

Advantech SE Technical Share Document

Date	2019 / 08 / 02					
Catagoria	■ FAQ □ SOP	Related Produc	ct			
Category	Driver Tech Note					
Abstract	How to use snapshot	How to use snapshot function to play a series of static images.				
Keyword	WebAccess/SCADA, snapshot					
Related OS	Win7, Windows Server 2008 / 2012 / 2016, Win10					
		Revision History				
Date	Version	Author	Reviewer	Description		
2019/08/02	V1.0	Alger Tan				
2019/10/01	V1.0		Nick Liu			

Problem Description & Architecture:

Video snapshot function is designed for playing a static image.

Video Type snapshot (JPG Image Pull)

Figure 1: snapshot function

Scenario:

There are 8 static images (tank1.png ~ tank8) are located at c driver. Let's use snapshot function with Video Display and TCLScript functions to achieve repeat loop play.

(C:) I tank							• • ••	搜尋 ta
共用對象 ▼	投影片放映	新増資料夾					-	
				Ĩ			Ī	٦
tank1.png	tank2.png	tank3.png	tank4.png	tank5.png	tank6.png	tank7.png	tar	1k8.png

Figure 2: eight tank images

Result:

When user clicks button to active loop play, Video Display on the left hand side will continuous play tank1 to tank8 image repeatedly.



Figure 3: ViewDAQ

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Brief Solution - Step by Step:

- 1. Add a constant analog tag for repeat playing 8 images
 - Tag type: constant analog
 - Tag Name: counter (or any name user prefers)
 - Span High: 8
 - Span Low: 1
 - Output High Limit: 8
 - Output Low Limit: 1
 - Display Digits (integer): 1
 - Display Digits (fraction): 0

Tag Type Constant (analog)
Alarm No Alarm 🗸
Tag Name counter
Description Description
Scan Type Constant Scan 🗸
Log Data 🔿 Yes 💿 No
Data Log Dead Band 3 %
Write Action Log • Yes O No
Read Only 🔾 Yes 💿 No
Keep Previous Value O Yes 💿 No
Initial Value 1
Security area 0
Security level 0
Span high 8
Span low 1
Output High Limit 8
Output Low Limit 1
Eng Unit
Display digits(integer) 1
Display digits(fraction)
Log To ODBC Frequency $0 \checkmark O$ Second \odot Minute

Figure 4: tag property

- 2. Add a discrete tag to start/stop playing image
 - Tag Type: constant discrete
 - Tag Name: trigger

Tag Type	Constant	(discrete)	
Alarm	No Alarm	<u>~</u>	
Tag Name	trigger		
Description	Description		

Figure 5: tag property

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3. Setup Snapshot function in Video SCADA Node property -> Video



Figure 6: Video

- 4. Select snapshot in Video Type
 - Video Type: snapshot(JPT Image Pull)
 - Video Name: pic (or any name user prefers)

Video Name	pic	
Description		
Local Tag File		Tag File List SbafanbladesADV.ltg 🗸
On Entry		Script File List almlogToIVS.js 🗸
On Exit]
While Showing		Interval 20 (10=0.25 Second)
Video Type	snapshot (JPG Image Pull)	~

Figure 7: top part of snapshot function

• Image Source: c:\tank\tank1.png

Then click "Submit" button

	· · · · · · · · · · · · · · · · · · ·
Image Source	c:\tank\tank1.png
Refresh Rate	0 Second
Jiew Substream	Enable
Trim	Left 0 % Right 0 % Top 0 % Bottom 0 %
Video	1
	[Cancel] Submit

Figure 8: bottom part of snapshot function

5. WebAccess/SCADA will return to Video configuration main page, just click "Update" on "pic" Video Name.

Add Video Download			
Node : image • scada			
Video Name	Description	Update	Delete
pie		<u>Update</u>	Delete

Figure 9: Video main page



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6. Go to bottom of the pic configuration, copy the content of Video e.g. snapshot#img=c:\tank\tank1.png&timer=0&lc=0&rc=0&tc=0&bc=0



Figure 10: content of pic Video part

 Go to DrawDAQ, and then insert a Video Display function Dynamic -> Video Display Name: pic Video: snapshot#img=c:\tank\tank1.png&timer=0&lc=0&rc=0&tc=0&bc=0

👸 Advanted	h DrawDA	Q - main.di	w [image	_scada]	_		_	234	1
File Edit \	/iew Set	ting Draw	Dynamic	Tools	Help				
2 🖻 📕	a 🖄 🚟	🔳 🔭 Abc	• 5	2 🖪 🖉	5 🗂 🗂	ته. ډر ا	🏭 😰	¢ þ	*
	Video Di	isplay							
	Name:	pic				🗌 Bord	er		
	Videor	snapshot#ir	ng=c:\tank\ta	ank1.png&	timer=0&	lc=0&rc=0	&tc=0&		
		(K		Cancel				
				_			_	J	

Figure 11: Video Display

- 8. Create a push button to start/stop playing images
 - Button Down Macro: <SETVAL>trigger=%REVERSE

	igger xx unter xx	×××	
Button Down Macro: SETVAL>tr Button Up Macro:	igger=%REVERSE		
Left-Top Bevel Color Button Color Right-Bottom Bevel Color	Group Objects Margin (1-60): 4	I/O Tag Macr <actlog< th=""><th>DaqTag LocTag Field</th></actlog<>	DaqTag LocTag Field
Bevel Size	□ Transparent ▼ ▼ Animation □ □ Confirmation	Highlight <ali>Almack Tab Stop <ali>Almino</ali> Closea Closea </ali>	> S> TER> P> LL>
		<closec <closed <closed <closed <closet <closeu< th=""><th>UR> EP> SP> TH> OP> RL></th></closeu<></closet </closed </closed </closed </closec 	UR> EP> SP> TH> OP> RL>
		ОК	Cancel

Figure 12: Push Button

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- 9. Write a TCLScript in While Showing
 - While Showing: test1.scr
 - Script Update Interval: 80 (mean 2 seconds)

Description:		almlogToIVS.js almsumToIVS.js \$bafanbladesADV.scr
Up Link Graph File: Down Link Graph File:		test.scr test1.scr
Local Tag File:	Edit	
Local Script File On Entry:	Edit	
While Showing: test1.scr	Edit	
On Exit:	Edit	
Key Mapping File:	Edit	
Background Image File:	□ □ On	
Graph Update Interval (0.025 sec per interval):	20	
Script Update Interval (0.025 sec per interval):	80]
OK	Cancel	

Figure 13: Graph Parameters

10. TCLScript

```
if {[GETVAL trigger]==1} then {
SETVAL "counter=%LOOPPLUS 1"
set x [GETVAL counter]
BWSPOOL $x
SENDVDO pic=snapshot#img=c:\\tank\\tank$x.png&timer=0&lc=0&rc=0&tc=0&bc=0
}
```

 TelScript 	○ VBScript	○ JScript
if {[GETVAL t SETVAL "count set x [GETVA] BWSPOOL \$x SENDVDO pic=	trigger]==1} th ter=%LOOPPLUS : L counter] snapshot#img=c	en { " \\tank\\tank\$x.png&timer=0&lc=0&rc=0&tc=0&bc=0
}		

Figure 14: TCLScript

11. Result in ViewDAQ



Figure 15: ViewDAQ



- Pin Definition (in case of serial connection):
- <u>Reference</u>: