

전자정부표준프레임워크 기반의 Open PaaS 개발

BOSH CLI 가이드

|  |  |  |
| --- | --- | --- |
| 작성자 | 문철호 (인) | 2015.8.3 |
| 검토자 | 김태형 (인) | 2015.8.4 |
| 승인자 | 김기현 (인) | 2015.8.10 |

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

개 정 이 력

| 버전 | 작성일 | 변경내용[[1]](#footnote-1) | 작성자 | 승인자 |
| --- | --- | --- | --- | --- |
| 0.1 | 2015.8.3 | 최초작성 | 문철호 | 김기현 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

목차

[1. 문서 개요 7](#_Toc430012911)

[*1.1.* *목적* 7](#_Toc430012912)

[*1.2.* *범위* 7](#_Toc430012913)

[*1.3.* *참고자료* 7](#_Toc430012914)

[2. BOSH CLI 기본 사용법 8](#_Toc430012915)

[3. BOSH CLI - micro 11](#_Toc430012916)

[*3.1.* *micro deployment* 11](#_Toc430012917)

[*3.2.* *micro deployments* 12](#_Toc430012918)

[*3.3.* *micro deploy* 13](#_Toc430012919)

[*3.4.* *micro status* 15](#_Toc430012920)

[*3.5.* *micro agent* 16](#_Toc430012921)

[*3.6.* *micro apply* 17](#_Toc430012922)

[*3.7.* *micro delete* 18](#_Toc430012923)

[4. BOSH CLI - Deployment 19](#_Toc430012924)

[*4.1.* *deployment* 19](#_Toc430012925)

[*4.2.* *deployments* 20](#_Toc430012926)

[*4.3.* *edit deployment* 21](#_Toc430012927)

[*4.4.* *deploy* 22](#_Toc430012928)

[*4.5.* *download manifest* 26](#_Toc430012929)

[*4.6.* *diff* 27](#_Toc430012930)

[*4.7.* *validate jobs* 28](#_Toc430012931)

[5. BOSH CLI - Release 29](#_Toc430012932)

[*5.1.* *create release* 29](#_Toc430012933)

[*5.2.* *delete release* 32](#_Toc430012934)

[*5.3.* *verify release* 34](#_Toc430012935)

[*5.4.* *upload release* 39](#_Toc430012936)

[*5.5.* *releases* 47](#_Toc430012937)

[*5.6.* *reset release* 48](#_Toc430012938)

[*5.7.* *init release* 49](#_Toc430012939)

[*5.8.* *generate job* 50](#_Toc430012940)

[*5.9.* *generate package* 51](#_Toc430012941)

[6. BOSH CLI - Stemcell 52](#_Toc430012942)

[*6.1.* *upload stemcell* 52](#_Toc430012943)

[*6.2.* *verify stemcell* 54](#_Toc430012944)

[*6.3.* *stemcells* 55](#_Toc430012945)

[*6.4.* *delete stemcell* 56](#_Toc430012946)

[*6.5.* *public stemcells* 57](#_Toc430012947)

[*6.6.* *download public stemcell* 58](#_Toc430012948)

[7. BOSH CLI - Job 59](#_Toc430012949)

[*7.1.* *start* 59](#_Toc430012950)

[*7.2.* *stop* 62](#_Toc430012951)

[*7.3.* *restart* 65](#_Toc430012952)

[*7.4.* *recreate* 68](#_Toc430012953)

[8. BOSH CLI - User 71](#_Toc430012954)

[*8.1.* *create user* 71](#_Toc430012955)

[*8.2.* *delete user* 72](#_Toc430012956)

[*8.3.* *login* 73](#_Toc430012957)

[*8.4.* *logout* 74](#_Toc430012958)

[9. BOSH CLI - Task 75](#_Toc430012959)

[*9.1.* *task* 75](#_Toc430012960)

[*9.2.* *tasks* 77](#_Toc430012961)

[*9.3.* *tasks recent* 78](#_Toc430012962)

[*9.4.* *cancel task* 79](#_Toc430012963)

[10. BOSH CLI - Property 80](#_Toc430012964)

[*10.1.* *set property* 80](#_Toc430012965)

[*10.2.* *get property* 81](#_Toc430012966)

[*10.3.* *properties* 82](#_Toc430012967)

[*10.4.* *unset property* 83](#_Toc430012968)

[11. BOSH CLI - Log 84](#_Toc430012969)

[*11.1.* *logs* 84](#_Toc430012970)

[12. BOSH CLI - Maintenance 85](#_Toc430012971)

[*12.1.* *cleanup* 85](#_Toc430012972)

[*12.2.* *cloudcheck* 86](#_Toc430012973)

[13. BOSH CLI – Remote Access 88](#_Toc430012974)

[*13.1.* *ssh* 88](#_Toc430012975)

[*13.2.* *scp* 90](#_Toc430012976)

[14. BOSH CLI - Blob 91](#_Toc430012977)

[*14.1.* *upload blob* 91](#_Toc430012978)

[*14.2.* *add blob* 92](#_Toc430012979)

[*14.3.* *sync blobs* 93](#_Toc430012980)

[*14.4.* *blobs* 94](#_Toc430012981)

[15. BOSH CLI - Snapshot 95](#_Toc430012982)

[*15.1.* *take snapshot* 95](#_Toc430012983)

[*15.2.* *delete snapshot* 96](#_Toc430012984)

[*15.3.* *delete snapshots* 97](#_Toc430012985)

[*15.4.* *snapshots* 98](#_Toc430012986)

[16. BOSH CLI - Misc 99](#_Toc430012987)

[*16.1.* *status* 99](#_Toc430012988)

[*16.2.* *target* 100](#_Toc430012989)

[*16.3.* *targets* 101](#_Toc430012990)

[*16.4.* *vms* 102](#_Toc430012991)

[*16.5.* *locks* 103](#_Toc430012992)

[*16.6.* *alias* 104](#_Toc430012993)

[*16.7.* *aliases* 105](#_Toc430012994)

[*16.8.* *export compiled package* 106](#_Toc430012995)

[*16.9.* *vm resurrection* 107](#_Toc430012996)

Executive Summary

본 문서는 BOSH CLI 사용법에 대한 매뉴얼 입니다.

* BOSH CLI 사용법 및 예시

# 문서 개요

## ***목적***

본 문서는 MicroBOSH/BOSH에 대한 설치 및 운영 관리를 위한 도구인 BOSH CLI에 대해 기본 사용법 및 사용 예시를 통해 BOSH를 이해하는데 목적이 있다.

## ***범위***

본 문서에서는 BOSH CLI 사용법에 대해서 작성하였습니다.

## ***참고자료***

본 문서는 Cloud Foundry의 BOSH Document를 참고로 작성하였습니다.

BOSH Document: <http://bosh.io>

# BOSH CLI 기본 사용법

CLI는 BOSH 배포와 Release를 관리하기 위해 도움을 주는 커맨드 라인 명령어로 아래와 같이 2가지 형태로 구분된다.

* bosh: BOSH (Multi-VM BOSH)를 관리하기 위한 CLI
* bosh micro: MicroBOSH (Single-VM BOSH)를 관리하기 위한 CLI

**. 기본 Syntax**

|  |
| --- |
| $ bosh [<options>] <command> [<args>]  $ bosh micro [<options>] <command> [<args>] |

bosh 또는 bosh micro 명령어에 대괄호로 묶인 인자인 <options>과 <args>는 명령어에 따라 선택적으로 사용되고, <command> 인자는 필수 인자이다.

**. Options**

|  |  |  |
| --- | --- | --- |
| **번호** | **옵션** | **설명** |
| 1 | -c, --config | BOSH configuration file 지정 |
| 2 | --parallel MAX | 병렬 다운로드 최대 개수 설정 |
| 3 | --[no-]color | Toggle colorized output |
| 4 | -v, --verbose | Show additional output |
| 5 | -q, --quiet | suppress all output |
| 6 | -n, --non-interactive | Don’t ask for user input |
| 7 | -N, --no-track | Return task ID and don’t track |
| 8 | -P, --poll INTERVAL | Director task polling interval |
| 9 | -t, --target URL | 타겟 디렉터 지정 |
| 10 | -u, --user USER | BOSH 사용자 아이디 |
| 11 | -p, --password PASSWORD | BOSH 사용자 비밀번호 |
| 12 | -d, --deployment FILE | BOSH 배포파일 지정 |
| 13 | -h, --help | Help 메시지 보기 |

BOSH 운영 및 관리하기 위한 도구인 BOSH CLI 아래와 같이 많은 명령어들을 제공하고 있으며, 유형을 분류하면 다음과 같다.

| **번호** | **구분** | **명령어** |
| --- | --- | --- |
| 1 | MicroBOSH | micro deployment |
| 2 | micro deployments |
| 3 | micro deploy |
| 4 | micro status |
| 5 | micro agent |
| 6 | micro apply |
| 7 | micro delete |
| 8 | Deployment | deploy |
| 9 | deployment |
| 10 | deployments |
| 11 | delete deployment |
| 12 | download manifest |
| 13 | edit deployment |
| 14 | diff |
| 15 | validate jobs |
| 16 | Release | init release |
| 17 | reset releases |
| 18 | verify release |
| 19 | create release |
| 20 | delete release |
| 21 | upload release |
| 22 | releases |
| 23 | generate job |
| 24 | generate package |
| 25 | Stemcell | public stemcells |
| 26 | download public stemcell |
| 27 | verify stemcell |
| 28 | upload stemcell |
| 29 | delete stemcell |
| 30 | stemcells |
| 31 | Job | start |
| 32 | stop |
| 33 | restart |
| 34 | recreate |
| 35 | User | create user |
| 36 | delete user |
| 37 | login |
| 38 | logout |
| 39 | Task | task |
| 40 | tasks |
| 41 | tasks recent |
| 42 | cancel task |
| 43 | Property | set property |
| 44 | get property |
| 45 | unset property |
| 46 | properties |
| 47 | Log | logs |
| 48 | Maintenance | cleanup |
| 49 | cloudcheck |
| 50 | Remote Access | ssh |
| 51 | scp |
| 52 | Blob | upload blobs |
| 53 | add blob |
| 54 | sync blobs |
| 55 | blobs |
| 56 | Snapshot | task snapshot |
| 57 | delete snapshot |
| 58 | delete snapshots |
| 59 | snpashots |
| 60 | Misc | status |
| 61 | target |
| 62 | targets |
| 63 | vms |
| 64 | locks |
| 65 | alias |
| 66 | aliases |
| 67 | export compiled\_packages |
| 68 | vm resurrection |

# BOSH CLI - micro

## ***micro deployment***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh micro deployment [<manifest-filename>] | | | |
|  | | | |
| **설명** | bosh micro에 설정된 배포 파일을 확인하거나 또는 설정하기 위한 명령어 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| manifest-filename | | MicroBOSH 배포 Manifest파일 | X |

**. 사용 예시**

|  |
| --- |
| # 파라미터 지정한 경우  **$ bosh micro deployment ./bosh-micro.yml**  WARNING! Your target has been changed to `https://10.10.5.100:25555'!  Deployment set to '/home/ubuntu/workspace/deployment/bosh-micro.yml'  # 파라미터 지정하지 않을 경우  **$ bosh micro deployment**  Current deployment is '/home/ubuntu/workspace/deployment/bosh-micro.yml' |

## ***micro deployments***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh micro deployments | |
|  | |
| **설명** | bosh micro에서 배포한 목록 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh micro deployments**  +-----------+--------------------------------------+--------------------------------------+  | Name | VM name | Stemcell name |  +-----------+--------------------------------------+--------------------------------------+  | microbosh | 1a673221-33f1-4cd7-a30b-85625668a56e | d28ea0cd-82bc-48a3-b08a-24952c7dfb09 |  +-----------+--------------------------------------+--------------------------------------+  Deployments total: 1 |

## ***micro deploy***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh micro deploy [<stemcell>] [--update] [--update-if-exists] | | | |
|  | | | |
| **설명** | MicroBOSH Instance 배포 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| stemcell | | Stemcell 파일 | O |
| --update | | update existing instance | X |
| --update-if-exists | | create new or update existing instance | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh micro deploy ~/workspace/stemcells/bosh-stemcell-3016-openstack-kvm-ubuntu-trusty-go\_agent.tgz**  No `bosh-deployments.yml` file found in current directory.  Conventionally, `bosh-deployments.yml` should be saved in /home/ubuntu/workspace.  Is /home/ubuntu/workspace/deployment a directory where you can save state? (type 'yes' to continue): yes  Deploying new micro BOSH instance `bosh-micro.yml' to `Unknown Director' (type 'yes' to continue): yes  Verifying stemcell...  File exists and readable OK  Verifying tarball...  Read tarball OK  Manifest exists OK  Stemcell image file OK  Stemcell properties OK  Stemcell info  -------------  Name: bosh-openstack-kvm-ubuntu-trusty-go\_agent  Version: 3016  Started deploy micro bosh  Started deploy micro bosh > Unpacking stemcell. Done (00:00:06)  Started deploy micro bosh > Uploading stemcell  . Done (00:00:13)  Started deploy micro bosh > Creating VM from d28ea0cd-82bc-48a3-b08a-24952c7dfb09. Done (00:00:28)  Started deploy micro bosh > Waiting for the agent. Done (00:01:52)  Started deploy micro bosh > Updating persistent disk  Started deploy micro bosh > Create disk. Done (00:00:06)  Started deploy micro bosh > Mount disk. Done (00:00:05)  Done deploy micro bosh > Updating persistent disk  Started deploy micro bosh > Stopping agent services. Done (00:00:01)  Started deploy micro bosh > Applying micro BOSH spec. Done (00:00:36)  Started deploy micro bosh > Starting agent services. Done (00:00:00)  Started deploy micro bosh > Waiting for the director. Done (00:00:31)  Deployed `bosh-micro.yml' to `Unknown Director', took 00:04:06 to complete |

## ***micro status***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh micro status | |
|  | |
| **설명** | MicroBOSH 등록 정보 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh micro status**  Stemcell CID d28ea0cd-82bc-48a3-b08a-24952c7dfb09  Stemcell name bosh-stemcell-3016-openstack-kvm-ubuntu-trusty-go\_agent  VM CID 1a673221-33f1-4cd7-a30b-85625668a56e  Disk CID 35057d4d-dc52-4efe-a0b8-25bc97e591d9  Micro BOSH CID bm-edd63a28-d248-4221-bbdb-6ee719f5de3d  Deployment /home/ubuntu/workspace/deployment/bosh-micro.yml  Target https://10.10.5.100:25555 |

## ***micro agent***

**기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh micro agent <args> | | | |
|  | | | |
| **설명** | MicroBOSH Agent에게 요청 Message 전달 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| args | | 메시지 유형  . start: MicroBOSH 에 구동중인 모든 Job 시작  . stop: MicroBOSH 에 구동중인 모든 Job 종료  . ping: Agent 응답 여부 확인  . drain TYPE SPEC   * TYPE: ‘shutdown’, ‘update’, ‘status’ 중 하나 * SPEC: 사용할 drain spec   . state [full]: 시스템의 상태 출력  . list\_disk: MicroBOSH에 마운트된 디스크 CID목록 출력  . migrate\_disk OLD NEW: 디스크 Migrate  . mount\_disk CID: 마운트 디스크  . unmount\_disk CID: 언마운트 디스크 | O |

**사용 예시**

|  |
| --- |
| **$ bosh micro agent ping**  pong  **$ bosh micro agent list\_disk**  ["35057d4d-dc52-4efe-a0b8-25bc97e591d9"]    **$ bosh micro agent drain state**  {"agent\_task\_id"=>"05fa9e76-1aed-426c-4e70-d5f5837fb120", "state"=>"running"} |

## ***micro apply***

**기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh micro apply <spec> | | | |
|  | | | |
| **설명** | MicroBOSH Instance에 지정된 Spec정보 적용 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| spec | | MicroBOSH Instance에 적용할 spec 파일 | O |

## ***micro delete***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh micro delete | |
|  | |
| **설명** | MicroBOSH Instance 삭제 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh micro delete**  You are going to delete micro BOSH deployment `microbosh'.  THIS IS A VERY DESTRUCTIVE OPERATION AND IT CANNOT BE UNDONE!  Are you sure? (type 'yes' to continue): yes  Started delete micro bosh  Started delete micro bosh > Stopping agent. Done (00:00:03)  Started delete micro bosh > Deleting persistent disk `d7094041-a30f-47e6-9358-7a10cb81004e'  Started delete micro bosh > Unmount disk. Done (00:00:14)  Started delete micro bosh > Detach disk. Done (00:00:07)  Started delete micro bosh > Delete disk. Done (00:02:16)  Done delete micro bosh > Deleting persistent disk `d7094041-a30f-47e6-9358-7a10cb81004e'  Started delete micro bosh > Delete VM. Done (00:00:06)  Started delete micro bosh > Delete stemcell. Done (00:00:00)  Deleted deployment 'microbosh', took 00:02:46 to complete |

# BOSH CLI - Deployment

## ***deployment***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh deployment [<manifest-filename>] | | | |
|  | | | |
| **설명** | bosh에 설정된 배포 파일을 확인하거나 또는 설정하기 위한 명령어 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| manifest-filename | | BOSH 배포 Manifest파일 | X |

**. 사용 예시**

|  |
| --- |
| # 파라미터 지정한 경우  **$ bosh deployment ./bosh-openstack.yml**  Deployment set to `/home/ubuntu/workspace/deployment/bosh-openstack.yml'  # 파라미터 지정하지 않을 경우  **$ bosh deployment**  Current deployment is `/home/ubuntu/workspace/deployment/bosh-openstack.yml' |

## ***deployments***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh deployments | |
|  | |
| **설명** | bosh에서 배포한 목록 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh deployments**  Acting as user 'admin' on 'microbosh'  +----------------+------------+------------------------------------------------+--------------+  | Name | Release(s) | Stemcell(s) | Cloud Config |  +----------------+------------+------------------------------------------------+--------------+  | bosh-openstack | bosh/187 | bosh-openstack-kvm-ubuntu-trusty-go\_agent/3016 | none |  +----------------+------------+------------------------------------------------+--------------+  Deployments total: 1 |

## ***edit deployment***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh edit deployment | |
|  | |
| **설명** | 현재 설정된 배포 Manifest 파일 편집기를 이용해서 수정 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh deployment**  Current deployment is `/home/ubuntu/workspace/deployment/bosh-openstack.yml'  **$ bosh edit deployment** |

## ***deploy***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh deploy [--recreate] [--redact-diff] | | | |
|  | | | |
| **설명** | 배포 수행 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --recreate | | 모든 VM 재생성 | X |
| --redact-diff | | Manifest내 변경된 정보는 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh deploy**  Acting as user 'admin' on deployment 'bosh-openstack' on 'microbosh'  Getting deployment properties from director...  Unable to get properties list from director, trying without it...  Cannot get current deployment information from director, possibly a new deployment  Please review all changes carefully  Deploying  ---------  Are you sure you want to deploy? (type 'yes' to continue): yes  Director task 9  Started unknown  Started unknown > Binding deployment. Done (00:00:00)  Started preparing deployment  Started preparing deployment > Binding releases. Done (00:00:00)  Started preparing deployment > Binding existing deployment. Done (00:00:00)  Started preparing deployment > Binding resource pools. Done (00:00:00)  Started preparing deployment > Binding stemcells. Done (00:00:00)  Started preparing deployment > Binding templates. Done (00:00:00)  Started preparing deployment > Binding properties. Done (00:00:00)  Started preparing deployment > Binding unallocated VMs. Done (00:00:00)  Started preparing deployment > Binding instance networks. Done (00:00:00)  Started preparing package compilation > Finding packages to compile. Done (00:00:00)  Started compiling packages  Started compiling packages > powerdns/256336d00b1689138490c385c03ad3a8f54b4a9e  Started compiling packages > genisoimage/008d332ba1471bccf9d9aeb64c258fdd4bf76201  Started compiling packages > mysql/e5309aed88f5cc662bc77988a31874461f7c4fb8  Done compiling packages > powerdns/256336d00b1689138490c385c03ad3a8f54b4a9e (00:03:15)  Started compiling packages > libpq/f181aa97dd63567e04d897762f0440fb2bef1517  Done compiling packages > mysql/e5309aed88f5cc662bc77988a31874461f7c4fb8 (00:03:22)  Started compiling packages > nginx/0ccc40df032599285cb16a4f2dfdf324a4a61a26  Done compiling packages > genisoimage/008d332ba1471bccf9d9aeb64c258fdd4bf76201 (00:03:26)  Started compiling packages > postgres/aa7f5b110e8b368eeb8f5dd032e1cab66d8614ce. Done (00:00:08)  Started compiling packages > redis/37eae530889cb9ef4e84f9c3d0827bab5ae5cb66  Done compiling packages > libpq/f181aa97dd63567e04d897762f0440fb2bef1517 (00:00:29)  Started compiling packages > ruby/c28e01e561dd7e1bd4ce44f134970dc9f5d7e8fc  Done compiling packages > redis/37eae530889cb9ef4e84f9c3d0827bab5ae5cb66 (00:00:31)  Done compiling packages > nginx/0ccc40df032599285cb16a4f2dfdf324a4a61a26 (00:01:04)  Done compiling packages > ruby/c28e01e561dd7e1bd4ce44f134970dc9f5d7e8fc (00:02:43)  Started compiling packages > health\_monitor/10a74646b7b8c093ab1816e8689d513b3c3a5ef6  Started compiling packages > registry/e95305aaef1f8377a7a25e4eadd6ff1612de483a  Started compiling packages > director/2be1abbf39d80ff40aa86e0253c91daa857c109b  Done compiling packages > health\_monitor/10a74646b7b8c093ab1816e8689d513b3c3a5ef6 (00:02:55)  Started compiling packages > nats/6a31c7bb0d5ffa2a9f43c7fd7193193438e20e92. Done (00:00:14)  Done compiling packages > registry/e95305aaef1f8377a7a25e4eadd6ff1612de483a (00:03:19)  Done compiling packages > director/2be1abbf39d80ff40aa86e0253c91daa857c109b (00:05:05)  Done compiling packages (00:11:32)  Started preparing dns > Binding DNS. Done (00:00:00)  Started creating bound missing vms  Started creating bound missing vms > medium/0  Started creating bound missing vms > medium/1  Started creating bound missing vms > medium/2  Done creating bound missing vms > medium/0 (00:01:58)  Started creating bound missing vms > medium/3  Done creating bound missing vms > medium/2 (00:02:16)  Started creating bound missing vms > medium/4  Done creating bound missing vms > medium/1 (00:02:17)  Started creating bound missing vms > medium/5  Done creating bound missing vms > medium/3 (00:02:21)  Started creating bound missing vms > medium/6  Done creating bound missing vms > medium/4 (00:02:18)  Done creating bound missing vms > medium/5 (00:02:17)  Done creating bound missing vms > medium/6 (00:02:18)  Done creating bound missing vms (00:06:37)  Started binding instance vms  Started binding instance vms > postgres/0  Started binding instance vms > redis/0  Started binding instance vms > nats/0. Done (00:00:00)  Started binding instance vms > blobstore/0  Done binding instance vms > redis/0 (00:00:00)  Started binding instance vms > director/0. Done (00:00:00)  Started binding instance vms > registry/0  Done binding instance vms > blobstore/0 (00:00:00)  Started binding instance vms > health\_monitor/0  Done binding instance vms > registry/0 (00:00:00)  Done binding instance vms > postgres/0 (00:00:01)  Done binding instance vms > health\_monitor/0 (00:00:01)  Done binding instance vms (00:00:01)  Started preparing configuration > Binding configuration. Done (00:00:01)  Started updating job nats > nats/0 (canary). Done (00:00:11)  Started updating job redis > redis/0 (canary). Done (00:00:10)  Started updating job postgres > postgres/0 (canary). Done (00:01:01)  Started updating job blobstore > blobstore/0 (canary). Done (00:00:29)  Started updating job director > director/0 (canary). Done (00:03:35)  Started updating job registry > registry/0 (canary). Done (00:00:18)  Started updating job health\_monitor > health\_monitor/0 (canary). Done (00:00:13)  Task 9 done  Started 2015-08-24 08:27:33 UTC  Finished 2015-08-24 08:51:49 UTC  Duration 00:24:16  Deployed `bosh-openstack' to `microbosh' |

## ***download manifest***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh download manifest <deployment\_name> [<save\_as>] | | | |
|  | | | |
| **설명** | BOSH Manifest 파일 다운로드 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| deployment\_name | | 다운로드할 배포명 설정 | O |
| save\_as | | 저장할 파일명 설정 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh download manifest bosh-openstack ~/test.yml**  Acting as user 'admin' on deployment 'bosh-openstack' on 'microbosh'  Deployment manifest saved to `/home/ubuntu/test.yml' |

## ***diff***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh diff <template> | | | |
|  | | | |
| **설명** | 현재 Deployment 설정된 정보와 지정된 Manifest파일과의 비교하여 차이 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| template | | 비교 대상 Manifst 파일 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh diff ./bosh-openstack-test.yml**  --- /tmp/d20150824-32188-1biq7hn/d20150824-32188-1sg44kb/bosh\_biff\_1 2015-08-24 09:10:04.403221503 +0000  +++ /tmp/d20150824-32188-1biq7hn/d20150824-32188-1sg44kb/bosh\_biff\_2 2015-08-24 09:10:04.403221503 +0000  @@ -1,181 +1,181 @@  ---  name: bosh-openstack  director\_uuid: 7f5aaabf-e98e-4845-b2c7-79c675fbf6d9  …  - static: [10.10.5.101 - 10.10.5.107]  + static: [10.10.5.101 - 10.10.5.108]  …  jobs:  - - name: nats  + - name: nats-server  template: nats  instances: 1  resource\_pool: medium  networks:  … |

## ***validate jobs***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh validate jobs | |
|  | |
| **설명** | 현재 배포 Manifest를 사용하여 Release에서 모든 Job의 유효 여부 확인 |
| **. 파라미터** | |
| * 없음 | |

# BOSH CLI - Release

## ***create release***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh create release [--force] [--final] [--with-tarball] [--dry-run] [--name NAME] [--version VERSION] | | | |
|  | | | |
| **설명** | Release 생성 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --force | | bypass git dirty state check | X |
| --final | | create final release | X |
| --with-tarball | | create release tarball | X |
| --dry-run | | stop before writing release manifest | X |
| --name NAME | | specify a custom release name | X |
| --version VERSION | | specify a custom version number | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh create release --force**  Syncing blobs...  Total: 0, 0B  You have some blobs that need to be uploaded:  new ruby/ruby-2.2.2.tar.gz 15.8M  When ready please run `bosh upload blobs'  Proceeding with dirty blobs as '--force' is given  Building DEV release  ---------------------------------  Release artifact cache: /home/ubuntu/.bosh/cache  Building license  ----------------  Building license...  No artifact found for license  Generating...  Generated version '643fdf9d42370280da7ea22848661d84979395a7'  Building packages  -----------------  Building ruby...  No artifact found for ruby  Generating...  Generated version 'ad88792e7b903109e9e40acb438bb9415f276663'  Resolving dependencies  ----------------------  Dependencies resolved, correct build order is:  - ruby  Building jobs  -------------  Building some-ruby-job...  No artifact found for some-ruby-job  Generating...  Generated version 'd83019d0d3590cdbc9b56b5d2fe04d0edd20c9af'  Building my-project...  No artifact found for my-project  Generating...  Generated version '5083cbe5b0a4aa610cba6367cf6d384d4747e04e'  Building release  ----------------  Generating manifest...  ----------------------  Writing manifest...  Release summary  ---------------  License  +---------+------------------------------------------+-------------+  | Name | Version | Notes |  +---------+------------------------------------------+-------------+  | license | 643fdf9d42370280da7ea22848661d84979395a7 | new version |  +---------+------------------------------------------+-------------+  Packages  +------+------------------------------------------+-------------+  | Name | Version | Notes |  +------+------------------------------------------+-------------+  | ruby | ad88792e7b903109e9e40acb438bb9415f276663 | new version |  +------+------------------------------------------+-------------+  Jobs  +---------------+------------------------------------------+-------------+  | Name | Version | Notes |  +---------------+------------------------------------------+-------------+  | some-ruby-job | d83019d0d3590cdbc9b56b5d2fe04d0edd20c9af | new version |  | my-project | 5083cbe5b0a4aa610cba6367cf6d384d4747e04e | new version |  +---------------+------------------------------------------+-------------+  Jobs affected by changes in this release  +---------------+------------------------------------------+  | Name | Version |  +---------------+------------------------------------------+  | some-ruby-job | d83019d0d3590cdbc9b56b5d2fe04d0edd20c9af |  | my-project | 5083cbe5b0a4aa610cba6367cf6d384d4747e04e |  +---------------+------------------------------------------+  Release name: my-project  Release version: 0+dev.1  Release manifest: /home/ubuntu/workspace/my-project-boshrelease/dev\_releases/my-project/my-project-0+dev.1.yml |

## ***delete release***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh delete release <name> [<version>] [--force] | | | |
|  | | | |
| **설명** | 등록된 Release 삭제 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | 삭제할 Release 이름 | O |
| version | | 삭제할 Release 버전 | X |
| --force | | Release 삭제하는 동안 에러 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh delete release bosh 198**  Acting as user 'admin' on 'microbosh'  Deleting `bosh/198'  Are you sure? (type 'yes' to continue): yes  Director task 8  Started deleting packages  Started deleting packages > health\_monitor/e51e51f2788f47babccfe3dc3b236c4ada5cd97e. Done (00:00:00)  Started deleting packages > nginx/1d356bbd17ed8c349fd1053093222d78559687ec. Done (00:00:00)  Started deleting packages > registry/98b7cf95a1e61cc8737fdbf6ebe00b6140924513. Done (00:00:00)  Started deleting packages > ruby/c2b6c610123a00a406b66ea4ccd123e24bfcd404. Done (00:00:00)  Started deleting packages > director/05e32104e08aeacbda4ee6d83e2567cc8206da61. Done (00:00:00)  Started deleting packages > libpq/92c9444b0736e46e3422df1d63739d8ad23dbbae. Done (00:00:00)  Done deleting packages (00:00:00)  Started deleting templates  Started deleting templates > health\_monitor/134387d0e46c6e2652b119352722d94586473bed. Done (00:00:00)  Started deleting templates > registry/8c56c475ece24d638552fad55e1b69a4fc6e56f2. Done (00:00:00)  Started deleting templates > director/57428a045c5c1dd64dc95226f06696b462e87dbd. Done (00:00:00)  Done deleting templates (00:00:00)  Task 8 done  Started 2015-08-24 08:13:12 UTC  Finished 2015-08-24 08:13:12 UTC  Duration 00:00:00  Deleted `bosh/198' |

## ***verify release***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh verify release <tarball\_path> | | | |
|  | | | |
| **설명** | Release 유효성 체크 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| tarball\_path | | Release 파일 | O |

**사용 예시**

|  |
| --- |
| **$ bosh verify release bosh-198.tgz**  Verifying release...  File exists and readable OK  Extract tarball OK  Manifest exists OK  Release name/version OK  Read package 'health\_monitor' (1 of 12) OK  Package 'health\_monitor' checksum OK  Read package 'nginx' (2 of 12) OK  Package 'nginx' checksum OK  Read package 'genisoimage' (3 of 12) OK  Package 'genisoimage' checksum OK  Read package 'registry' (4 of 12) OK  Package 'registry' checksum OK  Read package 'ruby' (5 of 12) OK  Package 'ruby' checksum OK  Read package 'postgres' (6 of 12) OK  Package 'postgres' checksum OK  Read package 'director' (7 of 12) OK  Package 'director' checksum OK  Read package 'redis' (8 of 12) OK  Package 'redis' checksum OK  Read package 'libpq' (9 of 12) OK  Package 'libpq' checksum OK  Read package 'powerdns' (10 of 12) OK  Package 'powerdns' checksum OK  Read package 'mysql' (11 of 12) OK  Package 'mysql' checksum OK  Read package 'nats' (12 of 12) OK  Package 'nats' checksum OK  Package dependencies OK  Checking jobs format OK  Read job 'health\_monitor' (1 of 8), version 134387d0e46c6e2652b119352722d94586473bed OK  Job 'health\_monitor' checksum OK  Extract job 'health\_monitor' OK  Read job 'health\_monitor' manifest OK  Check template 'health\_monitor\_ctl.erb' for 'health\_monitor' OK  Check template 'health\_monitor.yml.erb' for 'health\_monitor' OK  Check template 'uaa.pem.erb' for 'health\_monitor' OK  Check template 'syslog\_event\_forwarder.conf.erb' for 'health\_monitor' OK  Job 'health\_monitor' needs 'health\_monitor' package OK  Job 'health\_monitor' needs 'ruby' package OK  Monit file for 'health\_monitor' OK  Read job 'registry' (2 of 8), version 8c56c475ece24d638552fad55e1b69a4fc6e56f2 OK  Job 'registry' checksum OK  Extract job 'registry' OK  Read job 'registry' manifest OK  Check template 'registry\_ctl' for 'registry' OK  Check template 'registry.yml.erb' for 'registry' OK  Job 'registry' needs 'registry' package OK  Job 'registry' needs 'libpq' package OK  Job 'registry' needs 'mysql' package OK  Job 'registry' needs 'ruby' package OK  Monit file for 'registry' OK  Read job 'postgres' (3 of 8), version 90e43294de79754e659fc1731f515dc090f922f0 OK  Job 'postgres' checksum OK  Extract job 'postgres' OK  Read job 'postgres' manifest OK  Check template 'postgres\_ctl.erb' for 'postgres' OK  Check template 'postgresql.conf.erb' for 'postgres' OK  Job 'postgres' needs 'postgres' package OK  Monit file for 'postgres' OK  Read job 'blobstore' (4 of 8), version 267710c9165f827561b14b020c1181b098df27cf OK  Job 'blobstore' checksum OK  Extract job 'blobstore' OK  Read job 'blobstore' manifest OK  Check template 'nginx\_ctl' for 'blobstore' OK  Check template 'nginx.conf.erb' for 'blobstore' OK  Check template 'blobstore.conf.erb' for 'blobstore' OK  Check template 'mime.types' for 'blobstore' OK  Check template 'read\_users.erb' for 'blobstore' OK  Check template 'write\_users.erb' for 'blobstore' OK  Job 'blobstore' needs 'nginx' package OK  Monit file for 'blobstore' OK  Read job 'director' (5 of 8), version 57428a045c5c1dd64dc95226f06696b462e87dbd OK  Job 'director' checksum OK  Extract job 'director' OK  Read job 'director' manifest OK  Check template 'director\_ctl.erb' for 'director' OK  Check template 'director.yml.erb.erb' for 'director' OK  Check template 'worker\_ctl.erb' for 'director' OK  Check template 'drain' for 'director' OK  Check template 'sudoers' for 'director' OK  Check template 'stemcell-copy.sh' for 'director' OK  Check template 'task\_logrotate.sh' for 'director' OK  Check template 'task\_logrotate.cron' for 'director' OK  Check template 'director.pem.erb' for 'director' OK  Check template 'director.key.erb' for 'director' OK  Check template 'nginx.conf.erb' for 'director' OK  Check template 'nginx\_ctl' for 'director' OK  Check template 'mime.types' for 'director' OK  Check template 'scheduler\_ctl.erb' for 'director' OK  Job 'director' needs 'director' package OK  Job 'director' needs 'nginx' package OK  Job 'director' needs 'genisoimage' package OK  Job 'director' needs 'libpq' package OK  Job 'director' needs 'postgres' package OK  Job 'director' needs 'mysql' package OK  Job 'director' needs 'ruby' package OK  Monit file for 'director' OK  Read job 'redis' (6 of 8), version ef9ead1616b5a92a3d2b7d673f6de2ea2a8fa23c OK  Job 'redis' checksum OK  Extract job 'redis' OK  Read job 'redis' manifest OK  Check template 'redis\_ctl' for 'redis' OK  Check template 'redis.conf.erb' for 'redis' OK  Job 'redis' needs 'redis' package OK  Monit file for 'redis' OK  Read job 'powerdns' (7 of 8), version 581a3eca97719ac0757e8c5028971fe1a37976df OK  Job 'powerdns' checksum OK  Extract job 'powerdns' OK  Read job 'powerdns' manifest OK  Check template 'pdns.conf.erb' for 'powerdns' OK  Check template 'powerdns\_ctl.erb' for 'powerdns' OK  Job 'powerdns' needs 'powerdns' package OK  Monit file for 'powerdns' OK  Read job 'nats' (8 of 8), version 6850abe07a70b465a6ff7e2b7c133e07c534f220 OK  Job 'nats' checksum OK  Extract job 'nats' OK  Read job 'nats' manifest OK  Check template 'nats\_ctl.erb' for 'nats' OK  Check template 'nats.yml.erb' for 'nats' OK  Job 'nats' needs 'nats' package OK  Job 'nats' needs 'ruby' package OK  Monit file for 'nats' OK  Release info  ------------  Name: bosh  Version: 198  Packages  - health\_monitor (e51e51f2788f47babccfe3dc3b236c4ada5cd97e)  - nginx (1d356bbd17ed8c349fd1053093222d78559687ec)  - genisoimage (008d332ba1471bccf9d9aeb64c258fdd4bf76201)  - registry (98b7cf95a1e61cc8737fdbf6ebe00b6140924513)  - ruby (c2b6c610123a00a406b66ea4ccd123e24bfcd404)  - postgres (aa7f5b110e8b368eeb8f5dd032e1cab66d8614ce)  - director (05e32104e08aeacbda4ee6d83e2567cc8206da61)  - redis (37eae530889cb9ef4e84f9c3d0827bab5ae5cb66)  - libpq (92c9444b0736e46e3422df1d63739d8ad23dbbae)  - powerdns (256336d00b1689138490c385c03ad3a8f54b4a9e)  - mysql (e5309aed88f5cc662bc77988a31874461f7c4fb8)  - nats (6a31c7bb0d5ffa2a9f43c7fd7193193438e20e92)  Jobs  - health\_monitor (134387d0e46c6e2652b119352722d94586473bed)  - registry (8c56c475ece24d638552fad55e1b69a4fc6e56f2)  - postgres (90e43294de79754e659fc1731f515dc090f922f0)  - blobstore (267710c9165f827561b14b020c1181b098df27cf)  - director (57428a045c5c1dd64dc95226f06696b462e87dbd)  - redis (ef9ead1616b5a92a3d2b7d673f6de2ea2a8fa23c)  - powerdns (581a3eca97719ac0757e8c5028971fe1a37976df)  - nats (6850abe07a70b465a6ff7e2b7c133e07c534f220)  License  - none  `bosh-198.tgz' is a valid release |

## ***upload release***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh upload release [<release\_file>] [--rebase] [--skip-if-exists] | | | |
|  | | | |
| **설명** | Release 업로드 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| release\_file | | 업로드할 Release 파일 | O |
| --rebase | | 최신 버전 Release | X |
| --skip-if-exists | | Release가 존재하는 경우 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh upload release ~/workspace/bosh/release/releases/bosh-187.yml**  Acting as user 'admin' on 'microbosh'  Downloading from blobstore (id=a5d39703-f72b-400a-a986-e29efa9742f7)...  Downloading from blobstore (id=c8f87b75-0b4c-4e21-a734-c0ee2aa4b496)...  Downloading from blobstore (id=98825625-4abc-40eb-94df-0aa5ccdafb06)...  Downloading from blobstore (id=3e86e327-16cc-4d62-8232-0aef83d060dd)...  Downloading from blobstore (id=3cab49ad-f6e4-4122-ac5a-00640599f49a)...  Downloading from blobstore (id=3ab1aee6-9dbc-4062-93bf-c1e07439b726)...  Downloading from blobstore (id=31484394-680b-4934-a1ca-271ea2b9c455)...  Downloading from blobstore (id=978a7e00-5109-4032-8597-746788cdb25d)...  Downloading from blobstore (id=e3216b47-098d-41ff-89ba-cc0c626d720a)...  Downloading from blobstore (id=60cd250e-0c96-4dac-b25d-91a647838626)...  Downloading from blobstore (id=92d6f139-157e-4ba4-90f5-76e3f868e1fe)...  Downloading from blobstore (id=c78b1671-2d24-452b-8ba4-a2554b062130)...  Downloading from blobstore (id=b32d074a-996e-4e20-b85e-af8e8db5f013)...  Downloading from blobstore (id=8103f8d6-cd0c-4d88-af10-731f8afd77cb)...  Downloading from blobstore (id=5a072f8a-1fd5-4dbb-9ac9-a1a753dad59a)...  Downloading from blobstore (id=63536db4-cdcc-41dc-904f-854fca31366f)...  Downloading from blobstore (id=11b3cfc5-5c5d-4379-bb2b-5f33a96d1ed1)...  Downloading from blobstore (id=ce003042-bd9b-4938-abb4-e7c379764a93)...  Downloading from blobstore (id=4a143e92-95ab-4aaa-8b7f-fcdffc441013)...  Downloading from blobstore (id=743d7e60-e821-45ad-881b-73701636450d)...  Downloading from blobstore (id=47eca26d-1247-4c84-a5ae-ed6ebd9dc08e)...  Downloading from blobstore (id=2055626d-e196-484f-8d12-c0f9ad42019d)...  Copying packages  ----------------  health\_monitor  nginx  genisoimage  registry  ruby  postgres  blobstore  director  redis  common  libpq  powerdns  mysql  nats  Copying jobs  ------------  health\_monitor  registry  postgres  blobstore  director  redis  powerdns  nats  Generated /tmp/d20150824-3440-8u6vor/d20150824-3440-ufw23o/release.tgz  Release size: 157.6M  Verifying release...  File exists and readable OK  Extract tarball OK  Manifest exists OK  Release name/version OK  Read package 'health\_monitor' (1 of 14) OK  Package 'health\_monitor' checksum OK  Read package 'nginx' (2 of 14) OK  Package 'nginx' checksum OK  Read package 'genisoimage' (3 of 14) OK  Package 'genisoimage' checksum OK  Read package 'registry' (4 of 14) OK  Package 'registry' checksum OK  Read package 'ruby' (5 of 14) OK  Package 'ruby' checksum OK  Read package 'postgres' (6 of 14) OK  Package 'postgres' checksum OK  Read package 'blobstore' (7 of 14) OK  Package 'blobstore' checksum OK  Read package 'director' (8 of 14) OK  Package 'director' checksum OK  Read package 'redis' (9 of 14) OK  Package 'redis' checksum OK  Read package 'common' (10 of 14) OK  Package 'common' checksum OK  Read package 'libpq' (11 of 14) OK  Package 'libpq' checksum OK  Read package 'powerdns' (12 of 14) OK  Package 'powerdns' checksum OK  Read package 'mysql' (13 of 14) OK  Package 'mysql' checksum OK  Read package 'nats' (14 of 14) OK  Package 'nats' checksum OK  Package dependencies OK  Checking jobs format OK  Read job 'health\_monitor' (1 of 8), version 1f172d09b2eb1003ca8ec53d2786febae89689ca OK  Job 'health\_monitor' checksum OK  Extract job 'health\_monitor' OK  Read job 'health\_monitor' manifest OK  Check template 'health\_monitor\_ctl' for 'health\_monitor' OK  Check template 'health\_monitor.yml.erb' for 'health\_monitor' OK  Check template 'uaa.pem.erb' for 'health\_monitor' OK  Job 'health\_monitor' needs 'health\_monitor' package OK  Job 'health\_monitor' needs 'ruby' package OK  Monit file for 'health\_monitor' OK  Read job 'registry' (2 of 8), version a44a9bfa3cbd7d3cb977fb8f6af98779cf302a20 OK  Job 'registry' checksum OK  Extract job 'registry' OK  Read job 'registry' manifest OK  Check template 'registry\_ctl' for 'registry' OK  Check template 'registry.yml.erb' for 'registry' OK  Job 'registry' needs 'registry' package OK  Job 'registry' needs 'libpq' package OK  Job 'registry' needs 'mysql' package OK  Job 'registry' needs 'ruby' package OK  Monit file for 'registry' OK  Read job 'postgres' (3 of 8), version 90e43294de79754e659fc1731f515dc090f922f0 OK  Job 'postgres' checksum OK  Extract job 'postgres' OK  Read job 'postgres' manifest OK  Check template 'postgres\_ctl.erb' for 'postgres' OK  Check template 'postgresql.conf.erb' for 'postgres' OK  Job 'postgres' needs 'postgres' package OK  Monit file for 'postgres' OK  Read job 'blobstore' (4 of 8), version 267710c9165f827561b14b020c1181b098df27cf OK  Job 'blobstore' checksum OK  Extract job 'blobstore' OK  Read job 'blobstore' manifest OK  Check template 'nginx\_ctl' for 'blobstore' OK  Check template 'nginx.conf.erb' for 'blobstore' OK  Check template 'blobstore.conf.erb' for 'blobstore' OK  Check template 'mime.types' for 'blobstore' OK  Check template 'read\_users.erb' for 'blobstore' OK  Check template 'write\_users.erb' for 'blobstore' OK  Job 'blobstore' needs 'nginx' package OK  Monit file for 'blobstore' OK  Read job 'director' (5 of 8), version a5d38ec2bebcc0c4b80868b41028ce015021d10a OK  Job 'director' checksum OK  Extract job 'director' OK  Read job 'director' manifest OK  Check template 'director\_ctl.erb' for 'director' OK  Check template 'director.yml.erb.erb' for 'director' OK  Check template 'worker\_ctl.erb' for 'director' OK  Check template 'drain' for 'director' OK  Check template 'sudoers' for 'director' OK  Check template 'stemcell-copy.sh' for 'director' OK  Check template 'task\_logrotate.sh' for 'director' OK  Check template 'task\_logrotate.cron' for 'director' OK  Check template 'director.pem.erb' for 'director' OK  Check template 'director.key.erb' for 'director' OK  Check template 'nginx.conf.erb' for 'director' OK  Check template 'nginx\_ctl' for 'director' OK  Check template 'mime.types' for 'director' OK  Check template 'scheduler\_ctl.erb' for 'director' OK  Job 'director' needs 'director' package OK  Job 'director' needs 'nginx' package OK  Job 'director' needs 'genisoimage' package OK  Job 'director' needs 'libpq' package OK  Job 'director' needs 'postgres' package OK  Job 'director' needs 'mysql' package OK  Job 'director' needs 'ruby' package OK  Monit file for 'director' OK  Read job 'redis' (6 of 8), version ef9ead1616b5a92a3d2b7d673f6de2ea2a8fa23c OK  Job 'redis' checksum OK  Extract job 'redis' OK  Read job 'redis' manifest OK  Check template 'redis\_ctl' for 'redis' OK  Check template 'redis.conf.erb' for 'redis' OK  Job 'redis' needs 'redis' package OK  Monit file for 'redis' OK  Read job 'powerdns' (7 of 8), version 581a3eca97719ac0757e8c5028971fe1a37976df OK  Job 'powerdns' checksum OK  Extract job 'powerdns' OK  Read job 'powerdns' manifest OK  Check template 'pdns.conf.erb' for 'powerdns' OK  Check template 'powerdns\_ctl.erb' for 'powerdns' OK  Job 'powerdns' needs 'powerdns' package OK  Monit file for 'powerdns' OK  Read job 'nats' (8 of 8), version 6850abe07a70b465a6ff7e2b7c133e07c534f220 OK  Job 'nats' checksum OK  Extract job 'nats' OK  Read job 'nats' manifest OK  Check template 'nats\_ctl.erb' for 'nats' OK  Check template 'nats.yml.erb' for 'nats' OK  Job 'nats' needs 'nats' package OK  Job 'nats' needs 'ruby' package OK  Monit file for 'nats' OK  Release info  ------------  Name: bosh  Version: 187  Packages  - health\_monitor (10a74646b7b8c093ab1816e8689d513b3c3a5ef6)  - nginx (0ccc40df032599285cb16a4f2dfdf324a4a61a26)  - genisoimage (008d332ba1471bccf9d9aeb64c258fdd4bf76201)  - registry (e95305aaef1f8377a7a25e4eadd6ff1612de483a)  - ruby (c28e01e561dd7e1bd4ce44f134970dc9f5d7e8fc)  - postgres (aa7f5b110e8b368eeb8f5dd032e1cab66d8614ce)  - blobstore (3da8d48413344bd826006432b2a65620c29c06a9)  - director (2be1abbf39d80ff40aa86e0253c91daa857c109b)  - redis (37eae530889cb9ef4e84f9c3d0827bab5ae5cb66)  - common (1324d32dbda40da88aade1e07b226a208602baff)  - libpq (f181aa97dd63567e04d897762f0440fb2bef1517)  - powerdns (256336d00b1689138490c385c03ad3a8f54b4a9e)  - mysql (e5309aed88f5cc662bc77988a31874461f7c4fb8)  - nats (6a31c7bb0d5ffa2a9f43c7fd7193193438e20e92)  Jobs  - health\_monitor (1f172d09b2eb1003ca8ec53d2786febae89689ca)  - registry (a44a9bfa3cbd7d3cb977fb8f6af98779cf302a20)  - postgres (90e43294de79754e659fc1731f515dc090f922f0)  - blobstore (267710c9165f827561b14b020c1181b098df27cf)  - director (a5d38ec2bebcc0c4b80868b41028ce015021d10a)  - redis (ef9ead1616b5a92a3d2b7d673f6de2ea2a8fa23c)  - powerdns (581a3eca97719ac0757e8c5028971fe1a37976df)  - nats (6850abe07a70b465a6ff7e2b7c133e07c534f220)  License  - none  Uploading release  release.tgz: 100% |ooooooooooooooooooooooooooooooooooooooooooooooooooooooo| 157.6MB 24.4MB/s Time: 00:00:06  Director task 6  Started extracting release > Extracting release. Done (00:00:02)  Started verifying manifest > Verifying manifest. Done (00:00:00)  Started resolving package dependencies > Resolving package dependencies. Done (00:00:00)  Started creating new packages  Started creating new packages > health\_monitor/10a74646b7b8c093ab1816e8689d513b3c3a5ef6. Done (00:00:00)  Started creating new packages > nginx/0ccc40df032599285cb16a4f2dfdf324a4a61a26. Done (00:00:00)  Started creating new packages > genisoimage/008d332ba1471bccf9d9aeb64c258fdd4bf76201. Done (00:00:00)  Started creating new packages > registry/e95305aaef1f8377a7a25e4eadd6ff1612de483a. Done (00:00:01)  Started creating new packages > ruby/c28e01e561dd7e1bd4ce44f134970dc9f5d7e8fc. Done (00:00:00)  Started creating new packages > postgres/aa7f5b110e8b368eeb8f5dd032e1cab66d8614ce. Done (00:00:01)  Started creating new packages > blobstore/3da8d48413344bd826006432b2a65620c29c06a9. Done (00:00:00)  Started creating new packages > director/2be1abbf39d80ff40aa86e0253c91daa857c109b. Done (00:00:01)  Started creating new packages > redis/37eae530889cb9ef4e84f9c3d0827bab5ae5cb66. Done (00:00:00)  Started creating new packages > common/1324d32dbda40da88aade1e07b226a208602baff. Done (00:00:00)  Started creating new packages > libpq/f181aa97dd63567e04d897762f0440fb2bef1517. Done (00:00:00)  Started creating new packages > powerdns/256336d00b1689138490c385c03ad3a8f54b4a9e. Done (00:00:00)  Started creating new packages > mysql/e5309aed88f5cc662bc77988a31874461f7c4fb8. Done (00:00:01)  Started creating new packages > nats/6a31c7bb0d5ffa2a9f43c7fd7193193438e20e92. Done (00:00:00)  Done creating new packages (00:00:04)  Started creating new jobs  Started creating new jobs > health\_monitor/1f172d09b2eb1003ca8ec53d2786febae89689ca. Done (00:00:00)  Started creating new jobs > registry/a44a9bfa3cbd7d3cb977fb8f6af98779cf302a20. Done (00:00:00)  Started creating new jobs > postgres/90e43294de79754e659fc1731f515dc090f922f0. Done (00:00:00)  Started creating new jobs > blobstore/267710c9165f827561b14b020c1181b098df27cf. Done (00:00:01)  Started creating new jobs > director/a5d38ec2bebcc0c4b80868b41028ce015021d10a. Done (00:00:00)  Started creating new jobs > redis/ef9ead1616b5a92a3d2b7d673f6de2ea2a8fa23c. Done (00:00:00)  Started creating new jobs > powerdns/581a3eca97719ac0757e8c5028971fe1a37976df. Done (00:00:00)  Started creating new jobs > nats/6850abe07a70b465a6ff7e2b7c133e07c534f220. Done (00:00:00)  Done creating new jobs (00:00:01)  Started release has been created > bosh/187. Done (00:00:00)  Task 6 done  Started 2015-08-24 07:50:11 UTC  Finished 2015-08-24 07:50:18 UTC  Duration 00:00:07  Release uploaded |

## ***releases***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh releases | |
|  | |
| **설명** | Release 목록 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh releases**  Acting as user 'admin' on 'microbosh'  +------+----------+-------------+  | Name | Versions | Commit Hash |  +------+----------+-------------+  | bosh | 187 | 6073a794+ |  | | 198 | 5ca394af+ |  +------+----------+-------------+  (+) Uncommitted changes  Releases total: 1 |

## ***reset release***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh reset release | |
|  | |
| **설명** | Reset Dev release |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh reset release**  Your dev release environment will be completely reset  Are you sure? (type 'yes' to continue): yes  Removing dev\_builds index...  Clearing dev name...  Removing dev tarballs...  Release has been reset |

## ***init release***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh init release [<base>] [--git] | | | |
|  | | | |
| **설명** | Release작성하기 위한 템플릿 디렉토리 및 파일 생성 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| base | | Release 작성을 위한 기준 디렉토리 지정  (지정하지 않을 경우 현재 디렉토리에 생성됨) | X |
| --git | | git repository 초기화 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh init release ~/workspace/test3 --git**  Release directory initialized  # Release 작성을 위한 템플릿 디렉토리 생성  $ ls -al test3  total 32  drwxrwxr-x 8 ubuntu ubuntu 4096 Aug 24 08:04 .  drwxrwxr-x 9 ubuntu ubuntu 4096 Aug 24 08:04 ..  drwxrwxr-x 2 ubuntu ubuntu 4096 Aug 24 08:04 blobs  drwxrwxr-x 2 ubuntu ubuntu 4096 Aug 24 08:04 config  drwxrwxr-x 7 ubuntu ubuntu 4096 Aug 24 08:04 .git  drwxrwxr-x 2 ubuntu ubuntu 4096 Aug 24 08:04 jobs  drwxrwxr-x 2 ubuntu ubuntu 4096 Aug 24 08:04 packages  drwxrwxr-x 2 ubuntu ubuntu 4096 Aug 24 08:04 src  ubuntu@inception:~/workspace$ |

## ***generate job***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh generate job <name> | | | |
|  | | | |
| **설명** | Job Template 생성 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | 생성할 Job Template 이름 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh generate job sample-job**  create jobs/sample-job  create jobs/sample-job/templates  create jobs/sample-job/spec  create jobs/sample-job/monit  Generated skeleton for `sample-job' job in `jobs/sample-job' |

## ***generate package***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh generate package <name> | | | |
|  | | | |
| **설명** | Package 템플릿 생성 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | 생성할 패키지 이름 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh generate package ruby\_1.9.3**  create packages/ruby\_1.9.3  create packages/ruby\_1.9.3/packaging  create packages/ruby\_1.9.3/pre\_packaging  create packages/ruby\_1.9.3/spec  Generated skeleton for `ruby\_1.9.3' package in `packages/ruby\_1.9.3' |

# BOSH CLI - Stemcell

## ***upload stemcell***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh upload stemcell <stemcell\_location> [--skip-if-exists] | | | |
|  | | | |
| **설명** | BOSH stemcell 업로드 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| stemcell\_location | | BOSH Stemcell 파일 경로 | O |
| --skip-if-exists | | 존재하는 BOSH Stemcell이면 Skip | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh upload stemcell ~/workspace/stemcells/bosh-stemcell-3016-openstack-kvm-ubuntu-trusty-go\_agent.tgz**  Acting as user 'admin' on 'microbosh'  Verifying stemcell...  File exists and readable OK  Verifying tarball...  Read tarball OK  Manifest exists OK  Stemcell image file OK  Stemcell properties OK  Stemcell info  -------------  Name: bosh-openstack-kvm-ubuntu-trusty-go\_agent  Version: 3016  Checking if stemcell already exists...  No  Uploading stemcell...  bosh-stemcell: 100% |ooooooooooooooooooooooooooooooooooooooooooooooooooooooo| 533.8MB 28.7MB/s Time: 00:00:18  Director task 3  Started update stemcell  Started update stemcell > Extracting stemcell archive. Done (00:00:06)  Started update stemcell > Verifying stemcell manifest. Done (00:00:00)  Started update stemcell > Checking if this stemcell already exists. Done (00:00:00)  Started update stemcell > Uploading stemcell bosh-openstack-kvm-ubuntu-trusty-go\_agent/3016 to the cloud. Done (00:00:13)  Started update stemcell > Save stemcell bosh-openstack-kvm-ubuntu-trusty-go\_agent/3016 (53b4472f-50b4-41ff-9702-1a08a287a2cc). Done (00:00:00)  Done update stemcell (00:00:19)  Task 3 done  Started 2015-08-24 07:33:49 UTC  Finished 2015-08-24 07:34:08 UTC  Duration 00:00:19  Stemcell uploaded and created. |

## ***verify stemcell***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh verify stemcell <tarball\_path> | | | |
|  | | | |
| **설명** | BOSH stemcell 유효성 검사 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| tarball\_path | | BOSH Stemcell 파일 경로 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh verify stemcell ~/workspace/stemcells/bosh-stemcell-3016-openstack-kvm-ubuntu-trusty-go\_agent.tgz**  Verifying stemcell...  File exists and readable OK  Verifying tarball...  Read tarball OK  Manifest exists OK  Stemcell image file OK  Stemcell properties OK  Stemcell info  -------------  Name: bosh-openstack-kvm-ubuntu-trusty-go\_agent  Version: 3016  `/home/ubuntu/workspace/stemcells/bosh-stemcell-3016-openstack-kvm-ubuntu-trusty-go\_agent.tgz' is a valid stemcell |

## ***stemcells***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh stemcells | |
|  | |
| **설명** | Director에 업로드한 Stemcell 목록 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh stemcells**  Acting as user 'admin' on 'microbosh'  +-------------------------------------------+---------------+---------+--------------------------------------+  | Name | OS | Version | CID |  +-------------------------------------------+---------------+---------+--------------------------------------+  | bosh-openstack-kvm-ubuntu-trusty-go\_agent | ubuntu-trusty | 3012 | c6e04c3b-fd0c-4b15-89dc-1f43e05110c0 |  | bosh-openstack-kvm-ubuntu-trusty-go\_agent | ubuntu-trusty | 3016 | 53b4472f-50b4-41ff-9702-1a08a287a2cc |  +-------------------------------------------+---------------+---------+--------------------------------------+  (\*) Currently in-use  Stemcells total: 2 |

## ***delete stemcell***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh delete stemcell <name> <version> [--force] | | | |
|  | | | |
| **설명** | BOSH stemcell 삭제 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | Stemcell 이름 | O |
| version | | Stemcell 버전 | O |
| --force | | Stemcell 삭제하는 동안 에러 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh delete stemcell bosh-openstack-kvm-ubuntu-trusty-go\_agent 3012**  Acting as user 'admin' on 'microbosh'  Checking if stemcell exists...  You are going to delete stemcell `bosh-openstack-kvm-ubuntu-trusty-go\_agent/3012'  Are you sure? (type 'yes' to continue): yes  Director task 5  Started deleting stemcell from cloud > Delete stemcell. Done (00:00:00)  Started deleting stemcell metadata > Deleting stemcell metadata. Done (00:00:00)  Task 5 done  Started 2015-08-24 07:41:21 UTC  Finished 2015-08-24 07:41:21 UTC  Duration 00:00:00  Deleted stemcell `bosh-openstack-kvm-ubuntu-trusty-go\_agent/3012' |

## ***public stemcells***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh public stemcells [--full] [--all] | | | |
|  | | | |
| **설명** | public stemcell 목록 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --full | | 다운로드 URL 출력 | X |
| --all | | 모든 Stemcell 출력 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh public stemcells**  +-------------------------------------------------------------------+  | Name |  +-------------------------------------------------------------------+  | bosh-stemcell-2427-aws-xen-ubuntu.tgz |  | bosh-stemcell-2652-aws-xen-centos.tgz |  | bosh-stemcell-2881-aws-xen-centos-go\_agent.tgz |  | bosh-stemcell-2427-aws-xen-ubuntu-go\_agent.tgz |  | bosh-stemcell-2710-aws-xen-ubuntu-lucid-go\_agent.tgz |  | bosh-stemcell-2652-aws-xen-ubuntu-lucid.tgz |  | bosh-stemcell-3056-aws-xen-ubuntu-trusty-go\_agent.tgz |  | bosh-stemcell-2690.6-aws-xen-ubuntu-trusty-go\_agent.tgz |  | bosh-stemcell-2719.1-aws-xen-centos-go\_agent.tgz |  | bosh-stemcell-2865.1-aws-xen-ubuntu-trusty-go\_agent.tgz |  ….  | bosh-stemcell-2690.6-vsphere-esxi-ubuntu-trusty-go\_agent.tgz |  | bosh-stemcell-3056-vsphere-esxi-centos-7-go\_agent.tgz |  | bosh-stemcell-389-warden-boshlite-ubuntu-trusty-go\_agent.tgz |  | bosh-stemcell-53-warden-boshlite-ubuntu.tgz |  | bosh-stemcell-389-warden-boshlite-centos-go\_agent.tgz |  | bosh-stemcell-64-warden-boshlite-ubuntu-lucid-go\_agent.tgz |  +-------------------------------------------------------------------+  To download use `bosh download public stemcell <stemcell\_name>'. For full url use --full. |

## ***download public stemcell***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh download public stemcell <stemcell\_filename> | | | |
|  | | | |
| **설명** | public stemcell 다운로드 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| stemcell\_filename | | 다운로드 받을 Stemcell 파일명 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh download public stemcell bosh-stemcell-3016-openstack-kvm-ubuntu-trusty-go\_agent.tgz**  bosh-stemcell: 100% |oooooooooooooooooooooooooooooooo| 533.8MB 11.5MB/s Time: 00:00:46  Download complete |

# BOSH CLI - Job

## ***start***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh start <job> [<index>] [--force] | | | |
|  | | | |
| **설명** | Job/Instance 시작 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | O |
| index | | Job 번호 | X |
| --force | | 수행중 발생하는 에러 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh start redis --force**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  You are about to start redis/0  Detecting deployment changes  ----------------------------  Release  + name: bosh  + version: 187  Releases  bosh  - name: bosh  - version: 187  Compilation  No changes  Update  No changes  Resource pools  No changes  Disk pools  No changes  Networks  No changes  Jobs  No changes  Properties  No changes  Logging  No changes  Start redis/0? (type 'yes' to continue): yes  Performing `start redis/0'...  Director task 60  Started unknown  Started unknown > Binding deployment. Done (00:00:00)  Started preparing deployment  Started preparing deployment > Binding releases. Done (00:00:00)  Started preparing deployment > Binding existing deployment. Done (00:00:00)  Started preparing deployment > Binding resource pools. Done (00:00:00)  Started preparing deployment > Binding stemcells. Done (00:00:00)  Started preparing deployment > Binding templates. Done (00:00:00)  Started preparing deployment > Binding properties. Done (00:00:00)  Started preparing deployment > Binding unallocated VMs. Done (00:00:00)  Started preparing deployment > Binding instance networks. Done (00:00:00)  Started preparing package compilation > Finding packages to compile. Done (00:00:00)  Started preparing dns > Binding DNS. Done (00:00:00)  Started preparing configuration > Binding configuration. Done (00:00:01)  Started updating job redis > redis/0 (canary). Done (00:00:24)  Started updating job director > director/0 (canary). Done (00:00:47)  Task 60 done  Started 2015-08-25 04:14:35 UTC  Finished 2015-08-25 04:15:49 UTC  Duration 00:01:14  redis/0 has been started |

## ***stop***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh stop <job> [<index>] [--soft] [--hard] [--force] | | | |
|  | | | |
| **설명** | Job/Instance 종료 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | O |
| index | | Job 번호 | X |
| --soft | | 프로세스만 종료 | X |
| --hard | | VM 종료 | X |
| --force | | 수행중 발생하는 에러 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh stop redis --soft --force**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  You are about to stop redis/0  Detecting deployment changes  ----------------------------  Release  + name: bosh  + version: 187  Releases  bosh  - name: bosh  - version: 187  Compilation  No changes  Update  No changes  Resource pools  No changes  Disk pools  No changes  Networks  No changes  Jobs  No changes  Properties  No changes  Logging  No changes  Stop redis/0? (type 'yes' to continue): yes  Performing `stop redis/0'...  Director task 59  Started unknown  Started unknown > Binding deployment. Done (00:00:00)  Started preparing deployment  Started preparing deployment > Binding releases. Done (00:00:00)  Started preparing deployment > Binding existing deployment. Done (00:00:00)  Started preparing deployment > Binding resource pools. Done (00:00:00)  Started preparing deployment > Binding stemcells. Done (00:00:00)  Started preparing deployment > Binding templates. Done (00:00:00)  Started preparing deployment > Binding properties. Done (00:00:00)  Started preparing deployment > Binding unallocated VMs. Done (00:00:00)  Started preparing deployment > Binding instance networks. Done (00:00:00)  Started preparing package compilation > Finding packages to compile. Done (00:00:00)  Started preparing dns > Binding DNS. Done (00:00:00)  Started preparing configuration > Binding configuration. Done (00:00:01)  Started updating job redis > redis/0 (canary). Done (00:00:10)  Task 59 done  Started 2015-08-25 04:12:35 UTC  Finished 2015-08-25 04:12:48 UTC  Duration 00:00:13  redis/0 has been stopped, VM(s) still running |

## ***restart***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh restart <job> [<index>] [--force] | | | |
|  | | | |
| **설명** | Job/Instance (Soft stop+start) 재시작 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | O |
| index | | Job 번호 | X |
| --force | | 수행중 발생하는 에러 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh restart registry --force**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  You are about to restart registry/0  Detecting deployment changes  ----------------------------  Release  + name: bosh  + version: 187  Releases  bosh  - name: bosh  - version: 187  Compilation  No changes  Update  No changes  Resource pools  No changes  Disk pools  No changes  Networks  No changes  Jobs  No changes  Properties  No changes  Logging  No changes  Restart registry/0? (type 'yes' to continue): yes  Performing `restart registry/0'...  Director task 62  Started unknown  Started unknown > Binding deployment. Done (00:00:00)  Started preparing deployment  Started preparing deployment > Binding releases. Done (00:00:00)  Started preparing deployment > Binding existing deployment. Done (00:00:00)  Started preparing deployment > Binding resource pools. Done (00:00:00)  Started preparing deployment > Binding stemcells. Done (00:00:00)  Started preparing deployment > Binding templates. Done (00:00:00)  Started preparing deployment > Binding properties. Done (00:00:00)  Started preparing deployment > Binding unallocated VMs. Done (00:00:00)  Started preparing deployment > Binding instance networks. Done (00:00:00)  Started preparing package compilation > Finding packages to compile. Done (00:00:00)  Started preparing dns > Binding DNS. Done (00:00:01)  Started preparing configuration > Binding configuration. Done (00:00:00)  Started updating job registry > registry/0 (canary). Done (00:00:24)  Task 62 done  Started 2015-08-25 04:21:00 UTC  Finished 2015-08-25 04:21:27 UTC  Duration 00:00:27  registry/0 has been restarted |

## ***recreate***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh recreate <job> [<index>] [--force] | | | |
|  | | | |
| **설명** | Job/Instance (Soft stop+start) 재생성 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | O |
| index | | Job 번호 | X |
| --force | | 수행중 발생하는 에러 무시 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh recreate registry --force**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  You are about to recreate registry/0  Detecting deployment changes  ----------------------------  Release  + name: bosh  + version: 187  Releases  bosh  - name: bosh  - version: 187  Compilation  No changes  Update  No changes  Resource pools  No changes  Disk pools  No changes  Networks  No changes  Jobs  No changes  Properties  No changes  Logging  No changes  Recreate registry/0? (type 'yes' to continue): yes  Performing `recreate registry/0'...  Director task 63  Started unknown  Started unknown > Binding deployment. Done (00:00:00)  Started preparing deployment  Started preparing deployment > Binding releases. Done (00:00:00)  Started preparing deployment > Binding existing deployment. Done (00:00:00)  Started preparing deployment > Binding resource pools. Done (00:00:00)  Started preparing deployment > Binding stemcells. Done (00:00:00)  Started preparing deployment > Binding templates. Done (00:00:00)  Started preparing deployment > Binding properties. Done (00:00:00)  Started preparing deployment > Binding unallocated VMs. Done (00:00:00)  Started preparing deployment > Binding instance networks. Done (00:00:00)  Started preparing package compilation > Finding packages to compile. Done (00:00:00)  Started preparing dns > Binding DNS. Done (00:00:00)  Started preparing configuration > Binding configuration. Done (00:00:00)  Started updating job registry > registry/0 (canary). Done (00:02:36)  Task 63 done  Started 2015-08-25 04:30:07 UTC  Finished 2015-08-25 04:32:46 UTC  Duration 00:02:39  registry/0 has been recreated |

# BOSH CLI - User

## ***create user***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh create user [<username>] [<password>] | | | |
|  | | | |
| **설명** | BOSH 사용자 등록 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| username | | 사용자 아이디 | X |
| password | | 사용자 비밀번호 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh create user**  Acting as user 'abc' on 'microbosh'  Enter new username: def  Enter new password: \*\*\*  Verify new password: \*\*\*  User `def' has been created |

## ***delete user***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh delete user [<username>] | | | |
|  | | | |
| **설명** | BOSH 사용자 삭제 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| username | | 사용자 아이디 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh delete user**  Acting as user 'abc' on 'microbosh'  Username to delete: def  Are you sure you would like to delete the user `def'? (type 'yes' to continue): yes  User `def' has been deleted |

## ***login***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh login [<username>] [<password>] | | | |
|  | | | |
| **설명** | BOSH 사용자 등록 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| username | | 사용자 아이디 | X |
| password | | 사용자 비밀번호 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh login**  Your username: abc  Enter password:  Logged in as `abc' |

## ***logout***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh logout | |
|  | |
| **설명** | BOSH logout |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh logout**  You are no longer logged in to `https://10.10.5.100:25555' |

# BOSH CLI - Task

## ***task***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh task [<task\_id>] [--event] [--cpi] [--debug] [--result] [--raw] [--no-filter] | | | |
|  | | | |
| **설명** | BOSH Task 수행 로그 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| task\_id | | Task ID | O |
| --event | | Event Log 출력 | X |
| --cpi | | CPI Log 출력 | X |
| --debug | | Debug Log 출력 | X |
| --result | | Result Log 출력 | X |
| --raw | | raw 로그 출력 | X |
| --no-filter | | 모든 Task 유형(ssh, logs, vms, etc) 포함해서 로그 출력 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh task 12 --result**  Acting as user 'abc' on 'microbosh'  Director task 12  {"vm\_cid":"7f95e282-42e0-4083-983a-2d676a39fc6d","ips":["10.10.5.102"],"dns":["0.redis.default.bosh-openstack.microbosh"],"agent\_id":"d4c7f111-8ed0-4c47-9608-2c6aa9bf8f83","job\_name":"redis","index":0,"job\_state":"running","resource\_pool":"medium","vitals":{"cpu":{"sys":"0.1","user":"0.1","wait":"0.2"},"disk":{"ephemeral":{"inode\_percent":"0","percent":"0"},"persistent":{"inode\_percent":"37","percent":"46"},"system":{"inode\_percent":"37","percent":"46"}},"load":["0.00","0.01","0.05"],"mem":{"kb":"68672","percent":"2"},"swap":{"kb":"0","percent":"0"}},"resurrection\_paused":false}  {"vm\_cid":"bfcdb237-8156-4d18-9f35-9ba6acb48077","ips":["10.10.5.104"],"dns":["0.blobstore.default.bosh-openstack.microbosh"],"agent\_id":"e9e13123-2413-4fbe-ae61-4c82485734bc","job\_name":"blobstore","index":0,"job\_state":"running","resource\_pool":"medium","vitals":{"cpu":{"sys":"0.1","user":"0.0","wait":"0.2"},"disk":{"ephemeral":{"inode\_percent":"0","percent":"0"},"persistent":{"inode\_percent":"0","percent":"0"},"system":{"inode\_percent":"37","percent":"46"}},"load":["0.00","0.01","0.05"],"mem":{"kb":"73216","percent":"2"},"swap":{"kb":"0","percent":"0"}},"resurrection\_paused":false}  {"vm\_cid":"1ca185f6-0fce-4372-b4dd-3fc7b29906c9","ips":["10.10.5.101"],"dns":["0.nats.default.bosh-openstack.microbosh"],"agent\_id":"1dcbf4a8-e5c8-4979-a951-bf648b1fa4e1","job\_name":"nats","index":0,"job\_state":"running","resource\_pool":"medium","vitals":{"cpu":{"sys":"0.1","user":"0.0","wait":"0.0"},"disk":{"ephemeral":{"inode\_percent":"0","percent":"0"},"system":{"inode\_percent":"37","percent":"46"}},"load":["0.00","0.01","0.05"],"mem":{"kb":"86520","percent":"2"},"swap":{"kb":"0","percent":"0"}},"resurrection\_paused":false}  {"vm\_cid":"89c5466c-5937-4ba9-8b0c-97f0e9687603","ips":["10.10.5.103"],"dns":["0.postgres.default.bosh-openstack.microbosh"],"agent\_id":"14462896-507a-49db-ba57-590f056eb472","job\_name":"postgres","index":0,"job\_state":"running","resource\_pool":"medium","vitals":{"cpu":{"sys":"0.1","user":"0.1","wait":"0.1"},"disk":{"ephemeral":{"inode\_percent":"0","percent":"0"},"persistent":{"inode\_percent":"0","percent":"1"},"system":{"inode\_percent":"37","percent":"46"}},"load":["0.00","0.01","0.05"],"mem":{"kb":"111276","percent":"3"},"swap":{"kb":"0","percent":"0"}},"resurrection\_paused":false}  {"vm\_cid":"a4907f1e-8d7c-46a5-a172-7c195c29b46f","ips":["10.10.5.105"],"dns":["0.director.default.bosh-openstack.microbosh"],"agent\_id":"b6f7bd1c-a968-46fe-87ff-a932b3c24d27","job\_name":"director","index":0,"job\_state":"running","resource\_pool":"medium","vitals":{"cpu":{"sys":"0.1","user":"0.2","wait":"0.3"},"disk":{"ephemeral":{"inode\_percent":"1","percent":"1"},"persistent":{"inode\_percent":"0","percent":"0"},"system":{"inode\_percent":"37","percent":"46"}},"load":["0.00","0.01","0.05"],"mem":{"kb":"395916","percent":"10"},"swap":{"kb":"0","percent":"0"}},"resurrection\_paused":false}  {"vm\_cid":"05673fda-6d83-4935-82fa-da3200163150","ips":["10.10.5.107"],"dns":["0.health-monitor.default.bosh-openstack.microbosh"],"agent\_id":"f6323b64-b43a-430c-a7fa-0bcc091710ff","job\_name":"health\_monitor","index":0,"job\_state":"running","resource\_pool":"medium","vitals":{"cpu":{"sys":"0.0","user":"0.1","wait":"0.1"},"disk":{"ephemeral":{"inode\_percent":"0","percent":"0"},"persistent":{"inode\_percent":"37","percent":"46"},"system":{"inode\_percent":"37","percent":"46"}},"load":["0.00","0.03","0.05"],"mem":{"kb":"111492","percent":"3"},"swap":{"kb":"0","percent":"0"}},"resurrection\_paused":false}  {"vm\_cid":"062e82fd-d1b3-4380-b01f-bacc8962682d","ips":["10.10.5.106"],"dns":["0.registry.default.bosh-openstack.microbosh"],"agent\_id":"4f11a66c-d8b9-494c-bf25-df8700fbfc31","job\_name":"registry","index":0,"job\_state":"running","resource\_pool":"medium","vitals":{"cpu":{"sys":"0.0","user":"0.1","wait":"0.4"},"disk":{"ephemeral":{"inode\_percent":"1","percent":"1"},"system":{"inode\_percent":"37","percent":"46"}},"load":["0.00","0.01","0.05"],"mem":{"kb":"149328","percent":"4"},"swap":{"kb":"0","percent":"0"}},"resurrection\_paused":false}  Task 12 done |

## ***tasks***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh tasks [--no-filter] | | | |
|  | | | |
| **설명** | BOSH 수행중인 Task 목록 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --no-filter | | 모든 Task 유형(ssh, logs, vms, etc) 포함해서 로그 출력 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh tasks**  Acting as user 'abc' on 'microbosh'  +----+------------+-------------------------+------+----------------------------------+--------+  | # | State | Timestamp | User | Description | Result |  +----+------------+-------------------------+------+----------------------------------+--------+  | 14 | processing | 2015-08-25 01:42:04 UTC | abc | delete deployment bosh-openstack | |  +----+------------+-------------------------+------+----------------------------------+--------+ |

## ***tasks recent***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh tasks recent [<count>] [--no-filter] | | | |
|  | | | |
| **설명** | 수행 완료한 Task 목록 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| count | | Task ID | O |
| --no-filter | | 모든 Task 유형(ssh, logs, vms, etc) 포함해서 출력 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh tasks recent**  Acting as user 'abc' on 'microbosh' |

## ***cancel task***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh cancel task <task\_id> | | | |
|  | | | |
| **설명** | 수행중인 Task 취소 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| task\_id | | 수행중인 Task ID | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh cancel task 15**  Acting as user 'abc' on 'microbosh'  Task 15 is getting canceled |

# BOSH CLI - Property

## ***set property***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh set property <name> <value> | | | |
|  | | | |
| **설명** | Deployment Property 설정 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | Property 이름 | O |
| value | | Property 값 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh set property redis.max\_connection 10**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Target microbosh  Deployment bosh-openstack  This will be a new property  Are you sure you want to set property `redis.max\_connection' to `10'? (type 'yes' to continue): yes  Property `redis.max\_connection' set to `10' |

## ***get property***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh get property <name> | | | |
|  | | | |
| **설명** | Deployment Property 확인 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | Property 이름 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh get property redis.max\_connection**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Target microbosh  Deployment bosh-openstack  Property `redis.max\_connection' value is `10' |

## ***properties***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh properties [--terse] | | | |
|  | | | |
| **설명** | Deployment Property 목록 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --terse | | 간결한 형식으로 출력 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh properties**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Target microbosh  Deployment bosh-openstack  +----------------------+-------+  | Name | Value |  +----------------------+-------+  | redis.max\_connection | 10 |  +----------------------+-------+  **$ bosh properties --terse**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  redis.max\_connection 10 |

## ***unset property***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh unset property <name> | | | |
|  | | | |
| **설명** | Deployment Property 설정 해제 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | Property 이름 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh unset property redis.max\_connection**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Target microbosh  Deployment bosh-openstack  Are you sure you want to unset property `redis.max\_connection'? (type 'yes' to continue): yes  Property `redis.max\_connection' has been unset |

# BOSH CLI - Log

## ***logs***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh logs <job> [<index>] [--agent] [--job] [--only filter1,filter2,...] [--dir destination\_directory] [--all] | | | |
|  | | | |
| **설명** | BOSH에서 배포된 VM에서 Agent나 Job 수행 로그 다운로드 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | O |
| index | | Job 번호 | X |
| --agent | | Agent 로그 출력 | X |
| --job | | Job 로그 출력 | X |
| --only filter1,filter2 | | 지정된 Filter에 대한 로그만 출력 | X |
| --dir destination\_directory | | 로그 다운로드 경로 지정 | X |
| --all | | Deprecated | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh logs director**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Director task 20  Started fetching logs for director/0 > Finding and packing log files. Done (00:00:01)  Task 20 done  Started 2015-08-25 02:06:35 UTC  Finished 2015-08-25 02:06:36 UTC  Duration 00:00:01  Downloading log bundle (0989088d-fe17-4347-75f1-821f4bd50bfd)...  Logs saved in `/home/ubuntu/workspace/deployment/director.0.2015-08-25-02-06-44.tgz' |

# BOSH CLI - Maintenance

## ***cleanup***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh cleanup [--all] | | | |
|  | | | |
| **설명** | 사용되지 않은 오래된(2일) release와 stemcell 삭제 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --all | | 사용되지 않은 Release와 Stemcell 모두 삭제 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh cleanup**  Acting as user 'abc' on 'microbosh'  Cleanup command will attempt to delete old unused  release versions and stemcells from your currently  targeted director at microbosh.  Only 2 latest versions of each release  and 2 latest versions of each stemcell will be kept.  Releases and stemcells that are in use will not be affected.  Are you sure? (type 'yes' to continue): yes  Deleting old stemcells  none found  Deleting old release versions  none found  Cleanup complete |

## ***cloudcheck***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh cloudcheck [<deployment\_name>] [--auto] [--report] | | | |
|  | | | |
| **설명** | 배포 Manifest기준으로 차이가 있는 문제 검출 및 해결 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| deployment\_name | | 배포 이름 | X |
| --auto | | 자동으로 Problem 해결 | X |
| --report | | Report 생성 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh cloudcheck bosh-openstack --report**  Performing cloud check...  Director task 25  Started scanning 7 vms  Started scanning 7 vms > Checking VM states. Done (00:00:01)  Started scanning 7 vms > 7 OK, 0 unresponsive, 0 missing, 0 unbound, 0 out of sync. Done (00:00:00)  Done scanning 7 vms (00:00:01)  Started scanning 3 persistent disks  Started scanning 3 persistent disks > Looking for inactive disks. Done (00:00:00)  Started scanning 3 persistent disks > 3 OK, 0 missing, 0 inactive, 0 mount-info mismatch. Done (00:00:00)  Done scanning 3 persistent disks (00:00:00)  Task 25 done  Started 2015-08-25 02:27:31 UTC  Finished 2015-08-25 02:27:32 UTC  Duration 00:00:01  Scan is complete, checking if any problems found...  No problems found  **# VM 강제 삭제한 후 실행 시**  **$ bosh cloudcheck bosh-openstack --auto**  Performing cloud check...  Director task 27  Started scanning 7 vms  Started scanning 7 vms > Checking VM states. Done (00:00:10)  Started scanning 7 vms > 6 OK, 0 unresponsive, 1 missing, 0 unbound, 0 out of sync. Done (00:00:00)  Done scanning 7 vms (00:00:10)  Started scanning 3 persistent disks  Started scanning 3 persistent disks > Looking for inactive disks. Done (00:00:00)  Started scanning 3 persistent disks > 3 OK, 0 missing, 0 inactive, 0 mount-info mismatch. Done (00:00:00)  Done scanning 3 persistent disks (00:00:00)  Task 27 done  Started 2015-08-25 02:29:35 UTC  Finished 2015-08-25 02:29:45 UTC  Duration 00:00:10  Scan is complete, checking if any problems found...  **Found 1 problem**  **Problem 1 of 1: VM with cloud ID `ca49d274-d222-4621-9404-98727e0d77d3' missing.**  **Applying resolutions...**  **Director task 28**  **Started applying problem resolutions > missing\_vm 17: Recreate VM**  **. Done (00:02:23)**  Task 28 done  Started 2015-08-25 02:29:50 UTC  Finished 2015-08-25 02:32:13 UTC  Duration 00:02:23  Cloudcheck is finished |

# BOSH CLI – Remote Access

## ***ssh***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh ssh [--public\_key FILE] [--gateway\_host HOST] [--gateway\_user USER] [--gateway\_identity\_file FILE] [--default\_password PASSWORD] | | | |
|  | | | |
| **설명** | 배포된 VM ssh 세션 생성  # ~/.ssh 디렉토리에서 Public Key(‘ssh-keygen -t rsa’) 생성 후 사용 가능 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --public\_key FILE | | 인증서 파일 설정 | X |
| --gateway\_host HOST | | Gateway Host IP | X |
| --gateway\_user USER | | Gateway User | X |
| --gateway\_identity\_file FILE | | Gateway Identity File | X |
| --default\_password PASSWORD | | Default 비밀번호 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh ssh**  1. nats/0  2. redis/0  3. postgres/0  4. blobstore/0  5. director/0  6. registry/0  7. health\_monitor/0  Choose an instance: 5  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Enter password (use it to sudo on remote host): \*\*\*\*\*\*\*\*  Target deployment is `bosh-openstack'  Setting up ssh artifacts  Director task 41  Task 41 done  Starting interactive shell on job director/0  Ubuntu 14.04.2 LTS  Welcome to Ubuntu 14.04.2 LTS (GNU/Linux 3.19.0-22-generic x86\_64)  \* Documentation: https://help.ubuntu.com/  The programs included with the Ubuntu system are free software;  the exact distribution terms for each program are described in the  individual files in /usr/share/doc/\*/copyright.  Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  applicable law.  To run a command as administrator (user "root"), use "sudo <command>".  See "man sudo\_root" for details.  bosh\_ymeazyb46@10e2b23d-9efc-453e-b69c-6b7fbd08daf2:~$ |

## ***scp***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh scp <job> [--index][--download] [--upload] [--public\_key FILE] [--gateway\_host HOST] [--gateway\_user USER] [--gateway\_identity\_file FILE] | | | |
|  | | | |
| **설명** | 배포된 VM으로부터 파일 다운로드 또는 업로드  # ~/.ssh 디렉토리에서 Public Key(‘ssh-keygen -t rsa’) 생성 후 사용 가능 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | O |
| --download | | 다운로드할 파일 | X |
| --upload | | 업로드할 파일 | X |
| --public\_key FILE | | 인증서 파일 설정 | X |
| --gateway\_host HOST | | Gateway Host IP | X |
| --gateway\_user USER | | Gateway User | X |
| --gateway\_identity\_file FILE | | Gateway Identity File | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh scp director/0 –download /var/vcap/sys/log/director/access.log /tmp**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Executing file operations on job director  Target deployment is `bosh-openstack'  Setting up ssh artifacts  Director task 47  Task 47 done  Downloaded file to /tmp/access.log.director.0  Cleaning up ssh artifacts  Director task 48  Task 48 done |

# BOSH CLI - Blob

## ***upload blob***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh upload blobs | |
|  | |
| **설명** | blobstore에 blob 업로드 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh upload blobs**  Total: 0, 0B  You have some blobs that need to be uploaded:  new ruby-1.9.3-p484.tar.gz 12.0M  new rubygems-1.8.24.tgz 41B  new bundler-1.2.1.gem 221.5K  new yaml-0.1.4.tar.gz 460.7K  When ready please run `bosh upload blobs'  Upload blob ruby-1.9.3-p484.tar.gz? (type 'yes' to continue) yes uploaded  Upload blob rubygems-1.8.24.tgz? (type 'yes' to continue) yes uploaded  Upload blob bundler-1.2.1.gem? (type 'yes' to continue) yes uploaded  Upload blob yaml-0.1.4.tar.gz? (type 'yes' to continue) yes uploaded |

## ***add blob***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh add blob <local\_path> [<blob\_dir>] | | | |
|  | | | |
| **설명** | Blobstore에 로컬 blob 추가 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| local\_path | | 로컬 Blob디렉토리 | O |
| blob\_dir | | Release내 blob 디렉토리 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh add blob ~/workspace/releases/test/blobs/**  `/home/ubuntu/workspace/releases/test/blobs/' is a directory |

## ***sync blobs***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh sync blobs | |
|  | |
| **설명** | blobstore의 blob 동기화 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh sync blobs**  Syncing blobs...  Total: 4, 12.7M  No blobs to upload |

## ***blobs***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh blobs | |
|  | |
| **설명** | 현재 blob 상태 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh blobs**  Total: 4, 12.7M  No blobs to upload |

# BOSH CLI - Snapshot

## ***take snapshot***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh take snapshot [<job>] [<index>] | | | |
|  | | | |
| **설명** | Snapshot 생성 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | O |
| index | | Job 번호 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh take snapshot registry 0**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Director task 69  Task 69 done  Snapshot taken |

## ***delete snapshot***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh delete snapshot <snapshot\_cid> | | | |
|  | | | |
| **설명** | 지정된 Snapshot CID의 Snapshot 삭제 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| snapshot\_cid | | snapshot\_cid | O |

## ***delete snapshots***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh delete snapshots | |
|  | |
| **설명** | 설정된 배포내의 모든 Snapshot 삭제 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh delete snapshots**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  Are you sure you want to delete all snapshots of deployment `bosh-openstack'? (type 'yes' to continue): yes  Director task 70  Task 70 done  Deleted all snapshots of deployment `bosh-openstack' |

## ***snapshots***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh snapshots [<job>] [<index>] | | | |
|  | | | |
| **설명** | 모든 Snapshot 목록 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | X |
| index | | Job 번호 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh snapshots**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  +-----------+--------------+------------+-------+  | Job/index | Snapshot CID | Created at | Clean |  +-----------+--------------+------------+-------+  +-----------+--------------+------------+-------+  Snapshots total: 0 |

# BOSH CLI - Misc

## ***status***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh status [--uuid] | | | |
|  | | | |
| **설명** | BOSH 타겟 Director 설정 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| --uuid | | BOSH Director 등록 정보 출력 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh status**  Config  /home/ubuntu/.bosh\_config  Director  Name microbosh  URL https://10.10.5.100:25555  Version 1.3016.0 (00000000)  User admin  UUID 7f5aaabf-e98e-4845-b2c7-79c675fbf6d9  CPI openstack  dns enabled (domain\_name: microbosh)  compiled\_package\_cache disabled  snapshots disabled  Deployment  not set  **$ bosh status --uuid**  7f5aaabf-e98e-4845-b2c7-79c675fbf6d9 |

## ***target***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh target [<director\_url>] [<name>] [--ca-cert FILE] | | | |
|  | | | |
| **설명** | BOSH 타겟 Director 설정 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| director\_url | | BOSH Director URL | O |
| name | | BOSH Director의 Alias 지정 | X |
| --ca-cert FILE | | UAA server에서 제공된 인증서 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh target** <https://10.10.5.100:25555>  Target set to `microbosh'  Your username: admin  Enter password:  Logged in as `admin' |

## ***targets***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh targets | |
|  | |
| **설명** | BOSH 타겟 Director 목록 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh targets**  +--------------------------------------+---------------------------+  | Name | Director URL |  +--------------------------------------+---------------------------+  | micro | https://10.10.5.100:25555 |  | 7f5aaabf-e98e-4845-b2c7-79c675fbf6d9 | https://10.10.5.100:25555 |  +--------------------------------------+---------------------------+  Targets total: 2 |

## ***vms***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh vms [<deployment\_name>] [--details] [--dns] [--vitals] | | | |
|  | | | |
| **설명** | BOSH에서 배포된 VM 목록 출력 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| deployment\_name | | 배포이름 | X |
| --details | | VM 상세정보 출력 | X |
| --dns | | DNS 레코드 포함 출력 | X |
| --vitals | | VM 자원 사용 상태 출력 | X |

**. 사용 예시**

|  |
| --- |
| **$ bosh vms**  Acting as user 'abc' on 'microbosh'  Deployment `bosh-openstack'  Director task 53  Task 53 done  +------------------+---------+---------------+-------------+  | Job/index | State | Resource Pool | IPs |  +------------------+---------+---------------+-------------+  | blobstore/0 | running | medium | 10.10.5.104 |  | director/0 | running | medium | 10.10.5.105 |  | health\_monitor/0 | running | medium | 10.10.5.107 |  | nats/0 | running | medium | 10.10.5.101 |  | postgres/0 | running | medium | 10.10.5.103 |  | redis/0 | running | medium | 10.10.5.102 |  | registry/0 | running | medium | 10.10.5.106 |  +------------------+---------+---------------+-------------+  VMs total: 7 |

## ***locks***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh locks | |
|  | |
| **설명** | Lock된 VM 목록 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh locks**  Acting as user 'abc' on 'microbosh'  No locks |

## ***alias***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh alias <name> <command> | | | |
|  | | | |
| **설명** | BOSH 커맨드 Alias 등록 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| name | | Alias 이름 | O |
| command | | 등록할 BOSH Command | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh alias vm-list 'vms'**  Alias `vm-list' created for command `vms'  **$ bosh vm-list**  Acting as user 'abc' on 'microbosh'  Deployment `bosh-openstack'  Director task 56  Task 56 done  +------------------+---------+---------------+-------------+  | Job/index | State | Resource Pool | IPs |  +------------------+---------+---------------+-------------+  | blobstore/0 | running | medium | 10.10.5.104 |  | director/0 | running | medium | 10.10.5.105 |  | health\_monitor/0 | running | medium | 10.10.5.107 |  | nats/0 | running | medium | 10.10.5.101 |  | postgres/0 | running | medium | 10.10.5.103 |  | redis/0 | running | medium | 10.10.5.102 |  | registry/0 | running | medium | 10.10.5.106 |  +------------------+---------+---------------+-------------+  VMs total: 7 |

## ***aliases***

**. 기본 Syntax**

|  |  |
| --- | --- |
| $ bosh aliases | |
|  | |
| **설명** | 등록된 Alias 목록 출력 |
| **. 파라미터** | |
| * 없음 | |

**사용 예시**

|  |
| --- |
| **$ bosh aliases**  +-------------+-------------+  | Alias | Command |  +-------------+-------------+  | deploy-list | deployments |  | vm-list | vms |  +-------------+-------------+  Aliases total: 2 |

## ***export compiled package***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh export compiled\_packages <release> <stemcell> <download\_dir> | | | |
|  | | | |
| **설명** | compiled Package 내보내기 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| release | | Release 이름과 버전 | O |
| stemcell | | Stemcell 이름과 버전 | O |
| download\_dir | | 내보내기 디렉토리 | O |

**. 사용 예시**

|  |
| --- |
| **$ bosh export compiled\_packages bosh/187 bosh-openstack-kvm-ubuntu-trusty-go\_agent/3016 ~/bosh-workspace**  Acting as user 'admin' on 'microbosh'  Exported compiled packages to `/home/ubuntu/bosh-workspace/bosh-187-bosh-openstack-kvm-ubuntu-trusty-go\_agent-3016.tgz'. |

## ***vm resurrection***

**. 기본 Syntax**

|  |  |  |  |
| --- | --- | --- | --- |
| $ bosh vm resurrection [<job>] [<index>] <new\_state> | | | |
|  | | | |
| **설명** | 배포된 VM의 재시작 여부 설정 | | |
| **. 파라미터** | | | |
| **파라미터 명** | | **설명** | **필수(O/X)** |
| job | | Job 이름 | X |
| index | | Job 번호 | X |
| new\_state | | ‘on’ or ‘off’, ‘yes’ or ‘no’, ‘enable’ or ‘disable’ | X |

**. 사용 예시**

|  |
| --- |
| # Resurrection Off 설정  **$ bosh vm resurrection nats off**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh'  # Resurrection On 설정  **$ bosh vm resurrection nats 0 on**  Acting as user 'abc' on deployment 'bosh-openstack' on 'microbosh' |

1. 변경 내용: 변경이 발생되는 위치와 변경 내용을 자세히 기록(장/절과 변경 내용을 기술한다.) [↑](#footnote-ref-1)