

The `mon_host` option lists cluster monitors. This option is essential and cannot be stored in the configuration database. To avoid using a cluster configuration file, Ceph clusters support using DNS service records to provide the `mon_host` list.

The local cluster configuration file can contain other options to fit your requirements.

- `mon_host_override`, the initial list of monitors for the cluster to contact to start communicating.
- `mon_dns_serv_name`, the name of the DNS SRV record to check to identify the cluster monitors via DNS.
- `mon_data`, `osd_data`, `mds_data`, `mgr_data`, define the daemon's local data storage directory.
- `keyring`, `keyfile`, and `key`, the authentication credentials to authenticate with the monitor.

## Using Service Configuration Files

*Service configuration files* are YAML files that bootstrap a storage cluster and additional Ceph services. The `cephadm` tool orchestrates the service deployment, sizing, and placement by balancing the running daemons in the cluster. Various parameters can deploy services such as OSDs or MONs in a more defined manner.

An example service configuration file follows.

```
service_type: mon
placement:
  host_pattern: "mon*"
  count: 3
---
service_type: osd
service_id: default_drive_group
placement:
  host_pattern: "osd*"
data_devices:
  all: true
```

- `service_type` defines the type of service, such as `mon`, `mds`, `mgr`, or `rgw`.
- `placement` defines the location and quantity of the services to deploy. You can define the hosts, host pattern, or label to select the target servers.
- `data_devices` is specific to OSD services, supporting filters such as size, model, or paths.

Use the `cephadm bootstrap --apply-spec` command to apply the service configurations from the specified file.

```
[root@node ~]# cephadm bootstrap --apply-spec service-config.yaml
```

## Overriding Configuration Settings at Runtime

You can change most cluster configuration settings while running. You can temporarily change a configuration setting while the daemon is running.

The `ceph tell $type.$id config` command temporarily overrides configuration settings, and requires that both the MONs and the daemon being configured are running.

Run this command from any cluster host configured to run `ceph` commands. Settings that are changed with this command revert to their original settings when the daemon restarts.