| Classification | ISaGRAF FAQ- | ISaGRAF FAQ-158 |     |      |          |      |        |
|----------------|--------------|-----------------|-----|------|----------|------|--------|
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Soft-GRAF Application - Data Logger

This paper lists the way to build a data logger application in an ISaGRAF WinCE PAC by using the Soft-GRAF HMI software. User may download this document "fag158.pdf" and the example program "faq158.pia" from http://www.icpdas.com/faq/isagraf.htm > FAQ-158.

The following ISaGRAF driver version support the Soft-GRAF 's "g Logger1" HMI object.

WP-8xx7: driver Ver. 1.53 or later VP-25W7/23W7: driver Ver. 1.45 or later XP-8xx7-CE6: driver Ver. 1.33 or later WP-5147 : driver Ver. 1.02 or later XP-8xx7-ATOM-CE6: driver Ver. 1.01 or later

User may download the new ISaGRAF driver from the following Web site. http://www.icpdas.com/products/PAC/i-8000/isagraf-link.htm

The Soft-GRAF Studio supports the "g Logger1" HMI object starting from its version 1.07 and later version. User may download it from the following web site. http://www.icpdas.com/fag/isagraf.htm > FAQ-146.

The "g Logger1" HMI object can record up to 20 data automatically in the ISaGRAF WinCE PAC by the sampling rate set by the designer. It creates one file in each day to record the specified data. The data type can be Boolean, 16-bit signed integer, 32-bit signed integer and 32-bit Float. The "g Logger1" also supports to upload the data file automatically to a PC by ftp at a preconfigured hour (here PC is a ftp server). Or PC may run ftp to connect the ISaGRAF WinCE PAC to download the data file (here PC is a ftp client).



# Soft-GRAF demo for g Logger1

| Classification | ISaGRAF FAQ-158 |         |     |      |          |      |        |
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#### 1.1 Description of the ISaGRAF example program

The "faq158\_demo.zip" from <u>http://www.icpdas.com/faq/isagraf.htm</u> > FAQ-158 includes one ISaGRAF example program "faq158.pia" . Please restore it to the PC / ISaGRAF as the following figure.



Then download this program to the ISaGRAF WinCE PAC . User may refer to the section 1.1 , 1.2 and section 2.1 of the "ISaGRAF User's manual" if not familiar with the ISaGRAF software. The manual resides at <a href="http://www.icpdas.com/products/PAC/i-8000/getting\_started\_manual.htm">http://www.icpdas.com/products/PAC/i-8000/getting\_started\_manual.htm</a> (about 11MB) .

| Classification   | ISaGRAF FAC   | SaGRAF FAQ-158  |   |   |  |   |        |  |  |
|--|---|---|---|---|--|---|--------|--|--|
| Author   | Chun Tsai   | Version   | 1.1   | Date  | Nov.2012   | Page  | 3 / 12 |  |  |
| There is one L   | adder and one   | e ST progr  | am in the "fac  | q158.pia  | ı" project.  |   |        |  |  |
|  | - ISaGRA  | F - FAQ158  | - Ргодтать  |   |  |   |        |  |  |
|  | <u>F</u> ile <u>M</u> ake   | <u>P</u> roject <u>T</u> oo   | ols De <u>b</u> ug <u>O</u> ption   | ns <u>H</u> elp   |  |   |        |  |  |
| 🕒 🖬 🚭 🕦 🗅 🖻 💼 🗮 🏧 🕪 💷 🌺 🗶 (  |   |   |   |   |  |   |        |  |  |
|  | Begin:  | (HIC)   | D1  |   |  |   |        |  |  |
|  |   | 💌 S   | <b>T1</b>   |   |  |   |        |  |  |
|  |   |   |   |   |  |   |        |  |  |
|  | Begin: ST1  | (Structured 1   | 'ext)   |   |  |   |        |  |  |
|  |   |   |   |   |  |   |        |  |  |
| Global variables :   |   |   |   |   |  |   |        |  |  |
| Global variab  | les :   |   |   |   |  |   |        |  |  |
| Global variab  | les :   |   |   |   |  |   |        |  |  |
| Global variab<br>Name  | les :<br><b>Type</b>  | Attribut  | 9   |   | Descriptio   | n   |        |  |  |
| Global variab<br><b>Name</b><br>INIT   | les :<br><b>Type</b><br>Boolean   | <b>Attribut</b><br>Internal   | e<br>set initial v  | alue as   | <i>Descriptio</i><br>TRUE.   | n   |        |  |  |
| Global variab<br>Name<br>INIT<br>Year1   | les :<br><b>Type</b><br>Boolean<br>Integer  | Attribute<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea  | alue as<br>ır, i.e. 2(  | <i>Descriptio</i><br>TRUE.<br>012  | n   |        |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1   | les :<br><b>Type</b><br>Boolean<br>Integer<br>Integer   | Attribute<br>Internal<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea<br>PAC 's mo   | alue as<br>ir, i.e. 20<br>nth, i.e.   | Descriptio<br>TRUE.<br>)12<br>11 (Noverr   | n<br>nber)  |        |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1   | les :<br><b>Type</b><br>Boolean<br>Integer<br>Integer<br>Integer  | Attribute<br>Internal<br>Internal<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo  | alue as<br>ar, i.e. 20<br>nth, i.e.<br>nth-day,   | Descriptio<br>TRUE.<br>012<br>11 (Novem<br>i.e. 15 (ca   | <b>n</b><br>1ber)<br>n be 1 to 3′   | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1  | les :<br><b>Type</b><br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer   | Attribute<br>Internal<br>Internal<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea  | alue as<br>ir, i.e. 20<br>nth, i.e.<br>nth-day,<br>ək-day,  | <i>Descriptio</i><br>TRUE.<br>012<br>11 (Novem<br>i.e. 15 (ca<br>i.e. 2 (Tues  | n<br>ber)<br>n be 1 to 37<br>sday)  | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1   | les :<br><b>Type</b><br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer  | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea<br>PAC 's hou  | alue as<br>Ir, i.e. 20<br>nth, i.e.<br>nth-day,<br>ek-day,<br>Ir, i.e. 1  | Descriptio<br>TRUE.<br>012<br>11 (Novem<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5  | n<br>nber)<br>n be 1 to 3<br>sday)  | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1<br>Minute1  | les :<br><b>Type</b><br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer  | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's mo<br>PAC 's hou<br>PAC 's hou   | alue as<br>ar, i.e. 20<br>nth, i.e.<br>nth-day,<br>ek-day,<br>ar, i.e. 19<br>nute, i.e.   | <i>Descriptio</i><br>TRUE.<br>012<br>11 (Novem<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5<br>46   | n<br>nber)<br>n be 1 to 37<br>sday)   | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1<br>Minute1<br>Second1                                     | les :<br>Type<br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer                                 | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea<br>PAC 's hou<br>PAC 's min<br>PAC 's sec  | alue as<br>ar, i.e. 20<br>nth, i.e.<br>nth-day,<br>ek-day,<br>ar, i.e. 19<br>aute, i.e.<br>cond, i.e  | <i>Descriptio</i><br>TRUE.<br>012<br>11 (Novem<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5<br>46<br>. 18   | n<br>n be 1 to 3′<br>aday)  | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1<br>Minute1<br>Second1<br>V1                               | les :<br>Type<br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Real   | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal   | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea<br>PAC 's hou<br>PAC 's min<br>PAC 's sec<br>The first da  | alue as<br>ar, i.e. 20<br>nth, i.e.<br>nth-day,<br>ek-day,<br>ar, i.e. 19<br>oute, i.e.<br>cond, i.e<br>ata, set I  | Descriptio<br>TRUE.<br>11 (Novem<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5<br>46<br>. 18<br>NetWork ad   | n<br>nber)<br>n be 1 to 3<br>day)<br>dr as 1  | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1<br>Minute1<br>Second1<br>V1<br>V2                         | les :<br><b>Type</b><br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Real<br>Real   | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal                                     | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea<br>PAC 's hou<br>PAC 's hou<br>PAC 's sec<br>The first da<br>The secon                               | alue as<br>ar, i.e. 20<br>nth, i.e.<br>nth-day,<br>ek-day,<br>ar, i.e. 19<br>nute, i.e.<br>cond, i.e<br>ata, set 1<br>d data, s   | <i>Descriptio</i><br>TRUE.<br>012<br>11 (Novem<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5<br>46<br>. 18<br>NetWork ad<br>set NetWork  | n<br>ber)<br>n be 1 to 3<br>day)<br>dr as 1<br>addr as 3                                | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1<br>Minute1<br>Second1<br>V1<br>V2<br>V3                   | les :<br><b>Type</b><br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Real<br>Real<br>Real<br>Real                           | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal                         | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea<br>PAC 's min<br>PAC 's sec<br>The first da<br>The secon<br>The third d                 | alue as<br>ar, i.e. 2(<br>nth, i.e.<br>nth-day,<br>ek-day,<br>ur, i.e. 1<br>ata, set l<br>d data, s<br>ata, set   | Description<br>TRUE.<br>D12<br>11 (Novern<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5<br>46<br>. 18<br>NetWork ad<br>set NetWork ad<br>NetWork ad                            | n<br>ber)<br>n be 1 to 3 <sup>r</sup><br>aday)<br>dr as 1<br>addr as 3<br>Idr as 5      | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1<br>Minute1<br>Second1<br>V1<br>V2<br>V3<br>CNT1           | les :<br>Type<br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Real<br>Real<br>Real<br>Real<br>Integer                       | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal             | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea<br>PAC 's hou<br>PAC 's hou<br>PAC 's sec<br>The first da<br>The secon<br>The third d<br>To simulate | alue as<br>ar, i.e. 20<br>nth, i.e.<br>nth-day,<br>ek-day,<br>ar, i.e. 19<br>nute, i.e.<br>sond, i.e<br>ata, set 1<br>d data, s<br>ata, set<br>ata, set<br>ata, set                         | Descriptio<br>TRUE.<br>11 (Novem<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5<br>46<br>. 18<br>NetWork ad<br>set NetWork ad<br>NetWork ad<br>of Cos curve                     | n<br>ber)<br>n be 1 to 3<br>day)<br>dr as 1<br>addr as 3<br>idr as 5<br>value           | 1)     |  |  |
| Global variab<br>Name<br>INIT<br>Year1<br>Month1<br>Day1<br>Week1<br>Hour1<br>Minute1<br>Second1<br>V1<br>V2<br>V3<br>CNT1<br>Cycle1 | les :<br>Type<br>Boolean<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Integer<br>Real<br>Real<br>Real<br>Real<br>Integer<br>Integer<br>Integer | Attribute<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal<br>Internal | e<br>set initial v<br>PAC 's yea<br>PAC 's mo<br>PAC 's mo<br>PAC 's wea<br>PAC 's hou<br>PAC 's hou<br>PAC 's sec<br>The first da<br>The secon<br>The third d<br>To simulata | alue as<br>ar, i.e. 20<br>nth, i.e.<br>nth-day,<br>ek-day,<br>ar, i.e. 19<br>nute, i.e.<br>cond, i.e<br>ata, set 1<br>d data, s<br>ata, set<br>ata, set<br>ata, set<br>e Sin an<br>e Sin an | Description<br>TRUE.<br>11 (Noverr<br>i.e. 15 (ca<br>i.e. 2 (Tues<br>5<br>46<br>. 18<br>NetWork ad<br>set NetWork ad<br>set NetWork ad<br>d Cos curve<br>d Cos curve | n<br>ber)<br>n be 1 to 3<br>sday)<br>dr as 1<br>addr as 3<br>Idr as 5<br>value<br>value | 1)     |  |  |

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| LD1 program :<br>(* To get the c   | urrent date an   | d time of the PAC *)  |                                    |                |            |              |
| F  | en SYSDA   | T_R<br>eno<br>YYyear1<br>MMmonth1<br>DDday1<br><u>WW</u> -week1 | YSTIM_R<br>eno<br>HH<br>MM<br>SS - |                | 1          |              |
| ST1 program:   |  |   |                                    |                |            |              |
| (* To simulat<br>v1 := REAL  | te the value o<br>( <b>second1)</b> ;  | f V1 and simulate \$  | Sin and Co                         | s value for V2 | 2 and V3 v | /ariables *) |
| if INIT the<br>INIT := F<br>CNT1 :=<br>T1 := T#(<br>Interval1<br>cycle1 :=<br>e1 := RE<br>tStart(T1<br>T1_Next<br>end_if ;<br>if T1 >= T1<br>if T1 >= T1 | en<br>alse ;<br>0 ;<br>)s;<br>:= T#250ms<br>: 480 ;<br>AL( 2.0 * 3.14<br>);<br>:= T1 +Interv<br>_NEXT the<br>: T#6h then | ;<br> 15926 / REAL(cycl<br><sup>/</sup> al1 ;<br>n              | e1) );                             |                |            |              |
| T1 := T<br>end_if ;<br>T1_Next<br>CNT1 :=<br>if CNT1<br>CNT1 :<br>end_if ;<br>v2 := 50.<br>v3 := 50.<br>end_if ;   | #0s ;<br>:= T1 +Interv<br>CNT1 + 1 ;<br>>= cycle1<br>= 0 ;<br>0 * sin( REAL<br>0 * cos( REA                              | val1;<br>then<br>-(CNT1)*e1)+ 50.0<br>L(CNT1)*e1)+50.0          | •<br>•                             |                |            |              |
|  |  |   |                                    |                |            |              |

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|---|--|---|---|---|--|--------------------------------|--|--|--|
| Autio   | Ghun isai  |   | Dale  |   | Faye   | 5/12                           |  |  |  |
| 1.2 Descrip   | 1.2 Description of the Soft-GRAF HMI project   |   |   |   |  |                                |  |  |  |
| HMI view of this  | HMI view of this project:  |   |   |   |  |                                |  |  |  |
| (   | Si<br>Si Si S   | oft-GRAF der  | no for g_Lo   | ogger1  | 150)   |                                |  |  |  |
| (11)  | (www.icpdas.com > FAQ > software > 15aGKAF > 158)                                      |   |   |   |  |                                |  |  |  |
| mA  | mA – Cureve1 – Cureve2 – Cureve3   |   |   |   |  |                                |  |  |  |
| $ \begin{array}{c} 100.0\\ 80.0\\ 60.0\\ 40.0\\ 20.0\\ 0.0 \end{array} $                |  |   |   |   |  |                                |  |  |  |
| NOV,13<br>2012<br>TUE   | 18:10:0  | 18:1  | .1:30   | 18:13:00  | 18:14:   | 30<br>No. 1                    |  |  |  |
|   |  | Data Log  | gger 1  |   |  |                                |  |  |  |
| This demo proj<br>directory in the<br>GRAF Studio\"<br>Studio.exe") to<br>Studio\FAQ158 | ect of the Soft-<br>"faq158_demo<br>normally). The<br>open this proje<br>3\FAQ158.sof" | GRAF HMI is "F<br>o.zip" to the direc<br>on run the Soft-G<br>oct (execute File<br>)                  | AQ158" . Ple<br>ctory of your P(<br>RAF Studio ("c<br>> Open to ope               | ease copy the<br>C / Soft-GRAI<br>d:\Soft-GRAF<br>en the "d:\Soft | "FAQ158"<br><sup>=</sup> Studio (It<br>Studio\Sof<br>-GRAF | sub-<br>is "d:\Soft-<br>t-GRAF |  |  |  |
|   |  | oft-GRAF Studio<br>le Project View I<br>New<br>Open   | Help<br>D 💼   🔁 🍋 🛯   |   |  |                                |  |  |  |
| This HMI exam<br>g_Label<br>g_Label<br>g_Trend<br>g_Logger1 :                           | ple includes fo<br>: To show th<br>: To show th<br>: To show th<br>To show the         | our HMI objects a<br>e "Soft-GRAF de<br>e " <u>www.icpdas.c</u><br>he trend curve<br>"Data Logger1" l | as the following<br>emo for g_Logo<br><u>com</u> > FAQ > so<br>button (it will lo | ı.<br>ger1"<br>oftware > ISa<br>og data autom                     | GRAF > 15<br>atically)                                     | 58"                            |  |  |  |
| This paper only<br>Studio" softwar<br>FAQ-146 .   | / lists the usag<br>e, please refer  | e of the "g_Logg<br><sup>.</sup> to the documen   | er1" . If user is<br>t in the <u>http:</u>  | not familier v<br>://www.icpdas                                   | vith the "So<br>s.com/faq/is                               | ft-GRAF<br>agraf.htm >         |  |  |  |
|   |  | CP DAS Co., Lt  | d. Technical do   | ocument   |  |                                |  |  |  |

| Classification | ISaGRAF FAQ- | ISaGRAF FAQ-158 |     |      |          |      |        |
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File format of the "g\_Logger1" data :

The "g\_Logger1" records data in a file every day. If choosing CSV format, for example, the file name is "g\_Logger1\_2012\_11\_13.csv" on the date of Nov.13th,2012. Data files are saved in the following directory if it is November 2012.

WP-8xx7, VP-2xW7, WP-5xx7: \Micro\_SD\Soft-GRAF\g\_Logger1\2012\11\ XP-8xx7-CE6 and XP-8xx7-ATOM-CE6 : \System\_Disk2\Soft-GRAF\g\_Logger1\2012\11\

The first row lists the "File Title". The second row lists some "Column Title". The max. amount of the "Column title" is 21. The first "Column title" is Date-Time. The second to 21th are the title of all the 1 ~ 20th data. The other rows starting from the 3th row are the data of each sampling. All title can be displayed as your local language.

The following example shows the "File Title" as "g\_Logger1 Demo". The first column-title in the second row is "Date Time". The 2nd to 4th column-title are "Curve1", "Curve2" and "Curve3" respectively.

g\_Loger1 Demo (NOV-13-2012 Tuesday)

Date Time,Curve1,Curve2,Curve3

NOV-13-2012 17:15:06,6.0,5.4,27.3

NOV-13-2012 17:15:10,10.0,1.8,36.4

NOV-13-2012 17:15:15,15.0,0.0,49.3

NOV-13-2012 17:15:20,20.0,1.5,62.3

•••

If open the above data file by the Excel, it may show as the following figure.

|   | A                                   | В      | С      | D      | E |
|---|-------------------------------------|--------|--------|--------|---|
| 1 | g_Loger1 Demo (NOV-13-2012 Tuesday) |        |        |        |   |
| 2 | Date Time                           | Curve1 | Curve2 | Curve3 |   |
| 3 | NOV-13-2012 17:15:06                | 6      | 5.4    | 27.3   |   |
| 4 | NOV-13-2012 17:15:10                | 10     | 1.8    | 36.4   |   |
| 5 | NOV-13-2012 17:15:15                | 15     | 0      | 49.3   |   |
| 6 | NOV-13-2012 17:15:20                | 20     | 1.5    | 62.3   |   |

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|--|---|--|--|--|---|---|----------------|--|--|
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| g_Logger1 setti<br>If don't want the<br>Data Log                       | g_Logger1 settings:<br>If don't want the "File Title", set it as blank (then the first row will become "Column Title") .<br>Data Logger 1 |  |  |  |   |   |                |  |  |
|  |   | - Two  | click  |  |   |   |                |  |  |
| g_Logger 1   |   |  | g_Logger 1   |  |   |   |                |  |  |
| Setting - 1  | etting - 2, Setting - 3   | Setting - 4  | Setting - 1, Setti | etting - 2   ;                                       | Setting - 3 Setting   | - 4   |                |  |  |
| File format  | .CSV 💌  |  | Font size  | _1   | 12,Regul  | ample rate 5 s                                      | ecs 🔽          |  |  |
| File setting   |   |  | Fole Color   | -  |   |   |                |  |  |
| LoggerFile   | Setting   |  |  |  |   |   |                |  |  |
| File settin  | ig-1 File setting 2   |  |  |  |   |   |                |  |  |
| File title   | g_Log   | er1 Demo   |  |  |   |   |                |  |  |
| Time for   | mat Show Date, Ho   | ur, Min., Sec  | The:   | se 3 ad  | dress are the   | e   |                |  |  |
| Title of t   | he 1st column Date  | Time   | add  | ress of<br>ables ''\                                 | the ISaGRAI<br>√1''  , ''V2''   | -   |                |  |  |
| Date for   | mat DEC-31-2012   | 1  | and  | "V3"   | ,   |   |                |  |  |
| LoggerFileSe   | tting   |  |  |  |   | ×   |                |  |  |
| File setting-1   | File setting 2  | ·  |  |  |   | J   |                |  |  |
| C  | olumn title Da  | ita Address  | Value Type   | Dot  | New   |   |                |  |  |
|  | urvel 1<br>urve2 3  | <u> </u>   | Float  | 1  | Insert  |   |                |  |  |
| ► Cu   | uve3 5  |  | Float  | 1  | Delete  |   |                |  |  |
| *  |   |  |  |  |   |   |                |  |  |
|  | Two   | click  |  |  |   |   |                |  |  |
|  |   |  |  |  |   |   |                |  |  |
| g_Loger1 D   | emo<br>Curvo  | 1 00002  | Cupo2  |  |   |   |                |  |  |
| NOV-14-20  | 12 14:54:21   | ,, ouwez,  | Calves,  |  |   |   |                |  |  |
| Note : The "san<br>The retai<br>The retai<br>The retai<br>The other no | nple rate" settir<br>ning time is 10<br>ning time is 30<br>ning time is 3 r<br>ote is one PAC   | ng of the<br>days if "s<br>days if "s<br>nonths if<br>can enal | g_Logger1 aff<br>sampling rate"<br>sampling rate"<br>"sampling rate<br>ble only one g  | ects the<br>setting<br>setting<br>e" is 1 m<br>Logge | e retaining da<br>is 1 or 2 or 3<br>is 5 to 30 se<br>ninute or mor<br>r1. | ys of data fi<br>seconds.<br>conds.<br>e than 1 mir | lles.<br>nute. |  |  |
|  |   | CP DAS (   | Co., Ltd. Tech   | nical do   | cument  |   |                |  |  |

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#### **1.3** Enable the ftp client to send data file of the g\_Logger1 to the ftp server.

To send daily data file of the g\_Logger1 to the PC / ftp server automatically, do the following settings. Be aware of the setting of "FTP Directory", use the "\" symbol, DONOT use the "/" symbol. For ex., the "\Machine2" or "\" are correct. However "/Machine2" and "/" are incorrect. User may check the "Enable Ftp2" to send data file to the second ftp server. (Note: the "Enable Ftp2" doesn't work if the first "Enable Ftp" is not checked.)

| g_Logger 1                                   |  |
|--|--|
| Setting - 1 Setting - 2 Setting - 3 Setti    | ing - 4                                  |
| I Enable Ftg<br>Transmission Type Ethernet ▼ | FTP Directory Machine2<br>Hour to upload |
| FTP Server IP 192.168.1.170 Port NO. 21      | How1 01:00 V<br>How2 none V              |
| User name chun<br>Password ****              | Hour3 none 💌                             |

**Note**: 1. The data file of the g\_Logger1 is sent at about 05 minute of the selected hour. i.e, if setting the Hour1 as 08:00, the data file is sent at about 08:05.

2. If sending file to ftp server fails, the g\_Logger1 will re-try once at about 4-hours later. It will continuously re-try once every 4-hours later until it succeeds or expire 7-days.

3. The "FTP Server IP" means the IP address of the PC which will receive the data file. If the PC is not in the same IP domain as the PAC, set a proper "Default Gateway" setting for the LAN port of the PAC. (You may find the Gateway-IP-address by key-in the "ipconfig" command on the PC which is connected in the same IP domain of the PAC).

| 🕒 <u>D</u> ocume              | ents 🔸  | <u>Eile</u>                | dit <u>V</u> iew Adva <u>n</u> ced |
|-------------------------------|---|----------------------------|------------------------------------|
| <sup>₿</sup> <u>S</u> ettings | 🛛 🖗 <u>C</u> ontrol Panel                                     | <b>S</b>                   | <b>1</b>                           |
| <i>.</i> ● <u>H</u> elp       | Setwork and Dial-up Co  | onnectic Make              | LAN1                               |
| @ <u>R</u> un                 | 🛃 <u>T</u> askbar and Start Menu                              | New Co                     |                                    |
| 🛃 📃 'LA                       | N1 Fast Ethernet Adapter'                                     | Settings                   | ок 🔀                               |
| IP .                          | Address Name Servers  |                            |                                    |
| Ar                            | n IP address can be   | O <u>O</u> btain an IP ado | dress via DHCP                     |
|                               | omputer. If your network                                      | 💿 Specify an IP add        | dress                              |
|                               | pes not automatically assign<br>9 addresses, ask vour network | IP <u>A</u> ddress:        | 192.168. 1 .181                    |
| ac                            | dministrator for an address,<br>ad then type it in the space  | S <u>u</u> bnet Mask:      | 255.255.255.0                      |
| pr                            | ovided.   | Default <u>G</u> ateway:   | 192.168.1.1                        |
|                               |   |                            |                                    |
|                               |   |                            |                                    |
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| To send data file to a remote PC / ftp server by 2G / 3G dial-up wireless connection, set the<br>"Transmission Type" as "2G/3G Wireless". And this PAC requires a 2G/3G I/O module and a<br>SIM card. (for example, the I-8212W-3GWA : <u>http://m2m.icpdas.com/i-8212w-3GWA.html</u> ).<br>Then follow steps listed in the section 1.1 and section 1.2 of the following web site to setup the<br>2G/3G I/O module . ( <u>http://www.icpdas.com/faq/isagraf.htm</u> > FAQ-143). |   |             |                     |              |          |      |        |  |  |
|   | g_Logger 1                              |             |                     |              |          | ×    |        |  |  |
|   | Setting - 1                             | Setting - 2 | setting - 3 Setting | - 4          |          |      |        |  |  |
|   | 🔽 Enable                                | Fffi        | F                   | TP Directory | Machine2 | 1    |        |  |  |
|   | Transmiss                               | ion Type    | /3G Wirele:         | our to uploa | ď        |      |        |  |  |
|   | FTP Server IP 192.168.1.170 Hour1 01:00 |             |                     |              |          |      |        |  |  |
|   | Port NO. 21 Hour2 none                  |             |                     |              |          |      |        |  |  |
|   | 🔽 Usern                                 | ame chun    | — н                 | our3 r       | one 💌    |      |        |  |  |

Password

\*\*\*

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### 1.4 Using the "FTP\_Loader" to upload the data file of a specified date

The "faq158\_demo.zip" includes a utility "FTP\_Loader.exe". It can run in a PC / Windows. Its purpose is to command the g\_Logger1 to send the data file of a specified date to the PC / ftp server. To use this function, first add six integer variables with six continuous network-address numbers in the ISaGRAF program similar as the following picture (The following picture shows their network number are from 21 to 26, Hex. is 15, 16, ... to 1A).

| 🂊 ISaGRAF - FAQ1  | 58 - Global int    | egers/rea  | ls   |         |  |  |
|---|--------------------|------------|--|---------|--|--|
| <u>File E</u> dit <u>T</u> ools <u>Options</u> <u>H</u> elp |                    |            |  |         |  |  |
|   | 🖴 🕓 💽 🄇            | ) 🖷 🛚      | < 🖻 🤞 📉 🖀  |         |  |  |
| Booleans Integers/Re  | als Timers Mes     | sages   FE | instances Defined words                                  |         |  |  |
| Name  | Attrib.            | Addr.      | Comment  |         |  |  |
| minute1   | [internal,integer] | 0000       |  | <b></b> |  |  |
| second1   | [internal,integer] | 0000       |  |         |  |  |
|   |                    |            | //   |         |  |  |
| v1  | [internal,real]    | 0001       | Value of Curve 1, set addr. = 1                          |         |  |  |
| ∨2  | [internal,real]    | 0003       | Value of Curve 2, set addr. = 3                          |         |  |  |
| v3  | [internal,real]    | 0005       | Value of Curve 3, set addr. = 5                          |         |  |  |
|   |                    |            | //   |         |  |  |
| CNT1  | [internal,integer] | 0000       | for simulating Sin and Cos curve                         |         |  |  |
| cycle1  | [internal,integer] | 0000       | for simulating Sin and Cos curve                         |         |  |  |
| e1  | [internal,real]    | 0000       | for simulating Sin and Cos curve                         |         |  |  |
|   |                    |            | //   |         |  |  |
| ftp_year  | [internal,integer] | 0015       | addr.=21   |         |  |  |
| ftp_month   | [internal,integer] | 0016       | addr.=22   |         |  |  |
| ftp_day   | [internal,integer] | 0017       | addr.=23   |         |  |  |
| ftp_command   | [internal,integer] | 0018       | Set 1 to let Soft-GRAF to send a file (then auto reset a | ٤ 🔰     |  |  |
| ftp_result  | [internal,integer] | 0019       | 1:busy,21:succeed,101:no file,102:ftp fail,103:ftp disal | c 🛛     |  |  |
| ftp_progress  | [internal,integer] | 001A       | 0 ~ 100 means progressis 0 ~ 100                         |         |  |  |
| L   |                    |            | //   |         |  |  |
|   |                    |            |  |         |  |  |
|   |                    |            |  |         |  |  |
|   |                    |            |  |         |  |  |

Then do the following settings in the g\_Logger1.

|--|

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| Then run    | the "F          | TP_Loader.ex                           | ke" in a PC    | C to do the  | Address          | Setting" . |         |         |
|             | FTP I           | Loader                                 |                | -1           |                  | Ū          |         |         |
|             | Thicl           | Itility in for loadir                  | a tha data fi  | le of the    |                  |            |         |         |
|             | Soft-C          | Ganty is for foadin<br>GRAF g_Alarm of | rg_Loggerfi    | rom the      |                  |            |         |         |
|             | 15861           | RAF PAU to the T                       | .p server.     |              |                  |            |         |         |
|             | Pleas<br>the "L | e select the data<br>.oad " button.    | a file date to | load, then a | dick             |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             | Year            | : M                                    | ionth :        | Day:         |                  |            |         |         |
|             | 2012            | • 1                                    | 1 💌            | 14           |                  |            |         |         |
|             | Status          |  |                | Address Sett |                  |            |         |         |
|             |                 |  |                | 1            |                  |            |         |         |
|             | in Fo           | rm?                                    |                | Load         |                  |            |         | X       |
| _           |                 |  |                |              |                  |            |         |         |
|             | Ftj             | p-Year address                         | 21             |              | Ftp command a    | address 24 |         |         |
|             | Ftj             | p-Month address                        | 22             |              | Ftp result addre | 25         |         |         |
|             | Ftj             | p-day address                          | 23             |              | Ftp progress ad  | ddress 26  |         |         |
|             | P/              | AC Net-ID                              | 1              |              |                  |            | C-111-1 |         |
|             | PAC             | IP Address                             | 192            | 168          | 1                | 180        |         | $\sim$  |
|             |                 |  |                |              |                  |            | Васк    |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |
|             |                 |  |                |              |                  |            |         |         |

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| Then after, key-<br>file to the PC / f | in the date and<br>tp server. | l click the | e "Load" butto | n to com | nmand the P | AC to uploa | d the data |

| 🐃 FTP Loader   |                            |                      |  |  |  |  |
|--|----------------------------|----------------------|--|--|--|--|
| This Utility is for loading the data file of the<br>Soft-GRAF g_Alarm or g_Logger from the<br>ISaGRAF PAC to the ftp server. |                            |                      |  |  |  |  |
| Please select th<br>the "Load " butto  | ie data file date t<br>on. | to load , then click |  |  |  |  |
| Year:  | Month :                    | Day:                 |  |  |  |  |
| 2012 💌   | 11 💌                       | 14 💌                 |  |  |  |  |
|  |                            | Address Setting      |  |  |  |  |
| Status   |                            |                      |  |  |  |  |
|  |                            | Load                 |  |  |  |  |