

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

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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 Nimbus CLI

Name	Summary
List Testbed	/mts/git/bin/nimbus-ctl --testbed list
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
Take VM snapshot	NIMBUS=sc-prd-vc012 /mts/git/bin/nimbus-ctl --outputPath=\$HOME screenshot denny-snaps
Reference	CheatSheet: VMware Govmomi, CheatSheet: VMware Nimbus

1.3 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: 1 vcva, 2 ESX, 2 iscsi	Sample: testbed-iscsi.rb
Deploy Concourse	Sample: Deploy a Concourse Instance on Nimbus
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
Reference	Link: TestbedSpec, Demo: Deploy Your First Nimbus Testbed
Reference	Link: Logic of part of Nimbus-testbeddeploy code

1.4 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-nsxTsrn-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-jenkin-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-sampledeploy
-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

```

1.5 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_suppor
 vcd_errorlogbundle vcd-errorlogbundle vcd_dbcopy vcd-dbcopy vcd_dbdump vcd-dbdbump 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 bundles)
-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 credential from VM guest, this option is used
--vimPassword=<s>	Since VC6.0, VIM uses different credential from VM guest, this option is used
-b, --bora=<s>	
-T, --dbType=<s>	This option is used to specify the DB type for the commands vcdb-logbundle and vcdb-log
-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 createSnapshot
-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.

<code>-C, --clearCpuReservation</code>	Clear CPU reservation. This option only works with <code>--clear-reservation</code> .
<code>-x, --vnicIndex=<i></code>	The 1-based vnic index to operate on
<code>--vxlan=<s></code>	Comma separated list of vxlan-backed networks
<code>-O, --trunkOp=<s></code>	trunk operation
<code>-L, --nimbusLocation=<s></code>	Run Nimbus on specified datacenter, available datacenters are ["sc", "wdc",
<code>--silentObjectNotFoundError</code>	No exception will be raised if no vm found, will only print a log
<code>--bootOrder=<s></code>	Comma separated list of boot devices (e.g. 'hdd,eth')
<code>--disk=<i></code>	Additional disk size in KB. Repeat this option for as many disks you want to
<code>-D, --pvscsiDisk=<i></code>	Additional pvscsi disk size in KB. Repeat this option for as many disks you
<code>--user=<s></code>	User to which VM should be transferred
<code>--help</code>	Show this message

1.6 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:

=====

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

Testbed Deployment Options:

=====

<code>--arg</code>	Additional arguments
<code>--customizeTestbed</code>	This option can be used to modify testbed spec in a very generic way. You can '/esx cpuReservation=2048 memoryReservation=4096' will set reservation for Nodes can be selected multiple ways e.g. '/' will select all nodes in test
<code>--customizeWorker</code>	This option can be used to customize dynamic worker in a generic way, e.g. ' use this option as many times as you need
<code>--disableNatAfterPostboot</code>	Disable NAT on gateway VM. It only works with <code>--isolated-testbed</code> option.
<code>--enablePingVm</code>	Enable ping vms within the testbed
<code>--excludePlugin</code>	Specify a test framework plugin to not load. This provide a way to avoid loa
<code>--existingTestbed</code>	Existing testbed to use
<code>--failureTypeToKeepVMs</code>	Type of test fails when VMs need to be kept. Valid types are FAIL, INVALID,
<code>--fake</code>	Fake run, won't actually deploy vms
<code>--forceCleanTestbed</code>	If set, testbed will be destroyed. This option will override <code>--keepVMsOnFail</code>
<code>--gateway</code>	Specify public IP of gateway VM. This option only works with <code>--vxlan</code> option.
<code>--gencov</code>	VC or ESX code coverage flag. E.g. <code>--gencov esx --gencov vc</code> will do code cov
<code>--gencovConfigFile</code>	Specify the VC/ESX code coverage config file. Currently only needed when do E
<code>--hoursToKeepVMs</code>	Number of hours to keep VMs after test fails. Maximum to keep VMs for 24 hou
<code>--isolated-testbed</code>	Deploy the testbed in vxlan that is created on the fly.
<code>--keepVMsOnFailure</code>	If set, VMs will be kept if the test fails
<code>--list</code>	List all testbeds
<code>--nimbusResourcePool</code>	Use a specific resource pool
<code>--noPreparedTemplates</code>	Do not use prepared templates to speed up deployment
<code>--noStatsDump</code>	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
--pluginsLocation	Specify a location where test framework plugin are located at.This way user
--runName	A prefix adding to the names of vms deployed. It is required unless --list o
--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 n
--xvcTestbed	Distribute testbed to different pods

VM Deployment Options:

=====

--affinitizeTestbed	Affinitize all (expect VC) VMs of the testbed to locate on same host. Be car 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 { "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" } }
--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
--disableTCPOffload	Sends commands to change the TCP Offload in the windows VM
--domainLocator	A locator for the domain, in the format of domain://<User>:<Password>@<Domain>
--dynamicWorkerTemplate	Template of dynamic worker and worker-template by default
--enableFirewall	Sends commands to enable the firewall in the VM
--enableIPv6	Enable IPv6
--esx:force	Use The --force
--esx:hostprofilePath	Host profile path for stateless ESX
--esx:hostprofileVMLocation	Host profile VM location for stateless ESX
--esx:scriptBundle	Startup scripts tgz file path for stateless ESX
--esx:systemRescue	PXE Boot the host with Linux System Resuce CD. May be used in conjunction wi /dbc/pa-dbc1106/mfurman/public_html/sysrescue
--esx:wipeAllDisks	Wipes ALL partitions on ALL disks. Requires --force. USE WITH CAUTION
--esx:wipeAndDeploy	Wipe the host before deploying. Parameter is the pxeDir that will be used f
--esx:wipeVsanDisks	Wipes VSAN disks. USE WITH CAUTION
--esxCount	Number of ESX
--existingIsolatedNetwork	Full path of an existing isolated network's JSON result file. This allows to
--existingUniversalNetwork	JSON file which has existing universal vxlan spec for deploying testbed
--forceAutoVC	Force automatic determination of the VC product
--hostdsim:noNfs	Do not deploy NFS VM for Host Simulator
--hwVer	Virtual hardware version, specified as an integer (e.g. 8). Value 0 implies
--hwimMachine	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"
    }
}

--ip6AddressType      Type of ipv6 address (static_no_dns, static_with_dns, slaac, link_local)
--job-delay-mins      Waiting time in minute to schedule this job.
--job-schedule-at     When to schedule this job, like 2016-11-01 12:34
--lease              Lease in days
--loginsight_ovfdesc  Destination Loginsight OVF url
--maxRuntimeHint      How long the user is willing to wait (in minutes) (default: 1.5h)
--mergeLdu            Whether merging ldu
--network             Names of networks to use
--nicType             Type of NIC (e1000, e1000e, vmxnet3)
--nics               Number of NICs
--nimbus              Specify which Nimbus pod to use by name
--nimbusConfigFile    Specify the path of config file
--nimbusLocation      Run Nimbus on specified datacenter, available datacenters are ["sc", "wdc",
--noSchedulerNotification Whether to send email after scheduler job finishes.
--oneCloud            Deploy the testbed to OneCloud.
--powershellVCInstall Indicates that the powershell installer should be used
--product             Build product
--pxe-base-dir        Shared folder to save pxe image instead of user home dir
--queue              Schedule this job.
--queue-ttl           Scheduler job TTL (in hour). (default: 1.0)
--remote-nimbus-root  Specify Nimbus root for remote execution (e.g. execution inside dynamic work
--scheduler-job-id    Scheduler job ID.
--scheduler-job-launched-url Url for updating scheduler job 'launched' state.
--scheduler-job-reason The reason for scheduling a job, such as final result(INVALID, TIMEOUT) or e
--scheduler-job-result-url Url for reporting scheduler job error.
--settingsJsonFile    Used to specify a json file for installation parameters
--standaloneVCInstall 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_blddir            Build dir for cis
--ciswinBuild           Build number for ciswin
--ciswin_blddir         Build dir for ciswin
--ciswindevngcBuild     Build number for ciswindevngc
--cloudvmBuild          Build number for cloudvm
--cloudvm_blddir        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
```

1.7 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
```

1.8 More Resources

License: Code is licensed under MIT License.