

Application Note AN0104: icon firmware update

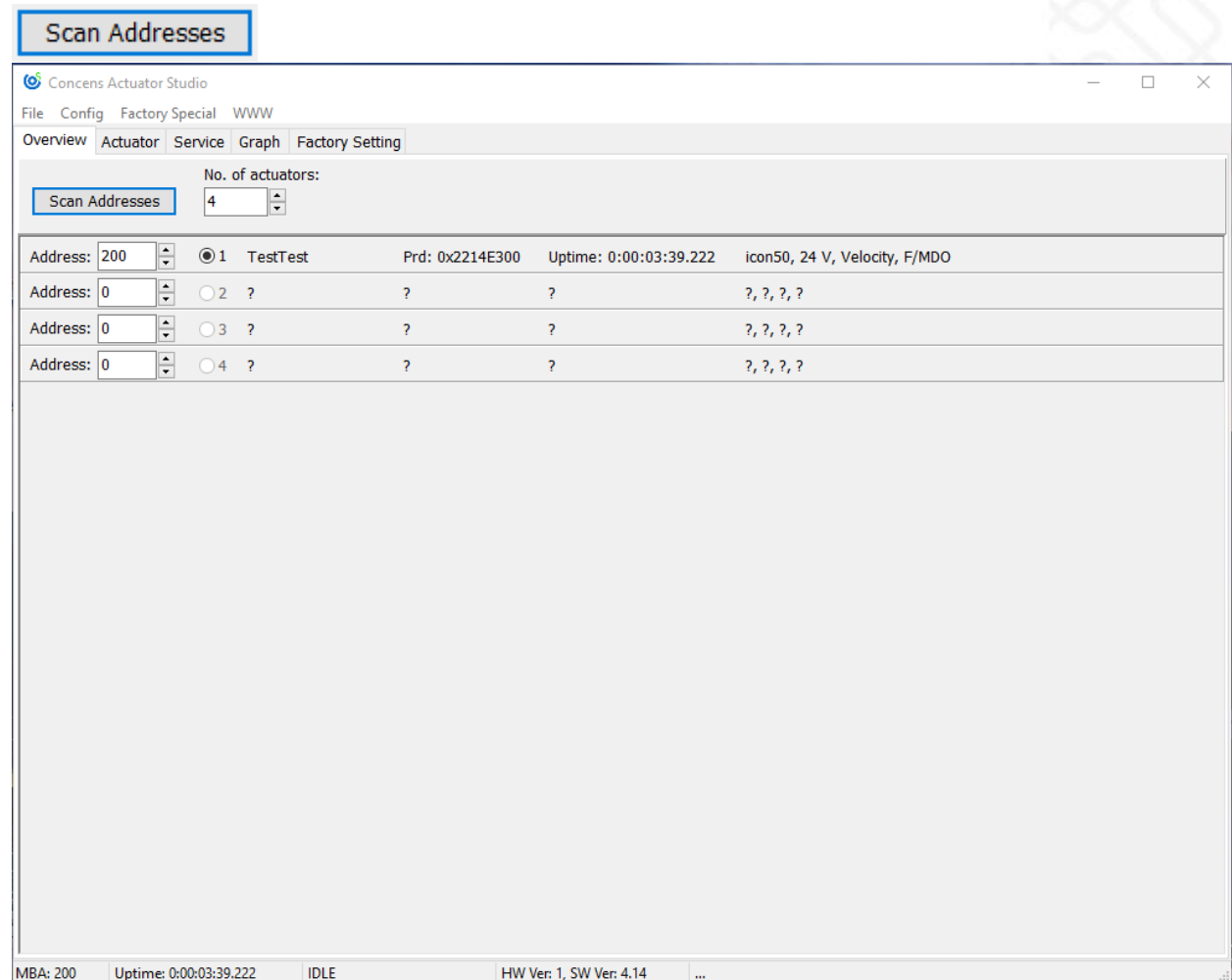
Introduction

This application note describes how to update firmware in a Concens icon actuator. Please be sure always to use the latest version of Concens Actuator Studio (CAS). It is not possible to “downgrade” an icon to an older version of the firmware, which is already installed.

Step 1

Start the CAS software. If this the first time CAS is started on a PC, the drivers will automatically be downloaded from the internet.

Press the “Scan Addresses” button



The current firmware-version in the actuator is shown:

HW Ver: 1, SW Ver: 4.14

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Step 2

Go to the “Actuator” tab

The screenshot shows the 'Concents Actuator Studio' window with the 'Actuator' tab selected. The interface includes a menu bar (File, Config, Factory Special, WWW), a tab bar (Overview, Actuator, Service, Graph, Factory Setting), and a status bar at the bottom. The main area displays the following information:

- Pos: 150**, **Run State: IDLE**, **Current: 0 mA**
- ☒ **Read and Update**, **Stop Reason: BUS ERROR**, **Distance: 150**
- Parameters** tab with sub-tabs: **Run**, **Run Parallel**, **Extra**

The parameters are organized into columns:

Speed [%]	Current Cutoff [mA], Inwards	H/L Min Speed [% of H/L speed]	Ramp acceleration [ms]
100	6000	50	1333
Home Offset [steps]	Current Cutoff [mA], Outwards	H/L Max Current [mA]	Ramp deceleration [ms]
50	6000	1000	1333
Ramp Down before Target [steps]	Voltage Cutoff [mV], Low	H/L Check Time Limit [ms]	Ramp quick deceleration [ms]
0	9000	1000	666
Safe Zone OUT [steps]	Voltage Cutoff [mV], High	H/L Timeout [s]	
0	29000	240	
Safe Zone IN [steps]	Max. Stroke Length [steps]		
0	44790		

Additional parameters on the right side:

- Maximum speed [ticks/s]: 450
- Deadband speed [ticks/s]: 10
- Check Delay, Current, Velocity change [ms]: 250
- Max Current Time Limit [ms]: 250
- Current offset calibration [mA]: 200

A **Save/Update** button is located at the bottom center of the parameter grid.

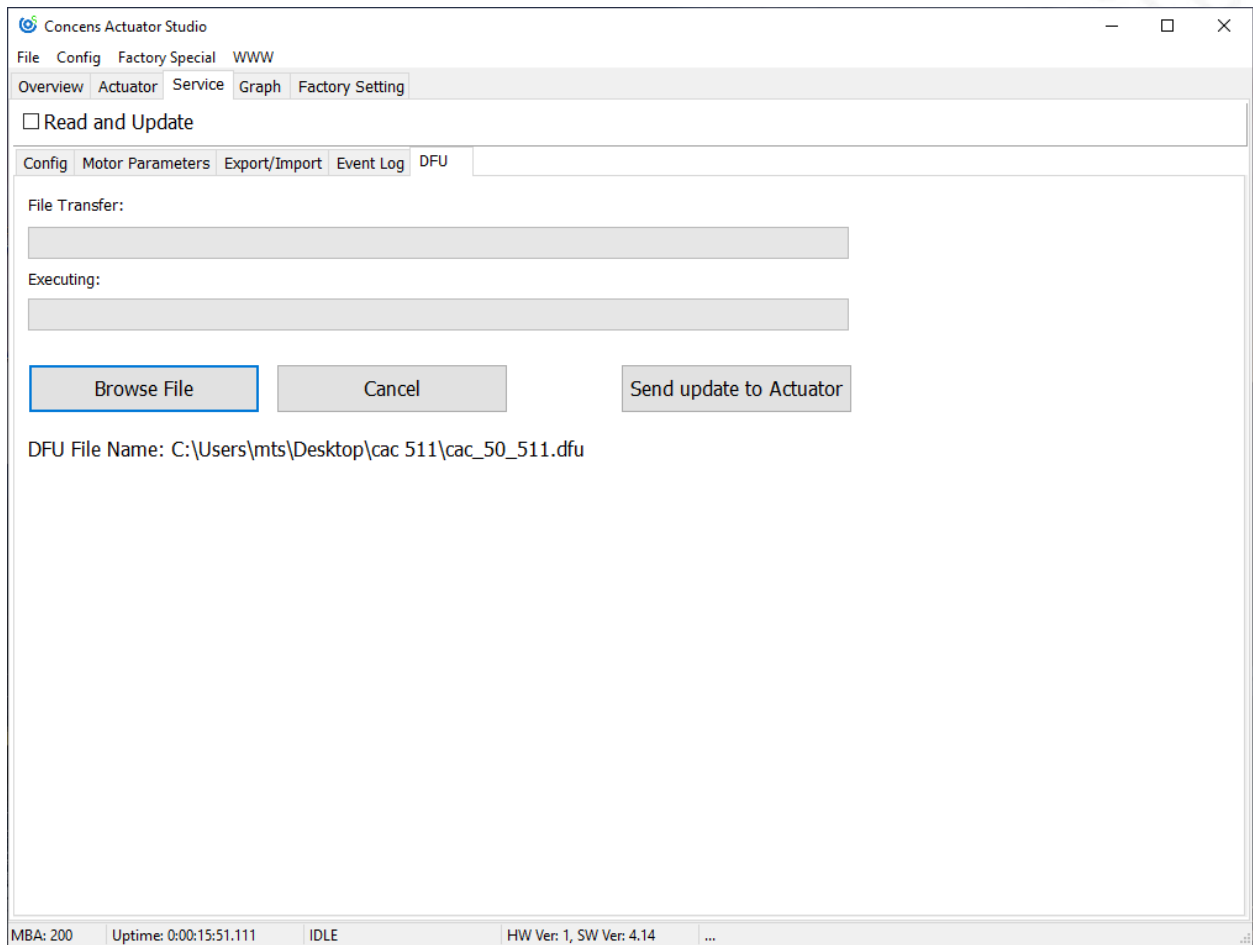
The status bar at the bottom shows: MBA: 200, Uptime: 0:00:12:57.485, IDLE, HW Ver: 1, SW Ver: 4.14, ...

Note: When performing a “full update”, i.e. going from one major firmware number to another, some parameters will be set to default. Please remember to save the data by taking a screenshot or write down the parameters.

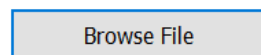
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Step 3

Go to “Service” tab



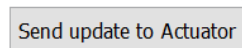
Press the “Browse File”-button



Find the relevant DFU-file for updating the icon.

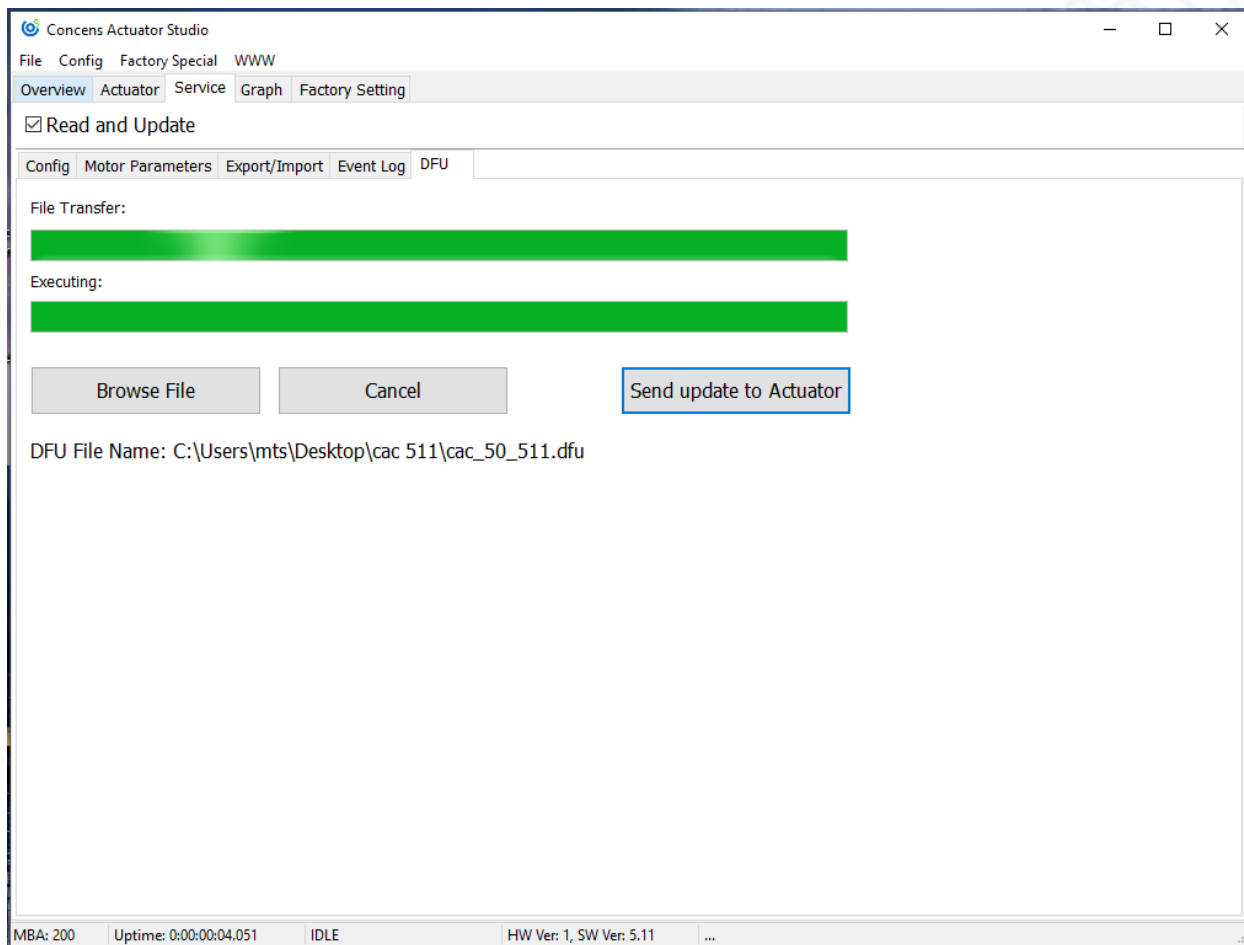
Note: If selecting the wrong icon DFU file, the actuator may need to go to service.

Now click “Send update to Actuator”

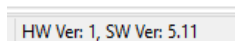


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When booth bars are green, the update is completed.



Verify the update by checking the version number in the bottom of the window



The actuator is now upgraded and ready to use!

Please contact support@concens.com for further information.

Concents A/S
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