A data logger file into WIMS, step by step

With the Generic SCADA CSV interface, Q12933. Also covers lab instrument files and typed sheets. Shown on Hach WIMS 8.5.2 with interface version 8.0.5.

The name says SCADA. It reads any file like this

This interface reads a plain text file of readings with a date and time on each row, oldest first. It does not ask what made the file. The worked example in its own Help is a data logger, not a SCADA system. It works out one number for each WIMS variable for each day and writes it into WIMS, in place of someone typing it.

If you have	Read
One data logger, read out to a file	Pages 1 and 2, then Parts 1 to 8 and "Every week after that".
More than one logger	The same, plus "More than one logger" after Part 8.
A lab instrument file	Parts 1 to 8 for how it works, then Part 9 for what differs.
A sheet somebody types and saves as CSV	Parts 1 to 8 for how it works, then Part 10.
Data in a SCADA system or historian	The note below.

If your data is in SCADA, or you are not sure you have the people for this. This guide takes someone who is comfortable with Windows folders and has a WIMS login that can open System Setup. It also takes a Windows administrator for two steps, and someone to look after it afterward. If the data is in a SCADA system or historian, or there is any question about having the skills and the time, we recommend the purchased SCADA interface. It reads the historian itself and is sold with setup and training. Ask your Hach WIMS contact.

Where this was run. These steps were run in November 2026 on a training plant, with made-up files in the layouts those sources write. We then followed Parts 1 to 7 a second time, word for word, on a fresh copy with one logger file, and fixed what tripped us. The service in Part 8 was installed from that copy, from an administrator command window. The screens are WIMS 8.5.2 and interface 8.0.5. Other versions were not tried. The last pages list what was checked and what was not.

Before you start

You need	Why
`Q12933.zip`, the program	Download it from the WIMS interface catalog: `www.opssys.com/instantkb/article.aspx?id=12932`. Find `Q12933.zip` on that page. The catalog lists it as included in your WIMS/Rio contract.
To be at the WIMS server	That is where we ran it. On our server, Part 2 came up with the database name already filled in.
A WIMS login that can open System Setup	Parts 3 and 6. We used a super user.
A Windows administrator	Only for Part 8, steps 6 and 8.
One real file from your logger	Part 5 shows your file inside the interface, so you can see that it reads right.

The file

This is the top of our logger file. A row of names, then a row for each reading, oldest first.

```
Date Time,Level ft,Battery V
11/09/2026 00:00,4.3,3.58
11/09/2026 00:15,4.69,3.61
```

Rule	What it means
Plain text	Commas between the values, as here. The Help says tabs work too.
Oldest row first	The interface's Help says the rows must be in time order.
Date and time	In one column, as here. The Help says two columns work too. If your dates look different from ours, the test in Part 7 shows whether they were read.
Lines above the data	You tell the interface how many. Ours has 1, the row of names.
Many rows a day	The statistic you pick boils them down to one number a day. The Help says it keeps one reading a minute, the last one.
Columns you do not want	Leave them. Our Battery V column is never used.

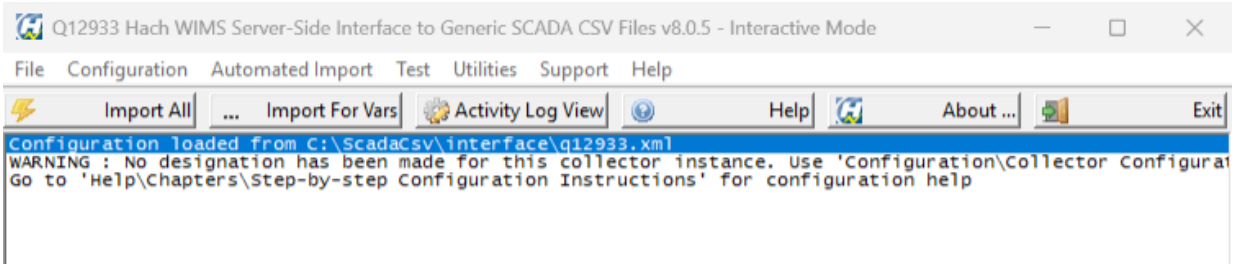
Do this once, now: folders and a first file

1. Make a main folder, for example `C:\LoggerData`.
2. Inside it make three folders: `interface` for the program, `files` for the logger files, and `archive`.
3. Inside `files`, make one folder for your logger. Give it a short name with no spaces. Ours is `LS1`. Do this even with one logger. You type this name again in Part 6.
4. Read the logger out to a USB stick the way its manual says. Plug the stick into the PC and copy the file into the logger's folder, `C:\LoggerData\files\LS1`.

Our PC had no USB stick in it. We copied the files into the folder, which is the same step. We did not point the interface straight at a USB stick.

Part 1. Put the interface on the server

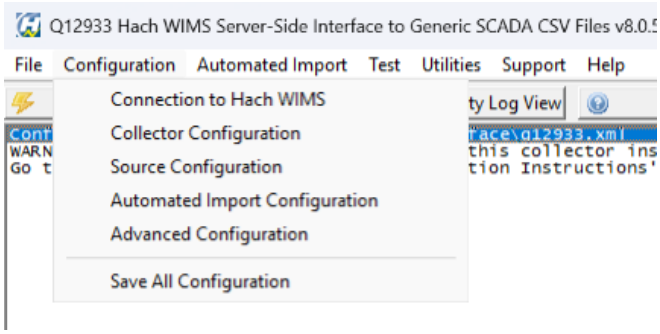
1. Unzip `Q12933.zip` into the `interface` folder.
2. Inside `interface`, make a folder named `log`. The interface writes its log files there, one each time the program starts.
3. Double-click `q12933.exe`. It is the file of type Application. The first time, the window says no collector has been picked yet. That is normal. Part 4 fixes it.



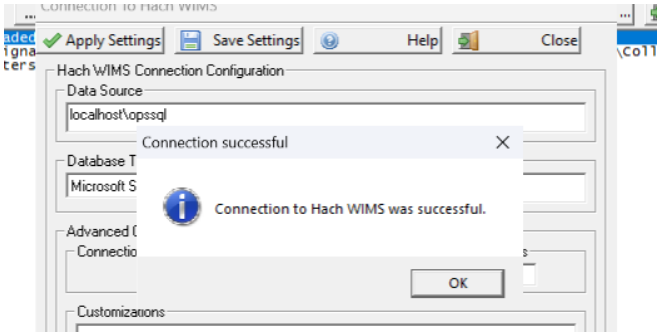
The interface the first time it opens.

Part 2. Connect the interface to WIMS

1. Click **Configuration**, then **Connection to Hach WIMS**.
2. Leave **Data Source**, **Database Type** and **OLE DB Provider** as they came up. On the WIMS server ours came up as `localhost\opssql`.
3. Click **Test Connection**. Look for "Connection to Hach WIMS was successful." Click **OK**.
4. Click **Save Settings**. The same message shows once more. Click **OK**. Then it says "Saved successfully". Click **OK**, then **Close**.



The Configuration menu. Parts 2, 4, 5 and 8 all start here.



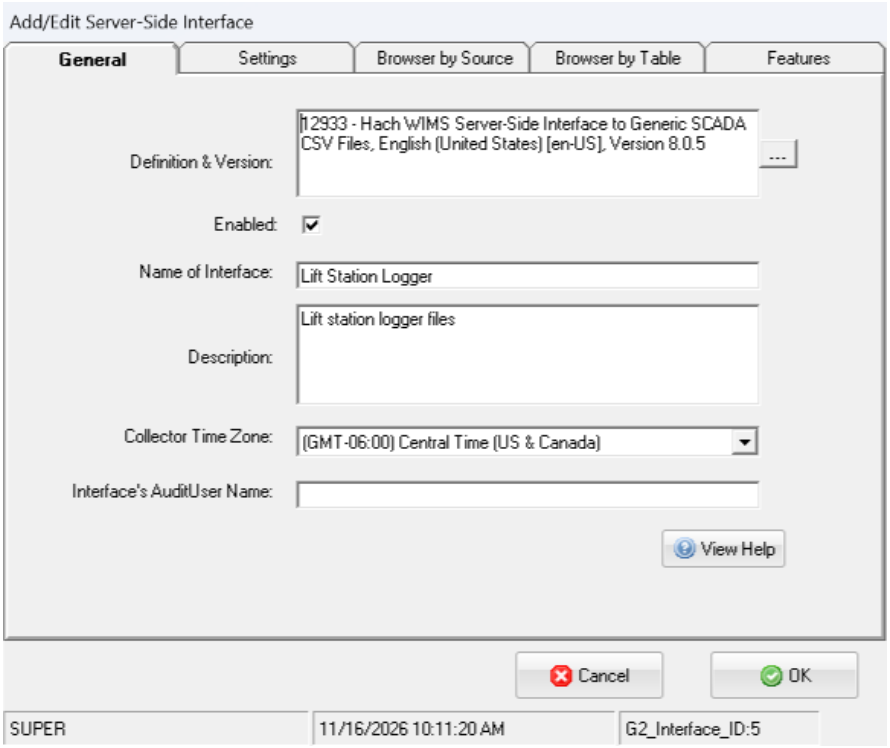
Step 3. The test passed.

Part 3. Tell WIMS the interface exists

This part is in the WIMS client.

1. Click **System Setup**, **System Tables**, **Entire System**, **Server-Side Interface Setup**.
2. Click **New**. If the box that opens lists **(12933) Hach WIMS Server-Side Interface to Generic SCADA CSV Files**, go to step 3. If it does not, click **Cancel**, click **New Definition**, pick the file `12933.g2_server_lu` from the `interface` folder, and click **New** again.
3. Click the 12933 line, click **Next**, click the version (the highest, if there is more than one), click **Finish**.

4. Type a **Name of Interface** that says what it reads. Ours is Lift Station Logger. You pick this name again in Parts 4 and 6.
5. Type a **Description**. Anything will do. WIMS will not save the record with this box empty.
6. Pick the **Collector Time Zone**. Use your own time zone.
7. Click the **Browser by Source** tab and untick **Browser Enabled**. This interface has no tag browser. Leave the other tabs and boxes alone.
8. Click **OK**. The new line shows in the list. Click **Exit**.

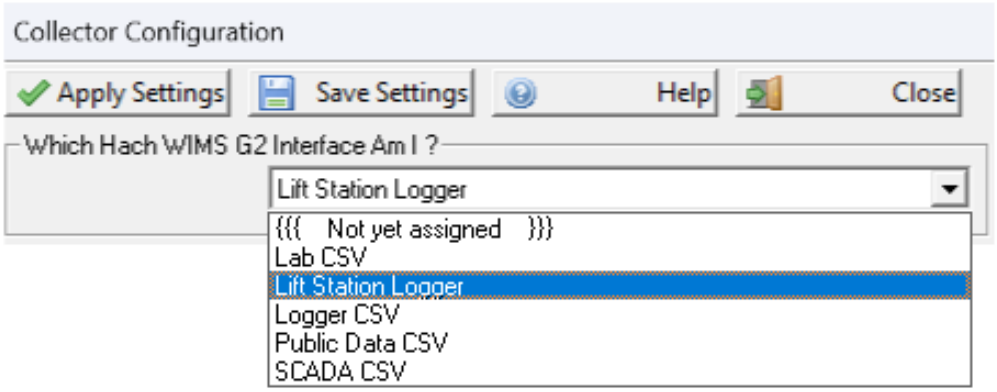


Steps 4 to 6. The name, a description and the time zone.

Part 4. Say which interface this copy is

1. Back in the interface program, click **Configuration**, then **Collector Configuration**.
2. Under **Which Hach WIMS G2 Interface Am I ?** pick the name you typed in Part 3.
3. Click **Save Settings**, **OK**, then **Close**. The window now says "This Collector is now designated as" and the name.

Name not in the list? The list is filled when the screen opens. If you made the WIMS record while this screen was open, close the screen and open it again.

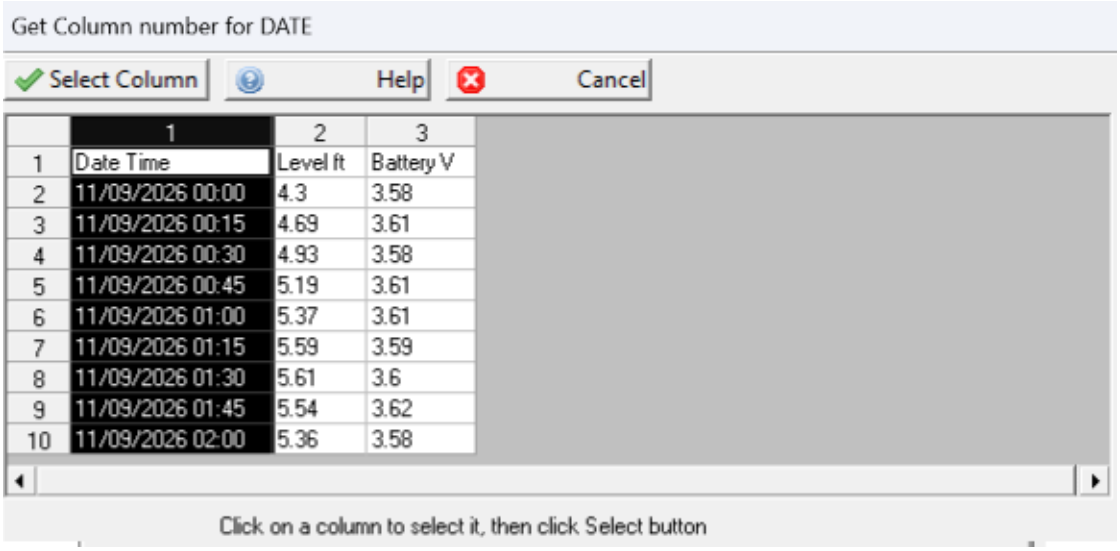


Step 2. Pick the name from Part 3.

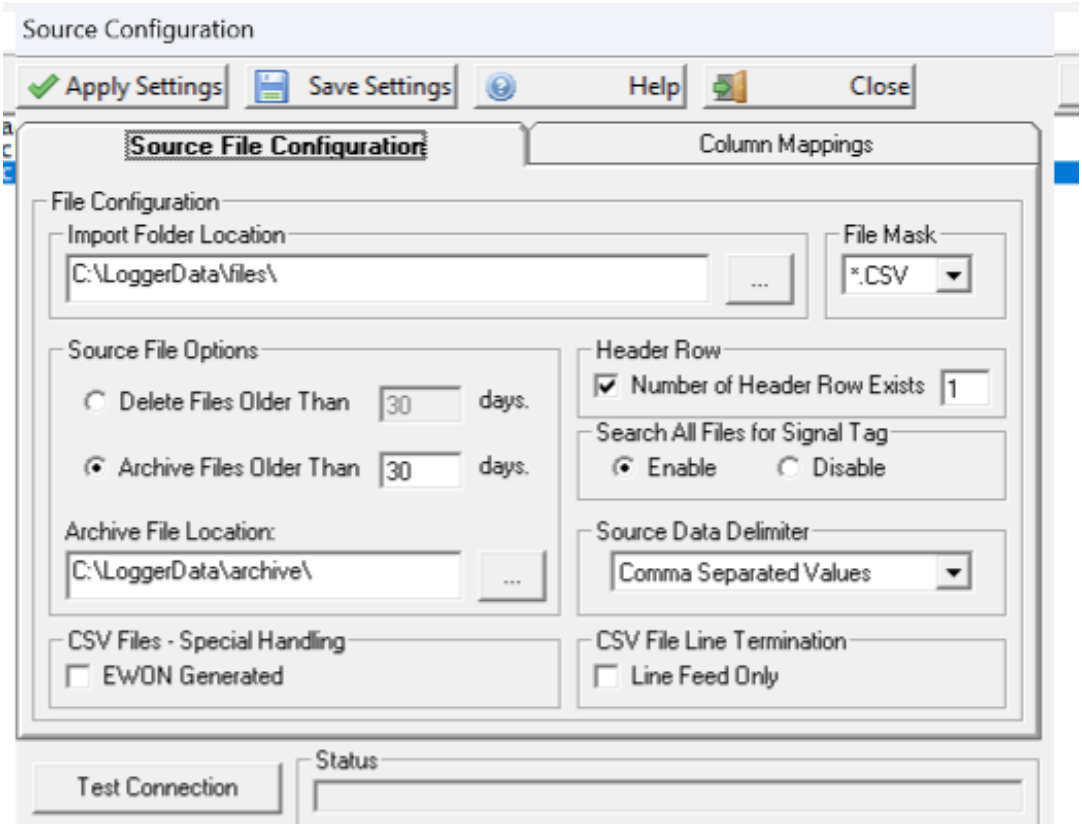
Part 5. Point it at the file

1. Check that one real file from your logger is in the logger's folder.
2. Click **Configuration**, then **Source Configuration**.
3. **Import Folder Location**: type the logger's own folder for now, `C:\LoggerData\files\LS1`. The box starts out as `C:\`.
4. **Archive File Location**: type `C:\LoggerData\archive\`, with the backslash on the end. It also starts out as `C:\`.
5. **Header Row**: type how many lines sit above the data. Ours is 1. Leave everything else on this tab as it opened. If your file's name does not end in .csv, change **File Mask** to match.
6. Click **Apply Settings**. Do this before you open the next tab.
7. Click the **Column Mappings** tab. Under **Style**, pick **Date and Time in the same column** if your file is like ours.
8. Click the small button beside **DATE**. The interface shows the top of your file. Click the date column, then click **Select Column**.
9. Leave **Source Data Format** on **Wide**. You do not pick the level column here. That is the tag in Part 6.
10. Go back to the first tab. Change **Import Folder Location** to the folder above the logger's, `C:\LoggerData\files`. Click **Apply Settings**. Do this with one logger too. The tag in Part 6 depends on it.
11. Click **Test Connection**. Look for "Test Connection Successful". Click **Save Settings**, **OK**, then **Close**.

Why the logger's own folder first. The column screen needs a file to show. Pointed at a folder that holds only folders, it said "Unable to retrieve data, no file found." The Help says the same: map the columns on one folder, then set the main folder.



Step 8. Our logger file, as the interface reads it. The numbers along the top are the column numbers. Level is column 2.



Step 10. The `files` folder, the archive folder and one header row.

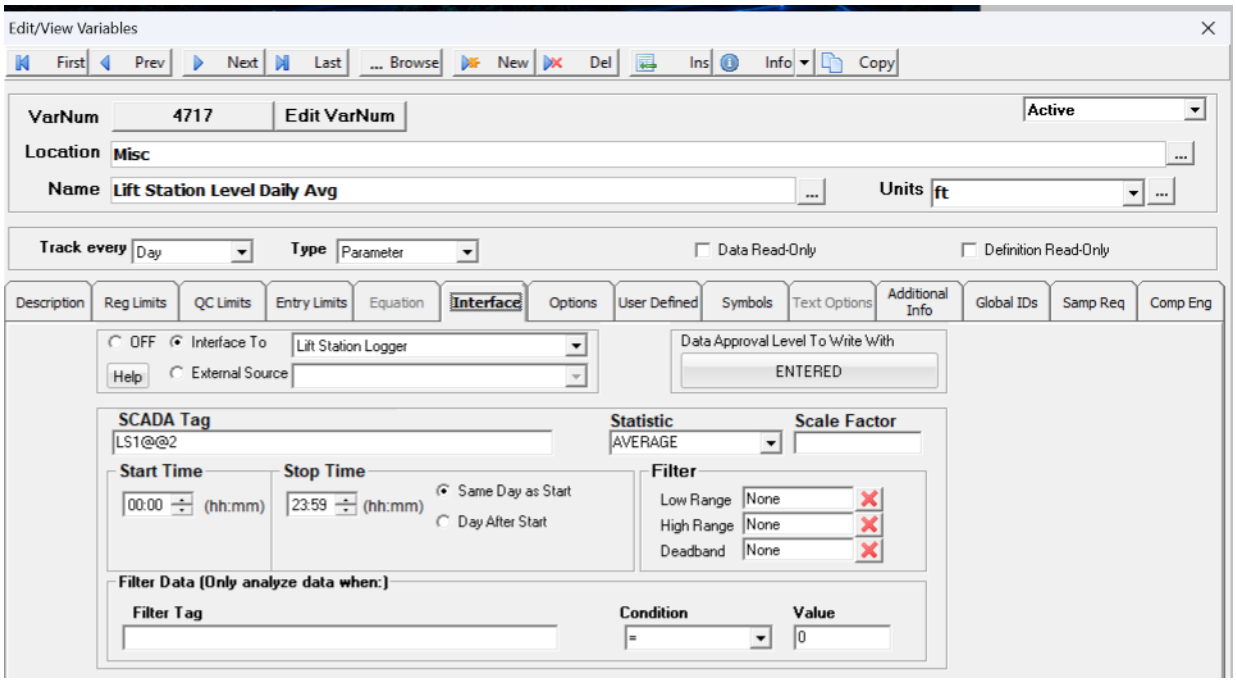
The backslash on the archive folder matters. Typed without it, the interface made a folder named `archiveLS1` beside our `archive` folder. With it, the interface made a folder for the logger inside `archive`. We made that change in the settings file, not on this screen, and no file was old enough to move.

Part 6. Link a WIMS variable to a column

This part is in the WIMS client. Do it for each variable the interface should fill.

1. Click **System Setup**, **Edit/View Variables**. Click **New**. WIMS gives it a number.
2. Click the small button at the right end of the **Location** line, click a location, click **OK**.
3. Type a **Name** and the **Units**. Leave **Track every** on Day and **Type** on Parameter.
4. On the **Description** tab, set **Decimal Places**. WIMS stored each of our values rounded to that many places. Ours started at 2.
5. Click the **Interface** tab. Click **Interface To** and pick the interface name from Part 3.
6. **SCADA Tag**: type the logger's folder name, two at signs, then the column number. Ours is LS1@@2. Type only the folder's name, not the whole path. The box is labeled SCADA Tag whatever the source is.
7. **Statistic**: pick how the day's rows become one number. Ours is AVERAGE.
8. Leave **Start Time** at 00:00, **Stop Time** at 23:59 and **Same Day as Start**. That is one value for each day, midnight to midnight.
9. Click **Prev**, then **Next**. WIMS saved ours when we left it. Check that the tag is still there.

Use a new variable. A load writes over whatever the variable already holds for those days. If people have typed values into a variable, make a new one for the logger.



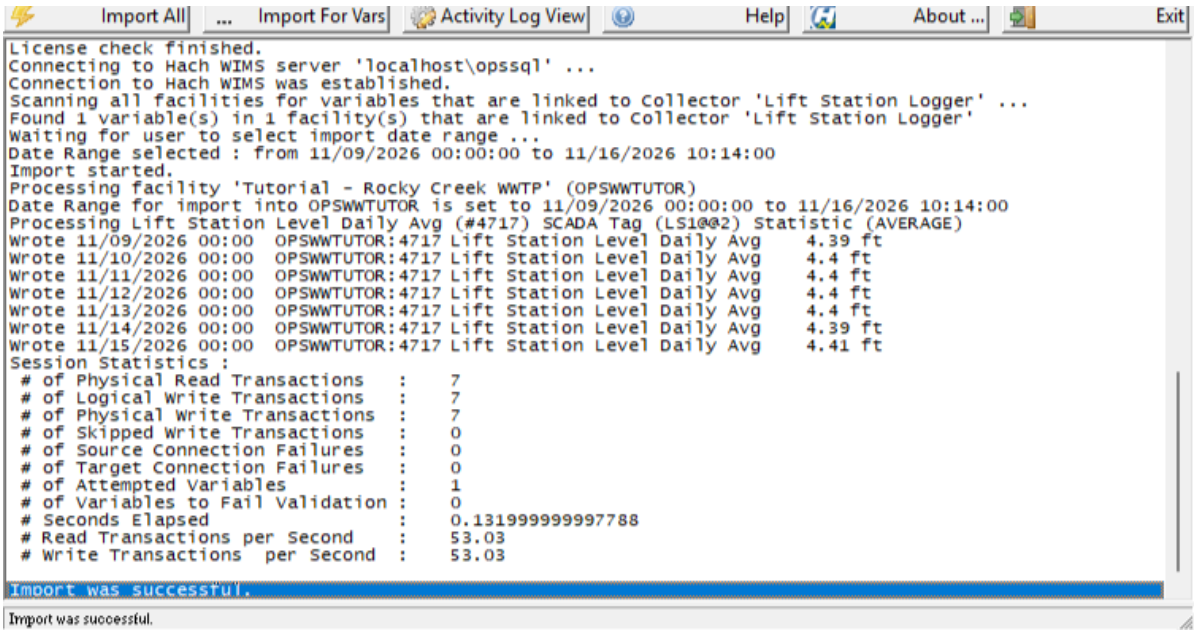
Steps 5 to 8. A folder, a column and a statistic are the whole link.

The statistics you are most likely to use

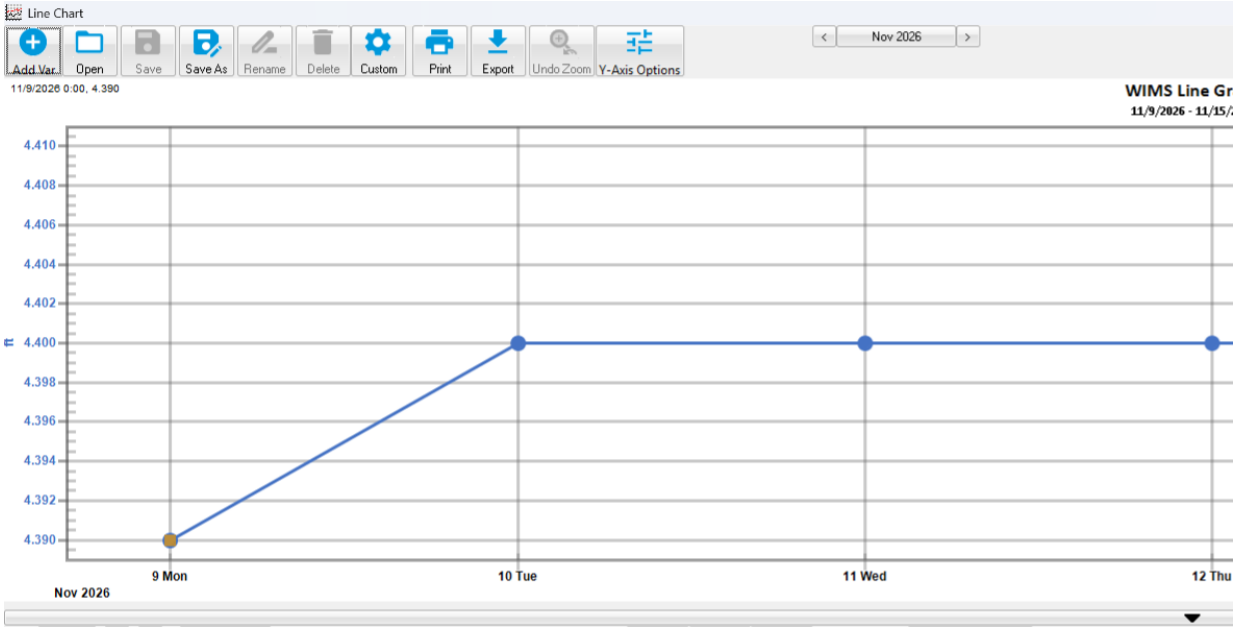
Statistic	What you get	Checked here
AVERAGE	The average of the day's readings	Yes
TOTAL	The readings added up	Yes
MINIMUM, MAXIMUM	The lowest or the highest reading	Yes
LAST, FIRST	The last or the first reading of the day	LAST yes. FIRST is from the Help
RANGE, COUNT	High minus low, how many readings	From the Help
DIFF and the rest	The list has more, such as DIFF for a totalizer. The interface's Help explains each one	From the Help

Part 7. Test it, load it, see it

1. In the interface, click **Test**, then **Test Import All**.
2. A box asks for dates. Click the day in **Start Date and Time** and type the first day in your file. Leave the end date. It is now. Click **Import**.
3. It lists every value it would write, and writes nothing. One variable for seven full days is 7 lines. To check one, average that day's rows in a spreadsheet.
4. Now click the **Import All** button. Set the same start date and click **Import**.
5. Read the numbers at the bottom. **Logical Write Transactions** is how many values it worked out. **Physical Write Transactions** is how many it wrote.
6. In WIMS, click **Graph Pac**, then **Line**. Click **Add Var**. Click the location on the left, click your variable, click **Add**. The graph shows this month's values. The month is at the top, with arrows beside it.



Step 5. One variable, seven days: 7 values worked out, 7 written.



Step 6. The first days of the seven on a WIMS graph. Add Var is at the top left.

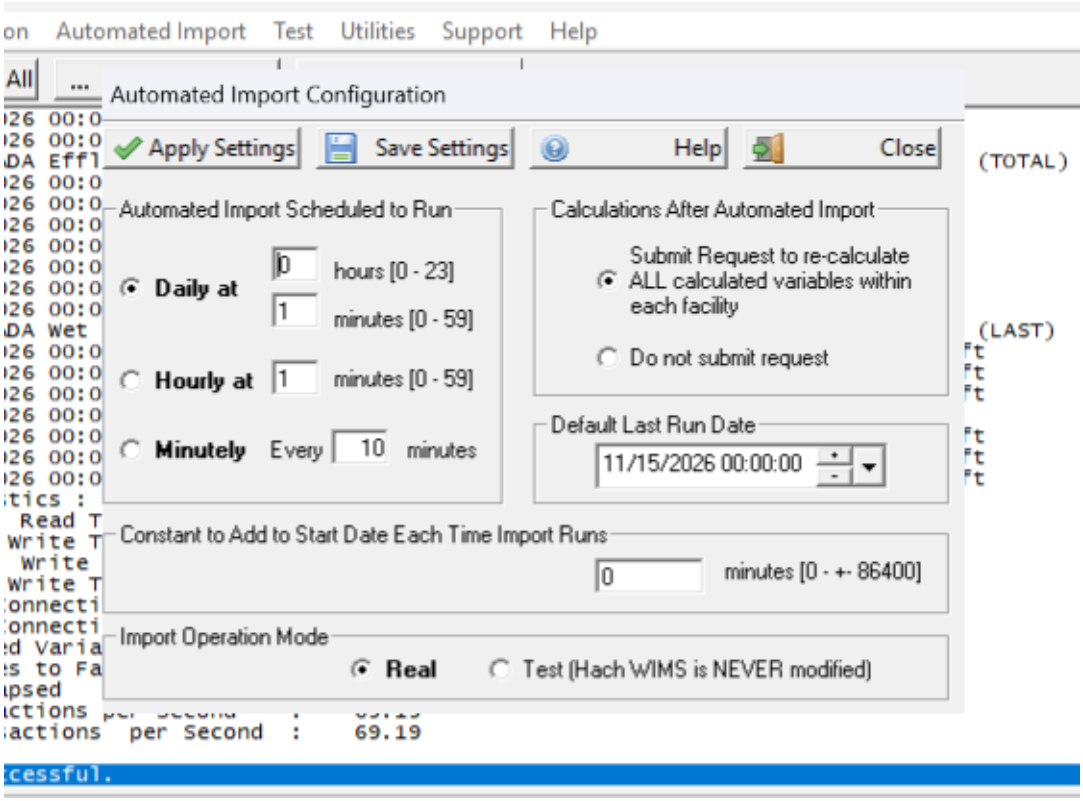
The day of the readout is a part-day value at first. Our file had this morning's readings in it, and nothing was written for today. The next day's run does write that day, from the part of it the file holds. In our test a day with readings only to 09:45 was written as 9.74. The whole day came to 9.51. The next file holds the whole day and corrects it, as long as the look-back in Part 8 reaches that far.

Count the values. It says "Import was successful" even when a tag matched nothing. If your count is short, check the tag and the dates you picked.

Part 8. Let it run by itself

1. In the interface, click **Configuration**, then **Automated Import Configuration**.
2. Pick when it runs. **Daily at** an hour and minute suits a file that comes once a week, and it is the one we ran as a service.
3. **Constant to Add to Start Date Each Time Import Runs**: type a negative number of minutes to look back. A file that comes once a week needs a look-back longer than a week. We used -20160, which is 14 days.
4. Leave **Import Operation Mode** on **Real** and the other boxes as they are. Click **Save Settings**, **OK**, then **Close**.
5. Click **Configuration**, then **Save All Configuration**. Click **OK**. Then click **Exit** to close the interface program.
6. This step and step 8 take a Windows administrator. In the `interface` folder, right-click `service_install.bat` and click **Run as administrator**. Say Yes if Windows asks. It shows no message either way.
7. Open `ntinterface.log` in the same folder with Notepad. The last line should read "Service Hach_WIMS_Q12933_Interface installed".

8. Right-click `service_start.bat` and click **Run as administrator**. The service now shows as Running in the Windows Services list.
9. On Daily it does nothing until its time. After that time, open the newest file in the `log` folder. Its name ends in `_ntservice.log`. Look for the **Logical Write Transactions** line and for "Import was successful." The line after that says when it wakes up next.



Steps 2 to 4. The schedule screen as it first opens: daily at 00:01.

What we proved, and what we did not. We installed the service from the fresh copy with the download's own two files. We ran them from an administrator command window, not by right-clicking. Set to Daily, it did nothing at start, ran at its time, logged 7 values written under the Windows SYSTEM account and said when it would wake next. Then we stopped it and removed it. Our test put the daily time, a few minutes ahead, straight into the settings file. So a time typed on this screen and then kept by the service is not something we ran. We did not leave it running overnight.

Every week after that

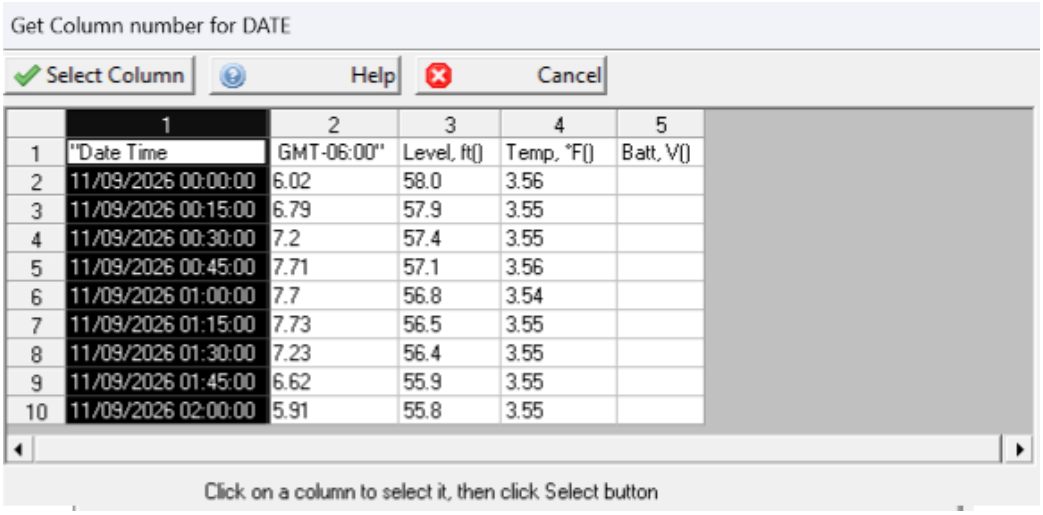
1. Read the logger out to the USB stick.
2. Copy the file into the logger's folder. Give each file its own name, such as the date, so that nothing is replaced.
3. That is all. The next scheduled run loads it. Days that are over show after that run. The day of the readout shows a day later, as a part-day value, until the next file corrects it.

Old files and repeated rows. A logger readout holds everything still in its memory, so a new file repeats rows an older file already had. That is fine. In our test the repeated days came out the same, and a daily TOTAL was not doubled. The interface is set to move files older than 30 days to the archive folder. That is how the setting first opens. We did not see a file move.

More than one logger

Give each logger its own folder inside `files`. One copy of the program reads them all, as long as the files are laid out the same. Each variable's tag starts with its logger's folder. Ours were `LIFT1@@2` and `LIFT2@@2`. We ran two loggers this way and all the values matched.

If a name in the header row has a comma in it. Some loggers write names like `"Level, ft()"`. In the column picker our first name of that kind showed split in two, so the names sat one column to the right of their numbers. Count the column from a data row, not from the names.



	1	2	3	4	5
1	"Date Time	GMT-06:00"	Level, ft()	Temp, °F()	Batt, V()
2	11/09/2026 00:00:00	6.02	58.0	3.56	
3	11/09/2026 00:15:00	6.79	57.9	3.55	
4	11/09/2026 00:30:00	7.2	57.4	3.55	
5	11/09/2026 00:45:00	7.71	57.1	3.56	
6	11/09/2026 01:00:00	7.7	56.8	3.54	
7	11/09/2026 01:15:00	7.73	56.5	3.55	
8	11/09/2026 01:30:00	7.23	56.4	3.55	
9	11/09/2026 01:45:00	6.62	55.9	3.55	
10	11/09/2026 02:00:00	5.91	55.8	3.55	

A logger file whose names hold commas. The names are shifted. The data rows are right.

Part 9. A lab instrument file

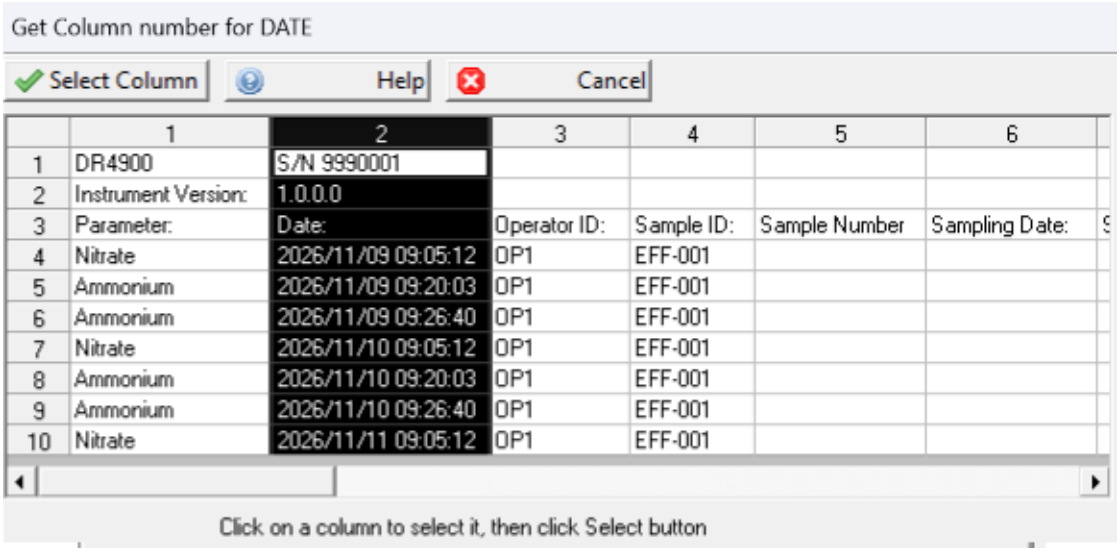
A lab file needs its own copy of the program in its own folder, its own WIMS record and its own name in Part 3, because its layout differs. Ours is a made-up file in the layout of the Hach DR4900's data log: two title lines, a row of names, then one row for each reading.

```
DR4900 ,S/N 9990001
Instrument Version:,1.0.0.0
Parameter:,Date:,Operator ID:,Sample ID:,Sample Number, ... ,Result,Unit, ...
Nitrate,2026/11/09 09:05:12,OP1,EFF-001,, ... ,4.94,mg/L NO3-N, ...
```

Do Parts 1 to 4 as before. These are the steps that differ in Parts 5 and 6.

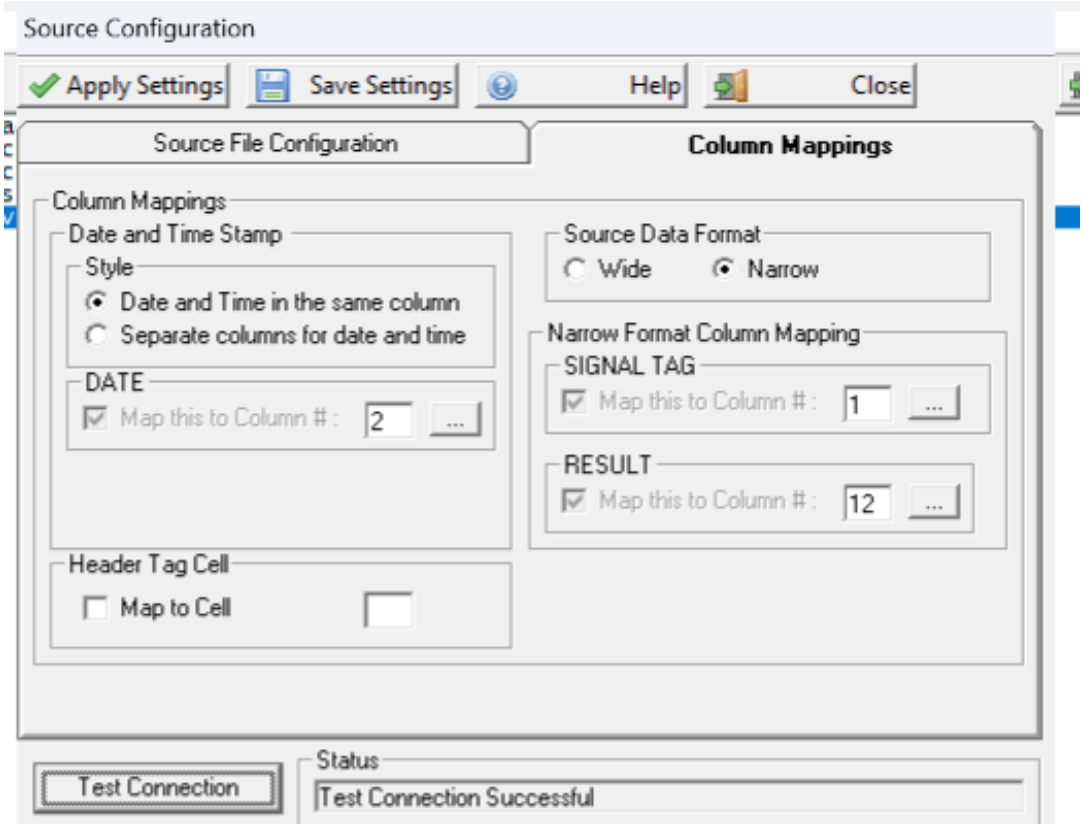
A second copy needs its own service name. Every download carries the same service name. With a first copy installed, our second install failed and showed no error. Before Part 8 on a second copy, open its `ntinterface.ini` in Notepad and change the name after ServiceName. Change the same name inside `service_start.bat`, `service_stop.bat` and `service_restart.bat`. The Help also has a service name box under Configuration, Advanced Configuration, which its Status And Control screen uses. We did not test the changed name.

1. **Source Configuration**, first tab: set the folder that holds the file, and type 3 for the header rows.
2. Click **Apply Settings**, then the **Column Mappings** tab. Pick **Narrow** under **Source Data Format**.
3. **DATE**: click the small button and pick the date column. Ours is column 2.
4. **SIGNAL TAG**: type the number of the column that says what each reading is. Ours is column 1, Parameter.
5. **RESULT**: type the number of the column that holds the number. Ours is column 12.
6. Click **Test Connection**, **Save Settings**, **OK**, **Close**.
7. On each WIMS variable, the **SCADA Tag** is the word in the signal tag column. Ours are `Nitrate` and `Ammonium`. There is no folder part, because our file sat in the folder we pointed at, not in a folder inside it.



	1	2	3	4	5	6
1	DR4900	S/N 9990001				
2	Instrument Version:	1.0.0.0				
3	Parameter:	Date:	Operator ID:	Sample ID:	Sample Number	Sampling Date:
4	Nitrate	2026/11/09 09:05:12	OP1	EFF-001		
5	Ammonium	2026/11/09 09:20:03	OP1	EFF-001		
6	Ammonium	2026/11/09 09:26:40	OP1	EFF-001		
7	Nitrate	2026/11/10 09:05:12	OP1	EFF-001		
8	Ammonium	2026/11/10 09:20:03	OP1	EFF-001		
9	Ammonium	2026/11/10 09:26:40	OP1	EFF-001		
10	Nitrate	2026/11/11 09:05:12	OP1	EFF-001		

Step 3. The file in the picker. Two title lines, the names, then the readings.



Steps 2 to 5. Narrow, with the date, the signal tag and the result columns.

Variable	Units	SCADA Tag	Statistic	Decimal Places
Effluent Nitrate, DR4900	mg/L	`Nitrate`	LAST	2
Effluent Ammonia, DR4900 Daily Avg	mg/L	`Ammonium`	AVERAGE	3

One column has to tell the readings apart. Here the Parameter column does it, because every reading in our file is the effluent. If the same test is run on more than one sample point, this interface cannot tell them apart by Parameter alone. That is the job the Generic LIMS CSV interface, Q12351, is built for. Its Help has pages for the Hach TU5200, HQd meters, 2100Q and AT1000. Our file also held plain numbers only. A real data log can hold over-range results, error rows and other date styles. We did not try those.

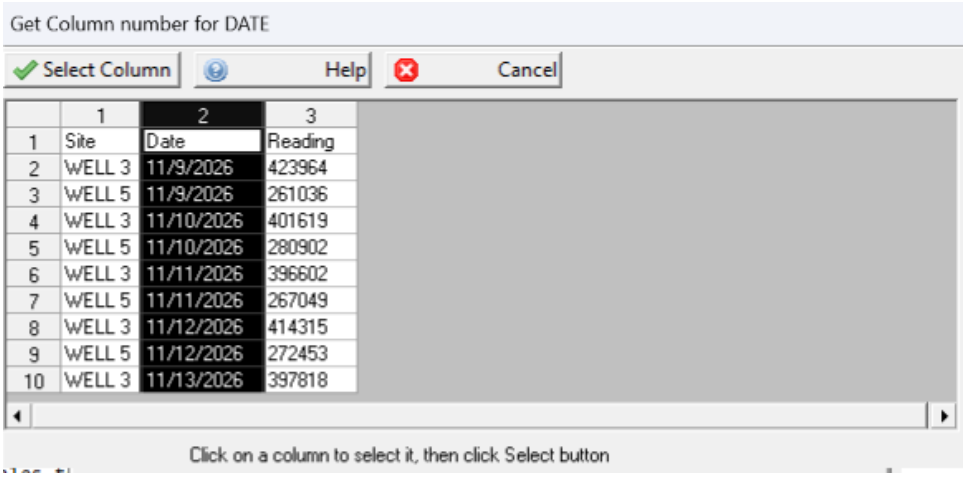
How some Hach instruments hand over their data

Instrument	How the file comes out	Where that is from
DR4900	Sends readings from its data log to a network folder as CSV	Our notes from setting one up
TU5200	Sends its data log as CSV to a network folder	LIMS CSV interface Help
HQd meters	Send Data Log, to a PC by USB cable, or to a USB flash drive as a text file	LIMS CSV interface Help for the cable, the meter's manual for the flash drive
2100Q	Send Data Log to its USB module, open the file in Excel, save as CSV	LIMS CSV interface Help
AT1000	Export data log to a USB key. The file is tab separated	LIMS CSV interface Help

Only a file in the DR4900's layout was run through this interface. The Help sends the other four through the Generic LIMS CSV interface.

Part 10. A sheet somebody typed

A log sheet typed into a spreadsheet and saved as CSV is the same kind of file. We made one with three columns: Site, Date, Reading. The date had no time. We set it up as Narrow with 1 header row, signal tag in column 1, date in column 2 and result in column 3.



The sheet in the picker.

We checked it with **Test**, **Source Read Test**. Type a tag, type a statistic, pick two dates, and click **Test Read Double**. It reads the file and shows the number. It writes nothing. For WELL 3 on November 12 it gave 414315, which is what the sheet says. That one value is all we read from this file.

What was checked

Check	Result
Parts 1 to 7 followed word for word on a fresh copy, with one logger and one variable	7 of 7 values written, and they match the file. Two steps tripped us and are now fixed: the Description box in Part 3, and the second message in Part 2.
This morning's readings in the same file	Nothing was written for today.
Two loggers in their own folders, tagged by column number and by column name	21 of 21 values in WIMS match the files. We worked the numbers out separately and read them back from the WIMS database.
A second file for one logger: a week the first file did not have, plus the first file's week repeated	It ran by itself and loaded it. 35 of 35 logger values match. A TOTAL over the repeated rows was not doubled.
A made-up file in the DR4900's data log layout, narrow, with 3 header rows	14 of 14 values match, loaded by hand and again running by itself.
A three-column sheet with a date and no time	The read test gave the right value for the one site and day we asked for.
A SCADA-style file, a row every 15 minutes, six variables	84 of 84 values match. Test Import All listed the values and wrote none. Loading the same days again wrote over what was there.
Decimal Places	With 2 places WIMS held 2.41. With 3 places it held 2.407.
A file with one column renamed and the other names in lower case	Lower case still matched. The renamed column gave its variable nothing, with no error line, and the run still ended "Import was successful".
The Windows service, installed from the fresh copy as an administrator and set to Daily	It ran at its time and logged 7 values written. It stopped and uninstalled cleanly.
A logger file that stops part way through yesterday	The next run wrote yesterday from the rows it had: 9.74, where the whole day is 9.51. With the whole file back it wrote 9.51.
The archive folder with and without a backslash on the end	Without, the interface made `archiveLS1` beside `archive`. With, it made a logger folder inside `archive`. No file was old enough to move.
The install file run without administrator rights	It made no service and showed no error. The reason was in `ntinterface.log`.
A second copy installed as a service with the service name unchanged	It failed and showed no error. `ntinterface.log` said error code 1073.

Not checked

- A person following this guide. So far only its author has, plus one reader who had only the pages.
- Right-clicking the two service files. We ran them from an administrator command window.
- A daily time typed on the schedule screen and then kept by the service, and changing the time while the service runs.
- Part 3 step 2 on a server that has never had this interface. Ours already had it. The New Definition clicks are from an earlier run and the Help.

- A second copy installed as a service under a changed service name.
- The service left running overnight or through a restart of the PC, and the Hourly and Minutely schedules as an installed service.
- Clicking Import All by hand while the service is running.
- A folder on a USB stick. The files were copied into folders on the PC.
- A real logger or instrument. The files were made up in the layouts those sources write.
- A DR4900 file with over-range results, error rows, another date style or more than one Sample ID.
- The TU5200, HQd, 2100Q and AT1000 files. The Help sends those through the Generic LIMS CSV interface.
- A lab file inside an instrument's own folder. The Help says the tag then needs the folder name and two at signs in front.
- A file whose name does not end in .csv, a folder name with spaces, tab-separated files, and date and time in two columns.
- The three-column sheet loaded into a variable.
- Two readings of the same thing inside one minute.
- The interface on a PC other than the WIMS server. Its Help says that PC needs the WIMS client installed.
- An ordinary WIMS login. Everything was done as a super user.
- Hourly or 15-minute WIMS variables, and the Filter, Scale Factor, Range and Deadband boxes.
- The archive move, and a file on a network share.
- A WIMS version other than 8.5.2.

If something goes wrong

What you see	Likely cause	What to do
Part 2: the connection test gives any other message	The Data Source is not your WIMS database	Ask IT for the name of the SQL Server that holds WIMS. Type it as server name, backslash, instance name.
Part 3: "Description cannot be Blank."	The Description box is empty	Click **OK**, type a description, click **OK** again.
Part 5: "Unable to retrieve data, no file found."	No file is in the folder itself, or the folder was typed but not applied	Point at the logger's own folder and click **Apply Settings**. Set the folder above it afterward.
Part 7: it ends "successful" but the variable got nothing	The SCADA Tag does not match	Check the folder name, the two at signs and the column number.
Part 7: nothing for today	The day is not over	The next day's run writes it, from the rows the file holds.
A value in WIMS has fewer decimals than the file	The variable's Decimal Places	Set Decimal Places on the Description tab, then load those days again.
Your interface name is not in the list in Part 4	The list was filled before you made the record	Close the screen and open it again.
Part 8: you ran `service_install.bat` and no service appears	It was not run as an administrator, or a service of that name already exists	Open `ntinterface.log`. Error code 5 means not an administrator. Error code 1073 means the name is taken.
Later, the Column Mappings tab says "no file found"	The folder it points at now holds only folders. That is how Part 5 leaves it	Click **OK**. Nothing is wrong.
Files are gone from the folder	The archive setting is on, at 30 days	Look in the archive folder, and for a folder beside it whose name starts with archive.

More help

- In the interface, click **Help**. It has a chapter called Step-by-step Configuration Instructions, and a page on setting up a data logger.
- Questions: Mitch Ryan, Hach WIMS, 682-206-8676.