

ars

DOOSAN FLEXIBOWL PLUGIN



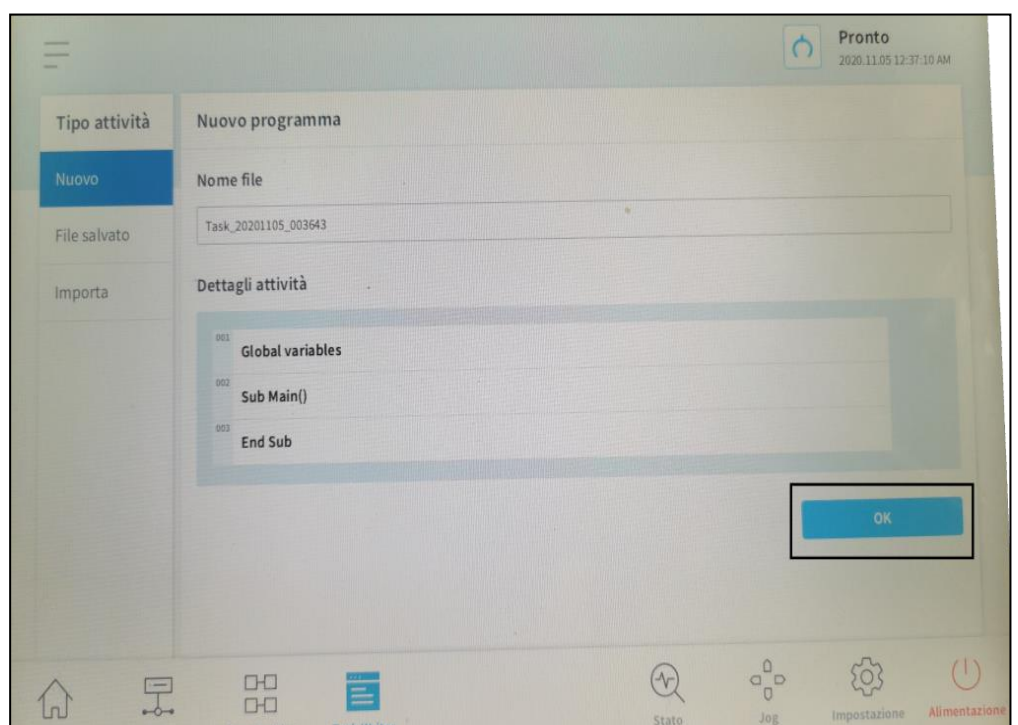
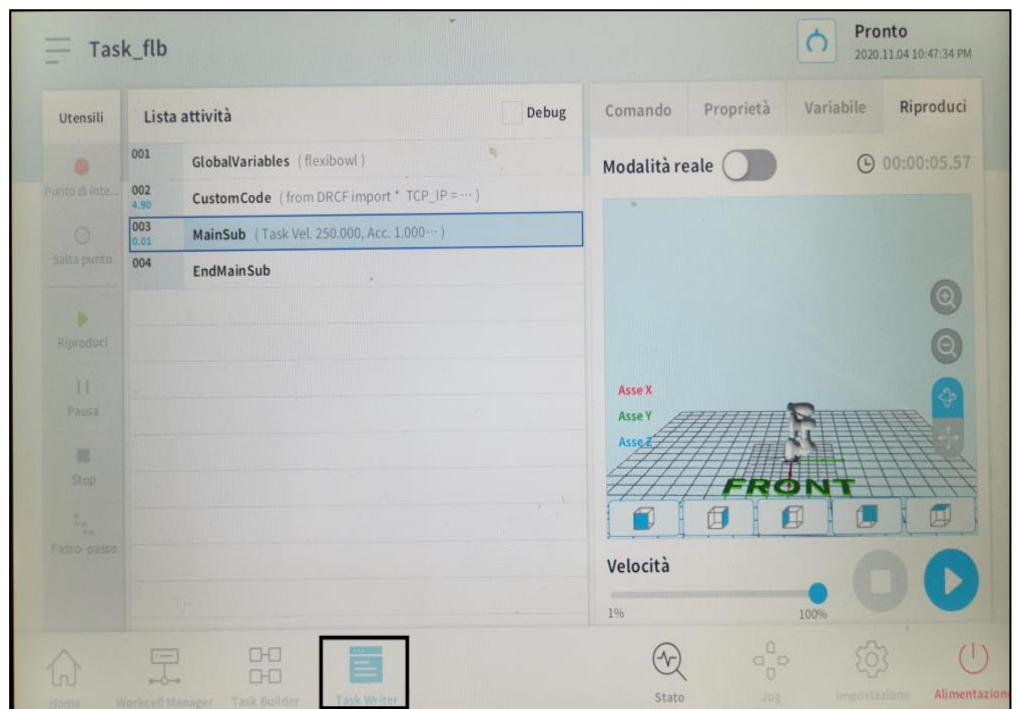
This Plugin was developed with the idea of communicating quickly and safely with FlexiBowl® through Doosan robots. The Plugin does not require an additional license.

FlexiBowl®



STEP 1:

Create a program in Task Writer



STEP 2:

After creating the program, the global variables to manage FlexiBowl must be defined.

The names of the variables are Case Sensitive.

4 variables must be created:

Global_ip_flb

Which stores the IP address for FlexiBowl (input variable)

Global_command_flb

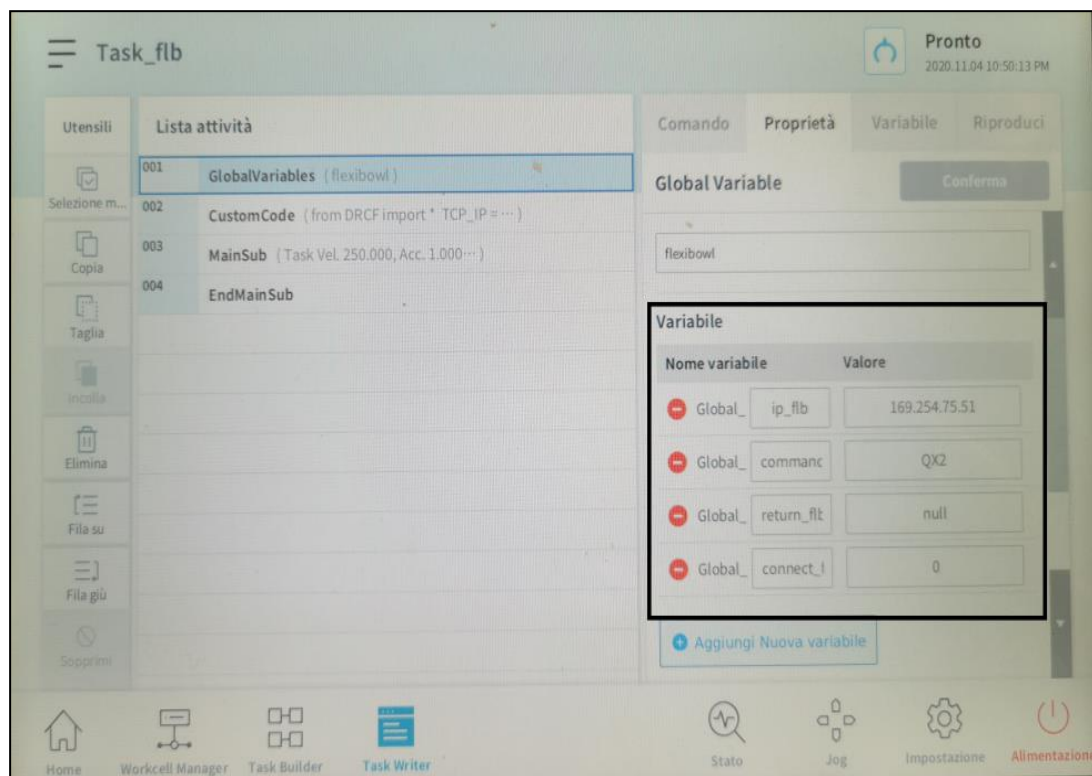
Which stores the command that FlexiBowl® will have to interpret (input variable)

Global_connect_flb

Which, following the execution of the script, will be 1 if the connection with FlexiBowl was successful; or 0 if the connection was not successful. (output variable)

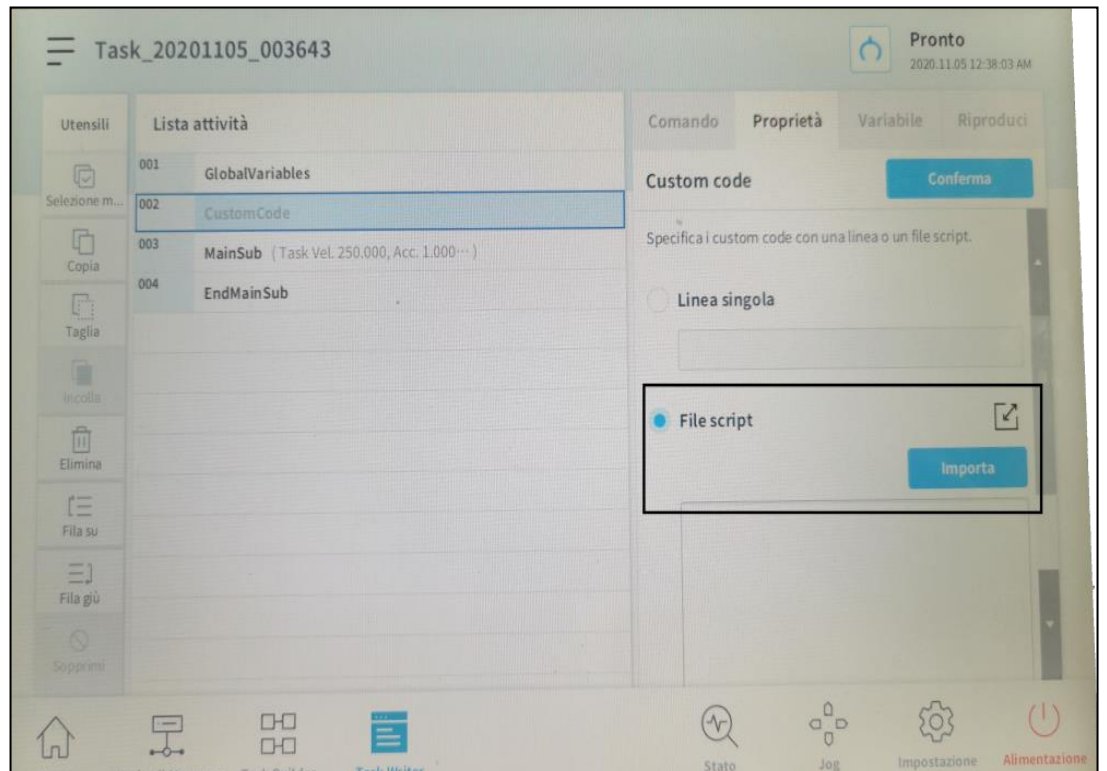
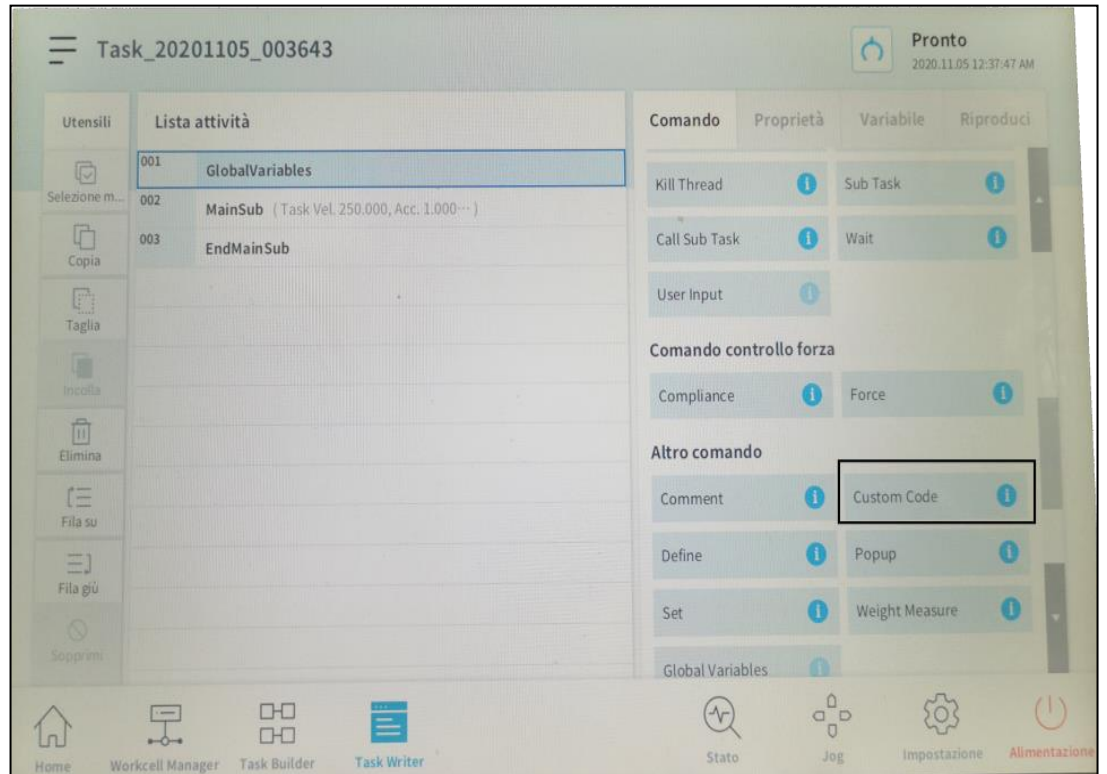
Global_return_flb

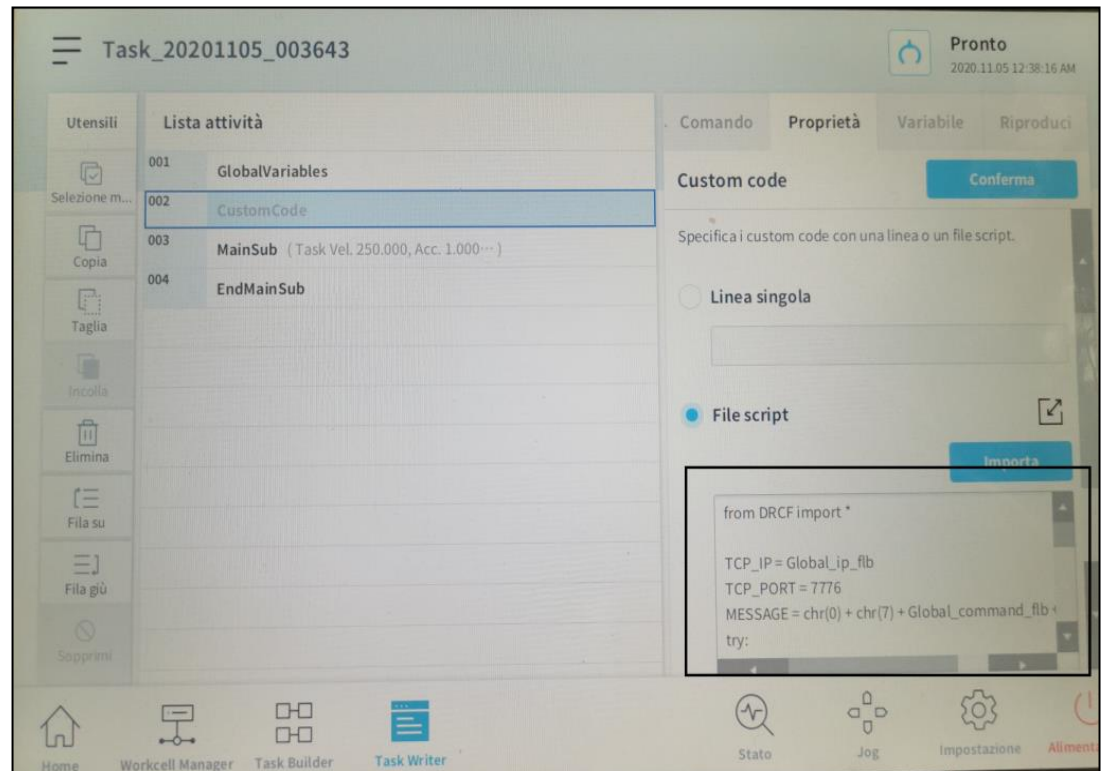
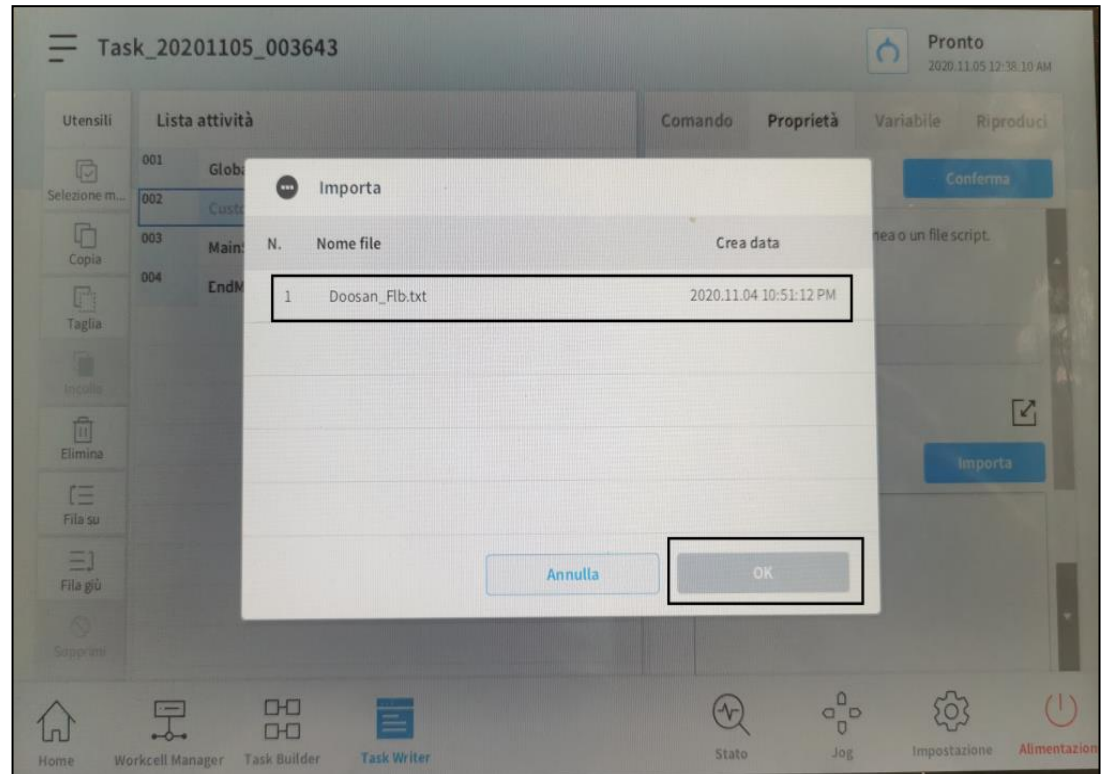
Which, following the execution of the script, will display the return value from FlexiBowl, for example if a movement command is sent, you will receive DONE as the answer from FlexiBowl; whereas, if a string of commands is sent to interrogate the status of FlexiBowl (like AL active alarms), in this script output variable you will receive the answer
From FlexiBowl (AL=00000)
(Output variable)



STEP 3:

Now a **CustomCode** must be created in the list of activities, where a text file Doosan_flb.txt must be imported. Insert the Doosan_flb.txt file in a USB key. Connect the USB to the robot controller. From the CustomCode's properties, select FileScript; then on "Import" select the usb, select the Doosan_flb.txt file and then "OK". At this point, the Doosan_flb.txt file will be imported directly on CustomCode.

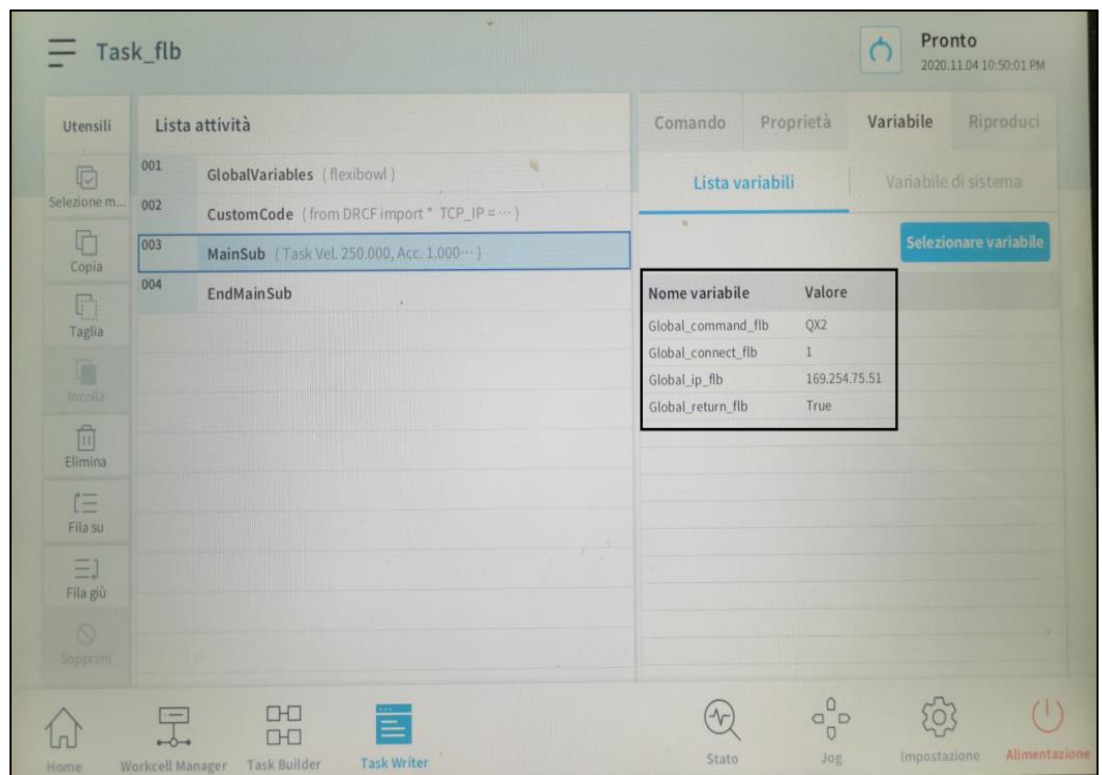




STEP 4:

Now by setting the right FlexiBowl IP in the **Global_ip_flb** variable and by setting the command – for example “QX2” – in the variable **Global_command_flb**, FlexiBowl will activate by executing the task.

In the image underneath you can also see the output variables from the script to carry out the debug.



Command list

Action	Description
MOVE	Moves the feeder the current parameters.
MOVE-FLIP	Moves the feeder and activates Flip simultaneously
MOVE-BLOW-FLIP	Moves the feeder and activates Flip and blow simultaneously
MOVE-BLOW	Moves the feeder and activates Flip simultaneously
SHAKE	Shakes the feeder with the current parameters
LIGHT ON	Light on
LIGHT OFF	Light off
FLIP	Flip
BLOW	Blow
QUICK_EMPTYING	Quick Emptying Option
RESET_ALARM	Reset Alarm and enable the motor

Command	Description
QX2	Move
QX3	Move - Flip
QX4	Move - Blow - Flip
QX5	Move - Blow
QX5	Shake
QX7	Light on
QX8	Light off
QX9	Flip
QX10	Blow
QX11	Quick Emptying Option
QX12	Reset Alarm
AL	Status Allarm

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