
Reference Documentation

Design docs, concept definitions, and references for APIs and CLIs.

[GUIDES](#) [REFERENCE](#) [SAMPLES](#) [SUPPORT](#)

Search

kubectl run

Run a particular image on the cluster.

Synopsis

Create and run a particular image, possibly replicated. Creates a deployment or job to manage the created container(s).

```
kubectl run NAME --image=image [--env="key=value"] [--port=port] [--replicas=replicas] [--dry-run=bool] [--overr
```

Examples

```
# Start a single instance of nginx.
kubectl run nginx --image=nginx

# Start a single instance of hazelcast and let the container expose port 5701 .
kubectl run hazelcast --image=hazelcast --port=5701

# Start a single instance of hazelcast and set environment variables "DNS_DOMAIN=cluster" and "POD_NAMESPACE=default"
kubectl run hazelcast --image=hazelcast --env="DNS_DOMAIN=cluster" --env="POD_NAMESPACE=default"

# Start a replicated instance of nginx.
kubectl run nginx --image=nginx --replicas=5

# Dry run. Print the corresponding API objects without creating them.
kubectl run nginx --image=nginx --dry-run

# Start a single instance of nginx, but overload the spec of the deployment with a partial set of values parsed
kubectl run nginx --image=nginx --overrides='{ "apiVersion": "v1", "spec": { ... } }'

# Start a single instance of busybox and keep it in the foreground, don't restart it if it exits.
kubectl run -i --tty busybox --image=busybox --restart=Never

# Start the nginx container using the default command, but use custom arguments (arg1 .. argN) for that command.
kubectl run nginx --image=nginx -- <arg1> <arg2> ... <argN>

# Start the nginx container using a different command and custom arguments.
kubectl run nginx --image=nginx --command -- <cmd> <arg1> ... <argN>

# Start the perl container to compute π to 2000 places and print it out.
kubectl run pi --image=perl --restart=OnFailure -- perl -Mbignum=bpi -wle 'print bpi(2000)'
```

Options

```

--dry-run[=false]: If true, only print the object that would be sent, without sending it.
--env=[]: Environment variables to set in the container
--expose[=false]: If true, a public, external service is created for the container(s) which are run
--generator="": The name of the API generator to use. Default is 'deployment/v1beta1' if --restart=Always
--hostport=-1: The host port mapping for the container port. To demonstrate a single-machine container.
--image="": The image for the container to run.
-l, --labels="": Labels to apply to the pod(s).
--leave-stdin-open[=false]: If the pod is started in interactive mode or with stdin, leave stdin open after
--limits="": The resource requirement limits for this container. For example, 'cpu=200m,memory=512Mi'
--no-headers[=false]: When using the default output, don't print headers.
-o, --output="": Output format. One of: json|yaml|wide|name|go-template=...|go-template-file=...|jsonpath=...|
--output-version="": Output the formatted object with the given group version (for ex: 'extensions/v1beta1'
--overrides="": An inline JSON override for the generated object. If this is non-empty, it is used to override
--port=-1: The port that this container exposes. If --expose is true, this is also the port used by the service
--record[=false]: Record current kubectl command in the resource annotation.
-r, --replicas=1: Number of replicas to create for this container. Default is 1.
--requests="": The resource requirement requests for this container. For example, 'cpu=100m,memory=256Mi'
--restart="Always": The restart policy for this Pod. Legal values [Always, OnFailure, Never]. If set to
--rm[=false]: If true, delete resources created in this command for attached containers.
--save-config[=false]: If true, the configuration of current object will be saved in its annotation. This
--service-generator="service/v2": The name of the generator to use for creating a service. Only used if --
--service-overrides="": An inline JSON override for the generated service object. If this is non-empty, it
-a, --show-all[=false]: When printing, show all resources (default hide terminated pods.)
--show-labels[=false]: When printing, show all labels as the last column (default hide labels column)
--sort-by="": If non-empty, sort list types using this field specification. The field specification is ex
-i, --stdin[=false]: Keep stdin open on the container(s) in the pod, even if nothing is attached.
--template="": Template string or path to template file to use when -o=go-template, -o=go-template-file. T
--tty[=false]: Allocate a TTY for each container in the pod. Because -t is currently shorthand for --ter

```

Options inherited from parent commands

```

--alsologtostderr[=false]: log to standard error as well as files
--certificate-authority="": Path to a cert. file for the certificate authority.
--client-certificate="": Path to a client certificate file for TLS.
--client-key="": Path to a client key file for TLS.
--cluster="": The name of the kubeconfig cluster to use
--context="": The name of the kubeconfig context to use
--insecure-skip-tls-verify[=false]: If true, the server's certificate will not be checked for validity. This
--kubeconfig="": Path to the kubeconfig file to use for CLI requests.
--log-backtrace-at=:0: when logging hits line file:N, emit a stack trace
--log-dir="": If non-empty, write log files in this directory
--log-flush-frequency=5s: Maximum number of seconds between log flushes
--logtostderr[=true]: log to standard error instead of files
--match-server-version[=false]: Require server version to match client version
--namespace="": If present, the namespace scope for this CLI request.
--password="": Password for basic authentication to the API server.
-s, --server="": The address and port of the Kubernetes API server
--stderrthreshold=2: logs at or above this threshold go to stderr
--token="": Bearer token for authentication to the API server.
--user="": The name of the kubeconfig user to use
--username="": Username for basic authentication to the API server.
--v=0: log level for V logs
--vmodule=: comma-separated list of pattern=N settings for file-filtered logging

```

SEE ALSO

- [kubectl](#) - kubectl controls the Kubernetes cluster manager

Auto generated by [spf13/cobra](#) on 11-Mar-2016

[Analytics](#)

Get Started

Community

I wish this page

enter your wish

© 2016 Kubernetes