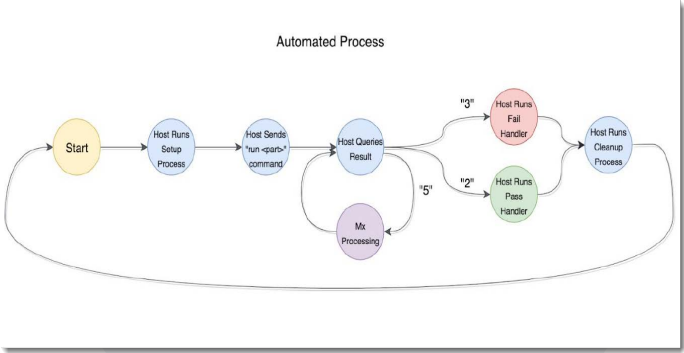


M3 Remote Control (RC)

ASCII Text Over TCP

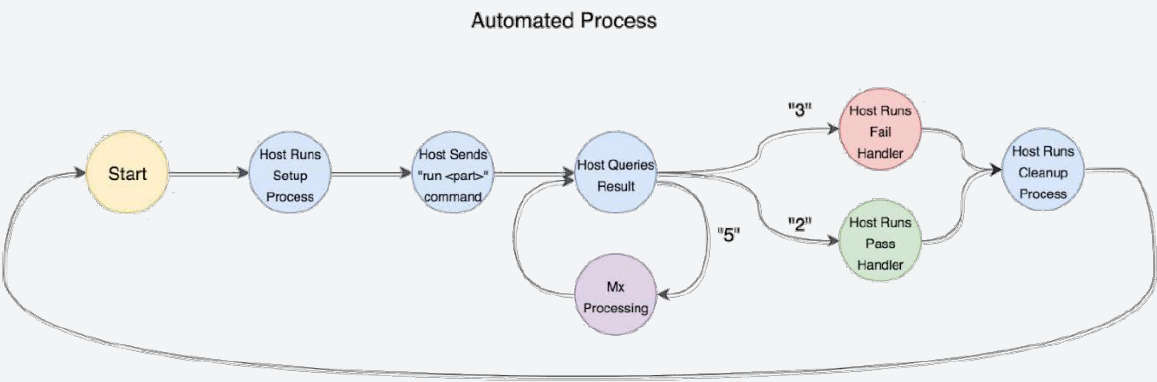


Purpose and Scope

The intent of this document is to outline a simple explanation and use case for the new *Remote Control* (RC) module in the M3 software. This new RC *add-on* module enables and supports automated functionality for the M3, allowing the software to act as a measurement sensor in a broader automated environment. Using the existing mlxscript library, commands can be sent and received via an open TCP/IP socket between the client and host systems.

Description

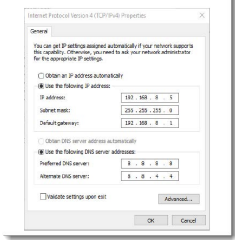
Using ASCII text commands sent through a TCP socket, the M3 will send or receive commands, and process and respond with a confirmation or result. This interface uses standard network protocol, however typically requires that the M3 PC have a firewall permission for port 13000, to enable communication with the host device.



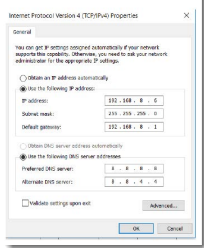
Example

As an example, a measurement piece could be loaded, measured, and sorted based on feedback from the M3 software. A standard script file would make use of the supported M3 commands to interact with the M3. Additionally, results data, program status, pass/fail state, and other environment variables could be made available to the automated environment, queried directly from the M3 remotely.

Server Side [Control System]:



Client Side [M3]:



Supported TCP Commands

Command	Description
Run	Will open a part file located in the parts folder. One parameter <filename>, without file extension. Example: <i>run <filename></i>
Results	Returns the results of the previously run part as an integer. 1= error, 2 = pass, 3 = fail, 10 = "test results pending". No parameters. Example: <i>results</i>
Open	Loads program without running. One parameter <filename> Example: <i>open <filename></i>
CancelProgram	Cancels the currently running program. No Parameters. Example: <i>cancelProgram</i>
PauseProgram	Pauses the currently running program. No Parameters. Example: <i>pauseProgram</i>
ResumeProgram	Resumes a previously paused programs. No Parameters. Example: <i>resumeProgram</i>
Message	Prompt a message to the user. One parameter <text> Example: <i>message <text></i>
GoTo	Goto to coordinate. 3 parameters in decimal <xposition> <yposition> <zposition>. Example: <i>goto <xposition> <yposition> <zposition></i>
GoToLocationMM	Go to coordinate in millimeters. 3 parameters in decimal <xposition> <yposition> <zposition>. Example: <i>gotoLocationMM <xposition> <yposition> <zposition></i>
GoToRotary	

More Supported TCP Commands

Command	Description
Load	Will open a bitmap file located in the parts folder. One parameter <filename> with file extension. Example: <i>load <filename></i>
Wait	Waits a specified time before continuing with the next task. One parameter <time in seconds>. Example: <i>wait <time in seconds></i>
Fit	No parameters Example: <i>fit</i>
Set	Two parameters variable name to be set<variableName>, the variables stored value <variableValue>. Example: <i>set <variableName> <variableValue></i>
Override-template	One parameter <path and filename> full path to template. override-template. Example: <i><path and filename></i>
Loop	Two parameters how many times to loop <loopCount>, which line to start from <lineNumber>. Example: <i>loop <loopCount> <lineNumber></i>
Archiveview	Executes image archive function. Uses M3 specified format. Example: <i>archiveview c:\currentimage.bmp</i>
Archivewhole	Executes Full Frame image archive function. Uses M3 specified format. Example: <i>archivewhole c:\currentfullframeimage.bmp</i>

Help and Resources

Please visit the support section at www.metlogix.com for access to MetLogix product documentation.

Watch tutorial videos for popular Mx functions at <http://www.youtube.com/metlogix>

Join the discussion on Facebook, search "MetLogix".

Contacts

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