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Date	2019 / 08 / 02	Related Product		
Category	■ FAQ □ SOP □ Driver Tech Note			
Abstract	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

Figure 1: snapshot function

Scenario:

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

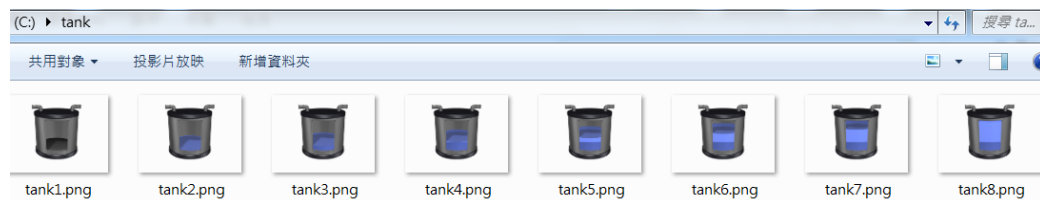


Figure 2: eight tank images

Result:

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

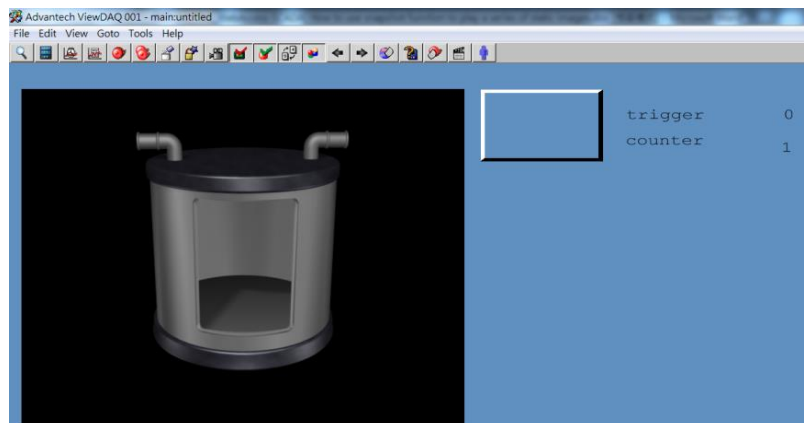


Figure 3: ViewDAQ

■ 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	<input type="radio"/> Yes <input checked="" type="radio"/> No
Data Log Dead Band	3 %
Write Action Log	<input checked="" type="radio"/> Yes <input type="radio"/> No
Read Only	<input type="radio"/> Yes <input checked="" type="radio"/> No
Keep Previous Value	<input type="radio"/> Yes <input checked="" type="radio"/> 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)	0
Log To ODBC Frequency	0 <input type="radio"/> Second <input checked="" type="radio"/> 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 ▼
Tag Name	trigger
Description	Description

Figure 5: tag property

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	\$bafanblades.ADV.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	
View Substream	<input type="checkbox"/> Enable		
Trim	Left 0 %	Right 0 %	Top 0 % Bottom 0 %
Video			
[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	
pic		Update	Delete	

Figure 9: Video main page

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

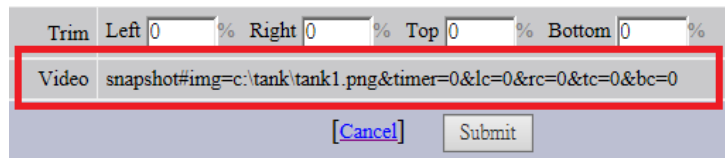


Figure 10: content of pic Video part

7. 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

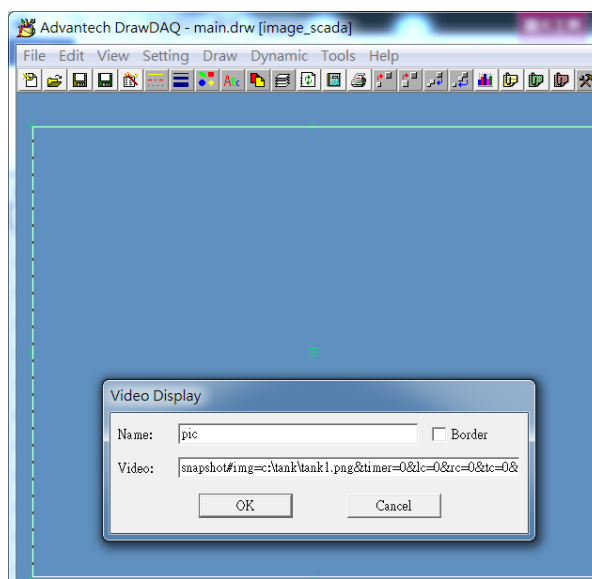


Figure 11: Video Display

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

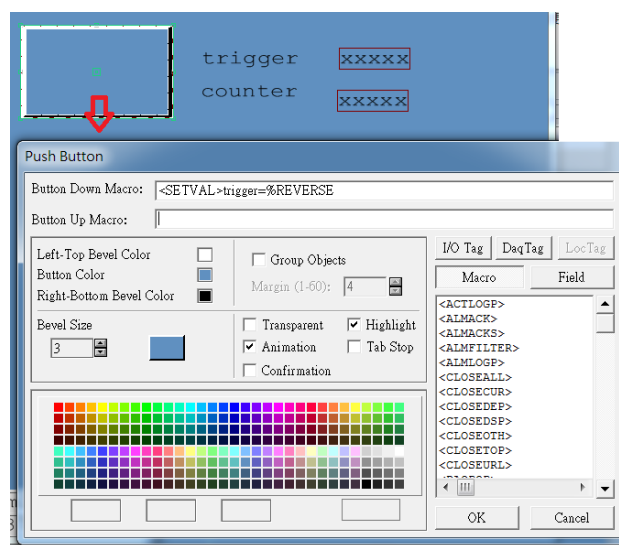


Figure 12: Push Button

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

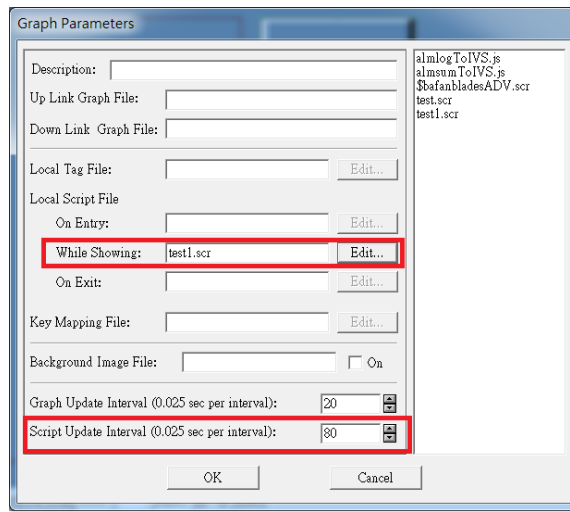


Figure 13: Graph Parameters

10. TCLScript


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

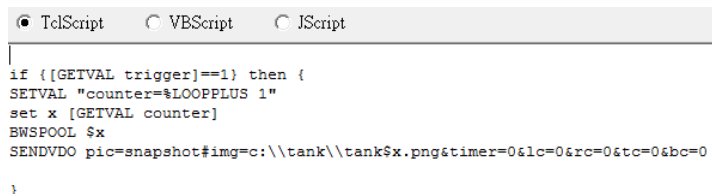


Figure 14: TCLScript

11. Result in ViewDAQ

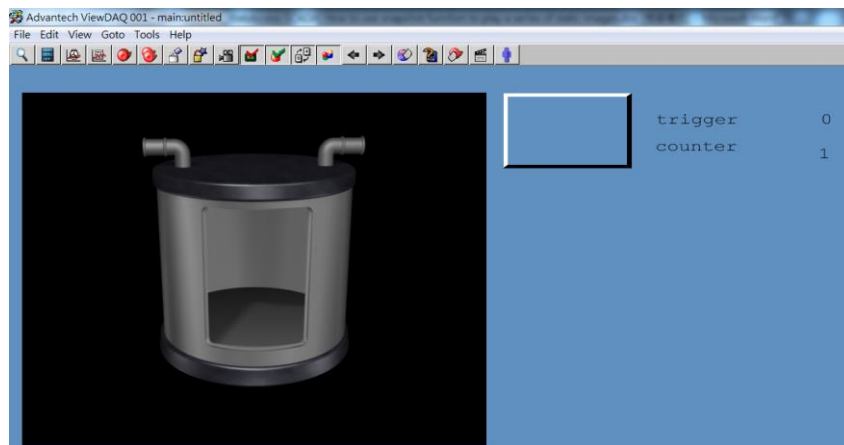


Figure 15: ViewDAQ

- **Pin Definition (in case of serial connection):**

- **Reference:**