

**DDE**

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# DDE

## Overview

The DDE data connection allows WIN-911 to connect to a wide variety of HMI/SCADA systems by using a generic data exchange medium, DDE. WIN-911 serves as a generic DDE client. Since there is no means of browsing or importing, all tags must be manually configured in WIN-911.

A configuration can be run with a single DDE connection or can be run simultaneously with any of our other data connections (DDE, OPC, or Direct Connects). It is important to note, however, that some of the terms (Application, Topic, Item Name, OPC Machine Name, and OPC Server Name) are components of Microsoft's DDE/OPC address nomenclature. Although these definition fields are still part of the configuration, they take on different meanings and are governed by different constraints.

The data source must be running and DDE must be functioning before WIN-911 can establish a connection. If WIN-911 is connecting to a data source across the network using NETDDE, DDE Shares must be configured and the NETDDE must be functioning before WIN-911 can establish a connection. If at any time WIN-911 loses its connection to the data source, WIN-911 must be restarted to establish the connection again.

Like an OPC connection, the data source is passing raw values to WIN-911. This means WIN-911 must be configured to alarm on appropriate set-points, therefore owning the alarms. The DDE connection supports data tags or tags without alarm set points configured. Data tags can be used in 411 Reports to monitor or manipulate values. The DDE connection does not support Filter Tags; nor does it support dynamic features.

The DDE connection also supports watchdog timers. The DDE's watchdog timers can be configured in two ways. WIN-911 can monitor a tag's changing value by setting the timeout value greater than the time it takes the tag's value to change. You can also define the watchdog timer with a "0". A watchdog timer set to "0" strictly monitors the connection to the DDE server. A watchdog timer set to "0" will only report an alarm when WIN-911 loses its connection to the server and the server reports that the connection was broken. Once the connection is lost WIN-911 must be restarted to reestablish connection with server. Only the watchdog monitoring the changing value has the ability to return to normal.

## What is DDE?

DDE stands for “Dynamic Data Exchange.” DDE is a complete communication protocol designed by Microsoft to allow applications in the Windows environment to send/receive data and instructions to/from each other. It implements a client-server relationship between two concurrently running applications. The server application provides the data and accepts requests from any other application interested in its data.

To obtain data from another application, the client program opens a channel to the server application by specifying three things: the server Application name, the Topic name, and the Item name. For example, in the case of Excel, the application name is “Excel”, the topic name is the name of the specific spreadsheet that contains the data, and the item name is the specific cell on the spreadsheet.

When a client application sets up a link to another DDE program, it requests the server application to advise the client whenever a specific item's value changes. These data links will remain active until either the client or server program terminates the link or the conversation. They are a very efficient means of exchanging data. Once the link has been established, no communication occurs until the specified data value changes. WIN-911 uses DDE to communicate with other DDE application programs.

WIN-911 has a recommended limit of 1,500 DDE data points. Proceeding beyond this limit may cause the installation to not function properly due to Windows resource limitations (number of data handles available) or otherwise exhibit impaired performance. This limit will vary with each installation and is dependent on hardware configuration, networking requirements, and other Windows programs running at the same time. Specter does not extend telephone support for WIN-911 systems with over 1,500 DDE data points.

## The DDE Conversation

The DDE protocol identifies an element of data by using a three-part address. The three parts of a DDE address are: Application, Topic, and Item.

The syntax is:

### **Application | Topic ! Item**

Application refers to the name of the Windows program (server) which knows how to access the data element. Note that if NetDDE is used to acquire data over a network, the Application includes a network node name.

Topic is an application-specific sub-group of data elements. The user creates meaningful names (or uses the DDE Server default topic) for the PLCs and other devices, and uses these names as the topic names for DDE references; i.e., PLC-102.

Item indicates a specific data element within the specified topic. For many PLC servers, an item is an individual register, or I/O point in a PLC or other device.

A typical DDE address of a data value coming from an Excel server would be:

**Application = Excel**

**Topic = Sheet1.xls**

**Item = R1C3**

NetDDE is a standard feature of Microsoft Windows Operating Systems. It allows DDE data to be shared between computers. The standard DDE address is appended to the machine name. The syntax is:

**\\ Machine Name \ Application | Topic ! Item**

Consult your Microsoft Windows manual for more information on networking and NetDDE.

## **WIN-911 and Multiple DDE Servers**

WIN-911 has the capability to communicate with more than one DDE Server simultaneously if the application requires. If a DDE I/O Server is monitored by an HMI/SCADA package and WIN-911 needs to monitor the same data, the developer has two choices to make the connection. Each method has unique advantages over the other.

1. Configure WIN-911 to use the DDE I/O Server directly (just like the HMI/SCADA package). This is the preferred choice when the DDE Server resides on the same computer as WIN-911. It has the advantage of being more efficient and offers higher performance.
2. Use the HMI/SCADA DDE Server to collect all the data from across the network and serve it to WIN-911 using indirect DDE items (another set of Topics and Items). This has the advantage in networking applications. If other Servers on the network are lost, no re-initialization for WIN-911 is required to continue monitoring active DDE items.

## Quick Reference to SCADA DDE

SCADA	Application	Topic	Item
Wonderware	View	Tagname	<user defined>
iFIX	Dmdde	Data	<user defined>
RSView32	Rtdata	<folder name>	<user defined>
Micronet DDE	Micronet	Micronet	<user defined>
Citect	Citect	Variable	<user defined>
Lookout	Lookout	<folder name>	<user defined>
Excel	Excel	<spreadsheet name>	<user defined>

## DDE Connections with Wonderware's Drivers

### Overview

If you are using Wonderware's InTouch, or one of the Wonderware DDE I/O drivers, the following will show you how to provide WIN-911 access to the DDE data.

### Identifying the Actual InTouch DDE Address:

From the InTouch Tag Name Dictionary, you can select and inquire any Tag Name. Note that the InTouch Tag Name may not be the same as the actual DDE Item Name. After locating the Tag Name of interest, look at the bottom of the dialog box and record the actual DDE Item Name. This is the name required in WIN-911/411.

The screenshot shows the 'Tagname Dictionary' dialog box with the following details:

- Tab: Details
- Buttons: New, Restore, Delete, Save, Select..., Cancel, Close
- Tagname: HOPPER1
- Type: I/O Real
- Group: \$System
- Comment: Hopper One is
- Options:  Log Data,  Log Events,  Retentive Value,  Retentive Parameters
- Initial Value: 0
- Min EU: -32768
- Max EU: 32767
- Deadband: 0
- Min Raw: -32768
- Max Raw: 32767
- Eng Units: (empty)
- Log Deadband: 0
- Conversion:  Linear,  Square Root
- Access Name: ANYNAME
- Item: HOPPER1
- Use Tagname as Item Name

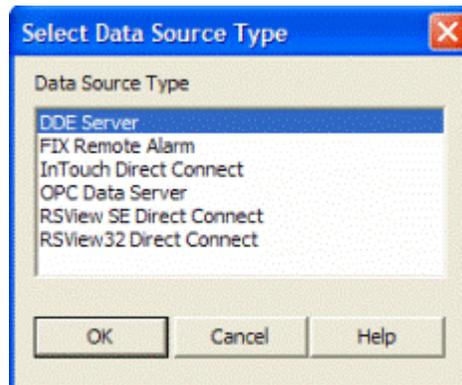
Note: If the Access Name button reveals a server other than View and a topic other than Tagname, InTouch is a DDE client. You may attach WIN-911 directly to the server or indirectly via the InTouch Tagname.

To complete a DDE address, you must have two pieces of additional information: a) the Application Name, and b) the Topic Name. These are found in InTouch by selecting the Access name button:

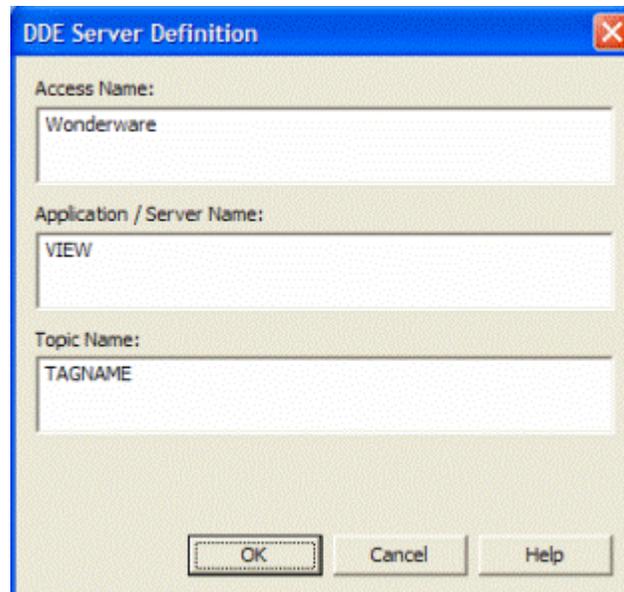
The screenshot shows the 'Add Access Name' dialog box with the following details:

- Access: ANY NAME
- Node Name: WVNODE
- Application Name: VIEW
- Topic Name: TAGNAME
- Which protocol to use:  DDE,  SuiteLink,  Message Exchange
- When to advise server:  Advise all items,  Advise only active items
- Enable Secondary Source

In the WIN-911 Configurator, select the button entitled Data Source Definition. Click New.



Select DDE Server and click OK.



This is very similar to InTouch; the Access Name is user defined. However, the Application Name and the Topic Name must match exactly as configured in InTouch.

Note: InTouch Direct Connect is the Direct Connect's invocation string and is not a valid Access Name for a DDE connection.

The last step is to identify the Item Name for the alarm/point you are interested in. Again, this must be the exact name as found at the bottom of the InTouch Tag Name Dictionary.

## DDE Connections with GE's FIX Drivers

### Overview

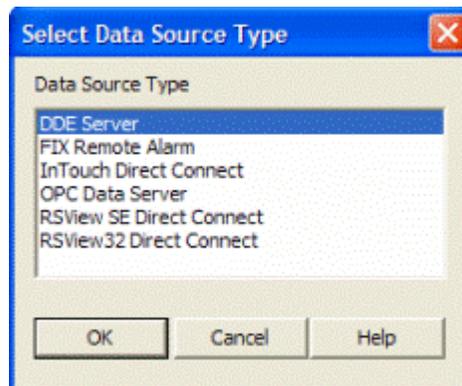
The following information will help in setting up WIN-911 to use with GE's FIX DDE Server for both local and NetDDE to access DDE Items within the FIX database.

### Identifying the FIX DDE Address

Two Possible DDE Application Names:

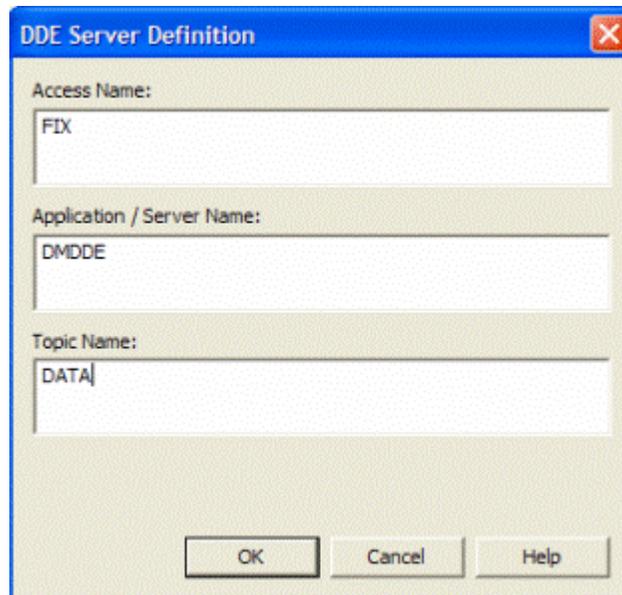
In the FIX Database Manger, you can view any tag defined in the database(s). For data tags, you can also determine the register Type field and Data field being used for the tag. You can see the elements defined for historical trending tags. The "Database Manager" will not show you the FIX data format filter or the DDE application and DDE topic. If you are configuring WIN-911 for tags on a FIX node locally, the Application will always be "DMDDE" with two possible topics. If you are configuring for tags on a FIX node across a network (NetDDE), the Application will always be "NDDE\$" with two possible topics.

In the WIN-911 Configurator, select the button entitled Data Source Definition, click New, then select "DDE Server."



Local or Networked Node DDE Server and Topic Names:

The local DDE Server name for the FIX is "DMDDE." The FIX DDE Server must be running with a valid database before Scan & Alarm is started. If Scan & Alarm is started first, there will be no DDE links established. The server provides two DDE topic names. These two topics have two different functions. The DDE topic named "DATA" is used to access live data values, and the DDE topic named "HTR" is used to access assorted elements of historical trending. For WIN-911, only live data would be monitored with alarms. Enter "DMDDE" in the Application/Sever Name field and "DATA" in the Topic Name field when configuring the WIN-911 Data Source Definition.



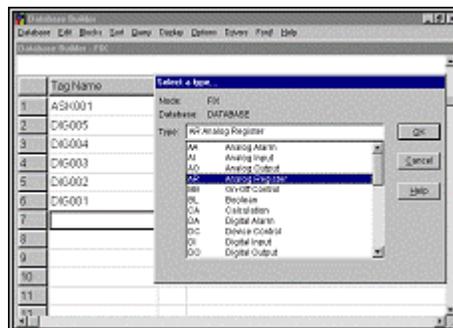
Note: "FIX Remote Alarming" is the Direct Connect invocation string and is not a valid Access Name for a DDE connection.

Finding the DDE Item Name:

Only tags defined in the active FIX database(s) will work with WIN-911. The Database Manager will show you the FIX node name, tag name, and block type for all tags contained within a database. You can also find the absolute maximum value range and whether or not outputs are enabled. The FIX default Digital block type labels (OPEN=0, CLOSE=1) for digital tags must match the "Alarm States" defined for a "Text Match" type digital tag in WIN-911.

Note: You may also set up the digital alarms to "Bit Pick" digital alarms from 32 bit analog values.

If an ASCII tag is going to be used to poke the alarms for a WIN-911 alarm group back to a text (TX) type block tag in the FIX data base, be sure the text tag has a higher I/O address than all other types. The maximum character string defined must be long enough for the longest alarm string that could be produced (including date and time stamps!).



The DDE Item names used by FIX tend to be lengthy and contain more information than the typical DDE Server uses to establish a DDE link. However, there is no way to shorten or simplify the item name. The first part of a FIX data tag name is the FIX node name. Be

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aware that a single PC on a network used for a FIX DDE Server (SCADA node), when seen from somewhere else on the network, has two names associated with it which are both required to configure a NetDDE link. One name is the computer's name, the other is the FIX node name. The computer's name is used as a delimited prefix for the DDE Application, the FIX node name is used as a delimited prefix for the DDE data item. The first element of the FIX DDE item name is the node name followed by a colon ":" with no spaces. Then the FIX tag name (case sensitive) is followed by a period "." with no spaces. The final element of a FIX DDE Item name is a data format suffix (filter) for the tag value, usually "F\_CV", "A\_CV", or "A\_###" for all data tags. The following are FIX DDE Item examples:

CONTROL:METER.F\_CV Node named "CONTROL", tag named "METER", tag block type Analog, Floating point, current value

STATUS:MESSAGES.A\_CV Node named "STATUS", tag named "MESSAGES", tag block type Text, ASCII, current value

Note: An extension ".F\_CV" is a read only tag to WIN-911. Extensions of ".A\_###", and ".A\_CV" are read-write tags and can be used by WIN-411 to change a data value.

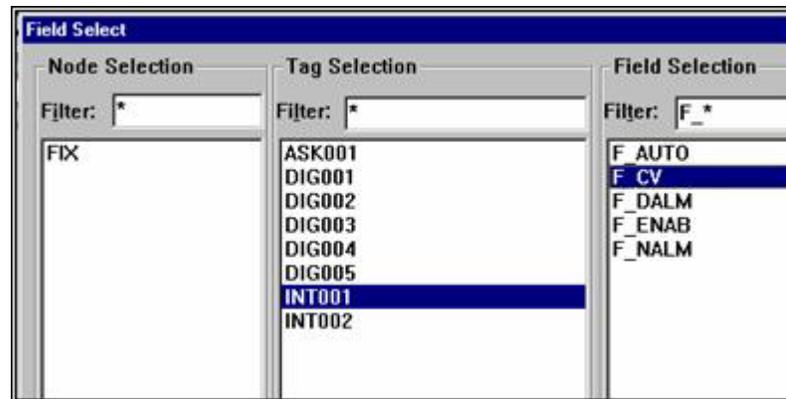
### FIX DDE Item Name for Historical Tags:

The DDE Item names used by FIX for trending do not contain FIX node name prefixes. Instead, they begin with a "Pen Group" followed by a period "." with no spaces, a "Time Group" followed by a period "." with no spaces, followed by four "Y" or "N" (yes or no) characters followed by periods "." with no spaces, and the sample number. The DDE item name configured in WIN-911/411 for a historical tag must match the complete character string including all delimiters. Only an analog floating point type should be selected to define historical alarm/points in WIN-911. See the examples below:

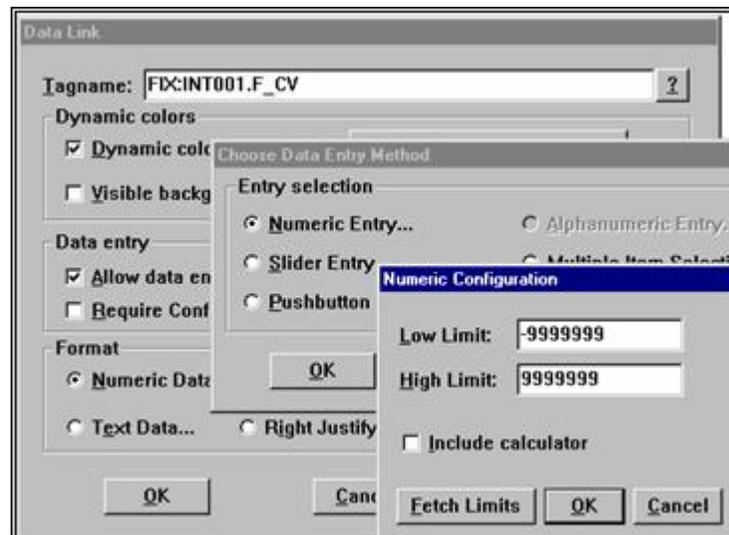
GROUP1.TIME1.Y.Y.N.N.10 Pen group "GROUP1", time group "TIME1", show node, show tag, do not show date, do not show time, 10 samples.

### Using FIX Workspace to Reference DDE Item Information:

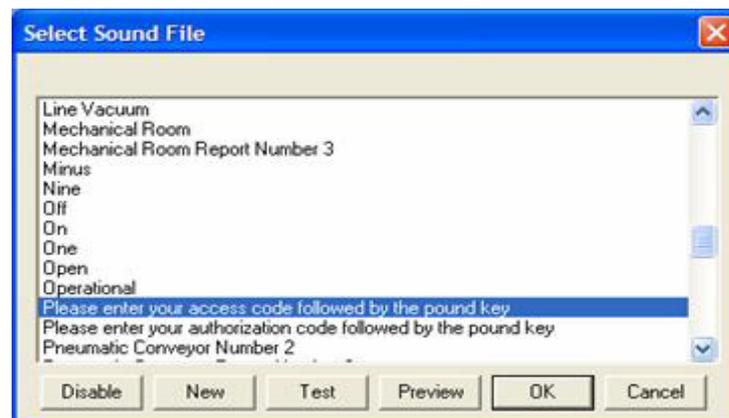
The easiest way to get the complete tag information in the FIX is through the drawing program. To cruise through the information about a tag that is already built into a view window, simply double click on the linked graphic. Cancel your way back out after you get what you need. To get information about a tag that is in the database, but is not part of the current view window, select "Tools", then "Link". Only tags that have a data format filter defined can be configured for WIN-911. For values used with WIN-911 alarming that are also used on a View screen, it is important to use the same data filter and value range. The following shows "Link" selecting a tag. The FIX node name prefix is the first column, the tag name is the second, and the data filter is the third. In the WIN-911 configuration, the DDE item would be defined as "FIX:INT001.F\_CV".



Additional information about a FIX tag can be found within the Data Link definition screens. Most important for configuration of WIN-911 are the portions that involve value range.



Another important user defined FIX data value range that you need to know about is the number of digits and if the format of the value is transferred using a decimal place. Within WIN-911, if the tag is not a Digital or Text block type, select "Floating Point" for the data type when defining any analog alarm/point.



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Starting WIN-911 with Task Manager

Using FIX "Task Manager" to start WIN-911 requires that you place the DDE Server before the TeleDAC.EXE in the list.

## Using NetDDE

NetDDE is a standard feature of Microsoft Windows Products. It allows DDE data to be shared between computers. The standard DDE address is appended with the machine name. The syntax is:

**\\ Machine Name \ Application | Topic ! Item.**

Consult your Microsoft Windows manual for more information on networking and NetDDE. Be sure all DDE Servers are “Shared” for NetDDE.

In completing the DDE Name Definition, use the “\\Machine Name\Application” as a single entry for the DDE Application\Server Name.

## Setting DDE Shares for NetDDE

Use of NetDDE requires the proper settings of DDE Shares on all nodes that Scan and Alarm will be interfacing. In this example we will setup a DDE Share for an Excel spreadsheet running on a remote node.

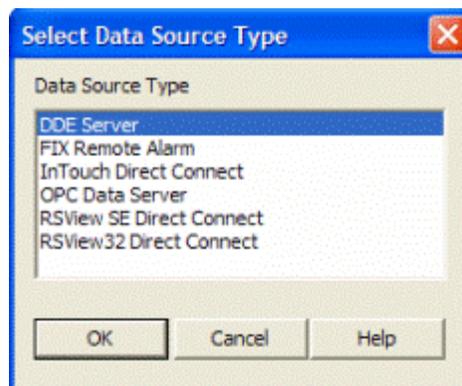
On the remote node setup the DDE Share as follows:

1. Run the DDE Share program by clicking Start, Run, and typing DDESHARE in the text box. After clicking OK the operating system will start the NetDDE Service.
2. From the DDE Share menu, select Shares, DDE Shares..., and the DDE Shares sheet appears.
3. Click on the Add a Share... button.
4. Enter the application name followed by a "\*" in the Share Name text box. In this case "Excel|\*"
5. In the Old Style Application Name text box enter "Excel" and in the Old Style Topic Name text box enter "\*". New Style and Static text boxes are to remain undefined. The Allow start Application and its service check boxes are left unchecked.
6. In the Item Security section, select the grant access to all items radio button.
7. Next, select the Permissions... button. The DDE Share Name Permissions sheet appears
8. Highlight Everyone in the Name box, and in the Type of Access pull-down menu select Full Control. Click OK to return to the DDE Share Properties sheet, and then OK again to get back to the main DDE Shares list where you should now see Excel|\* listed.
9. Highlight Excel|\* by single clicking on it and then click the Trust Share... button to bring up the Trusted Shares Properties sheet.
10. Select the Start Application Enable and Initiate to Application Enable check boxes and click OK.
11. At this time you should be able to access the spreadsheet from across the network using NetDDE.

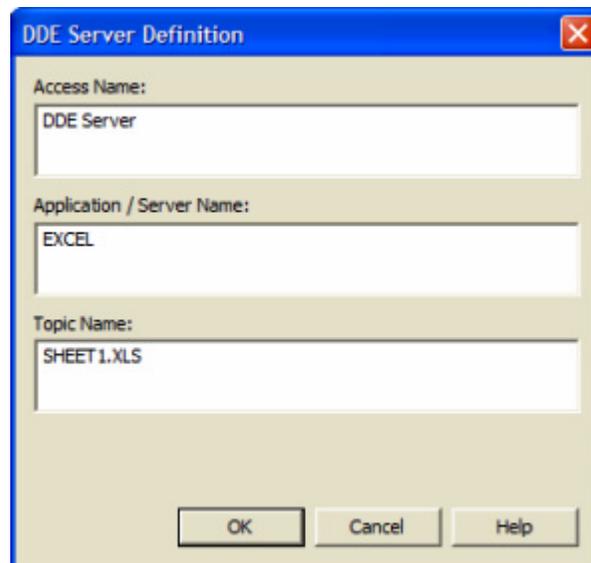
## Data Source Definition



This button is used to setup data communications. Data point addressing can be monotonous and syntactically rigorous. Rather than being forced into remembering (and exactly typing) the DDE Server invocation string for each "Item Name" to be alarmed, you merely select the appropriate data source type from the selection list. When you define data points, a selection box will provide you with a list of "Access Names" from which to choose. Simply select "DDE Server."

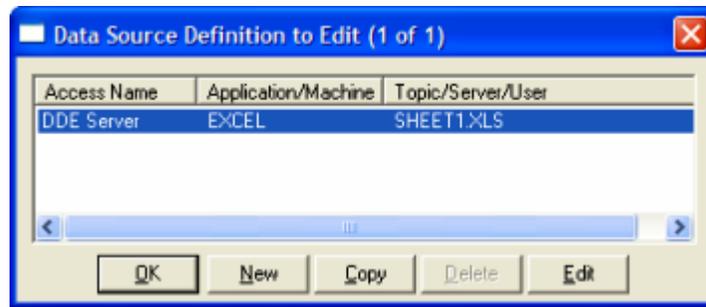


The DDE Server Access Name, Application/ Server Name, and Topic Name are defined here. The "Access Name" is a user defined name used to represent this particular data source. The "Application/ Server Name" is the application where the DDE Server resides. The "Topic Name" is the DDE Topic for this particular DDE Server/ Application. Click Ok.



Selecting "Edit" or double-clicking on the "Access Name" will bring you back to the DDE Server Definition window.

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## Demo of WIN-911 Capabilities

The following DDE demonstration provides a basic understanding and working example of the WIN-911 system. These examples are self-contained and do not require additional software not included in the WIN-911 install or on the install CD (Top Server). If voice telephony is desired for the demo, then you will need a TAPI modem or Intel Dialogic card and a phone line. If you wish to demonstrate paging you will need a standard Hayes® compatible modem and phone line with a pager service provider and if you wish to demonstrate email you will need a LAN connection and email servers. Both demos will run with WIN-911 in Demo mode (for 30 days).

## Creating a Demo DDE Server

Launch Microsoft Excel through the "Start" button -> "All Programs"; (or, if you are using the Excel Promotional software found in the "C:\Program Files\Specter Instruments\WIN-911 V7\Tools" directory, use Explorer). Use the "/File/Open" command to open the "WIN-911 V7\Tools" directory and select the 911DEMO.XLS file. This is a spreadsheet designed to offer WIN-911 active DDE data. Notice that the spreadsheet has three separate demos, referenced as: Plastic Molding DEMO.MDB, City Water Department DEMO.MDB, and Building Security DEMO.MDB. Select the demo of your choice and resize the window so that it looks like the illustration below:

TeleDAC Demonstration: *Plastic Molding DEMO.MDB*						
Group Name	>Raw Material Hopper Levels<			>>No. 2 Pneumatic Conveyor<<		
TagName	Hopper One	Hopper Two	Hopper Three	Vacuum Pump	Line Vacuum	Material Flow
Alarm Condition	Low <7.2	Low <7.2	Low <7.2	1=OFF	Low <4.5	1=Blocked
Variable	11.2	10.4	9.7	0	5.9	0
Report	>>>WIN-411 Report # 99<<<			>>>WIN-411 Report # 2<<<		
Change?	No	No	No	Yes	No	No
No. 2 Pneumatic Conveyor Group MMI/SCADA Interface Acknowledgement:						
Text String = GROUPACKED						
TeleDAC Demonstration: *City Water Department DEMO.MDB*						
Group Name	>>>>Fresh Water Storage<<<<			>>Lift Station No. 22<<		
TagName	Gate Valve	Supply Pump	Tank Level	Waste H2O Level	Lift Pump	
Alarm Condition	1=Open	1=Off	High >35	High > 5	0=Off	
Variable	0	0	31	3.8	1	

These Demos are designed for a simple understanding of WIN-911, and provide an example of how it interfaces with a data source. The digital alarms should be entered as a "0" or "1". The analog values are "Free Form".

The spreadsheet is protected and cannot be changed with the exception of the data field row entitled "Variable" and "Text String".

Note the DDE address for the data values. The Application is "EXCEL", the Topic is "911DEMO.XLS" and the Item Name is the row and column number of each variable data cell.

Take a moment to look at the spreadsheet. Each demo is named and has a corresponding WIN-911 configuration file found in the WIN-911 V7\Configuration Files folder. Each demo is similar in format:

1. The first line following the demo name is the WIN-911 Group names.
2. The following two lines list the WIN-911 Tagnames.
3. The next line describes the alarm condition: i.e., "Low < 7.2" indicates that the alarm is a floating point analog value with a low alarm setting of 7.2. A digital alarm might be listed as "1=Off", indicating a value of "1" as the alarm state and corresponds to a condition of "Off". A "0" value would be the normal state for that alarm.

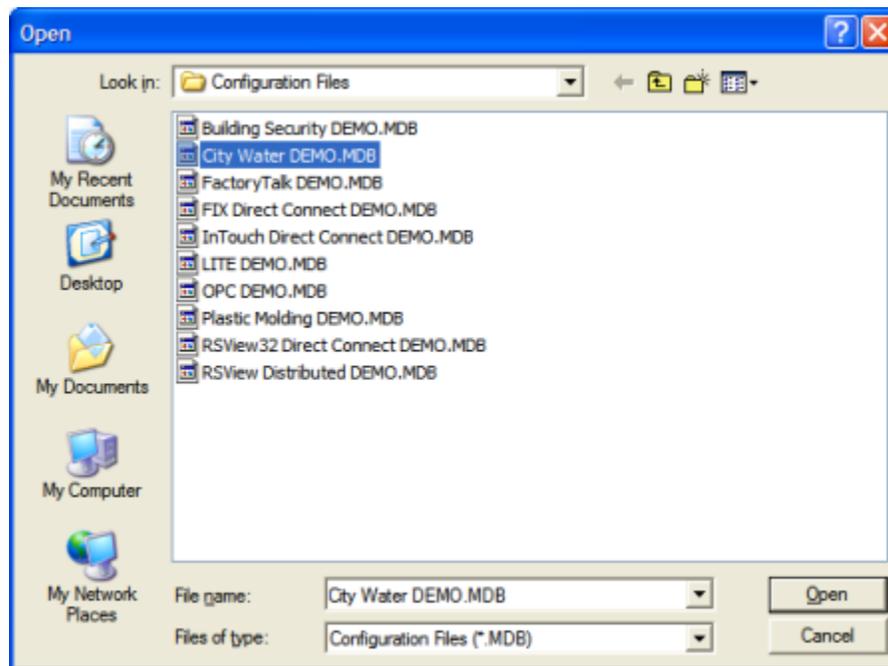
4. The next line (titled Variable) will allow you to enter values for the analog and digital alarms. Notice that the default values are all set to non-alarm conditions.
5. The next two lines apply to the WIN-411 "Inquiry" Option. The first line lists the WIN-411 name and number, and the next line indicates which alarm point may be changed.
6. The last two lines in each demo demonstrates the DDE ASCII POKE option which is used to allow HMI/SCADA software to be aware of WIN-911 alarms, and to allow the user to Acknowledge the alarms through simple scripting in the HMI/SCADA software. Upon an alarm in the Group, the alarm text message is sent to the HMI/SCADA software. If the string "Ack" is poked back to that DDE tag, WIN-911 will acknowledge the alarm condition.

## Exploring the WIN-911 Configurator



Start the WIN-911 Configurator from the "Start" button -> "All Programs" -> "WIN-911 V7" -> "WIN-911 Configurator". You will then need to open an existing configuration file. If this is not the first time the WIN-911 Configurator has been run, you will need to click "File" -> "Open" in the Configurator's menu.

Select one of the three demos: Plastic Molding DEMO.MDB, City Water DEMO.MDB, and Building Security DEMO.MDB. This tutorial will use the City Water DEMO.



Look behind all the various buttons, but do not change the configuration. Notice how the Group, Alarms, DDE Item names and the WIN-411 Reports correspond to the Excel spreadsheet. Reduce the program to icon size.

## Running the DDE Demo



Start Scan & Alarm from the "Start" button -> All Programs -> "WIN-911 V7" -> "Scan and Alarm". Size and position the Alarm Monitor window (and the Excel Window) so that both windows can be seen at the same time.

From the Excel spreadsheet, change the value in a cell in the "Variable" row to an alarm condition. This simulates an alarm. You should now be experiencing multimedia alarming. The monitor should be displaying an alarm and the sound card should be announcing the audio version of the same alarm.

You may acknowledge the alarm in one of three ways: a) by positioning the cursor over a red alarm banner in the Alarm Monitor and double-clicking, b) click on the Acknowledge button will "Ack" all alarms, or c) notice the "HMI/SCADA Acknowledgment" text on the last two rows of the Excel Demo. This is an example of how you can remotely acknowledge alarms from the data source. You will notice that the alarm message is presented as a Text String. Type the string Ack in this cell and hit return (it is Case sensitive.). Notice that this will acknowledge all outstanding alarms in the Alarm Monitor for that Group.

If you are running the "Plastic Molding DEMO", and let it run for at least two minutes, you received a "Watchdog" alarm, and it will repeat every 5 minutes until it is acknowledged. The purpose of a Watchdog alarm is to monitor the condition of the DDE Server and associated data. The Watchdog alarm was purposefully configured to look at an invalid data point. Watchdogs are highly recommended to validate healthy DDE data.

Exit the Scan & Alarm by right-clicking on the Scan 911-411 icon located in the system tray of your operating system, by the clock. Then select "Exit WIN-911."

If you have an alphanumeric pager, you may also try the pager option. You will first need to install a data modem. The following configuration changes are needed:

1. Select the correct COM Port for the modem by clicking on the "Pager" button and selecting the "Ports" tab.
2. From the Phone Book, double-click on "Tom Jones," and then on the connection. Modify the connection from "None" to "Alpha Pager" and enter appropriate phone number and pager PIN number.
3. From the "Group" button, modify the groups to include Tom Jones on the group's Contact List.
4. Save and exit the configuration, and restart Scan & Alarm.

If at any time you do not have a WIN-911 manual handy, just select the HELP button on the Configurator (it is an exact duplicate of the manual), utilize the contact sensitive help buttons, or click on the WIN-911 Digital Document to direct you to the exact reference in the manual.

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Continue with the manual and try out some of the options as you read. WIN-911 was designed to meet the alarm reporting needs of most industrial applications.

# Typical Example of WIN-911 Voice Dial-Out

## Overview

The following is an example of what can be expected using the WIN-911 Dial-Out Option. Note that the Dialogic and TAPI options vary slightly at the beginning of the message. With the Dialogic option, connection detect circuitry recognizes a human voice on the line and automatically knows when the phone has been answered. With most TAPI modems, simply loops a salutation until the recipient enters their access code, which indicates to WIN-911 that the phone has been answered. Afterwards the two voice modules function the same.

Upon an alarm (which was configured for a Voice connection), WIN-911 examines the phone book to determine if the first listed person is "on duty" (at this day and time). Assume Tom Jones was selected and he was scheduled to be "on call".

The phone rings at Tom Jones' home, and reports: "This is the Water District Monitoring System, with a call for Mr. Jones.... Please enter your access code followed by the pound key."

The access code is entered via the push button tone keypad on the telephone, followed by the # key. If the code is validated, all unacknowledged alarm messages that Mr. Jones needs to know about are reported for that alarm group, followed by: "Press star to repeat message, any other key to continue...". Assume Mr. Jones wished to continue. At this time another message is transmitted: "Enter you alarm acknowledgement code followed by the pound key."

If Mr. Jones wanted to acknowledge the announced alarms, he would then enter his acknowledgement code. If it was validated, he would then hear: "Alarms acknowledged..." and "...Thank you...good-bye".

Now, assume that Mr. Jones was not home when WIN-911 tried to call, and the baby sitter answered. In this scenario, after Mr. Jones' baby sitter answered the phone (and did not know the access code), the second name (or phone number) on the list would be called. Contact was made and the alarms were acknowledged. Upon returning home, Mr. Jones was informed of the call. He now decides to call to see if everything is going smoothly at the water department.

After dialing WIN-911's phone number, he would hear: "This is the Water District Monitoring System.... Please enter your access code followed by the pound key". Mr. Jones enters his code number. The response would be: "There are no Unacknowledged Alarms to report at this time...". Mr. Jones can now have a good night's rest.

## WIN-911 Demonstration

The demonstration outlined here assumes that you have successfully completed the WIN-911 demonstration. Use any of the "DEMO" files furnished and installed with the WIN-911 software.

## DDE

With the WIN-911 Configurator, modify the Phone Book to include a phone number, access and acknowledgement codes, and select "Voice" from the list box. Be sure the day of the week and times are selected so that a number will be called.

Also, from the "Group" button, select the name to be called. Next, be sure that the individual alarms listed are not selected for either "Auto Acknowledge", or "Acknowledge on Return", as the Voice/Dial-out will only report an unacknowledged alarm.

After the above modifications are made, save the configuration, launch Scan & Alarm.

# Typical Example of WIN-411 Inquiry

## Overview

The demonstration outlined here featuring the power of WIN-411 assumes that you have successfully completed the WIN-911 demonstration above. Use any of the three DDE "DEMO" files furnished and installed with the WIN-911 software. Review the configuration of the 411 Reports, taking careful notice of the access numbers, voice report number, change authorization codes, and each data index number.

## Demonstration

Check the EXCEL spreadsheet and be sure no points are in alarm. Launch the Monitor.

User dials the computer.

Computer answers: "Hello, this is the computer .... Please enter your access code followed by the pound key."

User enters his access code on the touch-tone phone and presses the # key...(911 & #).

Computer responds: "There are no unacknowledged alarms to report at this time. Select the desired report number followed by the pound key."

User enters the report number (22 & #).

Computer responds: "You have selected Lift Station number 22. Press the pound key to accept."

User confirms (#).

Computer: "Lift Station Number 22... the wastewater level is [value] feet."

"Lift Station Number 22... The pump is [on/off]."

" ... Press star to repeat message, any other key to continue."

User selects 5 (any number).

Computer: "Please enter your authorization code followed by the pound key."

User enters his authorization code for changes (411 & #).

Computer: "Select the point to change."

User enters the data change index number (10 & #).

Computer: "You have selected the .. pump ... Press the pound key to accept."

User confirms (#).

Computer: "Enter new value."

User enters a "1"(or "0") & #.

DDE

Computer: “Lift Station Number 22... the pump...the new value will be set to .. [On/Off].  
Press the pound key to accept.”

User confirms (#).

Computer: “Select the point to change.”

User presses pound sign (#).

Computer: “Select the desired report number.”

User presses pound sign (#).

Computer: “Thank you, Goodbye.”

User disconnects.

## For More Details

More information regarding the configuration of DDE data sources can be found in the main WIN911 Configurator help file located in the WIN-911 Help Library.