

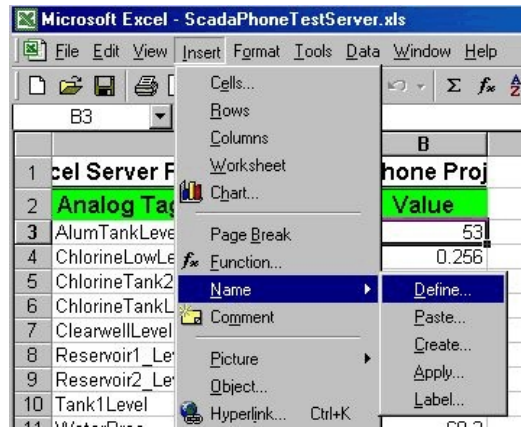
Purpose:

This technical note explains how to setup and use MS Excel as a tag server. Excel will act as the server while ScadaPhone is its client. ScadaPhone then polls Excel over a DDE link to get values of Tags.

In Excel, the name assigned to a cell is the Tag name. The value in the cell will be the value of the Tag returned to ScadaPhone..

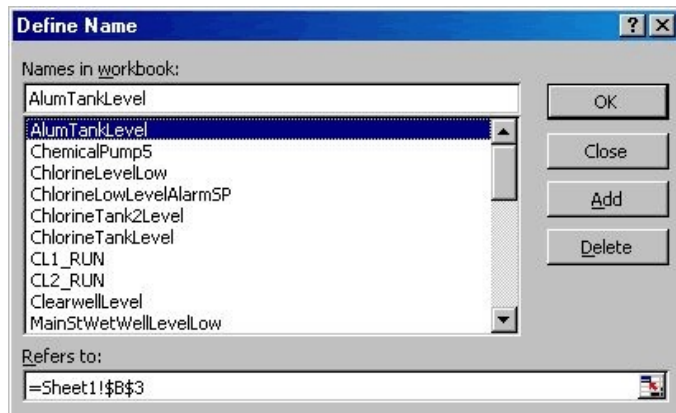
Procedure to assign a Tag Name to a cell in Excel:

Step#1 Open Excel, place your cursor on a cell and select 'Insert' then 'Name' then 'Define'



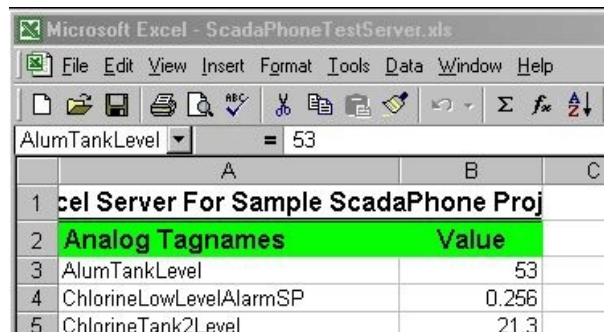
Step#2 Either select a name from the list or type the Tag name into the top window & press OK.

A procedure to create this list from a ScadaPhone project list of Tags is explained on page 3.



As an example, cell "B,3" is named "AlumTankLevel". When the cursor is on a cell, its assigned name is displayed in the upper left window as shown in the figure to the right.

ScadaPhone would use the DDE link to 'ask' for the value for the Tag "AlumTankLevel". Excel would return the current value, "53".



Procedure to Configuring ScadaPhone for Excel as the SCADA server:

Using the Sample Spreadsheet:

The ScadaPhone install program has a Sample project which includes a file named Sample.xls. This .xls file provides an example of how to test ScadaPhone's ScadaLink interface by establishing a DDE client conversation with Microsoft Excel.

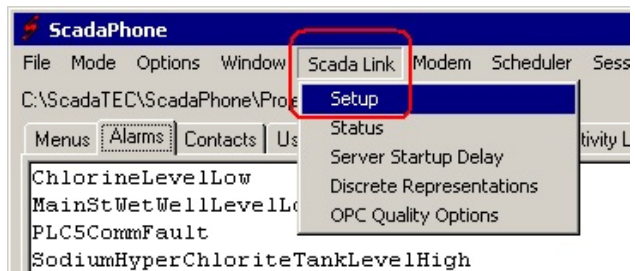
The cells in Sample.xls have been given names that correspond to the Tag names being used in ScadaPhone's Sample project; therefore, when ScadaPhone queries Excel for the value of a Tag name, Excel responds by returning the contents of the cell having that name.

The following steps walk you through using ScadaPhone with Excel as the server.

Step#1 Launch Microsoft Excel and load Sample.xls from the ScadaPhone Sample project folder (the default install path for this file is C:\ScadaTEC\ScadaPhone\Projects\Sample\Sample.xls)

Step#2 Launch ScadaPhone and make sure that the Sample project is loaded

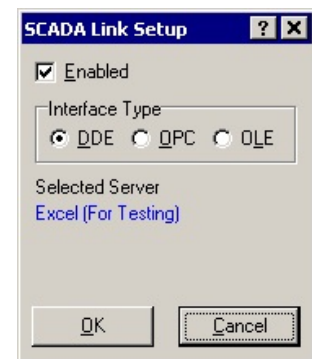
Step#3 On the ScadaPhone main window, click on the Scada Link / Setup menu item.



Step#4 The SCADA Link Setup window should display the selected server as Excel(ForTetsing), in blue.

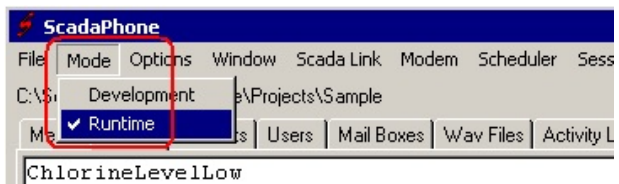
If Excel is not selected, edit the Scada Link using the following settings:

DDE Server: Excel
DDE Topic: Sheet1



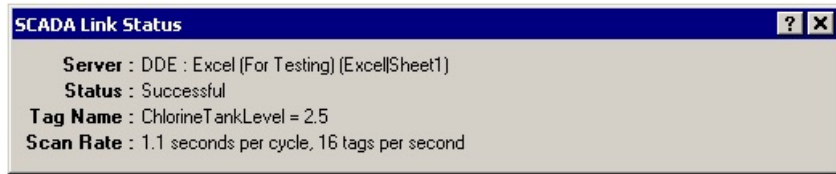
STEP#5

Make sure that ScadaPhone is in Run mode



Step#6

Open the Status window by clicking on ‘Scada Link / Status’



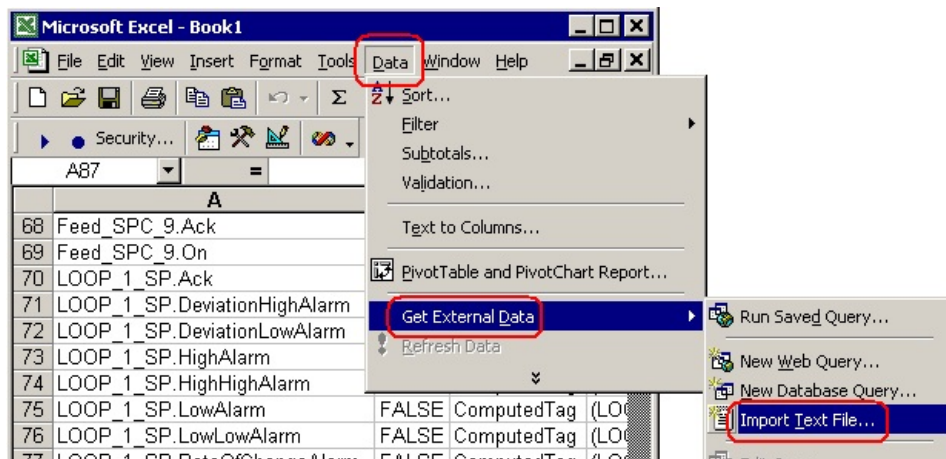
At this point ScadaPhone should be polling Excel for the Tag values. You can watch the polling process from this window.

The speed of polling is measurable & adjustable. The scan rate may be displayed by selecting ‘Scan Rate’ in the ‘Options’ pull down menu.

Procedure to Import Tags from ScadaPhone into Excel:

It is assumed that ScadaPhone has already been configured with a set of Tags, both discrete & analog. The steps that follow show you how import these Tag names into Excel. The result will list the Tag names in column A & the names for the cells in column B will be defined.

- Step #1 Configure ScadaPhone or ScadaLogger as desired for your application To use Excel as its server, follow the configuration steps in the procedure above this one.
- Step#2 Open MS Excel.
- Step#3 Open the ‘Analog.txt’ file in Notepad. Add to it the ‘Discretes.txt’ file. These two files are found in the project directory. Save this file so that it can be imported into Excel.
- Step#4 Import the saved Tag file into Excel by selecting Data/Get External Data/ Import Text File.



- Step#5 Highlight all the rows that start with '\$' and delete them. Highlight columns B thru D and delete them. This leaves Excel column A with only valid ScadaPhone Tag names.
- Step#6 Highlight the cell to the right of each tag name and select 'Insert/Name/Define' from the main menu then click 'OK'.
- This will give the cell a range name = to the tag name that is to it's left. A quick way of doing this is to in sequence, hold down the <Alt> key and press the 'I', 'N', 'D' and <Enter> keys.
- Continue this procedure until all of the Tags of interest have been assigned a name.
- Step#7 Switch ScadaPhone or ScadaLogger into Run mode. It should now begin getting the data from the Excel spreadsheet.

Change the data as desired in Excel. It will be updated in ScadaPhone or ScadaLogger on the next scan. You may change analog, discrete, and string values as desired to test various ScadaPhone / ScadaLogger actions.