

docker stack deploy

Estimated reading time: 4 minutes

Description

Deploy a new stack or update an existing stack

API 1.25+ (<https://docs.docker.com/engine/api/v1.25/>) The client and daemon API must both be at least 1.25 (<https://docs.docker.com/engine/api/v1.25/>) to use this command. Use the `docker version` command on the client to check your client and daemon API versions.

Usage

```
docker stack deploy [OPTIONS] STACK
```

Options

Name, shorthand	Default	Description
<code>--bundle-file</code>		experimental (daemon) (https://docs.docker.com/engine/reference/commandline/dockerd/#daemon-configuration-file) Swarm Path to a Distributed Application Bundle file
<code>--compose-file</code> , <code>-c</code>		API 1.25+ (https://docs.docker.com/engine/api/v1.25/) Path to a Compose file, or "-" to read from stdin
<code>--namespace</code>		Kubernetes Kubernetes namespace to use
<code>--prune</code>		API 1.27+ (https://docs.docker.com/engine/api/v1.27/) Swarm Prune services that are no longer referenced
<code>--resolve-image</code>	<code>always</code>	API 1.30+ (https://docs.docker.com/engine/api/v1.30/) Swarm Query the registry to resolve image digest and supported platforms ("always" "changed" "never")
<code>--with-registry-auth</code>		Swarm Send registry authentication details to Swarm agents
<code>--kubeconfig</code>		Kubernetes Kubernetes config file
<code>--orchestrator</code>		Orchestrator to use (swarm kubernetes all)

Parent command

Command	Description
<code>docker stack</code> (https://docs.docker.com/engine/reference/commandline/stack)	Manage Docker stacks

Related commands

Command	Description
<code>docker stack deploy</code> (https://docs.docker.com/engine/reference/commandline/stack_deploy/)	Deploy a new stack or update an existing stack
<code>docker stack ls</code> (https://docs.docker.com/engine/reference/commandline/stack_ls/)	List stacks
<code>docker stack ps</code> (https://docs.docker.com/engine/reference/commandline/stack_ps/)	List the tasks in the stack
<code>docker stack rm</code> (https://docs.docker.com/engine/reference/commandline/stack_rm/)	Remove one or more stacks
<code>docker stack services</code> (https://docs.docker.com/engine/reference/commandline/stack_services/)	List the services in the stack

Extended description

Create and update a stack from a `compose` or a `dab` file on the swarm. This command has to be run targeting a manager node.

Examples

Compose file

The `deploy` command supports compose file version `3.0` and above.

```
$ docker stack deploy --compose-file docker-compose.yml vossibility
```

```
Ignoring unsupported options: links
```

```
Creating network vossibility_vossibility
Creating network vossibility_default
Creating service vossibility_nsqd
Creating service vossibility_logstash
Creating service vossibility_elasticsearch
Creating service vossibility_kibana
Creating service vossibility_ghollector
Creating service vossibility_lookupd
```

The Compose file can also be provided as standard input with `--compose-file -` :

```
$ cat docker-compose.yml | docker stack deploy --compose-file - vossibility
```

```
Ignoring unsupported options: links
```

```
Creating network vossibility_vossibility
Creating network vossibility_default
Creating service vossibility_nsqd
Creating service vossibility_logstash
Creating service vossibility_elasticsearch
Creating service vossibility_kibana
Creating service vossibility_ghollector
Creating service vossibility_lookupd
```

If your configuration is split between multiple Compose files, e.g. a base configuration and environment-specific overrides, you can provide multiple `--compose-file` flags.

```
$ docker stack deploy --compose-file docker-compose.yml -c docker-compose.prod.yml vossibility
```

```
Ignoring unsupported options: links
```

```
Creating network vossibility_vossibility
Creating network vossibility_default
Creating service vossibility_nsqd
Creating service vossibility_logstash
Creating service vossibility_elasticsearch
Creating service vossibility_kibana
Creating service vossibility_ghollector
Creating service vossibility_lookupd
```

You can verify that the services were correctly created:

```
$ docker service ls
```

ID	NAME	MODE	REPLICAS	IMAGE
29bv0vnlm903	vossibility_lookupd	replicated	1/1	nsqio/nsq@sha256:eeba05599f31eba418e96e71e0984c3dc96963ceb66924dd37a47bf7ce18a662
4awt47624qwh	vossibility_nsqd	replicated	1/1	nsqio/nsq@sha256:eeba05599f31eba418e96e71e0984c3dc96963ceb66924dd37a47bf7ce18a662
4tjx9biia6fs	vossibility_elasticsearch	replicated	1/1	elasticsearch@sha256:12ac7c6af55d001f71800b83ba91a04f716e58d82e748fa6e5a7359eed2301aa
7563uuzr9eys	vossibility_kibana	replicated	1/1	kibana@sha256:6995a2d25709a62694a937b8a529ff36da92eb74baf7bf00e6caf6db2eb03
9gc5m4met4he	vossibility_logstash	replicated	1/1	logstash@sha256:2dc8bdd1bb4a5a34e8ebaf73749f6413c101b2edef6617f2f7713926d2141fe
axqh55ipl40h	vossibility_vossibility-collector	replicated	1/1	icecrime/vossibility-collector@sha256:f03f2977203ba6253988c18d04061c5ec7aab46bca9dfd89a9a1fa4500989fba

DAB file

```
$ docker stack deploy --bundle-file vossibility-stack.dab vossibility
```

```
Loading bundle from vossibility-stack.dab
Creating service vossibility_elasticsearch
Creating service vossibility_kibana
Creating service vossibility_logstash
Creating service vossibility_lookupd
Creating service vossibility_nsqd
Creating service vossibility_vossibility-collector
```

You can verify that the services were correctly created:

```
$ docker service ls
```

ID	NAME	MODE	REPLICAS	IMAGE
29bv0vnlm903	vossibility_lookupd	replicated	1/1	nsqio/nsq@sha256:eeba05
599f31eba418e96e71e0984c3dc96963ceb66924dd37a47bf7ce18a662				
4awt47624qwh	vossibility_nsqd	replicated	1/1	nsqio/nsq@sha256:eeba05
599f31eba418e96e71e0984c3dc96963ceb66924dd37a47bf7ce18a662				
4tjx9biia6fs	vossibility_elasticsearch	replicated	1/1	elasticsearch@sha256:12
ac7c6af55d001f71800b83ba91a04f716e58d82e748fa6e5a7359eed2301aa				
7563uuzr9eys	vossibility_kibana	replicated	1/1	kibana@sha256:6995a2d25
709a62694a937b8a529ff36da92eb0e74bafd7bf00e6caf6db2eb03				
9gc5m4met4he	vossibility_logstash	replicated	1/1	logstash@sha256:2dc8bdd
d1bb4a5a34e8ebaf73749f6413c101b2edef6617f2f7713926d2141fe				
axqh55ipl40h	vossibility_vossibility-collector	replicated	1/1	icecrime/vossibility-co
llector@sha256:f03f2977203ba6253988c18d04061c5ec7aab46bca9dfd89a9a1fa4500989fba				