
DOC 01/16

Version 7 Install & Quick Start

WIN-911[®]

Alarm Notification Software

For Windows 10[®], Windows 8[®], Server 2012[®], Windows 7[®],
Server 2008[®], Server 2003[®], Windows XP[®]

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In that event, be sure to read the release note or README.DOC file before using the product.

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Contents

1. Introduction	1
About this Manual	1
System Description	1
What's New?	2
Standard Products	3
WIN-911/Basic	3
WIN-911/PRO	4
WIN-911/L	5
Feature Upgrades	6
WIN-911/FT	6
WIN-911/PV	6
WEB-911 XTools	7
Mobile-911	7
Hardware Requirements	8
Software Maintenance and Support	9
WIN-911 Standard Product Installation	10
Installing WIN-911 V7	10
Installing ME ActiveX	11
The WIN-911 Feature Upgrade Installation	13
Installing Mobile-911	13
Installing Mobile-911 for Apple iOS	15
Installing Mobile-911 for Android	16
Installing Mobile-911 for BlackBerry	16
Installing WEB-911 Services	17
Installing WEB-911 XTools Client	19
Installing WIN-911 Premium Voices	21
WIN-911 Licensing & CopyShield Administration	22
Requesting a License	22
CopyShield License Install (Import a License File)	25
CopyShield License Install (Manually Install a License)	28
WIN-911 Version Upgrade	32
WIN-911 Feature Upgrade	33
Remove WIN-911 V7	34

Remove Mobile-911	35
Remove WIN-911 ME OCX	36
Remove WEB-911 Services	36
Remove XTools Client	37
Remove Premium Voice	37

2. Overview: A Must Read Chapter! 39

WIN-911 Architecture	39
What is the Design Advantage?	39
The WIN-911 System Components	40
Applications	40
Service	41
Modules	41
WIN-911 Peripherals	43
WIN-911 Applets	43
WIN-911 Tools	45
WEB-911 XTools	47
WIN-911 Premium Voices	48
Sound Card Selection	48
Voice Dialout Card Selection	48
Voice Telephony Option One: TAPI	49
Voice Telephony Option Two: Dialogic	49
Voice Selection	49
Voice	49
Voice Pager	49
Dialout Announcer	50
Pager Modem Selection	50
Pager Selection	50
Dial-out Alphanumeric	50
Dial-out Numeric	51
Local Alpha and Numeric	51
E-Mail	52
SMS	52
Acknowledgement Message	53
Health Status Message	54
Alarm Request Message	55
SMS 411-Report	56
Mobile-911	57
IP	58
Alarm Messages	58
Acknowledgements/Expected Responses	59
Primary/Secondary Remote Computers	59
Health Status	60

ASCII Outputs Integrate to Other Windows Applications	61
The Sound Clips	61
Sound Source	63
Wave Files Only	63
Text To Speech Wave Files	64
Runtime Voice Synthesis	64
What is the Direct Connect?	64
WIN-911 as a Service	65
 3. WIN-911 Demonstration	 67
Demo of WIN-911 Capabilities	67
Playing with Sound	68
Creating a Demo OPC Server	69
Installing KEPServerEX & OPC Demo	69
Setting up the OPC Demo	69
Exploring the WIN-911 Configurator	72
Running the DEMO	73
Typical Example of WIN-911 Voice Dial-Out	74
Overview	74
Demonstration	75
Typical Example of WIN-411 Inquiry	76
Overview	76
Demonstration	76
 4. WEB-911 XTools Demonstration	 79
Demo of WEB-911 XTools Capabilities	79
Creating a WEB-911 XTools Demo	80
Installing WEB-911 Services	80
Installing WEB-911 XTools Client	82
Setting up WEB-911 XTools	85
Exploring WEB-911 XTools	86
XContacts	86
XGroup	87
XSchedule	87
XActivate	87
XStandby	87
XApply	87
WEB-911 XTools Options	88

1. Introduction

About this Manual

This manual is an Install & Quick Start guide for setting up the WIN-911 software and discussing the basic principles of remote alarming. All four of these chapters are contained in the complete digital documentation and help file that can be accessed electronically after the WIN-911 setup is complete.

System Description

WIN-911 is the most advanced and proven alarming software available using Microsoft's multimedia capability with standard telephone, cellular networks and Internet systems. The WIN-911 package has three standard package offerings: **WIN-911/PRO**, **WIN-911/Basic**, and **WIN-911/L (Lite)**. The WIN-911 package also offers four feature upgrade packages **WIN-911/FT**, **WIN-911/PV**, **WEB-911/XC**, and **Mobile-911**. Some feature upgrades are included in the standard packages; see 'Current Price List' at **www.win911.com** for details. WIN-911 is a complete software solution for alerting personnel of alarms or out-of-tolerance conditions. Data values are compared to predefined limits or received from data source(s) and reported through Windows multimedia capabilities in either visual, audio, email, or dial-out messaging. Data can be accessed via three mediums: 1) generic connections can be established with **Microsoft Windows OLE for Process Control** and/or 2)

Dynamic Data Exchange, or 3) a custom developed Direct Connect can be established with **Wonderware's System Platform & InTouch**, **GE's iFIX**, **Rockwell Automation's FactoryTalk View A&E**, **FactoryTalk View HMI**, **FactoryTalk View ME & RSView32** and **Veriteq's viewLinc databases**. WIN-411 allows the user to inquire from any touch-tone telephone or SMS capable cell phone, the status of analog or digital values. If the data server allows, it will even enable the user to make changes over the telephone using voice telephony. **WEB-911 XTools** are a suite of ActiveX modules that allow configuration changes to be made from remote systems. **Mobile-911** consist of both the Mobile-911 smart phone application and MobileView, a web-based alarm monitor window. Mobile-911 allows for powerful organization of multiple alarm messages and provides a convenient way to acknowledge each alarm back to WIN-911 in the form of a smartphone application or a web-based monitor window.

WIN-911 V7 and support software is distributed on a USB flash drive or via an Internet download at **www.win911.com**.

What's New?

WIN-911 Software is pleased to introduce the following additions to WIN-911:

- **Support for Windows 10**
- **Support for Windows 8 and Windows 8.1**
- **Support for Windows Server 2012 and 2012 R2**
- **Printer and Logger Improvements**
- **New WIN-911 Premium Voices offered in 46 Languages**

Standard Products

The WIN-911 software package can be licensed to any one of the three Standard Products listed below. See the ‘Current Price List’ at www.win911.com for details.

WIN-911/Basic

WIN-911 Alarm Software for 1-way alarm notification will allow you to:

- Complement and enhance any Windows compliant industrial control application by giving it alarm and reporting capabilities.
- Notify personnel using Email, Paging and 1-way SMS.
- Utilize the Windows multimedia capability to alert users of out-of-tolerance conditions.
- Easily create both sound and visual messages and associate these with values found in your HMI/SCADA package and/or Windows OPC and DDE.
- Report alarms by visual "color coded" CRT messages, audio alert sounds (including speech), email, pager, and SMS messages, as well as send ASCII messages to remote mounted displays.
- Group and classify alarms (including priority levels), allowing different action responses as your needs dictate.
- Alert users if servers or source of data becomes disconnected or inoperable.
- Sort and view alarm data by any field (date, priority, group, tag name, etc.) at runtime with the Alarm Log Manager formatted alarm logger.
- Alert HMI and/or other applications of WIN-911's operational status by serving a constantly changing "heartbeat" via WIN-911's System Health Poke.
- Alert HMI and/or other applications of WIN-911's paging modules operational status.

WIN-911/PRO

WIN-911 Alarm Software for 1-way and 2-way alarm notification will also allow you to:

- Notify and acknowledge alarms by telephone/voice dial-up.
- Acknowledge alarms by replying with an SMS text message.
- Modify existing WIN-911 configurations on the fly from a networked location.
- Change the current state of WIN-911 from a networked location.
- Offers professional sounding voices as an alternative to the standard Microsoft choices.
- Inquire of other plant conditions using WIN-411 Reports after WIN-911 has reported an out-of-tolerance alarm.
- Call or text message the computer at any time from a touch-tone telephone to check on current operating conditions.
- Change any digital or analog value from a touch-tone telephone. (Changes are only possible if the configuration allows.) The following security is available for selecting a point to change:
 1. Special Access Code for changes per user.
 2. Selection of a numeric password for each point to change.
 3. High/Low limits for analog changes for individual points.
 4. Confirmation of intended change of value prior to the actual change.
 5. Watchdogs that can prevent access to reports on data source loss.
- Supports state-of-the-art performance in voice technology for alarm and report annunciation. Variable rate and pitch control allows fine-tuning of the audio to match exact user needs.

WIN-911/L

WIN-911 Lite will allow you WIN-911 PRO functionality with the following restrictions:

- Alarms can accommodate a total of 24 digital and unlimited watchdog alarms. Filter and Analog alarms are not supported in Lite Mode.
- User can select a single type of remote notification, such as: Voice Telephony, 2-way SMS, Numeric or Alphanumeric pagers, Voice Pagers, E-Mail, or Mobile-911.
- Lite mode does not include WIN-411 reporting capability, but users can acknowledge alarms from the voice telephony, 2-way SMS, or the Mobile-911 connection.
- Premium Voice is not included.
- XTools are not supported

Feature Upgrades

The following Feature Upgrades may be purchased and licensed in addition to some of the Standard Products. See ‘Current Price List’ at www.win911.com for details.

WIN-911/FT

WIN-911 FactoryTalk Alarm and Events Client offers a seamless connection to FactoryTalk's Alarm & Event servers:

- Required, if trying to subscribe to alarms in FactoryTalk's Alarm and Event server.
- Subscribes to FactoryTalk alarms based on a user defined filter criteria.
- Alarm properties and configuration are maintained at the PLC level, instead of in WIN-911.

WIN-911/PV

WIN-911 Premium Voices provide a more natural sounding voice as an alternative to the standard Microsoft choices. WIN-911 Premium Voices can be added to any WIN-911/PRO, Basic or Lite package:

- The Premium Voice package offers male and female voices in 46 different languages (each language pack sold separately).
- WIN-911/PV US English language pack includes 5 voices: Allison, Ava, Samantha, Susan, and Tom.
- The Premium Voice package also allows the user to adjust the rate and pitch of the premium voice.
- SAPI 5.0 or 5.1 speech engines can be used with WIN-911's Text-to-Speech.

WEB-911 XTools

WEB-911 XTools is a suite of ActiveX controls that allow you to modify existing WIN-911 configurations on the fly including:

- A networked solution to edit Contacts, Schedules, and Notification Methods by leveraging Microsoft .NET and Internet Information Services.
- A networked solution for switching WIN-911 between an Active and Standby state.
- The capability to install the XTools client in any ActiveX container, including most SCADA nodes.

Mobile-911

Mobile-911 consist of both the Mobile-911 smart phone application and MobileView, a web-based alarm monitor window. Mobile-911 allows for powerful organization of multiple alarm messages and provides a convenient way to acknowledge each alarm back to WIN-911 in the form of a smartphone application or a web-based monitor window.

- Mobile-911 is compatible with Apple iOS, Google Android and Blackberry devices.
- Mobile-911 pushes alarms to your mobile device over Apple's Push Notification service, Google's Cloud to Device Messaging Service or RIM's Push Service.
- An Internet connection is required on both your Mobile-911 Server machine and your mobile device.
- MobileView displays alarms in an alarm summary accessed through a web browser using a secure log in. This allows the user to access and acknowledge alarms from anywhere that has an Internet connection.

Hardware Requirements

WIN-911 PRO, Basic, Lite, PV, WEB-911 Service, XTools Client, ME ActiveX and Mobile-911 Server will run on any Windows based compatible computer capable of running Microsoft Windows XP Service Pack 3, Server 2003 Service Pack 1 or later, Server 2003 R2, Windows 7, Windows Server 2008, Windows Server 2008 R2, Windows 8, Windows 8.1, Windows Server 2012, Windows Server 2012 R2, Windows 10. ME ActiveX will also run in Windows CE in a PanelView 6. They do not support Windows Server 2000, NT, ME, 98, 95 or older, or Windows for Workgroups.

It is recommended that the computer system for WIN-911 be at least a Pentium 4 based computer system running at 2.1 GHz. The system should have a display with a resolution of 800x600 or greater. The system should have at least 2GB of memory. Additional memory is recommended if additional programs are to be run simultaneously. The minimum configuration should have at least 1 gigabyte of free disk space. Be aware that sound files require between 11 to 44 kilobytes of disk space per second of recording. Microsoft .NET 4.0 and IIS are required for some features.

If dial-out paging is required, a dedicated data modem and phone line is needed. If voice dial-outs or dial-ins are required you will need one of the following devices: 1) a TAPI voice modem or, 2) a Dialogic Telephonic Card and a dedicated analog voice line. If both paging and voice connections are required, two dedicated lines are needed. If SMS messaging is to be used, a GSM, CDMA or HSPA modem is required with an activated cellular account. See the recommend modem list for all GSM, CDMA, and HSPA modems at www.win911.com.

If alarm history printing is desired, a dedicated printer port and printer are required. A simple printer should suffice since no graphics are used. WIN-911 Software recommends that a dot matrix printer be used, or similar such device capable of printing a "line-at-a-time" as opposed to one that requires an entire page be defined before it will begin to print (such as lasers and ink-jets).

Note: When the WIN-911 Alarm Printer owns a printer, no other task can access it. The Alarm Printer does not use the Windows device drivers for printing; printing is done through

standard ASCII output. Other Printing tasks require a separate printer port and printer.

WEB-911 XTools require Microsoft .NET 4.0 and Internet Information Services to be on the WIN-911 server machine. Microsoft .NET 4.0 must be installed on all WEB-911 XTools client machines. See, "Installing WEB-911 Services" & "Installing WEB-911 XTools Client."

Mobile-911 Server requires Microsoft .NET 4.0 and may require Internet Information Services if installing MobileView. Mobile-911 Server is not required to be installed on the same machine as WIN-911. Mobile-911 Server may also require an internet connection.

Software Maintenance and Support

Registered users are given a Software Maintenance and Support number when the software is licensed. This Software Maintenance number is required to receive telephone and email support. For telephone support call WIN-911 Software at **512-326-1011 x3** or toll free in the US and Canada at **1-800-331-8740 x3**, and have your Software Maintenance number ready. Support hours are Monday through Friday, 8:00 AM to 5:00 PM (GMT -06:00) Central Time. Telephone and email support after the expiration of the support agreement will require renewing your Software Maintenance agreement. Email support will be directed through your Software Maintenance and Support page at: **www.win911.com** menu option **Customer Login** (upper-right corner). Installation guides, informational documentation, as well as solutions to common problems can be found under menu option **Support | Knowledgebase**.

In addition to technical support, participants are entitled to software version upgrades as they become available, relocks and software newsletters, with updates.

To renew your Software Maintenance and Support agreement call WIN-911 Sales at 512-326-1011 x2 or toll free in the US and Canada at 1-800-331-8740 x2. Invoices are sent out prior to expiration also.

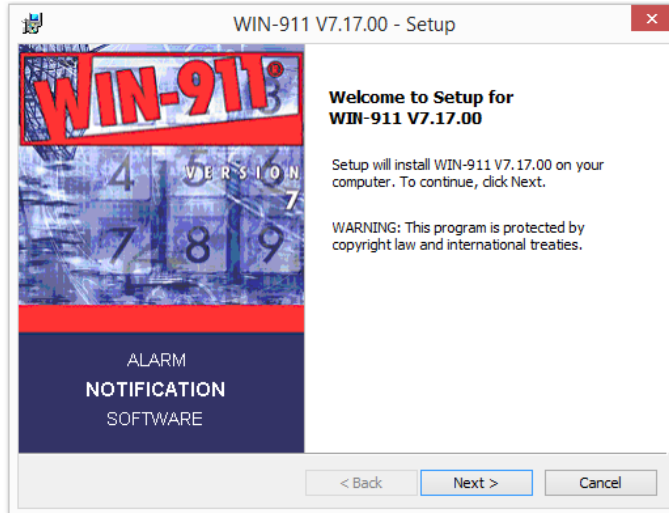
WIN-911 Standard Product Installation

Installing WIN-911 V7

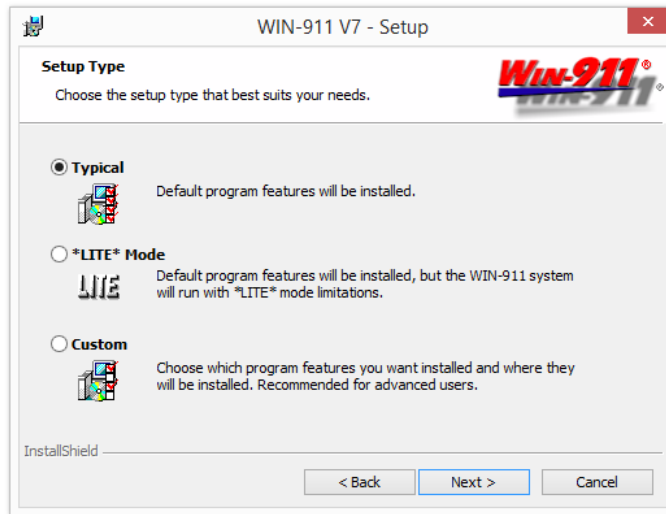
Insert the **WIN-911 Software** USB drive. Browse the drive and open **Setup.exe**.



Select **WIN-911**.



Click, **Next**. If prompted to install .NET 4.0 follow the on screen instructions. Then continue through the License Agreement and Customer Information.



Select **Typical** to run the default installation. This will install to the default location **C:\%Program Files%\Specter Instruments\WIN-911 V7**. The following program features will be installed: WIN-911 V7, Tools, and Application Demos.

Select ***LITE* Mode** to run the default installation with LITE mode limitations. See “WIN-911/L” section above for a list of limitations.

Select **Custom** to change any of the default installation settings, such as the WIN-911 install path.

Select **Next**, click **Install**, then **Finish**.

Note: WIN-911 V7 is fully functional for a 30-day DEMO period from the time of installation. After the DEMO period expires WIN-911 must be licensed. See ‘WIN-911 Licensing and CopyShield Administration’ for details.

Installing ME ActiveX

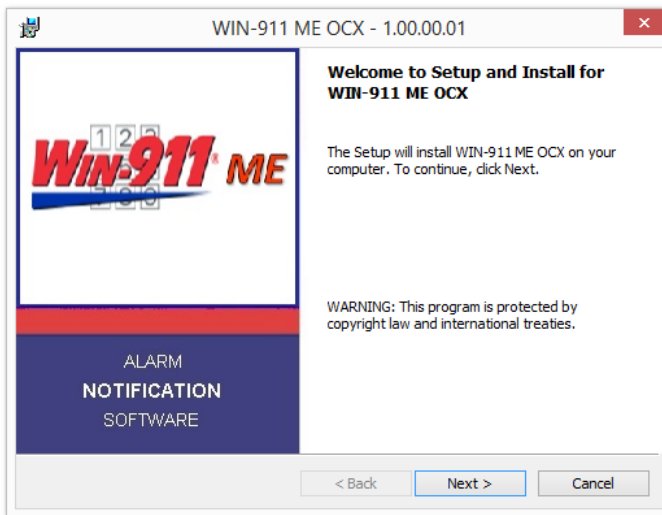
The ME ActiveX is required for the ME Direct Connect. This ActiveX control sends alarms from the ME application to WIN-911. For this reason, the ME ActiveX control must be installed on all PC clients as well as all development machines (View Studio). If the client resides on a PanelView or CE system, a

.CAB file must be installed. The .CAB file can be found by browsing the WIN-911 Install CD: \Support\CE\WIN-911_ME_Alarming_CE.cab

Insert the **WIN-911 Software** USB drive. Browse the drive and open **Setup.exe**.



Select **ME ActiveX**.



Select **Next**, click **Install**, then **Finish**.

The ME Active X install requires Microsoft Visual C++ 2010 Redistributable Package (x86). If prompted to install, select **Install**. If the redistributable is already installed select **Repair**.

Once installed, the ME ActiveX control can be found under Objects | ActiveX Control... in FactoryTalk View Studio.

The WIN-911 Feature Upgrade Installation

Installing Mobile-911

Mobile-911 requires Microsoft Framework .NET 4.0. If installed, it can be found in Add or Remove Programs. If .NET 4.0 Framework is not installed, Mobile-911 will direct you to the install. The Mobile-911 server also requires Internet Information Services if the Mobile View Server option is selected to be installed.

The Mobile-911 Server can be installed either on the same machine as WIN-911 or another machine with a networked connection to the WIN-911 computer. The Mobile-911 Server machine must have access to the internet. Setup instructions can be accessed electronically after the Mobile-911 installation is complete.

Server setup instructions can also be found on our website: www.win911.com under Support | Knowledgebase.

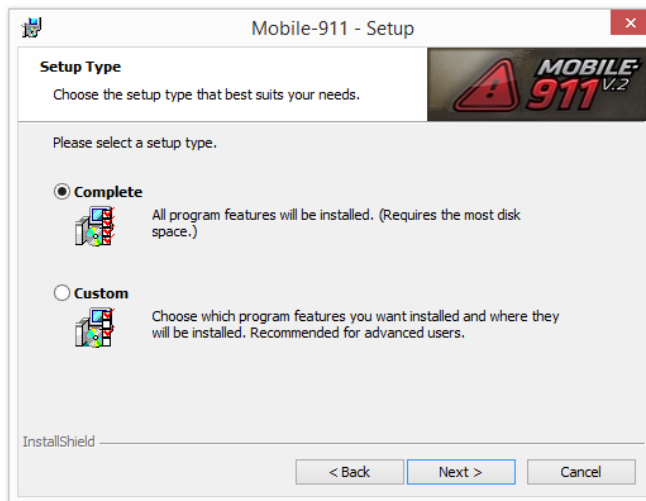
Insert the **WIN-911 Software** USB drive. Browse the drive and open **Setup.exe**.



Select **Mobile-911**. If prompted to install .NET 4.0 or the Microsoft Visual C++ Redistributable follow the on screen instructions.

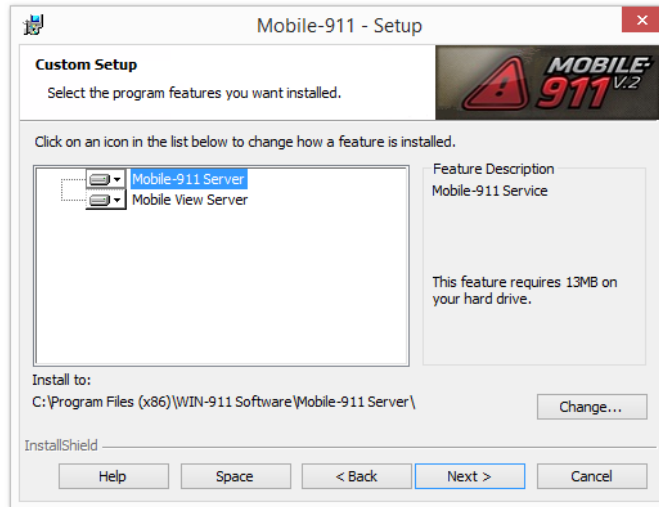


Click, **Next**. Continue through the License Agreement.



Click **Next** to continue with the **Complete** install. Select **Custom** if you would like to use a custom path and/or would like to disable the Mobile View Server install. Then click **Next**.

Mobile View Server requires IIS. If you only plan to use the Mobile-911 smart phone applications and do not want to install IIS, you must disable the Mobile View Server feature.



Click **Next** to continue with the selected features and custom path.

Click **Install**, then **Finish**.

Installing Mobile-911 for Apple iOS

Mobile-911 is available in Apple's App Store for any iOS 4 device or newer. At the time of this writing, the latest version of iOS is 8.4. Because we cannot anticipate future changes in the OS, we cannot guarantee that all future versions will be supported. Download and install the application directly from your Apple device. Future updates will be available from the App Store as well.

Once installed, important setup information is included in the application's help section.

A **Live Demo** is available to try out the app without having to install the Mobile-911 Server. Setup instructions can be found on our website:

www.win911.com under Smartphone Apps | Live Demo of Mobile-911

Installing Mobile-911 for Android

Mobile-911 for Android is available for Android 2.2 and newer. At the time of this writing, the latest version of Android is 5.1. Because we cannot anticipate future changes in the OS, we cannot guarantee that all future versions will be supported.

Mobile-911 requires the Google Play and a touch screen.

Mobile-911 is available in the Google Play. Future versions will be released through Play as well.

Once installed, important setup information is included in the application's help section.

A **Live Demo** is available to try out the app without having to install the Mobile-911 Server. Setup instructions can be found on our website:

www.win911.com under Smartphone Apps | Live Demo of Mobile-911

Installing Mobile-911 for BlackBerry

Mobile-911 is available on BlackBerry's App World for BlackBerry OS 5, 6 or 7. Download and install the application directly from your BlackBerry device. Future updates will be available from BlackBerry's App World as well.

Once installed, important setup information is included in the application's help section.

A **Live Demo** is available to try out the app without having to install the Mobile-911 Server. Setup instructions can be found on our website:

www.win911.com under Smartphone Apps | Live Demo of Mobile-911

Installing WEB-911 Services

WEB-911 Services requires WIN-911 Version 7.14.00 or newer to be installed first. It also requires Internet Information Services (IIS) and Microsoft Framework .NET 4.0.

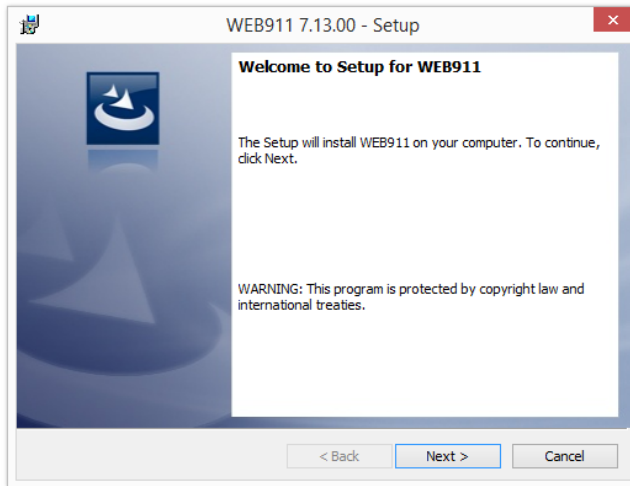
IIS must be installed prior to installing WEB-911 Services. IIS can be found in Administrative Tools. If IIS is not installed, run the IIS install from Add or Remove Programs -> Add/Remove Windows Components. **The operating system install disk is required to complete the IIS installation.**

Microsoft Framework .NET 4.0, if installed, can be found in Add or Remove Programs. If .NET 4.0 is not installed, WEB-911 Services will install it for you.

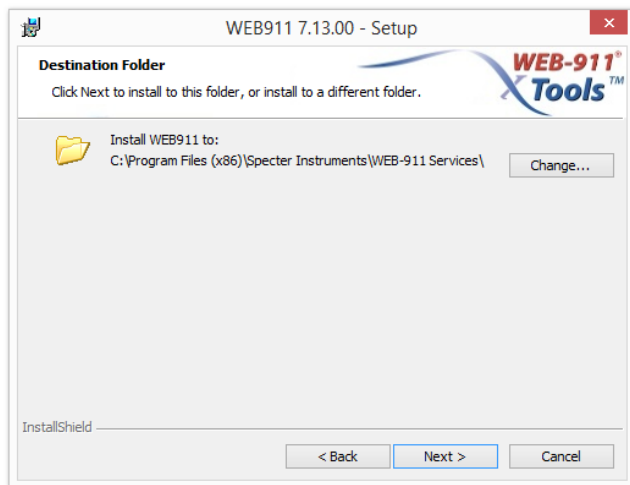
Insert the **WIN-911 Software** USB drive. Browse the drive and open **Setup.exe**.



Select **WEB-911 Services**. If prompted to install .NET 4.0 follow the on screen instructions.



Click, **Next**. Continue through the License Agreement.



Click **Next** to continue with the default path. Select **Change...** if you would like to use a custom path, and then click **Next**.

Click **Install**, then **Finish**.

Note: WEB-911 Services will run in a 30-day DEMO period from the time it is installed. After the WEB-911 Service DEMO period expires WEB-911 Services must be licensed. See 'WIN-911 Feature Upgrade' for details.

Installing WEB-911 XTools Client

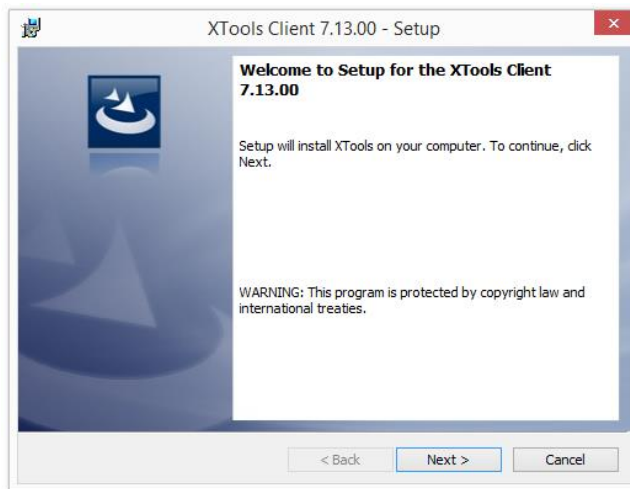
The WEB-911 XTools Client requires Microsoft Framework .NET 4.0. If installed, it can be found in Add or Remove Programs. If .NET 4.0 Framework is not installed, WEB-911 XTools Client will direct you to the install

The WEB-911 XTools Client can be installed on any machine on the network. The XTools controls can be inserted into any ActiveX container.

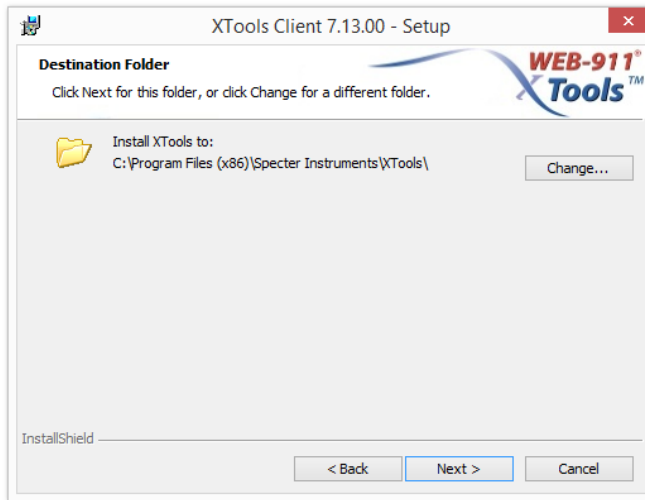
Insert the **WIN-911 Software** USB drive. Browse the drive and open **Setup.exe**.



Select **XTools Client**. If prompted to install .NET 4.0 click **Yes**.

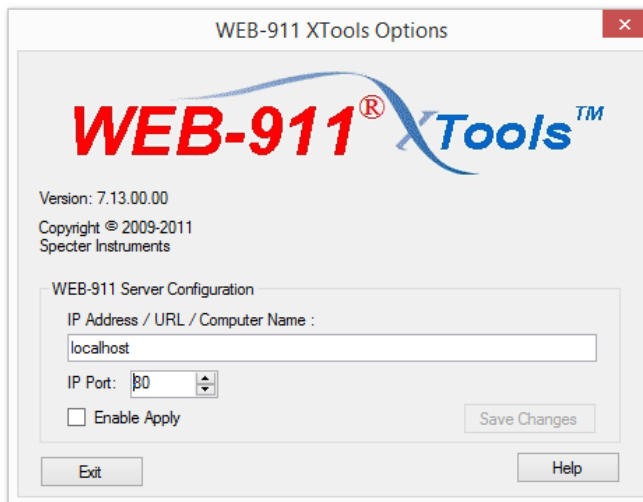


Click **Next**. Continue through the License Agreement.



Click **Next** to continue with the default path. Select **Change...** if you would like to use a custom path, and then click **Next**.

Click **Install**.

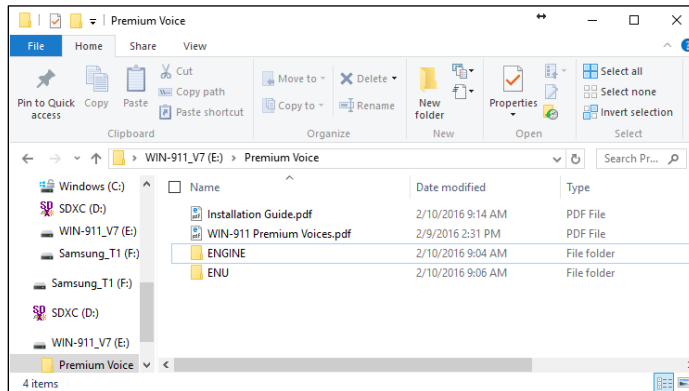


The WEB-911 XTools Options window allows the user to configure the location of the server. Click **Save Changes** and **Exit** to apply your changes. Then click **Finish**.

Note: WEB-911 Services will run in a 30-day DEMO period from the time it is installed. After the WEB-911 Service DEMO period expires WEB-911 Services must be licensed. See ‘WIN-911 Feature Upgrade’ for details.

Installing WIN-911 Premium Voices

Insert the WIN-911 Software USB drive. Open the **Premium Voice** folder. Premium Voice is an optional feature and may not be included.



First, you must install the **Premium Voice Speech Engine**. Browse the **ENGINE** folder and run the install: **\WIN911PV_ENG_1.5.exe**

To install the **Language Pack(s)** (*includes all voices*), browse the Language Pack folder and run the install(s): **\WIN-911PV_AAA.1.5.exe**

“AAA” represents the language code for the language pack

(US English Language Pack – **ENU** folder, the install is **WIN-911PV_ENU.1.5.exe**)

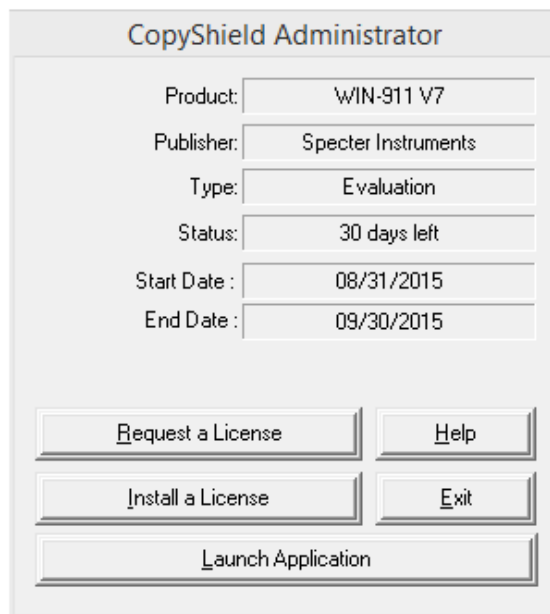
Note: WIN-911 Premium Voices are operational during the DEMO period. After the WIN-911 DEMO period expires the WIN-911 Premium Voices must be licensed. See ‘WIN-911 Feature Upgrade’ for details.

WIN-911 Licensing & CopyShield Administration

Before WIN-911 can be licensed permanently it must be registered with WIN-911 Software. Otherwise, the WIN-911 Scan & Alarm will only run for 30 days after the first time it is started.

Requesting a License

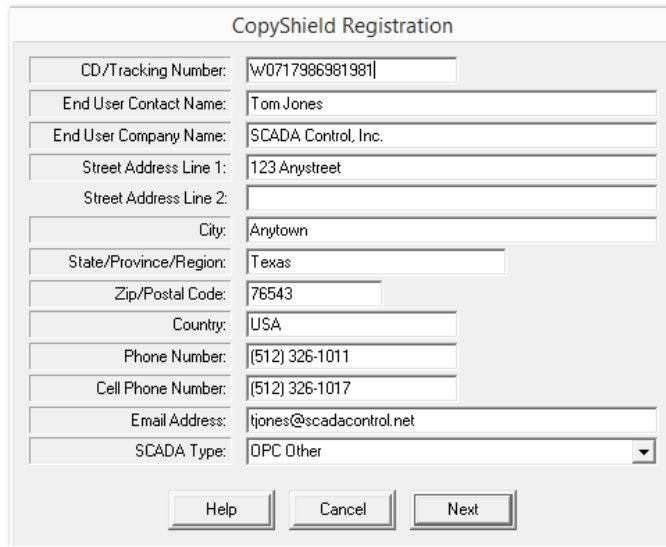
The first time Scan & Alarm is started and until it is licensed the CopyShield Administrator dialog appears. Click **Request a License** and complete the following form that will provide WIN-911 Software with the data necessary to generate a license file for your computer.



The image shows a screenshot of the 'CopyShield Administrator' dialog box. It has a title bar with the text 'CopyShield Administrator'. Inside the dialog, there are several labeled text boxes for data entry: 'Product:' with 'WIN-911 V7', 'Publisher:' with 'Specter Instruments', 'Type:' with 'Evaluation', 'Status:' with '30 days left', 'Start Date :' with '08/31/2015', and 'End Date :' with '09/30/2015'. Below these fields are five buttons arranged in three rows. The first row contains 'Request a License' and 'Help'. The second row contains 'Install a License' and 'Exit'. The third row contains a single wide button labeled 'Launch Application'.

CopyShield Administrator	
Product:	WIN-911 V7
Publisher:	Specter Instruments
Type:	Evaluation
Status:	30 days left
Start Date :	08/31/2015
End Date :	09/30/2015
<div><div>Request a License</div><div>Help</div><div>Install a License</div><div>Exit</div><div>Launch Application</div></div>	

Click **Request a License**.

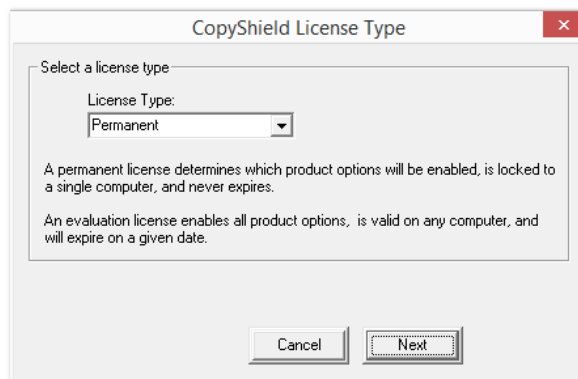


The image shows a 'CopyShield Registration' dialog box with the following fields filled out:

CD/Tracking Number:	W0717986981981
End User Contact Name:	Tom Jones
End User Company Name:	SCADA Control, Inc.
Street Address Line 1:	123 Anystreet
Street Address Line 2:	
City:	Anytown
State/Province/Region:	Texas
Zip/Postal Code:	76543
Country:	USA
Phone Number:	(512) 326-1011
Cell Phone Number:	(512) 326-1017
Email Address:	tjones@scadacontrol.net
SCADA Type:	OPC Other

At the bottom are three buttons: Help, Cancel, and Next.

Fill out the appropriate fields including the CD Tracking Number included with the WIN-911 media. Click **Next**.



The image shows a 'CopyShield License Type' dialog box with the following content:

Select a license type

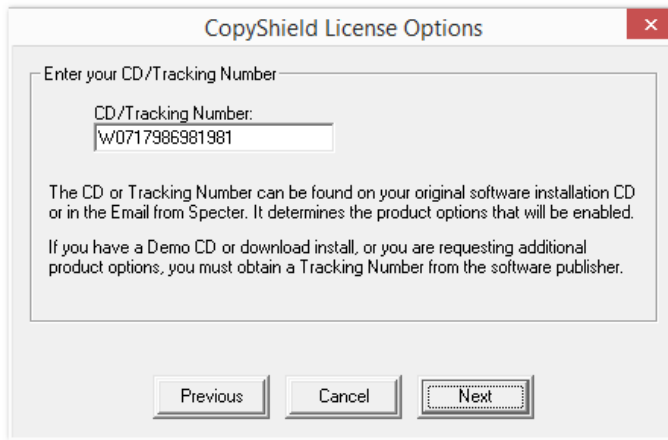
License Type:
Permanent

A permanent license determines which product options will be enabled, is locked to a single computer, and never expires.

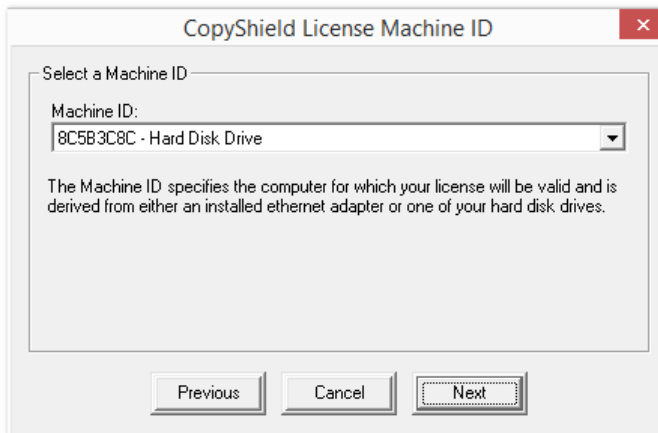
An evaluation license enables all product options, is valid on any computer, and will expire on a given date.

At the bottom are two buttons: Cancel and Next.

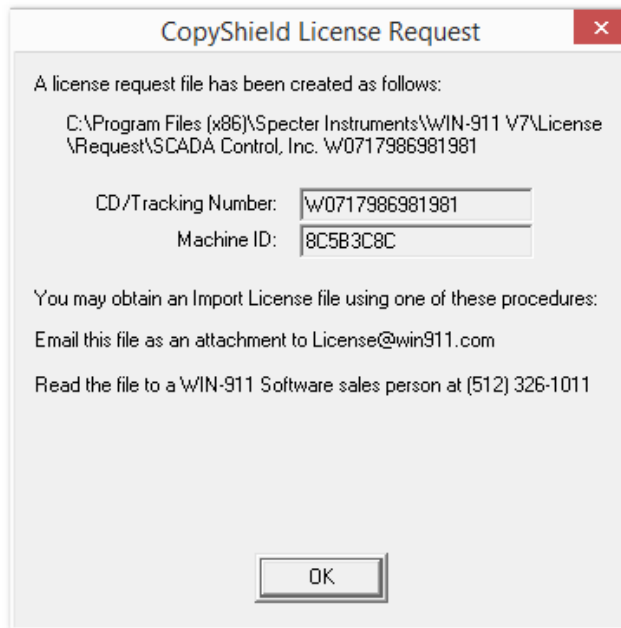
From the pull-down menu select the **type of license** you wish to request. A Permanent license will remove restriction on running Scan & Alarm on this machine. Evaluation will extend the demo to some point beyond the normal 30-day limit. Click **Next**.



Enter the CD tracking number included with the WIN-911 media. If you don't have the media, contact WIN-911 Software for a CD tracking number. Note that a CD Tracking Number is not required for an Evaluation extension, only a Permanent license. Click **Next**.



From the pull-down menu, select the **Machine ID** for your license. WIN-911 Software recommends selecting the Hard Disk Drive since Windows creates virtual Network Adapters whose ID's can change on a reboot. Click **Next**.

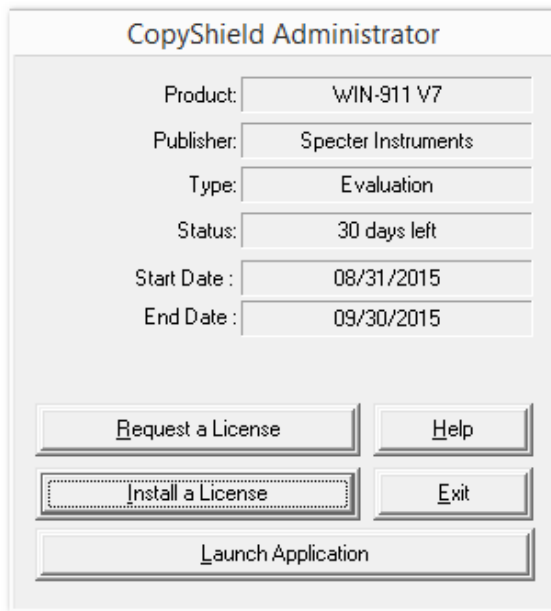


The license file location is printed at the top of the window. Be sure to make note of it. Click **OK** and email the ***.CSR** file to **license@win911.com**.

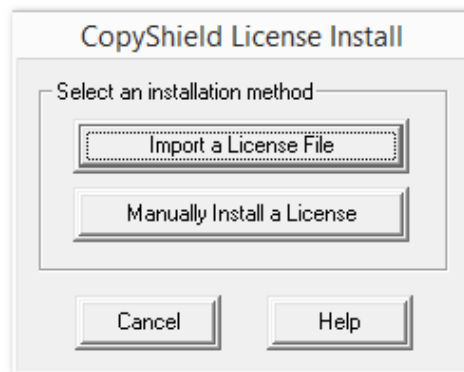
CopyShield License Install (Import a License File)

After receiving your license file via email from WIN-911 Software, copy the ***.CSL file** into the **C:\%Program Files%\Specter Instruments\WIN-911 V7\License folder**.

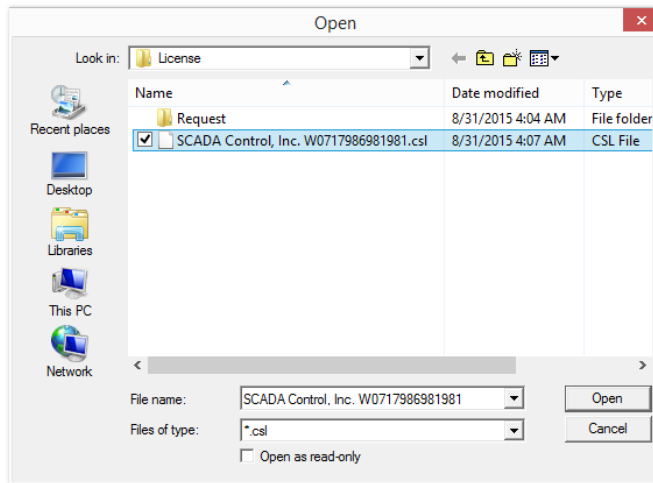
Start WIN-911 Scan & Alarm for the CopyShield Administrator splash screen to appear.



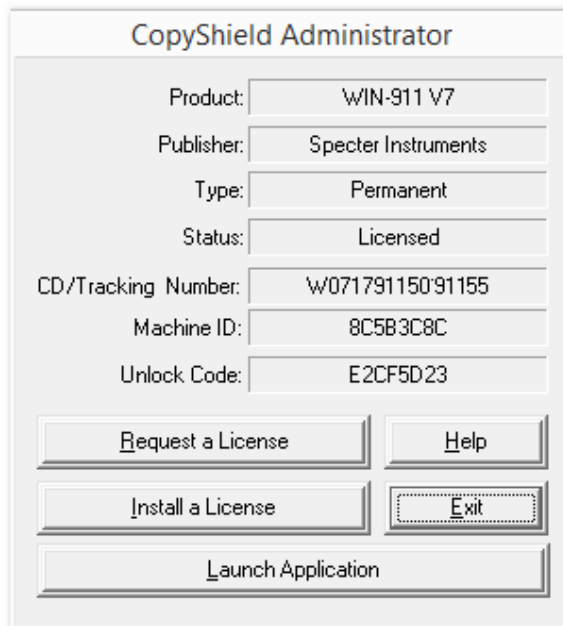
From the CopyShield Administrator click **Install a License**.



Click **Import a License File**.



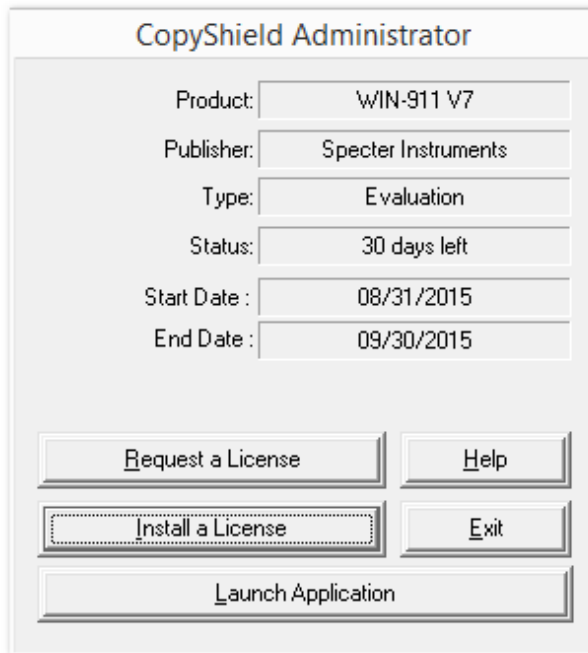
Select the license file and click **Open**.



Check for a status of "Licensed" to confirm the license was installed properly.

CopyShield License Install (Manually Install a License)

After obtaining your license (and CD Tracking Number for web downloads) from WIN-911 Software, start WIN-911 Scan & Alarm for the CopyShield Administrator splash screen to appear.

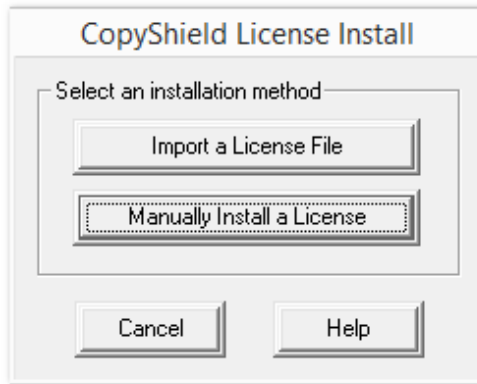


The image shows the CopyShield Administrator splash screen. It features a title bar with the text "CopyShield Administrator". Below the title bar, there are several fields displaying license information: Product: WIN-911 V7, Publisher: Specter Instruments, Type: Evaluation, Status: 30 days left, Start Date: 08/31/2015, and End Date: 09/30/2015. At the bottom, there are five buttons: "Request a License", "Help", "Install a License" (which is highlighted with a dotted border), "Exit", and "Launch Application".

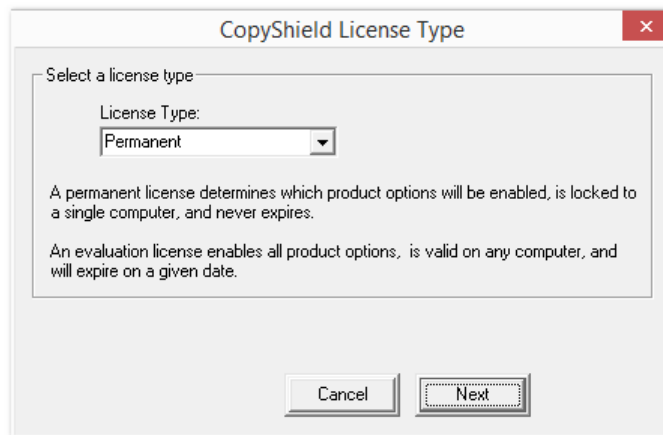
Product:	WIN-911 V7
Publisher:	Specter Instruments
Type:	Evaluation
Status:	30 days left
Start Date :	08/31/2015
End Date :	09/30/2015

Buttons: Request a License, Help, Install a License, Exit, Launch Application

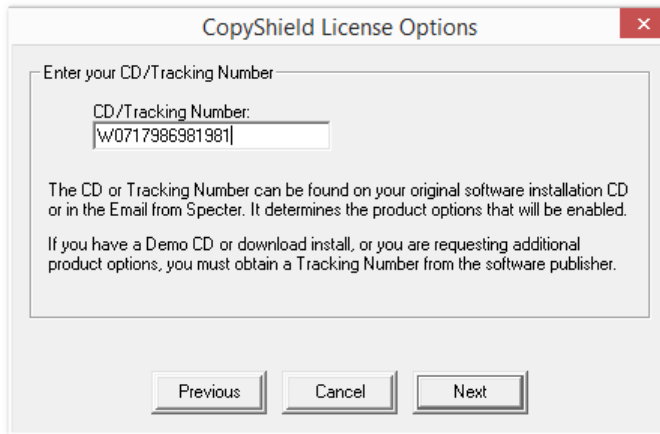
From the CopyShield Administrator click **Install a License**.



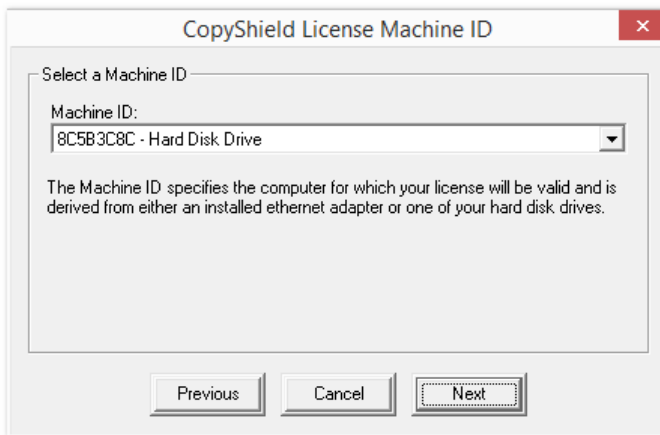
Click **Manually Install a License**.



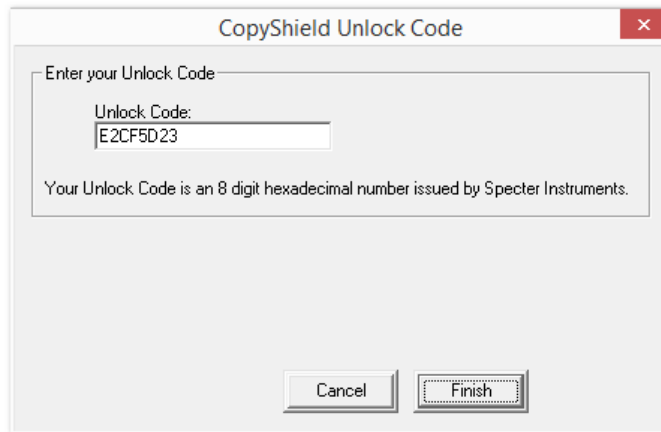
Select the **type of license** you wish to install (permanent or evaluation extension) and click **Next**.



Enter your **CD tracking number**, included with the WIN-911 media. Click **Next**.

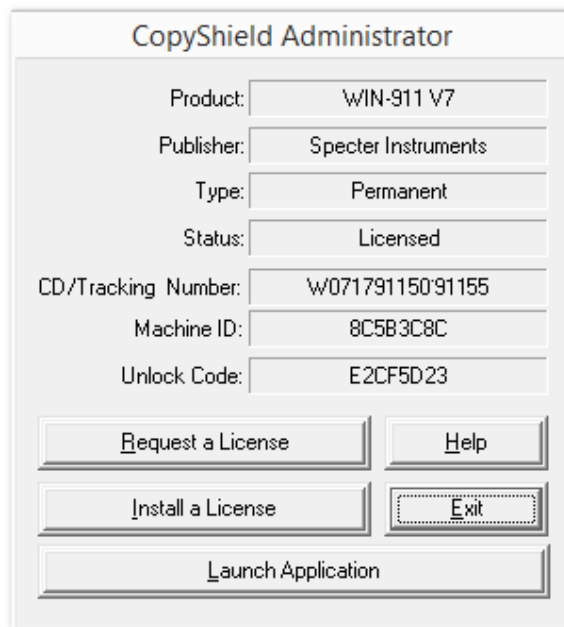


From the pull-down menu, select the **Machine ID** for your license. WIN-911 Software recommends selecting the Hard Disk Drive since Windows creates virtual Network Adapters whose ID's can change on a reboot. Click **Next**.



A dialog box titled "CopyShield Unlock Code" with a red close button in the top right corner. Inside the dialog, there is a section titled "Enter your Unlock Code" which contains a label "Unlock Code:" and a text input field containing the value "E2CF5D23". Below the input field, a message states: "Your Unlock Code is an 8 digit hexadecimal number issued by Specter Instruments." At the bottom of the dialog, there are two buttons: "Cancel" and "Finish".

Enter the **Unlock Code** provided by WIN-911 Software then click **OK**. Check the status of the license on the CopyShield Administrator and ensure that it is Permanent.



A window titled "CopyShield Administrator" displaying license information. The information is organized into a table-like structure with labels on the left and values in text boxes on the right:

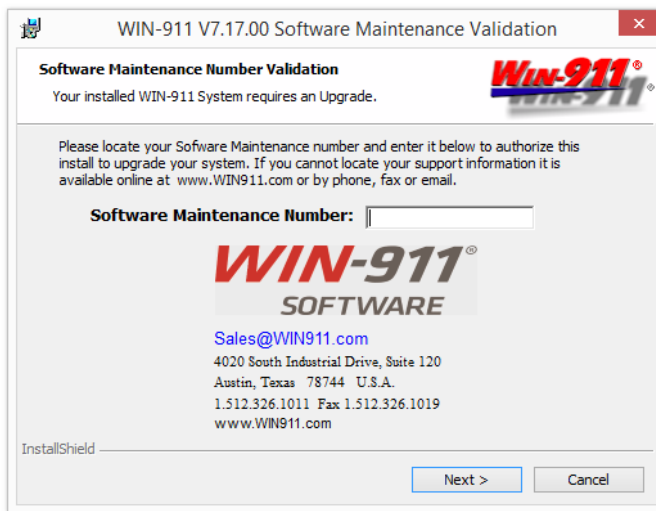
Product:	WIN-911 V7
Publisher:	Specter Instruments
Type:	Permanent
Status:	Licensed
CD/Tracking Number:	W071791150/91155
Machine ID:	8C5B3C8C
Unlock Code:	E2CF5D23

Below the table, there are five buttons arranged in three rows:

- Row 1: "Request a License" and "Help"
- Row 2: "Install a License" and "Exit"
- Row 3: "Launch Application" (a wider button spanning the width of the previous two)

WIN-911 Version Upgrade

Any version upgrade from a previous version 7 to the latest version of WIN-911 will require a **Software Maintenance Number** to install. If you cannot locate your Software Maintenance number, it is available online at **www.win911.com** or by phone, fax, or email. Contact WIN-911 Software by phone at **512-326-1011 x2** or toll free in the US and Canada at **1-800-331-8740 x2**.



Enter the **Software Maintenance Number** and click the **Next** button to upgrade the WIN-911 version. Then the install will proceed.

Note: A version upgrade to 7.17.00 PRO from a 7.09 or older PRO or TEP version will include WEB-911 XTools. You will need to obtain a new license file to actually enable those features during runtime. Email a new license request file to license@win911.com or call at 512-326-1011 or toll free in the US and Canada at 1-800-331-8740 to obtain a new license file.

WIN-911 Feature Upgrade

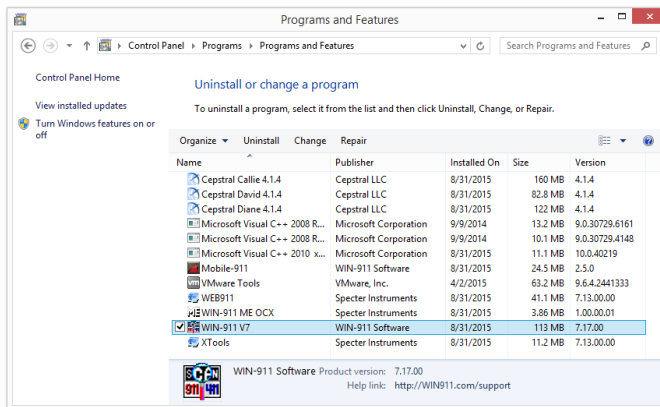
Once your system has been licensed it can be upgraded to support more features (perhaps by adding Telephony, Premium Voice, 2-way SMS Messaging, WEB-911 XTools or even Mobile-911) with a newer license. Start **Scan & Alarm** with the **Shift or Ctrl** key depressed. This will cause the CopyShield Administrator to appear. Contact WIN-911 Software Sales Department at **512-326-1011 x2** or toll free in the US and Canada at **1-800-331-8740 x2** with the original **CD Tracking Number** (and Purchase Order number or Credit Card) to retrieve a subsequent license to enable more features for your WIN-911 system. The **CD Tracking Number** is viewable in the **WIN-911 Configurator | Help | About**.

Note: A version upgrade to 7.17.00 PRO from a 7.09 or older PRO or TEP version will include WEB-911 XTools. You will need to obtain a new license file to actually enable those features during runtime. Email a new license request file to license@win911.com or call at 512-326-1011 or toll free in the US and Canada at 1-800-331-8740 to obtain a new license file.

Remove WIN-911 V7

To remove WIN-911 from your system, use **Programs and Features** located in your **Control Panel**.

Warning: *If you intend to perform an uninstall and reinstall or upgrade your system to a later version you will need to backup your Configuration file, your WIN-911.ini file, "*.WAV" files (for sound), Overrides.TeleDAC file, "*.CSR" and "*.CSL" files (for license) to preserve your configuration, Mobile-911 Bridge Inbound.exe.config and Mobile-911 Bridge Outbound.exe.config for Mobile-911. You may also want to backup your Log files. Use 911Backup.exe to perform a backup of all the required files. WIN-911 User File Backup & Restore can be found in the Tools folder.*

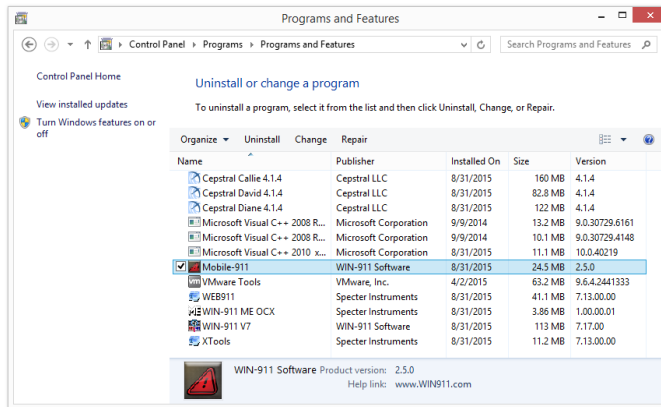


Select **WIN911 V7**. Then click **Uninstall**.

Remove Mobile-911

To remove Mobile-911 from your system, use **Programs and Features** located in your **Control Panel**.

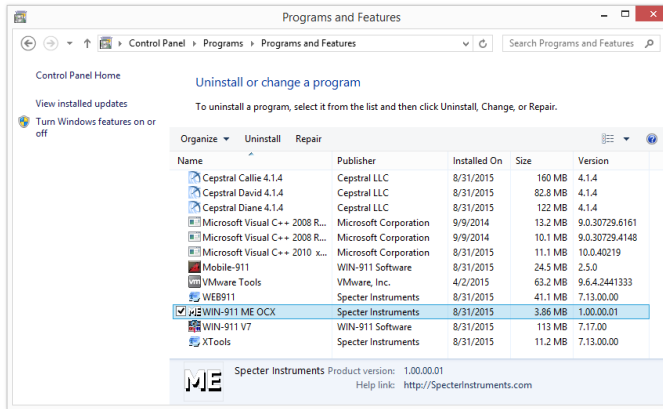
Warning: *If you intend to perform an uninstall and reinstall or upgrade your system to a later version you will need to backup your `Mobile911.Server.exe.config`, `serverconfig.xml`, `server.pfx`, and your `M9.s3db` file to preserve your configuration. Use `M911Backup.exe` to perform a backup of all the required files. **Mobile-911 User File Backup & Restore** can be found in the **Tools** folder.*



Select **Mobile-911**. Then click **Uninstall**.

Remove WIN-911 ME OCX

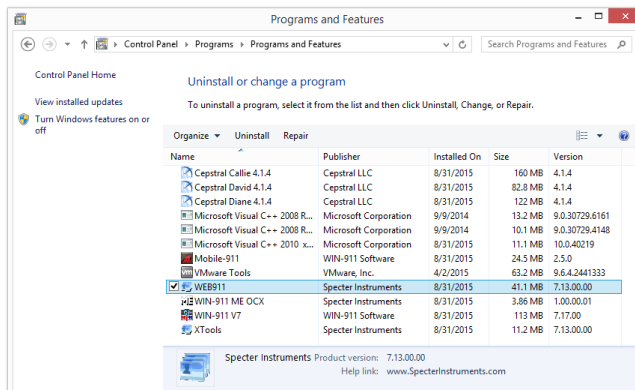
To remove WIN-911 ME OCX from your system, use **Programs and Features** located in your **Control Panel**.



Select **WIN-911 ME OCX**. Then click **Uninstall**.

Remove WEB-911 Services

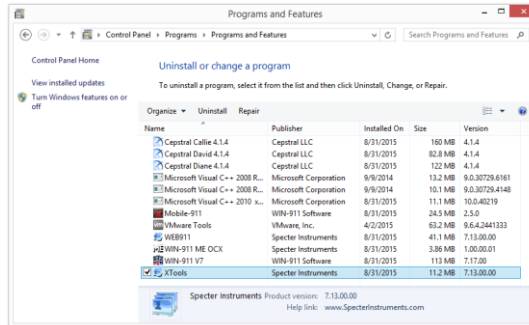
To remove WEB-911 Services from your system, use **Programs and Features** located in your **Control Panel**.



Select **WEB911**. Then click **Uninstall**.

Remove XTools Client

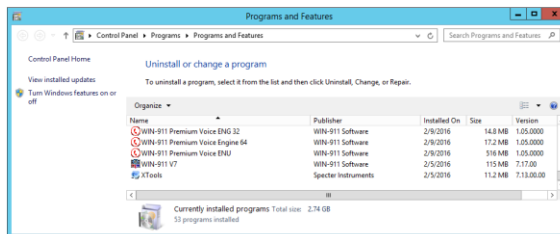
To remove XTools Client from your system, use **Programs and Features** located in your **Control Panel**.



Select **XTools**. Then click **Uninstall**.

Remove Premium Voice

To remove the installed Premium Voices from your system, use **Programs and Features** located in your **Control Panel**.



The **Premium Voice Speech Engine** will have (2) programs to uninstall.

Select **WIN-911 Premium Voice ENG 32**. Then click **Uninstall**.

Select **WIN-911 Premium Voice Engine 64**. Then click **Uninstall**.

Each **Language Pack** will have its own uninstall

Select **WIN-911 Premium Voice XXX**. Then click **Uninstall**.

“XXX” represents the language code for the language pack.

2. Overview: A Must Read Chapter!

WIN-911 Architecture

What is the Design Advantage?

WIN-911 is primarily composed of three applications that form the operational nucleus: 1) WIN-911 Configurator, 2) Scan & Alarm, and 3) Alarm Log Manager. Scan & Alarm (also known as TeleDAC.exe) can be linked to many dynamically linked libraries (*.DLL), depending on the requirements of your configuration.

One of the most powerful features of the WIN-911's design is its use of Microsoft standards. **The heart of the system is a database file. The configurations are built with the standard Microsoft Access Database (Office 97) file format: (*.MDB).**

The WIN-911 System Components

Applications

WIN-911 is comprised of three applications used to configure, view history and run Scan and Alarm.



The **WIN-911 Configurator** is a comprehensive, yet easy to use tool which will allow the user to develop WIN-911 applications with confidence and efficiency. The result of the configuration process is a configuration Microsoft database (*.MDB) and initialization file: **WIN-911.ini**.



The **Scan & Alarm (TeleDAC.exe)** module is the engine that connects the WIN-911 functions with the outside world. It is the OPC/DDE/Direct Connect Client connection that performs logical functions such as: comparing current values with alarm limits or conditions, keeping track of acknowledgments, and updating the alarm history log files. It will read the *.MDB and WIN-911.ini file and automatically start or stop the associated modules which are required for the application. In summary, Scan & Alarm:

1. Selects the modules required for the run-time application
2. Automatically starts each module selected in the proper sequence
3. Attaches to all OPC, DDE, and Direct Connect Servers
4. Bypasses and restores data points from the active callout list
5. Overrides and restores names from the contact lists
6. Shows and hides the Status Display for startup summary information
7. Monitors data points for alarm conditions
8. Automatically shuts down each module

The Scan & Alarm system can be started by the Run program, double clicking on the TeleDAC.exe, Restart.exe, or using the Windows Startup program or a third party's startup program. To shutdown Scan & Alarm, right-click on the thumbnail icon on the desktop in the system tray and left-click Exit WIN-911 or run the Shutdown.exe applet. A confirmation-of-intent will appear requiring the operator to select Exit before the program will shutdown.



The **Alarm Log Manager** can display archived alarming data, sort the data by any column and append comments to individual events. To use this application, WIN-911 must be configured with the Monthly MDB log file format.

Service

WIN-911 provides a service wrapper that allows Scan & Alarm to emulate a Window's system service.



The **911SRV** is a service module that will transform Scan & Alarm from an application into a service. This option can be selected from within the WIN-911 Configurator in the Global Options, Initialization tab.

Modules

WIN-911 is comprised of the following modules which run independently while working seamlessly together:



The **WIN911 Announcer** is optional and is only used when the user has selected the local sound option. A computer sound card is required for this option and should not be confused with the telephony card that is required for the voice functions.



The **WIN911 Alarm Monitor** is optional and is only used when the user wishes to see a visual display of either the entire history of alarms and errors, or just a summary of current alarms. It is also required if an operator needs the capability to acknowledge alarms at the computer and send manual email, SMS and pages.



The **WIN911 Alarm Printer** is optional and is only required when the user has selected the alarm printer option. Both a Local LPT port and a dedicated printer is required.



Two modules, **WIN911 Dialout Pager** and **WIN911 Local Pager**, are optional and started when the user configures pager connections. Both communicate with the Scan & Alarm module and manage all paging activity. This includes managing pager connections and their schedules.

WIN911 Dialout Pager processes alphanumeric and/or numeric paging that requires a commercial paging service.

WIN911 Local Pager processes alphanumeric and/or numeric paging that connects directly to a paging transmitter via a serial COM port and does not require a paging service interface.



Two modules, **WIN911 Voice** and **WIN911 TAPI**, are optional and are only used when voice connections (Voice, Voice Pager, and Dialout Announcer or 411 Reports) are configured. Both communicate with the Scan & Alarm module and manage all voice dial-out, dial-in, and call progress duties such as assembling the voice messages and recognizing touch-tone security codes.



The **WIN911 SMS** is optional and only required when SMS connections have been assigned or SMS 411-Reports have been created. It communicates with the Scan & Alarm module and manages communications to cell devices via a cellular modem.



The **WIN911 E Mail** is optional and is only required when email connections have been assigned to phonebook entries that have group assignments. It communicates with the Scan & Alarm module and manages communications to the SMTP/POP3 server.



The **Mobile-911** is optional and is only required when Mobile-911 connections have been assigned to phonebook entries. This module communicates with the Mobile-911 Server to send messages to and receive messages from applications running on smart devices such as cell phones and tablets. The Mobile-911 Server also sends and receives messages to and from MobileView.



The **WIN911 Alarm Logger** is optional. It is only required when the user wishes to archive an alarm group's events on a daily/monthly log of any alarm activity, error messages, phone and pager activity, and diagnostic logging.



The **WIN911 IP** is optional and is only required when the user has selected the IP option. Either a RAS connection or an IP Address must be defined.

WIN-911 Peripherals

WIN-911 Applets

WIN-911 Version 7 includes six small application programs (applets) that interact with the main Scan & Alarm executable to modify the program on the fly or shut it down altogether. These can be used with scripting to better control WIN-911 from a SCADA application. Previous versions of WIN-911 required a shutdown and restart for modifications to be applied, resulting in a window of uncovered alarm monitoring.



The **Standby** applet (yellow icon) acts in a global manner to disable all WIN-911 monitored data points from active callout consideration. This modifies the program operation without having to shutdown Scan & Alarm to modify the configuration. Hence, no loss of alarm coverage.

Warning: This applet can be configured not to require a user Ack code for execution. If you do not wish to use this function please delete it to avoid unauthorized manipulation of the alarm system.

Warning: If 911SRV.exe Service wrapper is controlling TeleDAC.exe, “Interact with Desktop” must be enabled.



The **Activate** applet (green icon) restores WIN-911 from Standby mode. See the Standby applet.

Warning: This applet can be configured not to require a user Ack code for execution. If you do not wish to use this function please delete it to avoid unauthorized manipulation of the alarm system.

Warning: If 911SRV.exe Service wrapper is controlling TeleDAC.exe, “Interact with Desktop” must be enabled.



The **Bypass** applet (green and yellow icon) suppresses selected alarms from being notified. This modifies the program operation without having to shutdown Scan & Alarm to modify the configuration. Hence, no loss of alarm coverage.

Warning: This applet can be configured not to require a user Ack code for execution. If you do not wish to use this function please delete it to avoid unauthorized manipulation of the alarm system.

Warning: If 911SRV.exe Service wrapper is controlling TeleDAC.exe, “Interact with Desktop” must be enabled.



The **Override** applet (blue and yellow icon) suppresses selected individuals in a group phone list from being called in the event of an alarm. This modifies the program operation without having to shutdown Scan & Alarm to modify the configuration. Hence, no loss of alarm coverage.

Warning: This applet can be configured not to require a user Ack code for execution. If you do not wish to use this function please delete it to avoid unauthorized manipulation of the alarm system.

Warning: If 911SRV.exe Service wrapper is controlling TeleDAC.exe, “Interact with Desktop” must be enabled.



The **Shutdown** applet (red icon) allows other applications to shutdown Scan & Alarm so that start/stop operations can be completely automated. By default Scan & Alarm requires confirmation before it will perform a shutdown, but this applet shuts down Scan & Alarm in a single step.

Warning: This applet can be configured not to require a user Ack code for execution. If you do not wish to use this function please delete it to avoid unauthorized manipulation of the alarm system.

Warning: If 911SRV.exe Service wrapper is controlling TeleDAC.exe, “Interact with Desktop” must be enabled.



The **Restart** applet (red and green icon) allows the user to silently shutdown and restart WIN-911 Scan & Alarm through the execution of a single applet. This module can be used to apply modifications made to the configuration to take affect. The shutdown and restart (or start if Scan & Alarm is not running during execution) is "silent," meaning that it occurs with minimal GUI activity. The only events that will be visible will occur as a result of errors during the restart phase. Otherwise, the shutdown and restart cycle will be invisible to the user.

Restart also has the ability to start Scan and Alarm with a particular configuration file. This can be done by running a command line for Restart.exe. For example, "/OPC Demo.mdb," leaving out the quotations.

Note: If Scan & Alarm is controlled by the 911SRV Service Wrapper, the Restart applet will only function in XP & Server 2003. "Allow Non-Admin Service Restarts" in the Global Options | Initialization tab must be checked for a non-admin to restart the Service.

Warning: This applet can be configured not to require a user Ack code for execution. If you do not wish to use this function please delete it to avoid unauthorized manipulation of the alarm system.

WIN-911 Tools

WIN-911 Version 7 includes four applications that make managing the WIN-911 system easy and intuitive.



The **Product Components Version** is a valuable trouble-shooting device for determining the version of every WIN-911 Software component and support software on the system. This program is particularly useful when updating a system from a previous version. If different versions of the components are co-mingled WIN-911 may not run properly.



The **DDE Client** is a tool for trouble shooting DDE servers. It can connect to a server, read and write a DDE value. This tool can verify syntax, display current values, and determine value format.



Backing up or restoring your WIN-911 system has never been easier with the **WIN-911 User File Backup/Restore** tool. With a click of the mouse all of the files needed to preserve your configuration for backing up and/or reinstalling your WIN-911 software are stored in the default location:



XP & Server 2003

C:\Documents and Settings\User name\Local Settings\Temp\911

Windows 7 & Server 2008

C:\Users\User name\AppData\Local\Temp\911

The same program can both backup and restore user-generated files with the two icons provided.



The **911Health** verifies functionality of several WIN-911 components. The modules TeleDAC (Scan & Alarm), Mobile-911, WIN911 SMS, and WIN911 IP each writes a status message to the registry. 911Health reads the registry message and serves it to an OPC Server that the user configures. These status messages can be used to alert users and other programs of problems WIN-911 may be experiencing.



TeleDACIsActive is a console app used for programmatically reading the Active/Standby state of WIN-911. This applet is particularly useful when writing scripts to manage WIN-911 redundancy. When WIN-911 is deployed in a redundant configuration the primary WIN-911 will be running in "Active" mode and the secondary WIN-911 machine will be running in "Standby" mode. TeledacIsActive returns a Result Code of 1 or 0. When WIN-911 is Active this program will return a "1" and when it is in Standby it will return a "0".



CustomCSV is a tool used to partially import large galaxies from Wonderware System Platform/Archestra. This tool allows you to list the object names the user would like imported into WIN-911 without having to browse the whole Archestra galaxy. This can dramatically speed up the importing processes, especially in large galaxies. CustomCSV allows you to drop in a list of objects that could have been copied from a spreadsheet or word document. Then a .CSV file is created for WIN-911 to use on import.

WEB-911 XTools

WEB-911 XTools includes six ActiveX controls that interact with one or more WIN-911 systems to modify configurations on the fly.



The **XContacts** control allows the user to edit Contact's names, access codes, acknowledge codes, and notifications.

This control has the option to save and apply the changes when the user exits.



The **XGroups** control allows the user to add or delete Contacts from a Group or change the Contacts order in the call-out list.

This control has the option to save and apply the changes when the user exits.



The **XSchedule** control allows the user to modify a single notification's schedule or modify multiple notifications at one time.

This control has the option to save and apply the changes when the user exits.



The **XActivate** control allows the user to change Scan & Alarm from Standby to Active mode.



The **XStandby** control allows the user to change Scan & Alarm from Active to Standby mode



The **XApply** control allows the user to apply the changes made by the other XTools. This allows for multiple edits to be made in multiple XTools before a single apply is made.



WIN-911 Premium Voices

WIN-911 Premium Voices provide a more natural sounding voice as an alternative to the standard Microsoft choices. WIN-911 Premium Voices can be added to any WIN-911 PRO/Basic or Lite package. WIN-911 Premium Voice packages are offered in 46 different languages (each language pack sold separately).

Sound Card Selection

WIN-911 is designed to support standard, commercially available sound cards, which are made to support Microsoft Windows XP, 7 and 8 or Server 2003, 2008 and 2012 multimedia functionality. Higher quality cards will produce better quality sounds and tend to give you better performance in harsh industrial environments.

Note: If you are using the Telephone Dial-Out option, you must adhere to specific sound file formats. See Chapter 3, Playing with Sound for details.

WIN-911 uses a sound card to perform "Local Audio" annunciation as well as previewing speech during development. If local sounds are not required, the sound card is not needed in the runtime mode.

Voice Dialout Card Selection

A special Microsoft compatible card capable of playing voice messages over the telephone line is needed for the voice dial-out and dial-in options to function. There are two hardware options for conducting telephony calls: 1) TAPI compliant modem or, 2) a Dialogic Telephonic.

Refer to www.win911.com -> Support -> Knowledgebase -> Article: 060001 - Dialogic Card Installation, for details about the Dialogic voice board.

Voice Telephony Option One: TAPI

This option requires a TAPI voice modem and driver. For a list of recommended modems see, www.win911.com -> Support -> Knowledgebase -> Article: 060014 - Recommended Voice Modem List.

Note: Some TAPI devices may require a sound device

Voice Telephony Option Two: Dialogic

This option requires a Dialogic card and Dialogic software. For information on the Dialogic cards, see www.win911.com -> Support -> Knowledgebase -> Article: 080002 - Dialogic Card Information Sheet.

Voice Selection

Voice

This option requires the Voice Card. The alarms will be dialed out to a telephone number; in the event of an "off-hook" condition, WIN-911 will ask for the contact's Access Code. Once a valid Access Code has been entered, WIN-911 will announce the current alarms with the option to repeat if necessary. When the contact continues WIN-911 will then ask for an Acknowledgement Code. Finally, when the correct Acknowledgment Code is received, the current alarm will be acknowledged and the line will hang up.

Voice Pager

This option requires the Voice Card (just as it would with a voice telephone connection). The alarms will be dialed out to a telephone number. In the event of an "off-hook" condition, WIN-911 will announce the current alarms and the line will hang up.

Dialout Announcer

This option requires the Voice Card (just as it would with a voice telephone connection). The alarms will be dialed out to a telephone number or intercom extension; after the number of seconds specified by the user, WIN-911 will announce the current alarms and hang up. This connection type differs from the Voice Pager in that it does not require a dial tone or answer indication before alarms will be announced. It is designed for use with internal phone systems' public address extensions that do not provide a standard answer indication like a ring cadence break or voice menu.

Pager Modem Selection

A data modem is necessary to use the pager option of WIN-911. Due to the current state-of-the-art modem used in typical pager services, most modem connections are still at 1200 or 2400 baud. Any Hayes® compatible modem capable of operating at the baud rate of your pager service will be sufficient. If a higher speed modem is used, an appropriate setup may be needed to facilitate communications at lower baud rates.

Note: As a general rule, the more complex the modem, the more difficult the modem setup may become!

Note: The data modem used for paging is separate hardware from either the TAPI modem or Dialogic card that will perform your voice calls. Paging and voice functions are independent of each other and require separate phone lines and hardware.

Pager Selection

Dial-out Alphanumeric

The pager option is designed to work with all alphanumeric pager units such as the units manufactured by NEC and Motorola. These units are typically capable of displaying 2 to 4 lines of 20 characters each. WIN-911's maximum message size is 199 characters.

A pager service is required that supports the TAP protocol, or private pager hardware that will allow messages to be sent via a personal computer. Examples of such service providers are Metrocall Corporation, Arch Wireless, or Motorola's People Finder. WIN-911 supports alphanumeric pager services through Motorola's TAP protocol (Telocator Alphanumeric Protocol). The standard TAP protocol, as implemented in the United States, specifies communication parameters of seven bit ASCII with even parity. If the pager service or paging equipment does not support the TAP protocol, the WIN-911 alphanumeric paging option may require special setup.

Dial-out Numeric

Any standard numeric pager, which requires a phone number to be called, and then a numeric message keyed on any touch-tone telephone, will work.

Local Alpha and Numeric

WIN-911 supports local alphanumeric and numeric pagers via serial port connection to a transmitter. Pages are processed using the TAP or COMP2 protocols.

WIN-911 supports alphanumeric pager hardware through Motorola's TAP (Telocator Alphanumeric Protocol) and COMP2 protocol. Only one protocol can be selected for use. If the default TAP protocol is selected, the communication parameters are specified by default to be 7 data bits, even parity, and one stop bit. If COMP2 is selected the parameters are specified to be 8 data bits, even parity, and one stop bit.

Note: Numeric pagers are a class of pager manufactured by various vendors and capable of displaying up to 20 digits. This type of pager will not support alpha characters in its message stream.

E-Mail

The email option requires an email account and connection via LAN (or WAN) connection. Messages can be sent directly to the account of a recipient or to a paging company that will in turn send a page or fax.

Note: In an effort to reduce the number of phone lines WIN-911 needs to accomplish its alarm notification, users who wish to implement both dialout paging and email should use their email account to deliver messages to the pager provider or be sure the email connection is via LAN/WAN.

SMS

The SMS option requires a GSM, CDMA or HSPA modem with an active cellular account. The user is responsible for activating the modem with a wireless service provider. An unlimited SMS messaging plan is recommended. Some SMS messaging features will need to be licensed. The WIN-911/Basic package will support 1-way SMS alarm messages as well as status checks sent via SMS. The WIN-911/PRO package supports everything the WIN-911/Basic package does and also includes 2-way messaging. The 2-way messaging feature gives the user the ability to acknowledge an alarm with a specifically formatted SMS message. 2-way messaging also gives the user SMS 411-Reports. The acknowledgement criteria, health status criteria, alarm request criteria and SMS 411-Reports are discussed below. For information explaining SMS message configuration and formatting see the "SMS Definition" section under "WIN-911 Global Menus."

For a list of recommended GSM modems see,
www.win911.com -> Support -> Knowledgebase -> Article:
080007 - Recommended GSM Modem List.

For a list of recommended CDMA modems see,
www.win911.com -> Support -> Knowledgebase -> Article:
090008 - Recommended CDMA Modem List.

Acknowledgement Message

WIN-911 can be licensed to accept incoming acknowledgement messages. This allows users to singularly acknowledge an alarm message via SMS. In order for WIN-911 to understand and accept the alarm acknowledgement, the sender and the message must meet a few requirements:

1. The sender's phone number must be configured in the 'Phone Book' with an 'SMS' connection.
2. The sender's name must be in the 'Selected Name List' in the Group for that particular alarm.
3. The first 6 characters of the acknowledgement message **MUST** be the 'ticket number' associated with that alarm. The 'ticket number' is the 6-digit number found at the beginning of the SMS alarm message.
4. The numeric 'Ack' code must be the last characters in the message. An 'Ack' code can be anywhere from 1-15 digits.
5. The 'Ack' code and the phone number configured in WIN-911 must match the 'Ack' code sent in the SMS acknowledgement message and the phone number it was sent from must match the 'Ack' code and phone number configured in the 'Phone Book' in WIN-911.

Note: Some users may be able to use the Reply or Forward function to automatically enter the 6-digit ticket number. This would then only require the user to enter in their acknowledgement code at the end of the message. Make sure when using Reply or Forward that no extra characters are placed in front of the alarm message (e.g. RE: or FW:). Once the acknowledgement is received and accepted by WIN-911 all contacts in the Group's 'Selected Name List' for that alarm should receive a confirmation that the alarm has been acknowledged. If WIN-911 rejects the acknowledgement, the user who sent the acknowledgement should receive a failed acknowledgement message back.

Health Status Message

The 'Health Status' message feature allows all configured SMS users to check the health of WIN-911 by simply sending the required message. This feature is supported by both 1-way and 2-way SMS licenses. In order for WIN-911 to understand and accept the 'Health Status' message, the sender and the message must meet a few requirements:

1. The sender's phone number must be configured in the 'Phone Book' with an 'SMS' connection.
2. The sender's name must be in a 'Selected Name List' for at least one Group.
3. The SMS message needs to have the text **STATUS** and only the text **STATUS** in the message. This string is not case sensitive.

Once the status message is received WIN-911 will reply to the sender with the message **OK** if WIN-911 is running or **STANDBY** if WIN-911 is in Standby mode. WIN-911 will reply with the message **INVALID/MANUAL SMS RECEIVED** if the sender did not send the proper message. If a response is not received, this may be caused by one or more of the following:

- The sender did not meet the required criteria listed above
- The computer is not running or is non-responsive
- Cellular modem is not functioning properly
- The cellular network is not functioning properly
- WIN-911 is not running
- The SMS DLL is not functioning properly

Alarm Request Message

The 'Alarm Request' message allows all configured SMS users to request alarm information at any given time. This feature is ONLY supported with a 2-way SMS license. In order for WIN-911 to understand and accept the 'Alarm Request', the sender and the message must meet a few requirements:

1. The sender's phone number must be configured in the 'Phone Book' with a 'SMS' connection.
2. The sender's name must be in a 'Selected Name List' for at least one Group.
3. The SMS message needs to only contain one of the following text strings:
 - **REQUEST ACTIVE ACKED**
 - **REQUEST ACTIVE UNACKED**
 - **REQUEST INACTIVE UNACKED**
 - **REQUEST UNACKED**
 - **REQUEST ACTIVE**
 - **REQUEST ALL**

Once the request message is received and all three criteria are met, WIN-911 will reply to the sender with one SMS message per alarm that meets the request.

If no response is received, confirm WIN-911 is still healthy by sending a Health Status message (described in the previous section).

If WIN-911 replies with the message **NO ALARMS**, then no alarms met the sender's request.

If WIN-911 replies with the message **INVALID/MANUAL SMS RECEIVED** then the sender did not send one of the six messages described above. Double check the sent text for errors.

If WIN-911 replies with the message **EVENT REQUEST REJECTED PER LICENSE** then the sender met all the criteria described above, but the sender is not licensed for 2-way SMS messaging.

SMS 411-Report

The 'SMS 411-Report' feature allows all configured SMS users to get the current status of any data point. Simply configure a report in WIN-911 and access the report later by sending the required message. This feature is only supported with a 2-way SMS license. In order for WIN-911 to understand and accept the 'SMS 411-Report' message, the sender and the message must meet a few requirements:

1. The sender's phone number must be configured in the 'Phone Book' with an 'SMS' connection.
2. The SMS message needs to have the text '**411:<report number>**' in the message. For example, to request report 21 send the following:

411:21

3. If the sender would like to request a single 411-Report Item the SMS message needs to have the text '**411:<report number>:<report item>**' in the message. For example, to request the 5th item in report 21 send the following:

411:21:5

Once the 411-Report request is received, WIN-911 will reply to the sender with one SMS message per report item.

If no response is received, confirm WIN-911 is still healthy by sending a Health Status message (described in the previous section).

If WIN-911 cannot determine which report was requested, possibly because of a formatting error or because that report does not exist, it will respond with **BAD411-REPORT:<report number>**.

If WIN-911 cannot determine which report item was requested, possibly because of a formatting error or because that report item does not exist, it will respond with **BAD411-ITEM:<item number>**.

If WIN-911 is not licensed for 2-way SMS it will respond with **411 REQUEST REJECTED PER LICENSE**.

Mobile-911

The Mobile-911 option requires the Mobile-911 Server be installed somewhere on WIN-911's network. WIN-911/PRO is required for this option. Mobile-911 also requires a client side installation, whether it is an app installed on an iOS, Android or BlackBerry device or the MobileView web based monitor system.

The Mobile-911 app gives the user the ability to acknowledge an alarm, create and view reports, check health status and request alarm information. Push notifications are used to send information to the app so the device must have a data plan in order to receive the push notifications. Push notification will also require the Mobile-911 Server to have access to the Internet.

A "**Live Demo**" is available to try out the app without having to install the Mobile-911 Server. Setup instructions can be found on our website:

www.win911.com under Smartphone Apps |Live Demo of Mobile-911

A more detailed explanation of the Mobile-911 app and its functionality can be found in the Help of the installed application.

Mobile-911 View allows the user to view alarm information through a web browser. The user also has the ability to acknowledge alarms and view reports. If MobileView is installed, the Mobile-911 Server will require Internet Information Services (IIS). The Mobile-911 Server will also be required to access the Internet if the user is trying to view alarms from outside the Mobile-911 local area network.

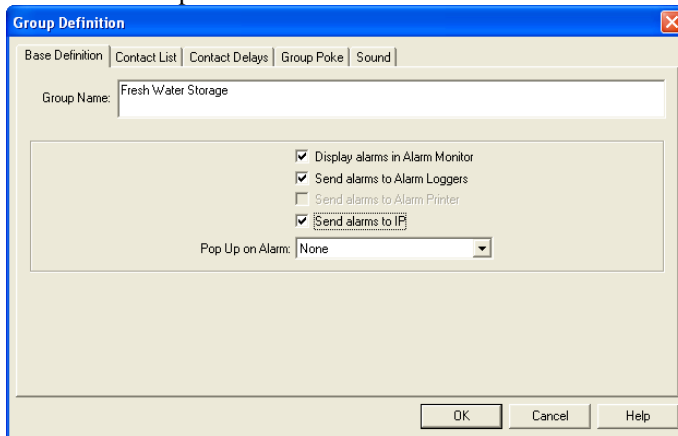
A more detailed explanation of the MobileView and its functionality can be found in the Help.

IP

The WIN-911 IP connection is designed to send alarm messages over a network through a TCP socket. It is compatible with RAS and Ethernet connections. In order to utilize this feature, users must develop their own application to accept alarm messages and handle them accordingly. Their application can also monitor health status information that WIN-911 stores in the registry. The WIN-911 IP connection adds a tremendous amount of extensibility to WIN-911.

Alarm Messages

Alarm messages are sent through the IP connection on a per group basis. To enable IP for a group, open a group definition and select **Send alarms to IP**. With this option selected, all alarms in the selected group will be sent through the IP feature to a remote computer.



When an alarm is received, it is sent as an ASCII string through the TCP port specified in your WIN-911 IP settings. This connection can be made through RAS, LAN or WAN. If utilizing a RAS connection, you must specify the name of the RAS connection you have set up in Windows. If you are using a LAN or WAN, then you must configure WIN-911 with the remote computer's IP address. For reliability, configure all

remote computers as well as the local computer with static IP addresses. If you must use DHCP, reserve an IP address for each machine. WIN-911 cannot resolve hostnames with WINS or DNS.

The beauty of the WIN-911 IP connection is that it is highly configurable. When an alarm is received it is formatted and then sent over the network as ASCII text. Each message starts with a configurable message prefix and ends with a configurable suffix. The contents of the message can contain any number of fields. These fields may be labeled with their field names and are also delimited by a user defined delimiter. When developing your application, determine which fields are required and use the message format settings to properly parse alarms.

Acknowledgements/Expected Responses

Once an alarm message is sent, WIN-911 can be configured to await a response from the remote computer to confirm that the message was delivered. WIN-911 can also acknowledge alarms based on whether or not the Expected Response was received.

Primary/Secondary Remote Computers

The WIN-911 IP connection has redundancy features built into it. In addition to a primary remote machine, you may configure a secondary remote machine. When a configurable amount of failures has been reached, WIN-911 will attempt to use the secondary connection. Failing to establish a TCP socket connection or any other type of failure associated with TCP will cause WIN-911 to attempt the secondary connection. Also, if you've enabled WIN-911 to wait for an Expected Response, then a failure occurs when that response is not received for an alarm. Once WIN-911 fails over to the secondary connection, it will send alarms to that secondary connection until the connection is closed. When a new connection is attempted, WIN-911 will first attempt the primary remote computer.

Health Status

Health status information can be monitored by the user's application to monitor the health of both WIN-911 and the hardware being used to send alarm messages via IP. Two values need to be monitored and compared in the registry to understand the current health of WIN-911:

1. **HKLM\SOFTWARE\Specter Instruments\WIN911 IP\Health.**
2. **HKLM\SOFTWARE\Specter Instruments\WIN911 IP\Time.**

Health stores the most current state of WIN-911. **Time** stores the time stamp of the most current state stored in the **Health**. The Health value should be updated approximately once a second. If the **Time** value is more than a few seconds old, the application should assume the **Health** value is bad. The three possible **Health** values and the format for the **Time** value is described below.

Health:

- **OK** – Healthy. WIN-911 and its hardware is functioning properly.
- **FAIL** – All message attempts have failed for a particular alarm. This included attempts made to the secondary remote machine if configured.
- **STOP** – The WIN911 IP DLL has been stopped by the shutdown of WIN-911.

Time:

- **YEAR:DAYOFYEAR:HOURL:MINUTE:SECOND**
– For example:, **2009:033:14:30:25** (Feb 2, 2009 2:30:25 PM GMT)

ASCII Outputs Integrate to Other Windows Applications

The ASCII OPC/DDE Poke feature is an easy to use function enabling the WIN-911 software modules to be integrated into other Microsoft Windows applications. This standard option will allow the TEXT Alarm Messages to be displayed within other programs, and it will allow these programs to "Acknowledge" the WIN-911 alarms. Pager and voice operational status can be monitored by other programs through the use of the Pager, Voice, and System Health. An example of the Pager Health poke might include a situation where a digital OPC/DDE tag belonging to an HMI package is poked a zero (0) when the pager applet is functional. If the modem stops responding, a failure is generated and a digital one (1) is poked, replacing the zero and indicating the loss of functionality.

The Sound Clips

Note: WIN-911 provides two options for voice sources 1) Pre-developed .wav files developed with Text-to-Speech and/or human voice recording, or 2) Runtime Voice Synthesis. Those using the Runtime Voice Synthesis do not need to manage sound files because there are none. With this option all speech is generated during runtime as it is needed.

WIN-911 uses Microsoft's multimedia feature to offer sound to enhance your alarm reporting needs. If you are not familiar with this capability, a review of the Windows documentation is advisable. In Windows the Sound Recorder icon is generally found under the "Accessories" folder. The "Help" information found here is usually all that is needed for review. Text-to-Speech may also be used with the WIN-911 Configurator to generate the "*.WAV" files. Third party sound software tools are available which will allow even more editing features.

In using voice to alert users of an alarm condition, WIN-911 has striven to conserve as much disk space as possible, considering the large memory appetite of sound clips (*.WAV files). The

typical example of a verbal alarm message might be: "AREA 3," "The Oven Temperature," "Is," "Above the High Limit." Each message within quotations is a separately recorded sound clip.

The "Is" and "Was" sounds are used in most common alarm messages, although they can be turned off. Continuing the above example: If the temperature decreased into the normal range and the alarm was unacknowledged, the verbal message would be: "AREA 3," "The Oven Temperature," "Was," "Above the High Limit." Upon the operator acknowledging the alarm via a telephone, the message would be: "AREA 3," "The Oven Temperature," "Is," "Normal." If the alarm is acknowledged via the personal computer keyboard, the acknowledgment is silent. Using "Is" and "Was" as global sound clips greatly reduces the need for additional custom messages.

The sound clips (*.wav files) furnished with this package are a sampling of miscellaneous industrial sounds such as Bells, Sirens, Alert Horns, and Whistles. These sounds are recorded in an 8-bit format. These .wav files are located on the install CD in "\Support\Sound Effects" and must be manually copied into the C:\Program Files\Specter Instruments\WIN-911 V7\Sound Files for use. It may be helpful at this time to play back a sampling of these clips, to verify your sound card is operational and the WIN-911 sound files are installed properly.

Note: Users of the Dialogic card and TAPI voice telephony can only play uniformly formatted "*.WAV" files that conform to the following parameters: PCM, 11 kHz or 8 kHz sample rate (one or the other but NOT both), 8 bit, and Mono. Check each of the existing files with Sound Check and convert them as needed.

Note: Runtime Voice Synthesis does not play pre-recorded sound files that require format management.

One of the strong benefits of the WIN-911 offering is the ability for you to customize the alarm sounds to fit your exact application. Use of a microphone and the sound card recording options are all that is necessary.

Helpful Hints:

1. Don't try to record sound clips for your application until you are familiar with the WIN-911 requirements. Use the demo clips furnished to learn.
2. Typically, you will have a "pause" or "dead space" at the beginning and at the end of each sound clip. WIN-911 patches several clips together to form a message, and the dead spaces will not allow a smooth speech pattern. To cure this, use the sound recorder's edit features to cut out the dead space found at both ends of the sound clip.
3. Using higher sample rates will use more disk space and use more system resources, but it will offer better quality.
4. Just as with the sound card, a higher quality microphone produces better sound clips.

Sound Source

WIN-911 Version 7 infuses Text-to-Speech (TTS) technology for generating sound files quickly and concisely. The TTS engine reads ASCII text strings and generates voice messages to verbalize the contents of the string. Scan & Alarm gives the user the option to use one of three sound sources to best fit the user's needs: Wave Files Only, Text To Speech Wave Files, and Runtime Voice Synthesis.

Wave Files Only

When this option is selected WIN-911's original and default mode of playing voice announcements and telephony is invoked and Scan & Alarm uses only pre-recorded wave files. Wave Files Only allows the user to use wave files created outside of WIN-911.

Text To Speech Wave Files

When this option is selected TTS technology is invoked. It will be used by the configurator to generate sound files for use by Scan & Alarm. This option provides the developer with two ways to generate wave files. One way is automated and can be done with the “Sound Build” button or is part of the Configurator shutdown. The other is manually, using the “Convert Text to Wave” dialog.

Runtime Voice Synthesis

When this option is selected TTS technology is invoked at runtime. It can be used directly by Scan & Alarm to generate the speech as it is needed without the requirement of sound files.

What is the Direct Connect?

The Direct Connect option provides a means of bypassing Windows DDE/OPC and connecting directly to viewLinc®, System Platform®, FIX®, Wonderware®, FactoryTalk View®, RSVIEW SE®, and RSVIEW32®. Unlike the DDE/OPC option (which is a generic data exchange medium), the Direct Connect is a custom data source developed with the use of toolkits provided by the perspective HMI developers. System Platform/ FIX/ Wonderware/ FactoryTalk View & View ME/ RSVIEW32/ RSVIEW SE/ viewLinc users will find this option time saving during configuration because WIN-911 does not require the re-entry of redundant information. Instead, WIN-911 references much of the information required for a configuration directly from the HMI. More importantly, the user will find this mode of operation delivers superior performance in the following areas: 1) Speed of connection and data point updates; 2) Data security and integrity; 3) Set points and alarm limits can be changed dynamically at the source.

A configuration can be run in the Direct Connect mode exclusively or simultaneously with DDE/OPC connections. It is important to note, however, that some of the terms (Application,

Topic, and Item name) are components of Microsoft's DDE or OPC Foundation's OPC address nomenclature. In a Direct Connect Data Source, Application and Topic Names are replaced with an invocation string that sets the mode of operation. When a Direct Connect mode is selected, the appropriate strings are automatically appended.

WIN-911 as a Service

WIN-911 Scan & Alarm can be configured to emulate a service when started with the 911SRV service wrapper. As a service, WIN-911 will be started automatically during the startup of the operating system and will run in the background regardless of who (if anybody) is logged in. WIN-911 behaves in much the same way as it does when running as an application except that you cannot exit WIN-911 in the usual manner.

A few limitations include the following:

- DDE data sources are not supported
- Network OPC is not supported (only local)
- RSVIEW SE Direct Connect data source is not supported
- RSVIEW32 Direct Connect data source is not supported

When "Interact with Desktop" is enabled in Windows XP and Server 2003, WIN-911 will function in the same manner except you cannot exit Scan & Alarm in the usual manner. You would have to go through the Service Control Manager to shut it down.

When "Interact with Desktop" is disabled or you are running as a service in Windows 7, Server 2008 Windows 8 and Server 2012, the user cannot use the WIN-911 Alarm Monitor. This prevents the user from acknowledging alarms or sending manual messages via the Alarm Monitor. The tray icon is not displayed so the user must Restart WIN-911 using the Restart.exe applet. Bypass, Override, Active and Standby will also become unusable since there is no application window to interact with.

3. WIN-911

Demonstration

Demo of WIN-911 Capabilities

The following OPC 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 WIN-911 USB drive (KEPServerEX for OPC). If voice telephony is desired for the demo, then you will need a TAPI modem or 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. This demo will run with WIN-911 in DEMO mode (for 30 days).

Playing with Sound

Part of the files installed by the WIN-911 installation program is a collection of sound files (identifiable by the "*.WAV" extension). These sound files were created using Text-To-Speech and an older Premium Voice. The Sound Recorder can also play back these sound files.



Start the Sound Recorder program that can be found in the Windows Accessories/Entertainment Folder. This will bring up a program window with command buttons similar to a tape recorder. Use the "/File/Open" command to select the "C:\Program Files\Specter Instruments\WIN-911 V7\Sound Files" directory and open any of the sound files.



You can play the sound file by pressing the play button. Try out several different sounds if you wish. When you are finished, exit the sound recorder. This will confirm you have a sound card compatible with WIN-911.

Note: Users of the Dialogic card and TAPI voice telephony can only play uniformly formatted "*.WAV" files that conform to the following parameters: PCM, 11 kHz or 8 kHz sample rate (one or the other but NOT both), 8 bit, and Mono. Check each of the existing files with Sound Check and convert them as needed.

Note: Runtime Voice Synthesis does not play pre-recorded sound files that require format management.

Creating a Demo OPC Server

Included in the WIN-911 software package is a “Promotional” copy of KEPServerEX and an OPC Project (WIN-911 OPC DEMO.opf) which will offer the feel of "real-world" events. These events will trigger alarm conditions and initiate responses in the Monitor.

Note: KEPServerEX is not required to run WIN-911; it merely offers easy access to "user defined" OPC values, and provides an OPC Server.

It is recommended that you first read Chapter 1 of this manual. The WIN-911 package must be installed. The demonstrations are much more impressive if a sound card is installed. However, the visual features of WIN-911 can be seen without a sound card.

The demo mode of WIN-911 will fully support all alarming options. To demonstrate the pager option, you must have a data modem installed (either internal or serial port) or a local paging system. The demo mode is unlimited with respect to Tagnames, Groups and phone book telephone/pager entries, but will time out in 30 days.

Installing KEPServerEX & OPC Demo

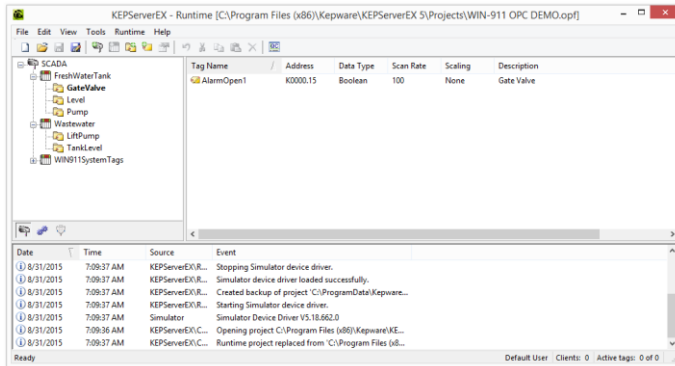
From the Support Folder of the WIN-911 USB drive open the OPC Server Demo sub-folder and double-click on the KEPServerEx5.exe to run the setup. Step through the setup dialog to complete the software installation.

Setting up the OPC Demo

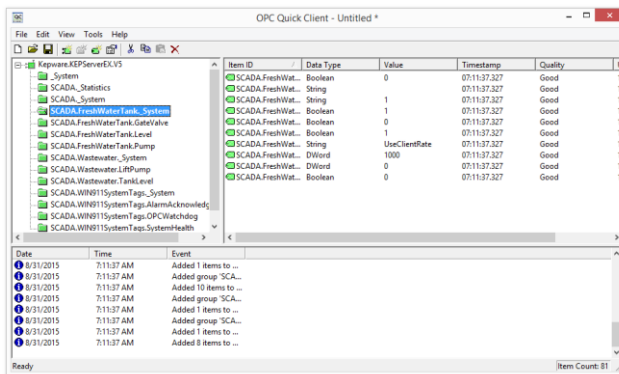
To run the OPC demo developed by Specter, you must copy the WIN-911 OPC Demo project from the C:\Program Files\Specter Instruments\WIN-911 V7\Tools folder. Copy the WIN-911 OPC DEMO.opf file to C:\%Program Files%\Kepware\KEPServerEX 5\Projects folder.

Start KEPServer by opening the KEPServerEX 5 Configuration in the Windows Start menu.

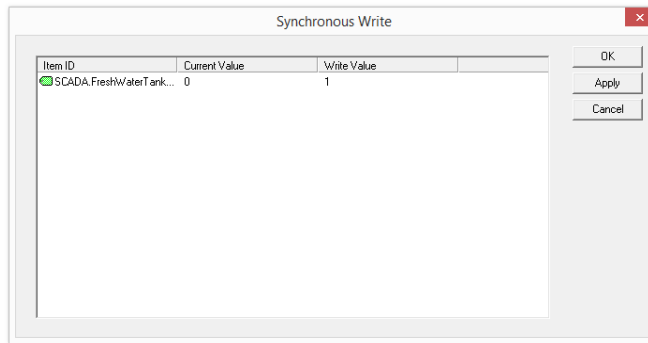
After the KEPServer launches, open the WIN-911 OPC DEMO.opf from the file pull-down menu.



In the Freshwater Tank tree highlight GateValve. This will display the AlarmOpen1 tag in the Tag Name list that makes up the demo. The Tag name is designed to describe the condition of the alarm which is "open" or "1." All the tags in this demo are labeled in similar fashion. To manipulate these values you will need to start the OPC Quick Client by clicking the last button on the right of the KEPServer toolbar.



You are now ready to manipulate data in the KEPServer. This is done by highlighting the tag of interest and right-clicking to select Synchronous Write. For example, highlight the SCADA.FreshWaterTank.GateValve.AlarmOpen1.



Right-click the highlighted tag and select Synchronous Write. In the Write Value text box enter the new digital value of 1. Then click Apply to execute the write. The value will be updated in KEServer. All value manipulations are handled in a similar fashion.

Now you are ready to bring WIN-911 online running the OPC DEMO (or LITE DEMO).

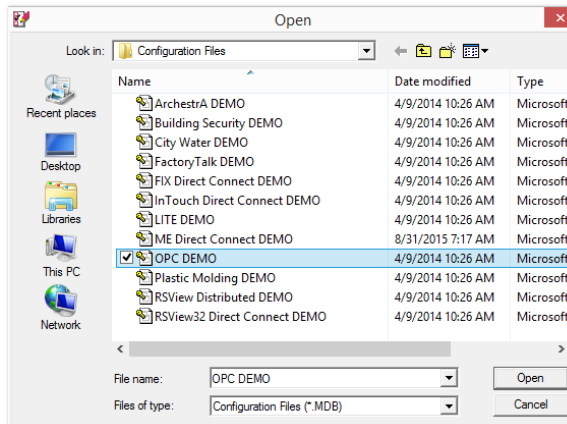
These Demos are designed for a simple understanding of WIN-911, and an example of how to interface the acknowledgment function with a HMI/SCADA package. The digital alarms should be entered as a "0" or "1." The analog values are "Free Form."

Note the OPC address for the data values. The OPC Machine Name is "(Local Machine)," the OPC Server Name is "Kepware.KEServerEX.V5" and the Item Name syntax is "SCADA.GroupName.AlarmCondition."

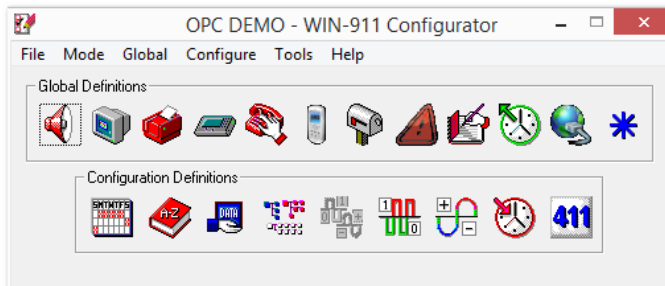
Exploring the WIN-911 Configurator



Start the WIN-911 Configurator from the "Start Program" button. A message box will appear asking if you would like to start a new configuration, click **No**. Select the "OPC DEMO.MDB or LITE DEMO.MDB" from the Open window, click **Open**. If you want to save the demo file as another name, from the Menu Bar select **Save As**.



Examine all the various buttons, but do not change the configuration. Notice how the Group, Alarms, and OPC Item names correspond to the KEPServer project.



Running the DEMO



Start Scan & Alarm from the "Start Program" button. This program will automatically start any modules needed to run the application. The demo application includes WIN911 Alarm Monitor and WIN911 Announcer. Size and position the Alarm Monitor window, KepServer window, and OPC Quick Client window so that all windows can be seen at the same time

From the OPC Quick Client, select:

SCADA.FreshWaterTank.GateValve and highlight **SCADA.FreshWaterTank.GateValve.AlarmOpen1** in the right column. Then, right-click the **highlighted tag** and select **Synchronous Write**. In the Write Value text box enter the new digital value of "1" and click **Apply**. This simulates an alarm. You should now be experiencing multimedia alarming. The WIN-911 Alarm 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 two ways: 1) by positioning the cursor over the alarm in the Alarm Monitor and double-clicking, or 2) clicking on the Acknowledge button.

Exit WIN-911 by clicking on the SCAN 911-411 icon with the right button. It is located in the Windows System Tray. 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.

*Note: 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 Documentation icon to direct you to the exact reference in the manual.*

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.

Note: Refer to the next two sections of this chapter: "Typical Example of WIN-911 Voice Dial-Out" and "Typical Example of WIN-411 Inquiry" for a continuation of these demos.

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. The TAPI option 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 Dial-Out), 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 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 your 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 access 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.

Demonstration

Note: The following assumes that you have successfully installed the Dialogic Drivers and card or are using a WIN-911 compatible TAPI voice modem as described in Chapter 2, "Overview: A Must Read Chapter!"

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.

With the Configuration Utility, 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 WIN-911 Scan & Alarm.

Typical Example of WIN-411 Inquiry

Overview

The demonstration outlined here, featuring the power of WIN-411, is not pre-configured in the OPC Demo. Use any of the three DDE DEMO files to see how it is configured. The DDE demonstration setup can be found in the DDE Server electronic Help manual.

Demonstration

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") & #.

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.

4. WEB-911 XTools Demonstration

Demo of WEB-911 XTools Capabilities

The WEB-911 XTools demonstrations provide a basic understanding and working example of the WIN-911 system and its suite of ActiveX controls. These examples are self-contained and do not require additional software not included in the WIN-911 install or on WIN-911 USB drive (KEPServer for OPC). If voice telephony is desired for the demo, then you will need a TAPI modem or 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. This demo will run with WIN-911 in DEMO mode (for 30 days).

Creating a WEB-911 XTools Demo

Included in the WIN-911 software package is the install for WEB-911 Service and WEB-911 XTools Client. The WEB-911 XTools Service requires Internet Information Services to be installed prior to its install. The WEB-911 XTools Client can be installed on remote machines, but for this demo we will install the client locally.

The demo mode of WIN-911 will fully support WEB-911 XTools. The demo mode is unlimited with respect to Tagnames, Groups and phone book telephone/pager entries, but will time out in 30 days. If WIN-911 is licensed, it must be licensed for WEB-911 XTools for the demo to still function.

The WEB-911 XTools demo uses the OPC Demo configuration and assumes the user has followed the OPC Demo setup explained in Chapter 3.

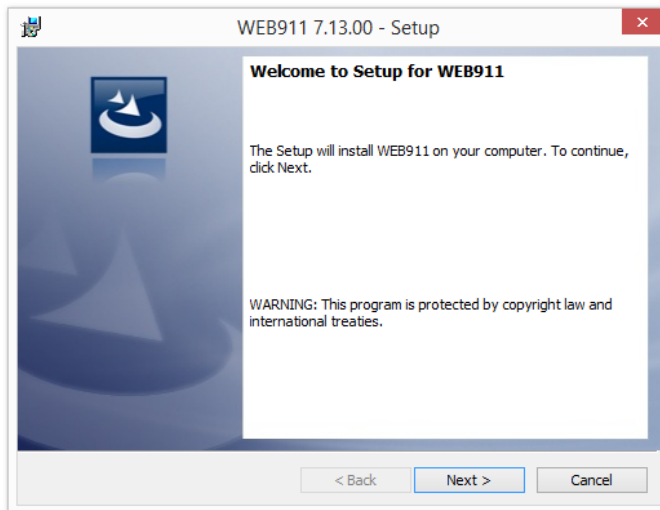
Continue with, 'Installing WEB-911 Services' and 'Installing WEB-911 XTools Client' if you have not already done so in Chapter 1. Otherwise go on to 'Setting up WEB-911 XTools'.

Installing WEB-911 Services

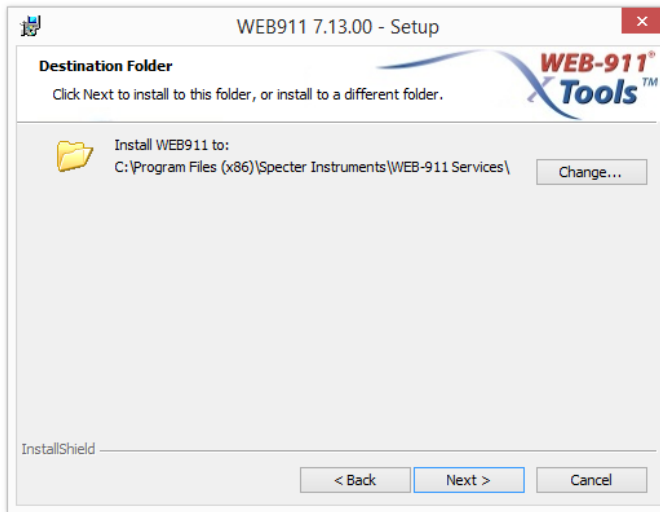
Prior to installing WEB-911 Services, WIN-911 version 7.14.00 or newer must be installed. WEB-911 Services also requires Internet Information Services (IIS) and Microsoft Framework .NET 4.0. IIS can be found in Administrative Tools. If IIS is not installed run the IIS install from Add or Remove Programs - >Add/Remove Windows Components. The operating system install disk is required to complete this installation. If installed, Microsoft Framework .NET 4.0 can be found in Add or Remove Programs. If .NET 4.0 is not installed, WEB-911 Services will install it for you.



Select **WEB-911 Services**. If prompted to install .NET 4.0 click **Yes**.



Click, **Next**. Continue through the License Agreement.



Click **Next** to continue with the default path. Select **Change...** if you would like to use a custom path, and then click **Next**.

Click **Install**, then **Finish**.

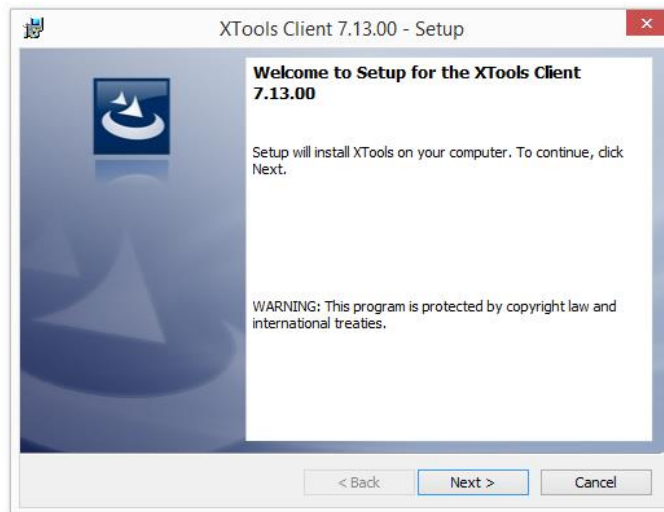
Installing WEB-911 XTools Client

The WEB-911 XTools Client requires Microsoft Framework .NET 4.0. If installed, it can be found in Add or Remove Programs. If .NET 4.0 Framework is not installed, WEB-911 XTools Client will install it for you.

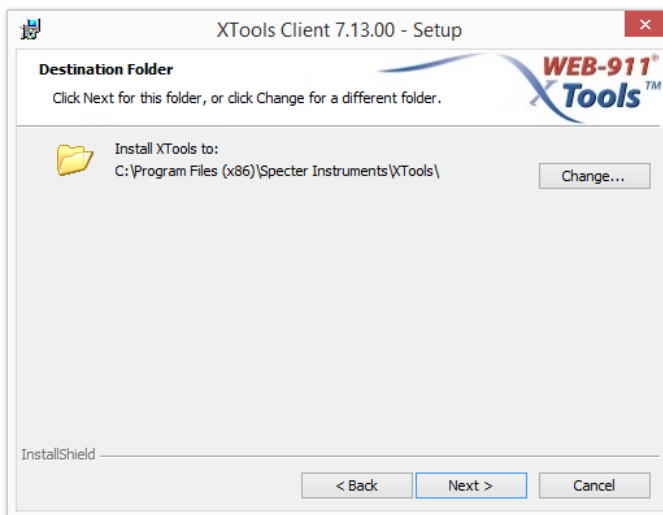
The WEB-911 XTools Client can be installed on any machine on the network. The XTools controls can be inserted into any ActiveX container.



Select **XTools Client**. If prompted to install .NET 4.0 click **Yes**.

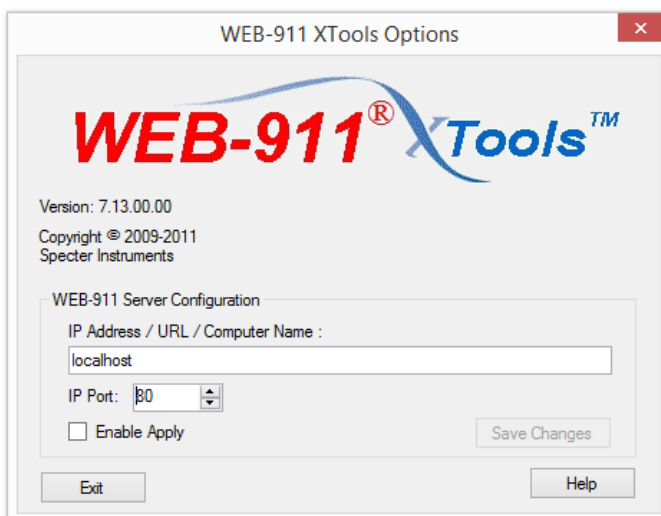


Click **Next**. Continue through the License Agreement.



Click **Next** to continue with the default path. Select **Change...** if you would like to use a custom path, and then click **Next**.

Click **Install**.



The WEB-911 XTools Options window allows you to configure the location of the server. Click **Save Changes** and **Exit** to apply your changes. Then click **Finish**.

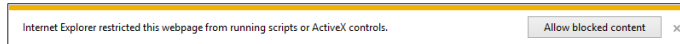
See, 'Setting up WEB-911 XTools' for a demonstration.

Setting up WEB-911 XTools

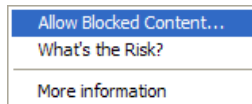
Start the WIN-911 Configurator from the "Start Program" button. From the File menu select **Open**, then select **OPC DEMO.MDB**. Next, find the WEB-911 XTools Client located at C:\%Program Files%\Specter Instruments\XTools\IE Client\WEB-911 XTools.html.

Note: Use Internet Explorer to view the webpage.

When the IE browser appears you will probably see an information bar popup at the top of the window.



This bar is warning you that IE has restricted this webpage from running ActiveX controls.



Right-click the information bar and select **Allow Blocked Content**.... Then click **Yes**. The six ActiveX controls should appear. You will also see a brief description of each control in the center of the webpage.



Each control needs to be activated by clicking it once. After each control is activated you should be able to access all four controls with a single click.

Exploring WEB-911 XTools

You can now explore the XContacts, XGroup, XSchedule, XActivate, XStandby and XApply controls.

Note: The initial connection to the server may take a few seconds.

If at anytime you need help, you can access the WEB-911 XTools help file through the Help buttons on each control.

XContacts



This control allows the user to edit the phonebook.

XGroup



This control allows the user to edit the callout list in the groups.

XSchedule



This control allows the user to edit notification schedules.

XActivate



This control allows the user to change Scan & Alarm from Standby to Active mode.

XStandby



This control allows the user to change Scan & Alarm from Active to Standby mode.

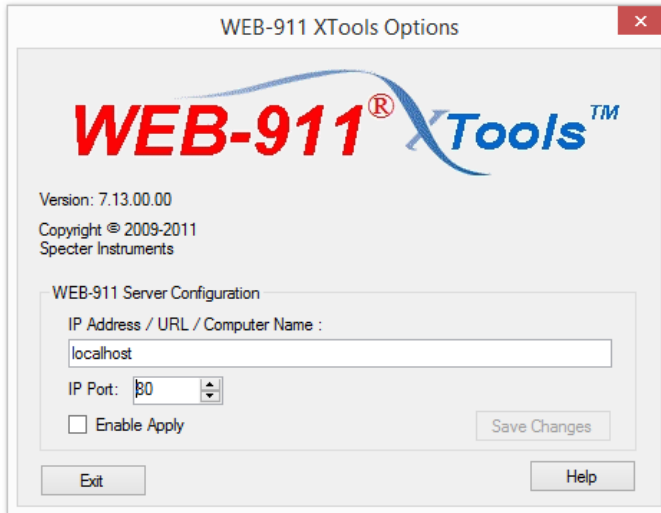
XApply



This control manually applies the changes made by XContact, XGroup, and XSchedule. This button will also restart Scan & Alarm if it is running.

WEB-911 XTools Options

This can be accessed by right-clicking any XTools Help buttons.



Here the user can define where the server is located by either entering an IP Address, URL, or Computer Name. The user can also specify an IP Port. By default, the controls will use IP Port 80 and will point at the local machine. The user can also enable or disable 'Apply' on the exit of the three editing XTools control. This will automatically apply the changes when the Exit button is clicked on each control.