



uWin Simple SCADA Getting Started Manual

Getting Started Manual



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Overview

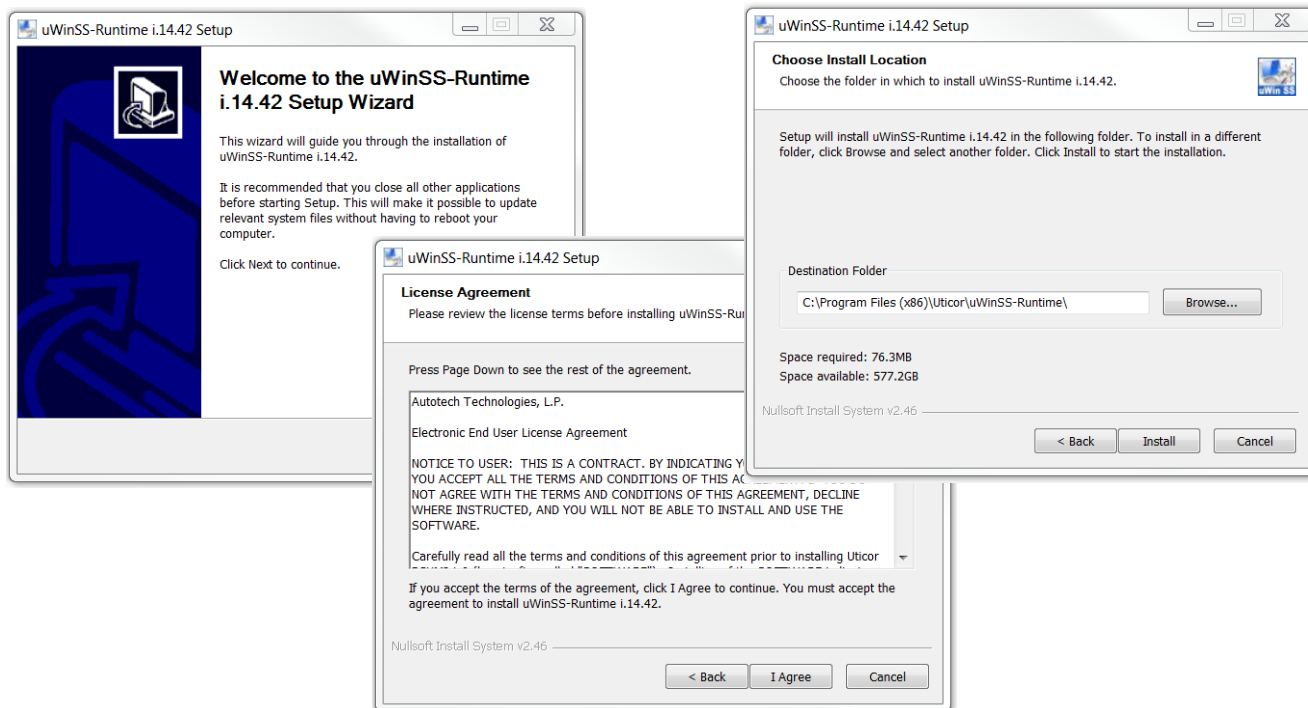
uWin Simple SCADA is a PC-based SCADA software which runs on a PC running Windows 7 or Windows XP operating system. The screens for uWin Simple SCADA Runtime are designed using uWin Simple SCADA Development. Designed screens are then downloaded to the PC running uWin Simple SCADA Runtime. (Development and Runtime may be on the same computer.)

Installation Requirements

A PC running Windows 7 or Windows XP operating system with 77 MB Space.
USB Port to plug in the license to run uWin Simple SCADA Runtime.
uWin Simple SCADA Development Version 1.3 or higher is required for screen designs.

Installation

uWin Simple SCADA Runtime is distributed as a single install file. To install uWinSS-Runtime, run the installation file and follow on screen instructions.



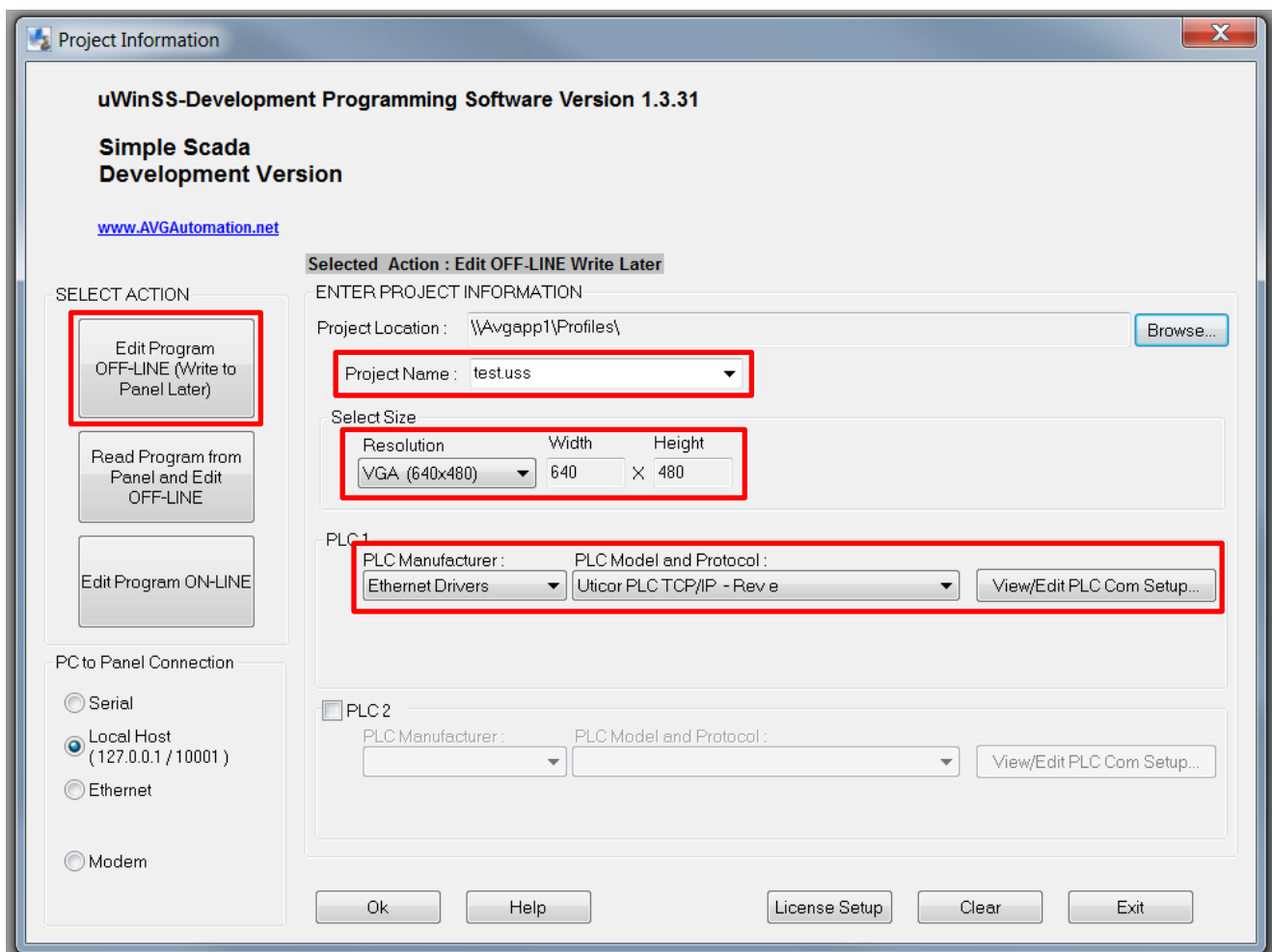
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Designing Screens

uWin Simple SCADA Development version 1.3 or higher is required to design screens for uWin Simple SCADA.

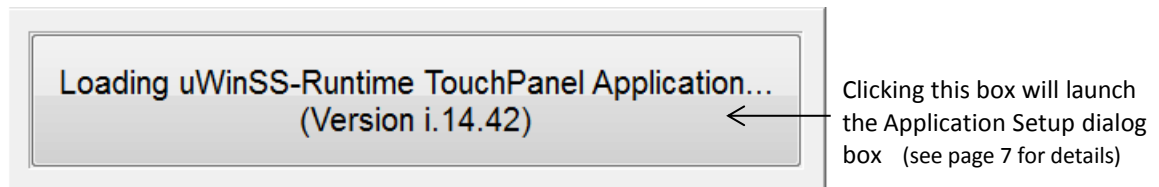
1. Launch the uWin Simple SCADA Development.
2. Click on the “Edit Offline...” button
2. Fill in the project name (change the Project location through *Browse* if necessary).
4. Set the resolution (screen size).
5. Select appropriate PLC protocol, and set the communication parameters for the protocol selected.



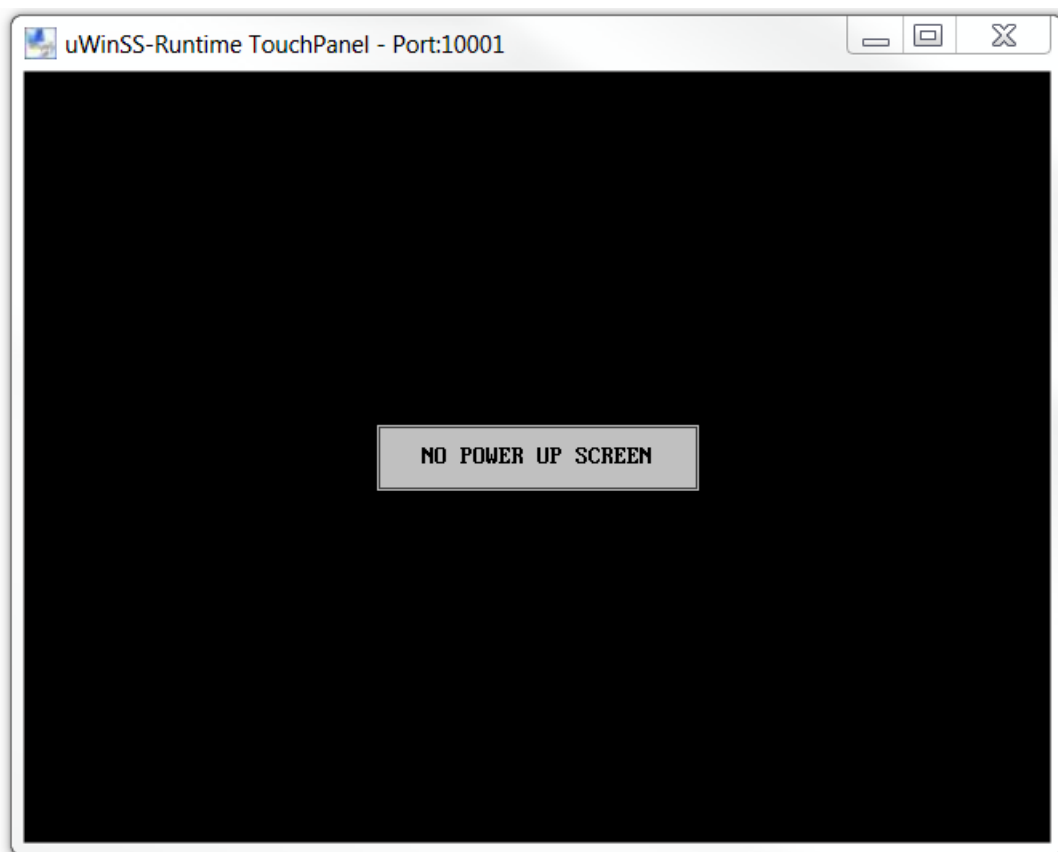
Running the uWin Simple SCADA Runtime

Installation of uWinSS-Runtime places an icon on the desktop. Click the icon or run uWinSS-Runtime from Program menu.

After a brief appearance of splash screen, following dialog box appears:



If above dialog box is not clicked, the application continues to load and brings up run-window as shown below indicating that there is no user project (screens) to display:

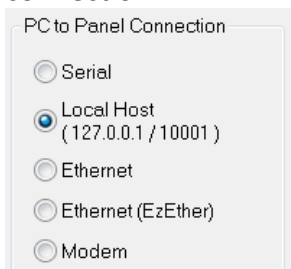


Now we need to “download” user project designed for the uWinSS-Runtime using uWinSS-Development.

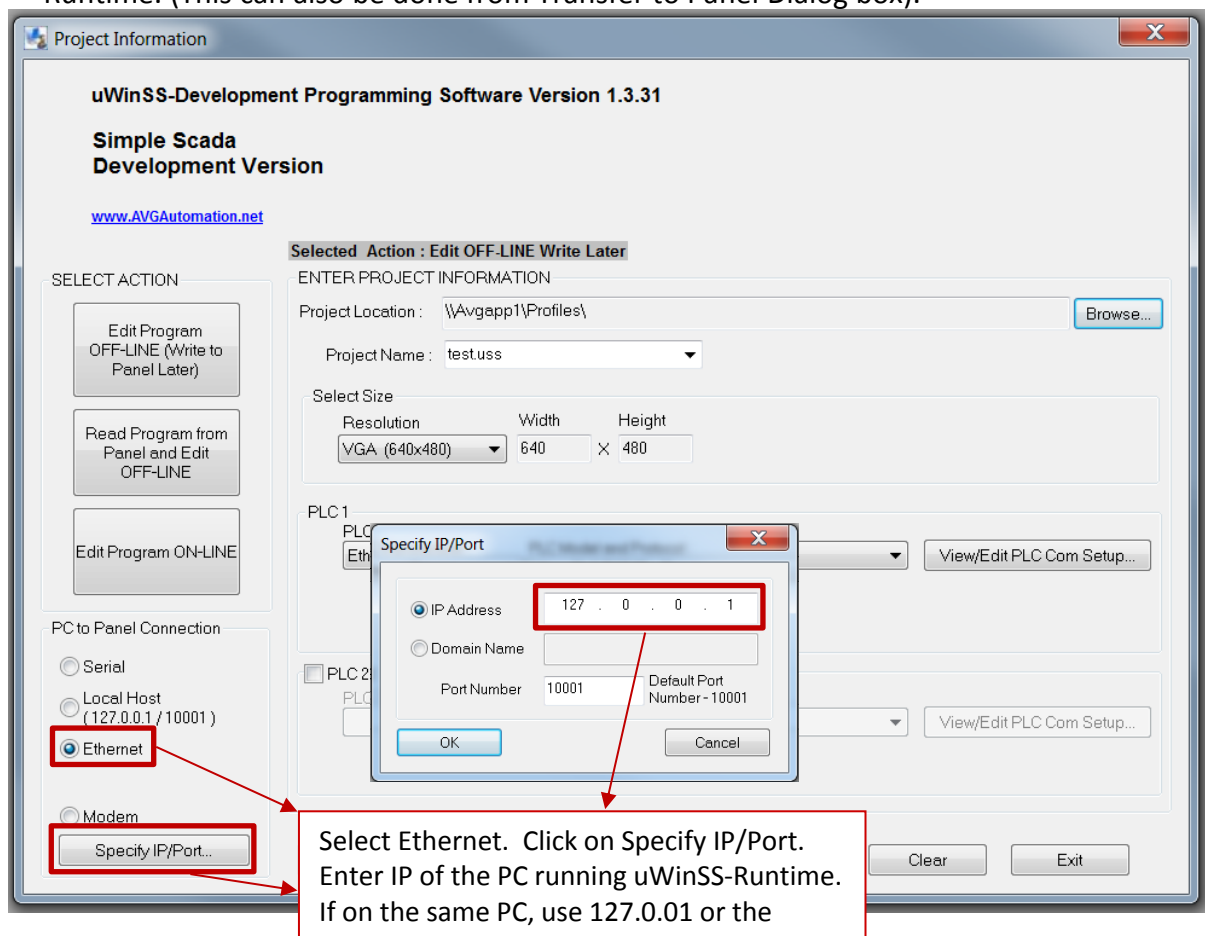
Transferring Project to uWinSS-Runtime

Once you have uWinSS-Runtime running, the next step is to transfer the project to the uWinSS-Runtime. Follow below given steps:

1. Launch uWinSS-Development.
2. Open your project.
3. If the uWinSS-Runtime and uWinSS-Development are running on the same computer, then you can use local host address (127.0.0.1). Otherwise, select Ethernet as Panel to PC connection.



4. If the uWinSS-Runtime and uWinSS-Development are not running on the same computer then in the "Specify IP/Port" dialog box, enter the IP address of the PC running uWinSS-Runtime. (This can also be done from Transfer to Panel Dialog box).

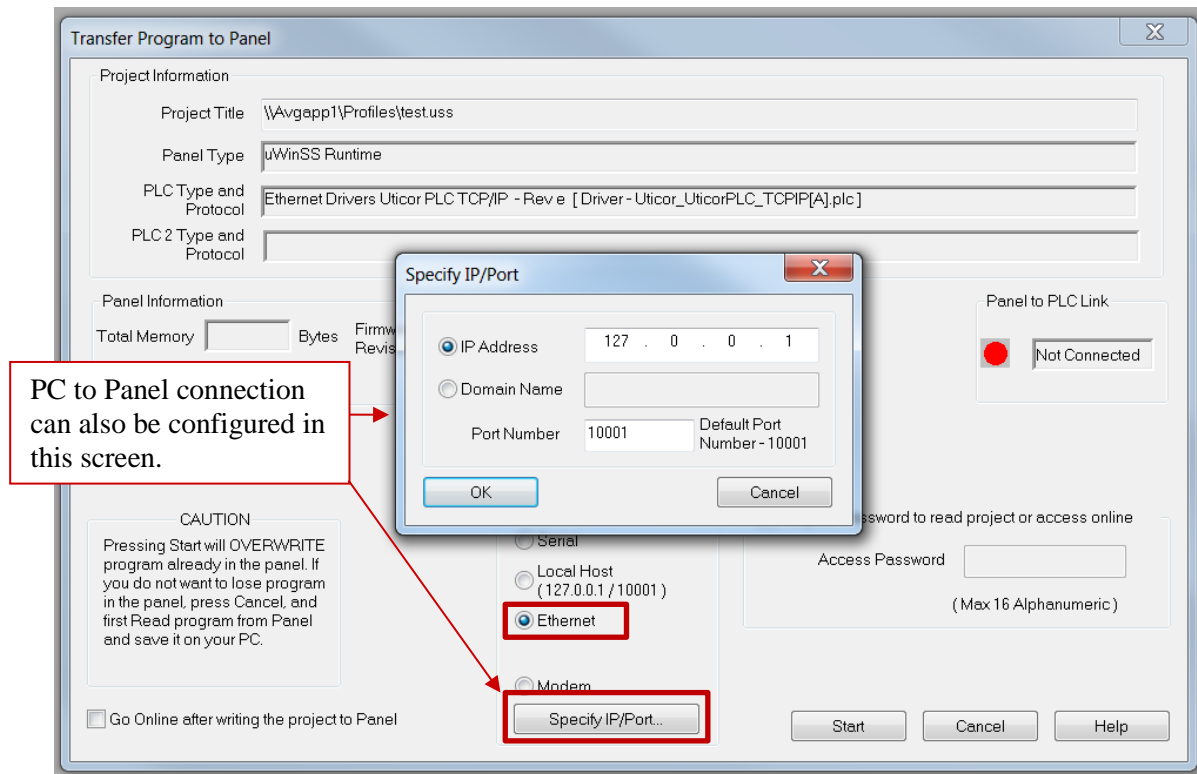


5. Click OK to close the main dialog box

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6. To transfer the project, select "File > Transfer to panel" menu and follow the instructions on the dialog box. You may select PC-Panel connection in this dialog box, and modify the IP address without going back to the opening dialog box. See below:



7. When ready to proceed, click Start to transfer the project.

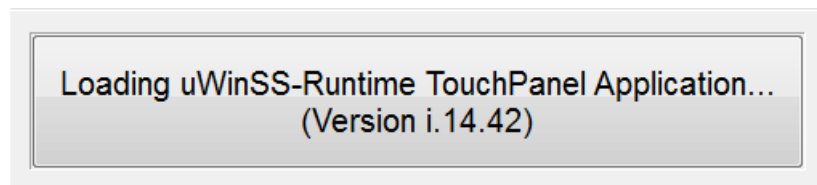
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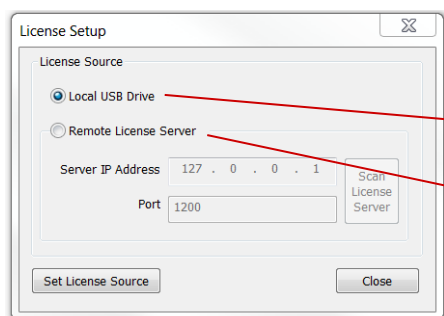
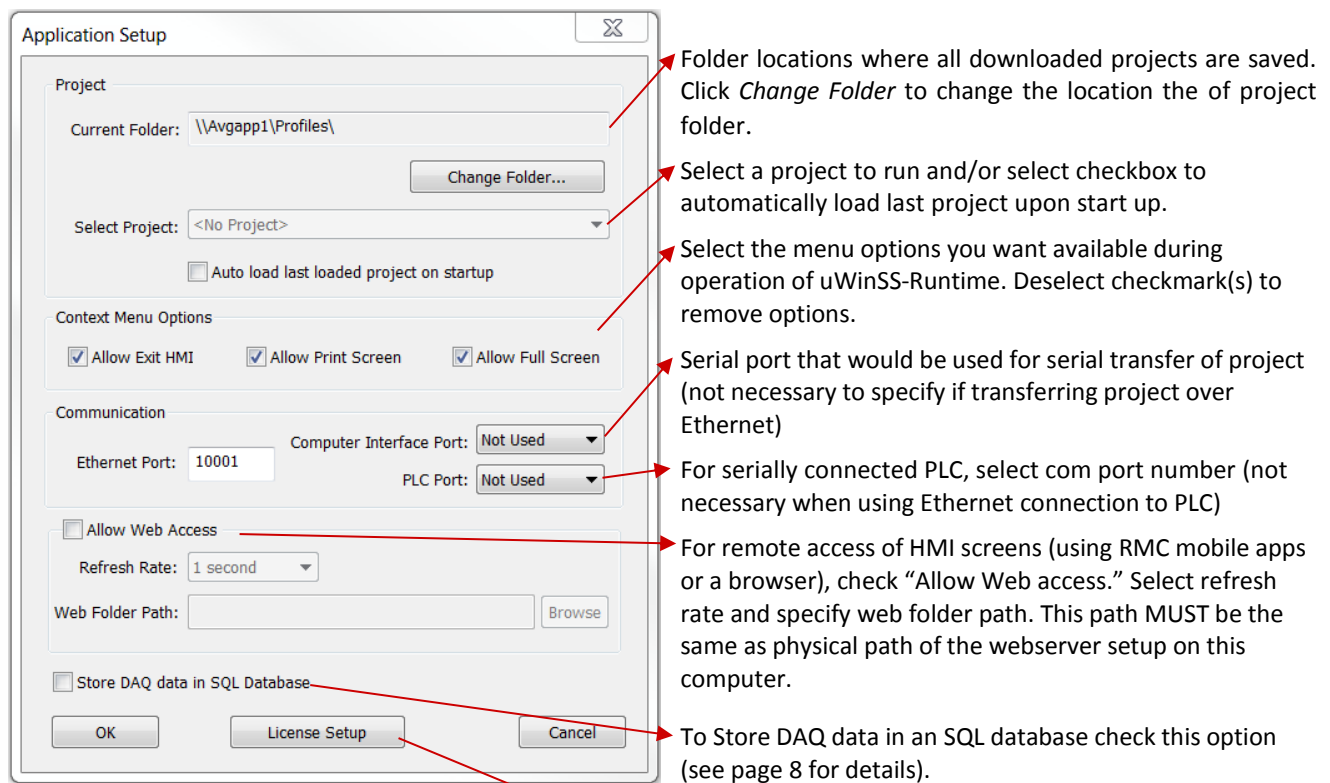
Configuring uWinSS-Runtime

Once you download a user project, the uWinSS-Runtime saves the downloaded project under the same name as that of the original project file, but with extension .img. For example, if your project was named Test.uss, the uWinSS-Runtime would save the project as Test.img.

You can set up the uWinSS-Runtime so that it can load a project file automatically on application start up. To do so click on the “Loading uWinSS-Runtime ...” dialog box when you start the uWinSS-Runtime.



When clicked, the following dialog box appears:



- Click *License Setup* to setup source of license:
- Local USB Drive** – Select if license located on inserted USB drive.
 - Remote License Server** – Select if license accessible over the LAN Network. Enter target IP Address and Port, then click *Scan License Server*.

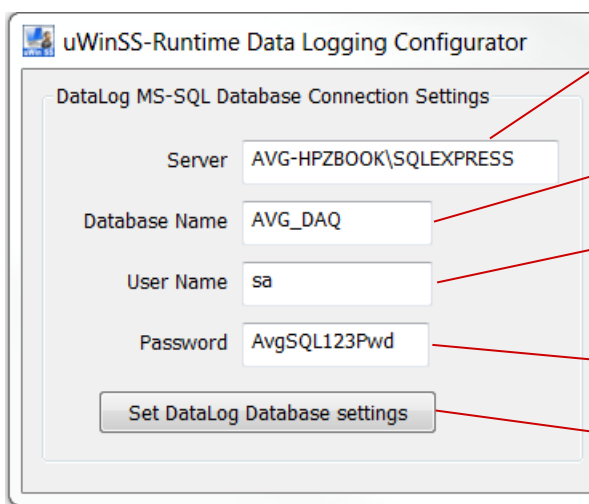
To load a new project to uWinSS-Runtime, simply download the new project from the uWinSS-Development.

Configuring Microsoft SQL Server

uWin Simple SCADA has the ability to store DAQ data in a Microsoft SQL database. The data acquisition is still configured the same (for DAQ setup see page 9 for details). The DAQ data is then not only stored in selected file on the computer but also sent to the setup Microsoft SQL database. Data in the SQL database can be retrieved at any time but cannot be changed.

To configure the SQL database follow below given steps:

1. In the start menu go to folder **Uticor > uWinSS-Runtime**
2. Launch the Data Logging Configurator
3. In the screen fill out the details for your SQL database
4. To configure the database settings press the Set DataLog Database settings button
5. Finally make sure that during launch of uWinSS-Runtime in the dialog box you select the store DAQ data in SQL database option.



The dialog box is titled "uWinSS-Runtime Data Logging Configurator". It contains a section titled "DataLog MS-SQL Database Connection Settings". Inside this section, there are four text input fields: "Server" with the value "AVG-HPZBOOK\SQLEXPRESS", "Database Name" with the value "AVG_DAQ", "User Name" with the value "sa", and "Password" with the value "AvgSQL123Pwd". Below these fields is a button labeled "Set DataLog Database settings".

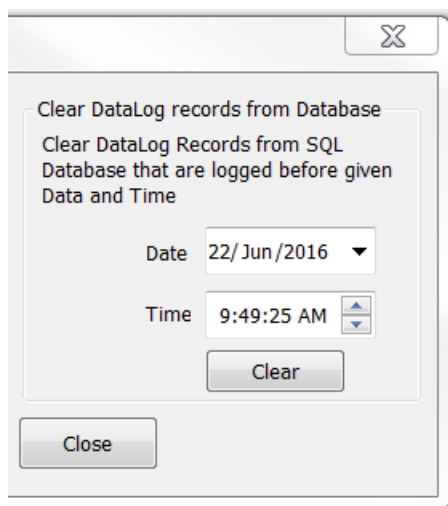
Server: Name of the server where the SQL database is found

Database Name: Name of the SQL database itself

Username: The username that this uWinSS-Runtime will log data as

Password: Password for the above username.

Set DataLog Database settings: Sets the detail that were entered above as the SQL database information.



The dialog box is titled "Clear DataLog records from Database". It contains a section titled "Clear DataLog Records from SQL Database that are logged before given Date and Time". Inside this section, there are two date and time selection fields: "Date" with the value "22/Jun/2016" and "Time" with the value "9:49:25 AM". Below these fields is a button labeled "Clear". At the bottom of the dialog box is a button labeled "Close".

Clear Datalog Records: Clears all the records in the database before the date and time that you set. This uses the above set username and password to clear the database.

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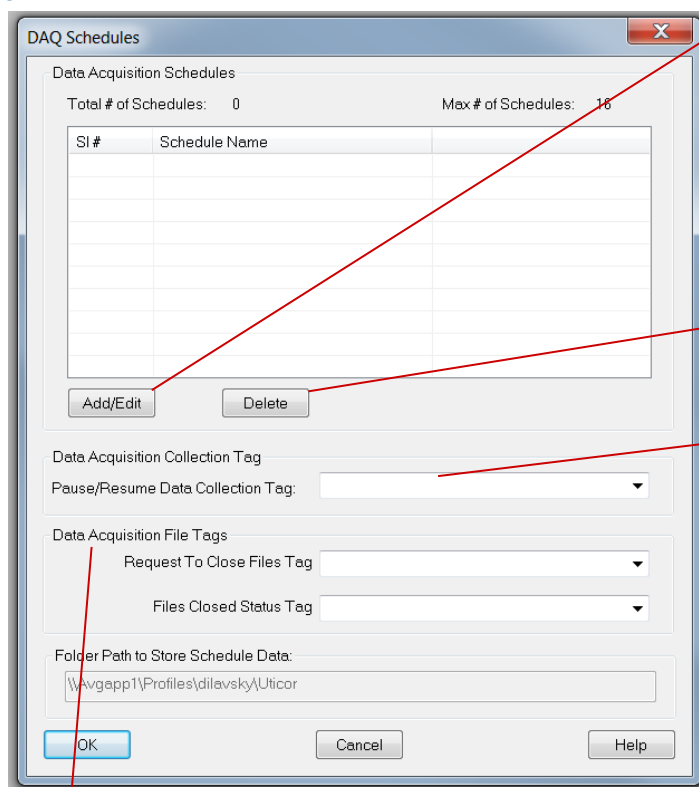


Data Logging Overview

Through our uWinSS-Development, users can establish time based or event based schedules for data acquisition. For instance, data can be collected every 10 seconds or at a specific time such as 9 AM. Alternatively, data collection can be activated when a certain event or condition occurs.

The user can define up to 16 schedules as long as each schedule is unique. (For example, there cannot be two identical schedules set to collecting data every 30 seconds.) User can also associate a name (up to 8 characters) with each schedule. Each schedule can currently be used to collect data for up to 1000 tags.

DAQ Schedules



Add / Edit: Use this button to add a data acquisition schedule or highlight an existing schedule and then press the button to edit it. Additional information on adding schedules and schedule types is available in the sections that follow.

Delete: Highlight an existing schedule, then press this button to delete it.

Pause / Resume Data Collection Tag: This is a discrete tag that can be controlled by user (e.g. through a Push Button) or by PLC to enable or disable data acquisition. When the tag's value is 0, data collection is enabled; when it is 1, the collection is disabled or paused. Setting the tag to 0 resumes the data collection.

Data Acquisition File Tags:

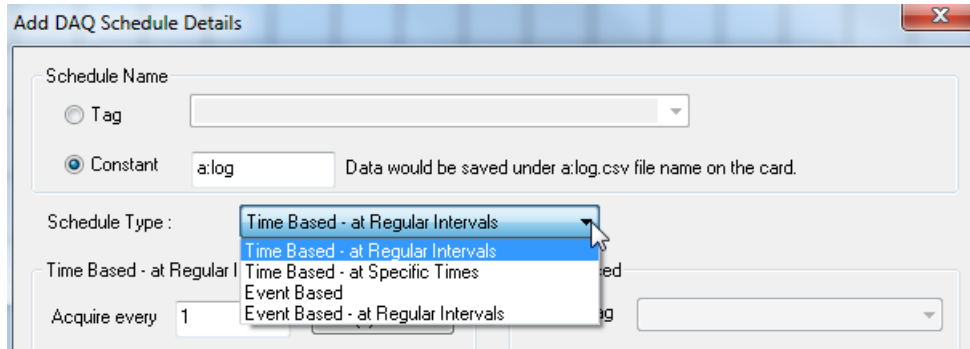
Request to Close Files Tag: This is a discrete tag that can be controlled by user (e.g. through a Push Button) or by PLC to close the data collection file so it can be accessed by another program. When the tag's value is changed to 1, the program will close the current data acquisition file so it can be edited by other programs. When file closed then value is changed to 0.

Files Closed Status Tag: This is an internal discrete tag that shows whether the file has been closed. When the tag's value is 1 then the file is closed. The file will be in use again once the data collection tag is re enabled, the value of this tag will change to 0 at that point.

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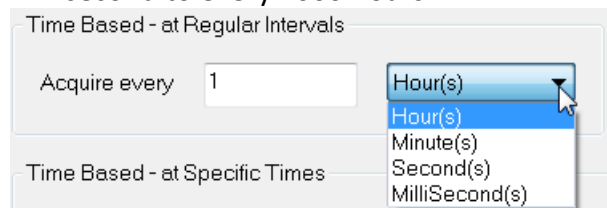


Types of Schedules



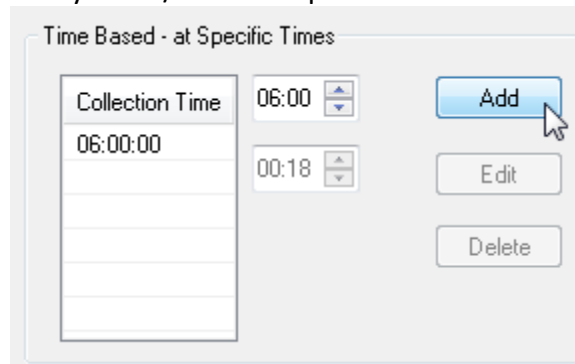
1. Time based – at regular Intervals

Allows you to store the tag value at regular time intervals, anywhere from every millisecond to every 1000 hours.



2. Time based – at Specific Times

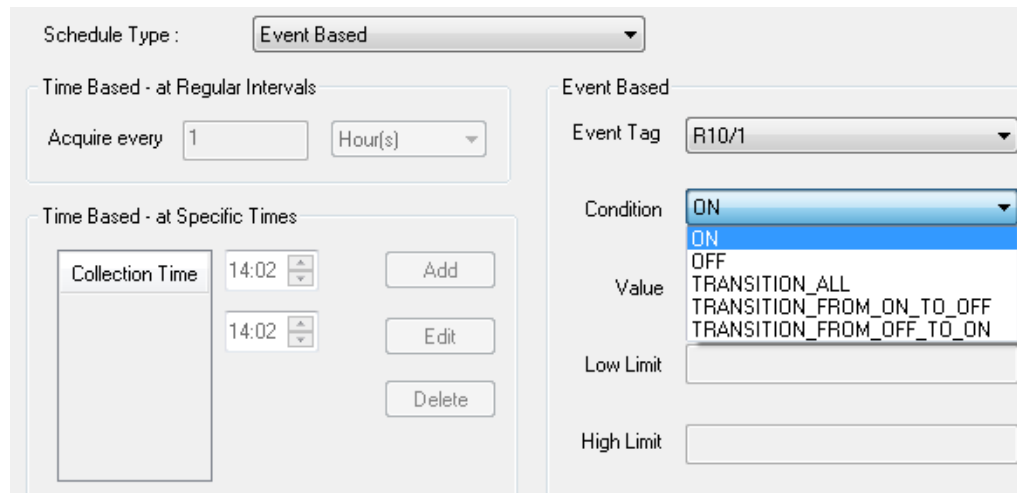
Allows you to store the value of a group of tags up to 10 specific times. You may always edit / delete a specified time.



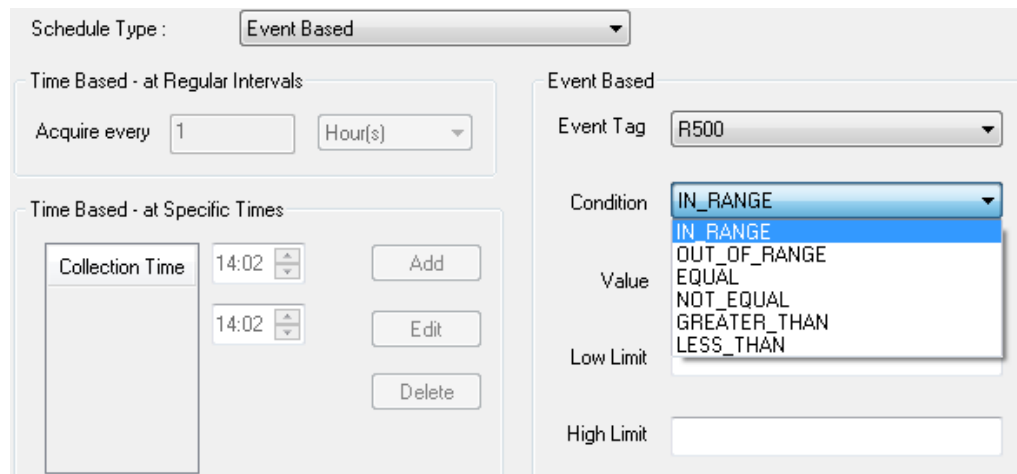
3. Event Based:

Allows you to create an event and store the values of a group of tags on the occurrence of the same. Based on the data type of the event tag, schedule can be either Discrete Event Type or Numeric Event Type.

Discrete Type Event:



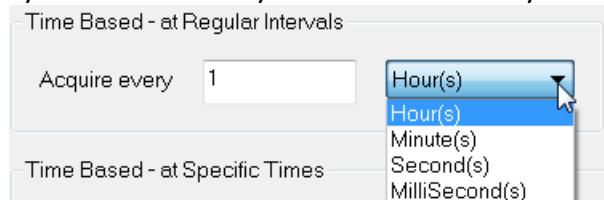
Numeric Type event:



4. Event Based - at Regular Intervals:

Allows you to create an event and store the values of a group of tags on the occurrence of the same during a set time period. Based on the data type of the event tag, schedule can be either Discrete Event Type or Numeric Event Type.

- a. Set how frequently the data is stored through the Time Based interval, anywhere from every millisecond to every 1000 hours.



- b. Select either a Discrete Type Event or a Numeric Event Type.

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Discrete Type Event:

Schedule Type : Event Based - at Regular Intervals

Time Based - at Regular Intervals
Acquire every Hour(s)

Time Based - at Specific Times
Collection ... ▲▼ Add
 ▲▼ Edit
Delete

Event Based
Event Tag DATA

Condition OFF
ON
OFF

Value

Low Limit

High Limit

Numeric Type event:

Schedule Type : Event Based - at Regular Intervals

Time Based - at Regular Intervals
Acquire every Hour(s)

Time Based - at Specific Times
Collection ... ▲▼ Add
 ▲▼ Edit
Delete

Event Based
Event Tag TEST

Condition WHILE OUT OF RANGE
WHILE IN RANGE
WHILE OUT OF RANGE
WHILE EQUAL TO
WHILE NOT_EQUAL
WHILE GREATER THAN
WHILE LESS THAN

Value

Low Limit

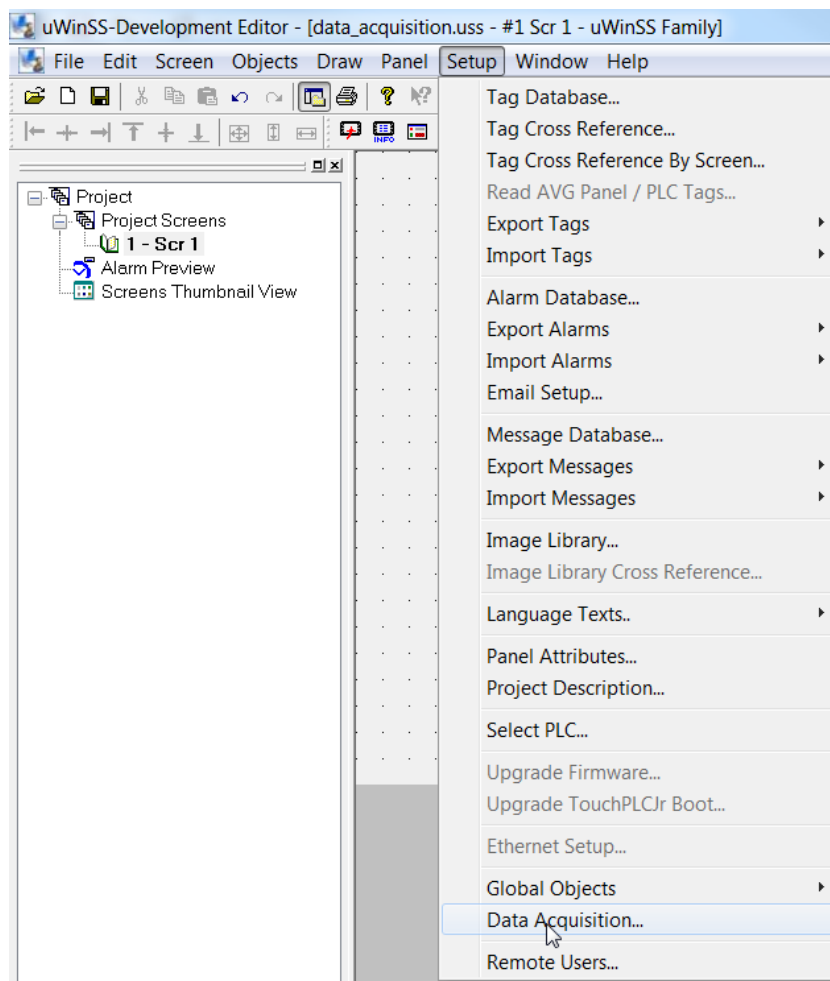
High Limit

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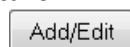


Adding a Schedule

1. Open your project file for the uWinSS-Runtime using the uWinSS-Development.
2. Then click **Setup > Data Acquisition** to display the DAQ Schedule dialog.



3. The Data Acquisition dialog box will appear which allows you to add new schedules or edit/delete existing ones. Click on Add/Edit button to display the "Add DAQ Schedule Details."



4. The "Add DAQ Schedule Details" box will appear. Enter a schedule name. Schedule Names can either be Tag based or a Constant (user defined name).

A dialog box titled "Add DAQ Schedule Details". It has a "Schedule Name" label. Below it are two radio buttons: "Tag" and "Constant". The "Constant" radio button is selected. To the right of the "Constant" radio button is a text field containing "Sch04". To the right of the text field is a note: "Data would be saved under Sch04.csv file name on the card."

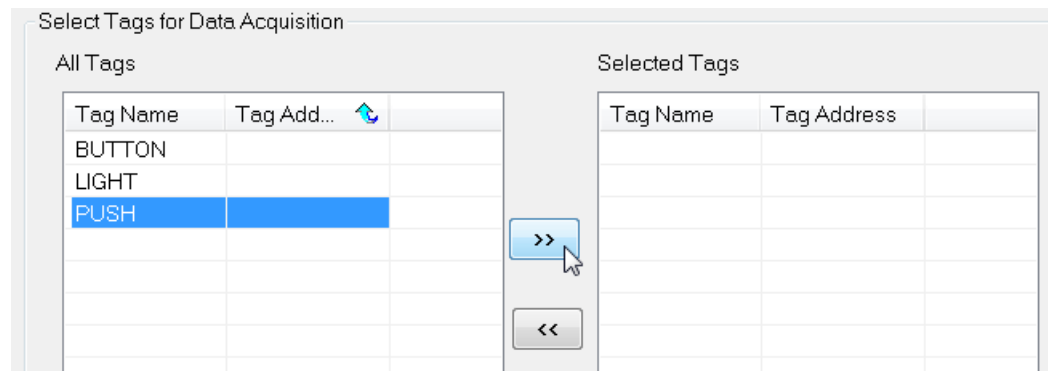
5. Select preferred Schedule Type (options displayed below):

A screenshot of the "Schedule Type" dropdown menu. The menu is open, showing several options: "Time Based - at Regular Intervals" (highlighted in blue), "Time Based - at Specific Times", "Event Based", and "Event Based - at Regular Intervals". The text "Schedule Type :" is visible to the left of the dropdown. Below the dropdown, the text "Time Based - at Regular Intervals" is partially visible, followed by "Acquire every" and the number "1".

6. Under "Select Tags for Data Acquisition," the selection displays all the tags defined in the panel with their corresponding tag addresses. Use the double arrows to select or deselect tags within the schedule. Maximum tags allowed per schedule is 1000.

➤ To select a tag for data acquisition, click on it and then press the >> button.

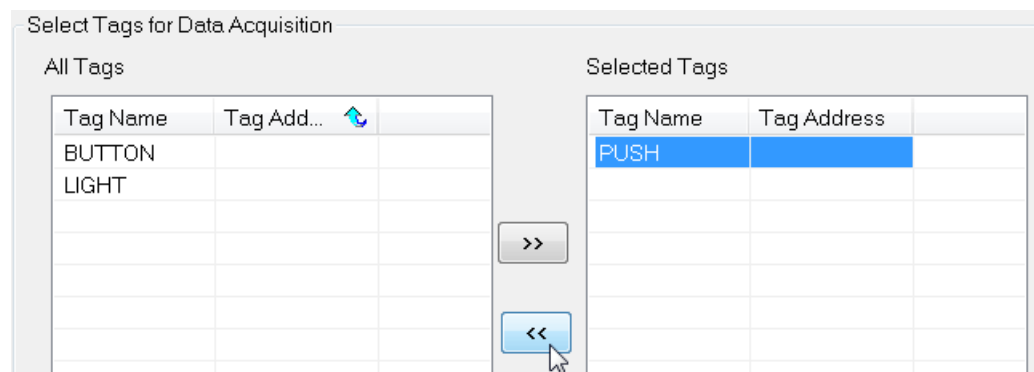
Note: Tags can also be selected or deselected by double-clicking on them.



All Tags		Selected Tags	
Tag Name	Tag Add...	Tag Name	Tag Address
BUTTON			
LIGHT			
PUSH			

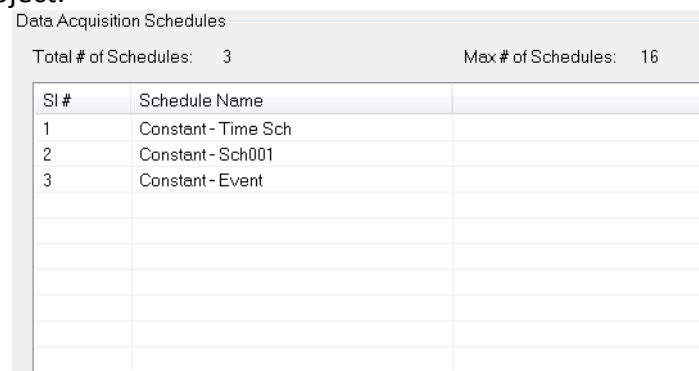
➤ To deselect a tag for data acquisition, select it again and press the << button.

Note: Tags can also be selected or deselected by double-clicking on them.



All Tags		Selected Tags	
Tag Name	Tag Add...	Tag Name	Tag Address
BUTTON		PUSH	
LIGHT			

7. Click "Add" when finished making selections. Then click "Close" to return to the main DAQ Schedules dialog box.
8. The added schedules will now be listed. Schedules are saved along with the user project.



SI #	Schedule Name
1	Constant - Time Sch
2	Constant - Sch001
3	Constant - Event

Reports and Graphs Overview

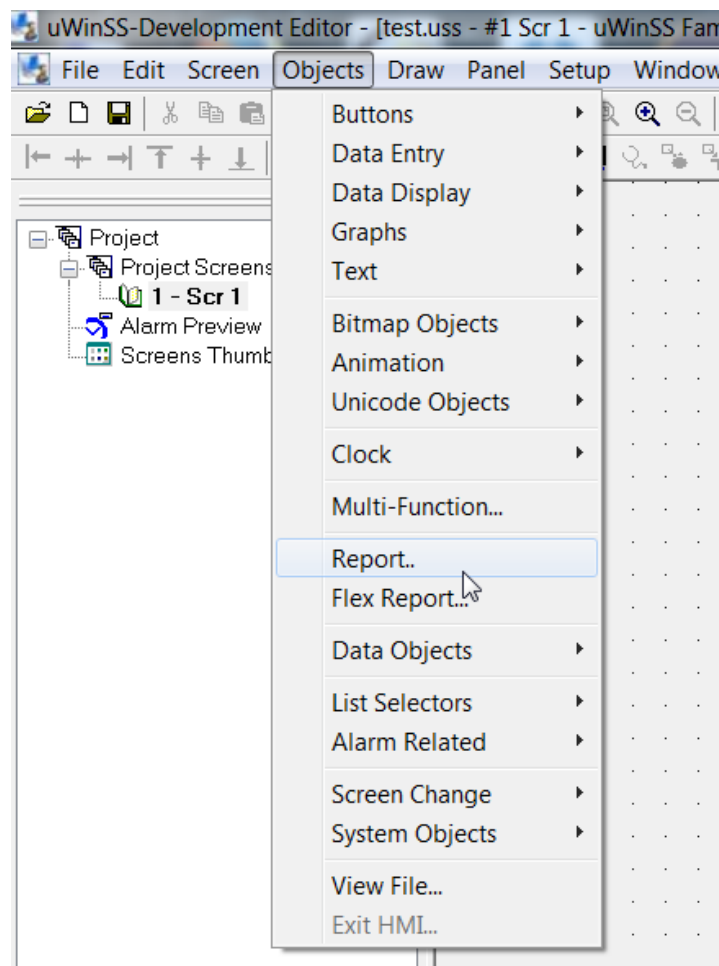
Through our uWinSS-Development, users can establish a variety of different reports and graphs. These range from simple one tag reports to longer production reports. In terms of graphs we have multiple graph types including bar graphs, line graphs and XY graphs. The line graphs even come with a historian option for data logging.

Adding a Report

A report is a single local instance report that can be printed (through network printer) and/or can be sent to a marquee. This type of report is created for access and printing of single local report. For global reports please look at adding a flex report on page 19.

To configure this type of report follow below given steps:

1. Open your project file for the uWinSS-Runtime using the uWinSS-Development.
2. Then click **Objects > Reports** to open a dialog to create a report generating button.



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3. In this dialog you can label and change how the button looks on the screen. Also you can have the button print the report (through a network printer) and/or send it to a marquee.

Add a label above the button.
Can change position of label,
its color and its size.

Change the text on the seen
on the button. Can change its
color and its size.

Can select to print report, and/or
to send report to a marquee.

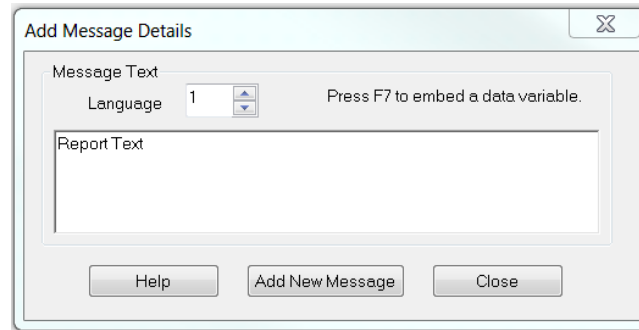
4. Then in the next tab, **Messages**; you put together the reports that are created. To create a report you click on Add/Edit Message.

All the different
message/reports that are
sent are displayed here.

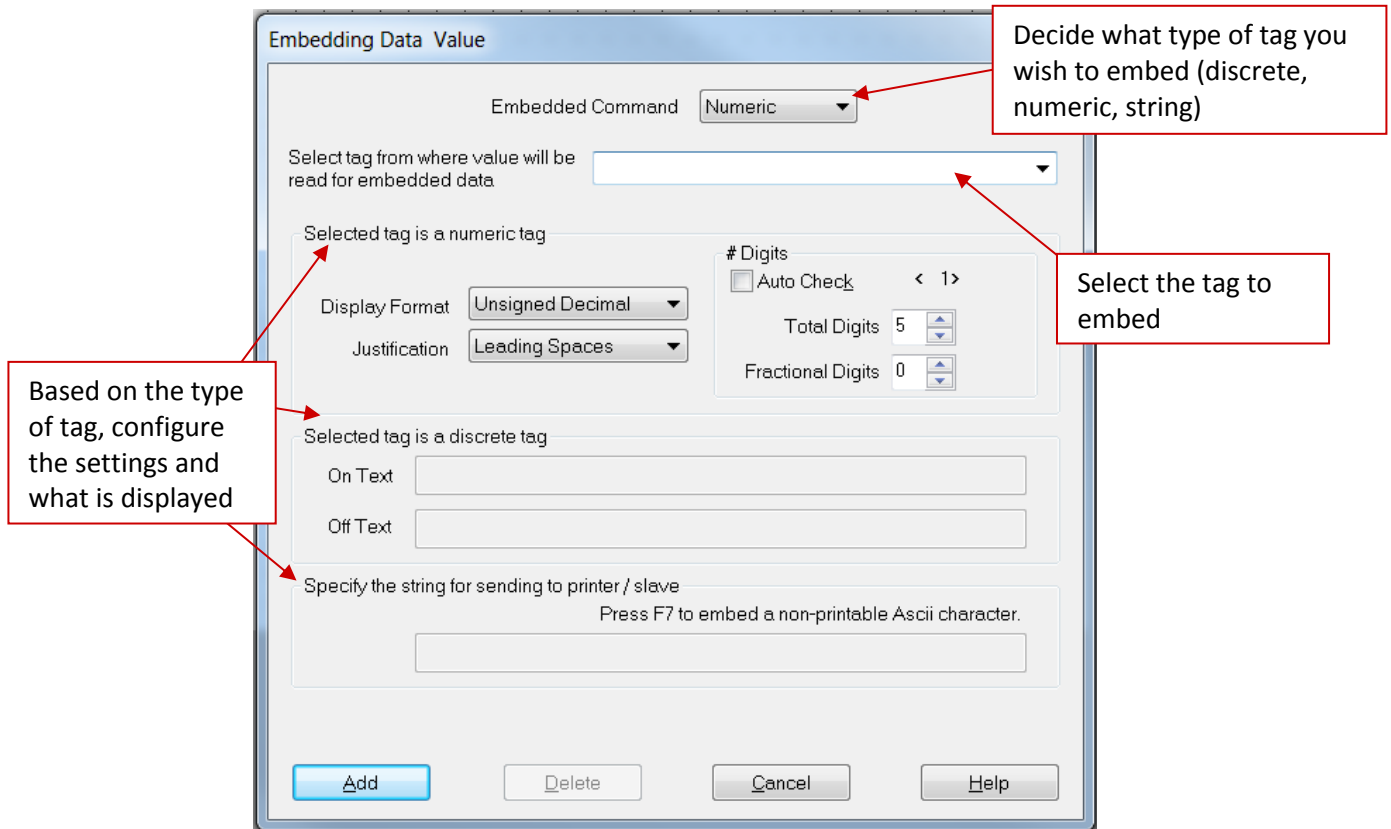
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5. In the Add Message Details you input the details of the message that you want to create. Once you have put in the report that you want to print then click add new message. To embed a data variable press F7. This data variable will be display the current value of the variable at the time that the report is created.



6. If you embed a variable the dialog below displays. Here you decided what variable you want to display information on. Then you click add to embed the variable.



7. Once you have set up the reports. Then you click ok in the setup dialog and place the button in location you want. Then when in the Runtime pressing this button will do the selected action (printing report on a network printer and/or sending report to marquee).

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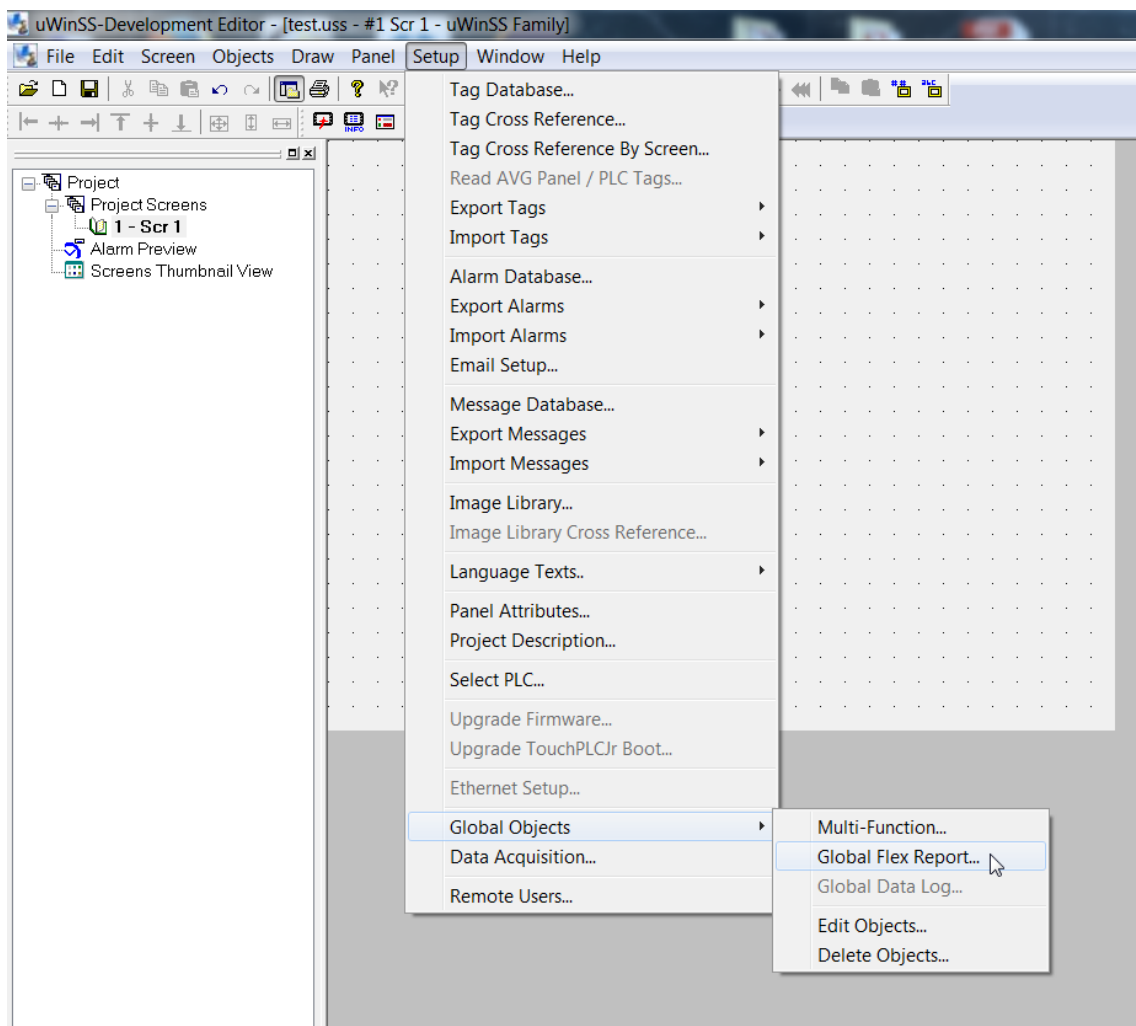


Adding a Flex Reports

A flex report is a global report that can be printed (through a network printer) and/or can be sent to a marquee. This report is a global object which can be access from multiple screens and printed using the flex report button.

To configure flex reports follow below given steps:

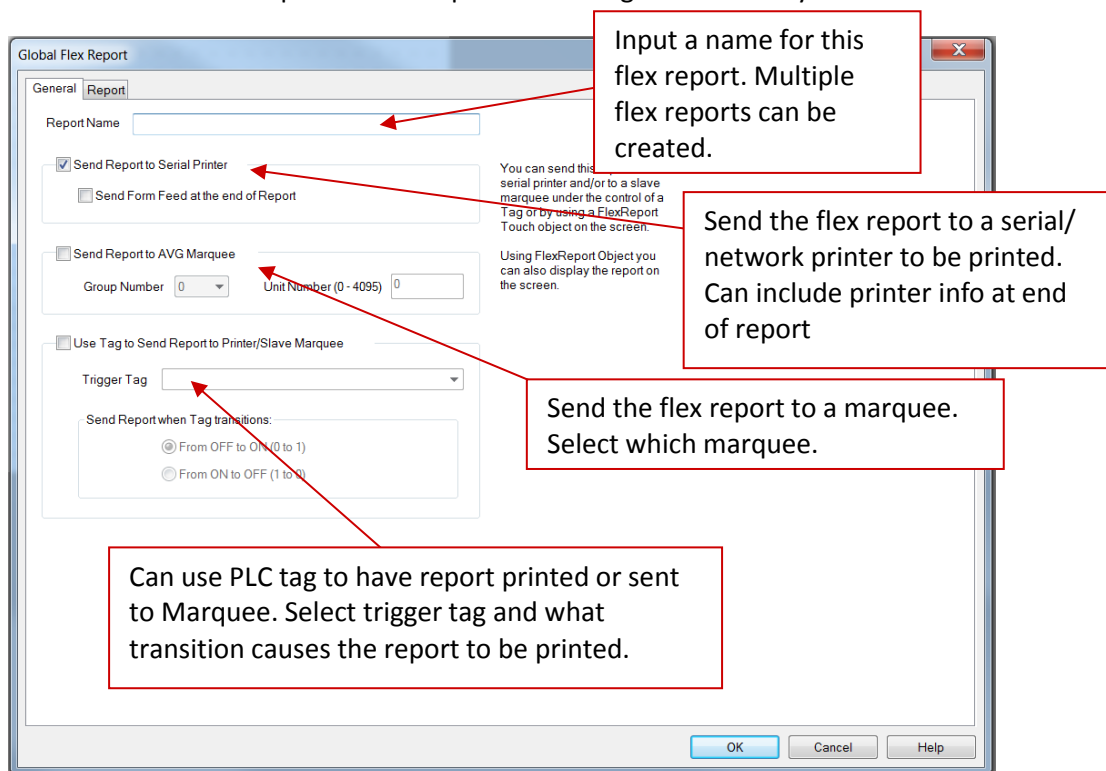
1. Open your project file for the uWinSS-Runtime using the uWinSS-Development.
2. Then click **Setup > Global Objects > Global Flex Report** to open a dialog to create a global flex report. Also in the Global Objects menu is where you can later edit or delete the flex report. For this use the Edit Objects and Delete Objects options.



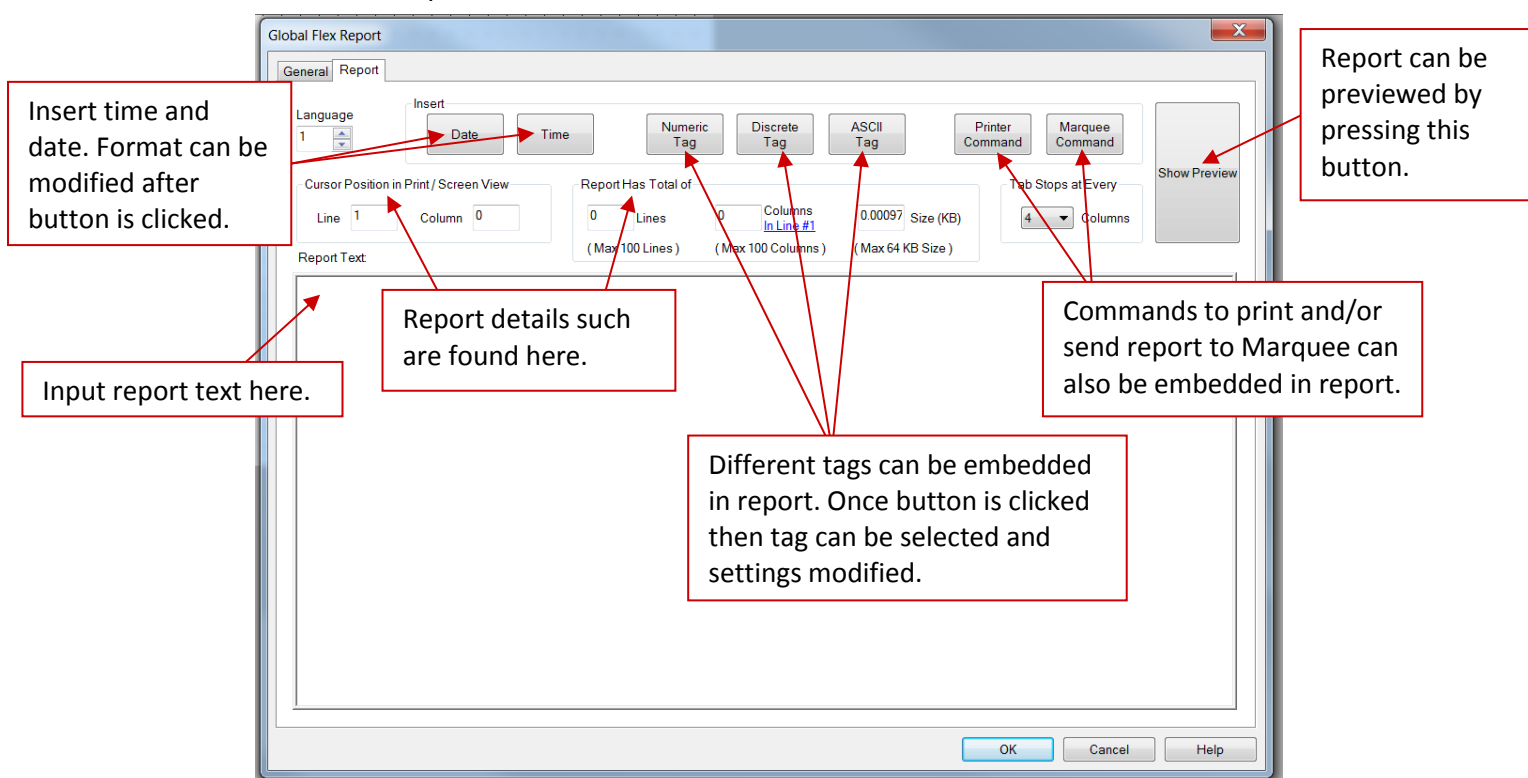
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3. In this dialog you configure the flex report. The first tab (General) decides what happens with the report whenever a Flex Report button is pressed. Configure based on your needs.



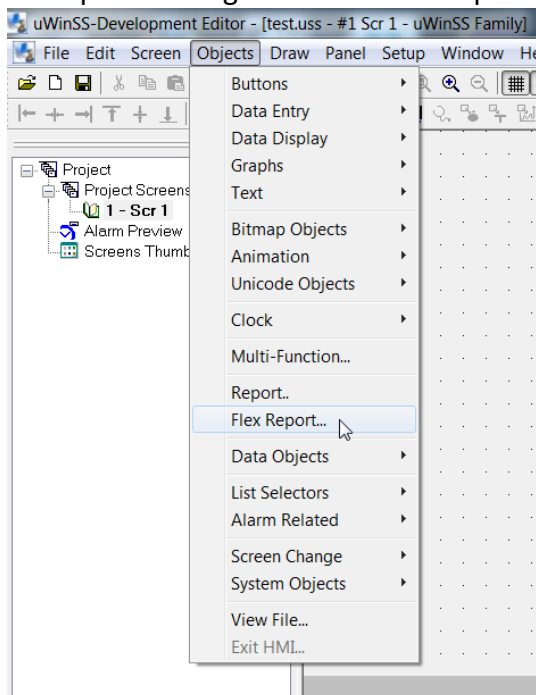
4. Then in the next tab, **Report**; you put together the report that will be printed. You can input multiple different things that you look for in a report including time stamp, variable data, and Marquee Commands.



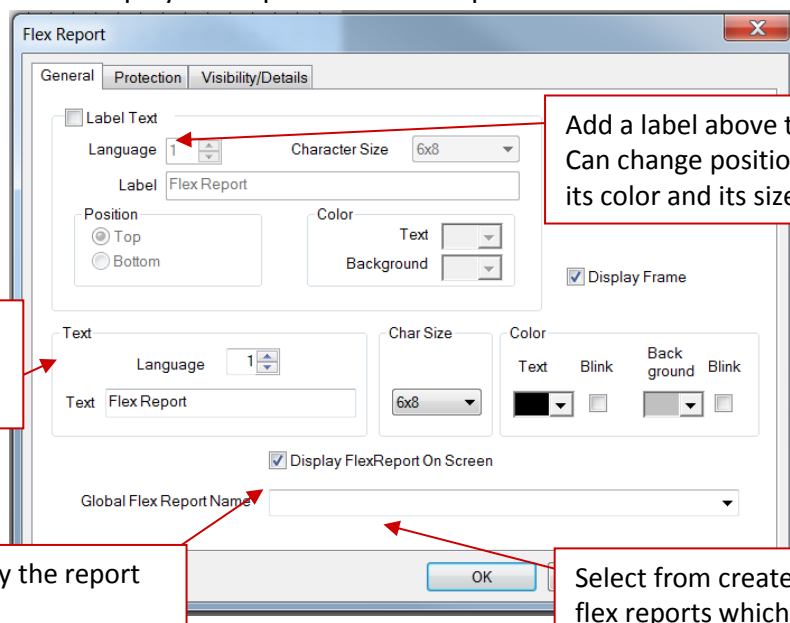
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5. Once the details of the report have been put together. Click Ok. With the global flex report created now you can add a button to your screen that shows/prints the report. Go to **Objects > Flex Report** to open a dialog to create a flex report button.



6. In this dialog you can label and change how the button looks on the screen. Also you can have the button display the report before it is printed.



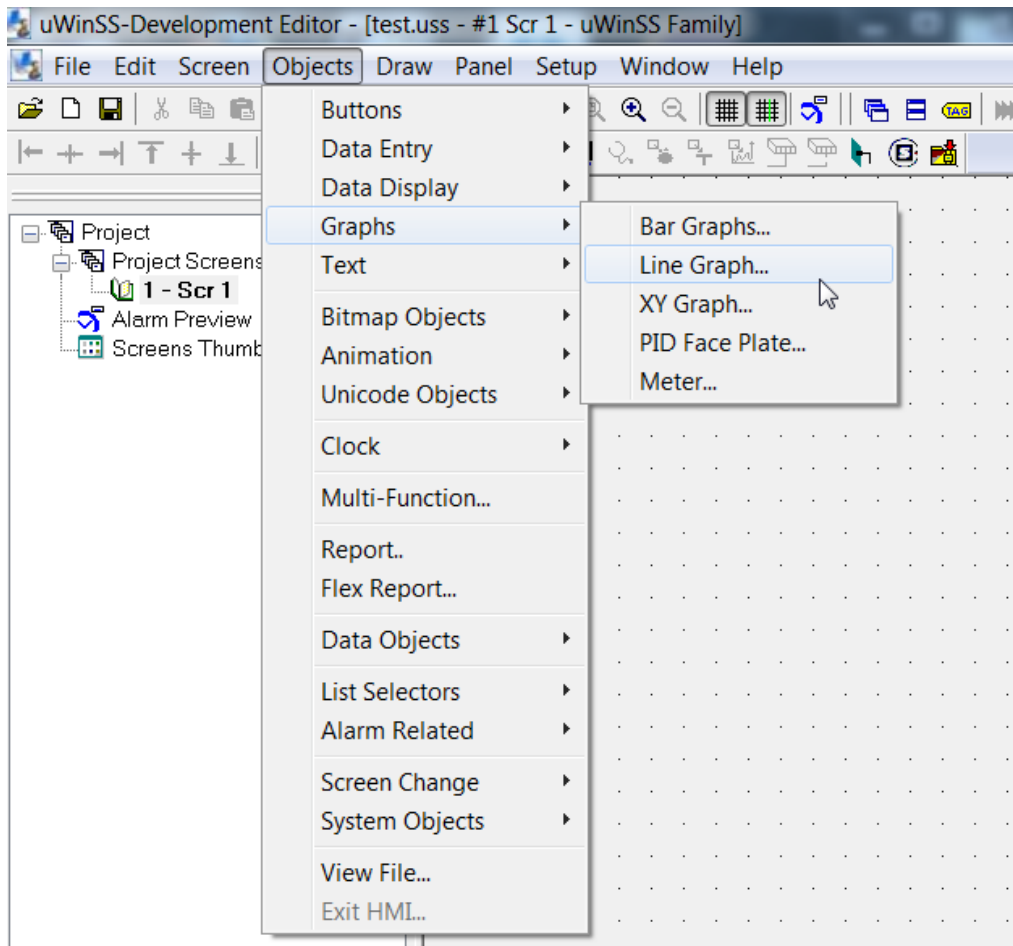
7. Once you have set up the flex report button. Then you click ok in the setup dialog and place the button in location you want. Then when in the Runtime pressing this button will do the selected action (showing the report, printing the report, sending report to Marquee).

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Setting up Graphs

The uWinSS software has multiple graph options. These graphs include bar graphs, line graphs and even XY graphs for showing data in multiple different formats. The setup for simple graphs is easy but you can make the graphs more complicated as well. All the graphs are found in the **Objects > Graphs** section.



To set up graphs you can follow the steps on the following pages:

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Bar Graphs

A bar graph is easy to set up with only needing the tag to monitor and range to be assigned and it is done. But it also has multiple other options that can be modified.

Add a label above the button.
Can change position of label,
its color and its size.

Can add a digital display and
change the scaling of the
graph in these tabs.

Can change the style of the
bar graph. It can go up or
down, left or right.

Input the tag
variable which
being displayed
on the graph.

Select the range
of the graph.
Can be set so
the range is set
by tags.

Can have a
midpoint at
which the color
of the graph
changes.

Select to show ticks and
there settings like how
many, their color, etc.

Change the color of the graph
as well as its background.

The screenshot shows the 'Bar Graph' configuration window with the following sections and callouts:

- General Tab:**
 - Label Text:** Language (1), Character Size (6x8), Label Text (BAR GRAPH), Position (Top/Bottom), Color (Text/Background).
 - Tag Name:** Input field for the tag variable.
 - Range:** Minimum (Tag/Value: 0), Maximum (Tag/Value: 65535).
 - Bipolar Mid Point:** Tag/Value (32767).
 - Show Ticks:** Left/Top/Right/Bottom, No. of Major Divisions (5), No. of Sub Divisions (3), Show Tick Numbers (checked), Color (black), Precision for Floating Pt.
 - Color:** Bar Foreground (blue), Bar Background (red), Blink (checkbox), Transparent Background (checkbox).
- Digital Display Tab:** (Callout: Can add a digital display and change the scaling of the graph in these tabs.)
- Scaling Tab:** (Callout: Can change the style of the bar graph. It can go up or down, left or right.)
- Visibility/Details Tab:** (Callout: Can have a midpoint at which the color of the graph changes.)

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Line Graph

The Line graph is more advanced but still to set up a basic one all that needs to be assigned is the tag to monitor in Graphs and Pens tab. But there are multiple other options that can be changed including that this type of graph can also be setup as XY graph. As well as having a historian option for recording the samples taken.

General Tab

Line Graph

General | Graph And Pens | XY Axis | Log to File

☐ Label Text

Language: 1 Character Size: 6x8

Label Text: LINE GRAPH

Color: Text: Background:

Color: Background: Axis/Tick: ☒ Display Frame

Sample Rate: ☒ Timed Sample Rate: 60 ☐ Hour ☐ Minutes ☒ Seconds ☐ 100 ms

☐ Triggered Tag Name:

Orientation: Left to Right

☐ Show TimeStamp

Date Format: dd-mm-yy

☐ 24 Hour Mode

☐ Show Seconds

Number of samples stored. → Total # of Samples: 100

Number of readings taken and averaged into sample. → Number of readings to average per sample: 1

Number of samples displayed on chart. → Sample Per Chart: 10 (1-100, 105, 110, 115, ..., 790, 795, 800)

Add a label above the button. Can change position of label, its color and its size. → Label Text

Change the color of the graph. → Color

Select the sample rate at which data points are displayed and stored. Can be set by PLC tag. → Sample Rate

Can change graph orientation. → Orientation

Can show date and time on graph. → Show TimeStamp

OK Cancel Help

Graph and Pens Tab

Line Graph

General | Graph And Pens | XY Axis | Log to File

Graph Type: ☒ Line ☐ XY

Pen Tag Name Color Line Type Language Legend

1 2 3 4 5 6

☒ Display Legend

pen tags must also have unsigned data types assigned to them. Signed same line graph.

Can have simple line graph or XY graph. If XY graph selected then need to input 2 tags. Also can select whether points or line display is used. → Graph Type

Can change color and line type of each tag. → Color Line Type

Input Legend descriptions. Also if do not want legend unselect. → Legend

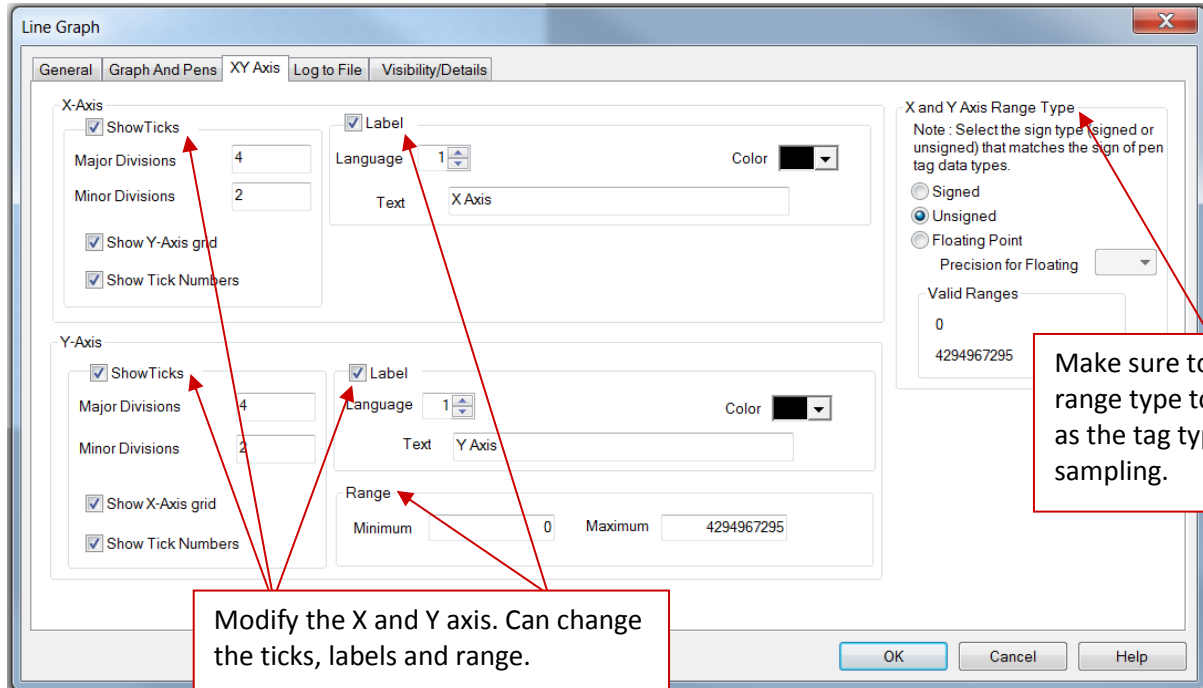
Input tag from which samples are taken and displayed. All tags must be of the same type (unsigned or signed). Can have up to 6 different tags on same graph. → Tag Name

OK Cancel Help

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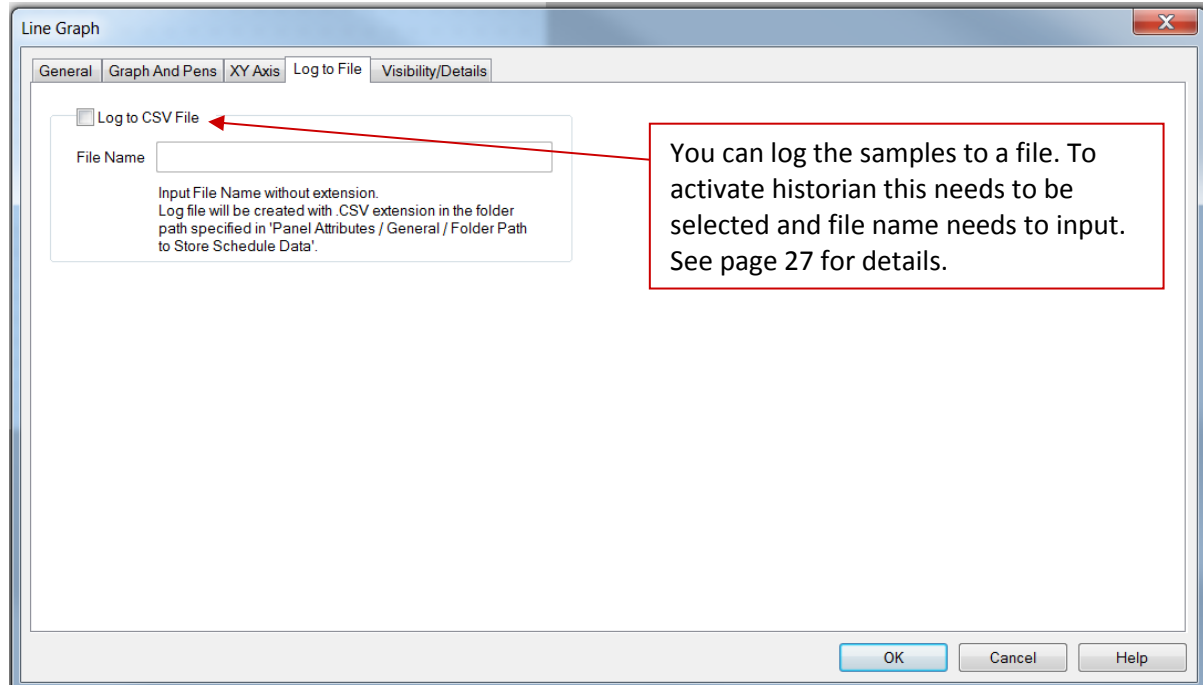
XY Axis Tab



Modify the X and Y axis. Can change the ticks, labels and range.

Make sure to select the range type to be the same as the tag type you are sampling.

Log to File Tab (Historian or Data Logging)



You can log the samples to a file. To activate historian this needs to be selected and file name needs to input. See page 27 for details.

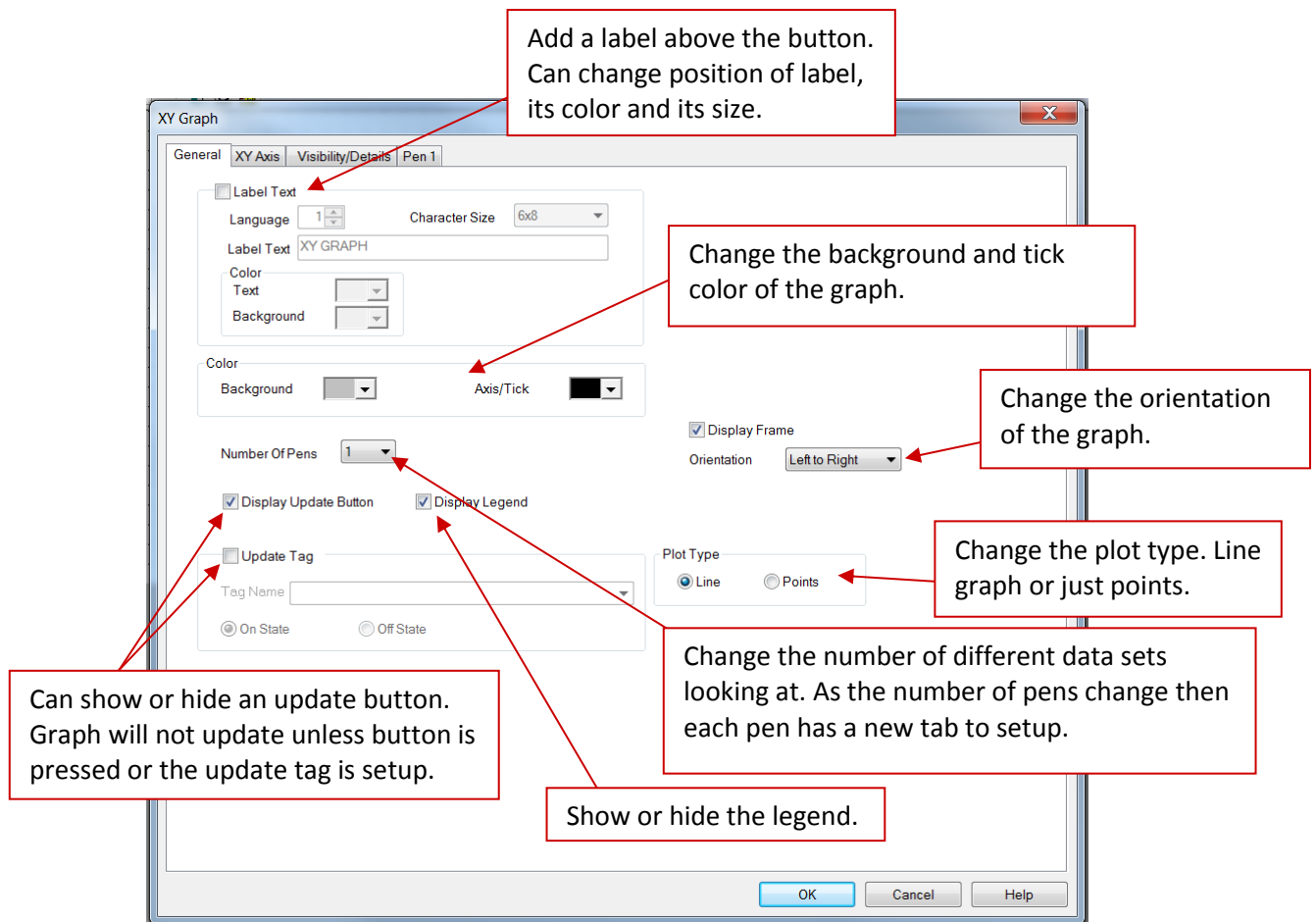
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XY Graph

The XY graph is a more advanced option for the XY graph available in the Line graph menu. To set up this graph you need input multiple X and Y tags to be monitored in the Pen tab. These are then all sampled at the same time and results are graphed on the XY graph. This is unlike the Line graph where values are only sampled one point at a time.

General Tab



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XY Axis Tab

Can change almost anything about graph including ticks, axis grids, range of axes, labels of axes, and even precision of the points.

Pen Tabs

To open the define X_Y Points Window.

Can change the color and line type of pen. Also can add legend label here.

Clears all data points.

The initial tag that will be used for graph.

How much the tag address will increment up for each subsequent point.

How many data points there will be.

Defines the tag addressing type.

Creates the tags

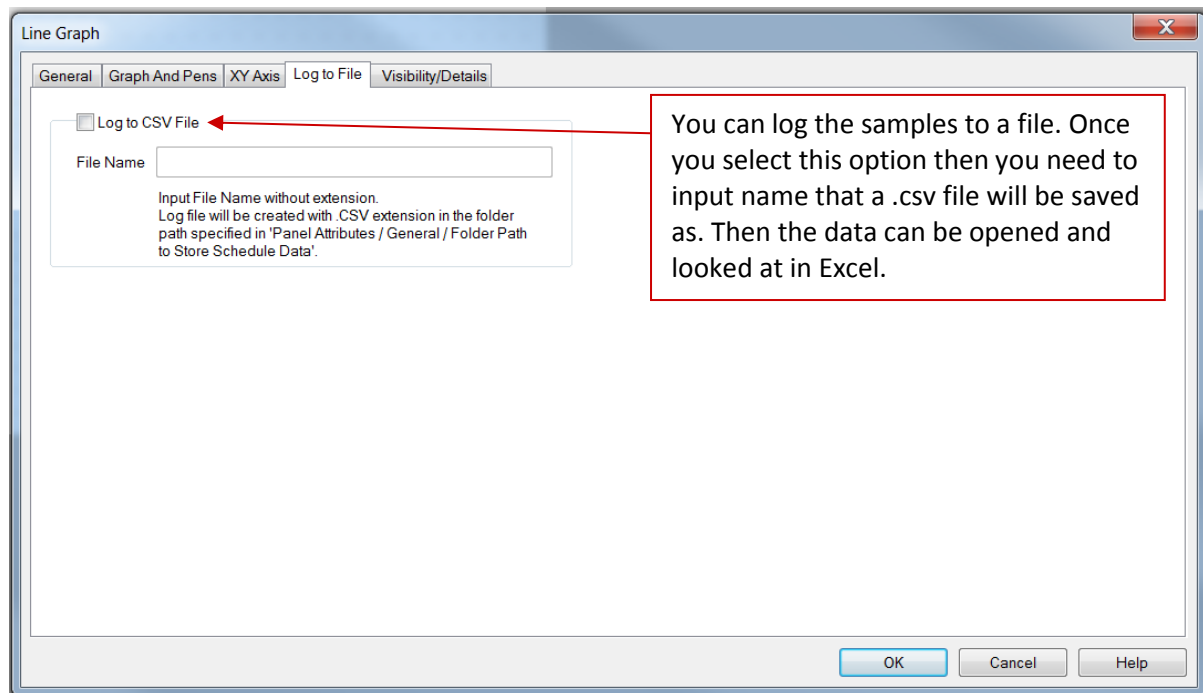
Getting Started Manual



Setting up Historian Data

The historian option is a type of data logging for graphs where the data taken is also stored in a selected file. The historian option is available for the Line Graph. For more information on setting up Line Graphs please refer to page 23.

To setup Historian/Data Acquisition go to the Line graph setup dialog and there in the Log to File tab you will select the Log to CSV File option, then input file name to save as. Once this is setup all the samples taken on the different tags will be recorded in the selected CSV File.



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Printing

Printing for uWin Simple SCADA is accomplished through the Windows printing options. Therefore any time something is printed the default printer is used. Therefore to enable printing from the uWin Simple SCADA Runtime you need to connect a printer to the PC.

This can be done by a direct by a cable or connecting over the network. Then in Devices and Printers of the PC add the selected Printer to your printers and faxes. For more information on adding your specific printers to your PC please refer to the printer's manual.

Once the printer has been added to your list of printers then you should be able to make it your default printer by right clicking on its icon and selecting **Set As Default Printer**. If this is not possible then you can enter the properties of the printer by double left clicking on its icon. Then go to **Printer** drop down menu and select **Set As Default Printer**. Once the printer is set as default then the uWinSS-Runtime will print to this printer

Printing reports

Reports are generated by clicking the reports button in uWinSS-Runtime. These buttons are configured beforehand in the uWinSS-Development (for setup information refer to page 15 & 18). In the configuration of these buttons you select if the report is to be printed. If a default printer is setup and the report printer option is selected then a report will be printed when the Report button is pushed.

Print screen captures

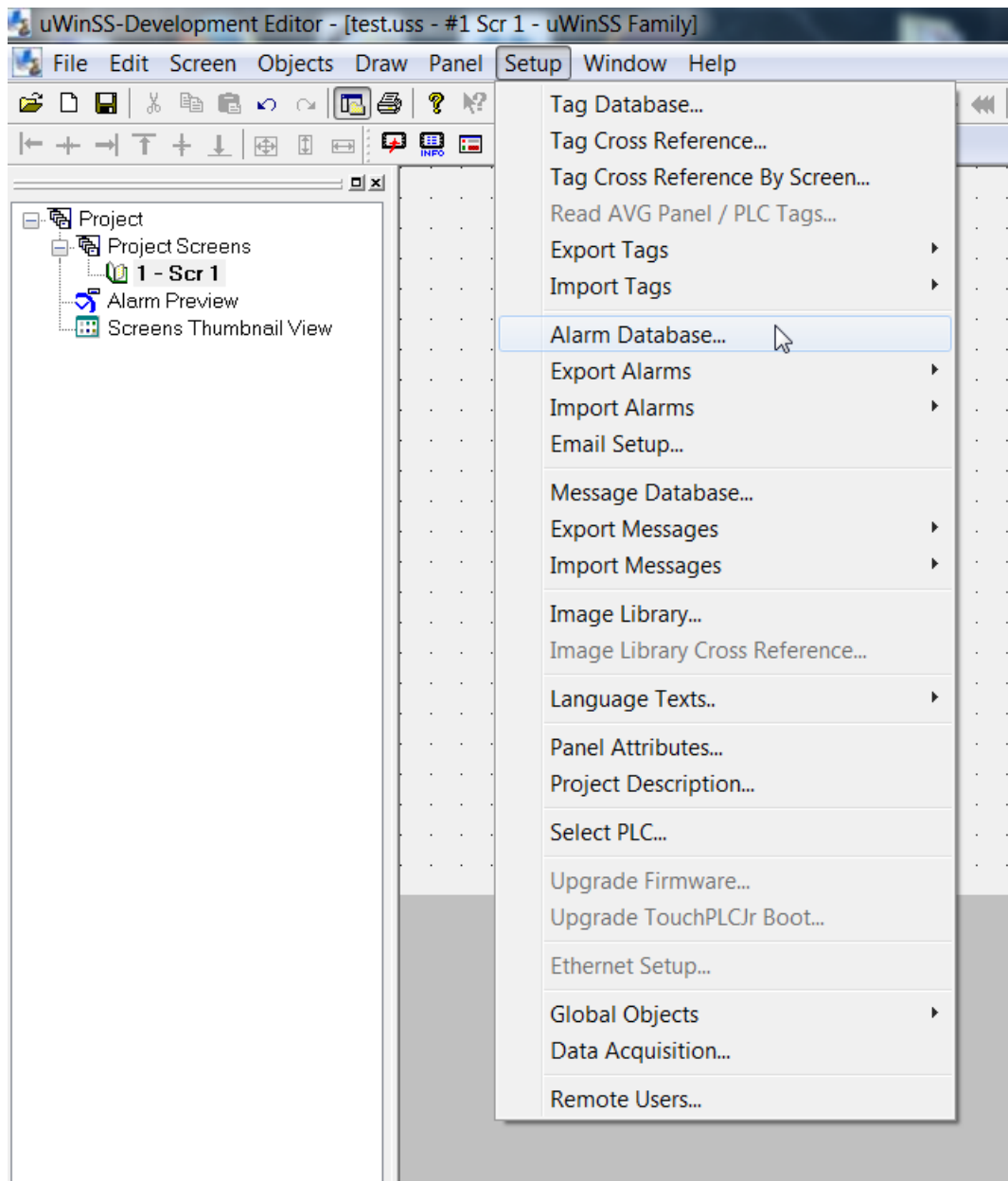
At all times the current screen of the uWinSS-Runtime can be printed by right clicking on the screen and selecting Print Screen. This option can be disabled during startup of the uWinSS-Runtime (for more information please refer to page 7).

Alarm Setup

uWin Simple SCADA has multiple alarms available as well as options to set them up and monitor them at all times. Any time an alarm is triggered it will show up in a designated area determined by you the user. The amount of information and what kind is seen is also determined by you the user.

To set up an alarm you can follow below given steps:

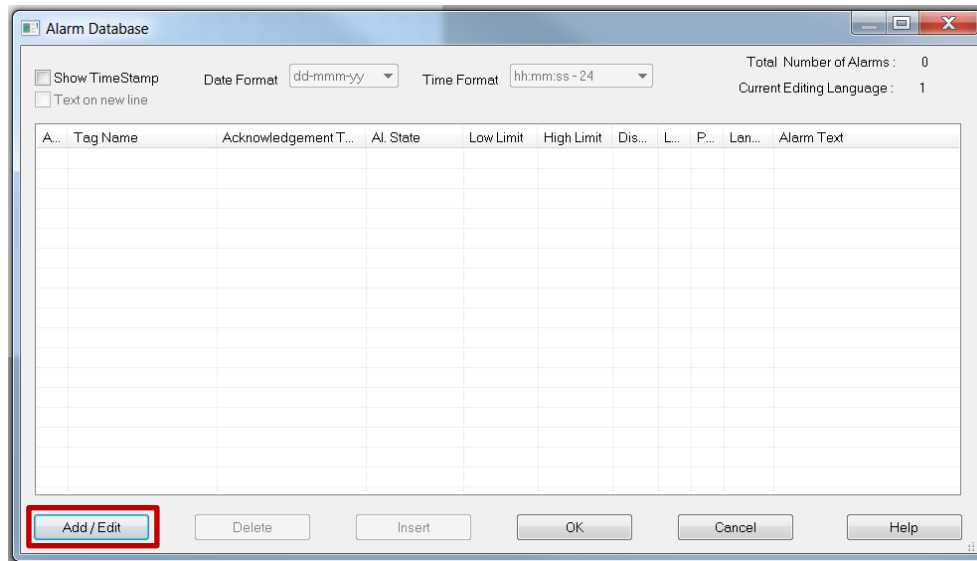
1. Open your project file for the uWinSS-Runtime using the uWinSS-Development.
2. Then click **Setup > Alarm Database** to open a dialog to create alarms. Also in the Setup menu you can export and import alarms as CSV or Excel files.



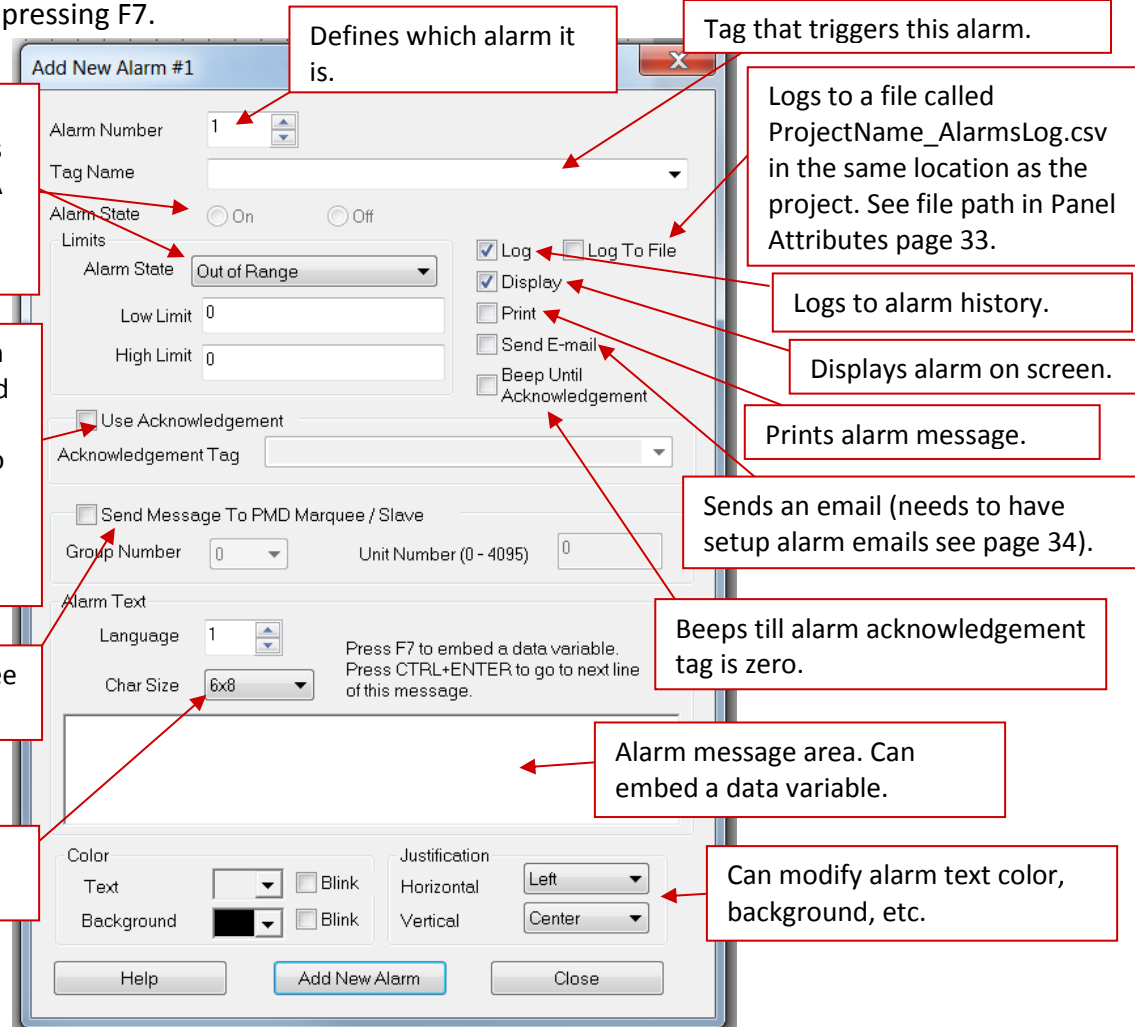
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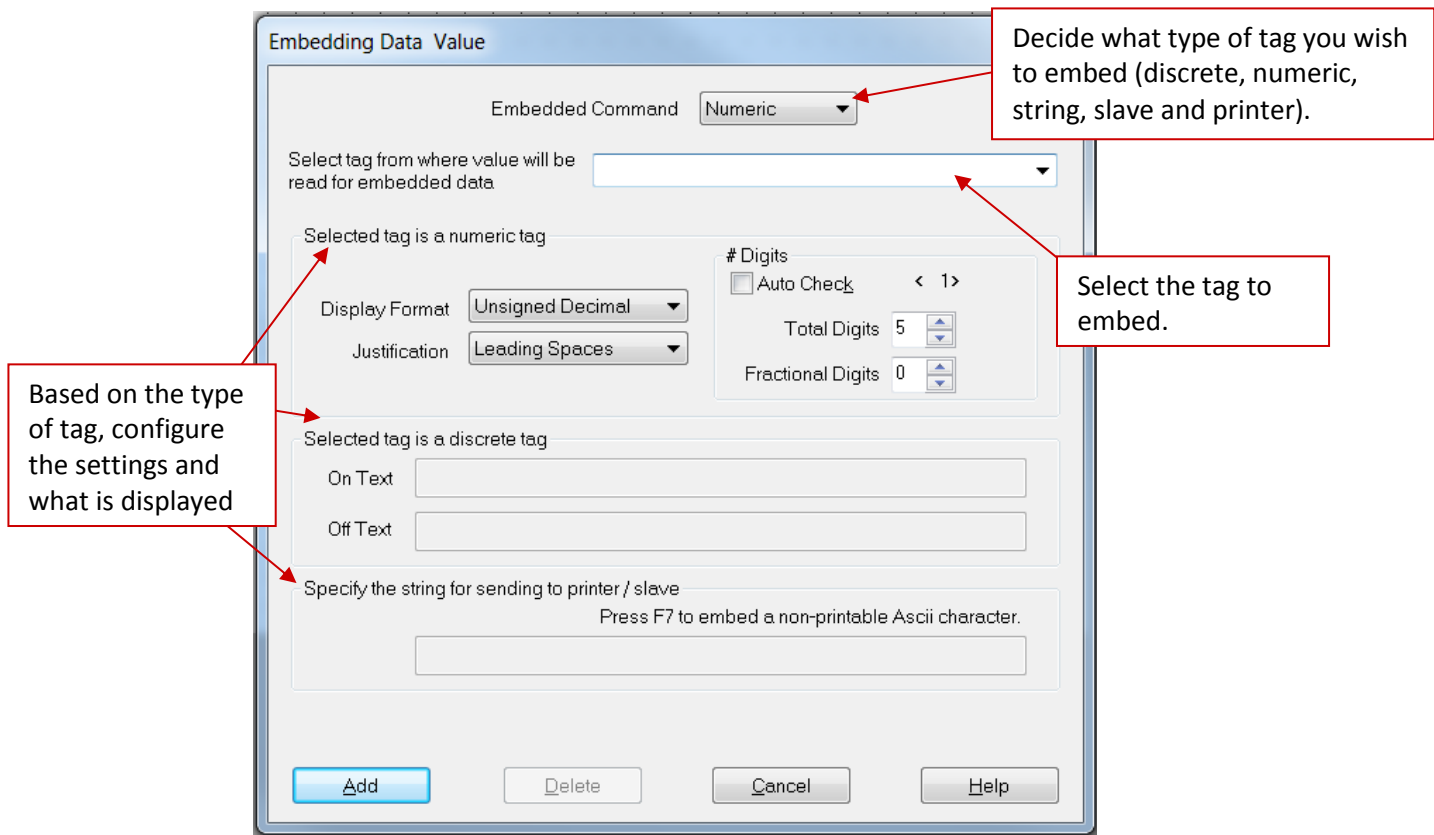
3. In the Alarm database dialog you can see all setup alarms and add and edit the alarms using the Add/Edit button.



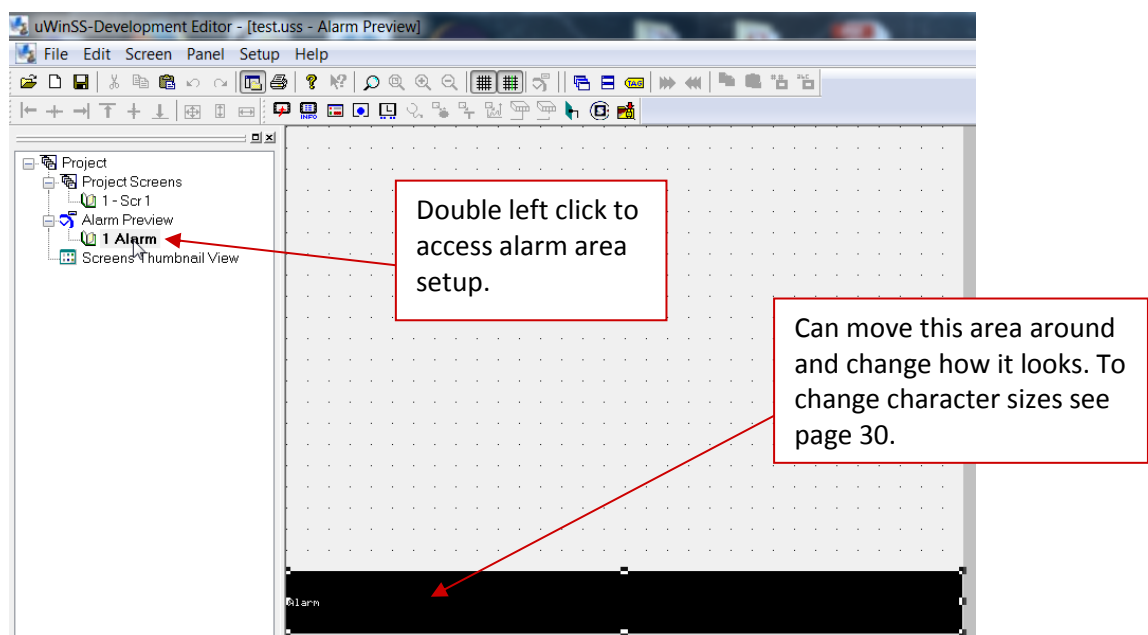
4. In the dialog that the Add/Edit button opens up you configure the tag that triggers the alarm as well as the information displayed when the alarm is triggered. You embed variables by pressing F7.



5. If you embed a variable the dialog below displays. Here you decided what variable you want to display information on. Then you click add to embed the variable.



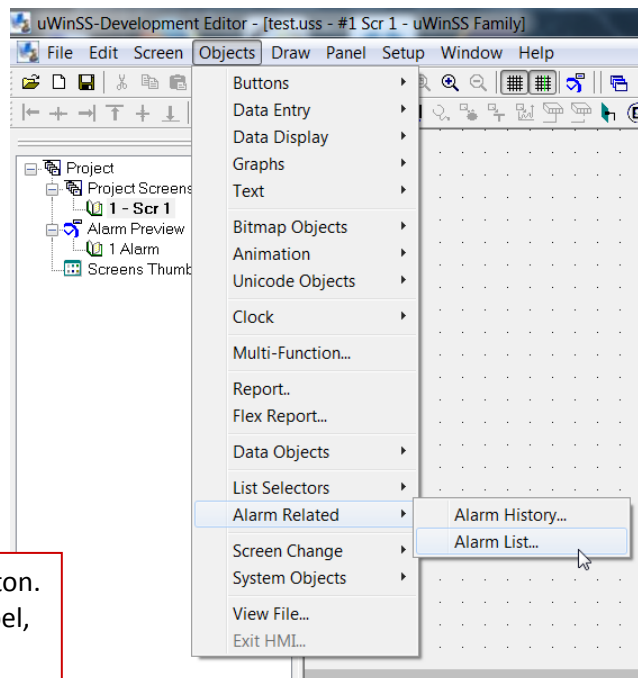
6. Once the alarm is setup and you click Add New Alarm. And then you click Ok in the Alarm database. Now you can configure the area the alarm displays by using the side panel and double clicking on the Alarm name. This is unavailable till the first alarm is created.



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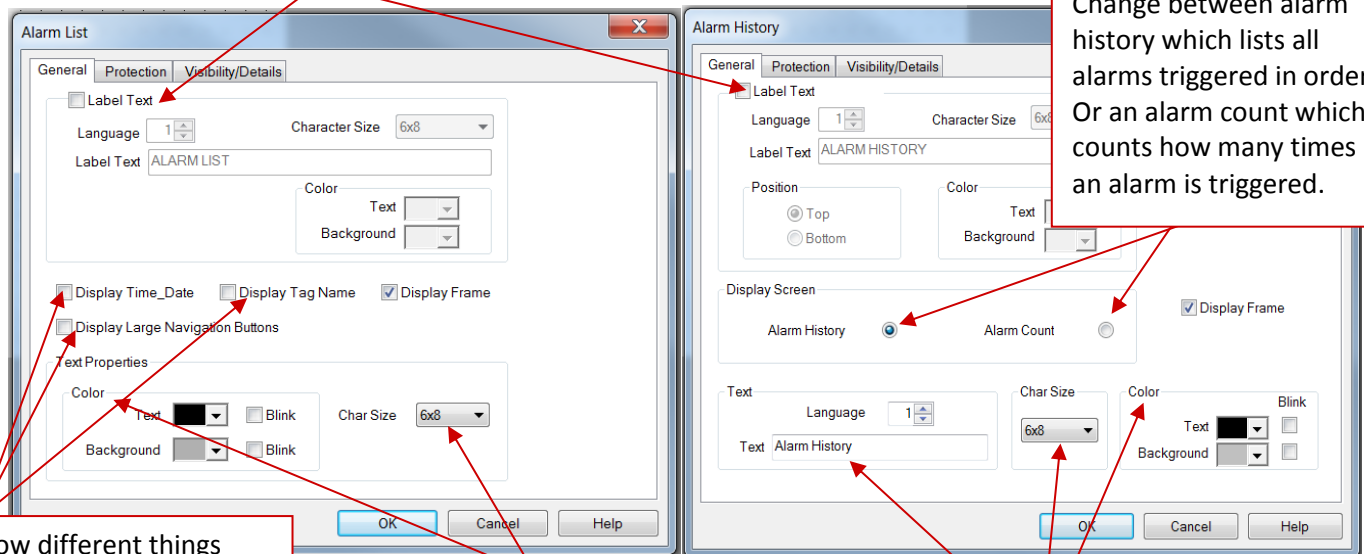


7. We do also have two buttons which work with alarms for easier navigation and alarm logging. These buttons are in the **Objects > Alarm Related** menu. There you have an Alarm History button which shows which alarms were triggered and when. Also it has an Alarm List which displays all current active alarms.



Add a label above the button.
Can change position of label,
its color and its size.

Change between alarm
history which lists all
alarms triggered in order.
Or an alarm count which
counts how many times
an alarm is triggered.



Can show different things
about alarms including time
and date, tag names that
triggered alarms, and even
larger navigation buttons.

Can change color of display text as
well as character size. Text is defined
as alarm list.

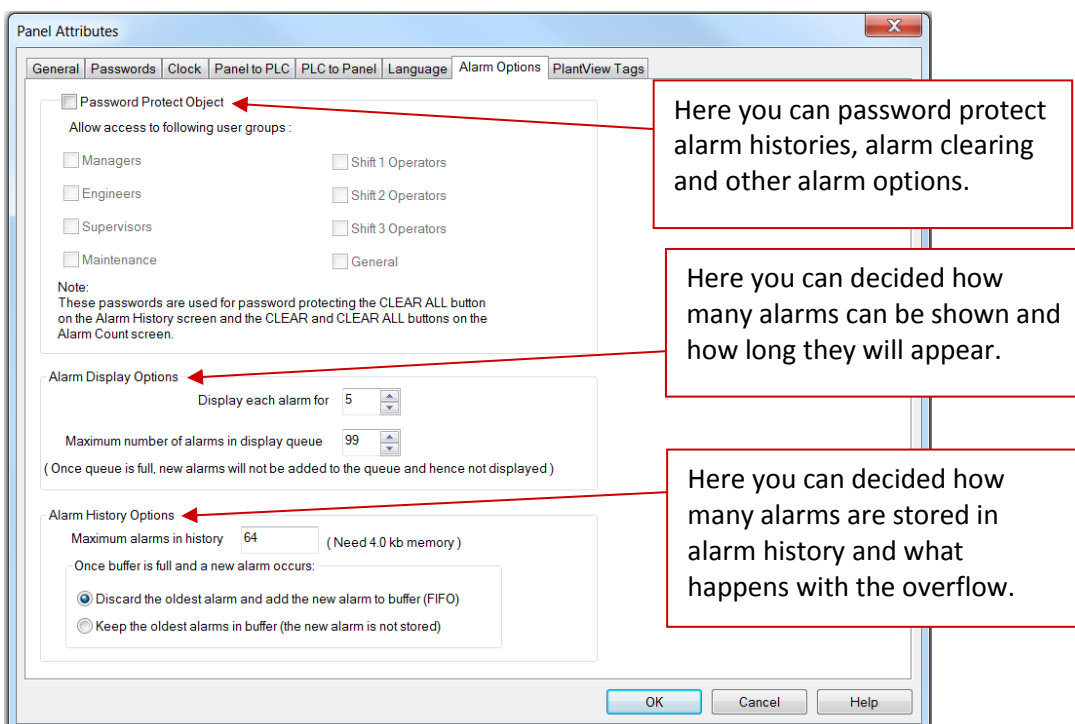
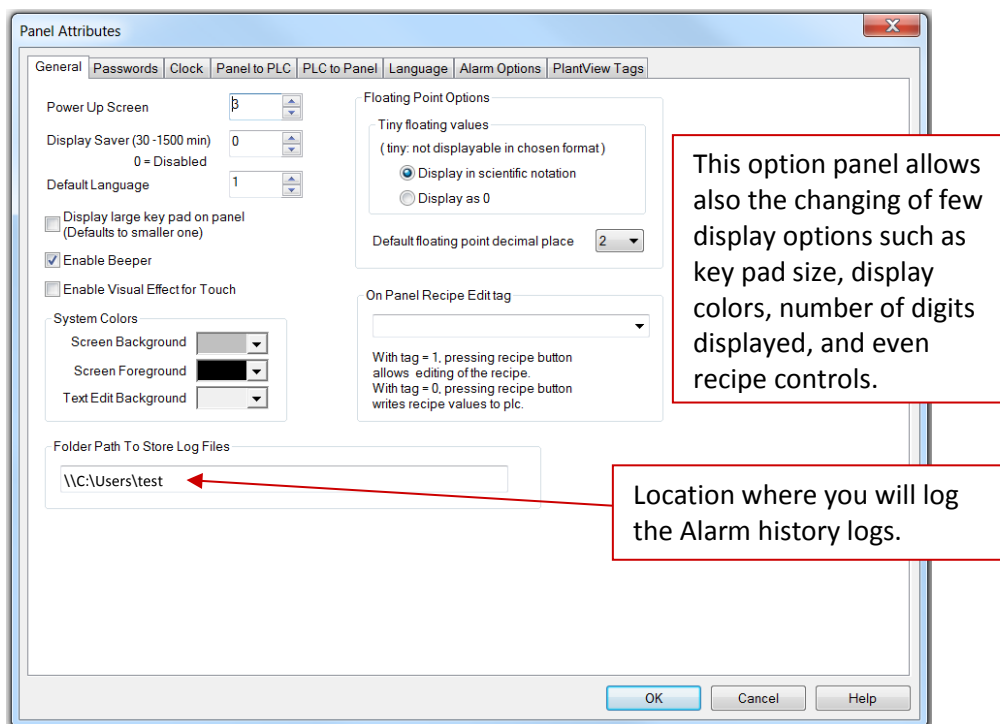
Can change color of display text as
well as character size. Can change text as well.

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Alarm Settings

To configure alarm settings go to **Setup > Panel Attributes**. Here you can modify the log to file location as well as Alarm behavior.



Getting Started Manual

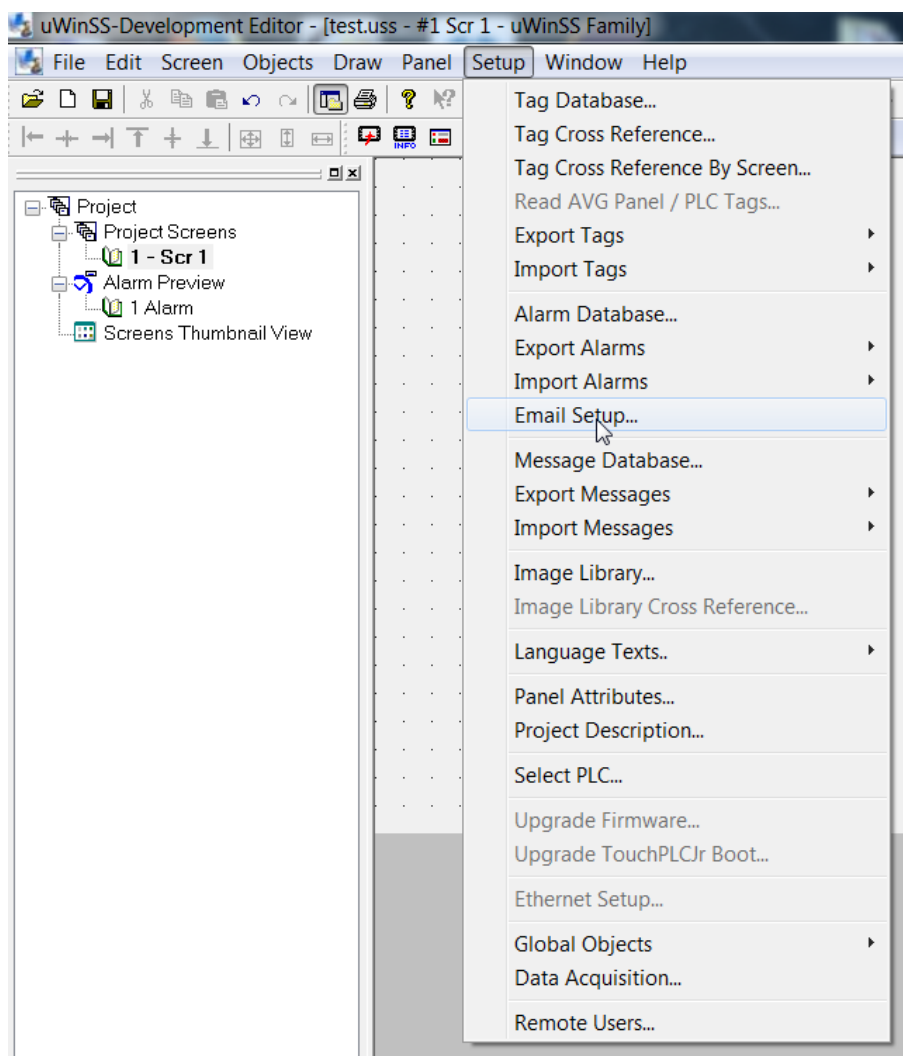


Email Setup

uWin Simple SCADA has an email option for both scheduled emails and for alarm emails. These emails can be configured to be sent by an alarm, a tag or even just at a scheduled time. These emails do not require any client software on the PC, instead you only need a valid email address and password with an email provider. This does include emails from own servers or from providers like gmail. Some IT information is needed for setup so if you do not know something please consult your IT department or your email provider.

To set up emails you can follow below given steps:

1. Open your project file for the uWinSS-Runtime using the uWinSS-Development.
2. Then click **Setup > Email Setup** to open a dialog to create alarms.



Getting Started Manual



3. In the Setup Email dialog you see details to setup outgoing server and your connection to your account. Please fill out the information with details from your IT department or email provider.

The screenshot shows the 'Setup Email' dialog box with the 'Email Server Setup' tab selected. It includes fields for 'Outgoing Server(SMTP)', 'Port No. (SMTP)', 'Encryption Type', and 'SMTP requires authentication'. There are also fields for 'User Name' and 'Password'. A 'Domain Name Lookup' button is present. A secondary 'Domain Name Lookup' dialog box is shown, with a 'Domain' field, a 'Lookup' button, an 'IP List' area, and a 'Use Selected IP' button. Red arrows point from text boxes to these specific fields and buttons.

Select the encryption type and port number. Provided by IT department or email provider.

Use domain lookup button to open dialog below. If know IP address of Outgoing server then can enter it directly.

Input the username and password of your email account that you wish to use. This is not required if SMTP authentication is not needed.

Input domain name like gmail.com. This will look up the IP address of that domain and then select the IP address and press Use Selected IP.

4. In the Alarm Email Setup screen you create the message body as well as input the sender information. You can include the alarm message in the email. To send a test email please first add email recipients in the email recipients tab.

The screenshot shows the 'Alarm Email Setup' tab in the 'Setup Email' dialog box. It includes fields for 'Sender email address', 'Subject Line', and 'Email Body'. There are checkboxes for 'Append Alarm Message to Subject Line' and 'Append Alarm Message Details to Body'. A 'Send Test E-Mail' button is located in the top right. Red arrows point from text boxes to these fields and buttons.

Enter sender email address.

Subject line of alarm email. Can append alarm message to it.

Email message body area. Can append alarm message to it.

Can send a test email to make sure everything is working. To send a test email please first add email recipients in the email recipients tab.

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5. In the Email Recipients tab you input who the emails will be going to. This can be constant or can be tag based.

List of emails that will get alarm emails.

Enter recipient email addresses. Can use a string tag which needs to contain an email address.

Edit and delete selected emails from email list.

6. In the Schedule Email tab you can configure scheduled emails.

Body of scheduled emails. Can embed different tags.

Email can be sent based on a tag.

Email can also at the same time be sent on a schedule. This schedule can be at hourly intervals, at specific times, or even at user specified times. There is also a daily, weekly and monthly option.

Tag that enables sending of scheduled emails.

Subject of scheduled emails.

Embeddable options. Include time/date and different tags.

Select which email recipients get the scheduled email.

7. Once you have set up all the emails you would like then you click OK and your emails are setup to send at the selected time or based on your alarms/tags.

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Remote Monitoring & Control

With the introduction of **Net View Control (NVC)** software our uWinSS-Development in connection with uWinSS-Runtime provides a unique set of remote capabilities. A user can remotely log on to a unit and monitor any of the panel screens with live data including the currently displayed screen.

With the right access permissions and authentication, a user can remotely “touch” the objects on the panel, to control a machine/plant effectively. Remote control feature can be invaluable for remote diagnostics, unmanned operations, or supervisory monitoring.

In addition to remote monitoring and control, user may also program the panels remotely over Ethernet, allowing OEMs to remotely upgrade the screen programs within the panels.

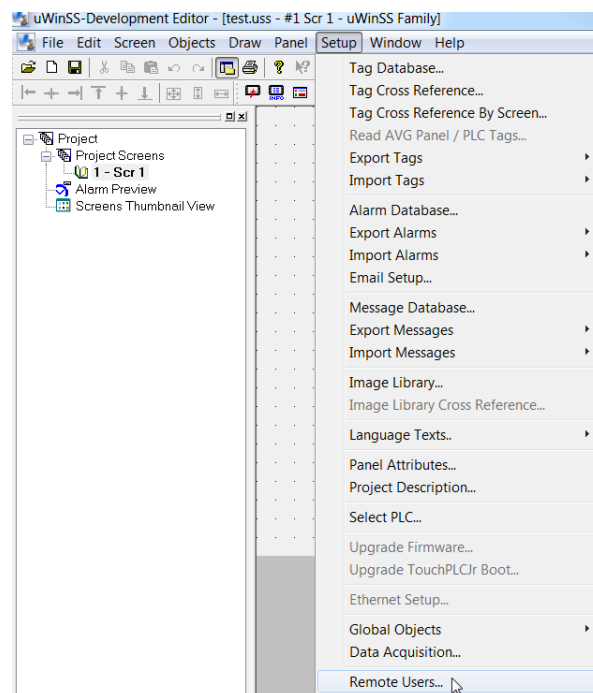
To setup Remote Monitoring and Control, follow these steps:

1. Use uWinSS-Development to set up remote users and authentication level.
2. Use NVC software (Net View Control software) to connect to the panel remotely.

Setting up Remote Users

The UT-NVC has to be used with defined authorized users. Remote users can be given View ONLY or Operation (View + Control) permission. View only permission allows user to ONLY monitor the panel display remotely, while operation permission allows a user to operate panel remotely.

Select **Setup > Remote Users** as shown below to display the following UT-NVC User Dialog window:



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SI #	UserName	Password	Access
1	avg12345	avg12345	View + Control
2	Operator	aabbcc123	View Only
3	Supervisor	fullcontrol123	View + Control

Use this screen to add up to 8 remote users through the *Add/Edit* button or delete existing users using the *Delete* button

Log-in and password must be between 8 to 16 characters

Log-in Name:

Password:

Access level:

- ☒ Allow Remote VIEW ONLY
- ☐ Allow Remote OPERATION (View + Control)
- ☐ Do Not Allow Access to Arbitrary Screen

WARNING!!!!
Be VERY selective and careful in allowing users remote operation access. Users MUST take extreme care during remote operation. It is highly recommended that panel/machine be watched by some one during its remote operation, as remote changes can be dangerous and can cause accident or damage to machine!!!

Add Help Close

Add Remote User

The Log-in name and the password are case sensitive and both must be between 8 to 16 characters in length. Password must contain at least one letter and one number.

Access Level can be set for remote viewing only or for viewing and control (details below).

OR highlight existing user then click *Add/Edit* to edit user details

Log-in and password must be between 8 to 16 characters

Log-in Name:

Password:

Access level:

- ☐ Allow Remote VIEW ONLY
- ☒ Allow Remote OPERATION (View + Control)
- ☐ Do Not Allow Access to Arbitrary Screen

WARNING!!!!
Be VERY selective and careful in allowing users remote operation access. Users MUST take extreme care during remote operation. It is highly recommended that panel/machine be watched by some one during its remote operation, as remote changes can be dangerous and can cause accident or damage to machine!!!

Apply Changes Help Close

Edit User Details

Under Edit Mode, you can make changes to the log-in name, password or access level granted.

When finished, click *Apply Changes* for the new details to take effect.

Access Level

ONLY Remote VIEW - A user can remotely log on to the panel and monitor any of the panel screens with live data including the currently displayed screen.

Remote OPERATION - A user can remotely log on to the panel and monitor any of the panel screens with live data including the currently displayed screen as well as can remotely “touch” the objects on the panel, to effectively operate or control a machine/plant.

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Net View Control software

To access the panel over Ethernet, you need to install and run the UT-NVC on your PC. Once you run the software, you will see the following UT-NVC dialog.

UT-NVC 1.2.15

Quick Connect

Select Ethernet/COM Port:

IP Address:

Port Number: Default Port Number is

Polling Time:

Favorite Panel List

#	Panel Name	COM
1	Panel 1	127.0.0.1:10001

Buttons: Add New Panel, Edit Selected Panel, Delete Selected Panel, Connect to Selected Panel, Close UT-NVC

Quick Connect

Select either Ethernet or desired COM Port.

(Ethernet option only) Enter the IP address of computer running the uWinSS-Runtime.

Polling time determines how often the NVC software reads data from the panel. A lower polling time may impact the performance of the panel. It is recommended to keep polling time as high as possible.

Favorite Panel List

Add panels which you connect to often. Need to input same information as for the quick connect.

Edit the access to favorite panels.

Delete the selected favorite panel.

Connect to the selected panel.

Authentication Information

User Name:

Password:

Buttons: OK, Cancel

Quick Connect

Once the Quick Connect button is pushed the username and password that were chosen in the uWinSS-Development remote user details need to be entered:

Add New Panel Details

Panel Name:

Select Ethernet/COM Port:

IP Address:

Port Number: Default Port Number is

Authentication Details

Unlock Password:

UserName:

Password:

Buttons: Add, Cancel

Add New Favorite Panel

If you wish to add a new favorite panel then you need to enter panel name.

Select Ethernet or desired COM Port. If Ethernet selected then provide the IP Address.

Enter unlock password. (This is the password that protects the project from downloading or reading. It is set during transfer to uWinSS-Runtime from uWinSS-Development.)

Enter username and password set up in remote user setup.

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PLC Protocols Supported

Allen Bradley / Rockwell Automation:

A-B DF1 Half and Full Duplex (PLC-5, SLC500, Micrologix 1000, 1200 and 1500)
A-B Ethernet I/P (ControlLogix & CompactLogix)
A-B DF1 over Ethernet (for Micrologix & SLC 500 PLCs)

Automation Direct:

ADC K-Sequence (Direct Logic PLCs)
Do-More PLC (Serial & Ethernet)
Modbus (Productivity 3000 PACs, Direct Logic PLCs, Click PLCs)
ECOM Ethernet (Direct Logic PLCs)
Entivity Think&Do (Modbus RTU and Modbus TCP/IP)

EZAutomation:

EZPLC TCP/IP

GE:

GE SRTP over Ethernet

Mitsubishi:

Modbus TCP/IP

Modicon / Schneider:

Modbus RTU
Modbus TCP/IP

Omron:

Modbus TCP/IP

Siemens:

Siemens Ethernet ISO over TCP/IP

Uticor:

Uticor PLC TCP/IP