In December 2010 Spirit IT has released a new version of the Flow-X Operating System. This version contains a number of improvements and Spirit IT suggests that any Flow-X products that were shipped before this date are upgraded to this new OS.

First check the current version

The update applies for Flow-X/M flow modules as well as the -X/P panel mounted flow computers with any of the following OS versions:

- 2.57
- 4.60
- 6.62
- 9.66
- 15.52
- 16.53

To check the OS version on your flow computer access the following display: System\Versions

For a Flow-X/M flow module that resides in a Flow-X/P please use the local LCD display to check the version or alternatively call up the display for the specific module in your web browser (System\Modules\<flow module>\Versions).

For other versions than the ones listed above, there is no need to upgrade the OS.
Connection to a Flow-X/S

For a flow module that resides in a Flow-X/S backplane your computer needs to have an Ethernet connection and a RS232 connection to COM1 of the flow module is required as indicated in the following picture.

For RS232 connect to following pins on connector block B:
- Pin 31 : Ground / Common
- Pin 33 : Tx (shall be Rx on you computer side)
- Pin 35 : Rx (shall be Tx on you computer side)

Connections to Flow-X/S

Connection to a flow module in a Flow-X/P

For a flow module that resides in a Flow-X/P backplane your computer needs to have an Ethernet connection and a RS232 connection to COM1 of the flow module itself (and not to COM1 of the Flow-XP) is required as indicated in the following picture.

A 37 pin D-Sub terminal block and cable is required for this purpose. The cable needs to be connected to X1A for module 1, X2A for module etc.

For RS232 connect to following pins on the terminal block:
- Pin 2 : Tx (shall be Rx on you computer side)
- Pin 4 : Rx (shall be Tx on you computer side)
- Pin 21 : Ground / Common

Connections to module in a Flow-X/P

Connection to the Flow-X/P itself

To upgrade the OS on the Flow-X/P itself your computer needs to have an Ethernet connection and a RS232 connection to COM1 of the Flow-XP as indicated in the following picture.

Note: A standard RS232 cable requires an additional null modem.

Connections to a Flow-X/P itself
OS upgrade procedure

**STEP 1: Back up the application**
The OS upgrade program will **clear the entire memory** of the Flow-X/P or Flow-X/M. Make sure to **backup** the flow-X application by first reading the application from the Flow-X and store it to your disc.

**STEP 2: Run the OS upgrade program**
After the connection is made you can start the OS upgrade program.

![Image of OS upgrade procedure](image)

This program will guide you through the necessary steps.

In case the OS upgrade program does not finish normally, please:

- temporarily disable all network connections except the one used to connect to the Flow-X
- temporarily disable the firewall on your computer

**STEP 3: Upgrade all modules**
For a Flow-X/P execute the step 2 for the X/P itself and all its modules.

**STEP 4: Write application back to flow computer**
After the OS upgrade has completed, write the application back to the Flow-X.