Gmail **ibrahim ahmed <ibrahemiat2@gmail.com>**

Re: share tcpip object [ref:_00Di0Ha1u._5000ZsIGgo:ref]

5 messages

US MathWorks Support <support@mathworks.com> Fri, Sep 29, 2017 at 2:44 PM
To: "tug90901@temple.edu" <tug90901@temple.edu>

Hello ibrahim,

I am Aoyu and I am writing in reference to your Technical Support Case #02771443 regarding 'share tcpip object'.

Thank you for contacting us regarding this workflow. I understand that you want to share the tcpip object between different blocks within the same library, so then you only need to initiate it once. I am now investigating this issue and need some more information from you:

1. Is the tcpip object created in one of the blocks within the library? Or is it created somewhere else outside the library?
2. Can you please explain more why the Instrument Control Toolbox does not work?
3. In the initialization block, there is an object "so". Is this the tcpip object you want to share? Or is it just another object not related to the tcpip object as you mentioned earlier?

I am looking forward to your reply to assist you further. Thanks!

Sincerely,
Aoyu Chen
MathWorks Technical Support Department

Please preserve the Reference ID in further correspondence on this query. This allows our systems to automatically associate your reply to the appropriate Case.

If you have a new technical support question, please submit a new request here:
http://www.mathworks.com/support/servicerequests/create.html

Self-Service: http://www.mathworks.com/support
File Exchange and MATLAB Answers: http://www.mathworks.com/matlabcentral/

ref:_00Di0Ha1u._5000ZsIGgo:ref

ibrahim ahmed <ibrahemiat2@gmail.com> Fri, Sep 29, 2017 at 2:59 PM
To: US MathWorks Support <support@mathworks.com>

Thank you Aoyu for responding,

1. Yes it could be in a block in the library or in its settings, the important thing is the tcpip object should be usable by every block in the library even when they are being used in a model. So it could be a block that i have to drag in a model with other blocks and it does the job for them.

2. It's really difficult if possible to use more than serial send, and i have a lot of functions sendind and receiving. So its way way more convenient, and efficient to be able to share the connection globally just like in the workspace.

3. Yes 'so' is the tcpip object the all the other functions in othe subsystems use, if you try to take it as an output then input it want work because tcpip objects are not numeric.

this issue is really frustrating, and i know there's a simple work aroud i just don't know how.
[Quoted text hidden]

US MathWorks Support <support@mathworks.com> Fri, Sep 29, 2017 at 5:12 PM
To: "ibrahemiat2@gmail.com" <ibrahemiat2@gmail.com>

Hello ibrahim,

I am writing in reference to your Technical Support Case #02771443 regarding 'share tcpip object'.

Please see the attached Simulink model "tcpip_init_edit.slx" as a workaround. In this model, "MATLAB Function" block created a new tcpip object and assigned it to a persistent variable "obj". Then, "obj" is saved to the workspace. "MATLAB Function1" block reads "obj" in from the workspace and assign "obj.bytesAvailable" value to the output as display. In this way, you only need to initiate tcpip object once, assign it to the workspace, and any other blocks in the model can use it.

However, the above method is not recommended, since this is not the typical workflow for communication between Simulink and other devices. You can still use the instrument control toolbox by combining all the sendings with some logic (state flow can be a good option), and then only one sending block will be enough.

Please feel free to reply to this email if your issue is not resolve, and I will be happy to reopen this case and assist you further.

Sincerely,
Aoyu Chen
MathWorks Technical Support Department

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ref:_00Di0Ha1u._5000ZsIGgo:ref

tcpip_init_edit.slx
20K

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ibrahim ahmed <ibrahemiat2@gmail.com> Sat, Oct 7, 2017 at 4:46 PM
To: US MathWorks Support <support@mathworks.com>

hi,
I was able to share the tcpip object using assignin and evalin, but for some functions i lose the connection after a while and I get a mismatch error like this:

```
size mismatch for MATLAB expression 'fread'. Expected = 1x1 Actual = 1x0
```

any ideas on how to keep the connection from expiring.
attached is an example.

[Quoted text hidden]

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2 attachments

RoombaInit_wifi.m
3K

tcpipSf17a.slx
20K

US MathWorks Support <support@mathworks.com> Mon, Oct 9, 2017 at 10:08 AM
To: "ibrahemiat2@gmail.com" <ibrahemiat2@gmail.com>

Hello ibrahim,

I am writing in reference to your Technical Support Case #02771443 regarding 'share tcpip object'.

Thank you for contacting us regarding this issue. I understand that you want to keep the tcpip connection from expiring. Please follow the TCP/IP workflow as below:

http://www.mathworks.com/help/matlab/import_export/create-a-tcpip-connection.html?searchHighlight=Clear%20and%20close%20tcpip%20connection&s_tid=doc_srchtitle

From your model and script, the TCP/IP port is never closed. This may cause the disconnection issue after a while. Please make sure close the port before the next TCP/IP connection. Please refer to the following link for closing TCP/IP connection.

http://www.mathworks.com/help/instrument/tcpip.html?searchHighlight=tcpip&s_tid=doc_srchtitle#f10-615138

You can also configure and get TCP/IP properties at the beginning or during the connection for debugging purposes:

http://www.mathworks.com/help/matlab/import_export/configure-properties-for-tcpip-communication.html?searchHighlight=TCP%2FIP%20property&s_tid=doc_srchtitle

If you close the port and the issue still exists, try to run everything in Simulink without stateflow. If it works, this issue may be caused by stateflow.

Sincerely,
Aoyu Chen
MathWorks Technical Support Department

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