How to capture a debug log file and send to PMDX?

Sometimes we will ask you to to enable the SmartBOB Plug-in's debug log, run a test for us and then send us the resulting log file. Here are the steps you need to do this:

(1) Display the SmartBOB plug-in configuration dialog box. To do so, with Mach4 running select the "Configure" menu, highlight "Plugins" and then select the "PMDX-SmartBOBUSB" (see the image below). In older versions of Mach4, go to the "Configure" menu and select "Plugins". Then click on the "Configure" button on the "PMDX-SmartBOB-USB" line.

🛞 Mach 4 - Industrial									
File	View	Configure	<u>D</u> iagnostic	Wizar	d Operator	Help			
Program		Select Motion <u>D</u> ev <u>M</u> ach		D	agnostics				
-G	Code - Plugins			•	PMDX-Smart8	BOB-US	B - Practical Micr	o Design	-
П							r		

(2) Enable the debug log: start by clicking on the "Debug" tab

PMDX-SmartBOB-USB Plug-In Configuration	
Device Info Motor Config Feature Config Spindle Config Pa Mach4 Configuration Note This configuration dialog contains ONLY settings that and that cannot be configured by the normal Mach4 of See the "Configure->Mach" dialogs for more configure	erformance Setting (Debug are specific to the PMDX-Smart808=658 configuration settings. ration settings.
Mach4 Build #:	2914
Mach4 Screen Set Name:	wxMach_PMDXTest.set
PMDX SmartBOB-USB Device:	PMDX-422 [Rev B PCB] on COM9
PMDX SmartBOB-USB Serial Number:	00000 (???)
PMDX SmartBOB-USB Plug-In Version:	0.36.171
PMDX SmartBOB-USB Bootloader Version:	1.6.61
PMDX SmartBOB-USB Firmware Version:	0.44.145
Update Devi	ice Firmware
Show Real-Time In The "Real-Time Input/Output Status" can also be (go to the "Diagnostics" menu and select "PMDX-S	put/Output Status displayed from the SmartBOB diagnostics window 5martBOB-USB").

(3) Change the settings as instructed by PMDX. Usually this will be "Debug Mode" set to "Debug" and "Debug Device" set to "File" as shown below. BUT NOT ALWAYS!!!

P	MDX-Smar	IBOB-USB PI	ug-In Configu	ration					×
	Device Into	Motor Contig	Feature Config	Spindle Contig	Performance S	5ettings	Debug		
	WARNING ONLY CHANGE THESE SETTINGS IF REQUESTED TO BY PMDX SUPPORT STAFF!! Changing the debug level can have a significant negative impact on system performance. *** RETURN TO THE DEFAULT SETTINGS FOR NORMAL OPERATION **								
	Debug Mode								
		◯ <u>S</u> ystem	(doFault)			() Winde	ows Dobug	g <u>A</u> PI (dofault)	
	○ <u>E</u> rror								
						Cmath	41.	dow	
	-						•		
			unfo (M ve an	impact on perfor	mance)				
		O <u>P</u> acket	(will have a MAJO	mpact on perf	ormance)				
	All (will have a MAJOR impact on performance)								
	Enable INDEX messages in debug log						NING: Ma	ay crash Mach4	
	Resture Default Settings								
	***NOTE** There is more debug and diagnostic information in the plug-in's diagnostic screen, including a window that displays the real-time state of all of the SmartBUB's input and output signals as the appear at the SmartBOB board. To get to the plug-in's diagnostics screen, close this configuration window and go back to the main Mach4 window. Then click on the "Diagnostic" menu (not the "Diagnostics" or "Machine Diagnostics" tab) and select "PMDX-SmarrBOB-USB".								

(4) Save settings and exit Mach4: click on "OK" to close the SmartBOB configuration dialog, then "OK" again to close the plug-in configuration window.

(5) OPTIONAL (and recommended unless instructed by PMDX to *NOT* do this): Restart Mach4 - exit Mach4, wait at least 10 seconds, then re-run Mach4.

(6) Run the test as described by PMDX. Make notes of every step that you do. For example: started Mach4, did a "Ref All Home", jogged the X axis 3 inches to the right, etc. We will need that information to help process the log file.

(7) Disable the debug log: Go back to the SmartBOB "debug" configuration tab (see steps 1 and 2 above). Click on the "Restore Default Settings" button (see below). Click on "OK" to close the SmartBOB configuration window, then "OK" again to close the Mach4 plug-in configuration dialog.

PMDX SmartBOB USB Plug In Configuration								
Device Info Motor Config Feature Config Spindle Config Performance	ce Settings Debug							
WARNING ONLY CHANGE THESE SETTINGS IF REQUESTED TO BY PMDX SUPPORT STAFF!! Changing the debug level can have a significant negative impact on system performance. *** RETURN TO THE DEFAULT SETTINGS FOR NORMAL OPER ATION **								
C Debug Mode								
⊙ ⊆ystem (deFault)	⊙ Windows Debug <u>A</u> PI (default)							
○ Error	○ <u>File</u>							
	🔘 Mach4 Log Window							
○ Info								
ODebuq								
Motion Info (will have an impact on performance)								
<u>Packet (will have a MAJOR impact on performance)</u> Old (will have a MAJOR impact on performance)								
Enable INDEX messages in debug log <- WARNING: May crash Mach4								
Restore Default Setti								
NOTE There is more debug and diagnostic information in the plug-in's diagnostic screen,								
including a window that displays the real-time state of all of the SmartBOB's input and output signals as the appear at the SmartBOB board.								
go back to the main Mach4 window. Then click on the "Diagnostic" menu (not the "Diagnostics" or "Machine Diagnostics" tab) and select								
"PMDX-SmarrBOB-USB".								

(8) Exit Mach4

(9) Send PMDX the debug log file. If you are running Mach4 build 2580 or higher **(THIS SHOULD BE EVERYBODY BY NOW!)** there is a function built in to Mach4 to create a "profile package", which you can then send to us. This package includes all of the files associated with the current Mach4 profile (including our log files) as well as a copy of your screen set. To create this package, go to the Mach4 "Help" menu and select "Support", and then "Package Current Profile" (see image below). By default Mach4 will save this in the Mach4 installation directory (usually C:\Mach4Hoby), but you have the option of saving the file somewhere else. Send us this file.

🖗 Mach 4 - Industrial							
File View Configure Diagnostic Wizard Operator	Help						
	Support 🔸	Package Current Profile					
Program Run Tool Path Machine Diagnostics	System Information	Email Current Profile					
Current Positions Program Extents	Documentation Folder	Website					
	About						

If you are running an older Mach4 build (earlier than 2580, **and you really should** Page 4 / 5

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NOT be running a version of Mach4 that is this old), then you will have to send the log file to us yourself. The log file is named "PMDX-SmartBOB-USB.log" and will be stored in one of two places, depending on which version of our plug-in you are running. In the examples below I presume that you installed Mach4 in the default "C:\Mach4Hobby" directory. If you installed Mach4 in a different directory, then substitute the actual install directory where you see "C:\Mach4Hobby". For example, if you installed Mach4 in the default location of "C:\Mach4Hobby", the log file will be:

For plug-in versions 0.30.136 (released 2 Aug 2015) and newer: C:\Mach4Hobby\Profiles\YOUR_PROFILE_NAME\PMDX-SmartBOB-USB.log where "YOUR_PROFILE_NAME" is the name of the Mach4 profile that you are running.

For plug-in versions 0.29.128 (16 Jul 2015) and older: C:\Mach4Hobby\Plugins\PMDX-SmartBOB-USB\PMDX-SmartBOB-USB.log

Send that file to us as an attachment to an email, sent to the email address given you by PMDX support.

Unique solution ID: #1002 Author: FAQCzar Last update: 2018-01-23 04:25