S/W MEDALS NV Version 2 Installation Guide

Updated: April 18, 2012

Introduction

This installation guide contains instructions for installing, configuring, and running S/W MEDALS NV. S/W MEDALS NV is a software for transmitting weather data from DAVIS Vantage Pro2TM automatic weather station (AWS) to the data center at Community Weather Information Network (Co-WIN). Data from the DAVIS Vantage Pro2TM AWS is first collected by WeatherLink[®], the software that came with the DAVIS Vantage Pro2TM AWS as a part of its product package, after which WeatherLink[®] creates a data text file that is read by S/W MEDALS NV and then transmit to Co-WIN data center. The data flow from DAVIS Vantage Pro2TM AWS to Co-WIN data center using the S/W MEDALS NV is illustrated in Figure 1.



Figure 1: Co-WIN Data Transmission Overview

Prerequisites

You should first install and configure the DAVIS Vantage Pro2TM AWS and WeatherLink[®] before installing S/W MEDALS NV. Instructions for installation and configuration of the DAVIS AWS and WeatherLink[®] should be included with the product package you receive when you purchase the DAVIS Vantage Pro2TM AWS. Do not proceed with S/W MEDALS NV unless you have already installed and configured the DAVIS Vantage Pro2TM AWS and WeatherLink[®] already.

Installation and Configuration of S/W MEDALS NV

Assuming you have successfully installed and configured the DAVIS Vantage Pro2TM AWS and WeatherLink[®], below is the instructions for installing, configuring, and running S/W MEDALS NV. In the example below, it is assumed that the WeatherLink[®] program has been installed in the directory

C:\Program Files\WeatherLink, and the data text file generated by WeatherLink⁰ in the directory C:\data\6999, but these locations are configurable by the user in WeatherLink⁰.

Step 1: Download S/W MEDALS NV Software

If you have purchased the S/W MEDALS NV software, you may download it from:

ftp://weather.ap.polyu.edu.hk/

You'll need username and password to enter the ftp site, which you'll obtain after purchasing S/W MEDALS NV. Once you have entered the FTP site, download the latest version. The filename is in the format swmedals_x_x_x_x.zip

Step 2: Extract the zip file

Extract the downloaded zip file to Desktop or any other location you prefer.

Step 3: Client PC Setup

a) Synchronize client PC with HKO time server

[1] Click the clock at the lower-right hand corner of the screen to bring up calendar, then [2] click "Change date and time settings".



In the resulting Date and Time dialog box, click the "Internet Time" tab [3], then click the "Change settings" button [4] to bring up the Internet Time Settings dialog box.



In the Internet Time Settings dialog box, ensure that the checkbox "Synchronize with an Internet time server" is checked and fill in "stdtime.gov.hk" in the Server textbox. Once this is done, click the "Update now" button to synchronize your PC with HKO time server. Click OK buttons afterward.



b) Date & time setting

Go to Start > Control Panel and then double click the "Region and Language" icon to bring up the Region and Language window.



In the resulting Region and Language dialog box, go to the Formats tab, then select "Chinese (Traditional, Hong Kong S.A.R.)" in the Formats field. Then click OK button.

🐓 Region and Languag	e
Formats Location Key	boards and Languages Administrative
Format:	
Chinese (Traditional	, Hong Kong S.A.R.) 👻
Change sorting meth	lod
Date and time form	ats
Short date:	d/M/yyyy
Long date:	yyyy'年'M'月'd'日'
Short time:	H:mm 🔻
Long time:	H:mm:ss 🔹
First day of week:	星期日
What does the nota	tion mean?
Examples	
Short date:	10/8/2011
Long date:	2011年8月10日
Short time:	10:00
Long time:	10:00:37
	Additional settings
Go online to learn ab	out changing languages and regional formats
	OK Cancel Apply

Step 4: WeatherLink® setting

S/W MEDALS NV functions by reading a data text file (a file called downld08.txt) generated by WeatherLink[®]. Therefore before we configure and run S/W MEDALS NV, we need to configure WeatherLink[®] to auto-generate the necessary data text file first.

a) Upgrade to WeatherLink[®] 5.9.3

If WeatherLink[®] is below version 5.9.0, upgrade WeatherLink[®] to version 5.9.3. The upgrade file can be downloaded at <u>http://www.davisnet.com/support/weather/software.asp</u>. S/W MEDALS NV has been tested to work with WeatherLink[®] version 5.9.0 and above. For versions below 5.9.0, we have not tested whether S/W MEDALS NV works or not.

b) Set the archive interval: 1 min







Set Archive Interval = 1 min.

c) Set the Measurement Units.

Click "Select Units"

W	eatherLink 5.9.0 05/31/10	1:25p: (6001		
File	ietup Reports Window Help	Challen K			
<u>.</u>	Station Config	Ctrl+C Ctrl+T			
	Set Transceiver Set Password				
	Select Units	Ctrl+U			
	Set Time & Date Set Archive Interval Set Barometer Set Rain Calibration Set Extra Film Calibration Set Extra Film Calibration Set Extra Film Calibration Set Extra Hum Calibration Set Yearly Rain Set Xearly Rain Set Vand Set Skin Type Scale Factor Set Alarms Set Extra Temp & Hum Alarms Clear	Ctrl+T Ctrl+A			
-	Auto Clear Auto Download Internet Settings	Ctrl+J Ctrl+E			
29	start 🔰 🖉 🙂 🧭 🚺	EmMain	🐂 WeatherLink 5.9.0 0	Q 🕄 📢 🕅	🛃 1:25 PM

Set the appropriate data measurement units. (Temperature = $^{\circ}$ C, Barometer = hPa, Wind Speed = km/h, Rain = mm, and Elevation = meters, In Air Density = kg/cu.m).



d) Internet Settings

Click "Internet Settings"





🔭 WeatherLink 5.8.0 13/04/10 14:46: 6998 - [V	antage Bulletin]					_ 0 ×
Eile Setup Reports Window Help			-			_ 8
	🔬 쭏 📃	<u> 40 ×</u>]			
WIND DIRECTION	TEMPER	ATURE (F)		HUMI	DITY (%)	WIND SPEED
NW NE E	Internet Settings Internet Settings Internet Connection Summary Internet Transfer Enabled: Off Local Transfer Enabled: Off FTP Path	nternet logon: Connection Type: No Intern	F et Connection. Prox	TP host Plogon:	t Proxy Server	8 10 12 6 114 4 16 2 18
SW SE	Local Path:			Internet Con	nection Settings	0≻ √20 Mph
S 2572	Data Upload Summary Profile 1	Profile 2 Profile 3	Profile 4 Profile	e 5 Profile 6	Profile 7 Profile	0 3 1h: 3
CURRENT RAIN (in)	Upload Frequency					TOTAL RAIN (in)
DAY STORM RATE	Automatically download					MONTH YEAR
	Number of Template 0	0 0	0 0	0	0 0	
0.4 -	Number of Reports to 0 transfer	0 0	0 0	0	0 0	- 30.00
0.3	Number of Current Data 0 Images to transfer	0 0	0 0	0	0 0	
0.2 -	Number of Historical 0 Data Images to transfer	0 0	0 0	0	0 0	- 20.00
	Configure	Configure Configure	Configure Config	ure Configure	Configure Configu	• 10.00
0.1 -	ОК		Cancel	Help		10.00
0.0 0.00 0.00						0.18 36.51
0.00 0.00			Currents	40.40		30.31
	Mostly cl	oudy and cooler	Precipitation	likely. Win	ıdy.	6 7
📀 🖉 📜 D 🔓	1 🔭 🚿					ZH 🚎 🔺 🏴 🛱 🛱 🌓 14:46 13/4/2010



Click OK button. (Note: When the "Local Transfer Enabled" checkbox is selected, this will cause WeatherLink[®] to create a file called downld08.txt, which is the data text file S/W MEDALS NV uses to read the required weather data to send to Co-WIN data centre. This downld08.txt file will be generated under two locations: (1) the WeatherLink[®] station directory, and (2) the directory specified in the Local Path textbox in the Internet Connection Settings dialog. When we configure the S/W MEDALS NV in later steps, we'll put the WeatherLink[®] station directory in a config file in S/W MEDALS NV, so from the perspective of S/W MEDALS NV it does not matter what directory you put in Local Path textbox, as long as the "Local Transfer Enabled" checkbox is selected so that WeatherLink[®] knows that it needs to generate the downld08.txt file. In this example we provided our WeatherLink[®] station directory in the Local Path textbox, but you are put any directory you like there.)

🔭 WeatherLink 5.8.0 13/04/10 14:46: 6998 - [Va	antage Bulletin]										
🚡 <u>F</u> ile <u>S</u> etup <u>R</u> eports <u>W</u> indow <u>H</u> elp											_ 8 ×
		É	5 🕜 🗙]							
WIND DIRECTION	онт н		E ([*] F)	IN		HUMI	DITY (%)		WI	ND SPEED	
	Internet Settings Internet Connection Summ Internet Transfer Enabled: Local Transfer Enabled: FTP Path: \ Local Path:	nary Off Internet	logon: ection No Interr	et Connection.	FTP ho FTP logo Proxy Serv	st: n: ver Use Defaul Internet Con	It Proxy Server			10 12	4 16 18 20
SW SE	Data Upload Summary Offset Time:	Profile 1 Pro	file 2 Profile 3	Profile 4	Profile 5	Profile 6	Profile 7	Profile 8	jh: 3 Min Áva: 0	Mph O	
CURRENT RAIN (in) DAY STORM RATE	Upload Frequency Automatically download								TOTAL R. MONTH	AIN (in) YEAR	- 40.00
0.4	before Internet upload Number of Template Files to transfer Number of Reports to	0	0 0	0	0	0	0	0			- 30.00
0.3	transfer Number of Current Data Images to transfer Number of Historical	0	0 0	0	0	0	0	0			- 20.00
0.2 -	Data Images to transfer	Configure Con	figure Configure	Configure	Configure	Configure	Configure	Configure			- 10.00
		ок	1-	Cancel		Help			0.10	20 51	0.00
Sunrise: 6:05 Sunset: 18:42 Mostly cloudy and cooler. Precipitation likely. Windy.											
📀 🖉 🚞 D 🚪	1 🔭 🚿								ZH 🚎 🔺 🏴	• 🛱 🛄 🕪	14:46 13/4/2010

Use any of the unused profile, and click Configure button.

Click Select Report Files button.

WeatherLink 5.9.3 09/08/11 14:51:	6999	state, then the same from a state of	
File Setup Reports Window He	lp		
>	1 🗖 🔜 🍣 👘		
			~
Internet Set	ttings		23
- Internet	Connection Data Upload Profile 1	×	
Internet	I ransfer El	- Download Weather	
Local Tr	ransfer Ena Upload every 1 min.	Starting at 0:03	
FTP Pal	ith: \ Template Files to Upload	Report Files to Upload	erver
Local P.	ath: C:\da	1-Week Data Archive	ettings
-Data Up	pload Sumn		7 Profile 8
Offset	Time: Select Template Files	Select Report Files	-
Autom before	atically dow Current Data Images to Upload:	Historical Data Images to Upload:	
Numbe Files to	er of Templ o transfer		0
Numbe transfe	er of Report er		0
Numbe	er of Curren		0
Numbe Data In	er of Histori mages to tr	Select Images	0
	ОК	Cancel Help	ure Configure
🚳 📋 🚮 🔹	o 🙆 🖳 💽 🕨		EN 🔺 🏴 🙀 .all 🌓 14:51 9/8/2011

Select check box 1-Week Data Archive. Then click OK. We have now finished the necessary configuration of WeatherLink[®] and are now ready to proceed with configuring and running S/W MEDALS NV.

File Stepper Window Help Image: Stepper Window Help Image: Stepper Window Help Image: Stepper Help Image: Stepper Help Image: Stepper Help </th <th>3. WeatherLink 5.9.3 09/08/11 14:53: 6999</th> <th>_ 0 ×</th>	3. WeatherLink 5.9.3 09/08/11 14:53: 6999	_ 0 ×
Image: 10 interest Image: 10 interest Image: 10 inte	File Setup Reports Window Help	
Internet Settings X Internet Connection Data Upload Profile 1 Internet Transfer En Upload every 1 min. Stating al 0:03 Convertication FTP Patr. Upload Precis for Data Upload Profile 1 Upload Patr. Upload Precis for Data Upload Profile 1 Upload Patr. Upload Activity Data Upload Sum Internet Frequency Offset Time: Upload free reports Upload Free reports Vertex Select an optional sub-directory Internet Lep Number of Freed Off Number of Freed Off Off Configure Off Configure Off Onfigure Off Onfigure Off Configure Off Configure Off Configure Off Off Off Off Off Configure Off Off		
Internet Settings X Internet Connection Data Upload Profile 1 Local Transfer En Upload every 1 min. FIP Path: V Local Path: Code Data Upload Sume Upload Heater Reports for Data Upload Profile 1 Upload Sume V Upload Sume V Upload Tressee NDAA This Month NDAA This Yea V You advamatically down V Advamatically down V Value and Report NDAA This Yea Number of Report Value and these reports to: Number of Report Origue Number of Pathod Off Configure OK Number of Histor OK Last Inages to the date of Histor OK Last Inages to the date of Histor OK Upload Streade OK Configure OK		
Internet Connection Data Upload Profile 1 23 Internet Transfer En Upload every 1 min. Stating at 0.03 Download Weather Station First FTP Path: \ Upload Perofile 1 ************************************	Internet Settings	<u></u>
Local Path: Civia Data Upload Summ NDAA This Worth Offset Time: Upload Frequence Upload Frequence Automatically dow Automatically dow Select an optional sub-directory Data Upload Transfer Configure Number of Temport Off Number of Temport Off Number of Temport Off Number of Temport Help Number of Temport OK Cancel Help Number of Hittory OK Cancel Help	Internet Transfer En Local Transfer En FTP Path: V Upload every 1 min. V Starting at 0.03 V Download Weather FTP Path: V Upload Weather Reports for Data Upload Profile 1	arver
Use upoad Sum Offset Time: Upload Frequency Automatically dow Files to transfer Number of Tempting Number of Tempting Number of Tempting Number of Tempting Number of Current Number of Current Number of Current Number of Current Number of Current Number of Histon Data Images to transfer Number of Histon	Local Path: C\da Reports NDAA This Month NDAA Last Month	ettings
	Data Upload Sumi Image: NDAA This Year Image: NDAA This Year Offset Time: 2 Day Data Archive Image: NDAA Archive Upload Frequence Automatically dow Select an optional sub-directory Automatically dow before Internet up Image: NDAA Archive Number of Tempt APRIS Weather Report OK Number of Tempt Off Cancel Number of Tempt Image: to transfer Help Number of Hetorin Help	7 Profile 8
	OK Cancel Hep	

(Note: WeatherLink[®] will generate a data text file called downld08.txt per minute Medals under the station directory and under the Local Path directory. This file is read by S/W MEDALS NV.)

Step 5: S/W MEDALS NV Setting

In the extracted directory of the S/W MEDALS NV, open the config.xml file using notepad.



Configure the following tags in the config.xml file. **Remember to save the file when done.**

area_code: assigned by Co-WIN when you first purchased the S/W MEDALS NV

station_id: assigned by Co-WIN

WLPROGDIR: directory where your WeatherLink[®] program is located (i.e. the directory containing your WeatherLink.x.x.x.exe executable file (where x is an integer).

WLDATADIR: directory where your WeatherLink[®]-generated data text file (downld08.txt) is located. **WLcomm**: whether the WeatherLink[®] uses USB or IP for connection with the DAVIS Vantage Pro2TM console (value is either **USB** or **IP**).

hasProxy: whether your computer uses proxy server for connection with internet (Y or N)

ProxyUri: URI of the proxy server your computer is connected to for internet (leave blank if you have N for **hasProxy** field)

ProxyUsername: proxy username (leave blank if you have N for **hasProxy** field)

ProxyPassword: proxy password (leave blank if you have N for hasProxy field)

Below is a sample of the config file used at the PolyU weather station. You should provide the area_code and station_id of your own weather station assigned by Co-WIN. Also, since we have installed WeatherLink[®] at C:\Program Files\WeatherLink, and our WeatherLink[®] station directory is created at C:\data\6999, we have set the WLPROGDIR and WLDATADIR parameters accordingly. You should adjust those parameters according to where you installed WeatherLink[®] and created the WeatherLink[®] station directory.

Example of config.xml:
<info></info>
<area_code>852</area_code>
<station_id>6999</station_id>
<wlprogdir>C:\Program Files\WeatherLink\</wlprogdir>
<wldatadir>C:\data\6999\downld08.txt</wldatadir>
<wlcomm>USB</wlcomm>
<debug>N</debug>
<hasproxy>N</hasproxy>
<proxyuri></proxyuri>
<proxyusername></proxyusername>
<proxypassword></proxypassword>

Step 6: Running S/W MEDALS NV

Now we are ready to run S/W MEDALS NV. Please follow the instruction below:

For Windows Vista, Windows 7, Windows Server 2008 or above:

- 1. Right-click on simplifiedSWMedals.exe and select "Create shortcut"
- 2. Right-click on the shortcut and select "Properties".

Recycle Bin swmedals2.	2 2 2	
Mozilia Firefox	e W	plifiedSWMedals - Shortcut Properties X Security Details Previous Versions General Shortcut Compatibility simplifiedSWMedals - Shortcut get type: Application
bledsb - Sionteut	Open Troubleshoot compatibility Open file location Run as administrator Add to archive Add to archive Add to "simplifiedSWMedals.rar" Compress and email Compress on "simplifiedSWMedals.rar" and email Pin to Taskbar Pin to Start Menu Restore previous versions Send to Cut Copy Create shortcut Delete Rename Properties	tion: swmedals2_0_1_0 dop'swmedals2_0_1_0'simplifiedSWMedals.exe C:\Users'ace\Desktop'swmedals2_0_1_0 y: None Normal window le Location Change Icon Advanced

3. Under the tab "Compatibility", click "Change setting for all users" to display the Properties dialog box.

👸 📰	
Recycle Bin swmedals2	simplifiedSWMedals - Shortcut Properties
Recycle Bin swmedals2 Mozilla Frefox Swmedals2 SimplifiedS Shortcut	SimplifiedSWMedals - Shortcut Properties Security Details Previous Versiess General Shortcut Compatibility If you have problems with this program and it worked correctly on an earlier version of Windows, select the compatibility mode that matches that earlier version. Help me choose the settings Compatibility mode Run this program in compatibility mode for: Windows XP (Service Pack 3) Settings Run in 256 colors Run in 640x 480 screen resolution Disable disktop composition Disable display scaling on high DPI settings Privilege Level Run this program as an administrator Image: Change settings for all users
-	OK Cancel Apply

4. Select the "Run this program as an administrator" check box, and then click OK twice.



- 5. Put the shortcut at the following path:
- C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Startup

For Windows 2000, Windows XP:

- 1. Right-click on simplifiedSWMedals.exe and select "Create shortcut".
- 2. Put the shortcut at the following path:
- C:\Documents and Settings\All Users\Start Menu\Program\Startup

(S/W MEDALS NV involves a module that automatically checks for disconnected USB connection between WeatherLink[®] and the Vantage Pro2TM console and reconnects the USB connection when necessary. This operation requires administrator right. If S/W MEDALS NV is not being run as administrator, it will still read and transmit data to Co-WIN data centre properly, but it will not be able to reconnect lost USB connection between WeatherLink[®] and Vantage Pro2TM console.)