

Advantech AE Technical Share Document

Date	2015 / 7 / 14	SR#						
Category	■ FAQ □ SOP	Related OS	Microsoft Windows7					
Abstract	WebAccess monitors ADAM-6060 AuxFlag (internal tag)							
Keyword	ADAM-6060, AuxFlag							
Related Product	N/A							

Problem Description:

ADAM-6060 is 6-channel DI and 6-channel Relay module. However, it also has 16 AuxFlags. This example will show user how to use WebAccess to monitor AuxFlag

Brief Solution - Step by Step:

1. Based on ADAM-6000 User Manual, ADAM-6000 module has 16 Internal Flag (AuxFlag).

Internal Flag (<mark>AuxFlag)</mark>

There are 16 internal flags on one ADAM-6000 module. The data type of internal flag is digital, meaning its value is either logic **True** or logic **False**. You can read the internal flag value and use it as input condition. After you choose **AuxFlag** as input mode, select appropriate internal flag by the **Index** combo box. (From flag 0 to flag 15) Then you can define the condition by the **Condition** combo box.

Also, user may get AuxFlag value in Modbus Address 40305.

1) 説明(H)							
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		Stop(0)					
00042		Clear Counter(1)	Write	40301	All	DI Value	Read
00043		Clear Overflow ³	Read	40303	All	DO Value	R/W
00044		DI Latch Status ⁴	R/W	40305	0~15	GCL Internal Flag Value ⁸	R/W
00045	3	Counter Start(1)/	R/W				

2. First, use ADAM/APAX .Net Utility to detect the ADAM-6060

🗙 Advantech Adam/Apax .NET Uti	lity (Win32) Version 2.02.09
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E Serial	ADAM-6060 6 DI / 6 relay module
COM4	Channel setting Modbus
🖃 🍘 Ethemet	
E 2 10.0.0.20 E 2 10.0.0.13-[ADAM6060]	DIO DOO F FSV
	DI1 DO1 FXV
DAM4500_5510Series	DI 2 DO 2 FSY
E- S Favorites group	DI 3 DO 3 E FSV
	DI 4 DO 4 FSY
	DI 5 DO 5 🔽 FXV
	The Fail Safe Value (FSV) of communication WDT. Each DO will switch to its FSV if the module's WDT is enabled and it gets triggered. FSV checked Logic High State, FSV unchecked Logic Low State. Communication WDT P2P(GCL WDT



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3. User may also monitor DI and DO values.

🗙 Advantech Adam/Apax .NET Utility (Win32) Version 2.02.09								
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COM3	ADAM-6060 6 DI Channel setting	/6 relay m Modbus	odule			1		
10.0.0.20	Location	Туре	Value	Description	Mode			
 □ 0.0.13-[ADAM6060] □ 0.0.13-[ADAM6060] □ 0.0.04 □ 0.0.013-[ADAM6060] □ 0.013-[ADAM6060] □	00001 00002 00003 00004 00005 00006 00017 00018 00019 00020 00022	Bit Bit Bit Bit Bit Bit Bit Bit Bit Bit	0 0 0 0 1 1 1 0 0 0 1	DI 0 DI 1 DI 2 DI 3 DI 4 DI 5 DO 0 DO 1 DO 2 DO 3 DO 4 DO 5	DI DI DI DI DI DO DO DO DO DO DO			

4. In 6060 GCL, we may program a simple Logic to control and monitor AuxFlag 0 to AuxFlag 2.



5. Based on previous image, we can tell AugFlag0 to AuxFlag 2 are triggered. To read Modbus Address 40305 value, user may use ModScan to read.

6.	AuxFlag	7.	0	8.	1	9.	2	10.	3	11.	4	12.	5	13.	6	14.	 15.	15
	channe																	
	I																	
16.	Value	17.	1	18.	2	19.	4	20.	8	21.	16	22.	32	23.	64	24.	 25.	

On previous example, AugFlag 0 to AuxFlag 2 are triggered. It means value of 7 (1+2+4=7) will be written in Modbus address 40305

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= ModScan32 - Mod	Sca1					
	View <u>W</u> indow <u>H</u> elp Fr I	₩ ?				
ModScal						
Address: 0301 Length: 100	Device I MODBU	d: 1 S Point Type G REGISTER	Number of Po Valid Slave R	lls: 5519 esponses: 5517 Reset Ctrs		
40301: < 192> 40302: < 0> 40303: < 35> 40304: < 0> 40305: < 7> 40306: < 0> 40305: < 0> 40307: < 0> 40307: < 0>	40309: < 0> 40310: < 0> 40311: < 0> 40312: < 0> 40312: < 0> 40313: < 0> 40314: < 0> 40314: < 0>	40317: < 40318: < 40319: < 40320: < 40321: < 40322: < 40322: < 40323: <	0> 40325: < 0> 40326: < 0> 40326: < 0> 40328: < 0> 40329: < 0> 40329: < 0> 40330: < 0> 40331: < 0> 40332: <	0> 40333: < 0> 40334: < 0> 40335: < 0> 40336: < 0> 40337: < 0> 40337: < 0> 40337: < 0> 40339: < 0> 40339: <	0> 40341: < 0> 40342: < 0> 40342: < 0> 40344: < 0> 40345: < 0> 40345: < 0> 40345: < 0> 40345: < 0> 40347: < 0> 40348: <	0> 40349: < 0> 40350: < 0> 40351: < 0> 40352: < 0> 40353: < 0> 40353: < 0> 40355: < 0> 40355: <

26. To read Modbus Address 40305 in WebAccess

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In Communication Port, create a "TCP/IP" port

🚰 Comport : 1 - Microsoft Inter	net Explorer										
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#世 🔘 http://localhost/broad/Web/thv/Hain.asp/ipos-project&Projidbw=1&ProjHams=&dvantsch											
Advantech WebAccess Project Manager											
工程/節點	Update Comport [Cancel] Submit										
Advantech	Interface Name TCPIP										
Dort1 (topip)	Comport Number 1										
auxFlag	Description										
auxFlag0											
auxFlag1	Scan time 1 OMilliSecond OSecond OMinute OHour										
auxFlag2 auxFlag3	TimeOut 1000 MilliSecond										
Port2 (topip)	Retry court 3										
hh1											
Port6 (serial)	Auto Recover Time 60 Second										
Const Point	Backup Port Number 0										
設備驅動	[Cancel] Submit										

27. In Device, setup "Modicon"

IP Address: 10.0.0.13 (based on user's ADAM-6060 module) Port Number: 502 Device Address: 1



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🚰 Device : adam6060 - Mic	rosoft	Internet Explorer					
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		Adva	ntech We	bAccess Project M	lanager		
	- 6	elete Add Tag Add Block					
工程/節點		And Tag And Diven					
Advantech	~			Dev	ice Property	[Cance	1] Submit
🔁 project			r				
Port1 (topip)		Device Name	adam6060				
adam6060		Description					
auxFlag		Unit Number	0				
auxFlag1		Device Type	Modicon	~			
auxFlag2				IP Address	10.0.0.13		1
auxFlag3		Primary		Port Number	502		
BAS3520		Finnary			302	Tes au par	
bb1				Device Address	1	if other that	an Unit Number
Dort6 (serial)				IP Address			
Const Point		Secondary		Port Number			
System Point				Device Address			
設備驅動							
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28. Create a Analog Tag and Address is 40305

🗿 Tag : auxFlag - Microsoft I:	nternet Explorer	
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	Advantech WebAcces	s Project Manager Quick Start Help Home Logout
		Update Tag [Cancel] Submit
工程/節點	Тад Туре	Point (analog)
Advantech	Alarm	No Alarm 💌
project	Tag Name	auxFlag
adam6060	Description	Analog Input
auxFlag	Scan Type	Constant Scan
auxFlag0	Address	40305
auxFlag1 auxFlag2	Conversion Code	linsinned Intener
auxFlag3	Start bit	
Port2 (topip)	Landh	16
DAS3520	Signal Payaraa	OVer ONe
Port6 (serial)	Sigilar Neverse Scaling Type	No Scale
Const Point	Cooling type	
System Point	Scaling factor 1	
設備驅動	Scaling factor 2	
AT01 ARMI CV	Log Data	O Yes ⊗ No
ABPLC5	Data Log Dead Band	3 %
ABSLC5	Write Action Log	O Yes O No
AceFAM3	Keen Provinus Value	Vec ONe
ADAMAK	Initial Value	
ADAM5KE	County area	
ADAM6K	Security area	
AdvDAQ	Security level	0
AE6000	Span high	1000
AXLNFMB	Span low	
BTrack	Value Clamp	Clamp to Span High Clamp to Span Low Clamp to Zero
BW UPS	Output High Limit	1000
BwBacNetE	Output Low Limit	0
BwBacNetJ BwBACnetM	Eng Unit	
BwConst	Display digits(integer)	4
BWDB	Display digits(fraction)	2
BWDDE	Log To ODBC Frequency	0 🔽 🔿 Second 💿 Minute
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29. Draw a TEXT field to display Modbus 40305 Address.

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Animation Configu	ation			
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C R-Text 💽 L	-Text C C-Text	C Pick	A17D02002	
Enable Attribute T	ng		A18a42002 A18a42003	
Attribute Tag:			A18D02001 A18D02002	1.0
Alarm Status	C Alarm Type		alarm	om H
C Digital States	C Multiple States	Elock Alarm	Ana0	om_w
Normal	FG BG BLIME	✓ Pickable	auto auxFlag	
Alarm			auxFlag0	
Alarm Ack		🥅 Tab Stop	auxFlag2	10
			auxFlag3 bbl:I01	
			bb1:102	1.0
			bb1:104	
			bb1:I05 bb1:I06	
			<	> -
			OK	Cancel

30. Result: it displays 7 in the ViewDAQ.

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😵 Advantech ViewDAQ 001 - main:untitled		
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7.00		

31. To display AuxFlag0, AuxFlag1 and AuxFlag2 separately. AuxFlag0 Modbus address is 40305, and Start Bit is 0

🗿 Tag : auxFlag0 - Microsof	t Internet Explorer							
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	Advantech WebAcces	Quick Start Help Home Logout						
	Tag Property Delete		·					
Advantech	Tag: Advantech • project • 1 • adam6060 • auxFla	j0						
project	Tag Type	Point (discrete)						
Pert1 (topip) adam6060	Tag Name	auxFlag0						
auxFlag	Description	DI						
awFlag0 awFlag1	Scan Type	Constant Scan						
auxFlag2	Address	40305						
Port2 (topip)	Conversion Code	Unsigned Integer						
BAS3520	Start bit	0						
Don Port6 (serial)	Length	1						
Const Point	Signal Reverse	No						
設備驅動	Log Data	No						
A101	Data Log Dead Band	3 %						

AuxFlag1 Modbus address is 40305, and Start Bit is 1



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2 Tag : auxFlag1 - Microsoft Internet Explorer									
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Advantech WebAccess Project Manager									
17. 和引作的聖人	Tag Property Delete								
Advantech	Tag: Advantech • project • 1 • adam6060 • auxFlag1								
project	Тад Туре	e Point (discrete)							
adam6060	Tag Name	auxFlag1							
auxFlag	Description	n DI							
auxFlag1	Scan Type	e Constant Scan							
auxFlag2 auxFlag3	Address	40305							
Port2 (tepip)	Conversion Code	Unsigned Integer							
bb1	Start bit	it 1							
Port6 (serial)	Length	1							
System Point	Signal Reverse	No							
設備驅動	Log Data	No							
A101	Data Log Dead Band	3 %							

AuxFlag2 Modbus address is 40305, and Start Bit 2

3 Tag : auxFlag2 - Microsoft Internet Explorer												
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網址 @ 褕 http://localhost/broad Web/bwMain.asp?pos=project&ProjIdbw=1&ProjName=Advantech												
Advantech WebAccess Project Manager												
Tag Property Delete												
Advantech	Tag : Advantech • project • 1 • adam6060 • auxFlag2											
Disproject	Tag Type	Point (discrete)										
Port1 (topip)	Tag Name	auxFlag2										
auxFlag	Description	DI										
<u>auxFlag0</u> auxFlag1	Scan Type	Constant Scan										
auxFlag2	Address	40305										
Port2 (topip)	Conversion Code	Unsigned Integer										
BAS3520 hb1	Start bi	2										
Port6 (serial)	Lengti	1										
Const Point	Signal Reverse	No										
設備驅動	Log Data	No										
<u>A101</u>	Data Log Dead Ban	1 3 %										

32. In DrawDAQ Setup, create AuxFlag0, AuxFlag1 and AuxFlag2 for display their values.

Enabling an Intelligent Planet 👸 Advantech DrawDAQ - adam6060.drw [Advantech_project] wserg wserg Animation Configuration Tag: auxFlag0 Advanced... I/O Tag DaqTag Field C ScaleH C Bar + C Pie Q C L-Text C ScaleV C Ber ↑ C Fill C C-Text Ē AlTa42002 AlTa42005 AlT02001 AlT02001 AlB042002 AlB042002 AlB042002 AlB042002 alarm augFlag augFlag augFlag augFlag augFlag bbl:101 bbl:105 bbl:105 -C Bar → C Pie Ω C R-Text 000 Bar 🔸 rame Enable Attribute Tag Alarm Status
 Digital States ← Alarm Type ← Multiple States FG BG Blink 🔲 Block Alarm 🔽 Pickable Normal ГГГ Alarm 🥅 Tab Stop Alarm Ack i ii > -OK Г Cancel ▶ № ○ つ ○ ● ■ ● □ ■ AR 随 Sa GdOrSa — ABC L 0 Zm1 > MODIFY X 202 Y 797

33. In ViewDAQ

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🛞 Advantech ViewDAQ 001 - main:untitled															
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