Application Note – Replacing ACC Controller in Cluster Mode

FREUND R&D department is doing their best to make a long lasting and reliable products, but like with all electronics, faulty devices are possible anywhere.

Following text will describe how to replace a faulty Master and Slave access controller in a Cluster Mode.

Master Controller replacement

You can use **IP-INTEGRA Network Configurator** to find all the devices on the network.

If master controller has failed, easiest way to have a new master is to **upgrade** the slave controller to master controller.

Step 1

Log in to web interface of **Slave controller**. Go to **Devices** and confirm that **Master controller** status is **offline/failed**.

Step 2

Extract license USB stick from **Master controller** and plug it in the USB slot on the **Slave controller** that you want to upgrade to Master controller.

Step 3

In the web interface of **Slave controller**, confirm on the Dashboard that the **Cluster license ID has been recognized.**

Step 4

Go to **Settings** – **Cluster Settings** and click on **Upgrade to Master**. Confirmation dialogue will appear. Click **Yes** to confirm the upgrade.

NOTE: If the Upgrade to Master button is unavailable, make sure that the USB stick is properly inserted into the correct controller. Alternatively, make sure you are logged in to the correct controller if there are multiple Slave devices in a cluster.

Step 5

Confirm that the upgrade process has been successful. On the Dashboard in the top left corner you should see the message **Currently running as Master**.

Slave Controller replacement

You can use **IP-INTEGRA Network Configurator** to find all the devices on the network.

Step 1

Locate the **master controller** and log in to the web interface. In the menu on the left side of the screen click on **Devices**. The defective controller will display status **Failed**.

	Type	Device Name ⓘ	Host Name	IP Address	Cluster Info	Version	Doors	Status	Actions
›	▤	INT4D-207520	facc332	192.168.200.103 77.78.204.154	FREUND Demo Cluster 102 S	v1.15.28	Door 1 A B Door 2 A B Door 3 A B Door 4 A B	FAILED	⊘ ✏ ⇄ ⚙
›	▤	INT4D-076113	facc763	192.168.200.121 77.78.204.154	FREUND Demo Cluster 102 S	v1.15.28	Door 1 A B Door 2 A B	OK	⊘ ✏ ⚙
›	▤	INT4D-195435	facc326	192.168.1.199 77.78.204.154	FREUND Demo Cluster 102 S / E	v1.15.28	Door 1 A B Door 2 A B Door 3 A B Door 4 A B	OK	⊘ ✏ ⚙
›	▤	INT4D-186119 This device	facc1338	192.168.200.111 77.78.204.154	FREUND Demo Cluster 102 M	v1.15.28	Door 1 A B Door 2 A B Door 3 A B Door 4 A B	OK	✏ ⚙

Step 2

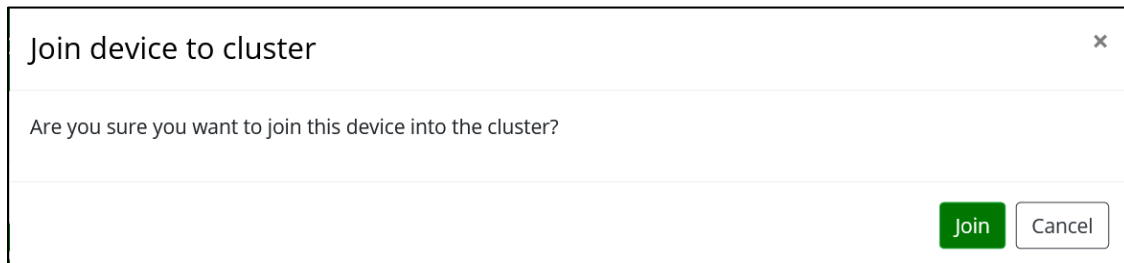Install the new slave controller and power it on.

Step 3

On the **master** web interface, click on **Devices** in the left side menu and then click on Scan Devices in the top right corner. Following screen will appear:

#	Host Name ⓘ	IP Address	Cluster Mode	Cluster Name	Software Version	DB Increment	Door count	Device State	Actions
0	facc1338	192.168.200.111	Master	Test Cluster	v1.15.0	24	4	OK	No actions avilable.
1	facc332	192.168.200.103	Stand Alone	None	v1.15.0	1	4	OK	→
2	facc321	192.168.200.131	Stand Alone	None	v1.14.11	1	2	OK	→

Under **Actions**, click on **Join Device** button. The dialogue asking for confirmation will appear, click on **Join** to confirm.

Join device to cluster	×
Are you sure you want to join this device into the cluster?	
	Join Cancel

During the process, the device might restart a couple of times and readers may produce a beeping sound. This is normal behavior during the cluster joining process.

Step 4

After the new slave controller has been added to the cluster, we need to **initiate the swap** for the broken controller.

In the **Devices** list, locate the **broken Slave controller**. Under **actions tab** you can find a "**Substitute"** button, marked in the picture bellow:

Click the **Substitute** button and a new prompt will open allowing you to select the replacement device, one we have just added in **Step 3.**

NOTE: 4-door controller can only be swapped for another 4-door controller!

Finally, **save the changes and apply them**. Allow the system to reconfigure the controllers, after which the new slave controller will inherit the settings from the broken one. No further action is required.

Step 5

To remove the defective controller from cluster, in the **Devices** section click on the **Remove device from cluster** button marked in the picture bellow located under **Actions tab**.