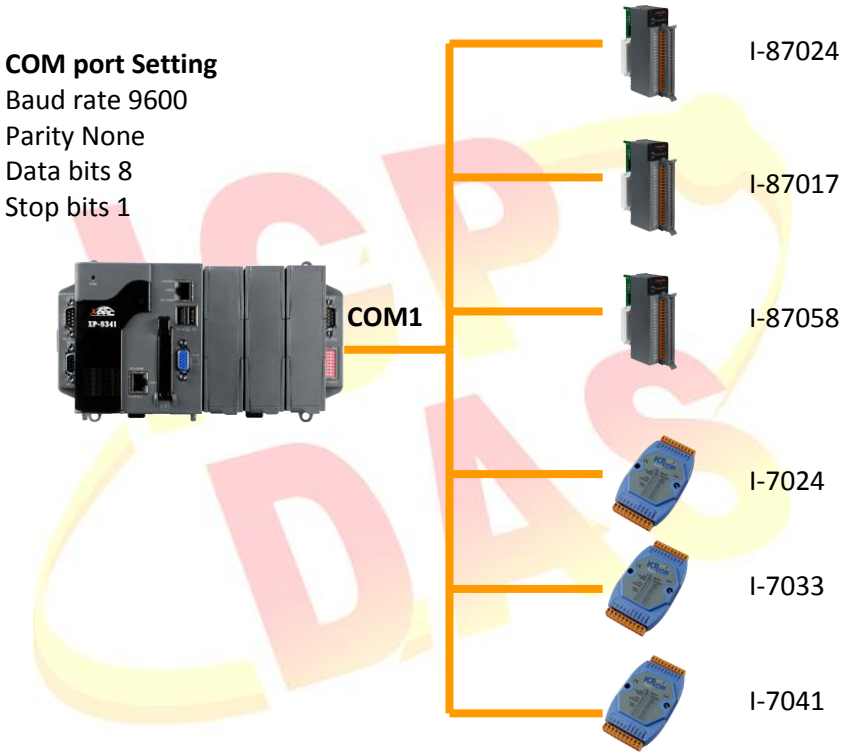
How to optimize communication performance in NAPOPC_XPE?

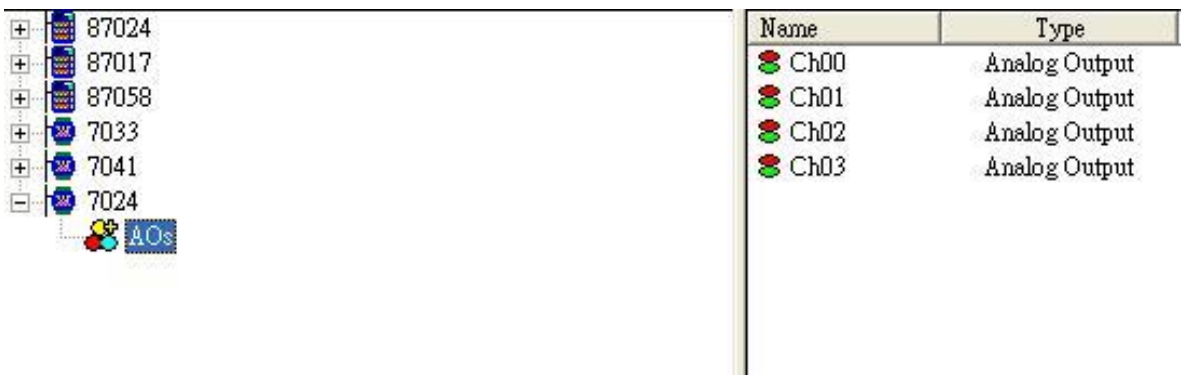
Applies to:

Platform	*OS version*	*NAPOPC version*
XPAC	*XPE*	*NAPOPC_XPE v1.12*

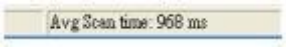


Here is an assumed architecture:

We connect to I-87024/I-87017/I-87058/I-7024/I-7033/I-7041 via COM1 of XPAC. Search all modules via COM1, and then we could get these modules in NAPOPC_XPE Server.



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Click any one module, and we could see "Average Scan Time" 

on the status bar of NAPOPC_XPE window. Now Average Scan Time we get is 968 ms.

	COM1					
Module	I-87024	I-87017	I-87058	I-7033	I-7041	I-7024
Avg Scan Time	968ms					

So far the Access-Interval of Each module is 968 ms.

If we intend to set the Access-Interval as below:

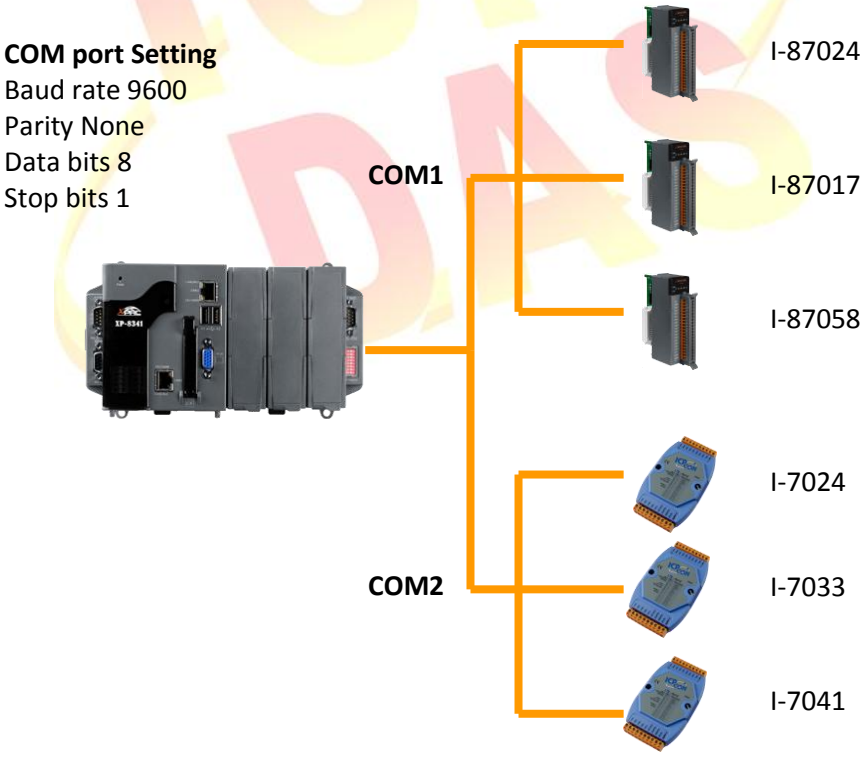
I-87024/I-7024: 1 Second

I-87058/I-7041: 3 Second

I-87017/I-7033: 100ms

We could operate as following steps:

1. Divide these modules into two different COM ports. Connect I-87024/I-87017/I-87058 to COM1, and connect I-7024/I-7033/I-7041 to COM2.

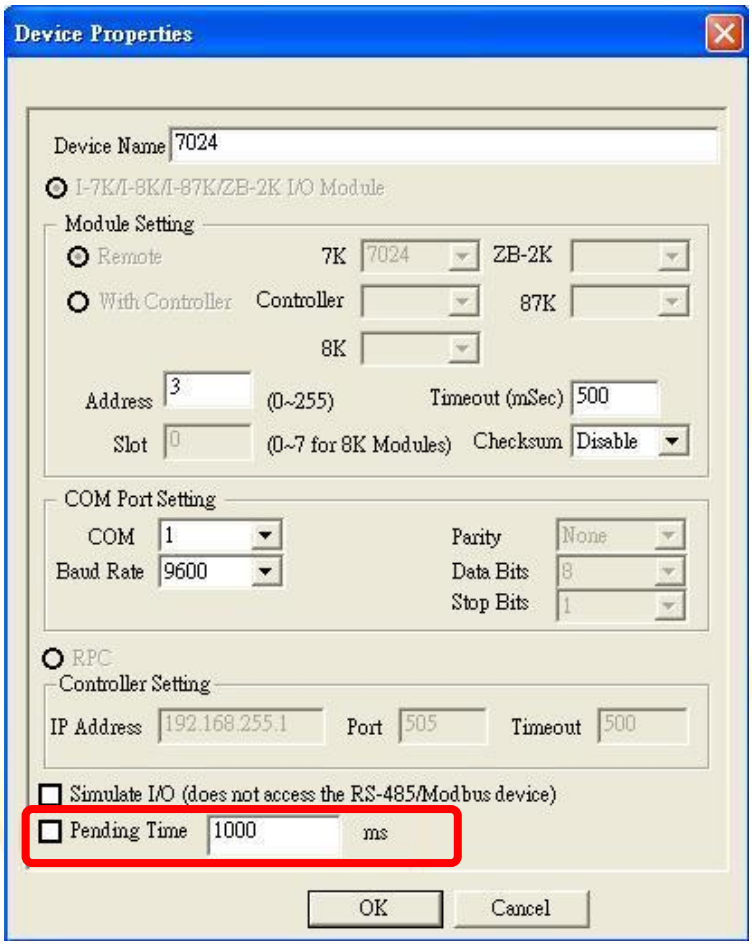


2. Search modules via COM1/COM2 again, and then check "Average Scan Time".
   We will find "Average Scan time" has been getting faster:

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	COM1			COM2		
Module	I-87024	I-87017	I-87058	I-7033	I-7041	I-7024
Avg Scan Time	391 ms			516 ms		

3. We could adjust "Pending Time" to enhance the performance of communication further. Enter the Controller Setting table to look for the "Pending Time" option.



According to our requirement, change the "Pending Time" as following

	I-7033	I-7041	I-7024
Pending Time	—	**2000**	**800**

	I-87024	I-87017	I-87058
Pending Time	**800**	—	**2000**

After we accomplish it, we could get better "Average Scan Time" as 62ms and 31ms.

Finally, we have improved Access-Interval and set different intervals for different modules.

	COM 1			COM2		
Module	I-87024	I-87017	I-87058	I-7033	I-7041	I-7024
Avg Scan Time	**62 ms**			**31 ms**		

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