

CheatSheet: Cloudfoundry Tile & OpsManager

VMWARE

- PDF Link: [cheatsheet-tile-A4.pdf](#), Category: vmware
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-tile-A4>
- Related posts: PKS CheatSheet, Bosh CheatSheet, #denny-cheatsheets

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1.1 om - Basic

Name	Command
om	A command-line API client for Pivotal Operations Manager
Download PCF vsphere Opsmanager OVA	https://network.pivotal.io/products/ops-manager
omcli	export passwd='CHANGEME'; alias omcli="om -t https://30.0.0.5 -u admin -p \$passwd"
Get uaa admin password	omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/uaa-admin
Get bosh connect credential	omcli curl -p /api/v0/deployed/director/credentials/bosh_commandline
List all installed tiles	omcli curl -p /api/v0/installations
Upload tile to opsmanager via cli	omcli upload-product -p </path/myproduct.pivotal>
Upload stemcell to opsmanager via cli	omcli upload-stemcell -s </path/mystemcell.tgz>
Use pivnet cli to download stemcell	Once pivnet login, pivnet download-product-files -p stemcells-ubuntu-xenial
Show status of apply changes	omcli installation-log --id 2, omcli installation-log --id \$installation_id
List all properties for a deployment	bosh deployments, omcli curl -p /api/v0/staged/products/\${bosh_deployment}
json output	omcli -k --format=json staged-products
Reference	PKS CheatSheet, Bosh CheatSheet, Tile CheatSheet, UAA CheatSheet

1.2 Get bosh/pks tile credential from om

Name	Summary
bosh tile -> Bosh Commandline Credentials	omcli curl -p /api/v0/deployed/director/credentials/bosh2_commandline
Get ops-manager ca cert	omcli curl -p /api/v0/certificate_authorities
pks tile -> Uaa Admin Password	omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/uaa-admin
pks tile -> Pks Uaa Management Admin Client	omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/uaa-admin
pks tile -> api server FQDN	omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/uaa-admin
pks tile -> pks certificates	omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/uaa-admin
pks tile -> whether wavefront is enabled	omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/uaa-admin
pks tile -> wavefront token	omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/uaa-admin

1.3 om product

Name	Summary
Upload tile from cli	omcli upload-product -p </path/myproduct.pivotal>
List products	omcli curl -s -p /api/v0/staged/products
List all available products	omcli available-products, or omcli curl -p /api/v0/available_products
List all deployed products	omcli deployed-products
Delete all unused products	omcli delete-unused-products
Delete product	omcli -k delete-product -p pivotal-container-service -v 1.3.0-build.3
Unstage product	omcli -k unstage-product -p pivotal-container-service
Stage product	omcli -k stage-product -p pivotal-container-service -v 1.3.0-build.3

1.4 pivnet-cli

Name	Comment
pivnet	CLI to interact with Pivotal Network. Install pivnet CLI
pivnet login	pivnet login --api-token \$your_token
pivnet download stemcell	pivnet download-product-files -p stemcells-ubuntu-xenial -r 170.9 -g '*vsphere*' -d \$download_dir
List all products	pivnet products
Show product info	pivnet product -p pivotal-container-service

1.5 Tile Challenges

Name	Comment
Tiles are big	It's usually GBs. Too big to distribute
In Opsmanager, can't cancel task	Costly to make mistakes
In Opsmanager, can't downgrade	Inconvenient for development cycle
In Opsmanager, review changes is confusing	The review feature should be more informative
Slow to apply changes	Usually it takes hours, while minutes in kubernetes

1.6 Tile Reference

Name	Command
kiln	A command line tool to help you maintain tile metadata. Download kiln
Example	example-product/metadata/example-product.yml.erb
nozzle	
firehose	
service broker	
buildpack	
Reference	Forms Reference, Product Template Reference, Property Reference, Tile Generator

1.7 Ops manager

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

1.8 om cli Online Help

```
> om --help
om helps you interact with an Ops Manager
```

Usage: om [options] <command> [<args>]

<code>--client-id, -c</code>	string	Client ID for the Ops Manager VM (not required for unauthenticated commands)
<code>--client-secret, -s</code>	string	Client Secret for the Ops Manager VM (not required for unauthenticated commands)
<code>--connect-timeout, -o</code>	int	timeout in seconds to make TCP connections (default: 5)
<code>--format, -f</code>	string	Format to print as (options: table,json) (default: table)
<code>--help, -h</code>	bool	prints this usage information (default: false)
<code>--password, -p</code>	string	admin password for the Ops Manager VM (not required for unauthenticated commands)
<code>--request-timeout, -r</code>	int	timeout in seconds for HTTP requests to Ops Manager (default: 1800)
<code>--skip-ssl-validation, -k</code>	bool	skip ssl certificate validation during http requests (default: false)
<code>--target, -t</code>	string	location of the Ops Manager VM
<code>--trace, -tr</code>	bool	prints HTTP requests and response payloads
<code>--username, -u</code>	string	admin username for the Ops Manager VM (not required for unauthenticated commands)
<code>--version, -v</code>	bool	prints the om release version (default: false)

Commands:

<code>activate-certificate-authority</code>	activates a certificate authority on the Ops Manager
<code>apply-changes</code>	triggers an install on the Ops Manager targeted
<code>available-products</code>	list available products
<code>certificate-authorities</code>	lists certificates managed by Ops Manager
<code>certificate-authority</code>	prints requested certificate authority
<code>config-template</code>	**EXPERIMENTAL** generates a config template for the product
<code>configure-authentication</code>	configures Ops Manager with an internal userstore and admin user account
<code>configure-bosh</code>	**DEPRECATED** configures Ops Manager deployed bosh director
<code>configure-director</code>	configures the director
<code>configure-product</code>	configures a staged product
<code>configure-saml-authentication</code>	configures Ops Manager with SAML authentication

create-certificate-authority	creates a certificate authority on the Ops Manager
create-vm-extension	creates a VM extension
credential-references	list credential references for a deployed product
credentials	fetch credentials for a deployed product
curl	issues an authenticated API request
delete-certificate-authority	deletes a certificate authority on the Ops Manager
delete-installation	deletes all the products on the Ops Manager targeted
delete-product	deletes a product from the Ops Manager
delete-unused-products	deletes unused products on the Ops Manager targeted
deployed-manifest	prints the deployed manifest for a product
deployed-products	lists deployed products
errands	list errands for a product
export-installation	exports the installation of the target Ops Manager
generate-certificate	generates a new certificate signed by Ops Manager's root CA
generate-certificate-authority	generates a certificate authority on the Opsman
help	prints this usage information
import-installation	imports a given installation to the Ops Manager targeted
installation-log	output installation logs
installations	list recent installation events
pending-changes	lists pending changes
regenerate-certificates	deletes all non-configurable certificates in Ops Manager...
revert-staged-changes	reverts staged changes on the Ops Manager targeted
set-errand-state	sets state for a product's errand
stage-product	stages a given product in the Ops Manager targeted
staged-config	**EXPERIMENTAL** generates a config from a staged product
staged-manifest	prints the staged manifest for a product
staged-products	lists staged products
unstage-product	unstages a given product from the Ops Manager targeted
upload-product	uploads a given product to the Ops Manager targeted
upload-stemcell	uploads a given stemcell to the Ops Manager targeted
version	prints the om release version

1.9 pivnet cli Online Help

```
> pivnet --help
Usage:
  pivnet [OPTIONS] <command>
```

Application Options:

-v, --version	Print the version of this CLI and exit
--format=[table json yaml]	Format to print as (default: table)
--verbose	Display verbose output
--profile=	Name of profile (default: default)
--config=	Path to config file (default: /Users/zdenny/.pivnetrc)

Help Options:

-h, --help	Show this help message
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Available commands:

accept-eula	Accept EULA (Available for pivots only) (aliases: ae)
add-file-group	Add file group to release (aliases: afg)
add-product-file	Add product file to release (aliases: apf)
add-release-dependency	Add release dependency (aliases: ard)
add-release-upgrade-path	Add release upgrade path (aliases: arup)
add-user-group	Add user group to release (aliases: aug)
add-user-group-member	Add user group member to group (aliases: augm)
create-dependency-specifier	Create dependency specifier (aliases: cds)
create-file-group	Create file group (aliases: cfg)
create-product-file	Create product file (aliases: cpf)

create-release	Create release (aliases: cr)
create-user-group	Create user group (aliases: cug)
curl	Curl an endpoint (aliases: c)
delete-dependency-specifier	Delete dependency specifier (aliases: dds)
delete-file-group	Delete file group (aliases: dfg)
delete-product-file	Delete product file (aliases: dpf)
delete-release	Delete release (aliases: dr)
delete-user-group	Delete user group (aliases: dug)
dependency-specifier	Get dependency specifier (aliases: ds)
dependency-specifiers	List dependency specifiers (aliases: dss)
download-product-files	Download product files (aliases: dlpf)
eula	Show EULA (aliases: e)
eulas	List EULAs (aliases: es)
file-group	Show file group (aliases: fg)
file-groups	List file groups (aliases: fgs)
help	Print this help message (aliases: h)
login	Log in to Pivotal Network. (aliases: l)
logout	Log out from Pivotal Network.
product	Show product (aliases: p)
product-file	Show product file (aliases: pf)
product-files	List product files (aliases: pfs)
products	List products (aliases: ps)
release	Show release (aliases: r)
release-dependencies	List release dependencies (aliases: rds)
release-types	List release types (aliases: rts)
release-upgrade-paths	List release upgrade paths (aliases: rups)
releases	List releases (aliases: rs)
remove-file-group	Remove file group from release (aliases: rfg)
remove-product-file	Remove product file from release (aliases: rpf)
remove-release-dependency	Remove release dependency (aliases: rrd)
remove-release-upgrade-path	Remove release upgrade path (aliases: rrup)
remove-user-group	Remove user group from release (aliases: rug)
remove-user-group-member	Remove user group member from group (aliases: rugm)
update-file-group	Update file group (aliases: ufg)
update-product-file	Update product file (aliases: upf)
update-release	Update release (aliases: ur)
update-user-group	Update user group (aliases: uug)
user-group	Show user group (aliases: ug)
user-groups	List user groups (aliases: ugs)
version	Print the version of this CLI and exit (aliases: v)

1.10 More Resources

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