42.67.37: admin
Checking if VM already exists...(No data found) message is good!
Creating stk1 on 10.42.67.37...
Waiting 5 seconds for stk1 to finish creating...
Powering on stk1 on 10.42.67.37...
Successfully powered on stk1 on 10.42.67.37
Clone VM, Working for stk1 on 10.42.67.37
Container SILVER
Checking if VM already exists...(No data found) message is good!
Creating stk2 on 10.42.67.37...
Created stk2 on 10.42.67.37
Waiting 5 seconds for stk2 to finish creating...
Powering on stk2 on 10.42.67.37...
Successfully powered on stk2 on 10.42.67.37
Clone VM, Working for stk3
Container GOLD
Checking if VM already exists...(No data found) message is good!
Creating stk3 on 10.42.67.37...
Created stk3 on 10.42.67.37
Waiting 5 seconds for stk3 to finish creating...
Powering on stk3 on 10.42.67.37...
Successfully powered on stk3 on 10.42.67.37
Successfully powered on stk3 on 10.42.67.37

Clone VM, Working for stk4

Container BRONZE

Checking if VM already exists...(No data found) message is good!

Creating stk4 on 10.42.67.37...
Waiting 5 seconds for stk4 to finish creating...
Powering on stk4 on 10.42.67.37...
Successfully powered on stk4 on 10.42.67.37
Successfully powered on stk4 on 10.42.67.37
Clone VM, Working for stk5
Container SILVER
Checking if VM already exists...(No data found) message is good!
Creating stk5 on 10.42.67.37...
Waiting 5 seconds for stk5 to finish creating...
Powering on stk5 on 10.42.67.37...
Successfully powered on stk5 on 10.42.67.37
Clone VM, Working for stk6
Container GOLD
Checking if VM already exists...(No data found) message is good!
Creating stk6 on 10.42.67.37...
Waiting 5 seconds for stk6 to finish creating...
Powering on stk6 on 10.42.67.37...
Successfully powered on stk6 on 10.42.67.37
Clone VM, Working for stk7
Container BRONZE
Checking if VM already exists...(No data found) message is good!
```

```
Creating stk7 on 10.42.67.37...
Waiting 5 seconds for stk7 to finish creating...
Powering on stk7 on 10.42.67.37...
Successfully powered on stk7 on 10.42.67.37
 Clone VM, Working for stk8
Container SILVER
Checking if VM already exists...(No data found) message is good!
Creating stk8 on 10.42.67.37...
Powering 5 seconds for stk8 to finish creating...
Powering on stk8 on 10.42.67.37...
Successfully powered on stk8 on 10.42.67.37
Clone VM, Working for stk9 on 10.42.67.37
Container GOLD
Checking if VM already exists...(No data found) message is good!
Creating stk9 on 10.42.67.37...
Waiting 5 seconds for stk9 to finish creating...
Powering on stk9 on 10.42.67.37...
Successfully powered on stk9 on 10.42.67.37
Clone VM, Working for stk10
Container BRONZE
Checking if VM already exists...(No data found) message is good!
Creating stk10 on 10.42.67.37...
Created stk10 on 10.42.67.37...
Waiting 5 seconds for stk10 to finish creating...
Powering on stk10 on 10.42.67.37...
Successfully powered on stk10 on 10.42.67.37
Clone VM, Working for stk11
Container SILVER
Checking if VM already exists...(No data found) message is good!
Creating stk11 on 10.42.67.37...
Waiting 5 seconds for stkl1 to finish creating...
Powering on stk11 on 10.42.67.37...
Successfully powered on stk11 on 10.42.67.37
Clone VM, Working for stk12
Container GOLD
Checking if VM already exists...(No data found) message is good!
Creating stk12 on 10.42.67.37...
Waiting 5 seconds for stk12 to finish creating...
Powering on stk12 on 10.42.67.37...
Successfully powered on stk12 on 10.42.67.37
Initialize data disk, working for stk1
Target VM: 10.42.67.55
DriveLetter: D
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.55 to setup new disk: D
 Id
                                                   PSJobTypeName
                                                                                      State
                                                                                                                    HasMoreData
                                                                                                                                                        Location
                                                                                                                                                                                                      Command
 812
                Job812
                                                                                                                                                        10.42.67.55
                                                                                      Running
                                                                                                                     True
                                                  RemoteJob
param($DriveLetter, $L...
Initialize data disk, Working for stk2
Target VM: 10.42.67.56
True
                                                                                                                                                        10.42.67.56
 DriveLetter: F
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.57 to setup new disk: F
816    Job816    RemoteJob    Running
816 Job816 RemoteJob param($DriveLetter, $L...
Initialize data disk, Working for stk4
Target VM: 10.42.67.58
                                                                                                                     True
                                                                                                                                                        10.42.67.57
DriveLetter: G
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.58 to setup new disk: G
818 Job818 RemoteJob Running T
                                                                                      Running True
                                                                                                                                                        10.42.67.58
param($DriveLetter, $L...
Initialize data disk, Working for stk5
Target VM: 10.42.67.59
DriveLetter: D
 Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.59 to setup new disk: D
```

```
RemoteJob Running
                                                                                                                       True
                                                                                                                                                            10.42.67.59
param($DriveLetter, $L...
Initialize data disk, Working for stk6
Target VM: 10.42.67.60
DriveLetter: E
 Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.60 to setup new disk: E
822 Job822 RemoteJob Running
==== Sending Job to 10.42.67.60 to setup new disk: E
822 Job822 RemoteJob Running Ti
param($DriveLetter, $L...
Initialize data disk, Working for stk7
Target VM: 10.42.67.61
DriveLetter: F
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.61 to setup new disk: F
824 Job824 RemoteJob Running Ti
param($DriveLetter, $L...
Initialize data disk, Working for stk8
Target VM: 10.42.67.62
DriveLetter: G
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.62 to setup new disk: G
826 Job826 RemoteJob Running Ti
param($DriveLetter, $L...
Initialize data disk, Working for stk9
Target VM: 10.42.67.63
DriveLetter: D
Userid/pw: administrator/xxyyzzaabb
                                                                                                                          True
                                                                                                                                                              10.42.67.60
                                                                                                                         True
                                                                                                                                                       10.42.67.61
                                                                                                                          True 10.42.67.62
 Running True 10.42.67.63
param($DriveLetter, $L...
Initialize data disk, working for stk10
Target VM: 10.42.67.64
DriveLetter: E
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.64 to setup new disk: E
830 Job830 RemoteJob Running T
830 Job830 RemoteJob Running Tiparam($DriveLetter, $L...
Initialize data disk, Working for stk11
Target VM: 10.42.67.65
DriveLetter: F
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.65 to setup new disk: F
832 Job832 RemoteJob Running Tiparam($DriveLetter, $L...
Initialize data disk, Working for stk12
Target VM: 10.42.67.66
DriveLetter: G
Userid/pw: administrator/xxyyzzaabb
===== Sending Job to 10.42.67.66 to setup new disk: G
834 Job834 RemoteJob Running Tiparam($DriveLetter, $L...
                                                                                                                         True 10.42.67.64
                                                                                                                         True
                                                                                                                                                      10.42.67.65
True 10.42.67.66
 Userid/pw: administrator/xxyyzzaabb
Interface: 12
Set IP and hostname, Working for stk3
Target VM: 10.42.67.57
New IP: 10.42.67.152
Network prefix: 24 (255.255.255.0)
```

```
Default gateway: 10.42.67.1
DNS: 10.42.196.10
   New hostname: stk3
  Userid/pw: administrator/xxyyzzaabb
Interface: 12
Userid/pw: administrator/xxyyzzaabb
Interface: 12
===== Sending Job to 10.42.67.57 to change IP address to 10.42.67.152 and hostname to stk3
===== This will take about a minute then the target Vm will reboot
3 Job843 RemoteJob Running True 10.42.67.57
param($ifIndexdefault,...
Set IP and hostname, working for stk4
Target VM: 10.42.67.158
New IP: 10.42.67.153
Network prefix: 24 (255.255.255.0)
Default gateway: 10.42.67.1
DNS: 10.42.196.10
New hostname: stk4
Userid/pw: administrator/xxyyzzaabb
Interface: 4
===== Sending Job to 10.42.67.58 to change IP address to 10.42.67.153 and hostname to stk4
===== This will take about a minute then the target Vm will reboot
846 Job846 RemoteJob Running True 10.42.67.58
param($ifIndexdefault,...
Set IP and hostname, Working for stk5
Target VM: 10.42.67.59
New IP: 10.42.67.59
New IP: 10.42.67.59
New IP: 10.42.67.59
Userid/pw: administrator/xxyyzzaabb
Interface: 4
==== Sending Job to 10.42.67.59 to change IP address to 10.42.67.154 and hostname to stk5
Userid/pw: administrator/xxyyzzaabb
Interface: 4
===== Sending Job to 10.42.67.59 to change IP address to 10.42.67.154 and hostname to stk5
===== This will take about a minute then the target Vm will reboot
 New hostname: stk7
Userid/pw: administrator/xxyyzzaabb
   Interface: 12
  ===== Sending Job to 10.42.67.61 to change IP address to 10.42.67.156 and hostname to stk7 ===== This will take about a minute then the target Vm will reboot 855 Job855 RemoteJob Running True 10.42.67.61 param($ifIndexdefault,...
 param($11Indexdefault,...
Set IP and hostname, working for stk8
Target VM: 10.42.67.62
New IP: 10.42.67.157
Network prefix: 24 (255.255.255.0)
Default gateway: 10.42.67.1
DNS: 10.42.196.10
New hostname: stk8
Userid/pw: administrator/xxyyzzaabb
Interface: 12
 Interface: 12
===== Sending Job to 10.42.67.62 to change IP address to 10.42.67.157 and hostname to stk8
===== This will take about a minute then the target Vm will reboot
858 Job858 RemoteJob Running True 10.42.67.62
param($ifIndexdefault,...
Set IP and hostname, Working for stk9
Target VM: 10.42.67.63
New IP: 10.42.67.158
Network prefix: 24 (255.255.255.0)
Default gateway: 10.42.67.1
DNS: 10.42.196.10
New hostname: stk9
```

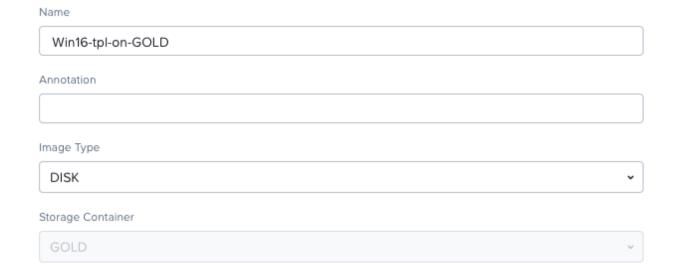
Prism, list VMs

▲ VM Name	Host	IP Addresses	Cores	Memory Capacity	Storage
• stk1	PHX-POC067-3/AHV	10.42.67.150	2	4 GiB	11.98 GiB / 104 GiB
• stk10	PHX-POC067-4/AHV	10.42.67.159	4	8 GiB	10.82 GiB / 168 GiB
• stk11	PHX-POC067-4/AHV	10.42.67.160	6	16 GiB	10.83 GiB / 296 GiB
• stk12	PHX-POC067-2/AHV	10.42.67.161	8	32 GiB	9.56 GiB / 552 GiB
• stk2	PHX-POC067-4/AHV	10.42.67.151	4	8 GiB	11.98 GiB / 168 GiB
• stk3	PHX-POC067-1/AHV	10.42.67.152	6	16 GiB	11.98 GiB / 296 GiB
• stk4	PHX-POC067-2/AHV	10.42.67.153	8	32 GiB	11.51 GiB / 552 GiB
• stk5	PHX-POC067-3/AHV	10.42.67.154	2	4 GiB	10.91 GiB / 104 GiB
• stk6	PHX-POC067-4/AHV	10.42.67.155	4	8 GiB	9.37 GiB / 168 GiB
• stk7	PHX-POC067-3/AHV	10.42.67.156	6	16 GiB	11.98 GiB / 296 GiB

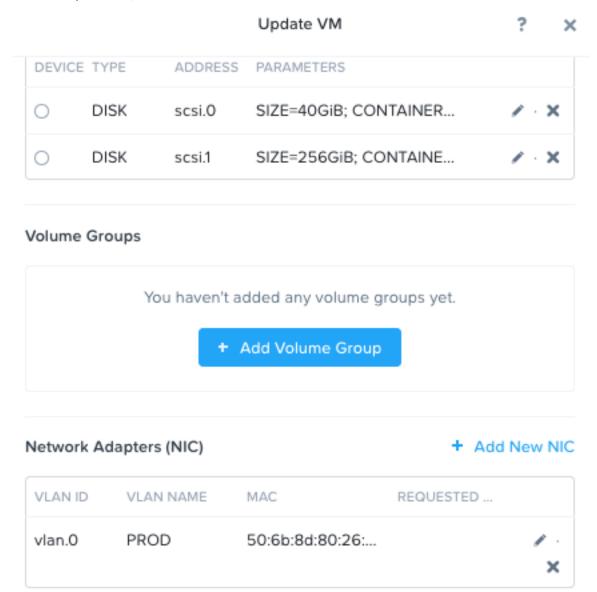
Images, used as templates – placed on EACH storage container

NAME	ANNOTATION	TYPE	STATE	SIZE
Virt IO		DISK	ACTIVE	45.03 MiB
Win12-tpl-on-BRO		DISK	ACTIVE	40 GiB
Win12-tpl-on-GOLD		DISK	ACTIVE	40 GiB
Win12-tpl-on-SILV		DISK	ACTIVE	40 GiB
Win16-tpl-on-BRO		DISK	ACTIVE	40 GiB
Win16-tpl-on-GOLD		DISK	ACTIVE	40 GiB
Win16-tpl-on-SILV		DISK	ACTIVE	40 GiB

Image on a specific storage container



stk11 VM shows 2x disks – they are both on the input storage container, also the NIC is on the input vlan/network



Show hostname, ipconfig and volumes as well as OS information for Windows 2012r2 and 2016 VMs

```
Administrator: Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.
PS_C:\Users\Administrator> hostname
stk11
PS C:\Users\Administrator> ipconfig
Windows IP Configuration
Ethernet adapter Ethernet:
    Connection-specific DNS Suffix : Link-local IPv6 Address . . . : fe80::c13f:e33:57a4:415c%5 IPv4 Address . . . . : 10.42.67.160 Subnet Mask . . . . . : 255.255.255.0 Default Gateway . . . : 10.42.67.1
Tunnel adapter isatap.{C90928A2-BC33-4A1F-A092-0DE8DDEA0226}:
Media State . . . . . . . . . . . . . Media disconnected Connection-specific DNS Suffix . : PS C:\Users\Administrator> get-volume
DriveLetter FileSystemLabel FileSystem DriveType HealthStatus OperationalStatus Sizemenining
                                       NTFS
                                                                                                                         255.88 GB 256 GB
169.26 MB 500 MB
26.34 GB 39.51 GB
                 DATA256
                                                                      Healthy
                                                                    Healthy
Healthy
                 System Reserved NTFS
NTFS
                                                        Fixed
PS C:\Users\Administrator>
```

View basic information about your computer

Windows edition

Windows Server 2016 Datacenter Evaluation

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System

em k

Processor: Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz 2.20 GHz (6 processors)

Installed memory (RAM): 16.0 GB

System type: 64-bit Operating System, x64-based processor

Pen and Touch: No Pen or Touch Input is available for this Display

Computer name, domain, and workgroup settings

Computer name: stk11

Full computer name: stk11

Computer description:

Workgroup: WORKGROUP

Change settings

VM stk9

View basic information about your computer

Windows edition

Windows Server 2012 R2 Datacenter

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System

Processor: Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz 2.20 GHz (2 processors)

Installed memory (RAM): 4.00 GB

System type: 64-bit Operating System, x64-based processor

Pen and Touch: No Pen or Touch Input is available for this Display

Computer name, domain, and workgroup settings

Computer name: stk9

Change settings

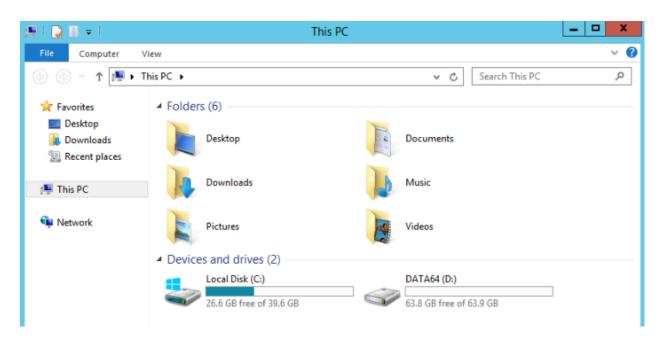
Full computer name: stk9

Computer description:

Workgroup: WORKGROUP

```
Windows PowerShell
Copyright (C) 2013 Microsoft Corporation. All rights reserved.
PS C:\Users\Administrator> hostname
stk9
PS C:\Users\Administrator> ipconfig
Windows IP Configuration
Ethernet adapter Ethernet:
   Connection-specific DNS Suffix :
Link-local IPv6 Address . . . : fe80::b0e8:baea:c192:106d%12
IPv4 Address . . . . : 10.42.67.158
Subnet Mask . . . . . . : 255.255.255.0
Default Gateway . . . . : 10.42.67.1
Tunnel adapter isatap.{C6385EEF-8DEA-41A1-97F8-10EC6830A6D0}:
Media State . . . . . . . . . . : Media disconnected
Connection-specific DNS Suffix . :
PS C:\Users\Administrator> get-volume
                           FileSystemLabel FileSystem
                                                                                                           HealthStatus
DriveLetter
                                                                                DriveType
                                                                                                                                          SizeRemaining
                                                                                                                                                 60.97 MB
63.9 GB
26.61 GB
                                                                                                                                                                             350 MB
64 GB
39.66 GB
                           System Reserved NTFS
DATA64 NTFS
NTFS
PS C:\Users\Administrator>
```

File explorer shows a D drive



CVM, working with vdisks to clone/copy intial templates to specific storage containers

```
nutanix@NTNX-16SM6B360097-D-CVM:10.42.67.29:~$ acli vm.disk get W120nGoldVm
ide.0 {
  addr {
    bus: "ide"
    index: 0
  }
  cdrom: True
  device uuid: "396eb0a5-e3e1-4ffa-be48-a982392599d7"
  empty: True
scsi.0 {
  addr {
    bus: "scsi"
    index: 0
  }
  container id: 630
  container uuid: "a9443fc1-a3bb-4900-ada0-56fe4e0be70f"
  device uuid: "3d8e85fc-9be3-4426-848f-651290f2bdb1"
  naa_id: "naa.6506b8d9636bd4ff4c6e1acb3681ec34"
  source_vmdisk_uuid: "d0234ced-6466-4681-82e1-4c23164b0fdb"
  vmdisk_size: 42949672960
  vmdisk uuid: "b962bdf2-81f8-444a-80c5-aad02eab73e1"
nutanix@NTNX-16SM6B360097-D-CVM:10.42.67.29:~$ acli image.create Win12-tpl-
on-BRONZE source_url=nfs://127.0.0.1/GOLD/.acropolis/vmdisk/b962bdf2-81f8-
444a-80c5-aad02eab73e1 container=BRONZE image type=kDiskImage
Win12-tpl-on-BRONZE: pending
Win12-tpl-on-BRONZE: complete
```

Source VMs used to create the templates/images

▲ VM Name	Host	IP Addresses	Cores	Memory Capacity	Storage	
• W12OnGoldVm			2	4 GiB	11.92 GiB / 40 GiB	
• W16OnGoldVm			2	4 GiB	9.15 GiB / 40 GiB	

Networks

▲ NAME	VLAN ID
DEV	vlan.0
PROD	vlan.0
Rx-Automation-Network	vlan.0

Containers

Name

BRONZE

default-container-60055

GOLD

Images

NutanixManagementShare

Name

SelfServiceContainer

SILVER

Get-Config.ps1: Query setup for a VM