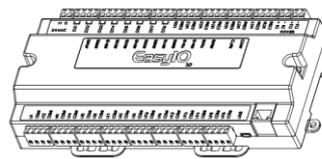


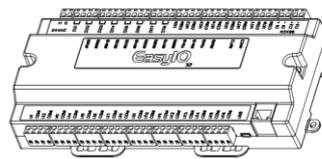
## EasyIO FS Series Firmware Upgrade User Guide



## Document Change Log

**17<sup>th</sup> Dec 2018**

Updated disclaimer and support channel emails addresses



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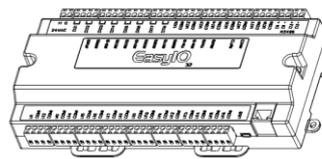
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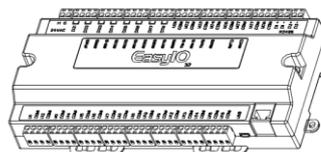
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Europe Support : [support@easyio.eu](mailto:support@easyio.eu)



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## Introduction

All products in the FS Series are equipped with a built-in “boot-loader”. This feature is designed to save time and effort when updating the controller firmware. The following new features have been added to the FS Series boot-loader:

- Boot-loader activation can now be carried out remotely. Manual activation of the boot-loader “service” and “reset” buttons is no longer required.
- Firmware upgrading now can be carried out without physical site assistance or (in most cases) attendance.
- Firmware file transfer is achieved using a 3<sup>rd</sup> party FTP client application of your choice.

A third party FTP client application must be used for file transfer. In this user guide, the open source (GNU GPL) FTP program for Windows “FileZilla” is used as an example.

If “FileZilla” is required, application is available for download at <https://filezilla-project.org/>

## General Information

EasyIO introduce EasyIO FS series which is a new series of controllers in the family.

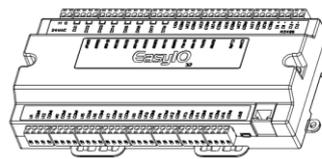
Model	Firmware Version Numbering	Remarks
EasyIO FS	V3.0bxx , where xx is the build number.	V3.0 is referring to the FS hardware.

## Precaution

***Tech Tip: -\*\*Please ensure you backup the controller Sedona App before running the firmware upgrade as the Sedona App in the controller will be erased during the flashing procedure\*\****

***Tech Tip: -\*\*during firmware flashing, no power interruption is allowed. Any power interruption will damage the controller and if this occurs the controller cannot be recovered and controller is required to shipped back to EasyIO for recovery process. Ensure the controller is supplied with a constant 24Vac or 24Vdc supply during the flashing procedure\*\****

***\*\*Firmware upgrade will not change the IP address of the device.\*\****



## Login Details for FTP

---

By default the EasyIO FS Series controller’s login details are as below. This login only allows for firmware upgrade. It will point to the “*easyio*” directory.

### FTP access

Username : **easyio**  
Password : 123456  
Port : 21  
Protocol : ftp

Default IP address : 192.168.10.12  
Default Subnet : 255.255.255.0  
Default Gateway : 192.168.10.1

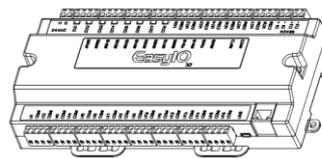
### Note:

*In order to login, the host PC (laptop) has to be in the same subnet.*

### Example:

*IP address : 192.168.10.123  
Subnet : 255.255.255.0*

*If user have change IP address for the controller, the FTP client will use the last change IP address.*



# Firmware Upgrade Procedure

## Web browser

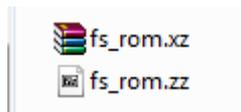
### Step 1

Obtain the required files from respective support channel.

The firmware file is a single file with the name of **fs\_rom.xz** OR **fs\_rom.zz**

Dot xz (\*.xz) and Dot zz (\*.zz) is a type of compression file format recognize by the FS Series controller as a firmware file.

DO NOT edit or modify the extension or content. This damaged the file compression.



### Step 2

Launch web browser.

Connect to the controller using the below details.

Only user with admin access right able to perform firmware flashing via web browser.

Default login credentials are as below;

IP address : 192.168.10.12

Username : admin

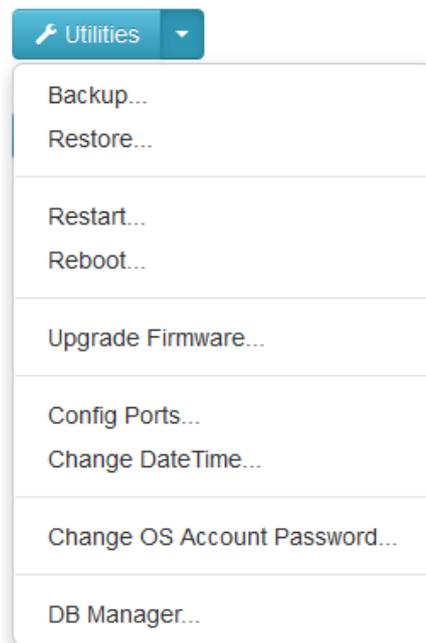
Password : hellocpt

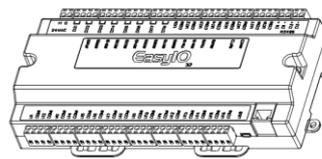
### Step 3a

If it's an existing EasyIO FS Series controller, you will be brought into the CPT graphics page.

Click at the utilities button located at the side bar.

Select the firmware upgrade option.





### Step 3b

If this is a brand new controller, you will be brought to the utility page.

**Restore** sedona app & graphics

**No backup available.**

#### Firmware Upgrade

Firmware File:  No file selected.

### Step 4

Browse the firmware file.  
Once done, click Upgrade.

### Step 5

Once file is transfer the controller will perform firmware upgrade and a reboot is send.  
File transfer rate is subject to network speed.

### Step 6

The process of firmware upgrade after the firmware transfer is completed is approx 1 min.  
The browser will time out and redirect to login page once the process is completed.

## File Transfer Client (FTP)

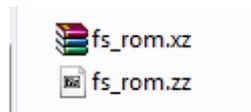
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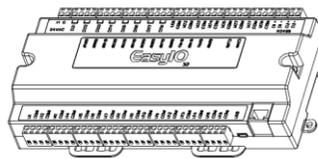


### Step 2

Launch FTP client software, in this case Filezilla is being used.  
Put in the login details as below and connect.

Username : easyio  
Password : 123456  
Port : 21

Successful connection will display a message at the ftp client as below.

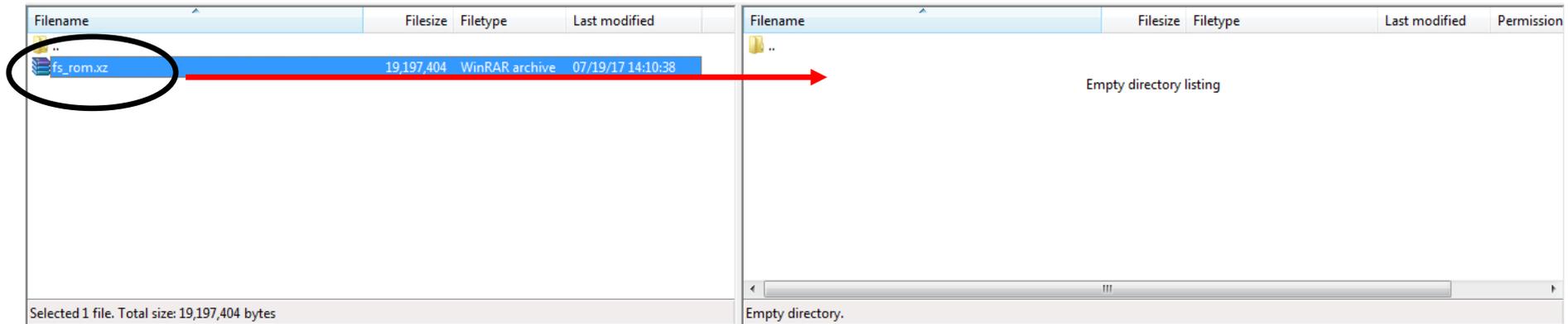


Host: 192.168.10.12    Username: easyio    Password: ●●●●●●    Port: 21    Quickconnect ▼

Status: Connecting to 192.168.10.12:21...  
Status: Connection established, waiting for welcome message...  
Status: Insecure server, it does not support FTP over TLS.  
Status: Connected  
Status: Retrieving directory listing...  
Status: Directory listing of "/" successful

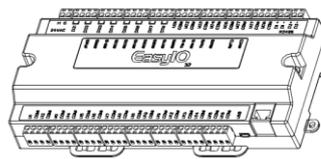
**Step 3**

The firmware file which is *fs\_rom.xz* needs to be copied into the root directory.  
The directory is empty. Do not worry.



**\*\*3 Important Tech Tips\*\***

Files need to be transfer/copied into the root directory of easyio ftp login. **DO NOT** create a subfolder.



**Step 4**

This is a very **IMPORTANT STEP**.

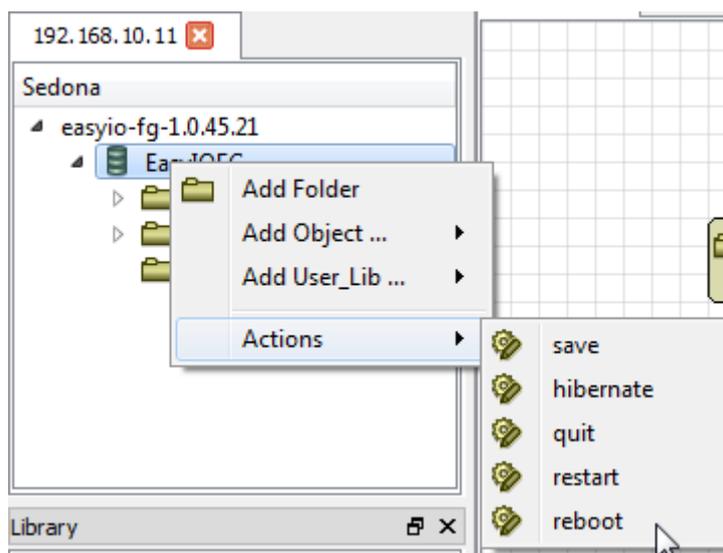
Once the file is successfully transferred to the EasyIO FS, please wait for approx **30 seconds** before proceed to the next step.

**Step 5**

Login in to the controller with CPT tool.  
Perform a reboot action to the device.

**\*\*Tech Tip** - The watchdog jumper must be at “ON” position for the controller to automatically reboot. By default the controller is shipped with the watchdog jumper in the ON position.

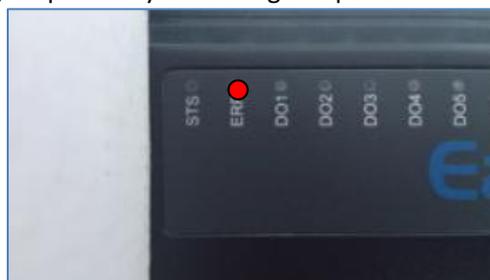
Optionally perform a power cycle to the controller by removing the power terminal for 5 seconds and repower it again.



*Reboot the controller via the CPT tool.*

**Step 6**

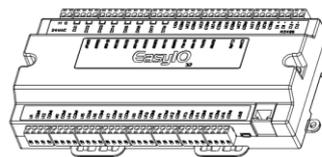
The controller will reboot and the process of firmware flashing/upgrade will start. The controller Error LED will light up steadily ON during this period. This is normal.



The process will take approximately 1 minute. Do not attempt to connect to the controller during this period. **DO NOT CYCLE POWER TO THE CONTROLLER DURING THIS PERIOD.**

It is important to wait and let the flashing/reboot process complete.

Wait for the Error LED (ERR) to turn off before powering off or connecting with Sedona tools.



Failure to follow this precautionary instruction may damage the controller requiring it to be returned back to factory for repairs or replacement.

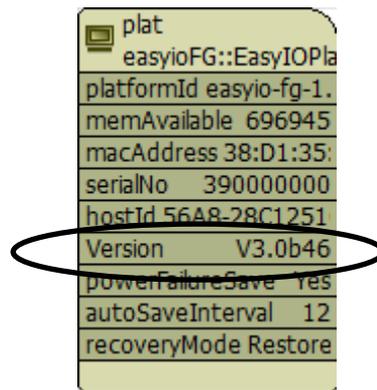
**\*\* IMPORTANT: DO NOT LOSE POWER DURING THIS PERIOD. POWER LOSS DURING FLASHING WILL RESULT IN PERMANENT DAMAGE TO THE CONTROLLER.\*\***

**Step 8**

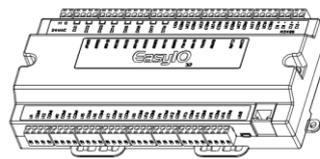
Once the controller firmware upgrade is complete, the “Error” LED (ERR) will go OFF and the controller will start the Sedona VM.

**Step 9**

To verify that the controller update is successful, login to Sedona and look at the “platform” (*plat*) in the service folder.



*Version property slot shows the version number.  
 The Version noted in the platform object should match the Version downloaded.  
 V3.0bxx = EasyIO FS*



## Kits version VS Firmware version

Every firmware comes with a new set of Sedona kits that matches its firmware.

Kits for FG+ are fully compatible with FS Series.

It is very important that you make sure you install/run your apps with the latest and correct kits against its firmware.

The Sedona kit version numbering is constructed in five (5) segments as follows;

Example: easyioFGxxx 1.0.45.yy.zz

Segment 1	Segment 2	Segment 3	Segment 4	Segment 5
easyioFG	xxx	1.0.45	yy	zz
Represents the kit is only applicable for the EasyIO FG Series	kit name example : FGSql	Sedona platform build	<b>This is the firmware version supported. This number will be incremented with each firmware release.</b>	<b>Kit revision number This number will be incremented with each kit enhancement/release.</b>

The following example is intended to assist in understanding the new numbering scheme.

This example is for the kit “**easyioFGBACnet 1.0.45.52.48**”.

Segment 1	Segment 2	Segment 3	Segment 4	Segment 5
easyioFG	BACnet	1.0.45	52	48

**Segment 1 - “easyioFG”**- identifies that the kit is for FG Series Controller use only

**Segment 2 - “BACnet”** – identifies that the kit is the BACnet Kit

**Segment 3 - “1.0.45”** –identifies the Sedona platform build number

**Segment 4 - “.52”** –identifies the *Sedona firmware version number* and therefore denotes the compatible controller firmware build (or version) number. In this case the *Sedona firmware version number* is “47” and therefore is only compatible with firmware build (or Firmware version number) b47 of the FG series controller firmware.

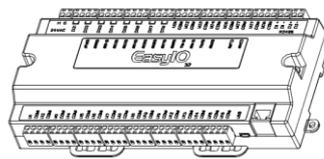
**Remember that the Controller Firmware Version and the Sedona Kit Version must match. In this example the Controller Firmware Version (or Build) number must be build “52”.**

**Segment 5 - “.48”** –identifies the *kit revision number*. In this case the *revision number* is revision 48.

Please note the importance of the difference between the Sedona Kit VERSION number and the Sedona Kit REVISION number.

The Controller Firmware VERSION/BUILD number must be the same as the Sedona Kit VERSION number.

The example below shows both a compatible and incompatible example.



Firmware Version	Sedona Kit version	Remark
V3.0b52	1.0.45.52.48	Compatible
V3.0b52	1.0.45.45.27	Not compatible

## Technical Support

For technical issue, please contact respective region support channel.

Worldwide and Asia Pacific Support : [support@easyio.com](mailto:support@easyio.com)  
 Americas Support : [support@easyio.pro](mailto:support@easyio.pro)  
 Europe Support : [support@easyio.eu](mailto:support@easyio.eu)