

## Advantech AE Technical Share Document

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<b>Category</b>	■FAQ □SOP	<b>Related OS</b>	N/A
<b>Abstract</b>	How to setup Resuming Broken Transfer between TagLink device and WebAccess?		
<b>Keyword</b>	Resuming Broken Transfer, WebAccess, data logger, TagLink, active connection		
<b>Related Product</b>	ADAM-3600		

### ■ **FAQ Description:**

This document explains how to setup Resuming Broken Transfer between TagLink device and WebAccess.

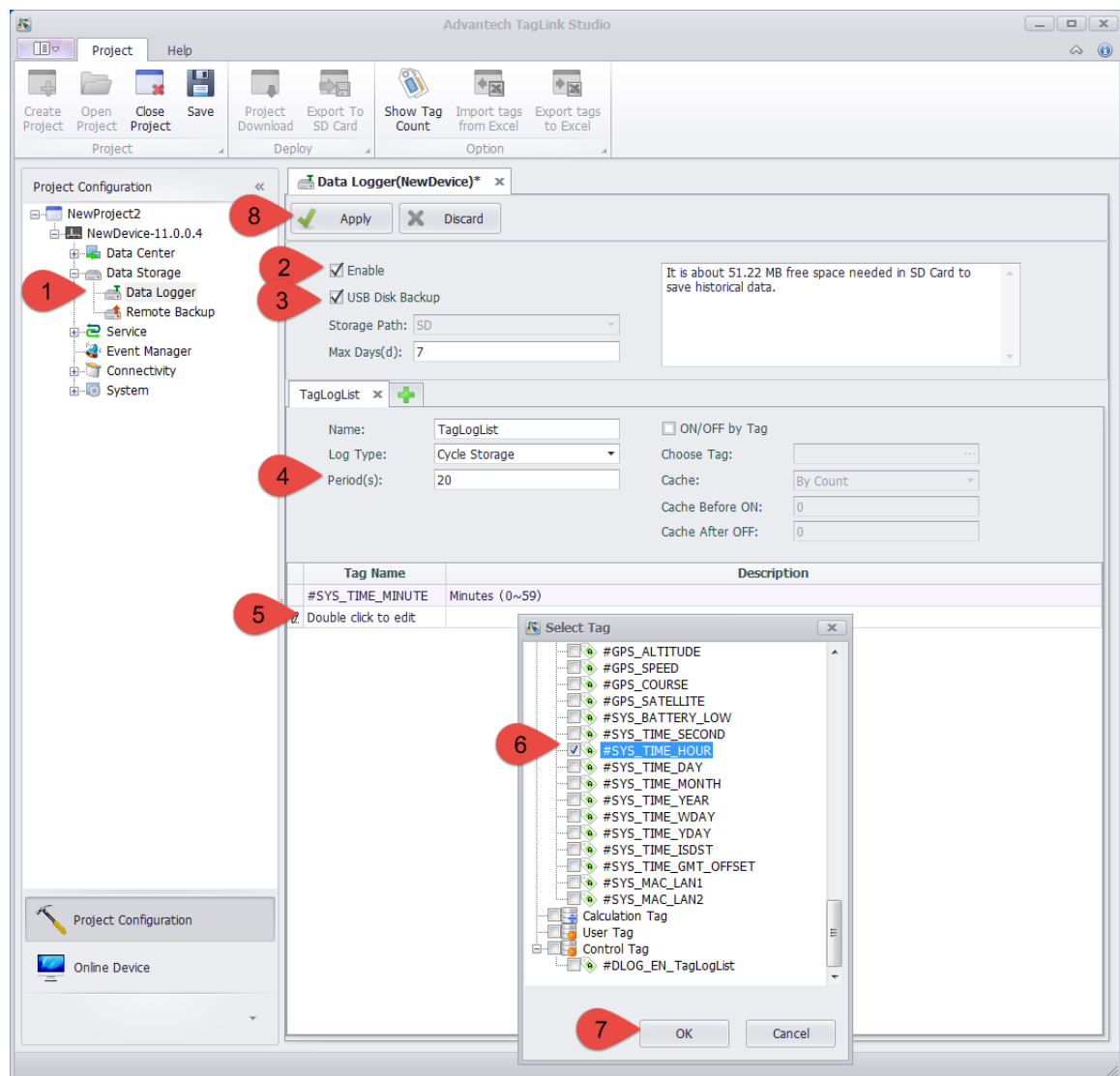
Resuming Broken Transfer is a function that support between TagLink device and WebAccess. After proper settings, WebAccess could acquire data from TagLink device after network recovery from disconnection and recovery. To be more specifically, WebAccess will reconnect to read the stored data logged on the tag during disconnection to complete the local historical trend data record of SCADA.

### **Prerequisites**

There are several requirements in order to implement Resuming Broken Transfer function.

1. TagLink device should have the **data logger** function, in case of the persistent record of each tag during network disconnection.
2. TagLink device should install **SD card** to enable data logger function.
3. The protocol between WebAccess and TagLink should be **WASCADA** protocol.
4. The **tag name** in WebAccess should be the same as the name in TagLink device. If using active connection on TagLink, one should check the Device identifier is same as device node in WebAccess.
5. The address set up in WebAccess should add **"/T"** in order to use Resuming Broken Transfer. For example, COM\_AI0/T. If there is no **"/T"** indicated, there is no Resuming Broken Transfer.
6. It should be noted that, the stored data mentioned above could only include the data of **minute**, **hour** and **day** precision. In other words, when users want to view the data during disconnection and the time precision of the historical trend graph is as accurate as *second* for example, no data curve will be displayed in this graph. It is designed considering too frequency request for data may cause large traffic in the network and cause worse performance.

## Data Logger Settings in TagLink Device



1. Double-click "Periodic Logger".
2. Enable this box to enable the data logging function.
3. Enable this box to enable the USB Disk Backup function.
  - Storage Path: The data storage path. The default path is SD card.
  - Max Days (d): The maximum days the historical data can be stored. The default value is 7. The earliest data will be deleted if the maximum days have been exceeded.
4. Modify how frequency you want to log the data. For example, log the data every 20 seconds.
5. Double-click "Double click to edit".
6. In "Select Tag" window, tick the needed tags.
7. Click "OK" button.
8. Click "Apply" button.

## Resuming Broken Transfer Settings in WebAccess

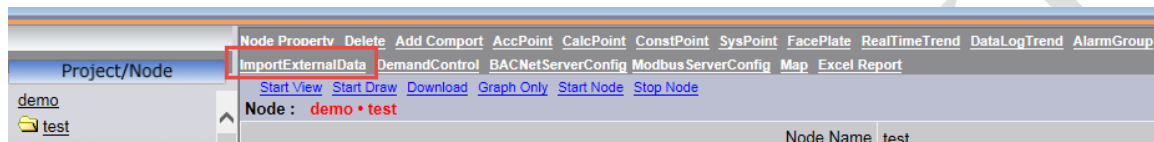
### Importing a project of TagLink device

Only the new version WebAccess offers the function of importing a project of TagLink device. If your WebAccess does not support this function, please download the latest version to install.

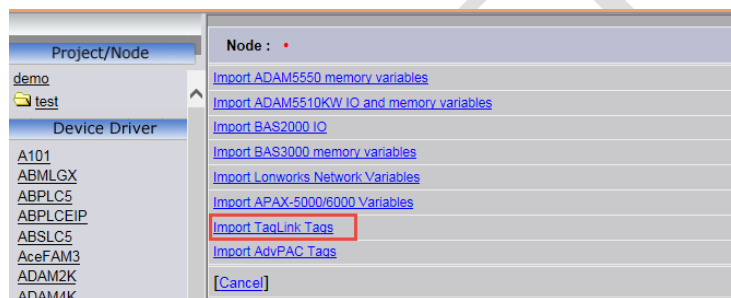
[http://support.advantech.com/Support/DownloadSRDetail\\_New.aspx?SR\\_ID=1-1DGHHWI&Doc\\_Source=Download](http://support.advantech.com/Support/DownloadSRDetail_New.aspx?SR_ID=1-1DGHHWI&Doc_Source=Download)

Download File	Released Date	Download Site
TagLink_AddOn_For_WebAccess_#9.exe	2017-07-31	<a href="#">Primary</a> <a href="#">Secondary</a>

1. In the project “demo” SCADA node “test”, click “ImportExternalData”.



2. If your WebAccess supports importing ADAM-3600 project file, the option of “Import TagLink Tags” should be listed here. Click it to enter the import.



3. Click “Browse” button on this page to select a RTU project file with an extension of .acproj, and then click “Submit” button.

Node : demo • test Import TagLink Tags

please select a .acproj file C:\Users\john.sun\Documents\Advantech TagLink Studio\Project\NewProject2.acproj 浏览...

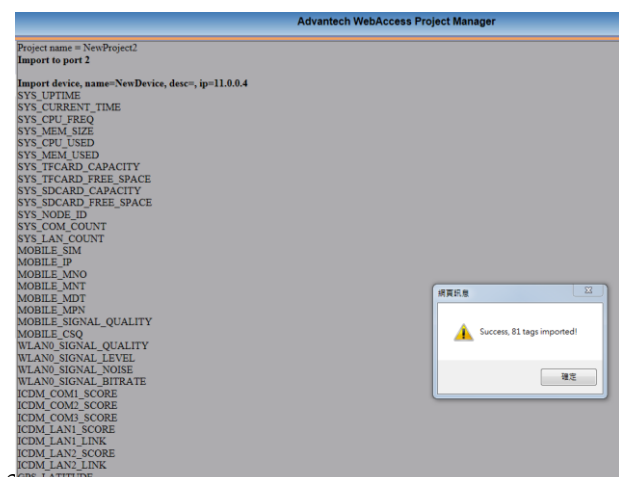
TagName Prefix

UserName

Password

[Cancel](#) [Submit](#)

4. The page displays “File uploading, please wait...”, which means the selected project file with an extension of .acproj is being uploaded. After uploading, the import will be automatically started. After the file imported, a pop-up window showing the information of a successful imported and the number of imported tags.



## Setting up property for the device

1. In Comport Property, set "Timeout" as **10000** (millisecond).

The screenshot shows the 'Update Comport' dialog box. The 'Interface Name' is set to 'TCP/IP'. The 'Comport Number' is '1'. The 'Description' field is empty. The 'Scan Time' is '1' with radio buttons for MilliSecond, Second (selected), Minute, and Hour. The 'Timeout' is '10000' with a unit of 'MilliSecond'. The 'Retry Count' is '3'. The 'Auto Recover Time' is '60' with a unit of 'Second'. The 'Backup Port Number' is '0'. The 'Scan Devices in Parallel' option has radio buttons for Yes and No (selected). Buttons for 'Update Comport', 'Cancel', and 'Submit' are at the top right. Buttons for 'Cancel' and 'Submit' are at the bottom right.

2. Check the device name by clicking the device name. After importing the project, device type is "WASCADA". IP and port number shall be the same as your project settings.

The screenshot shows the 'Device Property' dialog box. The 'Device Name' is 'NewDevice'. The 'Description' field is empty. The 'Unit Number' is '0'. The 'Device Type' is 'WASCADA'. The 'IP Address' is '11.0.0.4'. The 'Port Number' is '504'. The 'Device Address' is '1' with a note 'if other than Unit Number'. The 'Sync. Remote alarm, no log: 1, with log: 2' is '0'. The 'Max. Tags per packet (CE:300)' is '500'. The 'Sync. Runtime Tag Field' is '0'. The 'Compress Data' is '0'. Buttons for 'Device Property', 'Cancel', and 'Submit' are at the top right. Buttons for 'Cancel' and 'Submit' are at the bottom right.

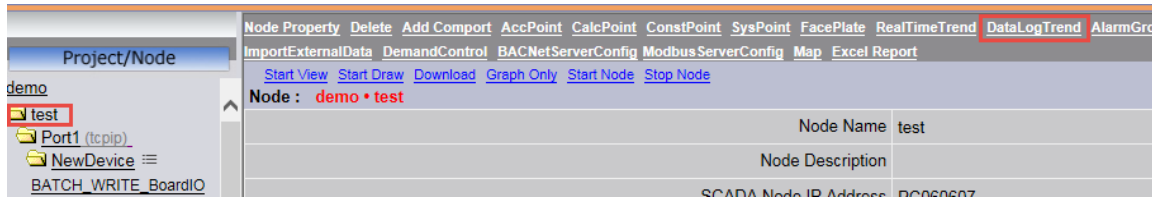
Note: If you use Active Connection, there is no need to fill in the IP Address in WASCADA. Because Active Connection means ADAM-3600 will upload to WebAccess Server periodically.

The screenshot shows the 'Update Tag' configuration window for the tag 'SYS\_TIME\_MINUTE'. The configuration includes fields for Tag Name, Description, Scan Type, Address, Conversion Code, Start Bit, Length, Signal Reverse, Scaling Type, Scaling factor 1, Scaling factor 2, Log Data, Data Log Dead Band, Write Action Log, Read Only, Keep Previous Value, Initial Value, Security area, Security level, Span high, Span low, Value Clamp, Output High Limit, Output Low Limit, Eng Unit, Display digits(integer), Display digits(fraction), Log To ODBC Frequency, Analog Change Log, Analog Change Log Dead Band, and Array Size. The 'Log Data' checkbox is checked, and the 'Data Log Dead Band' is set to 0.

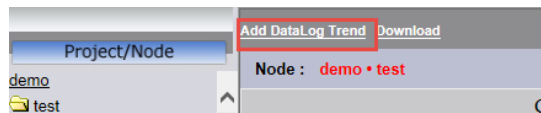
1. In "Project/Node" list, click the tag you want to set up for resuming broken transfer.
2. Check the Tag Name, which should be consistent with the name in ADAM-3600 project.
3. For "Address" option, if the imported tag is configured as periodic data logger on ADAM-3600, "T" shall be added after the tag name, which means the function of Resuming Broken Transfer is supported.
4. Choose "Yes" for Log Data.
5. Data Log Dead Band is a threshold for determining when to log. Only when the data varies over the threshold could make it log. To avoid complicated threshold computation, it is suggested to set this value as "0".
6. For the configurations of other parameters, please refer to "WebAccess User Manual" for modification. Click "Submit" to finish the settings.

## Data-log Trend Settings in WebAccess

1. In “Project/Node” list, click “test” and click the “DataLogTrend” button.



2. Choose “Add DataLog trend” to open settings.



3. Fill in the tag name you want to monitor. It should be consistent with the name in ADAM-3600 project.

DataLog Trend List

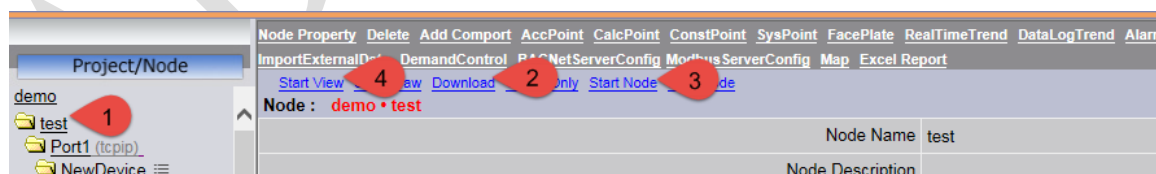
Create New DataLog Trend Group [Cancel] Submit

Group Number	1	Trend Templates	dlogtrd.bax / dlogryp.bax
Description		Tag List	
Time Span	6 minutes		
Tag Name 1	SYS_TIME_MINUTE	Plot Type 1	0 0:Last, 1:Max, 2:Min, 3:Average
Display High 1	60	Display Low 1	0
Tag Name 2	SYS_TIME_HOUR	Plot Type 2	0 0:Last, 1:Max, 2:Min, 3:Average
Display High 2	24	Display Low 2	0
Tag Name 3		Plot Type 3	0 0:Last, 1:Max, 2:Min, 3:Average
Display High 3		Display Low 3	

Fill in “Display High” and “Display Low” based on your condition.

Click “Submit” to finish the settings.

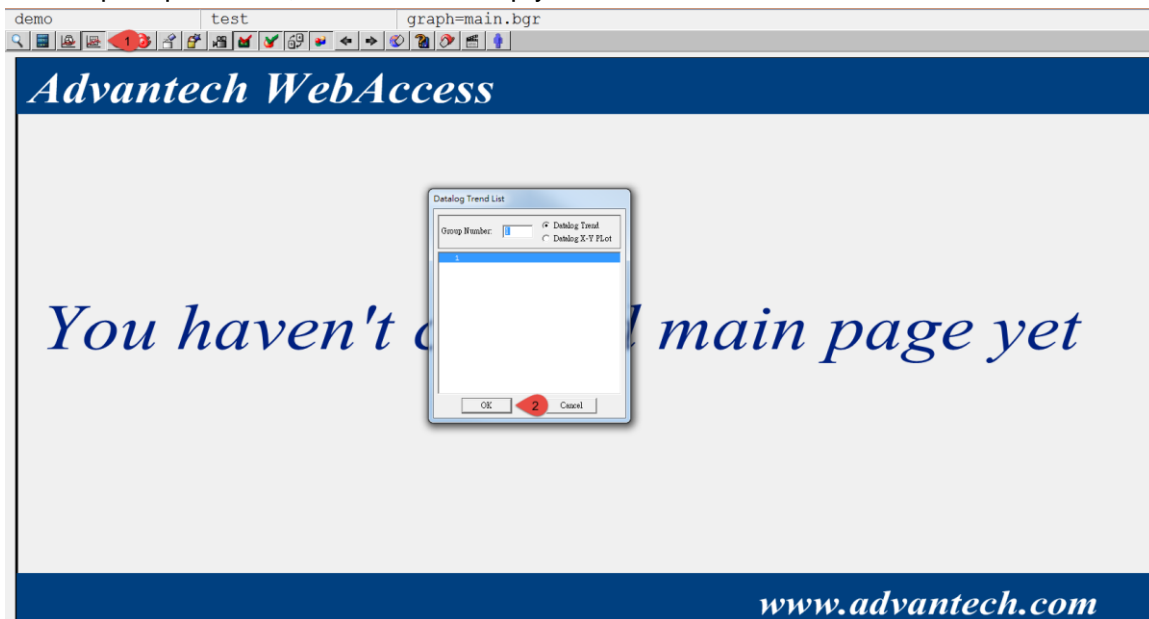
## Project downloading



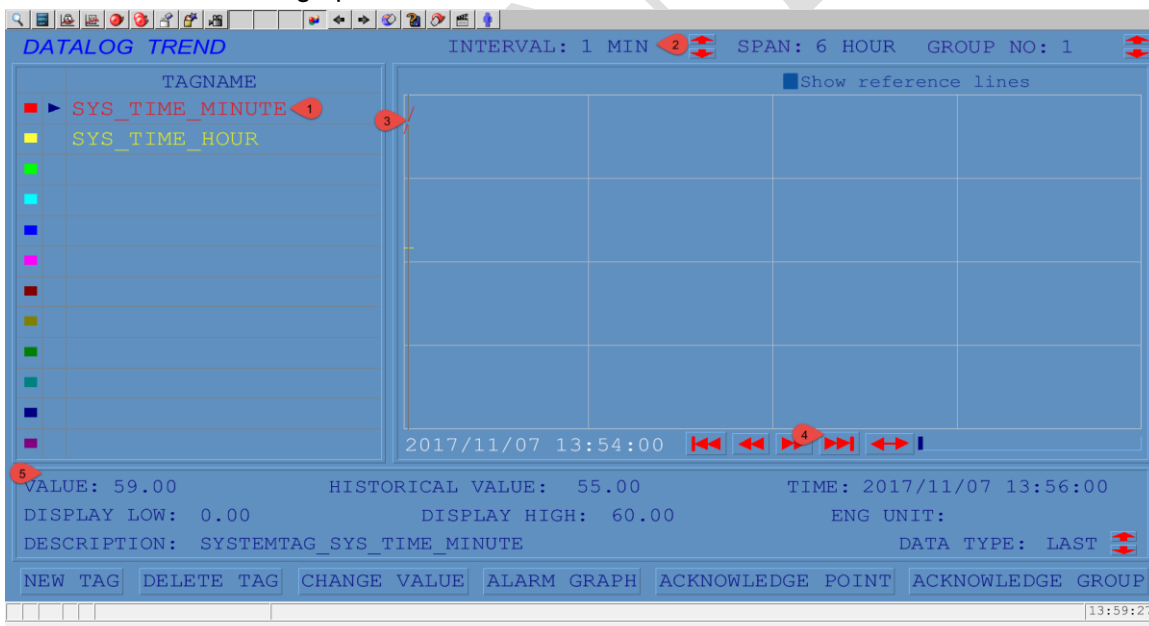
1. In “Project/Node” list, click SCADA node “test”.
2. Click “Download” button. In the prompt window, click “submit” and wait project download. After downloading, close the prompt window.
3. Click “Start node”. In the prompt window, click “submit” and wait project download. After downloading, close the prompt window.
4. Click “Start View”. In the prompt window, click “Advantech WebAccess”. In the prompt window, input administrator name and password. Press “Enter” to finish the settings.

## Monitoring the data-log trend

In the prompt window, choose the Group you set and click “ok.”

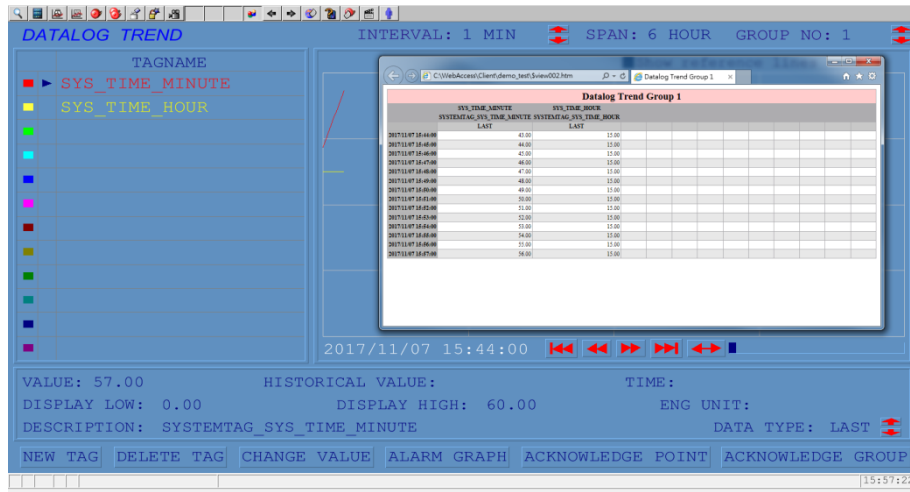


In DATALOG TREND graph,

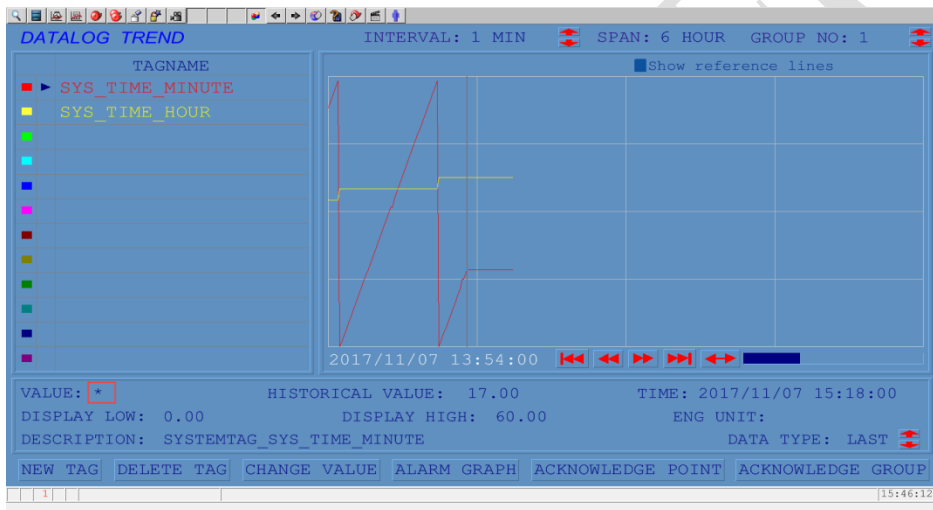


1. Tag name shows the name you want to monitor.
2. You can modify the observing interval by using up and down arrow. Switch the interval over **1 MIN** because the function of resuming broken transfer could only be observed when the interval is set greater or equal to 1 minute.
3. This area shows the status of the tag, and the data-log trend would be drawn here.
4. You could switch to left and right to observe data-log trend.
5. This block shows the information of the tag. The VALUE is the current value, and the HISTORICAL VALUE shows the value when your mouse click on region (3).

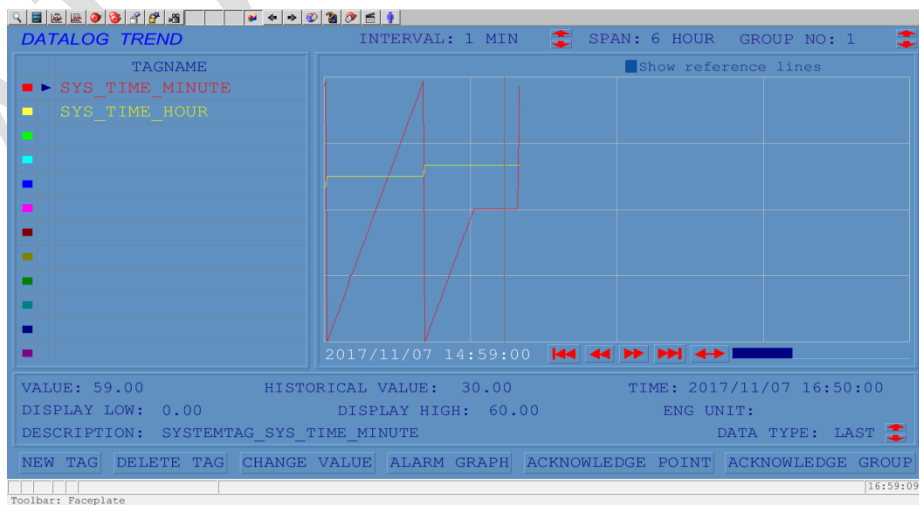
Use Ctrl+F4 to view the historical data log.



If we pull out the network line and make ADAM-3600 disconnection, the VALUE shows \* as unknown.

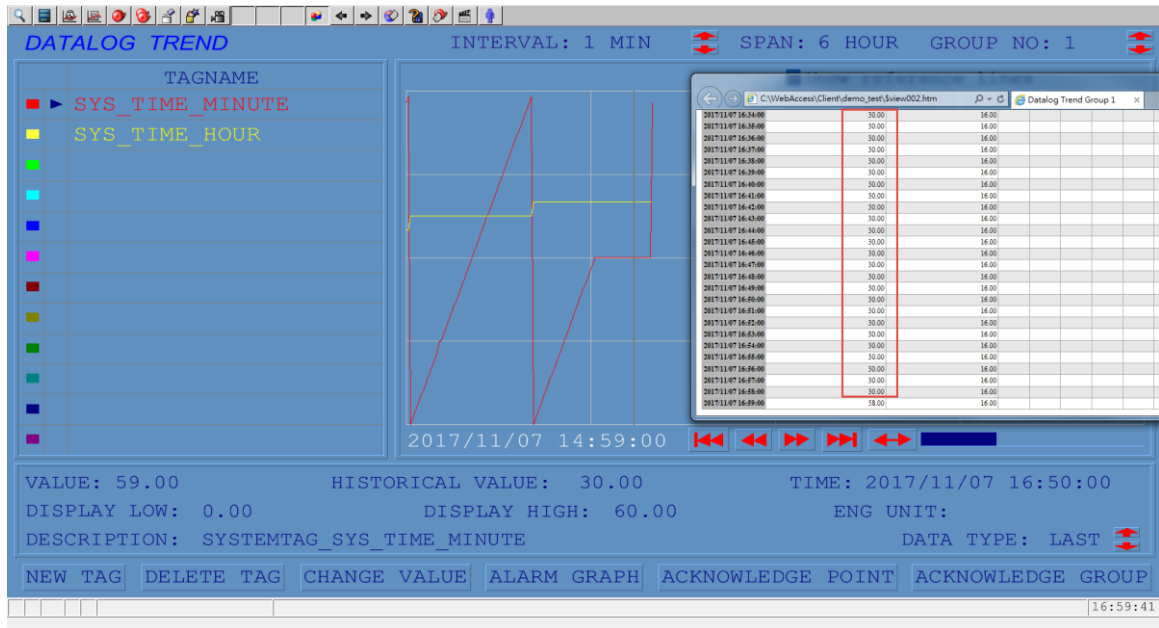


If we plug in the network connection back, the VALUE shows current value.

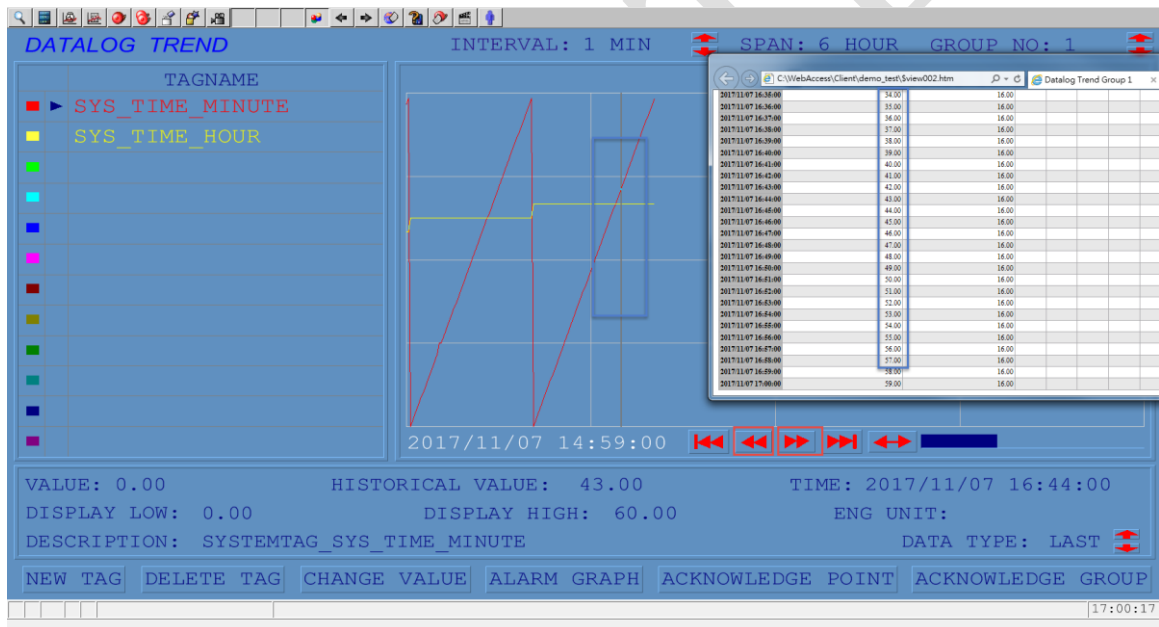




There are several values need to be resumed.



Press left and right arrow button and the value would be resumed.



## Trouble shooting

If the data-log trend cannot recover successfully, there are some settings you may check.

1. Check the tag property in WebAccess. The “Log Data” option shall be checked as “Yes”.
2. Check the SD Card. It should have recorded the data during disconnection.
3. Check the time in WebAccess is the same as the time in ADAM-3600. If not, please synchronize the time by setting up NTP server in ADAM-3600.

After WebAccess 8.3, the data log is supported for the units in 1 second if using MQTT.

User needs to enable the “Use RTDB For Data Log” in *Node Property*.

Project/Node	Alarm Email Cc		
CloudProject	Reply Alarm Email To Ack	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Node	Global Script Via Email	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Port1 (tcpip)	Global Script Security Code		
ADAM-3600	Retype Global Script Security Code		
SYS_CURRENT_TIME	Incoming Email (POP3) Server		
SYS_TIME_MINUTE	Email Account Name		
SYS_TIME_SECOND	Email Password		
Device Driver	Retype Email Password		
A101	Check Email Every	60	Seconds
ABMLGX	Alarm Voice	None	
ABPLC3	Alarm Log	To ODBC : <input type="radio"/> Yes <input checked="" type="radio"/> No	To Printer : Disable
ABPLCEIP	Minimal Alarm Log Priority	To ODBC : 0	To Printer : 0
ABSLC3	Action Log	To ODBC : <input type="radio"/> Yes <input checked="" type="radio"/> No	To Printer : Disable
AceFAM3	Send Alarm To Mobile Phone	None	
ADAM2K	Alarm To Mobile Phone By Project	<input type="radio"/> Yes <input checked="" type="radio"/> No	
ADAM4K	Data Log To ODBC	<input type="radio"/> Yes <input checked="" type="radio"/> No	
ADAM5360	Use RTDB For Data Log	<input checked="" type="radio"/> Yes <input type="radio"/> No	
ADAM5KASC	Disable All Second Data Log	<input type="radio"/> Yes <input checked="" type="radio"/> No	
ADAM5SKE			
ADAM6K			
ADMIO			
AdvDAinfo			
AdvPAC			
AE6000			
Agi34972A			
APAX			
APAX5580			
BAS3000			
...			