

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 |
| omcli | <code>export passwd='CHANGE_ME'; alias omcli="om -t https://30.0.0.5 -u admin -p \$passwd"</code> |
| Get uaa admin password | <code>omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials/.pr</code> |
| Get bosh connect credential | <code>omcli curl -p /api/v0/deployed/director/credentials/bosh_commandline_cred</code> |
| List all installed tiles | <code>omcli curl -p /api/v0/installations</code> |
| Upload tile to opsmanager via cli | <code>omcli upload-product -p </path/myproduct.pivotal></code> |
| Upload stemcell to opsmanager via cli | <code>omcli upload-stemcell -s </path/mystemcell.tgz></code> |
| Use pivnet cli to download stemcell | Once pivnet login, <code>pivnet download-product-files -p stemcells-ubuntu-xenial</code> |
| Show status of apply changes | <code>omcli installation-log --id 2, omcli installation-log --id \$installation_id</code> |
| List all properties for a deployment | <code>bosh deployments, omcli curl -p /api/v0/staged/products/\${bosh_deployment}/</code> |
| json output | <code>omcli -k --format=json staged-products</code> |
| 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 | <code>omcli curl -p /api/v0/deployed/director/credentials/bosh2_commandl</code> |
| Get ops-manager ca cert | <code>omcli curl -p /api/v0/certificate_authorities</code> |
| pks tile -> Uaa Admin Password | <code>omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent</code> |
| pks tile -> Pks Uaa Management Admin Client | <code>omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent</code> |
| pks tile -> api server FQDN | <code>omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent</code> |
| pks tile -> pks certificates | <code>omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent</code> |
| pks tile -> whether wavefront is enabled | <code>omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent</code> |
| pks tile -> wavefront token | <code>omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent</code> |

1.3 om product

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

1.4 pivnet-cli

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

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/*.yaml</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 |
|------------|------------------------|

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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