Application Note – Replacing ACC Controller in Cluster Mode



FREUND R&D department did 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 in order 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.

	You are currently running in Slave Mode. Any changes you make CANNOT be saved and applied. Please switch to Master. Devices or provide constant devices										
	Devices Devices										
	Туре	Device Name 🌘	Host Name	IP Address	Cluster Info	Version	Doors	Status	Actions		
>		INT4D-186119 This device	facc1338	192.168.200.111 77.78.204.154	Alem Cluster Test 26 5	v1.15.1	Door 1 AD Door 2 AD Door 3 AD Door 4 AD	ОК			
>		INT4D-207525	facc305	192.168.200.112 77.78.204.154	Alem Cluster Test 25 M	v1.15.1	Door 1 (A) Door 2 (A) Door 3 (A) Door 4 (A)	FAILED			
>		INT4D-217039	facc332	192.168.200.103 77.78.204.154	Alem Cluster Test 23 5	v1.15.1	Deer 1 1 Deer 2 1	ОК			

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.

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

You are currently running in Slave Mode. Any changes you make C Please switch to Master.	ANNOT be saved and applied.				
Currently running as Slave	ACCESS CONTROLLER	ACCESS CONTROLLER FACC1338			
	Cards	Groups		Zones	
SYSTEM STATUS	SYSTI	EM INFO	LICE	NSE INFO	
22.5%	HWID	05D4FF383033574157186119	FQDN	face1338.cloud.freund.ba	
•-•	Firmware / Hardware Version	1.23 / INT4D v1.2	Version	v1.15.1	
20%	MAC Address	02:81:f4:38:a4:9e	Base License	Enabled	
17.5%	IP Address	192.168.200.111 / 77.78.204.154	Additional License	Lic-face-cl1720-00113	
15%	Cluster Mode	Slave	Max Accounts	60	
•	Remote Support	Disabled	Max Cards	60	
12:5%	Proxy Server	Disabled Not Connected	Max External Devices	5	
Disk Usage Mem. Usage CPU Usage	Power Source	PoE	Cluster System	Enabled	
\square	Battery Status	Not Connected	Cluster License ID	face-cl1720	
11.73% 34% 14.5% 12.82 GB Free 0.32 GB Free	i)	C	A	:=	
Door 1 Reader 8 Reader 8	Zones	Access Times	Access Rules	Access Logs	
Door 2 Reader A Reader B					
Door 3 Reader A Reader B					
Door 4 Reader 8 Reader 8					
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LICENSE INFO	
FQDN	facc1338.cloud.freund.ba
Version	v1.15.1
Base License	Enabled
Additional License	Lic-facc-cl1720-00113
Max Accounts	60
Max Cards	60
Max External Devices	6
Cluster System	Enabled
Cluster License ID	facc-cl1720

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.

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

Dashboard syst	em stats and informatio	n				
Currently running	as Master		ACCESS CONTROLLER	ACCESS CONTROLLER FACC1338		
	SYSTEM STATUS		SYSTE	M INFO	LICEN	SE INFO
18%			HWID	05D4FF383033574157186119	FQDN	facc1338.cloud.freund.ba
			Firmware / Hardware Version	1.23 / (INT4D v1.2)	Version	v1.15.1
17%			MAC Address	02:81:f4:38:a4:9e	Base License	Enabled
16%	•		IP Address	192.168.200.111 / 77.78.204.154	Additional License	Lic-facc-cl1720-00113
15%			Cluster Mode	Master	Max Accounts	60
			Remote Support	Disabled	Max Cards	60
14%	12:50:20	12:50:25	Proxy Server	Disabled Not Connected	Max External Devices	6
Disk Usage	Mem. Usage	CPU Usage	Power Source	PoE	Cluster System	Enabled
			Battery Status	Not Connected	Cluster License ID	facc-cl1720
11.73% 12.82 GB Free Door 1 Door 2 Door 3 Door 4	33% 0.32 GB Free	15% Reader A Reader B Reader A Reader B Reader A Reader B Reader A Reader B	Zones	C Access Times	Access Rules	Access Logs
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Slave Controller replacement

You can use **IP-INTEGRA Network Configurator** in order 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**. We recommend not removing the defective controller until the replacement one has been installed and successfully configured. Reason for this is you will have to transfer some of the settings from the old controller to the new one.



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:

	Q Scanned devices										
									🛓 Export CSV		
#	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	ок	No actions avilable.		
1	facc332	192.168.200.103	Stand Alone	None	v1.15.0	1	4	ОК	+)		
2	facc321	192.168.200.131	Stand Alone	None	v1.14.11	1	2	ОК	÷		

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 couple of times and readers may produce beeping sound. This is normal behavior during the cluster joining process.

After the new slave controller has been added to the cluster, it will automatically receive user and card information from the master controller. However, you are still required to assign the doors from the new slave controller to the correct zones.

To do this, while logged in on master controller web interface, click on Zones button in the menu on the left side of the screen. Check the zone that the old controller's doors have been assigned to and replace these doors with ones from the new controller.

Edit zone's	s doors		×
	Assigned Groups		
	INT4D-125727	Door 1	
	INT4D-125727	Door 2	
	INT4D-125727	Door 3	
	INT4D-125727	Door 4	
	INT4D-207525	Door 1	
	INT4D-207525	Door 2	
	INT4D-207525	Door 3	
	INT4D-207525	Door 4	
	Unassigned Groups		
	INT4D-217039	Door 1	+
	INT4D-217039	Door 2	+
	INT4D-217039	Door 3	+
	INT4D-217039	Door 4	+
			Save Changes Cancel

NOTE: If you have been using custom name doors, you will have to rename the doors of the new controller as they will have the default ones. This can be done by clicking on **Devices** in the menu, and then clicking on **Edit door** button located under **Actions** tab.

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**.

Dev	Devices Overview of connected devices									
	Devices							evices 🗸		
	Туре	Device Name 🕚	Host Name	IP Address	Cluster Info	Version	Doors	Status	Actions	
>		INT4D-125727 This device	facc1338	192.168.200.111 77.78.204.154	Test Cluster 23 M	v1.15.0	Door 1 🛕 Door 2 🛕 Door 3 👌 Door 4 🗚	ОК		
>		INT4D-207525	facc305	192.168.200.112 77.78.204.154	Test Cluster 23 5	v1.15.0	Door 1 AB Door 2 AB Door 3 AB Door 4 AB	FAILED	<u>o</u> *	
>		INT4D-217039	facc332	192.168.200.103 77.78.204.154	Test Cluster 23 S	v1.15.0	Door 1 AB Door 2 AB Door 3 AB Door 4 AB	ок	0 🌶	