



# CLUSTERLION INSTALLATION GUIDE (LOCAL QUORUM)

Please take time to read the following instructions thoroughly and carefully before the first use of ClusterLion.

The installation itself is a simple task and can be performed by a single technician with NetApp installation experience and some basic Linux know-how. At the link

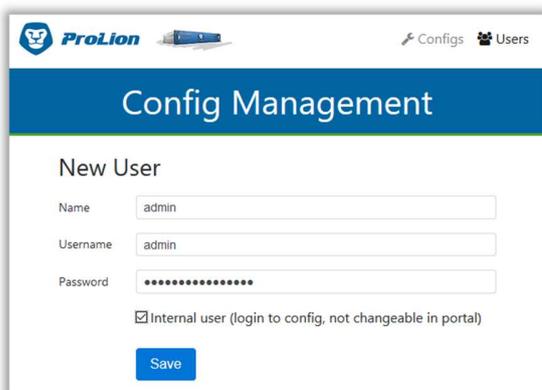
[http://prolion.at/documents/clusterlion/ClusterLion\\_detailed\\_cabling\\_local\\_quorum.pdf](http://prolion.at/documents/clusterlion/ClusterLion_detailed_cabling_local_quorum.pdf) you will find the correct cabling guide.

If there is still something unclear after reading that, please contact us.

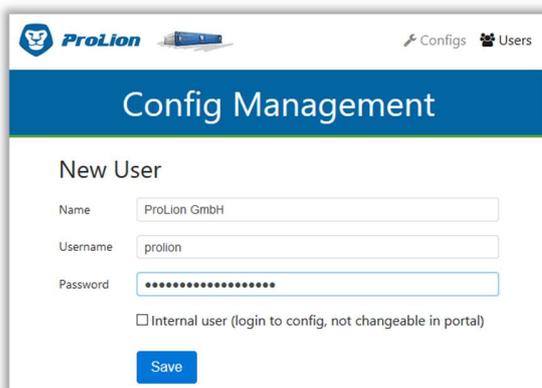
## **Please follow these step-by-step instructions:**

- 1) Please mount the ClusterLion appliances into the MetroCluster racks with the NetApp storage controllers. The rack mount kits are included.
- 2) Please connect the 4 power inputs of the ClusterLion appliance to the power supply (PDU). The use of different power sources makes the ClusterLion and also the NetApp Storage controller much more stable. So please use as many different power sources you have, including UPS, generator, regular power etc.
- 3) Please connect the routing port of the ClusterLions appliance to the prepared dedicated ClusterLion network.
- 4) **Setup of the NetApp Storage Controller:**  
At the link <http://prolion.at/documents/clusterlion/create.interfaces.lq.txt> you will find the commands for creating and configuring the network interfaces.  
Please execute these commands on each NetApp storage system.  
**ATTENTION:** Please replace the NetApp Node- and Hostnames and the network port at the NetApp controller with the correct values for your environment!  
  
Please use the IP-addresses that are already defined (in case other IP-addresses are required please contact us).
- 5) At the link <http://prolion.at/documents/clusterlion/create.users.txt> you will find the commands for setting up the user and roles needed by the ClusterLion. Please execute the commands on each NetApp storage system.
  - Username: clusterlion
  - PW: please select a password
- 6) Please connect the Ethernet ports from ClusterLion to the configured Ethernet ports of the NetApp storage controller and the serial ports from the ClusterLion to the serial ports of the NetApp storage controllers.  
If you use a 2-node controller then only one Ethernet port and one serial port is connected from ClusterLion to the NetApp storage controller.
- 7) Please connect on each ClusterLion (Location 1 and Location 2) the IC Port directly with the other IC Port. For this Bypass (Bridge) please use the short patch cable (25 cm) that we have delivered.

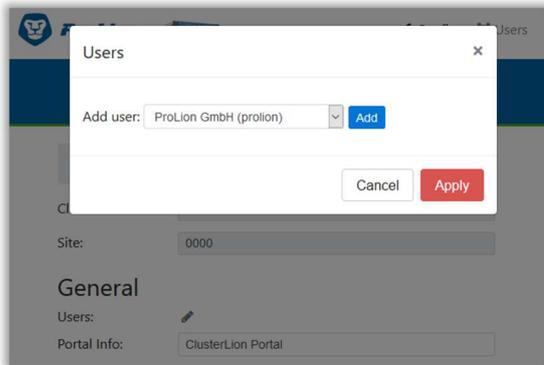
- 8) Please download the software for the quorum server. You will receive the download link and your customer- and site-id (required for installation) from us, a few days before ClusterLion installation (In case you don't, please request it from [support@clusterlion.com](mailto:support@clusterlion.com)). If not downloaded directly to the quorum server, please copy the downloaded TGZ file to it and extract it into any directory.
- 9) Start the install script as root with the command: `install/install.sh <customer-id> <site-id>`  
If error messages occur, please contact us.
- 10) Please configure the network settings of the quorum server. For the interface in the customer LAN (portal access) any IP-address can be used. For the interface in the dedicated ClusterLion network, please use the IP-address 192.168.168.11/24. Also some routes have to be configured. Therefore you can use our template file at `/app/templates/e17.network.route-eth0`  
  
Take the affected interface down and up again for the routes to become active.
- 11) Also, the SMTP settings for alarm emails need to be adjusted. Edit the file `/app/clcore/.env` and adjust the SMTP\_URL and SMTP\_FROM entry.
- 12) Furthermore, the passwords for the NetApp user are also to be deposited. Open the file `/app/agtsim1/app/core/cfg/config.local.json` and edit the line "storagePass": "netapp123". Replace the password netapp123 with the desired password for the clusterlion user (see point 5 above). Repeat this step for the file `/app/agtsim2/app/core/cfg/config.local.json`
- 13) Please restart the ClusterLion services with `systemctl restart clcore`
- 14) Afterwards the config portal should already be accessible at `https://<IPorHostname>:8443/`  
Login with username "admin" and empty password. Please create a new admin user at the "Users" button in the upper right corner as "Internal User" with a desired password.



- 15) For the "normal" portal access then another user is needed, which is not an "internal user"



- 16) Then at "Config" in the line "Site: <yourSiteId>" click on "Edit". Then at "General" -> "Users" add the previously created portal user. Select it, click "Add", then "Apply" and then at the bottom on "Save".



- 17) Now you can log in to the "normal" ClusterLion portal at <https://<IPorHostname>/> with the previously created user and should already see the correct status of the ClusterLion.
- 18) Please enter all email addresses of people that are meant to receive push notifications from ClusterLion at „Support“ in the ClusterLion Portal.  
In Case of critical failures or if an automatic Switchover has been triggered, all listed contacts will be notified via email.
- 19) An initial Power-On at Location 1 and Location 2 shall be done via ClusterLion Portal.  
Please click on the right top in ClusterLion Portal “Actions” and then Power-on Location 1 and Power-On Location 2.
- 20) Please check your ClusterLion Portal at “Dashboard” to ensure that all parameters are “green” (OK).  
Then check at Location 1 and Location 2 if all power out control LED’s (green) on the ClusterLion rear sides are active.
- 21) If all values are green (OK) in the ClusterLion Portal and you have checked the power out control LED’s (green), then the power connections of the NetApp Storage Controller can be disconnected from the PDU and connected to the ClusterLion.

**ATTENTION:** Please always make sure to disconnect only one power cable from the NetApp controllers at a time! After reconnecting the first cable please check if the NetApp power supply is working (green LED on the power supply).  
If the first power supply runs again, please wait for 30 seconds before reconnecting the second power supply to the ClusterLion appliance.  
After reconnecting the second cable please check if the NetApp power supply is working (green LED on the power supply).  
Please continue until all power connections of the storage controllers are connected to the ClusterLion power outputs.

The installation is now completed and ClusterLion is active!

In case of any questions please contact us at [support@clusterlion.com](mailto:support@clusterlion.com). Thank you!