Shutting down a TightGate-Pro cluster

A TightGate-Pro cluster with external data storage consists of the Ceph server components and the TightGate-Pro servers. The Ceph servers serve as data storage for the TightGate-Pro servers on which the users work. The TightGate-Pro servers do not store any user data, but only process it at runtime in the RAM memory. The cluster is a self-contained system in which the TightGate-Pro servers are connected to the Ceph servers. The Ceph servers can only be accessed from the LAN via TightGate-Pro servers, never directly. When shutting down a cluster, the TightGate-Pro servers must always be shut down first before the Ceph servers can be shut down. It must therefore be ensured that there is separate access to the Ceph servers via the server console.

The shutdown follows the procedure described below.

Warning

All TightGate-Pro servers must always be shut down first before the Ceph servers are shut down, otherwise there is a risk of data loss!

Requirements

To shut down a TightGate-Pro cluster properly, the following is required:

- Access to the administrator's administration interface ***maint*** on a TightGate-Pro server. Optionally via SSH (Putty) or directly on the console.
- Password of the administrator ***maint*** (TightGate-Pro).
- Access to the administrator's administration interface ***root*** on a Ceph server. Access must be via console access, a tunnel via TightGate-Pro is not sufficient.
- Password of the administrator ***root*** (Ceph server).

Allow approx. 20 minutes for the shutdown of a TightGate-Pro cluster.

Step 1: Shutting down the TightGate-Pro servers

The TightGate-Pro servers are shut down as follows:

- Login as administrator ***maint*** at a TightGate-Pro.
- Select the menu item **Shut down cluster(*)**
- Confirm the query as to when the cluster is to be shut down with **immediately**.
- Confirm the query as to whether a reboot is to be performed in recover mode with **No**.
- The shutdown command is now distributed to all TightGate-Pro servers in the cluster. The distribution of the instruction to all nodes can take up to 10 minutes.
- Once all TightGate-Pro servers have been shut down properly, the Ceph servers can be shut down.

Step 2: Shutting down the Ceph servers

When shutting down the Ceph servers, it is important to ensure that the majority of the Ceph servers are shut down at the same time or very quickly one after the other. For example: In a cluster with 5 Ceph servers, two can be shut down with a time delay and the last three shut down as simultaneously as possible.

The Ceph servers are shut down as follows:

- Log on to the **first Ceph server** with the identifier ***root*** directly to the server console.
- Enter the following command: **ceph-check-clients**
  The output of the command shows whether TightGate-Pro servers are still connected. If the message **The following nodes have not been shut down/disconnected:** is displayed, this is followed by a list of all TightGate-Pro that have not yet been shut down. The TightGate-Pro nodes that are still connected must still be shut down. The next step may only be carried out when the command displays the following output: **All nodes have been shut down or are disconnected from data storage**.
- Now connect to the last Ceph server, e.g. if you have 3 Ceph servers, first connect to the third one with the following command:
  ssh root@ceph3
    - Execute the following command there: **shudown -h now**
    - Then execute the key combination **CTRL+d** to return to the console of the first Ceph server.
- Then repeat the same procedure on the second Ceph server:
    - **ssh root@ceph2** and there **shudown -h now**.
    - Then use the key combination **CTRL+d**to return to the console of the first Ceph server.
- Finally, execute the following command on the first Ceph server to which you are directly logged in:
    - **shudown -h now**
- Shutting down the Ceph servers can take up to 5 minutes.

This shuts down the entire TightGate-Pro cluster.