



SVHT - Install a Silent Cube System C4 2022

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Step 1 — General information



- ❗ A Silent Cube System always consists of a Head Unit and a Silent Cube.
- The Head Unit is the bridge between the Silent Cube storage units and your network.
 - The FAST LTA operating system runs on the head unit and is used to administer and manage the system. The head units are always delivered pre-installed.
 - The Head Unit caches the data that is written to or read from the Silent Cube.
- The Silent Cube is the revision-proof storage unit. The administration of the connected Silent Cubes is done via the Head Unit.
 - Up to 128 Silent Cubes, of different sizes can be connected to a Head Unit.
- The systems can be operated in a replication network to improve reliability. A head unit and the same number of cubes are required on both sides.

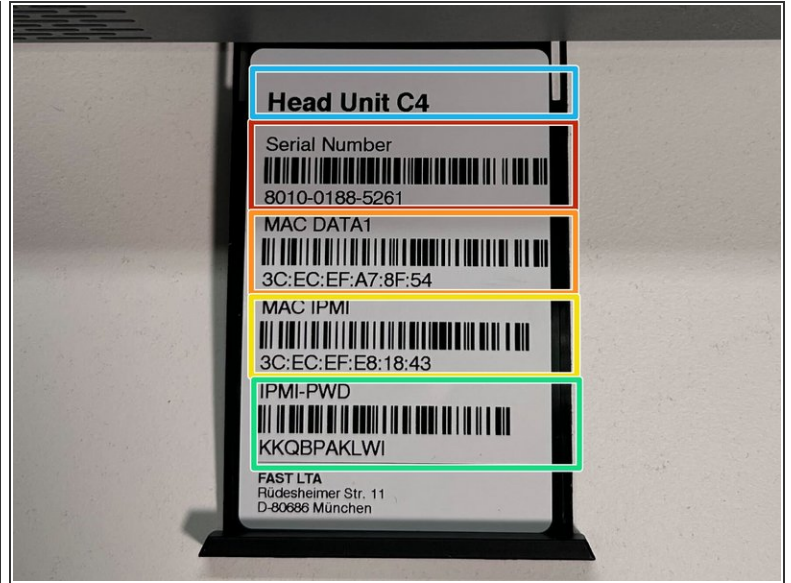
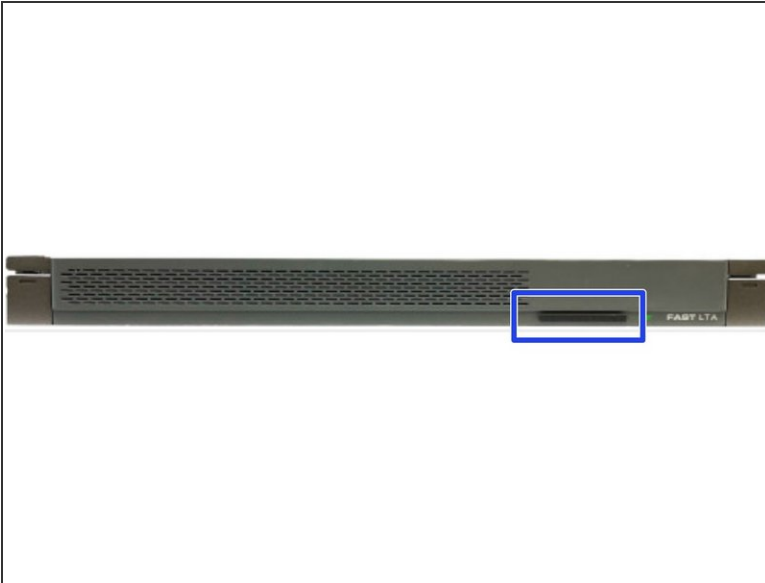
Step 2 — Hardware Preparation Rackspace



Space

- **1 HE** rackspace for the C4 2022 Head Unit
- **1 HE** rackspace for each Silent Cube DS. Silent Cube DS systems are installed directly with RACK rails and do not require a rack base.
- **6 HE** rackspace for a Silent Cube Classic. Silent Cube Classic require a floor on which they can be placed. Up to 4 Silent Cube Classic fit on one rack floor.

Step 3 — Head Unit Information



- All C4 2022 Head Units have a pull-out card on the front panel that contains the following information.
 - Head Unit Type
 - Serial number of the system - e.g. for support cases
 - MAC address of the data bond
 - MAC address of the installed IPMI / ILO board
 - Default password for the configuration of the IPMI board via the system BIOS of the machine

Step 4 — Mounting the devices



- Please assemble the units as described in the Quick Start guides provided.
- If you require further documentation for the installation, we will be happy to send it to you.

⚠ Attached you will find the mounting instructions for the rail set - Mount Rail Set.pdf

Step 5 — Preparation LAN

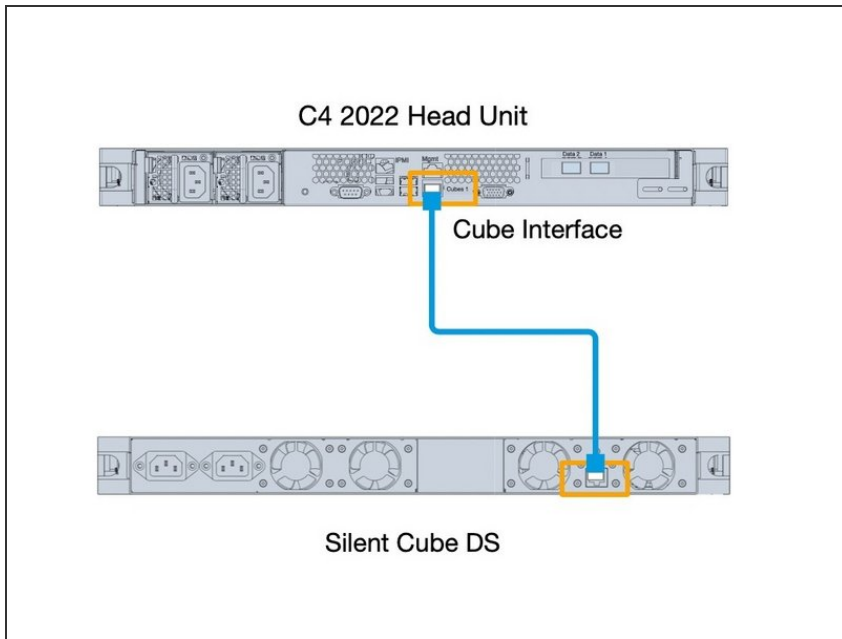


⚠ The network connections on the head units are pre-assigned and must not be swapped.

- On all newer head units there are 2 connections which are labelled either Data. These are for connecting the head unit to the customer's network. It is also possible to use only one port.
 - The two LAN ports are configured in active - backup mode. If both are used, only one port is active. If this port fails, the system switches to the other port with the same MAC and IP address.
- Then there is a cube connection. This is where the Silent Cube storage units are connected. If more than one Silent Cube unit is connected, an office switch or a dedicated VLAN is required between the head unit.
 - A DHCP server runs on the cube interface and provides the connected Silent Cube storage units with IP addresses from the Silent Cube network of the head unit.
 - If you want to set up a VLAN, it must be completely independent of the rest of the network and must contain a port for connecting the head unit and the number of cubes to be connected. The ports must be untagged, as the head unit and the cubes cannot process any VLAN information.

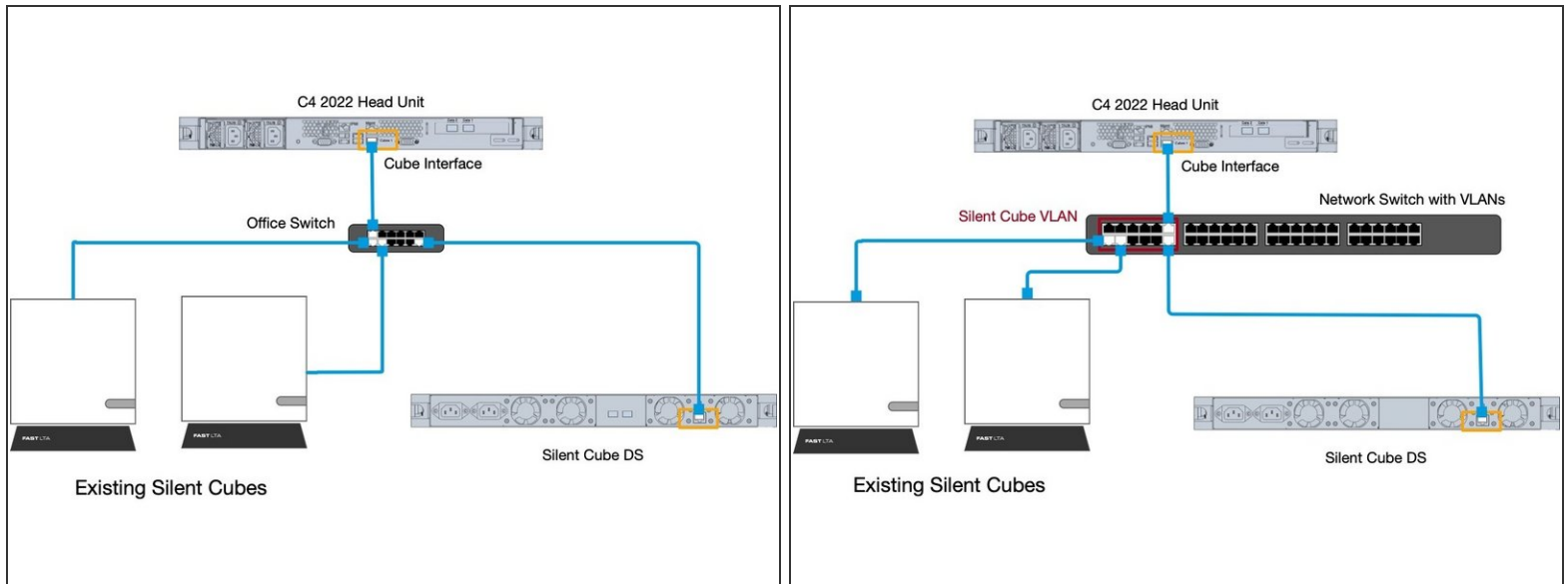
⚠ For a replicated Silent Sube system, 2 such VLANs are required for the cubes of the primary and secondary Head Unit.

Step 6 — Direct Connection C4 Head Unit to Silent Cube DS



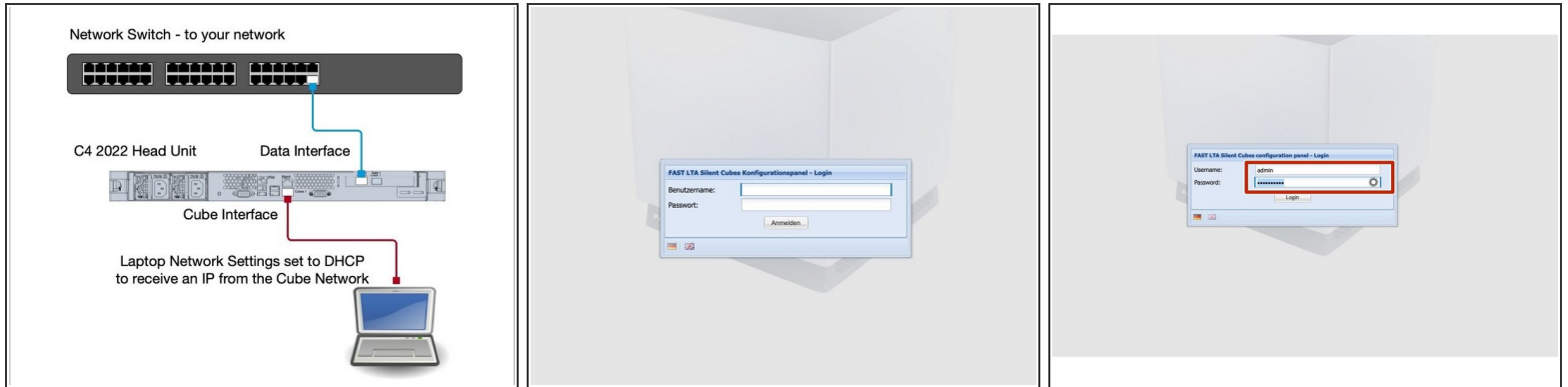
- If you have only one Cube and one Head Unit, they can be connected directly via the Cube interface.
- ⓘ For a replicated system, this must be done for both systems.

Step 7 — Connection of several Cubes to a Head Unit



- **Possibility 1** - If you have more than one cube or are expanding an existing system, you will need a switch between the head units.
 - **Possibility 2** - If you want to connect the silent cubes to your existing network switch, you need a VLAN for the cube connection that is separated from the rest of the network and in which only the cube connection of the head unit and the silent cubes are connected.
- ❗ For a replicated system, this must be done for both systems.

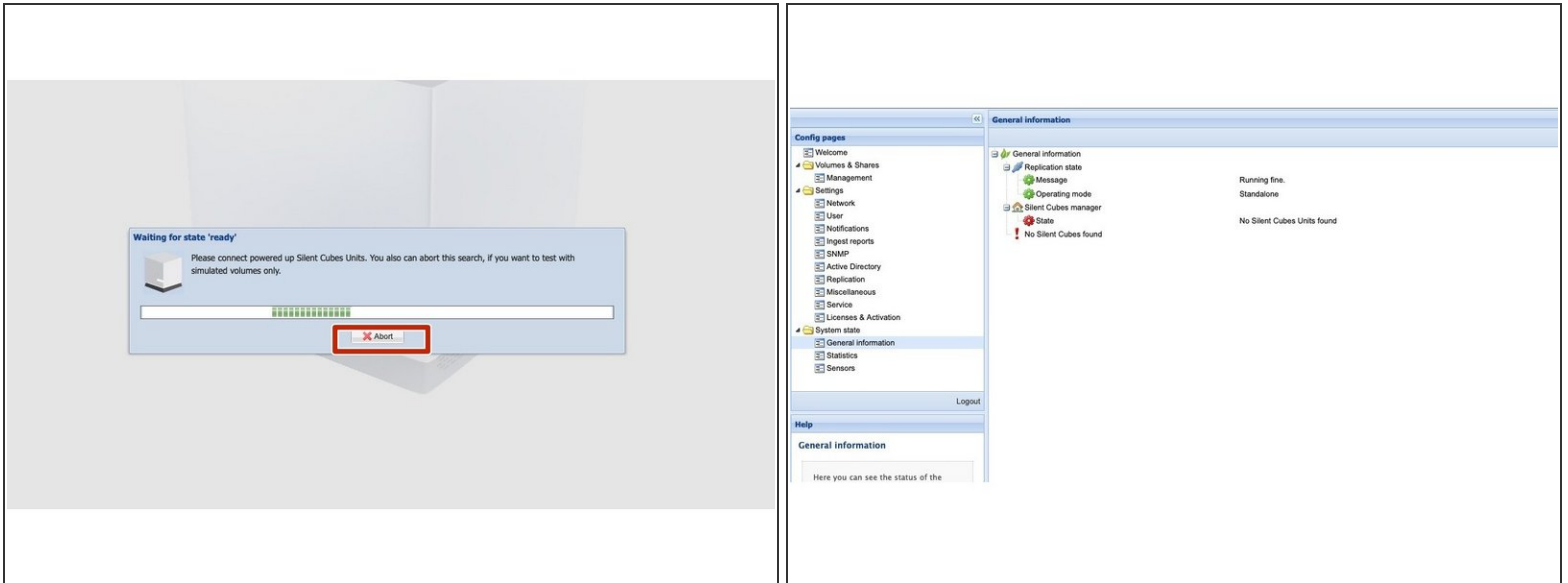
Step 8 — Setup And Configuration



⚠ **Connect the Data ports to your network. Do not connect a cube to the system yet.**

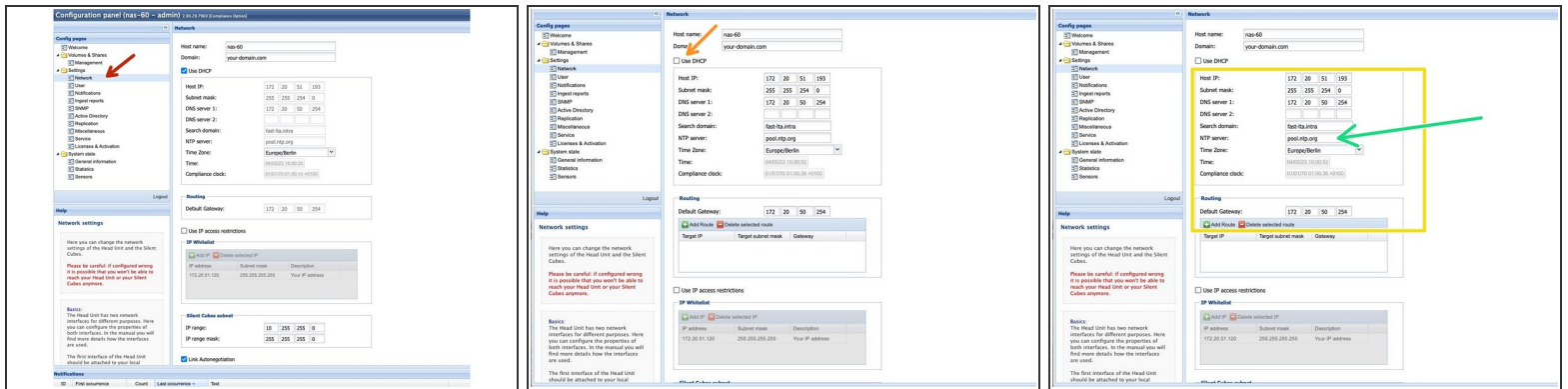
- ① Now connect both power supplies to a power outlet. The machine will now boot automatically. Depending on the type of head unit, this takes about 2 minutes.
- ① The network card of your laptop must be configured so that it receives an IP address via DHCP. This is the default setting in most cases.
- You should now receive an IP address from the cube network of the head unit. (10.255.255.x)
- Now use your browser and go to the address <https://10.255.255.254> and the login page of the system should appear.
- Now log in with the default account: **Account: admin, Password: adminadmin**

Step 9 — Setup And Configuration



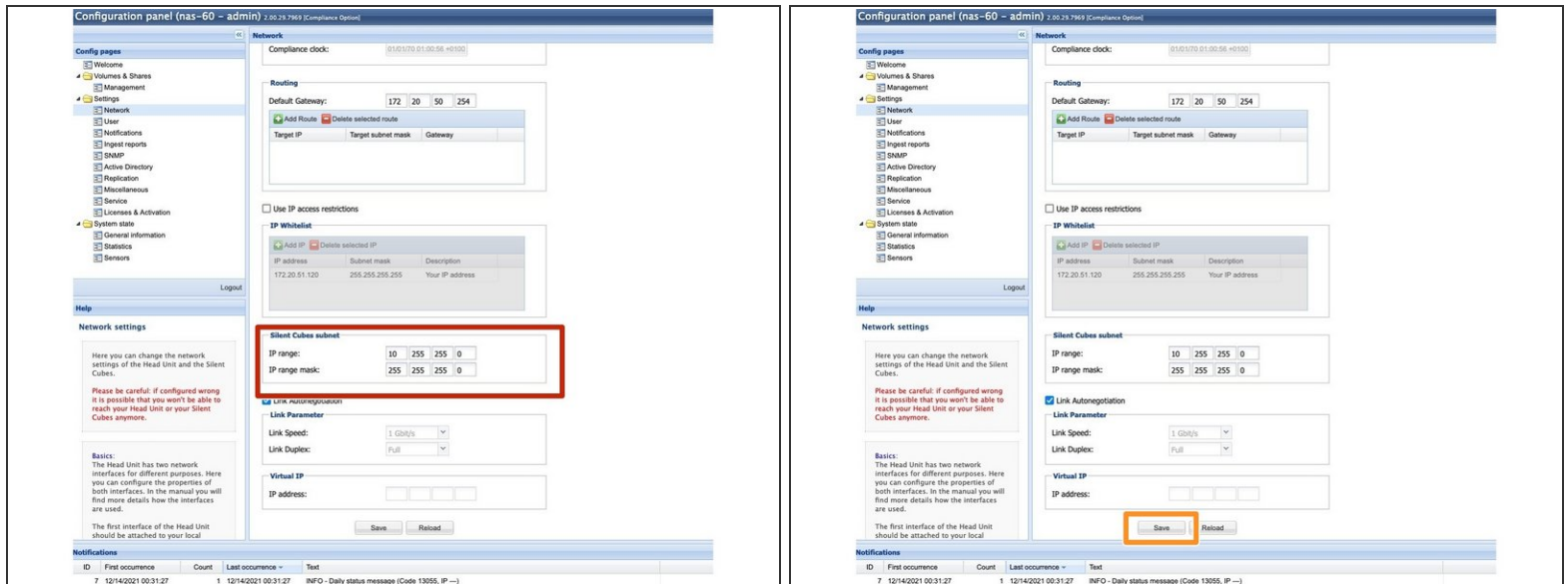
- As the head unit does not currently have a cube connected, it is looking for a cube. End the cube search with Abort
- ① You should now see the overview page of the system. There you will see an error message that no cube is connected - this can currently be ignored.

Step 10 — Setup Network



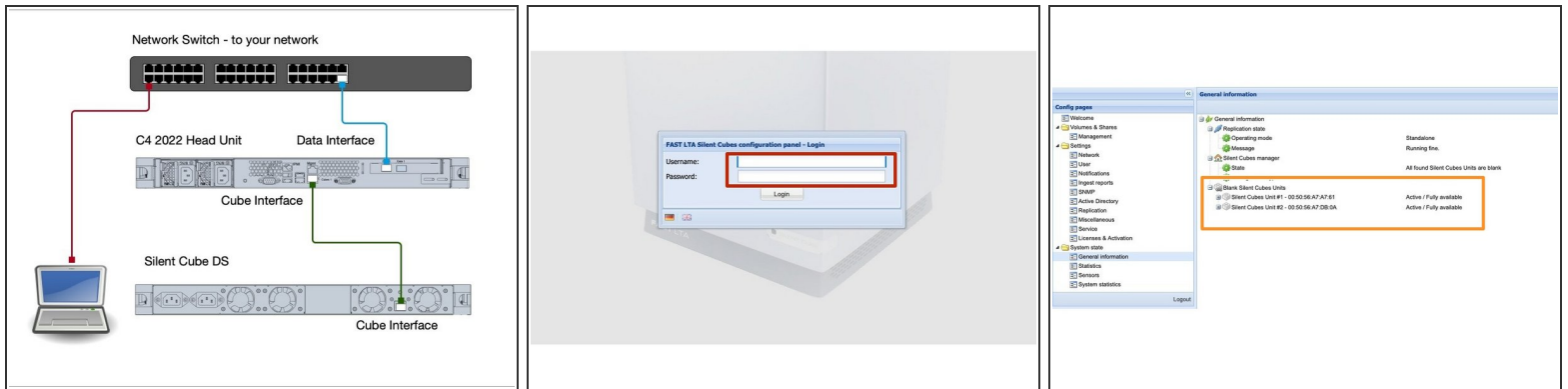
- Go to Network to configure the IP settings for the system
- ⚠ We recommend giving the system a fixed IP address. This is absolutely necessary for a replicated system!
- To do this, uncheck the "Use DHCP" box.
- Now set the required data such as IP address, network mask and gateway.
- Please note that a proper time server (NTP) is set. Since archiving data requires expiration times, a time server is essential.
 - The time server can be an NTP server in your network, or e.g. the DNS server or AD controller.

Step 11 — Setup Network



- If possible, the network segment for the silent cubes **should not be changed**. This is only necessary if it overlaps with the network segment in which the cube system is operated.
- Save the settings with "Save"

Step 12 — Checking The System



- Now connect the cube to the cube connector of the head unit.
- Now plug in the two power connections of the cube.
- The Cube will now boot. It takes about 2 minutes.
- Now you should be able to reach the system via <https://<Your IP address>> using the browser.
- Login to the system with admin / adminadmin
- You should now see a grey cube under General Information. (Grey = unused)

Step 13 — Additional Work For A Replicated System

- ❗ If you have a second system, you must also complete these steps for the second Head Unit.
- ⚠ To include the system in the replication network, no configuration other than the network and mail settings may be set up on the Secondary Head Unit. Otherwise, replication can no longer be set up!