

- 5.1. Enable the orchestrator service to create OSD daemons automatically from the available cluster devices.

```
[ceph: root@clienta /]# ceph orch apply osd --all-available-devices
Scheduled osd.all-available-devices update...
```

- 5.2. Verify the creation of the all-available-devices OSD service.

```
[ceph: root@clienta /]# ceph orch ls
```

NAME	RUNNING	REFRESHED	AGE	PLACEMENT
alertmanager	1/1	11s ago	13h	count:1
crash	4/4	5m ago	13h	*
grafana	1/1	11s ago	13h	count:1
mgr	4/4	5m ago	13h	...
mon	4/4	5m ago	13h	...
node-exporter	1/4	5m ago	13h	*
<b>osd.all-available-devices</b>	<b>0/4</b>	<b>-</b>	<b>10s</b>	<b>*</b>
osd.default_drive_group	9/12	5m ago	13h	server*
osd.unmanaged	2/2	11s ago	-	<unmanaged>
prometheus	1/1	11s ago	13h	count:1
rgw.realm.zone	2/2	5m ago	8m	...

- 5.3. Verify the existence of new OSDs.

```
[ceph: root@clienta /]# ceph osd tree
```

ID	CLASS	WEIGHT	TYPE NAME	STATUS	REWEIGHT	PRI-AFF
-1		0.19592	root default			
-9		0.04898	host clienta			
<b>12</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.12</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
<b>16</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.16</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
<b>17</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.17</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
<b>18</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.18</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
<b>19</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.19</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
-3		0.04898	host serverc			
0	hdd	0.00980	osd.0	up	1.00000	1.00000
1	hdd	0.00980	osd.1	up	1.00000	1.00000
2	hdd	0.00980	osd.2	up	1.00000	1.00000
9	hdd	0.00980	osd.9	up	1.00000	1.00000
10	hdd	0.00980	osd.10	up	1.00000	1.00000
-5		0.04898	host serverd			
3	hdd	0.00980	osd.3	up	1.00000	1.00000
4	hdd	0.00980	osd.4	up	1.00000	1.00000
5	hdd	0.00980	osd.5	up	1.00000	1.00000
<b>11</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.11</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
<b>14</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.14</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
-7		0.04898	host servere			
6	hdd	0.00980	osd.6	up	1.00000	1.00000
7	hdd	0.00980	osd.7	up	1.00000	1.00000
8	hdd	0.00980	osd.8	up	1.00000	1.00000
<b>13</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.13</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>
<b>15</b>	<b>hdd</b>	<b>0.00980</b>	<b>osd.15</b>	<b>up</b>	<b>1.00000</b>	<b>1.00000</b>