

Bosh CheatSheet

TOOLS

- PDF Link: [cheatsheet-bosh-A4.pdf](#), Category: tools
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-bosh-A4>

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1.1 Bosh Concepts

Name	Comment
Reference	link: terminology
Bosh Stemcells	A versioned Operating System image. Download stemcell
Bosh Tile	A *.pivot file containing everything needed to install/upgrade a PCF service
Bosh Deployment	An encapsulation of software and configuration that BOSH can deploy to the cloud.
Bosh Release	Everything needed to make a software component deployable by BOSH.
Bosh Job	Each release job represents a specific chunk of work that the release performs.
Bosh Package	It contains vendored in software source and scripts to compile it.
Bosh Errand	A short-lived job that can be triggered by an operator any time after the deploy.
Bosh Manifest	A YAML file that identifies one or more releases, stemcells and configurations
Bosh Operations file (ops file)	A YAML file that includes multiple operations to be applied to a different YAML file.
Bosh Event	Actions taken by the Director (via user or system control) are recorded as events
Bosh Director	The Director is the orchestrator of deployments.
Bosh Addon	A release job that is colocated on all VMs managed by the Director.
Bosh Agent	A process that runs continuously on each VM that BOSH deploys. one Agent process per VM
Bosh Jumpbox	A VM that acts as a single access point for the Director and deployed VMs.
Director Blobstore	A repository where BOSH stores release artifacts, logs, stemcells, and other content, etc
Cloud ID (CID)	ID returned from the Cloud identifying particular resource such as VM or disk.
BBR (bosh-backup-and-restore)	a framework for backing up and restoring BOSH deployments and BOSH Directors.
bbl (bosh-bootloader)	a command line utility for standing up BOSH on multi-clouds
kiln	Kiln helps you maintain tile metadata

1.2 Bosh Basic

Name	Command
bosh	<code>apt install bosh-cli</code> , link: pivotal bosh command
Interpolates variables	<code>bosh int /tmp/build/4dcXX/pks-lock/metadata --path=/ops_manager/username link</code>
Delete a deployment	<code>bosh delete-deployment -d \$deployment</code>
bosh log	<code>/var/vcap/bosh/log</code>
List all bosh deployments	<code>bosh -n deployments</code>
Download log files	<code>bosh -d <deployment>_id logs</code>
Show deployment manifest	<code>bosh manifest -d <deployment></code>
bosh config	<code>bosh cloud-config</code> , <code>bosh configs</code>
List environment	<code>bosh env</code> , <code>bosh env --json</code>
List all instances	<code>bosh instances</code>
Get vms per deployment	<code>bosh -e \$env -d <deployment> vms</code> , <code>bosh instances</code>
Cloud consistency check	<code>bosh cloud-check -d <deployment></code>
List disks	<code>bosh disks -o</code>

1.3 Bosh VM

Name	Command
List vms	<code>bosh -d <deployment> vms</code>
List vms with verbose info	<code>bosh -d <deployment> vms --vitals</code>
Delete a vm	<code>bosh -d <deployment> delete-vm <vm></code>
SSH to vm	<code>bosh -e <env> -d <deployment> ssh <vm></code>

1.4 Bosh Deployment

Name	Command
List bosh deployments	<code>bosh deployments</code>
Delete bosh deployment	<code>bosh -n -d <deployment> delete-deployment --force</code>
Get deployment manifest yaml	<code>bosh manifest -d <deployment> > my.yaml</code>
Run bosh deployment from yaml	<code>bosh deploy -d <deployment> my.yaml</code>

1.5 Bosh Task

Name	Command
List recent tasks	<code>bosh -d <deployment> tasks --recent</code>
List all tasks	<code>bosh -d <deployment> tasks -ar</code>
Attach to current task	<code>bosh -d <deployment> task -a</code>
Get task by id	<code>bosh -d <deployment> task \$id</code>
Get task detail msg	<code>bosh -d <deployment> task \$id --debug</code>
SSH to vm	<code>bosh -d <deployment> ssh \$instance_name</code>
Get all logs for a deployment	<code>bosh -d <deployment> logs</code>
Get log for one vm	<code>bosh -d <deployment> logs \$instance_name</code>
List bosh events	<code>bosh events</code>

1.6 Bosh Release

Name	Command
List release	<code>bosh -n releases</code>
Release folder	<code>/var/tempest/releases</code>
Create a local release	<code>bosh create-release --tarball=myrelease-0.4.0.tgz</code>
Inspect a release	<code>bosh inspect-release <my-release>/<release-version></code>
Export a release	<code>bosh -d <deployment> export-release <my-release>/<release-version> ubuntu-trusty</code>
Delete release	<code>bosh -n delete-release <my-release>/<release-version> --force</code>
Upload release	<code>bosh -n upload-release /tmp/my-release-0.22.0.tgz</code>
Create a release from directory	<code>bosh init-release --dir <my-release></code>

1.7 Bosh Errand

Name	Command
List errands	<code>bosh errands -d <deployment></code>
Run errand in a new vm	<code>bosh -n -d <deployment> run-errand <errand_name> link: run-errand</code>
Run errand in a new vm with env alive	<code>bosh -n -d <deployment> run-errand <errand_name> --keep-alive</code>
Run errand in an existing vm	<code>bosh -n -d <deployment> run-errand <errand_name> --instance=worker/instance</code>

1.8 Bosh Manifest

Name	Command
Show bosh manifest	<code>bosh manifest -d <deployment> link: manifest</code>

1.9 Bosh Stemcell

Name	Command
Upload stemcell	<code>bosh -n upload-stemcell /tmp/stemcell.tgz</code>
List stemcells	<code>bosh -n stemcells</code>

1.10 Bosh Monit

Name	Comment
List bosh deployed daemon processes	<code>sudo su -, monit summary</code>
Restart a given daemon processes	<code>monit restart <process_name></code>

1.11 Ops manager

Name	Command
Release folder	<code>/var/tempest/releases</code>
Restart Ops Manager	<code>service tempest-web stop/start</code>
Change file permission for your release	<code>chown tempest-web:tempest-web /var/tempest/releases/<your-release.tgz></code>
Tile entrance file	<code>/var/tempest/workspaces/default/metadata/*.yaml</code>
Tile jobs folder	<code>/var/vcap/jobs</code>

1.12 Bosh Tile Reference

Name	Command
Forms Reference	https://docs.pivotal.io/tiledev/2-1/product-template-reference.html#form-properties
Product Template Reference	https://docs.pivotal.io/tiledev/2-2/product-template-reference.html
Property Reference	https://docs.pivotal.io/tiledev/2-2/property-reference.html
Tile Generator	https://docs.pivotal.io/tiledev/2-1/tile-generator.html
Example	<code>example-product/metadata/example-product.yaml.erb</code>

1.13 Online Help Usage

kubo@jumper:~\$ bosh --help

Usage:

bosh [OPTIONS] <command>

Application Options:

```
-v, --version           Show CLI version
--config=              Config file path (default: ~/.bosh/config) [$BOSH_CONFIG]
-e, --environment=     Director environment name or URL [$BOSH_ENVIRONMENT]
--ca-cert=            Director CA certificate path or value [$BOSH_CA_CERT]
--sha2                Use SHA256 checksums [$BOSH_SHA2]
--parallel=           The max number of parallel operations (default: 5)
--client=             Override username or UAA client [$BOSH_CLIENT]
--client-secret=      Override password or UAA client secret [$BOSH_CLIENT_SECRET]
-d, --deployment=     Deployment name [$BOSH_DEPLOYMENT]
--column=            Filter to show only given column(s)
--json               Output as JSON
--tty                Force TTY-like output
--no-color            Toggle colorized output
-n, --non-interactive Don't ask for user input [$BOSH_NON_INTERACTIVE]
```

Help Options:

```
-h, --help           Show this help message
```

Available commands:

```
add-blob             Add blob https://bosh.io/docs/cli-v2#add-blob
alias-env            Alias environment to save URL and CA certificate https://bosh.io/docs/cli-v2#alias-env
attach-disk          Attaches disk to an instance https://bosh.io/docs/cli-v2#attach-disk
blobs                List blobs https://bosh.io/docs/cli-v2#blobs
cancel-task          Cancel task at its next checkpoint https://bosh.io/docs/cli-v2#cancel-task
clean-up             Clean up releases, stemcells, disks, etc. https://bosh.io/docs/cli-v2#clean-up
cloud-check          Cloud consistency check and interactive repair https://bosh.io/docs/cli-v2#cloud-check
cloud-config         Show current cloud config https://bosh.io/docs/cli-v2#cloud-config
config              Show current config for either ID or both type and name https://bosh.io/docs/cli-v2#config
configs             List configs https://bosh.io/docs/cli-v2#configs
cpi-config           Show current CPI config https://bosh.io/docs/cli-v2#cpi-config
create-env           Create or update BOSH environment https://bosh.io/docs/cli-v2#create-env
create-release       Create release https://bosh.io/docs/cli-v2#create-release
delete-config        Delete config https://bosh.io/docs/cli-v2#delete-config
```

delete-deployment	Delete deployment	https://bosh.io/docs/cli-v2#delete-deployment
delete-disk	Delete disk	https://bosh.io/docs/cli-v2#delete-disk
delete-env	Delete BOSH environment	https://bosh.io/docs/cli-v2#delete-env
delete-release	Delete release	https://bosh.io/docs/cli-v2#delete-release
delete-snapshot	Delete snapshot	https://bosh.io/docs/cli-v2#delete-snapshot
delete-snapshots	Delete all snapshots in a deployment	https://bosh.io/docs/cli-v2#delete-snapshots
delete-stemcell	Delete stemcell	https://bosh.io/docs/cli-v2#delete-stemcell
delete-vm	Delete VM	https://bosh.io/docs/cli-v2#delete-vm
deploy	Update deployment	https://bosh.io/docs/cli-v2#deploy
deployment	Show deployment information	https://bosh.io/docs/cli-v2#deployment
deployments	List deployments	https://bosh.io/docs/cli-v2#deployments
diff-config	Diff two configs by ID	https://bosh.io/docs/cli-v2#diff-config
disks	List disks	https://bosh.io/docs/cli-v2#disks
environment	Show environment	https://bosh.io/docs/cli-v2#environment
environments	List environments	https://bosh.io/docs/cli-v2#environments
errands	List errands	https://bosh.io/docs/cli-v2#errands
event	Show event details	https://bosh.io/docs/cli-v2#event
events	List events	https://bosh.io/docs/cli-v2#events
export-release	Export the compiled release to a tarball	https://bosh.io/docs/cli-v2#export-release
finalize-release	Create final release from dev release tarball	https://bosh.io/docs/cli-v2#finalize-release
generate-job	Generate job	https://bosh.io/docs/cli-v2#generate-job
generate-package	Generate package	https://bosh.io/docs/cli-v2#generate-package
help	Show this help message	https://bosh.io/docs/cli-v2#help
ignore	Ignore an instance	https://bosh.io/docs/cli-v2#ignore
init-release	Initialize release	https://bosh.io/docs/cli-v2#init-release
inspect-release	List release contents such as jobs	https://bosh.io/docs/cli-v2#inspect-release
instances	List all instances in a deployment	https://bosh.io/docs/cli-v2#instances
interpolate	Interpolates variables into a manifest	https://bosh.io/docs/cli-v2#interpolate
locks	List current locks	https://bosh.io/docs/cli-v2#locks
log-in	Log in	https://bosh.io/docs/cli-v2#log-in
log-out	Log out	https://bosh.io/docs/cli-v2#log-out
logs	Fetch logs from instance(s)	https://bosh.io/docs/cli-v2#logs
manifest	Show deployment manifest	https://bosh.io/docs/cli-v2#manifest
orphan-disk	Orphan disk	https://bosh.io/docs/cli-v2#orphan-disk
recreate	Recreate instance(s)	https://bosh.io/docs/cli-v2#recreate
releases	List releases	https://bosh.io/docs/cli-v2#releases
remove-blob	Remove blob	https://bosh.io/docs/cli-v2#remove-blob
repack-stemcell	Repack stemcell	https://bosh.io/docs/cli-v2#repack-stemcell
reset-release	Reset release	https://bosh.io/docs/cli-v2#reset-release
restart	Restart instance(s)	https://bosh.io/docs/cli-v2#restart
run-errand	Run errand	https://bosh.io/docs/cli-v2#run-errand
runtime-config	Show current runtime config	https://bosh.io/docs/cli-v2#runtime-config
scp	SCP to/from instance(s)	https://bosh.io/docs/cli-v2#scp
snapshots	List snapshots	https://bosh.io/docs/cli-v2#snapshots
ssh	SSH into instance(s)	https://bosh.io/docs/cli-v2#ssh
start	Start instance(s)	https://bosh.io/docs/cli-v2#start
stemcells	List stemcells	https://bosh.io/docs/cli-v2#stemcells
stop	Stop instance(s)	https://bosh.io/docs/cli-v2#stop
sync-blobs	Sync blobs	https://bosh.io/docs/cli-v2#sync-blobs
take-snapshot	Take snapshot	https://bosh.io/docs/cli-v2#take-snapshot
task	Show task status and start tracking its output	https://bosh.io/docs/cli-v2#task
tasks	List running or recent tasks	https://bosh.io/docs/cli-v2#tasks
unignore	Unignore an instance	https://bosh.io/docs/cli-v2#unignore
update-cloud-config	Update current cloud config	https://bosh.io/docs/cli-v2#update-cloud-config
update-config	Update config	https://bosh.io/docs/cli-v2#update-config
update-cpi-config	Update current CPI config	https://bosh.io/docs/cli-v2#update-cpi-config
update-resurrection	Enable/disable resurrection	https://bosh.io/docs/cli-v2#update-resurrection
update-runtime-config	Update current runtime config	https://bosh.io/docs/cli-v2#update-runtime-config
upload-blobs	Upload blobs	https://bosh.io/docs/cli-v2#upload-blobs

upload-release	Upload release	https://bosh.io/docs/cli-v2#upload-release
upload-stemcell	Upload stemcell	https://bosh.io/docs/cli-v2#upload-stemcell
variables	List variables	https://bosh.io/docs/cli-v2#variables
vendor-package	Vendor package	https://bosh.io/docs/cli-v2#vendor-package
vms	List all VMs in all deployments	https://bosh.io/docs/cli-v2#vms

Succeeded

1.14 More Resources

<https://github.com/bosh-tips/tips>

<http://engineering.pivotal.io/post/compiled-releases-for-pipelines/>

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