DASHBOARD PLUGIN

The dashboard plugin is a web application that visualizes information and statistics about the Ceph cluster using a web server hosted by `ceph-mgr`.

The dashboard currently provides insight into the following aspects of your cluster:

- **Overall cluster health**: Displays the overall cluster status, storage utilization (e.g. number of objects, raw capacity, usage per pool), a list of pools and their status and usage statistics, access to the cluster log file.
- **Hosts**: Provides a list of all hosts associated to the cluster, which services are running and which version of Ceph is installed.
- **Performance counters**: Displays detailed service-specific statistics for each running service.
- **Monitors**: Lists all MONs, their quorum status, open sessions.
- **Configuration Reference**: Lists all available configuration options, their description and default values.
- **OSDs**: Lists all OSDs, their status and usage statistics as well as detailed information like attributes (OSD map), metadata, performance counters and usage histograms for read/write operations.
- **iSCSI**: Lists all hosts that run the TCMU runner service, displaying all images and their performance characteristics (read/write ops, traffic).
- **RBD**: Lists all RBD images and their properties (size, objects, features) in a given pool.
- **RBD mirroring**: Lists all active sync daemons and their status, pools and RBD images including their synchronization state.
- **CephFS**: Lists all active filesystem clients and associated pools, including their usage statistics.
- **Object Gateway**: Lists all active object gateways and their performance counters.

ENABLING

The *dashboard* module is enabled with:

```
ceph mgr module enable dashboard
```

CONFIGURATION

Like most web applications, dashboard binds to a host name and port. By default, the `ceph-mgr` daemon hosting the dashboard (i.e., the currently active manager) will bind to port 7000 and any available IPv4 or IPv6 address on the host.

Since each `ceph-mgr` hosts its own instance of dashboard, it may also be necessary to configure them separately. The hostname and port can be changed via the configuration key facility:

```
ceph config-key set mgr/dashboard/$name/server_addr $IP
ceph config-key set mgr/dashboard/$name/server_port $PORT
```

where `$name` is the ID of the ceph-mgr who is hosting this dashboard web app.

These settings can also be configured cluster-wide and not manager specific. For example,:

```
ceph config-key set mgr/dashboard/server_addr $IP
ceph config-key set mgr/dashboard/server_port $PORT
```

If the port is not configured, the web app will bind to port `7000`. If the address it not configured, the web app will bind to `::`, which corresponds to all available IPv4 and IPv6 addresses.

In order to be able to log in, you need to define a username and password, which will be stored in the MON's configuration database:

```
ceph dashboard set-login-credentials <username> <password>
```

The password will be stored in the configuration database in encrypted form using `bcrypt`. This is a global setting that applies to all dashboard instances.

You can now access the dashboard using your (JavaScript-enabled) web browser, by pointing it to the selected TCP port and any of the host names or IP addresses where a manager instance runs on, e.g. `http://<$IP>:<$PORT>/`.

You should then be greeted by the dashboard login page, requesting your previously defined username and password. Select the **Keep me logged in** checkbox if you want to skip the username/password request when accessing the dashboard in the future.

REVERSE PROXIES

If you are accessing the dashboard via a reverse proxy configuration, you may wish to service it under a URL prefix. To get the dashboard to use hyperlinks that include your prefix, you can set the `url_prefix` setting:

```
ceph config-key set mgr/dashboard/url_prefix $PREFIX
```

so you can access the dashboard at `http://$IP:$PORT/$PREFIX/`.