

# 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 \$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    | <code>/mts/git/bin/nimbus-genericdeploy --list</code>  |
| Deploy with a spec file        | <code>/mts/git/bin/nimbus-testbeddeploy --testbedSpecRubyFile testbed_iscsi.rb --run</code>  |
| Deploy NSX Manager             | <code>/mts/git/bin/nimbus-nsxmdeploy --lease 7 --nsxBuild ob-7946221 nsxm-ob-7946221</code>  |
| Deploy NSX Controller          | <code>/mts/git/bin/nimbus-nsxcdeploy --lease 7 --nsxBuild ob-7946221 nsxc-ob-7946221</code>  |
| Deploy NFS with 1 mount point  | <code>/mts/git/bin/nimbus-nfsdeploy --disk 134217728 --mountPoint /storage-1 cbrc-nfs</code> |
| 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-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\_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
--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 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. ' /' 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  |
| --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   |
| --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  |
| --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 (except VC) VMs of the testbed to locate on same host. Be careful if 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 like below:<br><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   |

|                              |  |
|------------------------------|--|
| --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 Rescue CD. May be used in conjunction with <a href="#">https://github.com/dbc1106/mfurman/public_html/sysrescue</a>  |
| --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 for deployment   |
| --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 reuse the   |
| --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 latest   |
| --hwimMachine                | The value should be either a Hwim Machine ID/UUID (format: 8-4-4-4-12), the machine ID, or a UUID (format: 8-4-4-4-12).<br><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> |
| --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", "lax"]   |
| --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 worker)  |
| --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 error   |
| --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:**

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|                                     |   |
|-------------------------------------|---|
| --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.