1 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 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 $snapsl
Take snapshot for a vm	NIMBUS=${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 --runN`
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-nsxTsrm-deploy
-rwxr-xr-x 1 syncer mts      129 Nov 19 22:32 /mts/git/bin/nimbus-vmip-retrive
-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
```

1.6 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_suppor
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
  --vxlans=<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)
  --resultsurl                   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 ca
                                  '/esx cpuReservation=2048 memoryReservation=4096' will set reservation for
                                  Nodes can be selected multiple ways e.g. '/*' will select all nodes in test
  --customizeWorker              This option can be used to customize dynamic worker in a generic way, e.g. '
                                 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 loa
  --existingTestbed              Existing testbed to use
  --failureTypeToKeepVMs         Type of test fails when VMs need to be kept. Valid types are FAIL, INVALID,
  --fake                         Fake run, won't actually deploy vms
  --forceCleanTestbed            If set, testbed will be destroyed. This option will override --keepVMsOnFail
  --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 cov
  --gencovConfigFile             Specify the VC/ESX code coverage config file.Currently only needed when do E
  --hoursToKeepVMs               Number of hours to keep VMs after test fails. Maximum to keep VMs for 24 hou
  --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
  --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>@<Domai
--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>@<Domai

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
  --cloudvmssoBuild               Build number for cloudvmsso
  --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_blddir                    Build dir for hbr
  --hbrsrvBuild                   Build number for hbrsrv
  --ic-clientBuild                Build number for ic-client
  --licensing_blddir              Build dir for licensing
  --logInsightBuild               Build number for logInsight
  --mobilityagentBuild            Build number for mobilityagent
  --ngc_blddir                    Build dir for ngc
  --ngcinstallerBuild             Build number for ngcinstaller
  --nsx-transformersBuild         Build number for nsx-transformers
  --nsx_blddir                    Build dir for nsx
  --phservices_blddir             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_blddir                    Build dir for sso
  --suite-uiBuild                 Build number for suite-ui
  --testware_blddir               Build dir for testware
  --uiplatform_blddir             Build dir for uiplatform
  --vcBuild                       Build number for vc
  --vcde_blddir                   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_blddir         Build dir for vcenterwindows
```

```
  --vcenterwindowsdevngcBuild    Build number for vcenterwindowsdevngc
  --vcloudBuild                  Build number for vcloud
  --vcloud_blddir                Build dir for vcloud
  --vcops_blddir                 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_blddir                  Build dir for vm2c
  --vmc-gatewayBuild             Build number for vmc-gateway
  --vmc-gateway_blddir           Build dir for vmc-gateway
  --vpxBuild                     Build number for vpx
  --vpx_blddir                   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_blddir                  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_blddir                    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:
===================
  --blddir                       Build dir of a product
  --cis_vmtree                   vmtree for cis
  --ciswin_vmtree                vmtree for ciswin
  --cloudvm_vmtree               vmtree for cloudvm
  --esx_blddir                   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