

# 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   | <a href="https://network.pivotal.io/products/ops-manager">https://network.pivotal.io/products/ops-manager</a> |
| omcli                                 | export passwd='CHANGEME'; alias omcli="om -t <a href="https://30.0.0.5">https://30.0.0.5</a> -u admin -       |
| Get uaa admin password                | omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credentials                                       |
| 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-x  |
| Show status of apply changes          | omcli installation-log --id 2, omcli installation-log --id \$installati                                       |
| List all properties for a deployment  | bosh deployments, omcli curl -p /api/v0/staged/products/\${bosh_deploy  |
| 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_commandl  |
| 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}/credent |
| pks tile -> Pks Uaa Management Admin Client | omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent |
| pks tile -> api server FQDN                 | omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent |
| pks tile -> pks certificates                | omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent |
| pks tile -> whether wavefront is enabled    | omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent |
| pks tile -> wavefront token                 | omcli curl -p /api/v0/deployed/products/\${bosh_deployment}/credent |

## 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 |
| 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 <b>kubernetes</b> |

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

## 1.8 om cli Online Help

```
> om --help
```

om helps you interact with an Ops Manager

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

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

Commands:

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