

CheatSheet: VMware Nimbus

VMWARE

- PDF Link: [cheatsheet-nimbus-A4.pdf](#), Category: VMware
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-nimbus-A4>
- Related posts: Prometheus CheatSheet, Nagios CheatSheet, #denny-cheatsheets

File me Issues or star this repo.

1.1 Nimbus Basic

Name	Summary
Nimbus	VMware's internal vSphere based cloud written in Ruby
Nimbus Cloud	Nimbus cloud contains a lot of ESX hosts. Nimbus Pods can seen as data centers.
Nimbus Pod	It is created during a vSphere setup, after setup, it contains one VC and associated ESX hosts.
Nimbus Site	Each site is a separate Nimbus cloud with all of its peripherals. Currently we have: SC and WDC
nimbus-ctl	Ruby CLI for vmomi client
All nimbus tools	/mts/git/bin/nimbus*

<https://raw.githubusercontent.com/dennyzhang/cheatsheet.dennyzhang.com/master/cheatsheet-nimbus-A4/nimbus.png>

1.2 vsphere resource

Name	Summary
Data center	
Resource pool	
VM folder	
Host group	
vcs	
dvs	

1.3 Nimbus CLI

Name	Summary
List Testbed	/mts/git/bin/nimbus-ctl --testbed list
List all VMs of one testbed	/mts/git/bin/nimbus-ctl --testbed list \$testbed_name
Destroy a testbed/VM	/mts/git/bin/nimbus-ctl --testbed kill \$testbed_name
Extend lease of a testbed	/mts/git/bin/nimbus-ctl --lease 5 --testbed extend-lease \$testbed_name
List ip of all VMs	/mts/git/bin/nimbus-ctl ip
Choose nimbus location	NIMBUS_LOCATION=wdc /mts/git/bin/nimbus-ctl ip
Specify nimbus userid	USER=someusername /mts/git/bin/nimbus-ctl list
List all snapshot	NIMBUS=\${POD} /mts/git/bin/nimbus-ctl -testbed list-snapshot
Take snapshot for a testbed	NIMBUS=sc-prd-vc012 /mts/git/bin/nimbus-ctl -outputPath=\$HOME screenshot denny-snapsho
Take snapshot for a testbed	NIMBUS=\${POD} /mts/git/bin/nimbus-ctl -testbed -snapshotIncludeMemory -snapshot \$snapsh
Take snapshot for a vm	NIMBUS=\${POD} /mts/git/bin/nimbus-ctl -snapshotIncludeMemory -snapshot \$snapshotname
Revert all snapshot	NIMBUS=\${POD} /mts/git/bin/nimbus-ctl -testbed -snapshot \$snapshotname revert-snapshot \$
Reference	Gitlab: nimbus
Reference	CheatSheet: VMware Govmomi, CheatSheet: VMware Nimbus

1.4 Deploy Workload In Nimbus

Name	Summary
Nimbus testbed spec file	A json/ruby spec file to setup on-demand nimbus testbed.
List Supported VM Templates	/mts/git/bin/nimbus-genericdeploy --list
Deploy with a spec file	/mts/git/bin/nimbus-testbeddeploy --testbedSpecRubyFile testbed_iscsi.rb --run
Deploy NSX Manager	/mts/git/bin/nimbus-nsxmdeploy --lease 7 --nsxBuild ob-7946221 nsxm-ob-7946221
Deploy NSX Controller	/mts/git/bin/nimbus-nsxcdeploy --lease 7 --nsxBuild ob-7946221 nsxc-ob-7946221
Deploy NFS with 1 mount point	/mts/git/bin/nimbus-nfsdeploy --disk 134217728 --mountPoint /storage-1 cbrc-nfs
Deploy: 1 vcva, 2 ESX, 2 iscsi	Sample: testbed-iscsi.rb
Deploy: 1 vsan	Sample: testbed-vsan.rb
Deploy Concourse	Sample: Deploy a Concourse Instance on Nimbus
Reference	Link: TestbedSpec, Demo: Deploy Your First Nimbus Testbed
Reference	Link: Logic of part of Nimbus-testbeddeploy code

1.5 nimbus tools

```
-bash-4.1$ ls -lt /mts/git/bin/nimbus*
-rwxr-xr-x 1 syncer mts      137 Dec 10 17:27 /mts/git/bin/nimbus-nsx-auto-edge-deploy
-rwxr-xr-x 1 syncer mts      133 Nov 19 22:32 /mts/git/bin/nimbus-nsxTsrms-deploy
-rwxr-xr-x 1 syncer mts      129 Nov 19 22:32 /mts/git/bin/nimbus-vmip-retrieve
-rwxr-xr-x 1 syncer mts      129 Sep 29 2018 /mts/git/bin/nimbus-tbspec-search
-rwxr-xr-x 1 syncer mts      134 Aug 16 2018 /mts/git/bin/nimbus-srmphoton-deploy
-rwxr-xr-x 1 syncer mts      125 Jul 20 2018 /mts/git/bin/nimbus-racetrack
-rwxr-xr-x 1 syncer mts      134 Jun 13 2018 /mts/git/bin/nimbus-srm-vr-jenkins-job
-rwxr-xr-x 1 syncer mts      127 Jun 13 2018 /mts/git/bin/nimbus-vr-deploy
-rwxr-xr-x 1 syncer mts      133 Jan  4 2018 /mts/git/bin/nimbus-post-deployer-def
-rwxr-xr-x 1 syncer mts      128 Dec 20 2017 /mts/git/bin/nimbus-ldap-dump-pg
-rwxr-xr-x 1 syncer mts      144 Nov 20 2017 /mts/git/bin/nimbus-ucp-deploy
-rwxr-xr-x 1 syncer mts      609 Aug 20 2017 /mts/git/bin/nimbusvc-base
-rwxr-xr-x 1 syncer mts      139 Aug 17 2017 /mts/git/bin/nimbus-setup-master
-rwxr-xr-x 1 syncer mts      192 Jul  3 2017 /mts/git/bin/nimbus-testbed-clone
-rwxr-xr-x 1 syncer mts      141 Jul  3 2017 /mts/git/bin/nimbus-vca-wanopt-deploy
-rwxr-xr-x 1 syncer mts      144 Jun 12 2017 /mts/git/bin/nimbus-worker-deploy
-rwxr-xr-x 1 syncer mts 33791680 Jan 30 2017 /mts/git/bin/nimbus_recommend
-rwxr-xr-x 1 syncer mts      3394 Dec 16 2016 /mts/git/bin/nimbus-vropsloginsight-test-launcher
-rwxr-xr-x 1 syncer mts      205 Oct 31 2016 /mts/git/bin/nimbus
-rwxr-xr-x 1 syncer mts      185 Oct 31 2016 /mts/git/bin/nimbus-testbeddeploy
-rwxr-xr-x 1 syncer mts      185 Oct 31 2016 /mts/git/bin/nimbus-test-launcher
-rwxr-xr-x 1 syncer mts      185 Oct 31 2016 /mts/git/bin/nimbus-vcqa-launcher
-rwxr-xr-x 1 syncer mts      125 Oct 30 2016 /mts/git/bin/nimbus-ldap-dump
-rwxr-xr-x 1 syncer mts      135 Sep 27 2016 /mts/git/bin/nimbus-failure-investigate
-rwxr-xr-x 1 syncer mts      145 Aug 31 2016 /mts/git/bin/nimbus-fiaasco-deploy
-rwxr-xr-x 1 syncer mts      127 Jun  8 2016 /mts/git/bin/nimbus-srm-install
-rwxr-xr-x 1 syncer mts      134 Jun  8 2016 /mts/git/bin/nimbus-srmtestbed-deploy
-rwxr-xr-x 1 syncer mts      138 Jun  7 2016 /mts/git/bin/nimbus-vca-cgw-deploy
-rwxr-xr-x 1 syncer mts      134 May 13 2016 /mts/git/bin/nimbus-vcsa-inbox-upgrade
-rwxr-xr-x 1 syncer mts      148 May  4 2016 /mts/git/bin/nimbus-one-cloud-esxdeploy
-rwxr-xr-x 1 syncer mts      148 May  4 2016 /mts/git/bin/nimbus-one-cloud-vcvadeploy
-rwxr-xr-x 1 syncer mts      132 Mar 31 2016 /mts/git/bin/nimbus-post-config-hdrs
-rwxr-xr-x 1 syncer mts      127 Mar  2 2016 /mts/git/bin/nimbus-vum-install
-rwxr-xr-x 1 syncer mts      131 Feb  2 2016 /mts/git/bin/nimbus-quick-pod-setup
-rwxr-xr-x 1 syncer mts      130 Jan 28 2016 /mts/git/bin/nimbus-upgrade-ciswin
-rwxr-xr-x 1 syncer mts      136 Jan 22 2016 /mts/git/bin/nimbus-vrdeploy
-rwxr-xr-x 1 syncer mts      142 Dec 23 2015 /mts/git/bin/nimbus-vcopsdeploy
-rwxr-xr-x 1 syncer mts      138 Dec 23 2015 /mts/git/bin/nimbus-vcg-deploy
-rwxr-xr-x 1 syncer mts      127 Dec  9 2015 /mts/git/bin/nimbus-post-config
-rwxr-xr-x 1 syncer mts      155 Nov 21 2015 /mts/git/bin/nimbus-hostdsim-deploy
-rwxr-xr-x 1 syncer mts      149 Nov  9 2015 /mts/git/bin/nimbus-vrops-deploy
-rwxr-xr-x 1 syncer mts      145 Nov  3 2015 /mts/git/bin/nimbus-nsxcdeploy
-rwxr-xr-x 1 syncer mts      142 Nov  3 2015 /mts/git/bin/nimbus-nsxmdeploy
```

-rwxr-xr-x	1	syncer	mts	146	Oct	26	2015	/mts/git/bin/nimbus-vnimbus-deploy
-rwxr-xr-x	1	syncer	mts	125	Sep	8	2015	/mts/git/bin/nimbus-debug-esx
-rwxr-xr-x	1	syncer	mts	144	Aug	2	2015	/mts/git/bin/nimbus-sampleddeploy
-rwxr-xr-x	1	syncer	mts	129	May	12	2015	/mts/git/bin/nimbus-testesxdeploy
-rwxr-xr-x	1	syncer	mts	138	May	12	2015	/mts/git/bin/nimbus-testesxdeploy-launcher
-rwxr-xr-x	1	syncer	mts	155	Apr	24	2015	/mts/git/bin/nimbus-powercli-install
-rwxr-xr-x	1	syncer	mts	146	Apr	23	2015	/mts/git/bin/nimbus-network-deploy
-rwxr-xr-x	1	syncer	mts	142	Apr	8	2015	/mts/git/bin/nimbus-uiplatform-vamiui-test-run
-rwxr-xr-x	1	syncer	mts	714	Mar	24	2015	/mts/git/bin/nimbus-rvc
-rwxr-xr-x	1	syncer	mts	148	Mar	16	2015	/mts/git/bin/nimbus-mobagent-deploy
-rwxr-xr-x	1	syncer	mts	142	Mar	16	2015	/mts/git/bin/nimbus-fakepmdeploy
-rwxr-xr-x	1	syncer	mts	146	Feb	18	2015	/mts/git/bin/nimbus-vra-deploy
-rwxr-xr-x	1	syncer	mts	138	Feb	2	2015	/mts/git/bin/nimbus-vcddeploy
-rwxr-xr-x	1	syncer	mts	138	Jan	28	2015	/mts/git/bin/nimbus-vsmdeploy
-rwxr-xr-x	1	syncer	mts	140	Jan	28	2015	/mts/git/bin/nimbus-vcdeploy-cat
-rwxr-xr-x	1	syncer	mts	138	Jan	28	2015	/mts/git/bin/nimbus-vcvadeploy
-rwxr-xr-x	1	syncer	mts	138	Jan	28	2015	/mts/git/bin/nimbus-psadeploy
-rwxr-xr-x	1	syncer	mts	141	Jan	28	2015	/mts/git/bin/nimbus-vcbench-deploy
-rwxr-xr-x	1	syncer	mts	138	Jan	28	2015	/mts/git/bin/nimbus-pdp-deploy
-rwxr-xr-x	1	syncer	mts	147	Jan	28	2015	/mts/git/bin/nimbus-physical-esxdeploy
-rwxr-xr-x	1	syncer	mts	152	Jan	28	2015	/mts/git/bin/nimbus-loginsightdeploy
-rwxr-xr-x	1	syncer	mts	136	Jan	28	2015	/mts/git/bin/nimbus-fsdeploy
-rwxr-xr-x	1	syncer	mts	138	Jan	20	2015	/mts/git/bin/nimbus-ovfdeploy
-rwxr-xr-x	1	syncer	mts	142	Jan	20	2015	/mts/git/bin/nimbus-iscsideploy
-rwxr-xr-x	1	syncer	mts	168	Jan	12	2015	/mts/git/bin/nimbus-esxdeploy-ob
-rwxr-xr-x	1	syncer	mts	146	Jan	6	2015	/mts/git/bin/nimbus-genericdeploy
-rwxr-xr-x	1	syncer	mts	138	Jan	6	2015	/mts/git/bin/nimbus-esxdeploy
-rwxr-xr-x	1	syncer	mts	138	Dec	29	2014	/mts/git/bin/nimbus-nfsdeploy
-rwxr-xr-x	1	syncer	mts	130	Aug	6	2014	/mts/git/bin/nimbus-ovftool-deploy
-rwxr-xr-x	1	syncer	mts	132	Aug	4	2014	/mts/git/bin/nimbus-docker-ovfdeploy
-rwxr-xr-x	1	syncer	mts	140	Jul	30	2014	/mts/git/bin/nimbus-uiplatform-icui-test-run
-rwxr-xr-x	1	syncer	mts	139	Jul	30	2014	/mts/git/bin/nimbus-uiplatform-vui-test-run
-rwxr-xr-x	1	syncer	mts	119	Jul	19	2014	/mts/git/bin/nimbus-ctl
-rwxr-xr-x	1	syncer	mts	129	Jul	19	2014	/mts/git/bin/nimbus-hostdsim-kill
-rwxr-xr-x	1	syncer	mts	127	Jul	19	2014	/mts/git/bin/nimbus-nimbussetup
-rwxr-xr-x	1	syncer	mts	121	Jul	19	2014	/mts/git/bin/nimbus-touch
-rwxr-xr-x	1	syncer	mts	132	Jul	18	2014	/mts/git/bin/nimbus-hostdsim-prepare
-rwxr-xr-x	1	syncer	mts	124	Jul	18	2014	/mts/git/bin/nimbus-test-esx
-rwxr-xr-x	1	syncer	mts	127	Jul	17	2014	/mts/git/bin/nimbus-config-util
-rwxr-xr-x	1	syncer	mts	121	Jul	3	2014	/mts/git/bin/nimbus-vmserial
-rwxr-xr-x	1	syncer	mts	135	Jun	19	2014	/mts/git/bin/nimbus-vc-upgrade-and-test
-rwxr-xr-x	1	syncer	mts	129	May	29	2014	/mts/git/bin/nimbus-h5-run-testng
-rwxr-xr-x	1	syncer	mts	133	May	29	2014	/mts/git/bin/nimbus-hostclient-deploy
-rwxr-xr-x	1	syncer	mts	130	May	29	2014	/mts/git/bin/nimbus-ngc-run-testng
-rwxr-xr-x	1	syncer	mts	137	May	29	2014	/mts/git/bin/nimbus-uiplatform-run-testng
-rwxr-xr-x	1	syncer	mts	133	May	29	2014	/mts/git/bin/nimbus-vcd-supportbundle
-rw-r--r--	1	syncer	mts	128	May	29	2014	/mts/git/bin/nimbus-vcva-upgrade
-rwxr-xr-x	1	syncer	mts	133	May	29	2014	/mts/git/bin/nimbus-vc-windows-deploy
-rwxr-xr-x	1	syncer	mts	133	May	29	2014	/mts/git/bin/nimbus-vsm-supportbundle
-rwxr-xr-x	1	syncer	mts	137	May	19	2014	/mts/git/bin/nimbus-analyze-supportbundle
-rwxr-xr-x	1	syncer	mts	128	May	14	2014	/mts/git/bin/nimbus-physical-ctl
-rwxr-xr-x	1	syncer	mts	134	Aug	14	2013	/mts/git/bin/nimbus-autoinstalls
-rwxr-xr-x	1	syncer	mts	202	Apr	22	2013	/mts/git/bin/nimbus-legacy-rvc
-rwxr-xr-x	1	syncer	mts	155	Apr	21	2011	/mts/git/bin/nimbus-vim-cat-launcher
-rwxr-xr-x	1	syncer	mts	130	Feb	18	2011	/mts/git/bin/nimbus-clui
-rwxr-xr-x	1	syncer	mts	147	Feb	18	2011	/mts/git/bin/nimbus-ddt-esx
-rwxr-xr-x	1	syncer	mts	107	Feb	18	2011	/mts/git/bin/nimbus-rlui
-rwxr-xr-x	1	syncer	mts	143	Feb	18	2011	/mts/git/bin/nimbus-vc
-rwxr-xr-x	1	syncer	mts	130	Jan	11	2011	/mts/git/bin/nimbusvc-clui

```
-rwxr-xr-x 1 syncer mts      127 Jan 11  2011 /mts/git/bin/nimbusvc-vcdeploy
```

1.6 nimbus-ctl CLI Online Help

```
-bash-4.1$ /mts/git/bin/nimbus-ctl --help
Control VMs in the Nimbus cloud.
```

Usage:

```
nimbus-ctl [options] cmd <vm-names|testbed-name>
```

Commands: list tools_status tools-status host_name host-name on off kill reset destroy suspend is_on is-on ip
screenshot console vc_supportbundle vc-supportbundle esx_supportbundle esx-supportbundle hostdsim_supportbund
genericvm_supportbundle genericvm-supportbundle workervm_supportbundle workervm-supportbundle samplevp_support
vcdb_errorlogbundle vcdb-errorlogbundle vcdb_dbcopy vcdb-dbcopy vcdb_dbdump vcdb-dbdump dumpstats associated_
nfsvm-supportbundle create_snapshot create-snapshot list_snapshot list-snapshot revert_snapshot revert-snapsh
get-extra-cfg set_ovf_params set-ovf-params shutdown rename vropsvm_supportbundle vropsvm-supportbundle tag s

VMs could be:

1. One or multiple vm names, for example:

```
nimbus-ctl kill vm1          # to kill vm1
nimbus-ctl kill vm1 vm2      # to kill vm1 and vm2
```

2. Wildcards vm name, for example:

```
nimbus-ctl kill '*'          # to kill all VMs
nimbus-ctl kill '*esx*'      # to kill all VMs whose name contain 'esx'
```

To control a testbed:

1. List all testbeds

```
nimbus-ctl --testbed list
```

2. Destroy a testbed

```
nimbus-ctl --testbed kill testbed-name
```

3. Extend lease of a testbed

```
nimbus-ctl --lease 5 --testbed extend-lease testbed-name
```

Other options:

-d, --debug	Log SOAP messages
-o, --outputPath=<s>	Path to put stuff in
-p, --path=<s>	Folder Path to search the VM
-f, --filename=<s>	Name of the file generated (applicable to support bundles)
-i, --file-prefix=<s>	Name of the file generated without the extension (applicable to support bund
-l, --lease=<f>	Days to extend the lease by
-u, --username=<s>	Authentication info for VM operations
-a, --password=<s>	Authentication info for VM operations
--vimUsername=<s>	Since VC6.0, VIM uses different credantial from VM guest, this option is use
--vimPassword=<s>	Since VC6.0, VIM uses different credantial from VM guest, this option is use
-b, --bora=<s>	
-T, --dbType=<s>	This option is used to specify the DB type for the commands vcdb-logbundle a
-m, --nimbus=<s>	nimbus pod name
-e, --excludedPod=<s>	exclusion pod for operation
-c, --context=<s>	nimbus pod context

-s, --nimbusConfigFile=<s>	nimbus pod config json file
-h, --snapshot=<s>	Name of snapshot
-I, --snapshotIncludeMemory	Whether to include memory dump in snapshot. This option only works with crea
-t, --testbed	Control testbeds instead of VMs
-n, --nsx	Control NSX networks
-v, --vxlanDetail	Show vxlan parameters
-r, --hoursToKeepVM=<i>	Number of hours to keep the VM after test fails. (Default: 12)
-w, --allowShorten	Allow hoursToKeepVM is less than lease time
-K, --autoKeptOnly	Only kill auto-kept CAT testbed.
--hoststats	Dump physical host stats alongwith VM stats
--startTime=<s>	Start time of task or event: mm/dd/yyyy hh:mm:ss
--endTime=<s>	End time of task or event: mm/dd/yyyy hh:mm:ss
--nestedVmIp=<s>	Nested VM IP address. This option could be used to collect support bundle di
--osFamily=<s>	This option only works with --nestedVmIp. When a VM IP is specified, this opt
--console-option=<s>	Operations for 'console' command. Possible options: vnc_view, web_view, remo
-F, --outputFormat=<s>	Specify results format for output. Supported Formats: text,json,yaml (defau
-N, --templateName=<s>	Template name. It's same as VM name if not specified
-P, --templatePath=<s>	Folder Path to save the template (default: /templates)
--newName=<s>	New vm name
-g, --add-tag=<s>	Tag to be added to the VM
--remove-tag=<s>	Tag to be removed from the VM
--tag=<s>	Tag to filter VMs
-k, --universalNetwork	Control Cross-vCenter vxLAN. This option only works with --nsx.
-R, --cpuReservation=<i>	CPU reservation in MHz. This option only works with --set-reservation.
-y, --memoryReservation=<i>	Memory reservation in MB. This option only works with --set-reservation.
-M, --clearMemReservation	Clear memory reservation. This option only works with --clear-reservation.
-C, --clearCpuReservation	Clear CPU reservation. This option only works with --clear-reservation.
-x, --vnicIndex=<i>	The 1-based vnic index to operate on
--vxlangs=<s>	Comma separated list of vxlan-backed networks
-O, --trunkOp=<s>	trunk operation
-L, --nimbusLocation=<s>	Run Nimbus on specified datacenter, available datacenters are ["sc", "wdc",
--silentObjectNotFoundError	No exception will be raised if no vm found, will only print a log
--bootOrder=<s>	Comma separated list of boot devices (e.g. 'hdd,eth')
--disk=<i>	Additional disk size in KB. Repeat this option for as many disks you want to
-D, --pvscsiDisk=<i>	Additional pvscsi disk size in KB. Repeat this option for as many disks you
--user=<s>	User to which VM should be transferred
--help	Show this message

1.7 nimbus-testbeddeploy CLI Online Help

```
-bash-4.1$ /mts/git/bin/nimbus-testbeddeploy --help
Allocate testbeds in the Nimbus cloud.
```

Usage:

```
nimbus-testbeddeploy [options]
```

Notes:

- 1) The whole options for the command are not listed here, as they are specific to underlying deploy commands,
- 2) It depends on a testbed spec that which options are required. For example, if a vcva is specified in a spe

Test Run Related Options:

=====

--deployedDynamicWorkerName	Name of the deployed dynamic worker
--psodurl	Url to monitor psod status
--resultsDir	Directory to put results into (default: random in /tmp)
--resulturl	Target url to update the running result
--test	Specify which test to run by name
--testrunid	Run id of the test
--updateurl	Upstream site's url to update running status

Testbed Deployment Options:

=====

--arg	Additional arguments
--customizeTestbed	This option can be used to modify testbed spec in a very generic way. You can specify ' /esx cpuReservation=2048 memoryReservation=4096 ' will set reservation for VMs. Nodes can be selected multiple ways e.g. '/*' will select all nodes in testbed.
--customizeWorker	This option can be used to customize dynamic worker in a generic way, e.g. '/*' will use this option as many times as you need
--disableNatAfterPostboot	Disable NAT on gateway VM. It only works with --isolated-testbed option.
--enablePingVm	Enable ping vms within the testbed
--excludePlugin	Specify a test framework plugin to not load. This provide a way to avoid loading a plugin
--existingTestbed	Existing testbed to use
--failureTypeToKeepVMs	Type of test fails when VMs need to be kept. Valid types are FAIL, INVALID, SUCCESS
--fake	Fake run, won't actually deploy vms
--forceCleanTestbed	If set, testbed will be destroyed. This option will override --keepVMsOnFailure
--gateway	Specify public IP of gateway VM. This option only works with --vxlan option.
--gencov	VC or ESX code coverage flag. E.g. --gencov esx --gencov vc will do code coverage
--gencovConfigFile	Specify the VC/ESX code coverage config file. Currently only needed when do ESX code coverage
--hoursToKeepVMs	Number of hours to keep VMs after test fails. Maximum to keep VMs for 24 hours
--isolated-testbed	Deploy the testbed in vxlan that is created on the fly.
--keepVMsOnFailure	If set, VMs will be kept if the test fails
--list	List all testbeds
--nimbusResourcePool	Use a specific resource pool
--noPreparedTemplates	Do not use prepared templates to speed up deployment
--noStatsDump	Do not dump testbed stats no matter deployment success or fail
--plugin	Specify a test framework plugin to load. This provide a way to avoid loading a plugin
--pluginsLocation	Specify a location where test framework plugin are located at. This way user can specify a custom location
--runName	A prefix adding to the names of vms deployed. It is required unless --list option is used
--testbedName	Specify the name of the testbed to deploy
--testbedParams	Additional parameters accessible in testbed's postBoot block
--testbedSpecJsonFile	Specify a json testbed spec file
--testbedSpecRubyFile	Specify a ruby testbed spec file
--viewSpecOnly	View testbed spec definition only. Do not really deploy a testbed
--vxlan	Specify a vxlan to deploy the testbed on it. The vxlan will replace public network
--xvcTestbed	Distribute testbed to different pods

VM Deployment Options:

=====

--affinitizeTestbed	Affinitize all (except VC) VMs of the testbed to locate on same host. Be careful if high throughput among VMs are required.
--annotation	Specify annotation for the VMs
--bootTimeout	Boot time (in sec) after which to give up if the deployed VM didn't come up.
--catMachine	The value should be either a CAT Machine (integer), the CAT Machine name or a json object <pre>{ "id": "any id", "macaddrs": ["e8:39:35:ae:6a:68", "e8:39:35:ae:6a:69"], "hostname": "hostname-allocated-by-techops" "childmodel": { "ilo_hostname": "10.20.96.109", "ilo_username": "vmware", "ilo_password": "vmware123", "suite_location": "PromC" } }</pre>
--ciswinSettingsJsonFile	File path for ciswin settings
--cleanPxeDir	Clean image in pxe dir
--context	Nimbus pod context
--disableFirewall	Sends commands to disable the firewall in the VM

```

Sends commands to change the TCP Offload in the windows VM
A locator for the domain, in the format of domain://<User>:<Password>@<Domain>
Template of dynamic worker and worker-template by default
Sends commands to enable the firewall in the VM
Enable IPv6
Use The --force
Host profile path for stateless ESX
Host profile VM location for stateless ESX
Startup scripts tgz file path for stateless ESX
PXE Boot the host with Linux System Rescue CD. May be used in conjunction with
/dbc/pa-dbc1106/mfurman/public_html/sysrescue
Wipes ALL partitions on ALL disks. Requires --force. USE WITH CAUTION
Wipe the host before deploying. Parameter is the pxeDir that will be used for
Wipes VSAN disks. USE WITH CAUTION
Number of ESX
Full path of an existing isolated network's JSON result file. This allows to
JSON file which has existing universal vxlan spec for deploying testbed
Force automatic determination of the VC product
Do not deploy NFS VM for Host Simulator
Virtual hardware version, specified as an integer (e.g. 8). Value 0 implies
The value should be either a Hwim Machine ID/UUID (format: 8-4-4-4-12), the
{
  "id": "any id",
  "macaddrs": ["e8:39:35:ae:6a:68", "e8:39:35:ae:6a:69"],
  "hostname": "hostname-allocated-by-techops"
  "childmodel": {
    "ilo_hostname": "10.20.96.109",
    "ilo_username": "vmware",
    "ilo_password": "vmware123",
    "suite_location": "PromC"
  }
}
Type of ipv6 address (static_no_dns, static_with_dns, slaac, link_local)
Waiting time in minute to schedule this job.
When to schedule this job, like 2016-11-01 12:34
Lease in days
Destination Loginsight OVF url
How long the user is willing to wait (in minutes) (default: 1.5h)
Whether merging ldu
Names of networks to use
Type of NIC (e1000, e1000e, vmxnet3)
Number of NICs
Specify which Nimbus pod to use by name
Specify the path of config file
Run Nimbus on specified datacenter, available datacenters are ["sc", "wdc",
Whether to send email after scheduler job finishes.
Deploy the testbed to OneCloud.
Indicates that the powershell installer should be used
Build product
Shared folder to save pxe image instead of user home dir
Schedule this job.
Scheduler job TTL (in hour). (default: 1.0)
Specify Nimbus root for remote execution (e.g. execution inside dynamic work
Scheduler job ID.
  Url for updating scheduler job 'launched' state.
The reason for scheduling a job, such as final result(INVALID, TIMEOUT) or error
Url for reporting scheduler job error.
Used to specify a json file for installation parameters
Indicates that the standalone installer should be used (default)

```

--stress	used to set the stress options for the ciswin firstboot
--stressMaxRange	used to set the maximum delay range for the stress ciswin firstboot (seconds)
--templateName	Specify the VM template to use
--timeout	Time (in seconds) after which to give up the deployment
--universalNetwork	Deploy the testbed in Cross-vCenter vxlan. This option only works with --iso
--useWinVersion	Specifies the base windows VM among win2008r2, win2008, win2012, win2012r2 t
--vcCount	Number of VC
--vcvaSettingsJsonFile	File path for vcva settings
--windowsDomainLocator	A locator for the domain, in the format of domain://<User>:<Password>@<Domain>

Build Options:

=====

--autodeployServerBuild	Build number for autodeployServer
--build	Build number
--cis_blldir	Build dir for cis
--ciswinBuild	Build number for ciswin
--ciswin_blldir	Build dir for ciswin
--ciswindevngcBuild	Build number for ciswindevngc
--cloudvmBuild	Build number for cloudvm
--cloudvm_blldir	Build dir for cloudvm
--cloudvmdevngcBuild	Build number for cloudvmdevngc
--cloudvmngcBuild	Build number for cloudvmngc
--cloudvmsssoBuild	Build number for cloudvmssso
--cloudvmvcopsBuild	Build number for cloudvmvcops
--cloudvmvimBuild	Build number for cloudvmvim
--esxBoraDir	Bora dir of ESX
--esxBoraHost	Bora Host for ESX
--esxBuild	Build number for esx
--esxPxeDir	Location of the dir for pxe config
--esx_vmtree	vmtree for esx
--hbr_blldir	Build dir for hbr
--hbrsrvBuild	Build number for hbrsrv
--ic-clientBuild	Build number for ic-client
--licensing_blldir	Build dir for licensing
--logInsightBuild	Build number for logInsight
--mobilityagentBuild	Build number for mobilityagent
--ngc_blldir	Build dir for ngc
--ngcinstallerBuild	Build number for ngcinstaller
--nsx-transformersBuild	Build number for nsx-transformers
--nsx_blldir	Build dir for nsx
--phservices_blldir	Build dir for phservices
--platform-services-controllerBuild	Build number for platform-services-controller
--sampleBuild	Build number for sample
--serverBuild	Build number of server product
--sso_blldir	Build dir for sso
--suite-uiBuild	Build number for suite-ui
--testware_blldir	Build dir for testware
--uiplatform_blldir	Build dir for uiplatform
--vcBuild	Build number for vc
--vcde_blldir	Build dir for vcde
--vcenter-allBuild	Build number for vcenter-all
--vcenter-asanBuild	Build number for vcenter-asan
--vcenter-gcc6Build	Build number for vcenter-gcc6
--vcenter-python3Build	Build number for vcenter-python3
--vcenterBuild	Build number for vcenter
--vcenterphotonBuild	Build number for vcenterphoton
--vcentersles12Build	Build number for vcentersles12
--vcenterwindowsBuild	Build number for vcenterwindows
--vcenterwindows_blldir	Build dir for vcenterwindows

--vcenterwindowsdevngcBuild	Build number for vcenterwindowsdevngc
--vcloudBuild	Build number for vcloud
--vcloud_blldir	Build dir for vcloud
--vcops_blldir	Build dir for vcops
--vcqadistBuild	Build of vcqadist
--vcqetestwarezipBuild	Build number for vcqetestwarezip
--vcvaBuild	Build number for vcva
--vcvaBuildDir	Build tree to find cloudvm OVF. e.g. ~bora/build/. Must use with --vcvaBuild
--vcvaBuildType	Build type (obj/release/beta). Must use with --vcvaBuildDir
--vddkBuild	Build number for vddk
--vimclients-h5clientBuild	Build number for vimclients-h5client
--vimclients-platformBuild	Build number for vimclients-platform
--vimclients-qaBuild	Build number for vimclients-qa
--vm2c_blldir	Build dir for vm2c
--vmc-gatewayBuild	Build number for vmc-gateway
--vmc-gateway_blldir	Build dir for vmc-gateway
--vpxBuild	Build number for vpx
--vpx_blldir	Build dir for vpx
--vpxd-comptests-covBuild	Build number for vpxd-comptests-cov
--vpxd-comptestsBuild	Build number for vpxd-comptests
--vpxdBuild	Build number for vpxd
--vpxd_blldir	Build dir for vpxd
--vraCafeBuild	Build number for vraCafe
--vraSsoBuild	Build number for vraSso
--vropsBuild	Build number for vrops
--vsmBuild	Build number for vsm
--vui-componentsBuild	Build number for vui-components
--wsBuild	Build number for ws
--ws_blldir	Build dir for ws

Other Options:

=====

--andyPrefix	Andy's Prefix
--andyProducts	Andy's Products
--featureStates	Feature states
--logTriggerFile	Log Trigger files
--logTriggersMode	Possible values are 'off', 'always' or 'onerror'
--nimbusBreakpoint	Enable a named breakpoint in the nimbus code.
--noDefaultLogTriggers	No default Log Triggers
--noSupportBundles	Do not collect support bundles
--pxeBootOption	VMKernel boot option passed to nested ESXi
--umask	Set the umask for having desired permissions on file

Deprecated Options:

=====

--blldir	Build dir of a product
--cis_vmtree	vmtree for cis
--ciswin_vmtree	vmtree for ciswin
--cloudvm_vmtree	vmtree for cloudvm
--esx_blldir	Build dir for esx
--esxallBuild	Build number of esxall product
--hbr_vmtree	vmtree for hbr
--licensing_vmtree	vmtree for licensing
--location	Build location
--macaddrs	MAC addresses
--ngc_vmtree	vmtree for ngc
--nsx_vmtree	vmtree for nsx
--phservices_vmtree	vmtree for phservices
--sso_vmtree	vmtree for sso

```
--testware_vmtree      vmtree for testware
--uiplatform_vmtree    vmtree for uiplatform
--vcenterwindows_vmtree vmtree for vcenterwindows
--vcloud_vmtree        vmtree for vcloud
--vcops_vmtree         vmtree for vcops
--vm2c_vmtree          vmtree for vm2c
--vmc-gateway_vmtree    vmtree for vmc-gateway
--vpx_vmtree           vmtree for vpx
--vpxd_vmtree          vmtree for vpxd
--ws_vmtree            vmtree for ws
```

1.8 nimbus CLI Online Help

```
-bash-4.1$ /mts/git/bin/nimbus --help
```

Nimbus root command

```
-a, --help-all    Recursively get help for all commands
-h, --help         Show this message
```

Available subcommands:

```
deploy : Deploy various vms
ctl : Nimbus-ctl commands to control vms
scheduler : nimbus-scheduler commands to control scheduler jobs
```

1.9 More Resources

License: Code is licensed under MIT License.